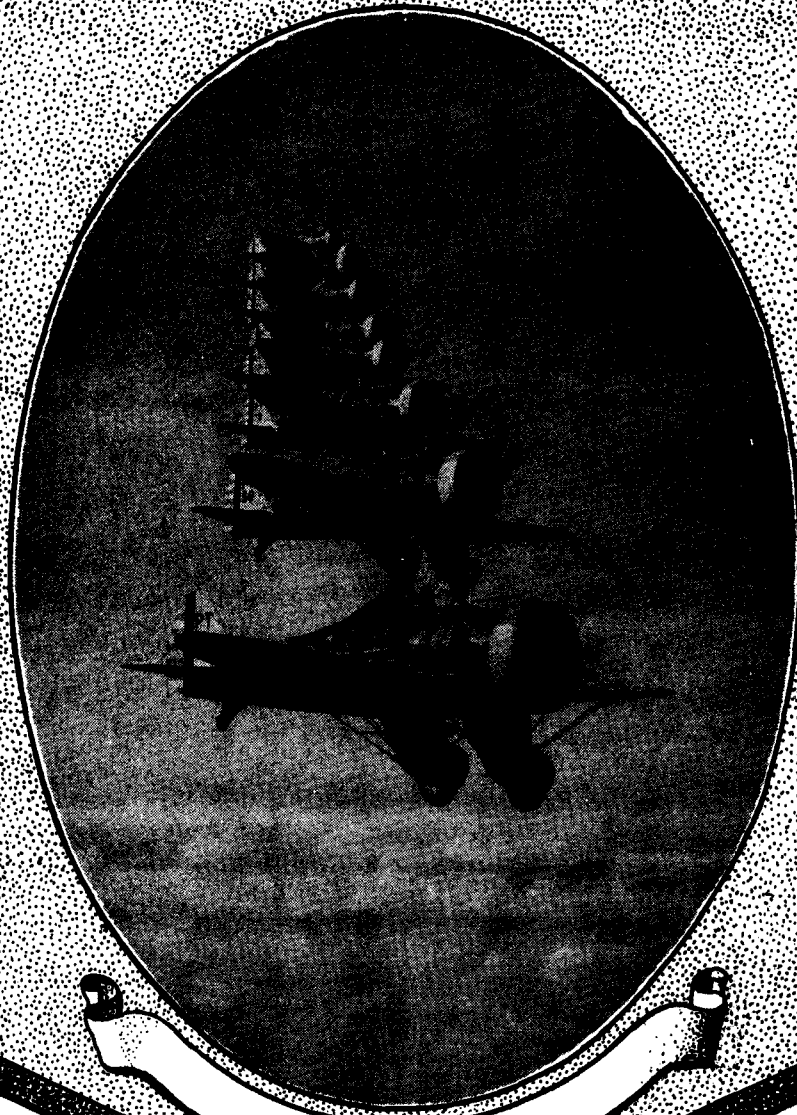


AIR

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NEWS LETTER



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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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A PROTECTION AGAINST NIGHT BLINDNESS

By Major John Hargraves, M.C., (Flight Surgeon)
Director of the Department of Ophthalmology,
School of Aviation Medicine.

THE phenomena of vision begins with a complex photochemical reaction in the substance of the retina or sensitive coat of the eyeball.

The substance which light acts upon to produce the sensation of vision is called visual purple. This substance is chemically related to carotene, crypto xanthin and vitamin A.

It is definitely known that deficiencies in the consumption or the utilization of vitamin A or its precursor carotene results in a decrease in the light sensitivity of the retina, with a resulting loss of visual efficiency, particularly at night.

Vitamin A is abundant in many foods and we would expect individuals who live on the economic plane of pilots to have adequate vitamin containing diets. However, recent investigations have shown that vitamin A deficiencies of varying degrees occur with great frequency in individuals over forty years of age. This could be explained in several ways:

1. The older individual becomes more set in his dietary habits and may not eat foods which contain the vitamin;
2. The older individual reaches the age where there is a tendency toward obesity, and consciously or subconsciously to retain his figure avoids certain foods, such as milk, cream, butter, etc., which are a rich source of vitamin A;
3. The processes of age increase the density of the liver and also decrease the absorptive qualities of the gastrointestinal tract so that the consumed vitamin is not utilized. Vitamin A does not store well, which makes it necessary to replenish it daily.

It is recommended that as a prophylactic and protective measure, all pilots above the age of thirty-five include in their daily diet foods which will contain 4,000 international units of vitamin A. (The exact quantitative requirements are as yet unknown, but 2,500 international units are considered essen-

tial for the average normal adult.

This amount of vitamin A can be obtained from the daily consumption of two cooked leafy vegetables, such as spinach, sprouts or cabbage; one uncooked leafy vegetable, such as lettuce and the drinking of one quart of milk (providing the cows have been fed on green fodder).

Other sources of vitamin A are butter, egg yolk, animal fats, liver, apricots, carrots, green beans, green peas, sweet potatoes, and pumpkin. Halibut Liver Oil is the richest source, also the old reliable cod liver oil. One tablespoonful of cod liver oil will give an ample daily dosage of vitamin A. There are also many concentrates of vitamins marketed by the various drug houses and obtainable in the form of capsules. Usually one capsule contains the required amount of vitamin for one day.

Of interest in connection with the above is a report by Drs. Ralph C. Wise and O.H. Schettler, which appeared in the June issue of the Ohio Medical Journal, to the effect that eyestrain and fatigue, common complaints among those doing work that requires close attention, have been relieved among color matchers of the Westinghouse Electric and Manufacturing Company by daily doses of Carotene-in-oil, a source from which the body manufactures vitamin A.

Three capsules of carotene-in-oil daily, they declare, by speeding up the regeneration of visual purple, light-sensitive substance in the eye, have improved the efficiency of color-matching inspectors by 75 per cent.

Color inspectors of the company had long complained of severe headaches, burning and smarting eyes. Many of them declared they were unable to read in the evening after work or stated that they actually feared night driving. These conditions have now been changed by use of the new treatment is the assertion of Dr. Wise, an eye specialist, and Dr. Schettler, of the medical department of the above-named company.

Basis for giving the carotene-in-oil

is the fact that visual purple, the light-sensitive substance in the retina of the eye, is decomposed in the process of seeing and can be regenerated only in the presence of vitamin A. Dosing with carotene in effect increases the body's supply of vitamin so essential to proper vision. Lack of vitamin A is known to be a cause of night blindness, an eye defect held responsible for a large share of the mounting toll of night automobile accidents.

An interesting by-product of the tests, which Dr. Wise expects to repeat elsewhere, was an appreciable improvement in the health of the workers treated, particularly in cases where fatigue, headaches and eye-strain were chronic. Several workers reported gains in weight.

The eye-strain is produced not only by the close application of the eyes required, but also by the unusually bright light in which the work must be done. This light, the doctors note, has a tendency to destroy visual purple and reduce the "light threshold." Through measurements conducted with special equipment it was shown that the rate of regeneration of visual purple was increased.

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The graduation exercises for the 1937-1938 Class at the Army War College, took place in the auditorium of that institution on Wednesday morning, June 22nd. The exercises consisted of the Invocation by Colonel Wm. R. Arnold, Chief of Chaplains, U.S. Army; a short introductory speech by Major General John L. DeWitt, Commandant of the Army War College, followed by the principal address delivered by the Hon. Louis Johnson, Assistant Secretary of War, who also presented the diplomas. Among the 81 graduates were the following-named Air Corps officers:

Lieut. Colonel Hubert R. Harmon
 Major John DeF. Barker
 Major W. R. Carter
 Major I. H. Edwards
 Major L. P. Hickey
 Major H. A. Johnson
 Major A. J. Lyon
 Major A. W. Martenstein
 Major J. Y. York.

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A total of 38 Air Corps officers graduated on Monday, June 20, 1938, from the Command and General Staff School at Fort Leavenworth, Kansas. The guest of honor at the graduation exercises for the 1937-1938 Class was the Hon. Louis Johnson, Assistant Secretary of War, who delivered an address and presented the diplomas to the graduates. Chaplain Milton O. Beebe, U.S. Army, delivered the Invocation, and Chaplain L. Curtis Tiernan, U.S. Army, the Benediction. The graduat-

ing Air Corps officers are listed below, as follows:

Lieut. Colonels

Floyd E. Galloway Leo A. Walton

Majors

Orvil A. Anderson	George C. McDonald
George H. Beverley	Clements McMullan
Eugene L. Eubank	John W. Monahan
Frederick W. Evans	Bob E. Nowland
Harold H. George	Ray L. Owens
Barney M. Giles	Younger A. Pitts
James D. Givens	Robert M. Webster
Theodore J. Koenig	Ennis C. Whitehead
Milo McCune	F.M. Hopkins, Jr.

Captains

Earl W. Barnes	Joe L. Loutsenhoefer
James M. Bevans	Edmund C. Lynch
Lawrence J. Carr	John F. McBlain
Usal G. Ent	Earle E. Partridge
Donald F. Fritch	James S. Stowell
Kirtley J. Gregg	Yantis H. Taylor
Robert W. Harper	Wallace E. Whitson
John R. Hawkins	W.R. Wolfinbarger
Joseph G. Hopkins	

1st Lieut.

William A.R. Robertson

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The graduation exercises of the 1937-1938 Class of the Army Industrial College were held on Thursday morning, June 23, 1938, in the auditorium of the Public Health Service, Washington, D.C.

The exercises consisted of the invocation by the Chief of Chaplains, Colonel William R. Arnold; a short introductory speech by Colonel Harry B. Jordan, Director of the School, followed by the principal address delivered by the Hon. Louis Johnson, Assistant Secretary of War.

Of the 56 graduates, eight were Air Corps officers, viz:

Majors Shiras A. Blair, Don L. Hutchins, Clarence P. Kane, John A. Laird, Jr., Malcolm S. Lawton, Edward M. Powers, Robert T. Zane and Captain Julian B. Haddon.

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The following-named Air Corps officers were given temporary promotions in the grades indicated:

To Colonel: Lieut. Colonel Percy E. Van Nostrand, from June 17, 1938.

To Lieut. Colonel: Major Frank H. Pritchard, from June 17, 1938; Major Idwal H. Edwards, from June 17, 1938.

To Major: Captain Randolph P. Williams, from June 17, 1938.

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Effective June 1, 1938, Lieut. Colonel William E. Crom (temporary) was promoted to the permanent rank of Lieut. Colonel, and Major Perry Wainer (temporary) to Major. Major William S. Gravely (Capt) was promoted to the permanent rank of Major, effective June 19, 1938.

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GRADUATION EXERCISES AT ADVANCED FLYING SCHOOL
By the News Letter Correspondent



GRADUATION exercises for Class No. 38-B (consisting of two Regular Army officers, one Siamese officer, one Mexican Army officer, four Philippine Army Air Corps officers, and eighty-eight Flying Cadets, Air Corps, were held at the Air Corps Advanced Flying School, Kelly Field, Texas, on Thursday, June 16, 1938, before a record crowd, which has been estimated at between 4,000 and 5,000 spectators, including Brigadier General James E. Chaney, Commanding General of the Air Corps Training Center; Brigadier General Lesley J. McNair, Commanding General of the 2nd Field Artillery Brigade; Brigadier General C. F. Humphrey, Jr., Commanding General of the 3rd Brigade, Fort Sam Houston; approximately 400 Reserve officers; 400 ROTC students, undergoing two weeks' active duty at Camp Bullis; and 400 soldiers of less than one year's service from the Second Division at Fort Sam Houston, as well as the entire membership of the Basic Stage of the Air Corps Primary Flying School at Randolph Field, Texas.

Following the usual inspection on the flying line by Colonel Frank D. Lackland, Commandant of the Advanced Flying School, and members of the School Faculty and Staff, an impressive aerial review was flown by the graduating class. This review won a great deal of praise from the reviewing party, as well as from the great number of spectators and the local press.

There followed then the usual exercises at the Post Theater, which was filled to capacity and which could not accommodate several hundred additional spectators who wanted to enter. General Chaney introduced the speaker, General McNair, who, after making a very interesting and instructive speech, presented the graduating class with their diplomas amid the usual ovation of the audience.

The 88 graduating Flying Cadets were commissioned second lieutenants, Air Reserve, on June 16, 1938, and ordered to extended active duty at Randolph Field, where they will await orders for their permanent assignments with tactical units of the Air Corps. The names of these graduates were published in the previous issue of the News Letter.

Orders have been issued covering the duty assignments of the two officers of the Regular Army who graduated with this class. Major Lawrence A. Lawson departed on June 19th for his new station, Lowry Field, where he will be on duty with the Denver Branch of the Air Corps Technical School at that station. First Lieut. Joseph E. Barzynski, who was transferred to the Air Corps from the Infantry, left on June 21st on leave of

absence prior to reporting at Mitchell Field, N.Y., where he has been assigned to duty with the 97th Observation Squadron.

With respect to the six foreign officers who graduated with the class, authority was received from the War Department attaching the four second lieutenants of the Philippine Army Air Corps to tactical units of the U.S. Army Air Corps, where they will remain until they receive orders to proceed to Chanute Field and Lowry Field to undergo instruction at the Air Corps Technical School in the various officers' courses, viz:

Andres O. Cruz to a Bombardment unit at March Field, Calif.

Isidro J. Paredes to the 22nd Observation Squadron at Brooks Field, Texas.

Eustacio D. Orobia to a Pursuit unit at Barksdale Field, La.

Ramon M. Zosa to an Attack unit at Barksdale Field, La.

These officers left Kelly Field on June 20th for the stations indicated, and expressed their pleasure and good fortune in their attachment for tactical training with Army Air Corps units.

Captain Cabanas and Lieut. Suriya departed for their respective countries, the former going direct to Mexico City, and the latter, after a brief stop at Washington, D.C., to report to the Siamese Legation for further instructions, being bound for England.

General McNair's address is quoted below, as follows:

"General Chaney, Colonel Lackland, members of the instructional staff, and young officers of the graduating class: First of all, I want to say how sorry we all at Fort Sam Houston are that General and Mrs. Chaney are leaving. They are both grand people, and we are going to miss them. I know that you all here feel the same - and then some.

"You have honored me today, and I appreciate it more than I can express. I only wish that my words could do justice to the occasion as it appeals to me. The review was one of the most inspiring spectacles I have ever witnessed - one that I shall never forget.

"My experience with graduating exercises - both as a student and as a graduate - tells me that the graduates at least are for shorter and snappier exercises, which recalls a recent incident at Fort Sam Houston. Father came home and informed the family that he was to speak on a certain occasion, and added, 'I don't see why they asked me, I don't know what to talk about.' Young daughter piped up promptly. 'Talk about a minute, Daddy.' And out of the mouths of babes and all that.

"In coming to this citadel of the Air

Corps. I realize at the outset that I can offer no words of air-might; you know a lot more than I do; but I claim one small distinction - my service in the Army extends over the entire lifetime of the Air Corps, including its embryonic days as a mere section of the Signal Corps. So that, while I never was in the Air Corps, I have grown up alongside of it - in both peace and war. I have seen its struggles at close range - which makes more vivid and romantic the picture of air-might as we have it today.

"My brief remarks today are addressed to you as officers, not merely of the Air Corps, but of the Army as a united whole. And the Army cannot hope for success, unless it is in fact a united whole - trained and ready to carry out the will of one man - its commander. There can be no division of purpose in action - no working at cross-purposes - if we are to win a decisive struggle. No one arm can win by itself; each must do its part in working out the complete pattern.

"You young gentlemen have just completed a year of air training - probably the finest in the world, certainly in this country. But, like all school work, it has been curricular. You have been told what to do and how to do it. Skilled instructors have watched over you and guided you.

"Now the scene changes. You take your places in a great organization, every element of which has an essential function - a duty, a mission to perform. While it is true that commanders will direct you, the direction will consist largely of giving you a job to do, either as an individual or with a unit under your command. You no longer will have an instructor at your elbow. You must go to it on your own. You must apply the training you have received here in obtaining useful, productive results.

"I could wish you no greater success than to be able to report each task completed - each mission accomplished. But it will not be so - life is not like that. Sometimes you will succeed, and sometimes you will fail. You will make hits, and you will strike out. The question is what will be your batting average.

"It always has seemed to me that there are two prime requisites in carrying out a mission - first, to understand the mission, and second, to do just that - not something else. It sounds easy and simple, but all experience - ground as well as air - denies it. In every applicatory exercise when I was at the War College, the Commandant required us to post a placard on the wall, stating our mission, hoping to reduce in some degree the number of cases when the mission was either mangled or forgotten. I served at GHQ in France during the War, when the Air Corps - then the Air Service - still

was pretty young and raw. I can say frankly that there was no little sentiment to the effect that it was pretty much of a gamble what the airman would do when he left the ground - whether he would keep his eye on the ball, or go off on a tangent. About 1925 or so, the President's Morrow Board, investigating air questions on a broad front, heard the testimony of one Captain Rath, one of our veteran bombers. He stated in effect that, if a bombing formation encountered anti-aircraft fire before reaching its objective, it lost no time in dropping its load and going home. Far be it from me to contend that nothing can or should prevent the airman from accomplishing his mission - for the obstacles may be insuperable. But there is no question that in war you are going to face the decision as between going ahead or turning back, doing or not doing. Any many such decisions will not be easy. In the stress of war - especially in the air - the decision is bound to be influenced by your fixed habits of thought and action. If you school yourself through the years to look upon the accomplishment of your mission as something sacred and inviolable, it inevitably will be reflected in increased perhaps decisive - effectiveness. The ever-increasing power of the Air Corps will cause commanders to expect more and more of it - to lean on it heavily - especially at critical times; and it becomes the more important that you carry out your mission exactly, if it is humanly possible. This indispensable attribute is in fact the highest form of discipline - the determination to do the job because it has been ordered. It is a form of discipline which comes from the heart and mind, not from drill-ground ceremonial - however important that may be.

"One more thought. You have every right to be proud of your Air Corps; the Army is proud of it. You must believe in its power, and make the most of it. Youth should have its visions of greater things, and strive to realize them. But, at the same time, you must look into those visions, and ask whether they can be made realities or must remain only visions. I served on a board of officers in Hawaii in 1923, to investigate bombing and anti-aircraft firing. The young bombers were enthusiastic at the prospect of demonstrating their skill and power. The tests began. Bombs were dropped at a target, and the points of fall measured carefully. When the flyers saw their patterns, they were shocked; they refused to believe that they had not come closer to their target. It was necessary after that to have some of their number on the ground, in order to convince them of the facts. Actually it was not that the practice was poor - judged by standards in those days. The fact was that the airmen had thought

themselves too good; just as their older comrades - the artillerymen - had found, in their own case, they were capable of making some goodly errors. Perhaps these numbers were not intellectually dishonest - merely ignorant in a sense - but the result was the same in either case - a false conception of one's own capabilities and limitations. I beg of you to know yourself and your weapons, and to be frank among yourselves and with the rest of the Army. The Army will believe what the Air Corps says it can do, and will rely on it. If its prowess is exaggerated, through whatever cause, disillusionment surely will come with war. I may add that this same condition existed in the artillery - my native arm - until the war showed that things were not as easy as they looked on the target range.

"And so the two thoughts that I'd like to leave with you as you join the Air Corps are to carry out your mission, and to be informed and honest as to your capabilities and limitations.

"Gentlemen of the graduating class, you are about to become what everyone for years has known as a 'Kelly Graduate' - a mark of great distinction. You have had your troubles with a most rigid and exacting course. You have survived as others fell by the wayside. Now what are you going to do? Are you going to rest on these laurels, or are you going on? It's an old question. I now have lived long enough to see careers worked out to the end - knowing the individuals intimately all the while. The striking thing is that the graduate whom everyone considered the fair-haired boy is not always the big shot 5, 10 or 20 years later. He considered himself a finished product on graduation. His fellowman just kept right on plugging through the years. In the end, we find the prodigy about where he started. The old plugger shows the accumulated progress of years. It is hard to believe that the two started together. Yet, if one looks at the whole picture, the answer is inevitable. I realize that some of you will plug harder than others, some of you are abler than others. But all of you as graduates of this course surely have the ability to make a lot of yourselves, if you only keep on developing. Especially at this time, you are most fortunate in having within your reach a commission in the Regular Army - a goal so many have sought in vain, simply because the necessary vacancies were not available.

"So now your work at Kelly is over; success will be yours, not for the asking, but by the old road of good, hard work at the daily tasks as they come along. More power to you - and the best of luck."

Commendation on the conduct of the graduation exercises on June 16th was expressed by Brigadier General James E.

Chaney, Commanding General of the Air Corps Training Center, in an official communication to the Commandant of the Air Corps Advanced Flying School, Kelly Field, Texas, dated June 16, 1938, as follows:

"1. The graduation exercises at the Air Corps Advanced Flying School on June 16, 1938, gave every evidence of careful planning, intelligent supervision, and efficient execution on the part of yourself, your staff, and the officer and enlisted personnel of your command.

"2. The student flying in the aerial review was indicative of thorough training. The efficient handling of large visiting detachments of Reserve officers, R.O.T.C. students, and enlisted men from Camp Bullis and Fort Sam Houston, the imparting to them of information on Air Corps equipment, and the efficient and courteous handling at the same time of large numbers of civilians all reflected the high standard of efficiency existing in your command.

"3. It is desired that this be brought to the attention of all members of your command in order that they may know that their thorough and efficient performance of duty has been recognized and appreciated by higher echelons of command."

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ADVANCED SCHOOL CLASS LARGEST IN HISTORY

Anticipating the arrival on June 27, 1938, at the Air Corps Advanced Flying School, Kelly Field, Texas, Class No. 38-C (the largest in the history of the school), preparations have been under way for some time to receive them. This class will consist of 66 Regular Army officers and 85 Flying Cadets, a total of 151 students.

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"OLD TIMER" LEAVES 12TH SQUADRON

The 12th Observation Squadron, stationed at Fort Knox, Ky., recently lost Master Sergeant Robert Duke, Air Corps, who has been transferred to the Philippines for duty. This veteran noncommissioned officer has the distinction of serving with the 12th Squadron through all the grades from buck private to Master Sergeant. He served as First Sergeant of this organization for 7 1/2 years and seemed an inseparable part of it.

A farewell dinner was tendered Sgt. Duke by the officers and men of the Squadron. General Van Voorhis, the Commanding General of Fort Knox, Ky., officiated and cited Sergeant Duke as an exemplary soldier and an inspiration for all young men in the service.

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During May, 1938, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled 19 planes and 55 engines and repaired 65 planes and 26 engines.

STANDARDIZATION OF WRECKING TRUCK

The Type C-2 wrecking truck has been standardized. This truck is of the tractor-trailer type, the tractor being equipped with an integrally mounted 10-ton capacity boom crane, a 2500-watt, 110-volt alternator, underslung drum type winch mounted at the rear of the tractor, and two 10-inch floodlighting projectors. The crane with a 15-foot boom may be utilized at airdromes for normal maintenance of airplanes in addition to its salvaging purposes. The 2500-watt alternator will permit the use of standard hand electric tools in the field to facilitate salvage and repair of airplanes.

Wrecked aircraft may be retrieved from swamps, ravines, and other inaccessible areas by means of the underslung winch. The floodlights and projectors are of the wide-angle type, enabling operation at night. A lower fifth wheel is mounted on the tractor chassis for the coupling of a semi-trailer.

The semi-trailer is of the stake and platform type. The loading platform is eight feet wide by forty feet long. There is a skid rail at the rear of the platform. The laden height of the platform will not exceed 43 inches. This will permit transportation of complete fuselages through average underpasses. A tool compartment of ample capacity is located at the forward end of the trailer.

The tractor and trailer are equipped with truck and bus balloon-type tires and air pressure operated brakes. A clearance lighting system conforming to Interstate Commerce Commission regulations is provided in order that operation of the vehicle may not be restricted. A converter dolly, which may be carried on the trailer or towed at the rear, makes it possible to maneuver the trailer by means of military trucks or tractors.

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SECOND AUTOGIRO CLASS

The second course of instruction in Autogiro Maintenance and Operation started on June 8th at Patterson Field, Fairfield, Ohio, under the able direction of 1st Lieut. H.F. Gregory, assisted by 2nd Lieuts. E.S. Nichols and J. V. Wilson.

The student pilots are second lieutenants G.R. Smith, of Langley Field, Va.; J.K. Arnold, Brooks Field, Texas; W.C. Barrett, Mitchel Field, N.Y.; V.R. Haugen, Marshall Field, Fort Riley, Kans., and N.L. Peterson, Godman Field, Ky.

The enlisted mechanics are Sergeants J.R. Ellett, of Langley Field, Va.; G.W. Money, Marshall Field, Kans.; Privates C.L. Liles, Post Field, Fort Sill, Okla., and J.E. Wright, Lawson Field, Fort Benning, Ga.

WEST POINT CADETS AT MITCHEL FIELD

During the period June 18th to July 9th, 456 West Point Cadets, Class of 1939, are receiving a practical taste of the way Uncle Sam employs his air forces at Mitchel Field, N.Y. Due to the scarcity of airplanes and the lack of ample housing facilities, the cadets are receiving their training in three echelons, each echelon remaining for a period of one week.

Enlisted personnel of the 9th Bombardment Group, stationed at Mitchel Field, turned over their barracks to the Cadets and moved into the 97th Observation Squadron hangar, where temporary facilities were installed for their accommodation.

Mornings are devoted to various phases of flying, such as Orientation, Observation, Navigation, and a demonstration of the manner in which a Bombardment Squadron bombs a given target. Each cadet receives approximately eight hours of flying. The afternoons are devoted to lectures and interesting excursions to the various activities about the post.

The cadets display keen interest in military aviation. In addition to scheduled flights, they are devoting their leisure time to flying with regular scheduled flights, including night missions.

On Wednesday afternoon of each week, a picnic is held at Jones Beach, New York State's largest bathing beach. Each Thursday evening a Tea Dance is given at the Officers' Club from 6:00 to 11:00 o'clock, in honor of the Cadets and their guests.

The tennis courts, bowling alleys and swimming pool were placed at the disposal of the Cadets during off duty hours.

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BOMBING PLANES INTERCEPT LINER AT SEA

Langley Field officers reported that on June 12th three "Flying Fortresses" of the Second Bombardment Group at that station, while on a routine training flight, intercepted the SS "Queen of Bermuda" about 300 miles at sea, exchanged greetings with the ship and returned to the home airdrome.

The three planes, with Majors Caleb V. Haynes, Edwin R. McReynolds and Captain Archibald Y. Smith at the controls, left Langley Field at 10:00 a.m. and were back at 5:30 p.m.

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Two Air Corps officers, 1st Lieuts. Thetus C. Odom and Wm. P. Eckert, are under orders for duty as students to pursue the course of instruction at the Harvard Graduate School of Business Administration, Cambridge, Mass. Lieut. Odom has been undergoing a course of instruction at the Air Corps Technical

(Continued on Page 7)

THE TYPE C-6 OBSERVATION BALLOON

The Type C-6 observation balloon represents the latest Air Corps endeavor for improving this type of equipment. Observation balloons were employed quite extensively during the World War, and are still regarded valuable for certain specialized methods of observation.

This new balloon somewhat resembles the present standard C-3 captive balloon, except that it depends for stability upon four fins, similar in construction to the tail surfaces of an airplane, instead of the three balloon fabric, air-inflated lobes of the older type. The aerodynamic characteristics of the C-6 balloon are definitely superior to those of previous types. It can be operated either as a captive or motorized balloon, and is converted from one form to the other in a few minutes.

When performing its prescribed mission of observation for the regulation of artillery fire, a cable containing a telephone wire center is attached, and the observers in the basket, which serves as a stationary elevated platform, are able to converse, via telephone, with the ground organization for whom they are observing. The telephone communication system, which is the most dependable method of communication, is one of the outstanding features of balloon observation. In addition, due to the absence of vibration, powerful field glasses can be used for observation work and a very high degree of accuracy obtained.

Upon completion of the observation mission, the balloon is hauled to the ground where the basket is detached and a small car, equipped with an 85-horsepower engine, is attached. The balloon is then flown under its own power to a location 25 to 30 miles in the rear. This method of transporting the balloon in flight, from one location to another, represents the major improvement in the equipment.

An idea of the advantage of this mobility feature may be obtained by a comparison with the method used in the past for changing the balloon location. With the old type balloon it was necessary to tow the craft over the ground while attached to a cable on a windlass truck. This system contributed to general traffic congestion on the roads and serious difficulties had to be overcome when overhead wires, bridges, etc., were encountered. The mobility feature also permits balloons of this type to be moored in the rear zone, thus reducing the hazard of attack while on the ground, which was one of the undesirable features of the old type balloons.

Helium is, of course, now used for practically all lighter-than-air operations. The new type observation balloon is inflated with 50,000 feet of this noninflammable gas. Since helium is an

inert gas and will not combine with another gas to form an explosive mixture, this feature offers a decided improvement, in that it eliminates the hydrogen fire hazard.

The envelopes for balloons, which up until recently were constructed of rubberized fabric, are now manufactured from fabrics coated with synthetic rubber. The power car is a tubular steel structure covered with cloth and provided with three wheels, on which the car is moved about while on the ground. The car is equipped with two cockpits, permitting carrying of an observer for specialized missions when flying as a motorized balloon.

The fact that the air speed compares with the speed of land vehicles rather than with that of other aircraft makes flight at low speeds and low altitudes possible with a high degree of safety. A change of location under cover of darkness without elaborate navigational aids is another of the outstanding characteristics of this type of balloon. It is entirely possible to throttle the engine and converse with persons on the ground.

Operation of this type of aircraft is relatively simple when compared with that of other types.

Two balloons of the C-6 motorized type are now in operation; one at Fort Sill, Oklahoma, where observation missions for the Artillery School are performed, and the other at Fort Lewis, Washington. Two additional balloons will be placed in service as soon as construction is completed.

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Lieuts. Odom and Eckert (From Page 6).

School at Chamute Field, Rantoul, Ill., while Lieut. Eckert has been on duty as a flying instructor at the Air Corps Primary Flying School at Randolph Field, Texas.

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The following-named Air Corps officers, upon the completion of their present tour of duty in the Philippine Department, are assigned to duty at the stations indicated:

First Lieuts. Jerome E. Blair, 2d, and Stanley J. Donovan to Randolph Field, Texas; Frederick J. Pillet to Maxwell Field, Ala.

Officers recently ordered to duty in the Philippines are 1st Lieut. William M. Gross and 2nd Lieut. Henry B. Fisher, upon the completion of the Armament course, and 2nd Lieut. Hilmer C. Nelson, upon the completion of the Photographic course at the Denver Branch of the Air Corps Technical School, Lowry Field, Denver, Colo.

HIGH ALTITUDE NAVIGATION MISSION

A flight of seven PB-2 Pursuit planes from the 33rd Pursuit Squadron, Langley Field, Va., took off on June 6th on a high altitude navigation mission. The flight was led by Major R.L. Maughan, Commanding Officer of this Squadron, and was joined by six planes attached from the 35th and 36th Pursuit Squadrons.

Except for the development of a faulty supercharger on the airplane piloted by Lieut. W.C. Clark, the mission was without incident. Maxwell, Barksdale and Kelly Fields were visited.

Much was learned of the capabilities of biplace Pursuit at high altitude, and the mission was considered successful by all concerned.

In connection with the above, the News Letter Correspondent of the 35th Pursuit Squadron states:

"Second Lieutenants Don Coupland, George B. Greene and Homer M. Truitt, as part of Major R.L. Maughan's flight, took off from Langley Field to visit their Alma Mater at San Antonio, Texas. During the trip they took the PB's aloft to 20,000 feet, where it became quite cold, especially with only summer flying equipment. While flying at this altitude they used the newly installed gaseous oxygen equipment, which proved to be very satisfactory."

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CHANGES IN PERSONNEL AT KELLY FIELD

Major Harvey W. Prosser and Captain Edward H. Porter, Air Corps, reported at Kelly Field recently from the Philippine Department.

During his tour of duty in the Philippines, Major Prosser served as Director of the Bureau of Aeronautics, Commonwealth of the Philippines, and Aeronautical Adviser on the staff of General Douglas MacArthur, Military Adviser of the Commonwealth of the Philippines; as well as Inspector, Bureau of Air Commerce, U.S. Department of Commerce. He returned to the States commercially, via the Suez Canal, with his family.

Major Prosser was assigned to the Air Corps Advanced Flying School and announced as Secretary and Public Relations Officer, succeeding Major Isaiah Davies, Air Corps, who has been designated as Director of Flying Training, relieving Major Robert T. Cronau, who will continue as Post Operations Officer.

While in the Philippine Department, Captain Porter served as Group Communications Officer of the Fourth Composite Group, Air Corps, and for over a year he was Commanding Officer of the 28th Bombardment Squadron at Nichols Field. He returned to the States with his family aboard the U.S. Transport GRANT. Captain Porter was assigned to the 61st School

Squadron at Kelly Field and will assume command of that organization in the near future, upon the departure of Major Clarence E. Cromrine for Fort Leavenworth, Kansas, where he was ordered to pursue the course at the Command and General Staff School.

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PERSONNEL NOTES

Colonels Walter H. Frank, Chief of Staff of the Headquarters GHQ Air Force, Langley Field, Va., and Herbert A. Dargue, Assistant Commandant of the Air Corps Technical School, Maxwell Field, Ala., are under orders for foreign service.

Colonel Frank is to sail on or about September 1, 1938, for the Hawaiian Department, where he will report to the Commanding General for duty as Wing Commander of the 18th Wing.

Colonel Dargue is to sail on the transport scheduled to leave Charleston, S.C., on or about October 8, 1938, for the Panama Canal Department, where he will report to the Commanding General for duty as Wing Commander of the 19th Wing.

Major Lloyd N. Keesling, Air Corps, has been placed on the retired list, June 30, 1938, for disability incident to the service.

Major Harlan W. Holden (Captain) was promoted to the permanent grade of Major, with rank from June 23, 1938.

Lieut. Colonel Walter F. Krauss, Air Corps, has been relieved from detail as a member of the General Staff Corps and from assignment and duty in the Office of the Chief of Staff, Washington, D.C., and assigned to duty in the Hawaiian Department.

Master Sergeant Frank Skrobacke, Air Corps, of the Headquarters and Headquarters Squadron, 3rd Wing, GHQ Air Force, has been placed on the retired list at Barksdale Field, La., effective June 30, 1938. Enlisting in the Coast Artillery Corps, he served continuously in that branch of the service, from Private to Sergeant, from August 8, 1907, to December 27, 1920. From that date and through the remainder of his military service he served with the Air Corps. He received his appointment as Master Sergeant on January 2, 1936. He graduated from the Air Corps Technical School as an Airplane Engine Mechanic, and served in the Panama Canal Department from April 15, 1915, to December 3, 1919. At the age of 48, Master Sergeant Skrobacke has completed over 30 years of service in the Army.

Captain Arnold H. Rich has been transferred from Maxwell to Lowry Field, Colo.

HICKAM FIELD, THE ARMY'S NEWEST AND LARGEST AIRDROME

By Captain H.B. Nurse, Quartermaster Corps

Through weird purple lights of a tropical dawn there came a mighty armada, roaring its way through tranquil skies over these enchanted islands of romantic Hawaii. The 18th Wing of Uncle Sam's mighty air force is "Coming Home." "Home," with all that the word implies, for Brigadier General Barton K. Yount, beloved and respected by every man of his command, has taken possession, for the U.S. Army, of this magnificent air base, which is destined to be, when completed, not only the most important unit of aerial defense within the Hawaiian Department, but the largest airdrome in this broad land of ours.

The young aviator fortunate enough to be assigned to the 18th Wing will find on "reporting in" that the charms of Hawaiian tradition have been interwoven by the creative mind in the development of this beautiful post.

As a kamaaina to a malihini, to one who is coming for his first tour in these tropical islands, let me quote for his enlightenment Mark Twain's early impression: "No land in all the world has any deep, strange charm for me but this one; no other land could so lovingly and beseechingly haunt me sleeping and waking through half a lifetime, as that one has done. Other things leave me, but it abides; other things change, but it remains the same. For me its balmy airs are always blowing, its summer seas flashing in the sun; the pulsing of its surf-beat is in my ear; I can see its garlanded crags, its leaping cascades, its plume palms drowsing by the shore; its remote summits floating like islands above the cloudrock; I can feel the spirit of its woodland solitude; I can hear the splash of its brooks; in my nostrils still lives the breath of flowers that perished twenty years ago." And THIS is Hawaii.

Nestling on these sunny shores, out here in the Paradise of the Pacific, Hickam Field has come into its own. It is situated seven miles northwest of the City of Honolulu, and lies between the Navy Yard, Pearl Harbor and Fort Kamehameha. This new Air Field was officially designated as HICKAM FIELD in commemoration of Lieut. Colonel Horace M. Hickam, Air Corps, who was killed in line of duty at Fort Crockett, Texas, on November 5, 1934, in an airplane accident.

In 1928, the necessity for expanding the air defenses of the Hawaiian Islands became apparent to the War Department, at which time a Board of Officers was appointed to select a suitable airdrome site on the Island of Oahu for this purpose. Several tentative sites were investigated. However, in the opinion of the Board, all but one site failed to possess the necessary characteristics of an

ideal airdrome. Recommendations were made to the War Department that this particular site, consisting of 2225.46 acres, be secured from private owners, comprised of the Bishop Estate, Damon Estate and Queen Emma Estate.

During 1928, the U.S. Attorney General started condemnation proceedings which were later suspended due to lack of funds. Nothing further was done concerning the condemnation of this land until January, 1935, when proceedings were reinstated against the property owners. Title was acquired to the property on April 9, 1935, at a cost of \$1,091,238.12, the funds having been provided for under Public No. 21, of the 74th Congress, approved March 21, 1935.

On July 26, 1935, Captain H.B. Nurse, Quartermaster Corps, arrived in Hawaii to assume the duties of Constructing Quartermaster. After making a thorough examination of the site, a layout plan was prepared for this vast airdrome, and this was approved on August 16, 1935, by Major General Hugh A. Drum, the Department Commander.

Major Don L. Hutchins, Air Corps, arrived in the Department shortly before Captain Nurse, and assumed the duties of Air Corps Representative and Technical Advisor to the Constructing Quartermaster. Major Hutchins and Captain Nurse had worked together on Air Corps construction for more than six years. At the expiration of Major Hutchins' tour, when he was ordered to the Mainland to attend the Industrial College, Major Harold L. Clark, Air Corps, an old-timer in the Building and Grounds Division in the Office of the Chief of the Air Corps, and with whom Captain Nurse had previously served, was ordered to Hawaii as replacement in this important position.

Lieut. Jesse H. Veal, Quartermaster Corps, reported for duty as assistant to the Constructing Quartermaster on November 23, 1935, and was assigned as Executive Officer. The greater portion of his service since graduation from West Point has been with Captain Nurse.

On September 1, 1935, Master Sergeant Harry A. Chapman, Air Corps, was assigned to the project as Assistant to the Constructing Quartermaster and placed in charge of work to be performed by the Purchase and Hire Section; work for which he was well qualified and which he handled very efficiently until impaired health compelled his return to the Mainland, at which time Lieut. Archibald W. Lyon, Quartermaster Corps, a young officer who received his initial grooming during the construction of Hamilton Field, under Captain Nurse's supervision, took charge of this work.

The remainder of the organization was

made up of Civil Service employees, many of whom were transferred from mainland posts, and had served previously with Captain Nurse at various stations from Washington, D.C., to as far distant as the Philippine Islands.

When completed, Hickam Field will have barracks that will provide accommodations for six thousand enlisted men and more than eight hundred dwellings to house the commissioned and noncommissioned personnel. There will be eight double hangars with over twelve acres of floor space. The Hawaiian Air Depot, which is also an important part of Hickam Field, will be provided with 380,000 square feet of floor space for the storage of supplies and will be equipped with a most modern shop with more than eight acres of the latest type of machinery and equipment.

The Japanese have a proverb which embodies the theory that beautiful surroundings play a great part in the building of good men. Major General Hugh A. Drum, the Department Commander at the time this work was initiated, was a believer in the building up of "good men," thereby moulding strong organizations, which would in turn result in a decidedly efficient fighting machine.

First, he believed thoroughly in a "Happy Garrison," which is the indication of contentment within the organization; second, he strongly agreed with Ruskin, who once said: "One will so often think that beauty is expensive, which is wrong, - it is ugliness that costs." With this in mind, General Drum in the initial plans tried to make Hickam Field not only a "model of efficiency," but a beautiful place in which to live.

Colonel Delos C. Emmons was Wing Commander at the inception of Hickam Field, and was subsequently relieved by General Yount. Both officers took a keen interest in converting what only yesterday were tangles of Algaroba and lantana jungle into a model Army post which, if General Yount's prophecy comes true, will become one of the show places of Hawaii.

The Quartermaster Corps, charged with the construction of this project, is accomplishing results through the medium of very careful and thorough planning. The day is never so crowded with routine duties but that Colonel C.L. Corbin, the Department Quartermaster, finds time to study the minute details that go into the construction of a post of this magnitude.

Every home is not only being so placed as to avail itself of the prevailing trade winds, but also the mountain scenery or marine view. The homes will be in keeping with the Hawaiian atmosphere and traditions, rather than being set "four square," and each a replica of the other, as were the buildings of our earlier Army Posts, when it was considered essential to follow the lines of a cita-

del, a tradition which was handed down from the time of Caesar.

At Hickam Field, streets curve and wind in an easy, carefree manner, with a leisurely Hawaiian indifference to the Euclidean maxim concerning two points and one straight line; yet, it contains organic unity, as well as direct arteries of circulation leading to various focal points.

In the technical area, however, lethargy is abated and is replaced with an alert efficiency.

Landscaping, in keeping with Hawaiian sub-tropical growth, is keeping pace with the construction. Over 300,000 trees and shrubs have already been propagated at little cost. Had this work been delayed until completion of construction and the necessary trees of proper growth purchased in the open market, it would have resulted in the expenditure of several hundred thousands of dollars. As it is, we have 175 varieties of trees and shrubs with 41 varieties of palms alone. Many of these have been set out along the streets and boulevards and by the time Hickam Field reaches completion, they will have matured into well developed young trees.

Endeavoring to get away from a stereotyped form of building, it is also hoped to develop individuality in the grounds and landscaping as well, so that when completed Hickam Field will be not only a credit to our Government but a source of pride to the good people of fair Hawaii.

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55TH PURSUIT SQUADRON ON THE GO.

The 55th Pursuit Squadron, stationed at Barksdale Field, La., recently returned home from their sojourn at the Floyd Bennett Airport, Brooklyn, N.Y. The News Letter Correspondent states that many lessons were learned of the big city, also that when the Pursuiters arrived at Barksdale Field they stopped there only long enough to secure a clean shirt and a pair of socks, and then seven pilots and fifty percent of the enlisted personnel of the Squadron proceeded to Galveston, Texas, where they were busily engaged in conducting aerial gunnery. "Completion of this phase of pilot training," he says, "will finish our training directive for the Fiscal Year to the satisfaction of all concerned."

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Standardization of the Type A-8, vapor-proof, cabin lamp assembly has been initiated at the Air Corps Materiel Division. This lamp is similar to the Type A-7, except that a 25-watt, 110-volt, double contact bayonet candleabra base lamp is used in lieu of the 21 c.p., 12-16 volt, single contact, bayonet candleabra base lamp.

PROMOTION OF SECOND LIEUTENANTS

The following-named second lieutenants of the Air Corps were promoted to the grade of first lieutenant, with rank from June 12, 1938:

- | | |
|----------------------|--------------------------|
| Albert J. Shower | Willis F. Chapman |
| Jack W. Hickman | Thomas Wildes |
| Leighton I. Davis | Aaron W. Tyer |
| George E. Smith | German P. Culver |
| James VanG. Wilson | Wilhelm C. Freudenthal |
| John K. Brown, Jr. | Charles J. Daly |
| Robert M. Stillman | Samuel C. Mitchell |
| Richard E. Ellsworth | Lamont Sarton |
| Raymond W. Sumi | Thomas C. Musgrave, Jr. |
| Joseph G. Russell | Thomas J. Gent, Jr. |
| Kenneth P. Berquist | Pelham D. Glassford, Jr. |
| Arthur A. Fickel | Maurice M. Simons |
| Downs E. Ingram | Jack Roberts |
| Carl M. Parks | Glenn C. Thompson |
| James H. Walsh | Samuel B. Knowles, Jr. |

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ASSIGNMENT OF GRADUATES OF ENGINEERING SCHOOL

Upon the completion of their present course of instruction at the Air Corps Engineering School at Wright Field, Dayton, Ohio, the following-named Air Corps officers are assigned to stations, as follows:

- To the Materiel Division, Wright Field: Captains Oscar F. Carlson, Frank G. Irvin, 1st Lieutenants Mark E. Bradley, Jr., Merrill D. Burnside, Charles E. Munroe, Jr. Rudolph Fink.
- To the Rockwell Air Depot, Coronado, Calif: 1st Lieut. Charles G. Williamson.
- To Leland Stanford University, Calif: 1st Lieut. Samuel R. Brentnall.
- To University of Michigan, Ann Arbor, Mich: 1st Lieut. Daniel F. Callahan, Jr.
- To California Institute of Technology, Pasadena, Calif.: 1st Lieut. Clark N. Piper.

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NEW OFFICERS FOR THE AIR CORPS

Under the provisions of the Acts of Congress of August 30, 1935, and April 13, 1938, a total of 61 Reserve officers of various branches of the Army serving on active duty received permanent commissions in the Regular Army in the grade of second lieutenant. Nineteen each were commissioned in the Infantry and the Air Corps, 9 in the Field Artillery, 5 in the Coast Artillery Corps, 3 in the Cavalry and the Corps of Engineers, 2 in the Signal Corps and one in the Chemical Warfare Service.

The 19 officers permanently commissioned in the Air Corps, with rank from July 1, 1938, and the stations at which they are at present serving are given below, viz:

- J.W. Phelps, Jr. and S.R. Patterson, Selfridge Field, Mich. Also L.G. Fiegel.
- J.R. Allison, T.K. Myers and H.G. Barrett, Langley Field, Va.
- M.J. Coffield, W.A. Davis and W.E. Nau, March Field, Calif.
- L.H. Dalton, J.R. Kilgore and E.S. Chickering, Randolph Field, Texas.
- E.V. Martin, Jr. and R.C. Orth, Scott Field.
- G.L. Hyason, Jr., Moffett Field, Calif.

(Continued on Page 13)

CHANGES IN JULY CLASS AT RANDOLPH FIELD

Thus far a total of 343 candidates have been selected for the July, 1938, entering class at the Primary Flying School at Randolph Field, Texas.

A number of candidates, listed in the previous issue of the Air Corps News letter as having been selected for this class, have for various reasons declined appointment. These candidates, 20 in number, are listed below, as follows:

- | | |
|----------------------------|----------------------|
| Campbell, Charles Clay | University, Ala. |
| Grant, Robert Smith | Washington, D.C. |
| Roberts, Harold Halcombe | Bartow, Fla. |
| Hay, Samuel Wahl | Chicago, Ill. |
| Baker, Barton Ormsbee | Moline, Ill. |
| Marshall, Paul Robert | Peoria, Ill. |
| Werner, Franklin Andrew | Peotone, Ill. |
| Crow, Roger McKee | Topeka, Kans. |
| Tarter, Heber Dana | Mintonville, Ky. |
| Walden, David Carroll | Brunswick, Me. |
| McGrath, John Francis, Jr. | Jamaica Plain, Mass. |
| Mason, Robert Earl | Quincy, Mass. |
| Bates, Albert W. | Worcester, Mass. |
| Phapscoen, John Louis | Belleville, N.J. |
| Chapin, Lambert | Potsdam, N.Y. |
| Isensee, George Lorne | Fargo, N.D. |
| McCoy, Charles Wirth | Longview, Texas |
| Lamberth, Ivey Earl, Jr. | Waco, Texas |
| Kershner, Maurice Irving | Burlington, Vt. |
| Venable, Eugene Roane | Roanoke, Va. |

The 22 candidates listed below have been added to the number of Flying Cadet appointees for the July, 1938, class at Randolph Field, viz:

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|------------------------------|---------------------|
| Grosetta, Anthony V. | Tucson, Ariz. |
| Hubbard, Harry Vaughn | Hayward, Calif. |
| Wood, Samuel Gordon | Washington, D.C. |
| Fleege, Francis Joseph | Galena, Ill. |
| Hampton, Vern James | Galesburg, Ill. |
| Van de Lester, John Rineir | Hammond, Ind. |
| Harker, Ward W. | Detroit, Mich. |
| Wood, William Johnston | Albuquerque, N.M. |
| Vosper, Stanley Richard | Akron, Chic |
| Wilson, Frederick Gerald | Delaware, Chic |
| Kendall, William Talbott | Salem, Chic |
| Finkles, Raymond Archer, Jr. | Warner, Okla. |
| Newton, Darr Ellsworth | Malvern, Pa. |
| Stubbs, A.B. | Fort Moultrie, S.C. |
| Gilbert, William Frank, Jr. | Lyman, S.C. |
| McDonald, William Emory | Corsicana, Texas |
| McCafferty, Guy Franklin** | Fort Bliss, Texas |
| Brosseau, William D. | San Antonio, Texas |
| Gwinn, John W. | Lockbridge, W.Va. |
| Hurley, Edward Phillip | Lafayette, Ind. |

*2nd Lieutenant, Infantry Reserve

**2nd Lieutenant, Cavalry Reserve

Enlisted Men

- Smith, William Bernard, Private, Coast Art'y 51st Coast Artillery, Fort Monroe, Va.
- Fawcett, Ralph M., Private, Air Corps 10th Air Base Squadron, Chanute Field, Ill.

In the issue of the Air Corps News Letter for June 15, 1938, it was stated that a total of 341 candidates had up to that time been selected for the July, 1938, Class at Randolph Field.

Deducting the 20 candidates who declined appointment, and adding the 22 candidates above listed, makes the size of the class 343.

ALBROOK FIELD AIRPLANES SALVAGED AT JAQUE, PANAMA
By Lieut. Franklin K. Paul, Air Reserve

A motor launch, barge, airplanes and natives armed with machetes were utilized to salvage the usable parts of a B-10B and a B-6A which were recently damaged while landing at Jaque, Republic de Panama. Lying some 160 miles south-east of Albrook Field and just a few miles from the Colombian border, the little village of Jaque is accessible only by boat or airplane. Its few dozen inhabitants live in bamboo huts; most of them have never seen an automobile, but an airplane is a common sight, and several weeks ago they were privileged to witness a little civilized sport when a B-10B kneeled down after landing, and a B-6A somersaulted in the mud.

As neither airplane could be locally repaired and flown away, it was necessary to dismantle both and attempt to tow the undamaged parts by boat and barge to Albrook Field. Not such a difficult procedure - if one is supplied with a concrete loading dock and a few traveling cranes, but rather arduous under the conditions met with in Panama's interior, where the only cranes are those with white wings and crooked necks.

Under direct supervision of Master Sergeant (Doctor) Lucy, a pier of logs was built on the bank of the river that terminates the north runway of the Jaque landing field, and which is some half mile in from the sea. Native labor was used chiefly in the actual construction, the principal tools being axes and machetes. This forty by sixty foot pier was set up a la Engineers' Field Manual with jungle timber, and when finished was strong enough to support a freight car. The logs for the flooring were hewed flat, and in accomplishing this feat the native contingent showed a confidence in the handling of axes that was blood-chilling to observe.

"How wide to cut?" asked one, and when Sergeant Lucy answered "as wide as your foot," the dusky Indian placed his bare pedal extremity on a log and proceeded to hack away the wood to its exact width. If his toes had had whiskers they would have been shaved as closely as with a freshly stropped razor.

The P-10 crash boat, accompanied by the Navy mine-tender SCHUMM, towing the Army's sixty-ton barge, arrived off-shore at Jaque. However, the SCHUMM proved to have too much draft to negotiate the shallow river mouth channel, and it was not feasible for the light P-10 to tow the barge close-hauled through the heavy surf. Accordingly, the P-10 came ashore alone, took aboard one end of a 3500-foot line, and attempted to haul this end back to the barge. The plan was for the P-10 to pull the barge at the end of the long line in such a

manner that the line would span the several hundred yards of rough water, and the P-10 would be pulling in the quiet river.

On its outward trip to the barge, the P-10 met disaster in the form of a huge roller, which broke completely over the small cruiser, damaging its stern and washing overboard Private Bryan, of the 15th Air Base Squadron. Bryan managed to struggle to the shore through several hundred feet of shark-infested ocean, but the P-10 was out of commission for towing purposes. It later limped back to Balboa under its own power.

Salvage operations were delayed until Captain Manning E. Tillery, Post Engineering Officer, and officer in charge of the salvaging, secured the services of T.J. Libonati, a machinist in the Canal Zone Mechanical Division. Mr. Libonati asserted that his Diesel-powered shallow draft launch could pull the barge through the surf. Accordingly, on the morning of June 4th, the CECELIA, towing the barge twice her size, came around Pinas Point and anchored off-shore at Jaque, awaiting the afternoon high tide. At morning high tide the inlet is usually fairly calm, but by late afternoon huge whitecaps lash frenziedly against the rocks and over the sandbar which guard the narrow channel. Even the fish keep a safe distance from the tumbling tons of water. And the CECELIA was just two hours late to catch the morning tide.

Captain Tillery and other salvage workers ashore, remembering what had happened to the P-10, gathered on the beach to watch, and at 5:30 p.m., the little launch with the barge snubbed close behind, pointed her nose in the breakers. At the first one she hit the sixty-ton barge came alive. The tiny CECELIA almost disappeared into the trough of the wave, and the barge, poised on its crest, leaned backward and lunged like a deeply struck tarpon. As the line snapped taut, its huge bulk plowed forward and the CECELIA was forced to full throttle to avoid being rammed. For a hectic five minutes a dramatic duel was fought between scow and launch, the barge twisting first side-ways, then plunging head-on, and snapping the stern of the CECELIA about until its skipper was hard put to avoid being rammed and swamped. The little craft wallowed wildly in the rollers, shipping water over both rails, but finally slid into the smooth flowing river with the heavy load, and though her floor bits were pulled from the strain and the rudder cable jammed, managed to tie up at the home-made pier.

The loading of the salvaged airplane parts was accomplished that night in or-

ber that the launch might take advantage of the smoother morning tide on the outward trip. Four heavy motors and the B-10 wings were carried by sheer man power for approximately a hundred yards to the barge; cowlings, instruments and other usable parts were loaded, and at the end of four hours the load was lashed down and ready. Early the next morning Mr. Libonati swung the CECELIA through the now calm passage and reached Balboa two days later with the cargo intact.

For salvage operations in such a locality a great deal of prior planning had to be made. Men to supervise the building of the pier, dismantling the airplanes, engaging of native labor, and securing materials, had to be sent to Jaque two weeks before the arrival of the boat, and these men had to be kept supplied with fresh water and food carried by plane from Albrook Field. The rainy season, with its daily downpours, made the regular delivery of supplies an uncertain procedure, and the prevalence of mosquitoes necessitated constant dosing of quinine to offset malaria. In procuring native labor, and in transmitting orders to them, the salvaging officers were greatly assisted by August Adrian, an English speaking native of Germany, who has lived in Jaque for the past seven years, and who proved very efficient in directing his helpers in any one of three languages.

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CHIEF OF ATTACK SEC. LEAVES KELLY FIELD

Captain Glen C. Jamison and his family will leave Kelly Field on July 1st on a two-months' leave of absence for travel and recreation. At the expiration of his leave, Captain Jamison will proceed to Maxwell Field, Ala., for station and for duty as a student at the Air Corps Tactical School.

Active in the training of students of the Air Corps Advanced Flying School, Kelly Field, for the past five years, Captain Jamison has left a tradition of excellent service. As its chief, he has been the bulwark of the Attack Section for the past three years. During his present tour of duty at Kelly Field, he has served as an instructor in practically every section of the Flying Department.

"Jamie," as the Captain is known to all his brother officers and to his host of civilian friends, graduated from the U.S. Military Academy in June, 1923. In September, 1924, he graduated from Kelly Field as an Airplane Pilot, having received his training in Pursuit. Upon graduation, he was assigned to the Primary Flying School at Brooks Field, where he served as an instructor for four years. In 1928 he was transferred to Panama, where he served until June, 1930.

He was then assigned to Langley Field, Va., where he served until April, 1932, when he was assigned to Bolling Field. In 1933 he was assigned to Kelly Field, and now has completed five more years of service as an instructor. He has been Chief of the Attack Section since October, 1935.

Captain Jamison was first assigned to the 43rd School Squadron, with which he served for one year. In October, 1933, he was placed on detached service at Rockwell Field, Coronado, Calif., for the purpose of conducting tests on navigation instruments to be used in navigation training. Upon the completion of these tests, he was placed on temporary duty at Langley Field, Va., for a period of three months, to help organize and conduct a school in Advanced Navigation Training. After organizing and conducting a course there, he returned to his home station and was assigned to the Bombardment Section as an instructor.

"Jamie" then served as an instructor in the Pursuit and Attack Sections until he was appointed Chief of the Attack Section in October, 1936, relieving Captain Wm. R. Sweeley. Along with his strenuous duties "on the line," he has also in many instances acted as Post Operations Officer and conducted a course in "Attack Aviation" in connection with the Ground School.

He was promoted to the rank of temporary Captain on March 16, 1935, and then received his permanent promotion on August 1st of the same year.

Due to his wealth of knowledge of the training requirements at the Air Corps Training Center, Captain Jamison was called to Washington, D.C., on the first of May of this year to attend a conference in the Office of the Chief of the Air Corps regarding the assignment of various types of airplanes to the Training Center.

It is with reluctance that his friends, both in the Army and in civil life, see him and his family leave San Antonio, and all join in wishing him the best of luck and success.

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New Officers for the Air Corps (Continued from Page 11)

H.M. Means, Fort Knox, Ky.
T.D. Brown, Fort Lewis, Wash.
H.P. Leber, Jr., Hickam Field, T.H.
McC. F. Stunkard, Jr., Mitchel Field, New York.

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Special Orders of the War Department, recently issued, relieves Brigadier General Henry C. Pratt, U.S. Army, from duty with the Air Corps and from his present assignment as Commandant of the Air Corps Tactical School, Maxwell Field. He is assigned to the command of the 23rd Brigade in the Philippine Department.

OBITUARIES

Flying Cadets Gerald David Shannon, of Parsons, Kansas, and Robert Josiah Brown, of Brady, Nebraska, both students in the Observation Section of the Air Corps Advanced Flying School, Kelly Field, Texas, were killed instantly in an aircraft accident which occurred about 10:30 a.m. Thursday, May 28th, some two miles west of Leon Springs Station, Texas. Cadet Shannon was pilot and Cadet Brown, observer, in the O-25 airplane in which they were engaged in a routine student reconnaissance mission looking over the area in which their section was scheduled to cooperate with ground arms that night. According to witnesses of the crash, the airplanes in which they were flying appeared to be having engine trouble when it went into a spin and crashed. Both occupants of the plane were dead when reached by witnesses, and the bodies were removed to the Fort Sam Houston Station Hospital in a Camp Stanley ambulance. The airplane was completely demolished.

Both Shannon and Brown reported at Kelly Field from the Primary Flying School on February 23, 1938, and would have graduated from the Advanced Flying School on June 16, 1938.

Cadet Shannon was born on October 9, 1913, at Parsons, Kansas, where he resided when he received his appointment as a Flying Cadet. He graduated from Parsons Junior College in 1933, and attended the University of Minnesota from 1935 to 1937. His father, Mr. G.A. Shannon, is also a resident of Parsons. Cadet Shannon held a commission as second lieutenant in the Medical Administrative Reserve.

Cadet Brown was born on August 29, 1913, at North Platte, Nebraska, and was a resident of Brady, Nebraska, when he received his appointment as a Flying Cadet. He graduated from Nebraska State College in 1936 with a degree of Bachelor of Science in Mechanical Engineering, and held a commission as a second lieutenant in the Infantry Reserve. Both of Cadet Brown's parents are deceased, and his brother, Mr. Harold L. Brown, of Brady, Nebraska, is his only survivor.

A Board of Officers met to investigate and determine, if possible, the exact cause of the crash which deprived the Air Corps and the Army of two very promising young pilots.

Double funeral services were held for these cadets at the Hanavan Funeral Parlors, San Antonio, at 1:30 p.m., on May 27th. Lieut. Col. Edmond J. Griffin, chaplain of Kelly Field, officiated at the services, which were attended by the Commandant, members of his staff and school faculty, as well as the Flying Cadet Detachment and other personnel of the post. The remains of Cadet Brown, under escort of Flying Cadet William F. Stewart, were sent to North Platte, Neb.; while the remains of Cadet Shannon, escorted by Flying Cadet Earle L. Hermall, were sent to Parsons, Kansas, on the morning of May 28th, for interment.

Funeral services were held at the Hanavan Funeral Parlors, San Antonio, Texas, at 1:30 p.m., May 21st, for the late Flying Cadet Kinch Erum Brister, Jr., Air Corps, who lost his life

in an aircraft accident near Madison, Texas, on May 20th. Services were conducted by Lieut. Colonel Edmond J. Griffin, chaplain of Kelly Field. Brigadier General James E. Chaney, Air Corps, Commanding General of the Air Corps Training Center; Colonel Frank D. Lackland, Air Corps, Commandant of the Air Corps Advanced Flying School, and members of his staff, as well as the senior instructors of the four sections, and members of the Flying Cadet Detachment and personnel of the post attended.

Following the services, the remains of Cadet Brister, accompanied by Flying Cadet William R. Yancey, Air Corps, a classmate in the Attack Section, were sent to Cadet Brister's parents at Yazoo City, Miss., for burial.

The crash of a BT-9 airplane on the morning of June 7th, one-half mile southeast of Zuehlfield, Texas, resulted in the death of Flying Cadet William H. Coneby, pilot of the plane, and 2nd Lieut. Nathan H. Coddington, Air Reserve, Flying Instructor. The cause of the crash has not been determined.

Lieut. Coddington was born at Fresno, Calif., March 16, 1910. He attended the Manual of Arts High School for three years, the University of California, at Los Angeles, for three years; and the University of California at Berkeley for two years. Appointed a Flying Cadet in the Air Corps, he graduated from the Primary Flying School, Randolph Field, Texas, February 21, 1934, and from the Advanced Flying School, Kelly Field, Texas, June 23, 1934, when he was rated as an "Airplane Pilot" and assigned to active duty under his cadet status with the 20th Bombardment Squadron at Langley Field, Va. On October 30, 1934, he was transferred to Brooks Field, Texas, and assigned to the 12th Observation Squadron. He was appointed a second lieutenant in the Air Reserve on June 30, 1935. In August, 1935, Lieut. Coddington was transferred to the Hawaiian Department for station at Luke Field. Following the completion of his tour of duty in Hawaii, he was assigned to duty as a Flying Instructor at the Primary Flying School at Randolph Field, Texas.

Flying Cadet Coneby was born at Indianapolis, Indiana, March 21, 1913. After graduating from high school in Washington, D.C., he attended the University of Maryland for two years and the George Washington Law School for two years. For over a year, from July, 1934, to October, 1935, he was employed in the Office of the Home Owners Loan Corporation, Washington, D.C., as general assistant to the Senior Administrative Assistant. He was appointed a Flying Cadet in the Air Corps and entered the October 15, 1937, class at the Primary Flying School, Randolph Field, Texas. He was nearing the completion of his eight months' course at this school at the time of the fatal accident.

Second Lieut. Joseph C. Marcy, Air Reserve, stationed at March Field, Calif., lost his life on June 9th, when the A-17A airplane he was piloting crashed at 9:40 p.m., some 10 miles southeast of Beaumont, Calif. His pass-

sergeant, Private William F. White, of Base Headquarters and 4th Air Base Squadron, March Field, was slightly injured.

Lieut. Marcy was born at Montevideo, Washington, November 8, 1914. He graduated from Yakima High School in January, 1933; attended the Yakima Junior College for two years, and the University of Washington for one year. Appointed a Flying Cadet in the Air Corps, he graduated February 16, 1938, from the Advanced Flying School, Kelly Field, Texas, specializing in Attack Aviation, and was on that date rated as "Airplane Pilot" and commissioned a second lieutenant in the Air Reserve. He was then assigned to extended active duty with the 34th Attack Squadron at March Field, Calif.

The crash of a BT-9 airplane on the morning of June 7th, seven miles southeast of Randolph Field, Texas, resulted in the instant death of 2nd Lieut. Arthur M. Keppler, Air Reserve, Flying Instructor, and severe injuries to the student pilot, 2nd Lieut. Frederick M. Thompson, Air Corps (Corps of Engineers), which subsequently proved fatal. The cause of the accident was undetermined.

Lieut. Keppler was born at Houston, Texas, on September 4, 1909. Following his graduation in 1932 from the Texas A. & M. College with a B.S. degree in electrical engineering and being engaged in the automobile and radio business for over a year, he received an appointment as a Flying Cadet and entered the October, 1933, Class at the Primary Flying School at Randolph Field, Texas. Following his graduation from Randolph Field, June 30, 1934, and from the Advanced Flying School, Kelly Field, Texas, where he specialized in Bombardment Aviation, on October 13, 1934, he was rated an "Airplane Pilot" as of that date and assigned to active duty under his Cadet status with the 31st Bombardment Squadron at March Field, Calif. In December, 1934, he was transferred with this organization to Hamilton Field, Calif. He was commissioned a second lieutenant in the Air Reserve on October 14, 1935, and in October, 1937, he was transferred to Randolph Field for duty as Flying Instructor.

Lieut. Thompson was born in Kansas, November 18, 1913. He graduated from the U.S. Military Academy, West Point, N.Y., in June, 1937, and commissioned a second lieutenant in the Corps of Engineers. He was assigned to the Air Corps for flying training with the October, 1937, Class at the Primary Flying School, Randolph Field, Texas, and was nearing the completion of his eight months' course at this school at the time of his fatal accident.

On June 10, 1938, a Bombardment plane, flying from the Air Corps Technical School, Chanute Field, Rantoul, Ill., to the branch of this School at Denver, Colo., crashed during a storm at Delevan, Ill., and resulted in the death of all the occupants of the plane - 3 officers and 5 enlisted men of the Air Corps. The plane was piloted by 1st Lieut. Norman H. Ives, with 2nd Lieut. Thomas F. Langben as co-pilot, and the following passengers: Captain Richard B. Reeve, Staff Sergeant Edward F. Murrah, Corporal William

H. Housley, Private Philip J. Truitt, Max W. Myer and George H. Burdeman. According to press reports, two of the witnesses of this accident claim that the plane was on fire before the crash. One of them, however, stated that the plane exploded after the crash, while the other expressed the opinion that the explosion occurred before the crash. A Board of Air Corps officers was immediately appointed to investigate and ascertain, if possible, the cause of the accident.

Captain Reeve was born at Waunakee, Wis., March 27, 1902. He graduated from high school in Madison, Wis., in 1920, and attended the University of Wisconsin in 1921-1923. Prior to his appointment in the year 1925, as a Flying Cadet in the Army Air Corps he was employed in the advertising department of the Chicago "Herald and Examiner." Following his graduation from the Advanced Flying School, Kelly Field, Texas, March 14, 1926, he was rated "Airplane Pilot" and "Airplane Observer" and commissioned a second lieutenant in the Air Reserve. Successful in his examination for a commission in the Regular Army, he was appointed a second lieutenant in the Air Corps on September 4, 1926, and assigned to duty as a flying instructor at the Air Corps Primary Flying School at Brooks Field, Texas.

From June 30, 1931, to April 20, 1932, Capt. Reeve took the course of instruction in Aircraft Armament at the Air Corps Technical School at Chanute Field, Rantoul, Ill. In June, 1932, he arrived in the Philippines and was assigned to duty with the 28th Bombardment Squadron at Nichols Field.

After serving 3½ years in the Philippines, two years of that time as Armament Officer of the 28th Bombardment Squadron, and the remainder on such duties as Group Armament Officer, Post Ordnance Officer, and then as Supply Officer of the 66th Service Squadron, he returned to Chanute Field in November 16, 1935, and for some months served as Intelligence and Operations Officer of the 48th Pursuit Squadron. Later he was appointed as Assistant Director of the Department of Armament of the Air Corps Technical School, and moved to Denver upon the establishment of a branch of the Technical School in that city and the transfer of the Armament and Photographic departments of the School to this branch.

Lieut. Ives was born at Ogden, Utah, July 9, 1906. He graduated in 1925 from the Los Angeles Polytechnic School, where he studied journalism and mechanical engineering. He attended the University of California for one year.

Appointed a Flying Cadet in the Army Air Corps, he completed the course at the Primary Flying School at Brooks Field, Texas, on August 5, 1927, and the advanced course at the Advanced Flying School, Kelly Field, Texas, on February 4, 1928, specializing in Observation Aviation. He was rated as "Airplane Pilot" and "Airplane Observer," effective February 28, 1928, and was commissioned a second lieutenant in the Air Reserve. Passing the examination for a commission in the Regular Army, Lieut. Ives was appointed a second lieutenant in the

Air Corps, with rank from February 2, 1929, and assigned to duty at Rockwell Field, Calif. In the latter part of 1933, he was assigned to duty in the Philippine Department, where he served as Armament Officer of the 3rd Pursuit Squadron at Clark Field, P. I.

Upon the completion of his tour of foreign service, Lieut. Ives was transferred to Chanute Field, Rantoul, Ill., where he reported on May 14, 1936. Here he completed the Armament course at the Air Corps Technical School with high honors. He remained on duty at the Technical School, and in February, 1938, was transferred to Denver, Colo., when the Armament and Photographic Departments of this School were moved to Lowry Field, Denver, Colo.

Lieut. Ives made a very close study of the subject of aircraft armament, and contributed several highly interesting and valuable articles on that subject for publication in the Air Corps News Letter.

Born in Toronto, Canada, September 6, 1909, 2nd Lieut. Thomas F. Langben became an American citizen, attended grammar school and high school at Galveston, Texas, and in 1929 graduated from the Virginia Military Institute with a B. S. degree in civil engineering. Prior to his appointment as a Flying Cadet in the Air Corps, he was engaged in the surveying profession. After completing a year of flying training at the Air Corps Training Center and graduating from the Advanced Flying School, where he specialized in Bombardment Aviation, he was commissioned on February 24, 1933, as a second lieutenant in the Air Reserve and rated an "Airplane Pilot." Assigned to extended active duty, he served with the 20th Bombardment Squadron at Langley Field, Va., to October 10, 1934, and with the 8th Attack Squadron at Fort Crockett, Galveston, Texas, to February 18, 1935. Successful in his examination for a commission in the Regular Army, he was appointed a second lieutenant in the Air Corps on July 15, 1935, and was assigned to duty at Mitchel Field, N.Y., where he subsequently qualified as a Navigator in the GHQ Air Force.

In November, 1937, Lieut. Langben was assigned to duty as a student to pursue the course of instruction in Aircraft Armament at the Air Corps Technical School at Chanute Field, Ill. With the transfer of the Armament Department of this School to Denver, Colo., his station was changed to that city.

Staff Sergeant Edward F. Murrah, Air Corps, a native of Princeton, Wis., was born on September 24, 1905. He entered the Army in December, 1922, and after serving several enlistments in the 12th Field Artillery, he enlisted in the Air Corps on May 28, 1931, and served three years with the 98th School Squadron and a similar period with the 10th Air Base Squadron. He received his appointment as Staff Sergeant on February 1, 1937. On February 12, 1938, he was assigned to the Photographic Detachment of the Denver, Colo., branch of the Air Corps Technical School.

Corporal William H. Housley was born on April 21, 1908, at Chateau, Oklahoma. He enlisted in

the Air Corps on August 24, 1929, and since that time he served with the 11th School Group Headquarters at Brooks Field, Texas, with the 58th Service Squadron and the 37th Attack Squadron at Langley Field, Va., and with the Photographic Detachment at the Denver Branch of the Air Corps Technical School. On March 27, 1931, he graduated as engine mechanic from the Air Corps Technical School at Chanute Field, Ill.

Private William J. Truitt, a native of Galax, Va., where he was born on May 28, 1914, enlisted in the Air Corps on February 17, 1936. He was assigned to the 8th Pursuit Group at Langley Field, Va., and was subsequently transferred to the Denver Branch of the Air Corps Technical School for duty with the Photographic Detachment.

Private Max W. Myser was born at Villa Grove, Ill., July 11, 1917. He enlisted in the Air Corps at Chanute Field, Ill., on November 2, 1936, and at the time of his death was a member of the Photographic Detachment of the Denver Branch of the Air Corps Technical School.

Private George L. Huntsman was born on October 26, 1915, at Kankakee, Ill. He enlisted in the Air Corps on January 4, 1934, and was assigned to the Headquarters Squadron of the Air Corps Technical School at Chanute Field, Ill. On July 23, 1937, after completing a course of instruction at the Technical School, he qualified as an airplane mechanic. He was subsequently assigned to duty with the Photographic Detachment of the Denver Branch of the Air Corps Technical School.

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Enroute to his home station, Chanute Field, Ill., from an authorized cross-country flight to Asheville, N.C., 1st Lieut. Samuel V. Stephenson, Air Corps, was killed instantly when the BT-9 he was piloting crashed near Arden, N.C., on June 19th. According to the report on this accident, the pilot was apparently climbing too fast in the fog and rain, and the plane fell into a spin.

Lieut. Stephenson was born in Ohio, December 13, 1902. He graduated from the U.S. Military Academy, West Point, N.Y., June 13, 1929, and was commissioned a second lieutenant in the Coast Artillery Corps. Assigned to the Air Corps for flying training, he graduated from the Air Corps Training Center on February 28, 1931, specializing in Observation Aviation, and was rated as Airplane Pilot and Airplane Observer. He was then assigned to duty in the Panama Canal Department, where he served for one year at France Field and the remaining period of his foreign service at Albrook Field.

Upon his return from Panama, Lieut. Stephenson was assigned to duty as a student to pursue the Airplane Maintenance Engineering - Armament Course at the Air Corps Technical School at Chanute Field. Following his graduation, he was assigned to duty at that station.

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The death at the Letterman General Hospital V-7779, A.C.

WAR DEPARTMENT ORDERS
Changes of Station

on June 25, 1938, of Major Courtland M. Brown, Air Corps, removed from the ranks of this branch of the service one of a small number of officers holding all four flying ratings, viz: Airplane Pilot, Airplane Observer, Balloon Observer and Airship Pilot.

Major Brown entered the service during the World War, enlisting in the Signal Corps on May 22, 1917. A native of Natick, Mass., where he was born on December 6, 1894, he attended grammar and high school in that city, and the Wentworth Institute at Boston, Mass.

Assigned to the Army Balloon School at Fort Omaha, Neb., for lighter-than-air training, Major Brown, after completing the course, was sent to the Adjutant Officers' School at Ohio State University, Columbus, Ohio, from which he graduated in June, 1918. He was then assigned to duty at Camp John Wise, San Antonio, Texas. He was commissioned a second lieutenant in the Air Service on September 1, 1918.

In May, 1919, he was transferred to Brooks Field, Texas. He was honorably discharged from the service on July 29, 1919.

Appointed a second lieutenant in the Air Service, Regular Army, July 1, 1920, Major Brown was assigned to duty, November 5, 1920, at Lee Hall, Va. Shortly thereafter he was transferred to the Balloon School at Ross Field, Arcadia, Calif., where he was stationed until April 6, 1922. He was then transferred to Scott Field, Ill., where he performed various duties and completed the eight months' course of instruction at the Air Service Balloon and Airship School.

From August 25, 1923, to October 2, 1923, he pursued the Special Observation Course at the Advanced Flying School at Kelly Field, Texas, following which he was assigned to duty in the Hawaiian Department, where he was stationed until June 22, 1927. For a period of eight months he was stationed at the Primary Flying School, Brooks Field, Texas, for flying training. He then returned to Scott Field, and served with the 24th Airship Company as Engineering Officer and then as Supply Officer until September 6, 1930.

After completing the course in Aerial Photography at the Air Corps Technical School at Chanute Field, Ill., Major Brown was again assigned to duty in the Hawaiian Department, and was stationed at Luke Field from January 6, 1932, to May 29, 1935. Upon his return to the United States he was assigned to the Air Corps Training Center to undergo the heavier-than-air flying course. He successfully completed the primary flying course at Randolph Field and the Advanced Flying course at Kelly Field, and received the rating of Airplane Pilot on October 7, 1936.

Major Brown was next assigned to duty at Brooks Field, and was subsequently transferred to his last station, Moffett Field, Calif.

The Air Corps expresses its deep sympathy to the bereaved families and friends of the deceased Air Corps officers and enlisted men who died in the service of their country.

To Chanute Field, Ill.: 2nd Lieut. Homer A. Boushey, from Fort Lewis, Wash., to pursue course of instruction, Airplane Maintenance Engineering at Air Corps Technical School.

To Buffalo, N.Y.: 1st Lieut. William T. Colman, from Fairfield Air Depot, Fairfield, O. for duty as Assistant Air Corps Representative at the Curtiss-Wright Corporation, Curtiss Airplane Division.

To Fort Riley, Kans.: 2nd Lieut. Hilmer C. Nelson, upon completion of present course of instruction at the Denver Branch of the Air Corps Technical School, and to duty with the 1st Observation Squadron.

To Materiel Division, Wright Field, O.: 1st Lieut. Paul G. Miller, from the 96th Bombardment Squadron, Langley Field, Va. Previous orders in his case amended.

To Randolph Field, Texas: Major Harry H. Mills, from duty at Army Industrial College, Washington, D.C.

To Maxwell Field, Ala.: Captain Henry R. Baxter, from Bolling Field, D.C., for duty as student in the 1938-1939 course at the Air Corps Tactical School.

To the Philippines: 2nd Lieut. Charles B. Harvin, upon completion of Airplane Maintenance Engineering course at Air Corps Technical School, Chanute Field, Ill.

Reserve Officers to Extended Active Duty

2nd Lieut. Richard William Simmons, West Plains Mo., to Mitchel Field, N.Y., to June 14, 1941.

2nd Lieut. Pete Brewster, Birmingham, Ala., to San Antonio Air Depot, Duncan Field, Texas, to May 26, 1941.

2nd Lieut. Ralph William Rodieck, San Antonio Texas, to March Field, Calif., to Sept. 23, 1941.

2nd Lieut. Arch Graham Campbell, Fort Worth, Texas, to Barksdale Field, La., to June 24, 1941.

2nd Lieut. Theodore Q. Graff, Ada, Ohio, to Patterson Field, Ohio, to June 20, 1941.

Transferred to the Air Corps

1st Lieut. Joseph E. Barzynski, Jr., Inf., June 16, 1938, and to Mitchel Field, N.Y., for duty with the 97th Observation Squadron.

Assigned to the Air Corps

2nd Lieut. Harry C. Benton, from duty with the 34th Infantry at Fort George G. Meade, Md. and to Randolph Field, Texas, for flying training with the class commencing July 1, 1938.

Relieved from assignment to Air Corps

2nd Lieut. James H. Skeldon, Infantry, from Air Corps Training Center, Randolph Field, Tex. and to the 2nd Division with station at Fort Francis E. Warren, Wyoming.

Orders Revoked

Assignment of Captain Milton M. Towner, of Mitchel Field, N.Y., for duty as student in the 1938-1939 course at the Air Corps Tactical School, Maxwell Field, Ala.

Retirement

Master Sergeant Clarence Baird, Hqrs. and Hqrs. Squadron, 2nd Wing, HQ Air Force, Langley Field, Va., June 30, 1938.

4. A contract award to the Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., in the sum of \$30,000.00, covering the purchase of propeller blades and data required for experimental purposes.

5. A contract award to Curtiss Propeller Division, Curtiss-Wright Corporation, Buffalo, N.Y., in the amount of \$41,963., covering the purchase of propeller hubs, propeller assembly, and sets of controls and data required for experimental purposes.

6. The award of a contract to Engineering & Research Corporation, Washington, D.C., in the amount of \$29,702.00, covering the purchase of propeller blades and data required for experimental purposes.

7. A contract award to Link Aviation Devices, Inc., Binghamton, N.Y., in the total amount of \$135,600.00, to cover the procurement of Instrument Flying and Landing Trainers, including data.

8. Contract award to the United Aircraft Corp., (Pratt & Whitney Aircraft Division), East Hartford, Conn., in the amount of \$58,884.25, covering the purchase of spare parts.

9. A change order, in the amount of \$29,075.00, covering the purchase of additional propeller assemblies from the United Aircraft Corp. (Hamilton Standard propellers Division), East Hartford, Conn.

10. Contract award to The Corbitt Company, Henderson, N.C., in the sum of \$99,090.11, covering the purchase of 5 truck-tractors (motor), for F-1 fuel servicing truck, 4 truck-tractors (motor) for type C-2 wrecking truck, and 4 semi-trailers for type C-2 wrecking truck.

11. Contract award to Standard Steel Works, North Kansas City, Mo., in the sum of \$99,977.50, for ten semi-trailer tanks (4,000-gal. capacity) for fuel servicing truck.

12. Contract award to the Gar Wood Industries, Inc., Detroit, Mich., in the sum of \$3,044.65, covering the purchase of 5 dollies (trailer converter) for fuel servicing truck.

13. Contract award to the Fruehauf Trailer Company, Detroit, Mich., in the sum of \$2,264.00, covering the purchase of 4 dollies (trailer converter) for type C-2 wrecking truck.

14. Contract award to Covered Wagon Company, Mount Clemens, Mich., in the amount of \$68,425.00, covering the purchase of 23 portable photographic laboratories (Type A-1A) (Trailer).

15. Contract award to Suncook Mills, Suncook, N.H., in the amount of \$116,777.25, for the purchase of mercerized cotton airplane fabric required for maintenance and repair.

16. Contract award to Rohm and Haas Company, Philadelphia, Pa., in the amount of \$55,154.80, covering the purchase of five items of plastic sheet (transparent, Acrylate base), required for maintenance and repair of airplanes in the service.

17. Contract award to United Aircraft

Corporation, Hamilton Standard Propeller Division, East Hartford, Conn., in the amount of \$140,600.00, for the procurement of Governor Assemblies, propeller control.

18. Contract award to Curtiss-Wright Corporation, Curtiss Propeller Division, Buffalo, N.Y., in the amount of \$40,150.00, for the procurement of Governor Assemblies, propeller control.

19. Contract award to Bendix Products Corporation, South Bend, Ind., in the sum of \$66,660.00, covering the purchase of automobile mixture control assemblies for installation in Model B-18 airplanes.

20. A change order in the amount of \$99,999.00, covering the purchase of additional aircraft engine fuel, from Shell Petroleum Corporation, St. Louis, Mo.

21. A change order in the amount of \$72,500.00, covering the purchase of additional type K-3B and additional type K-12 aircraft cameras, from Fairchild Aerial Camera Corporation, Jamaica, Long Island, N.Y.

22. Contract award to Eclipse Aviation Corporation, East Orange, N.J., in the total amount of \$224,770.00, covering the purchase of accessory power plants and data.

23. Contract award to United Aircraft Corporation (Hamilton Standard Propellers Division), East Hartford, Conn., in the sum of \$67,840.00, covering the purchase of propeller assemblies, tools and data, required for installation in 26 Observation-Amphibian airplanes, Model OA-9.

24. Contract award to Curtiss-Wright Corporation, Curtiss Propeller Division, Buffalo, New York, in the sum of \$72,963, covering the purchase of controllable propeller assemblies, constant speed controls, cockpit controls, and servicing tools and data, to be used as equipment for YFM-1 and YFM-1A airplanes.

25. Contract award to the Eclipse Aviation Corporation, East Orange, N.J., in the total amount of \$66,780.00, covering the purchase of additional type C-20 and additional type C-21 starter assemblies required for C-39, YA-19, and OA-9 airplanes now under construction, and for repair of Model B-18A airplanes now in service.

26. Contract award to Pittsburgh Screw & Bolt Corporation, Pittsburgh, Pa., in the sum of \$50,700.00, covering the purchase of propeller blades and data, required in the fabrication of propeller assemblies to be installed in YFM-1 and YFM-1A airplanes, now under construction by the Bell Aircraft Corporation.

In making the announcement of these awards, the Acting Secretary explained that the placing of these contracts, especially of the additional 91 Bombardment and of the 7 new type Attack planes, marks the culmination of a year of intensified effort toward the reaching of the

objective set by the Baker Board which was to procure 2320 modern first line aircraft by July 1, 1940.

It is interesting to note that in the Fiscal Year ending June 30, 1938, contracts were placed for 588 airplanes at a total cost of approximately \$29,000,000.00, divided as follows:

Pursuit.....	236
Bombardment.....	118
Attack.....	35
Observation.....	33
Primary Trainers...	20
Cargo.....	51
Basic Combat.....	95
	588

These contracts were divided among ten aircraft manufacturers and were in the main awarded as a result of the competitive bidding system utilized by the Air Corps. During the year contracts were likewise awarded for 732 aeronautical engines at a total value of \$6,000,000. The engine contracts were placed with four aeronautical engine manufacturing companies.

Government furnished equipment purchased during the year, consisting of radio, armament, instruments and other aeronautical appliances for installation in airplanes purchased, amounted to approximately \$7,500,000.

Analyzing the results of the contracts thus totaling \$42,500,00.00 in 1938, Colonel Johnson states: "These ships, purchased this year, type for type, are

the equal, if not the superior, of like types in any part of the world, and clearly establish the fact that the United States is not lagging behind other nations in aeronautical development, but on the other hand has assumed, and will maintain its position in the forefront of aviation."

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AIR CORPS SECOND LIEUTENANTS PROMOTED

The following-named second lieutenants of the Air Corps were promoted to the rank of first lieutenant, as of June 30, 1938:

Ray W. Clifton	Lawrence S. Fulwider
Randolph L. Wood	Lester S. Harris
Arnold T. Johnson	Donald N. Wackwitz
Marvin F. Stalder	James H. C. Houston
Noel F. Parrish	Charles H. Leitner, Jr.
Dolf E. Muehleisen	Clair L. Wood
Carl Swyter	Charles B. Harvin
Richard C. Weller	George H. Macintyre
Edward M. Gavin	Bob Arnold
Robert E. Jarmon	Burton W. Armstrong, Jr.
Harry Crutcher, Jr.	Mel M. Stephenson, Jr.
Jack M. Malone	Harold L. Neely
Frank N. Moyers	Erickson S. Nichols
Edward S. Allee	Jasper N. Bell
Harry N. Renshaw	Russell E. Waldron
Joseph B. Stanley	William P. Day, Jr.
Clarence M. Sartain	Harry Coursey
James H. Price	Daniel E. Hooks
Joseph C. Moore	Raymond P. Todd

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Air Corps

NEWS LETTER

ISSUED BY THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT - WASHINGTON, D.C.

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VOL. XXI

JULY 15, 1938

NO. 14

Information Division
Air Corps

July 15, 1938

Munitions Building
Washington, D. C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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EMERGENCY FLOTATION FOR LAND AIRPLANES By the Materiel Division Correspondent

The desirability of providing a means of keeping a land airplane afloat in case of a forced landing on water was early recognized. The Engineering Division, Air Service, worked on this problem at McCook Field following the World War. The first experiments were conducted on a DH-4 airplane fitted with an emergency flotation gear consisting of inflatable rubber bags mounted under the wings and air bags in the tail. Wing pontoons were installed near the wing tips and hydrovanes in front of the landing gear. The latter prevented nosing over and supported the weight of the airplane in landing until sufficient speed had been lost to prevent the bags from being torn off. A vane on the tail skid was used to hold the tail down. The tests indicated, however, that the hydrovane in front of the landing gear did not ride the surface of the water and the tail skid vane did not engage the water during landing. There was no tendency to nose over.

There was no further development of emergency flotation gear by the Air Corps until about the year 1930. At that time the O-2H airplanes were equipped with emergency flotation equipment which had been developed by the Navy. The Naval gear consisted of flotation bags folded into a quick-opening container installed inside the upper wing and a cylinder of liquid carbon dioxide fitted with a release valve. The gear was operated by manual release, discharging the carbon dioxide into the system, which in turn released and inflated the flotation bags. Since the bags were carried inside the wings and fuselage, there was practically no drag on the airplane.

An Air Corps policy requiring emergency flotation on all airplanes required to fly over water became effective in 1932. Specifications were prepared based on the Navy requirements. The equipment was required to operate automatically upon landing in the water. A manual release was provided for emergency. Considerable experimental work was necessary to establish the ratio of the cubical size of the bag containers in relation to the bag sizes. Automatic

valves which could be operated either manually or automatically, together with a bag release operated by CO₂ pressure, were developed. An experimental gear was purchased and installed on a surveyed O-17 airplane which was rolled into Huffman Lake near Patterson Field to check the automatic valves, time of inflation, and other characteristics. This type of flotation equipment was installed on practically all airplanes in foreign service.

The maintenance cost of this type of equipment ran high, due to functional tests required periodically to insure it being in working order. The rubber flotation bags deteriorated rapidly, as a result of being folded in the wing containers. In one case accidental release of CO₂ inflated the bags in the air, and caused the loss of the airplane.

The advent of plywood-covered wings and of all-metal wings suggested the possibility of using watertight compartments in the wings, tail surfaces, or fuselages for the desired flotation. Preliminary studies indicated that the watertight compartments could be built into the wings and other units of the airplane with less weight increase than by using gas-inflated bags.

Accordingly, tentative requirements were set up and the Glenn L. Martin Company was contacted regarding the possibility of incorporating watertight flotation in at least some of the B-10 or B-12 airplanes then under construction. The study of this problem indicated that the built-in flotation could be installed with a weight increase of approximately 50 pounds per airplane, as compared with a probable weight of 105 to 110 pounds for the CO₂ equipment. Built-in flotation was included in the B-12A airplanes.

Today all types of Air Corps combat airplanes, except single-place Pursuit and basic combat airplanes, are required to have a means of flotation when forced down on water.

Built-in flotation in accordance with U.S. Army Specification 40233 is being incorporated in all Air Corps airplanes, except as noted above. This specification required that flotation be provided

with 35 percent excess buoyancy in the form of watertight compartments in the wings, tail surfaces, or fuselage; and that adequate vents be provided to prevent a differential pressure in excess of 12 pounds per square foot in either a climb or a dive from service ceiling. Provisions for using a bilge pump are also required in order to overcome leakage which might develop from age or stresses in landing.

The specification also requires that the compartments be watertight and capable of holding a test water or air pressure for one hour without signs of leaks. Due to the type of structure used in wings, considerable difficulty was experienced by Air Corps contractors in meeting this requirement. In order to overcome this, test specimens in the form of a section of a two-spar wing were fabricated from heat-treated alloy, using sealing compounds in the seams, for test by the Air Corps Materiel Division. The results of these tests indicate that flotation compartments can be made watertight, provided the structure is adaptable to being sealed with tape impregnated with sealing compound.

It is being found practically impossible so to locate built-in compartments that the airplane will float horizontally and right side up, especially in the smaller airplanes. The watertight compartments are in the wings and the concentration of weight due to installation of the engines and other equipment forward of the wings produces a tendency for the nose to submerge. This can usually be corrected by shifting the crew aft when the airplane is afloat. After the crew is removed the tendency to nose down is not so important, since the airplane can be salvaged in this attitude satisfactorily.

In recent years the Air Corps has had very few landings in water with airplanes equipped with built-in flotation, but it has proved satisfactory in these few instances.

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FIELD TRAINING FOR 4TH RECON. SQUADRON

The 4th Reconnaissance Squadron, stationed at Luke Field, T.H., was scheduled to move to Bellows Field on June 20th for its annual period of field training and ground gunnery. The entire Squadron was to be included and the movement made by truck and airplane. The training was to be progressive and to include:

- .30 Cal. machine gun firing on 1000 inch range, using flexible aerial guns.
- .45 Cal. pistol shooting by all personnel, (commissioned).
- .45 Cal. pistol shooting by all personnel authorized to fire for record.
- .30 Cal. aerial machine gun firing as in Event I, Phase I of Training Regulations 440-40; training in bombing also

to be continued if time permits.

"Our cooperative mission with Battery 'A,' 15th Coast Artillery, of locating targets for 16-inch guns at long ranges is progressing nicely," reports the News Letter Correspondent, and he adds: "A definite procedure has been worked out and is now being perfected."

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A WEATHER MAN OF MANY DEGREES

The promotion of Captain Randolph P. Williams, weather officer of the General Headquarters Air Force at Langley Field, Va., to the rank of Major was recently announced.

Under the newly installed system, the Air Corps has its own weather observers. It is the job of Major Williams to see that the six air bases of the General Headquarters Air Force in Louisiana, California, Virginia, New York and Michigan are supplied with the proper weather information and that it is properly disseminated at these bases.

Major Williams possesses four aeronautical ratings, those of Airplane Pilot, Airplane Observer, Airship Pilot and Balloon Observer.

Schools from which he holds graduation certificates include the Engineers' School, Belvoir, Va. (then Fort Humphreys); the Air Corps Balloon and Airship School at Scott Field, Ill.; the Air Corps Engineering School, Wright Field, Ohio; the United States Military Academy, West Point, N.Y., with degree of B.S.; and the Massachusetts Institute of Technology, Cambridge, Mass., with degree of M.S. In addition, Major Williams took a post graduate course in aerology at the U.S. Naval Academy, Annapolis, Md., and he holds the honorary degree of Doctor of Science from the South Dakota School of Mines.

Major Williams is a native of Baltimore, Md., and claims Washington, D.C., as his home town.

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A CORRECTION

In the previous issue of the Air Corps News Letter, listing the names of Air Corps officers who graduated on June 22d from the Army War College, the name of Colonel Henry W. Harms was inadvertently omitted. The News Letter regrets the omission.

Colonel Harms, who is now on leave of absence, is slated for assignment to duty in the Supply Division, Office of the Chief of the Air Corps. Prior to his assignment as a student at the Army War College, he was Commandant of the Primary Flying School, Randolph Field, Texas. He will return to familiar surroundings, since some ten years ago he was on duty in the Materiel Liaison Section of the Chief's Office.

MARCH FIELD TRAINS ORDNANCE RESERVE OFFICERS

Under the direction of the Commanding General of the General Headquarters Air Force, there has been organized an Ordnance Service which is responsible for furnishing bombs, pyrotechnics, machine gun ammunition, and guns of all kinds to all organizations of the GHQ Air Force. Due to shortage of personnel, its peace time strength is approximately 20% of its proposed war time strength. Accordingly, authorization to assign 25 Ordnance Reserve Officers to the Ordnance Service of the GHQ Air Force was granted early this year. The duty of obtaining and training these officers was assigned to March Field.

Within two months after the authorization, the full quota of Ordnance Reserve officers had been transferred to the GHQ Air Force and assigned to March Field for training. All of these officers now reside in Southern California, and for this reason it was possible to assign all of them to March Field for training. On M-day their assignments will be spread out over all of the bases of the GHQ Air Force.

In April of this year, the following four officers received two weeks' active duty training at March Field:

- 1st Lieut. F.E. Whittenburg
- 2nd Lieut. R.G. Goodall
- 2nd Lieut. M. Hicks
- 2nd Lieut. A. Curtis

In June of this year, the following four additional officers received two weeks' active duty training at March Field:

- 1st Lieut. H.J. Galbraith
- 1st Lieut. K.J. Soderberg
- 1st Lieut. D.E. Willetts
- 1st Lieut. G.S. Johnson

The training of these officers was so arranged that they were able actually to assist in the preparation of bombs and other Ordnance equipment while they were at March Field. They accompanied the 17th Attack organizations in some of their tactical training missions; they observed the 19th Bombardment Group personnel receiving training in bomb dropping by flying with them in Bombardment airplanes when bombs were being dropped. Two days were spent at Muroc assisting in the preparation of bombs and inspecting the Muroc bomb storage and target facilities. They observed the method used in the destruction of dud and explosive bombs at Muroc. Naturally, they also experienced the Muroc climate both day and night. The general opinion of the officers who received this training was that it was the most valuable and most enjoyable period of active duty which they had ever experienced. All of them were anxious to have another tour of active duty under the same conditions.

While on active duty, the officers

were attached to the 4th Platoon of the 10th Ordnance Service Company which is stationed at March Field. The training was conducted by personnel of the 4th Platoon, which is commanded by Captain Philip Schwartz, Ordnance Department. Technical Sergeant William Steinback of the 4th Platoon accompanied the officers during all of their instruction periods.

It is understood that efforts are now being made to have Reserve officers of other branches besides Ordnance assigned to the GHQ Air Force. The successful assignment and training of Ordnance officers has shown that similar assignments of officers of other branches are both practicable and desirable.

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AIRCRAFT TRAFFIC AT ATLANTA AIRPORT

Advice received from the Commanding Officer of the Air Corps Detachment, Municipal Airport, Atlanta, Ga., is to the effect that during the fiscal year 1938, with a detailed emergency crew of two enlisted men - except that when traffic was in flights of more than two airplanes the hangar crew was called out to assist - the following transient aircraft traffic was handled at that station:

Total airplanes handled throughout the fiscal year numbered 2,051. Of this total, 1,356 were Army aircraft and 695 were aircraft of the U.S. Navy. These figures do not include airplanes used by Reserve officers on inactive status and on 14-day active duty periods.

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PROMOTION OF AIR CORPS OFFICERS

The following-named Air Corps officers received promotion to the permanent rank indicated, effective July 1, 1938:

Brigadier Generals Delos C. Emmons and Arnold N. Krogstad, Wing Commanders, and holding the permanent rank of Lieutenant Colonel, to Colonel.

Majors (temporary) Joseph L. Stromas, Rudolph W. Propst, Frank D. Hackett, Aaron E. Jones and Robin A. Day, to Major.

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Major George S. Warran, Air Corps, was given the temporary appointment of Lieut. Colonel, with rank from July 1, 1938.

Effective August 11, 1938, Colonel Percy E. Van Nostrand, Air Corps (General Staff), is relieved from detail as a member of the General Staff Corps, from assignment to the War Department General Staff, and from further duty in the Office of the Chief of Staff, Washington, D.C., and assigned to March Field, Calif.

V-7781, A.C.

26TH ATTACK SQUADRON FLIES TO KAUAI

By 1st Lieut. E.W. Suarez, Air Corps

The Island of Kauai, the oldest of the Hawaiian Group and some 90 miles westward from Oahu, was the setting for one of the most pleasant field exercises ever conducted by the 26th Attack Squadron.

Greeted by clear skies and warm semi-tropical sunshine, nine A-12 airplanes recently rose from Wheeler Field and headed westward to cross ninety miles of open sea. At 8,000 feet, the nine airplanes leveled off and proceeded to enjoy a flight which for glassy-smoothness is seldom experienced by Attack airplanes. A small speck, some 7,000 feet below, gave assurance to all that the OA-8 Amphibian plane was on the job to insure a safe crossing.

In the Hawaiian Island Group, each island has some characteristic of historical or natural interest different from the others. The aerial view of these islands gives the impression of sugar cane and pineapples. To realize the hidden beauty of these islands, it is necessary to go by automobile to the out of the way spots. The 26th Attack Squadron was exceedingly fortunate to see Kauai from the ground.

The huge Waimea Canyon, made when Madam Pele was rampant centuries ago, can be compared only to the Grand Canyon of Arizona. The grandeur of this canyon cannot be described in writing. Looking down hundreds of feet, one sees a small stream coursing its way to the ocean; then, as his gaze wanders to the precipitous sides, he observes a blending of all the colors of the spectrum. A slight mist affords a rainbow. Surely, this sight will long be remembered by personnel witnessing it.

Barking Sands is a stretch of beach where, some of the oldtimers say, the crunching sound of the strides of bare-footed warriors, long dead, can still be heard when the weather conditions are right for the warriors to roam.

The stone wall built by the Menehunes, legendary brownies, sprang up over night, each stone almost the size of a brownie.

Lale Bay is truly the garden spot of all Kauai. A cove sheltered by high cliffs on two sides, white sands, tropical vegetation, a stream emptying into the ocean, all combine to form a pretty picture. One can easily imagine being transplanted in old Hawaii with gay, dancing natives making the skies ring with their carefree laughter.

The McBryde Estate is now open to the public, thus enabling everyone to enjoy a scene of beauty which was once the privilege of only a few. Tall tropical trees, brilliant flowers, roaming peacocks, all make this truly a rare sight.

During the stay, all personnel were afforded the opportunity of viewing the island of Niihau from the air. This island, about twenty miles off the coast of Kauai, is owned by the Robinson brothers. The Robinsons and 150 full-blooded Hawaiians are the sole inhabitants of the island. It is one of the few remaining estates run on a feudal basis.

There are sections of white sanded beach where one can find hundreds of skulls and bones. It was never definitely explained whether these are grave yards or old battlefields. One attached pilot would like to believe that they are old battlefields, for he proudly exhibits in his office a skull and some bones as his trophy. Even though the skull is small enough to be that of a woman, let us say, for his sake, that the sands are historic battlefields.

And so when the 26th Attack Squadron said "Aloha" to Kauai, it was with the feeling that some day it would again be its privilege to enjoy Kauai's gardens of rare beauty.

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ACTIVITIES GROWING AT HICKAM FIELD

With greatly increased activity at Hickam Field, T.H., more and more departments of the 5th Bombardment Group are setting up offices there. In addition to the 23rd, 31st and 72nd Bombardment Squadrons operating their B-18's out of the new hangars, the squadron operations, communications and meteorological section are expected to join the Group Materiel Section in the new Operations Building in the near future. The Group Headquarters remains at Luke Field.

Using ships' weather reports as a source of information on vessels in the vicinity of the Hawaiian islands, navigators of the 5th Bombardment Group are devoting a large part of their time in conducting search and interception missions. With the large amount of water traffic in and out of this, the "Crossroads of the Pacific," an unusual opportunity is provided for training of this type.

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Effective on or about August 15, 1938, Lieut. Colonel Ralph E. Wooten, Air Corps, General Staff, is relieved from assignment to the War Department General Staff and from assignment and duty in the office of the Chief of Staff, Washington, D.C., and is then assigned to the General Staff with troops and to duty at the American Embassy, Santiago, Chile, as military attache and military attache for air to Chile and Bolivia.

THE NEW CLASS AT THE ADVANCED FLYING SCHOOL

Class 39-C, the largest in the peacetime history of Kelly Field, consisting of 65 Regular Army officers and 83 Flying Cadets, Air Corps, reported from the Primary Flying School, Randolph Field, Texas, on June 27, 1938, for training at the Advanced Flying School.

In this class there are eight sons of Army officers, namely:

2nd Lieut. Charles B. Westover
 " Samuel C. Gurney, Jr.
 " Malcolm Green, Jr.
 " Harold E. Marr, Jr.
 " Marshall R. Gray
 " Alan D. Clark
 " Horace Greeley

Flying Cadet Eriksen E. Shilling

The following Flying Cadets were appointed from the enlisted ranks of the Regular Army:

Edwin S. Green, Cavalry
 Sig Rogers Young, Air Corps
 Kenneth M. Welborn
 Forrest H. Baxter, Air Corps

The period from June 27th to July 1st was devoted to processing the new class, and a number took advantage of short leaves of absence over the 4th of July. Flying and ground training commenced on July 5, 1938.

The class was assigned to Sections of the Advanced Flying School, as follows:

Attack Section: 16 officers and 14 Flying Cadets.

Bombardment Section: 24 officers and 14 Flying Cadets.

Observation Section: 6 officers and 14 Flying Cadets.

Pursuit Section: 19 officers and 41 Flying Cadets.

When the above class commenced training at the Primary Flying School on October 15, 1937, it numbered a total of 271 students (105 officers and 166 Flying Cadets). Since a total of 148 students reported for advanced training at Kelly Field on June 27th, it will be noted that 54.6% of the class which started training successfully completed the primary and basic courses at the Primary Flying School.

The class is expected to graduate early in October, 1938.

The students now undergoing their advanced training at Kelly Field are given below, as follows:

OFFICERS

Attack Section

Denson, Render Dowdell	Birmingham, Ala.
Andrews, Frank William	Glendale, Calif.
Leland, Gordon Custer	San Jose, Calif.
Green, Malcolm, Jr.	Sausalito, Calif.
Poasey, James Theo	Henderson, Ky.
Brumal, Donald Bowen	Chicago, Ill.
Marr, Harold Everett, Jr.	Searport, Me.
Low, Curtis Raymond	Needham Heights, Mass.
van Laben, Harry Francis	Minneapolis, Minn.

Durham, Jasper Newton	Salem, Mo.
Barden, Richard Risley	Pen Yan, N.Y.
Miller, Joseph Alfred, Jr.	Brevard, N.C.
Herman, Robert Hensey	Middletown, Ohio
Hipps, William Grover	Curwensville, Pa.
Eckman, Walter	Houston, Texas
Pell, Floyd Joaquin	Ogden, Utah

Bombardment Section

Caldwell, Jack Edward	Searoy, Ark.
Wade, Kenneth Sayre	San Diego, Calif.
Preston, Maurice Arthur	Tulare, Calif.
Clark, Alan Doane	Washington, D.C.
Diehl, Conrad Henry, Jr.	Washington, D.C.
Rutherford, Alvord	Washington, D.C.
Westover, Charles Bainbridge	Washington, D.C.
Dorney, Harvey Charles	Olney, Ill.
Horrigan, William Kienle	Fort Thomas, Ky.
Taylor, Robert, 3rd	Baltimore, Md.
Spilman, Lawrence Augustus	Ottumwa, Iowa
Gray, Marshall Randolph	Newton Center, Mass.
Denohew, Jack Norman	Slater, Mo.
McDonald, William Emmett	Urich, Mo.
Ohman, Nils Olof	East Dedham, Mass.
Sanborn, Kenneth Oliver	Potter Place, N.H.
Gurney, Samuel Charles, Jr.	Ridgewood, N.J.
Hackford, Richard Hilton	Gardenville, N.Y.
Greeley, Horace	Jackson Heights, N.Y.
Agee, Sam Wilkerson, Jr.	Silver City, N.M.
Dunlop, Woodrow William	Manville, R.I.
Conway, Walter Clem	Abilene, Texas
Batjer, John Francis	Houston, Texas
Molcomb, George Lawrence	Kemp, Texas

Observation Section

Mauldin, Whiteford Carlisle	Lockesburg, Ark.
Powell, Thomas Everett	San Francisco, Calif.
Tarro, John Albert	Ill.
Lee, Robert Merrill	Me.
Mosby, John Fruheart	Va.
Stratton, Wilbur Harvey	Seattle, Wash.

Pursuit Section

Hammond, Harry Edwin	Pine Bluff, Ark.
Sprague, Charles Andrews	Bridgeport, Conn.
Robbins, Charles Louis	Elkhart, Ind.
Clingerman, William Ray, Jr.	Terre Haute, Ind.
Holdimen, Thomas Alexander	Marshalltown, Iowa
Lesser, Robert Fales	Lincolnton, Me.
Mageffan, Morton David	Deerwood, Minn.
Ulricson, John Russell	Milford, N.H.
Cain, William Joseph, Jr.	Bayonne, N.J.
Stark, Charles William, Jr.	Trenton, N.J.
Klocko, Richard Phillip	Dunkirk, N.Y.
Bondley, Charles John, Jr.	Ohio
Wright, Harold Bell	Calvin, Okla.
Ellis, Gale Eugene	Beaver Falls, Pa.
Holloway, Bruce Keener	Knoxville, Tenn.
McElroy, Ivan Wilson	Austin, Texas
Fellows, Richard William	Algona, Wis.
Eriksen, John Gordon	Milwaukee, Wis.
Stevenson, John Dudley	Tie Siding, Wyo.

All but four of the officers above listed are second lieutenants and members of the class which graduated from the U.S. Military Academy, West Point, N.Y., June 12, 1937. The four exceptions are Captain John Albert Tarro, V-7791, A.C.

Air Corps; 1st Lieuts. Charles John Bondley, Jr., Coast Artillery Corps; Robert Merrill Lee, Cavalry, and John Trueheart Mosby, Infantry.

FLYING CADETS
Attack Section

DeShazo, Robert Vernon	Leeds, Ala.
Young, Sig Rodgers	Tucson, Ariz.
Moffett, Christopher Otho	Fordyce, Ark.
Bylander, Richard Murray	Little Rock, Ark.
Flack, Rudolph Emil	West Los Angeles, Calif.
Robinson, Gerald Graham	Los Angeles, Calif.
Stuart, Robert Hartwell	San Jose, Calif.
Cole, Perry Sherman	Washington, Ind.
Walborn, Kenneth Moses	Ky.
Nichols, Thomas Brooks	Lexington, Ky.
Hubbard, Ronald Dean	Warren, Ohio
Madre, John Douglas	Memphis, Tenn.
Howery, Allen Moore	Russellville, Tenn.
Arnold, Walter Erath	El Paso, Texas

Bombardment Section

Wade, Horace Milton	Magnolia, Ark.
Courtney, Harold Douglas	Fullerton, Calif.
Green, Edwin Smith	Imperial, Calif.
Lindsay, James Robert	Santa Paula, Calif.
Nisbett, Charles Albert	East Hartford, Conn.
Manierre, Ernest Roderic	Hartford, Conn.
Proctor, John Peebles	Athens, Ga.
Carlton, John Noble	St. Peter, Minn.
Eisenhart, Charles Marion	Culbertson, Neb.
McGinity, Frank Joseph	Denville, N.J.
Adams, Jack	Walters, Okla.
Sharp, Frank Douglas	Salem, Ore.
Sullivan, John Lynn	Scranton, Pa.
Bohnaker, William John	Platteville, Wis.

Observation Section

Bacon, Thomas Philip	Bessemer, Ala.
Fitzgerald, Maurice Joseph	Fort Smith, Ark.
McGowan, Leland Stanford	Alhambra, Calif.
Hopper, Rowland Wells	Fresno, Calif.
Lawrence, Reesor Mott	Oakland, Calif.
Heinlein, Oscar Allen	Sacramento, Calif.
Khorre, Frederick James, Jr.	San Francisco, Calif.
Eldson, Harry Taylor	Indianapolis, Ind.
Hamilton, McHenry, Jr.	Alexandria, La.
Casey, Edward Richard	Boston, Mass.
Longino, Houston Walker, Jr.	Silver Creek, Miss.
Mohtstein, Charles Lewis	Norman, Okla.
Gilbert, Huntington Kerr	Dorset, Vt.
Kime, Duane Louis	Milwaukee, Wis.

Pursuit Section

Westbrook, Sam Wilkins	Faunsdale, Ala.
Tuell, Joseph Charles	Bisbee, Ariz.
Roberts, John Alva, Jr.	Beebe, Ark.
Willard, Edward Delaney	Modesto, Calif.
Cleveland, William H.	San Francisco, Calif.
Tolliver, Raymond Frederick	Fort Collins, Colo.
Starkey, James Fred	Greeley, Colo.
Greasley, Philip Henry	W. Hartford, Conn.
Shilling, Eriksen Emerson	Washington, D.C.
Fountain, Willard Asa	Hialeah, Fla.
Schwartz, Paul	Tampa, Fla.
Whitehouse, Robert Rempfer	Evanston, Ill.
Salzarulo, Raymond Paul	Richmond, Ind.
Kluever, Arnold F.A.	Atlantic, Iowa
Walker, Arthur James	New Orleans, La.
Feeney, Francis Robert	Boston, Mass.
Yurkanis, Paul John	South Boston, Mass.

Bullis, Harry J.	Portland, Me.
Prichard, William Jesse	Inverness, Miss.
Sparks, Walter William, Jr.	Inverness, Miss.
Osborn, John William	Lincoln, Neb.
Thurman, Wayne Earl	Lincoln, Neb.
O'Brien, Frank Edwin	Concord, N.H.
Healy, John Patrick	North Bergen, N.J.
Pinkston, Gladwyn Earl	Phillipsburg, N.J.
Ward, Brewster	Buffalo, N.Y.
Quinn, Robert Sidney	Rochester, N.Y.
Wiper, Samuel Bey	Sheldon, N.D.
Stefonowicz, LeRoy Len	Wildrose, N.D.
Rockey, Guy Hamilton	Athens, Ohio
McKechnie, Robert Ross	Cleveland, Ohio
Mason, Joe Lennard	Columbus, Ohio
Wintermute, Ira Francis	Salem, Ore.
Sullivan, William A., Jr.	Aspinwall, Pa.
Baxter, Forrest Houston	Hazel, S.D.
Knox, John Max	Nashville, Tenn.
Taylor, Ozburn Early	Nashville, Tenn.
Holcombe, Elton Earl	Atlanta, Texas
Slayden, Van Hatton	Fort Sam Houston, Texas
McEntire, William Elza	Fort Worth, Texas
Hubbard, Glenn Elwood	Durand, Wis.

It will be noted that the State of California leads with 19 students claiming that State as their home. Texas follows next with 9; Arkansas, 8; Tennessee, 7; Massachusetts, New York, and Ohio, 6 each; Indiana and Wisconsin, 5 each, and remaining States with four or less. In the cities represented in this class, Washington, the nation's capital, leads with five students, followed by San Francisco, Calif., and Hartford, Conn., with 3 each; Los Angeles, Calif.; Boston, Mass.; Lincoln, Neb., and Nashville, Tenn., with 2 each. None of the other cities represented claim more than one student each.

The lure of aviation brought the namesakes of three famous Americans to the Air Corps Training Center, and who are members of the above mentioned class at Kelly Field. The namesakes are Horace Greeley, John L. Sullivan and Harold Bell Wright.

Lieut. Greeley explained that he is a descendant of the famous editor of the New York TRIBUNE, who coined the famous phrase, "Go to West, Young Man." He believes he is a second or third nephew to the editor. He is the youngest son of the late Col. M.N. Greeley, of New York. Because there was no Horace Greeley in the immediate family, it was decided to name the youngest son after the great editor. Two of his brothers are in the Army, one in the Coast Guard and one in civil life.

Cadet John L. Sullivan, namesake of the once world's heavyweight champion, is a native of Scranton, Pa. When asked if his father was a fight fan, Cadet Sullivan, auburn-haired and freckled-face, queried, "What Irishman isn't?"

Second Lieut. Harold Bell Wright, Corps of Engineers, native of Calvin, Okla., said he started out in life as Harold Lambert Wright, but while a child he told everyone he was Harold Bell Wright, although he was too young to know he had taken the name of a famous English writer of novels on life in the Ozark Mountains. Wright's name has been changed officially to Harold Bell Wright. He does not know if he is related to the novelist.

AIRPLANE MAINTENANCE BY THE 88TH SQUADRON

During the recent GHO Air Force Exercises, the Second Provisional Transport Squadron was commanded by Major Newton Longfellow, who had for his officer personnel officers attached from various other organizations. The 88th Reconnaissance Squadron, Hamilton Field, Calif., furnished three of the five airplanes used by the Transport Squadron, and four of the airplanes were maintained by the 88th Squadron maintenance crews.

The Transport Squadron made four round trips from coast to coast, piling up a lot of flying hours. The maintenance crews kept the airplanes in good condition and established some sort of a record for keeping airplanes in commission. The total airplane time was over 700 hours, or an average of about 140 hours per airplane. One airplane had over 170 hours.

On one return trip to Hamilton Field, the Squadron landed at 6:45 p.m. on May 5th. The crews set to work and performed 40-hour inspections on four airplanes and had them all set for a 5:30 a.m. take-off the next day, May 6th. This was typical of all overnight stops. When the Squadron landed in the evening or late afternoon after flying all day, the crews would start right in on their servicing and inspections, working on most occasions long after dark getting the airplanes ready for an early take-off the next day.

Each trip took four days of flying, two days each way from coast to coast. On some of the trips an extra day was necessitated by bad weather.

It is interesting to note that the Hamilton Field radio station was able to maintain contact with the airplanes as far as Midland, Texas, a distance of over 1,200 miles.

The 88th Squadron is proud of the manner in which the airplanes performed and of their maintenance work which enabled the Transport Squadron to dart back and forth across the United States without any unnecessary delay or stopovers.

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CAPTAIN BRYTE LEAVES KELLY FIELD

Captain Walter G. Bryte, Air Corps, commanding the 64th School Squadron at the Air Corps Advanced Flying School, Kelly Field, Texas, departed on July 9th on a leave of absence prior to reporting to Maxwell Field, Montgomery, Ala., in September, where he has been ordered to duty as a student at the Air Corps Tactical School.

Captain Bryte graduated from the U.S. Military Academy with the Class of 1925, and from the Air Corps Advanced Flying School in September, 1926. He specialized in Bombardment Aviation and received the rating of "Airplane Pilot." He

was rated as "Airplane Observer" in 1933. He has been on duty at Kelly Field since March 15, 1935, when he reported from Nichols Field, Manila, P.I. While at Kelly Field he served in many important capacities, including:

Instructor in the Bombardment Section from March 15, 1935, to December 1, 1936;

Commandant of Flying Cadets from June 1, 1936, to December 1, 1936;

Secretary and Public Relations Officer, Air Corps Advanced Flying School, from December 1, 1936, to July, 1937.

Since the date last mentioned he served as Commanding Officer of the 64th School Squadron.

Captain Bryte's home is in Pasadena, Calif. Before his appointment to the U.S. Military Academy, he attended the University of California, at Los Angeles, in 1920 and 1921. He received his temporary promotion to the rank of Captain on April 20, 1935, and his permanent appointment on August 1st of that year.

It is with reluctance that his host of friends, both Army and civilian, see him leave San Antonio, and all join in wishing him the best of luck and success.

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TROPHIES AND MEDALS WON BY PISTOL EXPERT

A Kelly Field officer, who is very handy with the pistol, has brought home the bacon so often as to make it appear that he should be well supplied with this item of food which goes along with the eggs.

According to the Kelly Field Correspondent, 1st Lieut. Charles F. Densford, Air Corps, popular Observation Flying Instructor at the Air Corps Advanced Flying School, took time out between classes and went to El Paso, Texas, and literally cleaned up on the 18th Annual State Pistol Matches, which were conducted in that fair city from June 18th to the 22nd, under the auspices of the Texas State Rifle Association.

Lieut. Densford participated as an individual shooter, and while he did not capture the State Pistol Championship he nevertheless walked away with four matches, winning four first places, four second, one third and two fourths. Lieut. Densford bettered his scores of last year in most of the shoots he won. His nemesis of this and previous years, Mr. Charles Ashkins, of the Texas Border Patrol, won the title, although he did not take a single match, his aggregate topping that of Lieut. Densford by four points.

Included in the "spoils" brought home by Lieut. Densford were four trophies, seven silver medals and three bronze medals, which were placed on display at Post Headquarters for all to admire and envy.

(Continued on Page 8).

PERSONNEL CHANGES IN THE CHIEF'S OFFICE

Ten Air Corps officers and one Medical Corps officer, who are nearing the completion of their tour of duty in the Office of the Chief of the Air Corps, Washington, D.C., are slated for duty at the stations indicated, viz:

Lieut. Colonel M.C. Grow, Medical Corps, Chief, Medical Section, Personnel Division, to Langley Field, Va.

Lieut. Colonel Robert LeG. Walsh, Chief of the Reserve Division, to duty as student, Army Industrial College.

Lieut. Colonel Gerald E. Brower, Supply Division, to the Army War College for duty as student.

Major Charles P. Prime, of the Training and Operations Division, to Bolling Field, D.C.

Major Alvan C. Kincaid, of the Training and Operations Division, to duty as student at the Command and General Staff School, Fort Leavenworth, Kansas.

Majors Rowland C.W. Blessley, Reserve Division; William B. Souza, Training and Operations Division; James A. Mollison, Personnel Division, and Captain Donald F. Stace, Supply Division, to duty as students at the Air Corps Tactical School, Maxwell Field, Ala.

Major Edward V. Harbeck, Inspection Division, to San Diego, Calif., as Air Corps Technical Supervisor.

Major Morton H. McKinnon, Personnel Division, to duty as student at the Army War College.

Of the Air Corps officers due to report for duty in the Office of the Chief of the Air Corps, Brig. General George H. Brett goes to the Executive Office;

Colonel Henry W. Harms, Major Ennis C. Whitehead and Captain Donald F. Fritch to the Supply Division;

Lieut. Colonel Robert J. Platt, Medical Corps, to the Medical Section, Personnel Division;

Major Warren R. Carter and Captain John F. McBlain to the Training and Operations Division;

Major Barney M. Giles to the Inspection Division;

Major Austin W. Martenstein to the Finance Division;

Major Omer O. Niergarth and Captain Donald R. Goodrich to the Personnel Division;

Major Robert M. Webster to the Plans Section;

Captain Cecil E. Henry to the Reserve Division.

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LIEUT. DENSFORD (From Page 7)

Lieut. Densford's outstanding pistol shooting dates back from the days he was attending the Air Corps Advanced Flying School at Kelly Field, when in 1932 he won the State Championship. While serving in the Hawaiian Department he com-

peted in two Territorial championship shoots, capturing first place both times. He also participated in the Texas State Matches in 1936 and 1937, winning second place - as he did this year. Paprolman Ashking nosed him out of first place at each of those shoots, as he did this year. The winner of this year's matches, which were figured on an aggregate basis, scored 1133 in five matches, against 1129 for Lieut. Densford, and out of a possible 1200.

The Kelly Field participant used .22, .38 and .45 caliber pistols in these matches. He is a member of the Liberty Pistol and Rifle Club (San Antonio) but did not compete under its auspices this year, as there were insufficient numbers of its membership to make up a team.

All the members of Kelly Field - and the shooting fraternity especially - were immensely pleased with the achievements of their gun totin' flying instructor, and wish him continued success in many pistol shoots to come in the future, with the conviction that he will always bring home the bacon.

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LOWRY FIELD HOLDS OPEN HOUSE

More than 12,000 residents of Denver and vicinity took advantage of Lowry Field's first "open house" to see how the Air Corps lives and to look at the equipment used in teaching students the subjects of Armament and Photography.

Starting at 1:30 p.m., Sunday, June 27th, a steady line of cars began pouring into the post, and when the closing hour arrived at 5:30 p.m., it was hard for most of those present to break away from the thousands of interesting items on display.

Several mothers were seen to point out to their sons the orderly manner in which the soldiers make their beds and place their shoes beneath them.

Great interest was shown in the work of the Armament Department. The collection of machine guns, dummy bombs, bomb racks, machine gun synchronization apparatus and gun cameras kept the huge throng constantly asking questions of the military personnel on duty.

Equal interest was manifested in the Photographic Department, where dozens of huge and expensive cameras were on display. Many candid camera enthusiasts kept the photo students and instructors on their toes answering questions.

Lieut. Colonel Junius W. Jones was greatly impressed by the huge crowd, and indications were that future visiting days may be designated.

Colonel Jacob H. Rudolph, Air Corps, reported for duty and assumed command of Lowry Field, Denver, Colo., on July 1st, relieving Lieut. Colonel Junius W. Jones, assigned to duty in Washington, D.C.

LIEUT. GOWEN LOSES LIFE IN CRASH

The crash of a B-10B Bomber on July 11, 1938, at Paitilla Point, on the outskirts of Panama City, Republic of Panama, resulted in the death of 1st Lieut. Paul R. Gowen, Air Corps. His two companions in the plane, 1st Lieut. Kenneth R. Crosher and Private Gareth H. Bundy, Air Corps, survived the crash, the former sustaining minor burns and the latter major burns.

A graduate of the United States Military Academy, West Point, N.Y., June 13, 1933, the deceased officer was commissioned a second lieutenant in the Corps of Engineers and assigned to the Air Corps for flying training. Graduating from the Primary Flying School, Randolph Field, Texas, June 30, 1934, he specialized in Attack Aviation at the Advanced Flying School, Kelly Field, Texas, and graduated therefrom October 13, 1934, on which date he was rated as "Airplane Pilot." He was then assigned to duty with the 20th Pursuit Group at Barksdale Field, Shreveport, La. In January, 1937, he was assigned to duty in the Panama Canal Department.

Lieut. Gowen was 29 years of age and a native of the State of Idaho.

The Air Corps sends its deep sympathy to the bereaved relatives of this promising young officer who lost his life in the service.

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DEATH OF LIEUT. COLONEL ERNEST CLARK

The death on June 30, 1938, at the Marine Hospital, Baltimore, Md., of Lieut. Colonel Ernest Clark, removed from the ranks of the Air Corps an officer of superior qualifications and one who was held in high esteem by his fellow officers.

Funeral services were held at the chapel at Fort Myer, Va., on the morning of July 5th, and interment was in the Arlington Cemetery. The honorary pallbearers were Lieut. Colonels M.F. Davis, Vincent B. Dixon, Rosenham Beam, W.E. Farthing, Ira C. Eaker and Major David G. Lingle.

A native of Terre Haute, Ind., where he was born on December 13, 1884, Col. Clark for a period of three years from March 15, 1899, served as an enlisted man in the 10th U.S. Infantry, and was discharged as a sergeant. Reenlisting on July 31, 1902, he was assigned to Company G, 20th Infantry, and he served therewith until discharged by purchase, as a corporal, August 24, 1903. While with the Infantry, he saw service in Cuba.

Beginning in 1907, Colonel Clark, for a period of ten years, served with the Indiana National Guard. He was commissioned a second lieutenant on February

24, 1908, and was promoted to first lieutenant on December 30, 1914. From July 15, 1916, to February 1, 1917, he was aide-de-camp to Brigadier General E.M. Lewis, the Commanding Officer of the Indiana Brigade, at which time it was in the Federal service on the Mexican border.

In March, 1917, Colonel Clark was authorized by the Militia Bureau in Washington to take the course in aviation at the Signal Corps Aviation School at San Diego, Calif. He completed the course and qualified for the rating of Junior Military Aviator in July, 1917.

Appointed a temporary 1st Lieutenant, Signal Corps, U.S. Army, on November 14, 1917, he was officially rated a Junior Military Aviator on the same date. He continued on duty at San Diego, serving as Assistant to the Officer in Charge of Flying until his transfer to March Field, Calif., for duty as Officer in Charge of Flying. While on duty at San Diego, he established the auxiliary flying field at Otay Mesa, then known as "East Field," and had direct charge, being responsible for all flying at this field.

At March Field, Colonel Clark not only established the course of flying instruction thereat, but made an enviable record in having given 28,000 hours of instruction to flying cadets without a fatality.

In March, 1919, Colonel Clark assumed the additional duty of commanding officer of the Flying School Detachment, and for a number of months he also served as Executive Officer of the field. During the summer months of 1920 he was in charge of Forest Fire Patrol operations.

Transferred to Chanute Field, Rantoul, Ill., in April, 1921, Colonel Clark was stationed at this field until October 6, 1927. During this period, his duties were varied in character. He commanded the Air Service Technical School Detachment, was Executive Officer of the field, Intelligence Officer, Provost Marshal, Post Operations Officer, Engineering Officer and Meteorological Officer. For a number of years he commanded the 15th Observation Squadron.

At his next station, Langley Field, Va., Colonel Clark was Post and Wing Operations Officer, Post Airways Officer, and Post Information Officer until July, 1928. He was then assigned to the command of the 59th Service Squadron, 2nd Bombardment Group. For several months he was in temporary command of the 2nd Bombardment Group.

Transferred to Bolling Field, D.C., in February, 1929, he was placed in command of the Air Corps Detachment thereat. For brief periods he served as Executive Officer and Commanding Officer of the Field.

(Continued on Page 12).

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11TH BOMBARDMENT SQUADRON CELEBRATES

Observance of the 21st anniversary of the 11th Bombardment Squadron, stationed at Hamilton Field, Calif., was celebrated on June 25th with a picnic at McNear's Beach, a few miles from San Rafael. All types of recreation were available to the men of the "Eleventh," their friends and guests. A public address system was taken along for dancing in the evening after the soldiers made the most of swimming and games in the far famed California sun.

The 11th Bombardment Squadron was organized at Kelly Field, Texas, on June 26th, 1917, from personnel derived from Company "B," Provisional Aviation School, Signal Corps. After intensive training both at Kelly Field and Scott Field, the Squadron was ordered to England December 18, 1917; on H.M.S. "Orduna." Disembarking at Greenbrock, Scotland, December 31, 1917, the Squadron arrived at Winchester, England, January 1, 1918.

At Maulan, shortly after leaving their first front line station of Amanty, July, 1918, the Squadron Insignia was adopted. Conceived in the mud of the front lines, "Jiggs" was supposed to typify the long suffering and patient spirit of the Eleventh, as it met with many disappointments in its effort to get into action.

Privates Hal Green and Lawrence Larson conceived the idea of "Jiggs" for the Squadron Insignia, and it was drawn by Sergeant Clement Jenkins.

The unofficial record shows that "Jiggs" accompanied the Squadron on 32 bombing raids, engaged in 17 combats and has official confirmation of 13 victories.

A few years ago, Mr. George McManus, the famous creator of the Maggie and Jiggs cartoon, obligingly drew the cartoon for the Eleventh, thus perfecting and adding to the attractive insignia a feeling that Mr. McManus alone can put into his cartoons.

General Orders No. 5, War Department, 1926, awarded four battle credits to the Squadron at Lorraine, St. Mihiel, and the Meuse-Argonne. Thirteen victories of the Squadron received official confirmation. During the 32 bombing raids and 17 combats in which it participated, the Squadron suffered 20 casualties, consisting of 10 killed, 8 taken prisoner, one wounded and one missing in action.

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Master Sergeant Charley J. Osburn, Air Corps, stationed at the Advanced Flying School, Kelly Field, Texas, is placed on the retired list, effective July 31, 1938.

PHOTOGRAPHS OF ERUPTING VOLCANO

Army airmen stationed in the Philippines took a number of interesting photographs of Mt. Mayon, the world's most perfect volcano, in action. After ten years of inactivity, this volcano erupted on June 4th, last, forcing thousands of natives to flee from their homes.

Mt. Mayon, which towers to a height of 8,274 feet and rises straight out of the coastal plain, is located five miles northwest of the city of Legaspi, the capital of the province of Albay on the island of Luzon. It is approximately 210 miles east of the city of Manila. Chiefly noted for being one of the world's most symmetrically conical volcanoes, Mt. Mayon is one of several active volcanoes left in the Philippines. Its activity is limited to smoking and periodical eruptions.

Almost ten years ago, on July 2, 1928, the coast town of Libog, P. I., then having a population of 7,000, and several villages, were virtually destroyed by the lava from this volcano.

In the 1928 volume of the Air Corps News Letter, the following item was found under notes from Nichols Field and under the caption "5th Photo Section":

"Lieut. John D. Corkille, pilot, and Lieut. George W. Goddard, photographer, flew to Legaspi and made some interesting photographs of Mayon volcano, which is in eruption at the present time."

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FLYING ACTIVITIES OF 3RD TRANSPORT SQDN.

The pilots of the Third Transport Squadron, San Antonio Air Depot, Duncan Field, Texas, have flown an average of 688 hours each during the past fiscal year.

The eight pilots of the Squadron, 1st Lieuts. M.H. Warren (Commanding), L.F. Kleinoeder, C.B. Collier, 2nd Lieuts. T.K. Dorsett, P.S. Blair, Master Sergeant C.P. Smith, Technical Sergeant P.B. Jackson and Staff Sergeant F.O. Tyler, have flown 5,511 hours without even a minor accident. Technical Sergeant Jackson, with a total of 785 hours, had the highest amount of flying time.

The News Letter Correspondent states: "This is an exceptionally well qualified group, having an average of 3,070 hours' total time per pilot. Since the first C-33 transport was received 20 months ago, these airplanes have been flown over a half million miles without even a minor accident and with only one forced landing, on which occasion the airplane, fully loaded, was flown on one engine to Austin, Texas, and landed without mishap. This forced landing was due to a material failure and was not caused by

(Continued on Page 12)

AIR-TRACK INSTRUMENT LANDING SYSTEM

The improved Air-Track Instrument Landing System, manufactured by the Washington Institute of Technology, was inspected and flight tested at Pittsburgh, Pa., by a representative of the Air Corps Materiel Division, Wright Field, Ohio. In his report, it was stated that this landing system as now installed at the Allegheny County Airport, Pittsburgh, Pa., presents a system much improved over that tested by representatives of the Materiel Division at College Park, Md., in June and July, 1936, and provides information which would indicate that the straight line glide path will be a desirable as well as an essential feature of any future instrument landing system.

This straight line glide path is, of course, under development by several agencies, including the Army, at the present time. The glide path of the Air-Track Instrument Landing System had only a slight curvature, and the straightening out of this path made it possible for it to be followed much more accurately and with greater ease than any previously tested.

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OFFICERS ASSIGNED TO RANDOLPH FIELD

The following-named Air Corps officers were relieved from further assignment and duty at the stations indicated and assigned to duty at the Air Corps Training Center at Randolph Field, Texas:

Captain James F. Phillips, from Edgewood Arsenal, Md.

Captain Elmer T. Rundquist, from Fort Riley, Kansas.

1st Lieut. William C. Dolan, from Brooks Field, Texas.

1st Lieuts. Richard E. Ellsworth and Richard H. Wise, from Mitchel Field, N.Y.

1st Lieuts. William J. Holzappel, Jr., Dyke F. Meyer and 2nd Lieut. Wilbur W. Aring, from Maxwell Field, Ala.

1st Lieuts. Kurt M. Landon and Earl F. Signer, from Scott Field, Ill.

1st Lieut. John W. Persons, from Bolling Field, D.C.

1st Lieut. Lloyd H. Tull, from Aberdeen Proving Ground, Md.

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Lieut. Colonel Harold M. McClelland, Air Corps, has been detailed as a member of the General Staff Corps and assigned to the War Department General Staff.

Effective August 3, 1928, he is relieved from assignment and duty at the General Headquarters Air Force, Langley Field, Va., and assigned to duty in the office of the Chief of Staff, Washington, D.C.

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Captain Francis B. Valentine, Air Corps, was promoted to Major (temporary), with rank from June 27, 1938.

PERMANENT REMINDERS OF A WORLD WAR HERO

The various medals and engraved citations, once the treasured possessions of the late Lieut. Colonel William Thaw, Air Service, one of America's outstanding heroes of the World War, will be on display sometime in the future at the Army Aeronautical Museum at Wright Field Dayton, Ohio. These mementoes were presented to the Air Corps by Mrs. Benjamin Thaw, of Washington, D.C., widow of the brother of Colonel Thaw. At their permanent resting place at Wright Field, they will serve as a reminder to future generations of American youth of the gallant airmen who gave their all for the defense of democracy during the World War.

At the age of 40, Colonel Thaw died in Pittsburgh, Pa., on April 22, 1934. The airman, whose feats in aerial combat as commander of the Lafayette Escadrille made illuminating chapters in the history of war-time aviation, succumbed to pneumonia.

As an early aviation enthusiast, Colonel Thaw devoted much of his time to its development before the outbreak of the war. During that great conflict he came to be recognized as one of the outstanding figures in the air operations in the war-torn area, and he became the leader of the heroic little band of American flyers who plunged into the conflict almost at its beginning as soldiers of France, and who later became identified by the now famous name of the "Lafayette Escadrille."

Story after story of German planes brought down, and of heroic battles in the undeveloped war-time planes, centered the attention of the world on the Lafayette Escadrille. Colonel Thaw was frequently cited for heroic action, and before the war had been in progress two years he was awarded the French government's Military Cross, the highest honor which can be attained by a French soldier.

Long before the outbreak of the war, Colonel Thaw and his brother, Alexander Blair Thaw, were conducting experiments on aircraft devices, and the latter developed an automatic stabilizer. In 1914, the two brothers went to France in an endeavor to interest the French government in that device. Shortly thereafter, the war broke out, and Colonel Thaw remained in France to enlist with 121 other Americans in a volunteer foreign legion organized when the hostilities began. He entered as a private and while still holding that rank was transferred in December, 1914, to the flying corps. He served with various squadrons on the front lines and, during the course of his service with the French air force, he was promoted at various times and reached the rank of 1st Lieutenant on May 22, 1916.

On October 17, 1917, he was given command of the Lafayette Escadrille, and in the following month he was transferred to the American Air Service. He was commissioned a Major on November 7, 1917, and given the command of the 103rd Pursuit Squadron on January 10, 1918. On August 1, 1918, he was placed in command of the 3rd Pursuit Group, and on October 15, 1918, he was promoted to Lieutenant Colonel.

While with the U.S. Air Service overseas, Colonel Thaw was on active flying duty in the various offensives in which the American Army was engaged. He returned to the United States in December, 1918, and commanded Rockwell Field, Calif., until July, 1919, when he was honorably discharged from the service.

Following his return to civil life, Colonel Thaw entered the insurance business in Pittsburgh, but maintained his interest in aviation and made frequent flights. He first learned to fly at the Curtiss School of Aviation at Hammondsport, N.Y., June to August, 1913. He flew from Newport, via New Haven, to New York, with another airman, Steve Macgordon, flying under the East River bridges and around the Statue of Liberty. This was in October, 1913. In December of that year he flew a Curtiss flying boat in Florida. Early the next year he flew a Curtiss hydroplane at various localities on the Mediterranean Sea.

The medals, engraved citations, etc., turned over by Mrs. Thaw to the Air Corps, are enumerated below, as follows:

1. Citation for the Distinguished Service Cross, signed by General John J. Pershing, with the decoration affixed to the citation.

2. Citation, dated April 19, 1919, and signed by General Pershing, commending Lieut. Colonel Thaw for exceptionally meritorious and conspicuous service as Commanding Officer of the 103rd Pursuit Squadron.

3. Citation for the A La'Ordre de L'Armee, to which is affixed the Croix de Guerre decoration, with four palms pinned on the ribbon.

4. Citation for the Ordre National de La Legion D'Honneur, dated April 9, 1919, conferred by the President of France on Lieut. Colonel Thaw. The decoration is affixed to the certificate.

5. A history of the 3rd Pursuit Group, 1st Pursuit Wing, 1st Army, comprising eight single-spaced typewritten pages, mounted on heavy cardboard.

6. Large sheet of parchment paper, on the bottom half of which are inscribed the names of pilots of the 28th, 93rd, 103rd and 213th Squadrons, credited with bringing down enemy planes, and the number thereof. At the top of this sheet, painted in colors, an eagle is perched on the top of a scroll wherein there is inscribed the words "Roll of Honor of the 3rd Pursuit Group." Underneath this,

painted in appropriate colors, are the insignia of the squadrons above mentioned.

7. A large frame, on the left appearing a letter to Lieut. Colonel Thaw, dated Paris, France, January 14, 1918, written by Mr. Lawrence V. Benet, Chairman of the Foreign Service Committee, Aero Club of America, and stating that in recognition of the splendid service Colonel Thaw rendered as founder of the Franco-American Flying Corps, there is bestowed upon him the Special War Medal of the Aero Club of America. This medal is fastened at the top center in the frame. At the right is an engraved certificate of the Ligue Aeronautique de France, dated June 14, 1917, expressing praise and gratitude to Colonel Thaw, of the Lafayette Escadrille, and awarding him the Medal of the League. This medal, which is more in the form of a plaque, is fastened at the bottom center of the frame.

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COLONEL CLARK (From Page 9).

In June, 1931, Colonel Clark arrived in the Hawaiian Department and assumed command of the 18th Pursuit Group at Wheeler Field, Schofield Barracks, T.H. He was repeatedly commended by his superior officers for the excellent manner in which he administered his command.

After over four years of service in Hawaii, Colonel Clark, in November, 1935, reported for duty with the 1st Pursuit Group at Selfridge Field, Mt. Clemens, Mich. On March 19, 1937, he began his duties as Air Officer of the 3rd Corps Area at Baltimore, Md.

Commissioned a Captain in the Air Corps, Regular Army, on September 23, 1920, he was promoted to Major on March 1, 1931, and to Lieut. Colonel (temporary), March 12, 1935.

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THIRD TRANSPORT SQUADRON (From Page 10).

faulty maintenance. Therefore, although the pilots have hung up an excellent record, too much praise cannot be given the enlisted personnel who have made this possible through excellent maintenance.

During the past year, approximately one and one-half million pounds of freight was moved in and out of the San Antonio Depot by air.

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War Department Special Orders announced the temporary appointment of Captain Hobart R. Yeager, Air Corps, to the grade of Major, with rank from July 1, 1938.

Major Arthur G. Hamilton, Brooks Field, Texas, was transferred to Marshall Field, Kans., for duty with 1st Observation Sq. V-7791, A.C.

WORLD FLIGHT A MATTER OF HOURS

Tears ago, when Jules Verne, the famous novelist, wrote his book "A Tour of the World in Eighty Days," it is safe to assume that little did he dream that his fanciful vision of fast travel around the globe would actually be reduced to a matter of hours.

Through his remarkable achievement of encircling the globe and covering a distance of 14,824 miles in 91½ hours, Howard Hughes, America's No. 1 Sportsman Pilot, demonstrated once more the supremacy of the United States in aviation.

Sunday evening, July 10th, at 6:20 p.m., E.S.T., he took off from Floyd Bennett Field, N.Y., and Thursday afternoon, July 14th, the wheels of his special Lockheed monoplane rolled to a stop at this same airport at 1:34 o'clock, E.S.T.

And in the meantime! Monday, at 10:55 a.m., E.S.T., he arrived in Paris, after crossing the turbulent Atlantic and covering a distance of 3,641 miles in 16 hours and 35 minutes. At 7:24 p.m. that day, after refueling and repairs, he took off for Moscow, where he arrived on Tuesday morning at 3:13, covering 1,675 miles in 7 hours and 49 minutes.

Two hours and 12 minutes later, after refueling, the flight was resumed, and Omsk, U.S.S.R., was reached at 1:00 p.m., the distance of 1,380 miles being covered in 7 hours and 35 minutes.

At 5:37 p.m., the American airman took off on the next leg of their flight to Yakutsk, Siberia, a distance of 2,177 miles, and they arrived there at 4:08 a.m., Wednesday, after flying 10 hours and 31 minutes.

Less than three hours later, at 7:01 a.m., the monoplane was again in the air and headed toward Fairbanks, Alaska, a distance of 2,456 miles. This hazardous "hop" was covered in 12 hours and 17 minutes. They arrived at 7:18 p.m.

The airmen stopped in Fairbanks only an hour and 18 minutes, taking off for Minneapolis, Minn., at 8:36 p.m., and landing at the Wold Chamberlain Airport at 8:38 a.m., Thursday, after a 2,441-mile flight, which was covered in 12 hours and one minute. Just 33 minutes later, at 9:11 a.m., the take-off was made on the final 1,054-mile lap to the Floyd Bennett Airport.

All of the time given above is Eastern Standard.

Major General Oscar Westover, Chief of the Air Corps, made a special flight to New York to extend in person his hearty congratulations to the globe-encircling airmen for their epochal feat. And, to make his feelings in the matter of record, he wired Mr. Hughes as follows:

"Heartiest congratulations to you from me personally and from the Air Corps as a whole on the successful completion of your epoch making world flight. You and your crew have demonstrated to the en-

tire world the preeminence of the United States in aeronautics."

Brigadier General Henry H. Arnold, Assistant Chief of the Air Corps, wired Mr. Hughes, as follows:

"Congratulations on successful completion of your epoch making world flight. You and your crew have certainly shown that the United States leads the way in aeronautics."

As one around-the-world flyer to another, Major Lowell H. Smith, Air Corps, Chief of the Inspection Division, Office of the Chief of the Air Corps, who was the leader of the Air Corps Around-the-World Flight in 1924, wired Mr. Hughes, as follows:

"Participants in the Army Air Corps World Flight nineteen twenty four extend their most hearty congratulations to you and each member of your flight for your splendid achievement and the remarkable record established."

Associated with Mr. Hughes on this flight was 1st Lieut. Thomas L. Thurlow, Air Corps, who is stationed at the Air Corps Materiel Division at Wright Field, Dayton, Ohio. Quoting Hughes' story of the flight in the press: "I had two of the best aerial navigators who ever lived. Lieut. Thomas Thurlow studied astronomy in college and is tremendously enterprising. He invented the best type of sextant, which we used, and perfected our drift indicator.

"Harry Connor is a fine celestial navigator, who learned his business in the merchant marine. He and Thurlow spelled each other. One would navigate at the take-off and the other would guide us into landing, and then they'd change off midway of the next leg."

According to Hughes' story, it appears that on the take-off from Floyd Bennett Field when he had taxied to the end of the runway he thought the runway was too short for a take-off with that load, so he taxied out beyond the end of the runway (concrete) on the grass. The tail wheel hit a hole in the grass. "I felt the jar," he said. "What had happened - although we didn't know it then - was that the bump had ruptured the fitting of the tail wheel to the bulkhead of the ship."

"A French mechanic nosing around under the ship found the trouble right away. The biggest danger was that the break was right up close to the elevator controls and interfered with them. We and the French, who were grand to us, took a look. They threw up their hands and said: 'C'est fini' - it's the end. But not Ed Lund.

"He found a United States Army mechanic named Cook - I don't know what he was doing around Paris - and he and Cook fixed things up with a log of angle irons. I'd thought maybe we could do it with a 2 by 4, or something, but their job was swell." Ed Lund, a member of

Hughes' crew, is a man who has had considerable experience with engines. The Army mechanic referred to by Hughes is Staff Sergeant John J. Cook, Air Corps, who is on detached service in Paris and mechanic for Captain John M. Sterling, Air Corps, who is the Assistant Military Attache for Air at the American Embassy in Paris. Sergeant Cook was formerly stationed at Bolling Field, D.C., and is a resident of Washington.

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ASSIGNMENTS OF NEWLY APPOINTED OFFICERS

The 19 newly appointed Air Corps officers, who held commissions in the Air Reserve, and who were commissioned under the provisions of the Acts of Congress of August 30, 1935, and April 13, 1938, as second lieutenants in the Air Corps, Regular Army, with rank from July 1, 1938, as referred to in the previous issue of the Air Corps News Letter, have been assigned to duty at the Air Corps stations indicated:

Howard Monroe Means, to Fort Knox, Ky.
Leland Gordon Fiegel and McClellan Ferguson Stunkard, Jr., to Mitchel Field, L.I., New York.

Thomas Danville Brown to Fort Lewis, Washington.

Harry Philip Leber, Jr., to Hickam Field, Territory of Hawaii.

James Warren Phelps, Jr., to Selfridge Field, Mich.

John Richardson Alison, Steele Roy Patterson, Thornton Kise Myers and Henry Gordon Barrett to Langley Field, Va.

Michael Joseph Coffield, Waymond Austin Davis and Wallace Embry Nau to March Field, Calif.

Alford Henry Dalton, John Ray Kilgore and Edward Shepard Chickering to Randolph Field, Texas.

Henry Vedder Bastin, Jr., and Robert Carl Orth to Scott Field, Ill.

Guy Leonard Hudson, Jr., to Moffett Field, Calif.

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HAMILTON FIELD GIVES RELEASE TO B-10's

According to the Hamilton Field Correspondent, the personnel at that field recently paid farewell to the last of the old Martin B-10 Bombers. He states:

"These planes at one time were supposed to be one of the most advanced type of two-motored bombers in our Air Force, but are now on the down hill grade and in a few more years will be entirely obsolete.

Two of these B-10's - the last two at Hamilton Field - were transferred, one to Fort Lewis, Washington, and one to Moffett Field, Calif., where they will be used as training ships for Reserve officers and the National Guard.

The Martin B-10 bomber has been slowly replaced by the more up-to-date Douglas

B-18, which is also a two-motored bomber, but with a carrying capacity of sixteen men over the capacity of three in the old B-10's."

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TRAVELING EXAMINING BOARD INTERVIEWS APPLICANTS FOR REGULAR APPOINTMENT

Incident to the examination of officers being conducted at Hamilton Field, Calif., for commissions in the Air Corps, Regular Army, was the flight which took the members of the examining board to Barksdale Field, Shreveport, La.

The Air Corps members of the board, Lieut. Colonel C.W. Russell, Majors C.P. Talbot and T.V. Foster, proceeded in a Douglas twin-motored B-18 airplane to March Field, Calif., and from there continued on to Barksdale Field. Lieut. Troy W. Crawford acted as observer on the flight. The other members of the board are Major W.F. DeWitt and Captain F.C. Gilliland, Medical Corps.

Forty-one applicants, all of whom are graduates of the Air Corps Training Center, have been interviewed by the board at Hamilton Field. Many of these young men are at present on active duty either at Hamilton Field or other Air Corps stations, while others of them are engaged in commercial aviation and other business pursuits.

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MAJOR HARPER TO LEAVE CHANUTE FIELD

The Chanutte Field Correspondent reports that on August 1st, Major Earle G. Harper, Air Corps, will leave that field for a month's vacation in the Sierra Nevada Mountains, upon the termination of which he will report for duty at Moffett Field, Calif. He then adds:

"Major Harper came to the Technical School from March Field in July, 1932. Two years later he was appointed the Assistant Commandant, Air Corps Technical School, and served as such for almost four years.

Since Major Harper's arrival six years ago his record has been one of loyal and consistently hard work with but one end in view - the improvement of the school, its courses of instruction, and quality of its graduates. Only one who has watched the progress of the school in the past six years can fully appreciate the effect of Major Harper's efforts.

As Squadron Commander of Headquarters and Headquarters Squadron - an organization composed largely of students and numbering on an average of five hundred men - he has kept in very close touch with the men. He knew personally the best students and the worst, their troubles and their problems. Few leaders have his ability to gain the same affection and respect of their men while holding them to the strictest discipline."

V-7791, A.C.



NEWS LETTER



MT. MAYON, P.I. IN ERUPTION.

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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OPERATION OF CARBURETOR MIXTURE CONTROLS

By a Materiel Division Engineer

Apparently no other one thing causes more trouble in the mind of the average pilot than the operation of the mixture control. Probably no other thing so contributes to the high cost of maintenance at overhaul as the improper use of the mixture control. This is especially true of air-cooled engines of high output. Every bit of distance stretched on cross-country or every penny saved on gas is paid for by dollars in abuse to the engine. And this engine, as a result, may let you down before you get to your destination or let your fellow officer down tomorrow or next week. It is hoped to have this control eventually automatic and fool-proof; in the meantime the Air Corps News Letter is taken as a medium to summarize information now being gathered for formal publication at a later date.

1. As an introduction, a thorough study of all available information on "Operating and Flight Instructions" for your particular airplane is always in order. The engine you fly today doesn't respond as the engine you flew yesterday, a year ago, or certainly not ten years ago. Be conservative. Stay on the rich side if you are manually controlling the mixture or, if not, give the automatic control the opportunity to function properly.

2. Manual Settings. - The following expressions are applicable to manual adjustment of mixture control with a propeller installed that can be locked in a fixed-pitch position. Given a constant speed propeller of the type that cannot be locked in a fixed-pitch position, and the extreme pitch positions of which result in engine speeds outside the normal operating range in flight, and the use of an instrument measuring the fuel-air ratio for manual adjustment of the mixture control is necessitated.

- a. "Full Rich" is the setting of the mixture control lever in the position giving maximum fuel flow.
- b. "Best Power" (sometimes termed "Maximum Power") is the setting of the mixture control lever which, with a given fixed throttle setting, results in

the maximum engine r.p.m. at the leanest fuel flow; that is, further leaning of the mixture would cause a decrease in engine r.p.m.

- (1) "Rich Best Power" is the setting of the mixture control lever which, with a given fixed throttle setting, results in the maximum engine r.p.m. at the richest fuel flow.
- c. "Smooth Operation." To obtain the setting for "Smooth Operation" the setting for "Best Power" is obtained and the mixture enriched until engine speed drops from 20 to 30 r.p.m.
- d. "Maximum Economy" is obtained by adjusting to "Best Power" and then leaning to obtain a decrease of 40 to 50 r.p.m.

3. Automatic Mixture Controls. - The following types of automatic mixture controls are now in service. Except as specified in Engine Operation Instructions the manual adjustment of carburetors equipped with automatic mixture controls is not required. But when so required, adjustment will be as outlined in Paragraph 2, above.

a. One Position Automatic (Bendix). - This type of control automatically controls the mixture, including changes due to various altitudes and temperatures, without regard to throttle setting. It does not in any way control the power output of the engine. Within the effective operating range, and with the mixture control set in the "Automatic" position, the necessity for manual mixture control is obviated. In the event the automatic mixture control is damaged or for any other reason does not perform properly, the mixture control may be operated manually as with a conventional type carburetor by shifting the carburetor mixture control lever from the "Automatic" position to the desired manual position. This type of control is designed to function at all power outputs up to a standard altitude of 25,000 feet.

b. Two Position Automatic (Bendix). - This type has the following control positions: "Manual," "Automatic Rich," and

"Automatic Lean." In the "Manual" position the mixture is adjusted manually as with a conventional type carburetor. In the "Automatic Rich" position, the mixture is automatically adjusted for safe engine operation up to normal rated power, manifold pressure, and speed. The "Automatic Lean" position will be used only for manifold pressures and speeds below those specified for "Maximum Cruising," and only with the specified grade of fuel. For operation at "Maximum Cruising" power and above, it is imperative that the mixture control be placed in the "Automatic Rich" position or adjusted manually to give the proper mixture. Failure to comply with this procedure is apt to result in serious damage to the engine. With this type of control, take-off will normally be made with the mixture control in the "Full Rich Manual" position except at altitudes above 3500 feet, for which the "Automatic Rich" position may be used.

c. Power Control Type (Pratt & Whitney). - This type has the following control positions: "Emergency" and "Mid" or "Cruising" position. In the "Emergency" position there is no automatic control of either mixture or power, and during operation in this position care must be exercised to avoid excessive manifold pressures and the mixture must be adjusted manually as with a conventional carburetor. In the "Mid" and "Cruising" positions, the power is controlled with the throttle wide open by means of an automatic valve in the air intake in front of the carburetor. This regulation of power is obtained up to the maximum altitude at which the engine can maintain the power for which the regulator is adjusted. Automatic mixture control is also obtained up to this altitude.

At higher altitudes the mixture will grow richer as the power decreases, and therefore to obtain maximum performance and economy the mixture must be leaned manually. Within the range of this type of control, when the control is set in the "Mid" or "Cruising" position and the propeller set for cruising r.p.m., the manifold pressure will be limited to a definite value with the engine throttle full open. If a lower cruising power condition is desired, it may be obtained by leaving the engine throttle full open and reducing the propeller r.p.m. by means of the propeller control. In reducing the propeller r.p.m., the manifold pressure will be automatically reduced slightly. The lower cruising power condition may also be obtained by having the propeller r.p.m. fixed and closing the engine throttle manually. The former method is more satisfactory and efficient. If the latter method is used, the cruising fuel consumption will be somewhat higher.

4. Caution. When operating an engine

with the mixture control in the manual lean position at high altitudes, it is extremely important that the mixture setting be enriched during descent, as the normal change in mixture due to change in altitude only may prove dangerous to the proper functioning of the engine. When the airplane is leveled off at lower altitudes, the mixture control should be readjusted for the proper operating conditions then in effect.

5. Adjustment for High Altitude Take-Off. While present instructions generally specify "Full Rich" adjustment of the mixture control for take-off, the operation of some engines not equipped with automatic mixture controls is unsatisfactory if the take-off is at more than 3500 feet above sea level with the mixture control in the "Full Rich" position. The present fuel-air ratio indicators, moreover, are not sufficiently rapid and sensitive to permit adjustment of the mixture during run-up or take-off. Adjustment of the mixture controls for take-off above 3500 feet will therefore be made as follows:

a. Engines equipped with propellers that can be locked in a fixed position should be run-up as near take-off manifold pressure and r.p.m. as possible and the mixture leaned only enough to give an increase in speed of 50 to 75 r.p.m. This setting will be the leanest which should be used for take-off.

b. The mixture control of engines equipped with constant speed propellers whose pitch cannot be fixed cannot be properly adjusted on the ground. Prior to landing airplanes so equipped, they should be flown at the approximate altitude of the field from which take-off is contemplated, at take-off r.p.m., and manifold pressure. The mixture control should be leaned barely enough to eliminate rough operation of the engine, or adjusted for the proper fuel-air ratio indicator reading and this setting marked on the mixture control quadrant for use in subsequent take-offs from this field.

c. Engines equipped with automatic mixture controls should be set as follows for take-off above 3500 feet:

(1) The one-position automatic type will be set in "Automatic" or adjusted manually as described above.

(2) The two-position automatic type will be placed in "Automatic Rich" or adjusted manually as described above.

(3) The power control type will be placed in "Emergency" position and adjusted manually as described above.

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Lieut. Colonel George E. Stratemeyer, Air Corps, Commanding Officer of the 7th Bombardment Group, Hamilton Field, Calif., left that station July 30th for Washington, D.C. He is slated to attend the next course at the Army War College.

V-7807, A.C.

OBSERVATION SQUADRON OPERATIONS IN CAVALRY DIVISION MANEUVERS
By the Brooks Field Correspondent

The 22nd Observation Squadron (Corps and Army), stationed at Brooks Field, Texas, is one organization which is well prepared to cooperate with ground forces in war. This organization furnished the Air Observation for the Proposed Infantry Division Maneuvers, (so-called "Streamlined Division Maneuvers"). It also was detailed to furnish the Air Observation for the recent Proposed Cavalry Division Maneuvers. The 22nd Squadron flew over 700 airplane hours on the P C D Maneuvers in a month's time.

The work with these modern mechanized forces revealed several points that had not been noted in the older type, slower-moving Divisions.

The first point noted was that it is highly impractical for the Engineers to build air fields close behind a moving Division. This often results in the Observation squadron being based at a distance of 100 miles or more behind the friendly forces.

It became apparent that Observation squadrons operating with forces having exposed flanks must be based far to the rear to avoid attack by enemy mechanized forces. In fact, in one free maneuver, the Air Officer of the White forces remained behind the friendly Advance with the Air Ground Set, receiving and transmitting to G-2 on another set. He believed he was safe from attack due to a high mountain between him and an attack from flank on rear. To his surprise, he discovered an enemy combat car coming over the mountain, and barely escaped to a position of safety. In attempting to re-establish communications with G-2, he could get no response. Later, it was learned that the White C P had been surprised and captured.

The majority of the pilots and observers on duty with the 22nd Squadron are recent graduates of the Air Corps Training Center. Their demonstrated ability in locating positions, movements, and activities when the enemy is a skeletonized, represented force, speaks well for the type of training they have received.

In addition to normal daylight Observation and Artillery Missions, many night missions were performed. It was found that columns could be located when moving without lights, both on roads and in open terrain.

Observation missions were performed as much as 200 miles in advance of the friendly forces. Information was relayed back to the main body through the Reconnaissance Car Squadron, which operated 75 to 100 miles in advance of the main body.

In the Proposed Cavalry Division, the Reconnaissance Car Squadron had one car on the same frequency with the Observa-

tion Squadron. An accompanying car was on the Reconnaissance Squadron frequency. This arrangement between the two principal Reconnaissance forces resulted in excellent team-work, and was mutually advantageous.

In the Proposed Infantry Division Maneuvers, the Commander used aircraft for controlling marches on parallel roads. Often the columns were as much as 50 miles apart.

During the Proposed Infantry Division and Proposed Cavalry Division Maneuvers, officers from Brooks Field served with the ground forces. Every effort was made not only to give the ground forces the observation they wanted, but to anticipate their needs and to learn from them, and with them, what the future needs will be.

In both of these Maneuvers, the need for longer-range aircraft was forcibly brought to the attention of the air officers participating. Commanders were calling for longer range Reconnaissance in the face of mechanized threats.

The modern Tank and Combat Cars are likened to rabbits by the 22nd Observers. They sit quietly in full view until the Observer is looking at some other part of the terrain, then they disappear. They are very difficult to keep located.

Another point observed in both the Proposed Infantry Division Maneuvers in the Camp Bullis area, and the Proposed Cavalry Division Maneuvers in the Toyahvale area, (north of Marfa), was the readiness with which the present sand-tan-colored khaki showed up from the air. They were easily seen in both instances, while the woolen O.D. shirt could not be seen. Riflemen in firing positions on the ground appeared to the eye as "frog saddles" strewn along the ground.

The mechanics of the 22nd Squadron were kept busy on these Maneuvers. They said 20's and 40's came so fast that if they had been pickets, they would have been a picket fence.

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GUNNERY TRAINING FOR 4TH RECON. SQUADRON

The 4th Reconnaissance Squadron, stationed at Luke Field, T.H., returned on July 2nd from Bellows Field, Oahu, after spending two weeks in the gunnery camp thereat. The Squadron was favored with near perfect weather, and only one day was lost due to rain.

Four phases of training were conducted and completed, comprising: pistol shooting; .30 cal. ground gun 1000" range; .30 cal. flexible gun fired at tow targets.

ALBROOK FIELD BOMBER FORCED DOWN

Lieut. Kenneth B. Hobson, Air Corps, and his three enlisted companions, Sgt. Harry Hayes, Privates Richard E. Handy and Uno Gustafson, narrowly escaped serious injury when their B-10 was forced down in the water off Point Mariato, 150 miles from Panama City on the Pacific Coast.

Lieut. Hobson took off from Albrook Field at 8:30 a.m., Saturday, July 2nd, accompanied by Lieut. Stephen B. Mack in another B-10. The two planes were to make a training flight from Albrook Field to David, Republic of Panama, and return. On the return leg of the flight, the two planes became separated in a violent storm. Lieut. Mack broke through the bad weather, but could not contact Lieut. Hobson. After searching as long as his supply of gasoline would allow, Lieut. Mack returned to Albrook and reported the fact that he believed Lieut. Hobson and companions had been forced down.

Four Bombardment planes were immediately sent out for the purpose of locating the missing ship. Shortly after 4:00 p.m., the four men were sighted on the beach at Point Mariato. After dropping water, food, and other necessities, the searching party returned to Albrook Field with the very welcome news that no one had been injured seriously.

Colonel Weir, Commanding Officer of Albrook Field, made arrangements for the men to be picked up by Navy patrol planes from Coco Solo early Sunday morning, having realized that an after dark rescue attempt would be very hazardous, and that no one needed immediate medical attention.

The Navy planes left Coco Solo at 7:45 a.m., July 3rd, and at 9:30 a.m., radioed that they had picked up the four men. At 10:20 a.m., the rescuers landed at Blaboa, where they were met by Medical officers from Albrook Field. Private Gustafson suffered a broken collar bone, the only injury among the four men.

The bomber, a Martin B-10, nosed over when it hit the water, and when sighted by the rescue party was located about 200 yards from the shore, with only one wing tip showing. No attempt will be made to salvage the wrecked plane.

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BRIDE AND GROOM LEAD THE PARADE

The officers and ladies of Albrook Field, Panama Canal Zone, welcomed Lieut. William W. Jones and his bride in true Air Corps fashion. When they attempted to enter unannounced, Lieut. and Mrs. Jones were held at the gate by the guard until the alarm could be given. Phones buzzed, horns honked and planes landed. A specially decorated tug and trailer were produced, and with the newly mar-

ried couple on the trailer, the long procession began a noisy tour of the post, ending up at the Club, where refreshments and introductions were in order.

Before her marriage in San Antonio on June 10th, Mrs. Jones was Miss Mary Eleanor Cutrer. She is the daughter of Lieut. Colonel Victor Cutrer, U.S.A., Retired, and Mrs. Cutrer.

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TWO BOMBERS FLOWN TO COSTA RICA

Two Martin Bombers, commanded by Lieut. Colonel George E. Lovell, Jr., Air Corps, were recently flown to Costa Rica. Departing from France Field, Panama Canal Zone, at 7:30 a.m., the planes reached San Jose, Costa Rica, two hours and 10 minutes later. The Army airmen returned to France Field the following day.

Colonel Lovell is on duty at the Panama Air Depot.

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TEST OF NAVIGATION INSTALLATION

A B-17 (Flying Fortress) airplane departed from Wright Field, Dayton, Ohio, on June 30, 1938, for Miami, Fla., arriving there at about 6:00 p.m. Shortly after midnight, the airplane took off for Brownsville, Texas, flying direct and arriving about 7:00 a.m., July 1st. The airplane was refueled and departed for New Orleans, La., arriving at about 10:30 a.m. After an overnight stay, the airplane took off for Wright Field, arriving about 1:30 p.m., July 2nd.

The flight was made for the purpose of testing the equipment installation and of conducting further tests on the electric-driven gyro sextant. The gyro stabilized drift meter, Type B-3, was used in conjunction with drift signals over the Gulf of Mexico. Observations of Polaris and companion stars were made to obtain lines of position which resulted in fixes. The Type A-4 computer was employed to reduce the celestial observations. All of the equipment functioned satisfactorily.

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PHOTOGRAPHS OF MT. MAYON VOLCANO

The News Letter Correspondent of the 2nd Observation Squadron, Nichols Field, Rizal, P.I., reports that numerous flights were made to Legaspi during the week of June 6 - 12 to obtain pictures of Mt. Mayon in eruption. Some excellent ones were obtained and printed in the Manila papers. They received much favorable comment.

One of the photographs obtained of the erupting volcano is that shown on the cover of this issue of the News Letter. Messrs. Dunnington and Leap, of the Information Division, collaborated on the production of this cover.

WEST POINT GRADUATES ASSIGNED TO UNDERGO FLYING TRAINING

Recent orders of the War Department assigned to the Air Corps for flying training a total of 113 second lieutenants of the Regular Army who graduated from the United States Military Academy, West Point, N.Y., on June 14, 1938. Constituting 37.6% of the entire graduating class, numbering exactly 300, this is the largest number of West Pointers to choose the Air Corps as their branch of the service since the policy was inaugurated in the year 1922 of assigning West Point graduates to the Air Corps for flying training.

The 113 young officers, above mentioned, are under orders to proceed upon the expiration of their graduation leave to Randolph Field, Texas, and report to the Commanding General of the Air Corps Training Center for duty and flying training.

The following tabulation shows the number of West Point graduates of the June, 1938, class who were commissioned in the various branches of the Army and the number from each of these branches assigned to the Air Corps for flying training, viz:

Branch of Service in which Commissioned	Assigned to Air Corps for flying training	Percentage
Corps of Engineers	24	5
Signal Corps	15	7
Cavalry	33	12
Field Artillery	58	22
Coast Artillery	38	14
Infantry	132	53
Total	300	113
		37.6

A year of intensive flying training is ahead of these West Point graduates to whom aviation presents a special appeal, i. e., eight months of primary and basic training at the Primary Flying School at Randolph Field, Texas, and four months of advanced training at the Advanced Flying School at Kelly Field, Texas. Those who succeed in completing the year's course will be awarded the rating of "Airplane Pilot" and will be transferred to the Air Corps, while those failing to make the grade will return to the branch of the Army in which they were originally commissioned upon their graduation from the Military Academy.

It is now 17 years since the policy was inaugurated of assigning West Point graduates to the Air Corps for flying training. During the period from 1922 to 1937, inclusive, 1017 West Pointers were accepted for flying training, of which number 441 graduated from the Advanced Flying School up to and including the year 1936. In addition, approximately 61 members of the 1937 Military Academy graduating class are scheduled to graduate from the Advanced Flying School, Kelly Field, Texas, next October, making the grand total of graduated flyers 502, or slightly more than 49% of the number who completed training. It would appear from this that practically one-half of the young men who are mentally and physically qualified to undergo the course of flying training at the Air Corps Training Center are able to complete the

course successfully.

The following tabulation covering a 16-year period of flying training given West Point graduates may be of interest:

Year	Total No. of Graduates	Assigned to the Air Corps	Pct.	Number graduating from the Advanced Flying School	Pct.
1922	102	16	15.6	8	50.00
1923	261	51	19.5	25	49.21
1924	406	61	15.0	20	32.78
1925	244	42	17.2	9	21.43
1926	152	18	11.8	7	38.88
1927	203	30	14.7	16	53.33
1928	260	77	29.0	53	68.83
1929	297	110	37.0	41	32.27
1930	235	85	36.1	41	48.23
1931	296	92	31.0	43	46.74
1932	258	69	26.7	39	56.52
1933	346	92	26.6	43	46.74
1934	247	60	24.3	30	50.00
1935	277	47	17.0	28	59.57
1936	276	61	22.8	38	62.29
1937	293	106	36.0	61*	57.54
Total	4153	1017	24.5	502	49.36

*Expected to graduate in October, 1938.

The West Point graduates of the June, 1938, Class, who will soon report at Randolph Field to learn the intricacies of piloting military airplanes, are enumerated below, as follows:

Class Standing	Name	Home
<u>Corps of Engineers</u>		
7	Alexander J. Frolich	San Fernando, Calif.
8	Paul T. Preuss	Seymour, Ind.
22	William S. Crocker, Jr.	Hingham Center, Mass.
23	William B. Kieffer	Jackson Hts., L. I., N. Y.
30	Robert M. Batterson, Jr.	Boonville, Calif.
<u>Signal Corps</u>		
28	Andrew C. Dapprich	Pittsburgh, Pa.
29	Benj. M. Tarver, Jr.	Lookout Mtn., Tenn.
44	Rolf O. Wulfsberg	St. Paul, Minn.
62	George A. Bosch	Mission Beach, Calif.
72	Albert P. Sights, Jr.	Clinton, Okla.
93	Norman L. Tittle	Wichita Falls, Texas
117	Robert L. Snider	Temple, Me.
<u>Cavalry</u>		
74	Omar E. Knox	Lyons, Kans.
92	John H. Swenson	Red Owl, S. D.
104	Joseph R. Barber, 2d	Birmingham, Ala.
106	William K. Kispaid	Middleport, Ohio
118	Ashley B. Packard	Douglas, Ariz.
123	William P. Brett	Statesboro, Ga.
134	Ralph B. Praeger	Claflin, Kans.
135	Charles W. Sherburne	Evanston, Ill.
136	Nicholas H. Chavasse	Henderson, N. C.
150	Maurice R. Lemon	Carrizozo, N. M.
206	Robert W. Rulkoetter	St. Louis, Mo.
243	Merrick Bayer	Washington, D. C.
<u>Field Artillery</u>		
11	Morris F. Taber	Seattle, Wash.
39	William K. Scaer	Huntington Park, Calif.
49	Laurence E. Wernberg	Sea Cliff, L. I., N. Y.

Field Artillery (Continued)

66 John D. Ryan Cherokee, Iowa.
 77 Alvar B. Sundlin New Bedford, Mass.
 87 Martin L. Webb Monroe, La.
 89 Frank P. Sturdivant Minter City, Miss.
 96 Francis B. Harrison Lander, Wyo.
 113 Douglas C. Polhamus Berryville, Va.
 115 Louis E. Coira Lock Haven, Pa.
 121 Donald W. Saunders Athens, N.Y.
 125 Robert A. Zaiser Burlington, Iowa
 127 John D. Moomman Idabel, Okla.
 137 Henry C. Huglin Fairfield, Iowa
 152 Lorenzo D. Adams Hortense, Ga.
 153 John R. Hopson Washington, D.C.
 155 Robert C. McBride Wichita, Kans.
 167 Samuel L. Barbour, Jr. Plainfield, N.J.
 172 William H. Blanchard Chelsea, Mass.
 185 William A. Sundlof Wilmette, Ill.
 221 Richard A. Broberg Torrington, Conn.
 223 Leland O. Krug Rochester, N.Y.

Coast Artillery

41 Prescott M. Spicer Poughkeepsie, N.Y.
 50 Glenn P. Anderson, Jr. Marion, Va.
 61 Burton R. Brown Erie, Pa.
 63 Sherwood E. Buckland Woodhaven, N.Y.
 70 Joseph Conigliaro Bronx, N.Y.
 73 George Kappes Zanesville, Ohio
 95 Lloyd E. Johnson, Jr. Royersford, Pa.
 110 Harvey P. Barnard, Jr. Buffalo, N.Y.
 132 John H. Spangler Briggsdale, Colo.
 140 Harry C. Morrison Ridgefield Park, N.J.
 147 John B. Herboth, Jr. Glen Ellyn, Ill.
 154 Virgil L. Zoller Marion, Ill.
 169 Philip R. Hawes Los Angeles, Calif.
 191 Carter E. Duncan Bloomington, Ill.

Infantry

78 Gregory Hoisington, Jr. Baltimore, Md.
 83 Milton E. Lipps Salem, Ore.
 98 Howard D. Kenzie Boise, Idaho
 100 Edward J. Cichowski Batavia, N.Y.
 101 Bertram C. Harrison Mount Holly, N.J.
 107 Clifford P. Macomber Fall River, Mass.
 112 Arthur J. Smith, Jr. Detroit, Mich.
 148 Richard F. Bromiley Philadelphia, Pa.
 173 Castex P. Conner Jennings, La.
 181 Hugh D. Wallace Fort Worth, Texas
 188 Clarence E. Beck Daytona Beach, Fla.
 189 James R. Luper Portland, Ore.
 193 Rollin B. Durbin St. Louis, Mo.
 194 Fred M. Dean Knoxville, Tenn.
 195 Alexander B. Pendleton Reidsville, N.C.
 196 Joseph B. Missal, Jr. Cleveland, Ohio
 211 William H. Frederick, Jr. Minneapolis, Minn.
 213 Vincent M. Miles, Jr. Fort Smith, Ark.
 215 Joseph B. Wells Grant, Va.
 218 Harris E. Rogner Masury, Ohio
 230 Gibson E. Sisco, Jr. Fort Wayne, Ind.
 231 Richard E. Sims Little Rock, Ark.
 232 Vincent Keator Chichester, N.Y.
 234 James W. Rhymes Macon, Miss.
 235 Ben Sternberg Starke, Fla.
 237 Frederic C. Teich, Jr. New Britain, Conn.
 238 Richard C. Thomas Atchison, Kans.
 240 Robert J. Bruton Racine, Wis.
 241 Charles M. Young Helena, Ark.
 245 John T. English Mount Pleasant, Tenn.
 246 Arthur A. Maloney Hartford, Conn.
 249 Littleton J. Pardue Hopkinsville, Ky.
 251 Edward G. DeHart Erie, Pa.
 254 Henry S. McDonald, Jr. Buford, Ga.

260 Myrl F. Smith Belding, Mich.
 261 Wallace S. Ford Pass Christian, Miss.
 264 Joseph G. Reddoch, Jr. Luverne, Ala.
 269 Shelby Y. Palmer, Jr. Shreveport, La.
 270 Gabriel C. Russell Louisville, Ky.
 272 John H. Chambers Fargo, N.D.
 273 Birdsey L. Learman Essexville, Mich.
 274 John T. Corley Brooklyn, N.Y.
 279 Edward R. Skinner Pomeroy, Ohio
 283 Edward W. Jacunski Detroit, Mich.
 284 James K. Schmidt Chicago, Ill.
 285 Joe R. Brabson, Jr. Washington, D.C.
 287 Robert J. Hill Chicago, Ill.
 290 Robert H. York Hartselle, Ala.
 292 Ralph B. Lister Buffalo, N.Y.
 293 George R. Zohrlaut Chicago, Ill.
 295 Frank E. Hartman Brookhaven, Miss.
 296 William F. Neff Atlantic City, N.J.
 299 James H. Isbell Union City, Tenn.

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TRAINING FILM FOR OBSERVATION AVIATION

Captain Samuel E. Anderson, Air Corps, Instructor in the Observation Section of the Air Corps Advanced Flying School, Kelly Field, Texas, was a recent visitor at the Infantry School at Fort Benning, Ga., and the Cavalry School at Fort Riley, Kansas. The purpose of Captain Anderson's visit was to confer with representatives of the service schools mentioned and coordinate the preparation of a picture plan for the proposed Air Corps Training Film on Observation Aviation and Infantry and Cavalry Missions which the Signal Corps contemplates releasing at an early date.

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NO AIRCRAFT ACCIDENT DURING ENTIRE YEAR

The 31st Bombardment Squadron, stationed at Hickam Field, T.H., accomplished what is thought to be a record when it finished the Fiscal Year 1938 without an aircraft accident of any nature. Another major achievement was made of record when the longest non-stop flight for the B-18 type airplane was performed when 31st Squadron pilots flew from Hamilton Field, Calif., to Dayton, Ohio.

Other outstanding feats included flights to San Antonio, Texas; Fort Leavenworth, Kansas, in addition to several coast to coast flights, while the organization was stationed at Hamilton Field.

Late in January, 1938, orders were received for the Squadron to proceed to Hickam Field, T.H., for permanent station. Despite the short time available before embarking at Fort Mason, Calif., on February 1, 1938, the movement was accomplished in a highly efficient manner. This was the first transfer of an entire organization in several years.

It is also noteworthy that all officers of this organization completed their minimum training requirements with a comfortable margin of time remaining.

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Brigadier General Barton K. Yount, Wing Commander (Colonel) Air Corps, was appointed Assistant to the Chief of the Air Corps, with rank of Brigadier General, for 4 years from July 17, '38. V-7807, A.C.

CIVILIAN WARNING NET TO AID AIR DEFENSE PROBLEM

In order to prepare for the largest and most important Air Defense exercises yet devised by the Army, the War Department has recently issued instructions to Major General George Van Horn Moseley, commanding the Third Army, to make detailed plans for a joint Antiaircraft-Air Corps exercise to be held at Fort Bragg, North Carolina, during the period October 3-17, 1938.

The directive, in addition to providing for heavy concentrations of anti-aircraft and Air Corps defense equipment, will enlist civilian aid on a large scale in the installation of an extensive aircraft warning net encircling Fort Bragg with a radius reaching to the North Carolina Coast.

Although an Aircraft Warning Net was tested on the West Coast in April of this year, which involved certain civilian and governmental agencies, the net in North Carolina will be not only much more extensive but will place, for the first time, principal reliance on the civilian personnel of the area covered.

The general function of the warning net is to warn the defended area of the approach of any hostile aircraft, in order to provide for interception by the defending Pursuit Aviation and immediate defensive fires by the anti-aircraft artillery.

The net will consist of some 300 stations. It will utilize to the maximum extent the existing commercial telephone communication facilities, together with similar facilities of the Federal, State and municipal agencies, and of the railroads, power companies and other similar private agencies, all of whom are cooperating in every possible way in the preparation of the plans.

One of the chief purposes of the exercise will be to test under simulated service conditions the adequacy of our present tactical and technical procedure and to determine what changes, if any, are necessary to meet present day conditions.

For this purpose it will be assumed that the Fort Bragg Military Reservation contains an important base airdrome, defended by a complete, all-around coordinated anti-aircraft artillery and Pursuit Aviation defense. The exercise will be two-sided, in that attacks will be made by portions of the GHQ Air Force. However, the purpose is not an appraisal of relative efficiency of the two arms, but is designed solely as a training exercise to determine the best tactical methods and dispositions of defense against the most effective forms of aerial attack.

The results of the test to be made during this exercise of the practicability of manning warning nets along our coast line by civilians will be of much

importance to the War Department in connection with the formulation of plans for the installation, in time of war, of such nets, which are an essential part of the defense of the country against enemy attacks from the air.

The exercise will involve the concentration of a large percentage of the Regular Army anti-aircraft artillery in the United States. A large part of the GHQ Air Force will participate.

The Defense will consist of the following troops, under command of Brigadier General Fulton Q. C. Gardner, U.S. Army, who now commands the Fourth Coast Artillery District, with station at Fort McPherson, Ga.:

A Provisional Anti-aircraft Artillery Brigade, to include the following troops, with home stations as indicated:

- 61st Coast Artillery (AA), Fort Sheridan, Ill.
- 62nd Coast Artillery (AA), Fort Totten, N.Y.
- 69th Coast Artillery (AA), Fort Crockett, Texas.
- Batteries A and C, 2nd Coast Artillery (HD), Fort Monroe, Va.

A Provisional Wing, Air Force, to include:

- 33rd Squadron, 8th Pursuit Group, Langley Field, Va.
- 36th Squadron, 8th Pursuit Group, Langley Field, Va.
- Headquarters and Headquarters Squadron, 8th Pursuit Group, Langley Field, Va.
- 27th Squadron, 1st Pursuit Group, Selfridge Field, Mich.
- The 51st Signal Battalion, Fort Monmouth, New Jersey.

The Attacking Force will consist of the following organizations of the GHQ Air Force, with home stations as indicated, under command of Brigadier General Arnold N. Krogstad, Air Corps, U.S. Army, now stationed at Landley Field, Va.:

- 2nd Wing Headquarters, Langley Field.
- 18th Reconnaissance Squadron, Mitchel Field, L.I., New York.
- 2nd Bombardment Group, Langley Field.
- 9th Bombardment Group, Mitchel Field.
- 1 Attack Squadron, 3rd Wing, Barksdale Field, La.
- 1 Bombardment Squadron, 1st Wing, March Field, Calif.

Brigadier General William Bryden, U.S. Army, Commanding General, Fort Bragg, N.C., will act as Director of the Exercises.

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During the month of June, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled a total of 14 airplanes and 34 engines, and repaired 48 planes and 46 engines.

V-7807, A.C.

SPOT LANDINGS BY INSTRUMENTS AT RANDOLPH

On a recent Saturday, 19 graduates of the instrument landing training demonstrated their skill in a spot landing test which was expected to show the accuracy which might be attained, as well as the extent to which graduates retained their skill after ceasing regular and frequent practice.

Each pilot was permitted to make one flight entirely on instruments, including take-off and landing, and was limited to twenty minutes' flying time. BT-9 airplanes were used exclusively and a flag was placed on the airdrome to mark the spot where a BT-9 would stop after a theoretically correct landing and a normal roll. The work of each pilot was judged entirely by his nearness to this flag when he opened the hood after stopping, provided, of course, no assistance was had from the safety pilot or external vision.

The first pilot to take-off was 1st Lieut. E.A. Joyce, Air Reserve, who made a beautiful landing right on the line to the flag, but stopped rolling 836 feet before reaching it. This was considered highly creditable, as it was only the second time that Lieut. Joyce had made instrument landings in a BT-9. Captain James B. Burwell lowered the record to 643 feet, which was soon cut to 318 feet by 1st Lieut. R.W. Burns, Commanding Officer, Flight B, Basic Stage. Second Lieut. Tom H. Cunningham promptly lowered the record to 240 feet, and no subsequent pilot was able to improve this.

This test was a welcome change from the routine instrument landing training, which had been done outside the usual duty hours to avoid hazard from student flying, and because with the present large classes officers have not been able to spare the time during duty hours. Notwithstanding these handicaps, 36 pilots, including the Post Commander, Lieut. Colonel John B. Brooks, have completed the training since February and been found qualified by the rigidly applied rule of three consecutive landings without assistance.

Officers, often already overloaded, have undertaken this extra duty with a willingness which is shown by the long waiting list of applicants of the course; and if any ladies have murmured at the substitution of instrument landing practice for the usual dinner hours, they have not made such complaints public.

If the test did not prove anything else, it confirmed the fact that a large proportion of the Air Corps officers consider instrument landing training highly important.

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Major Lawrence F. Hickey, Air Corps, has taken over the command of the 1st Pursuit Group, Selfridge Field, Mich.

HIGH FLYING TIME MARK AT RANDOLPH FIELD

Randolph Field officers and students flew this past fiscal year the unusual total of 102,932 hours and 25 minutes. This total exceeded previous fiscal years of 1936 and 1937 by approximately 30,000 flying hours.

The 46th School Squadron led in flying time on the field with a total of 28,513 hours and 40 minutes. This Squadron has consistently led in flying time for Randolph Field for the last three years.

The Randolph Field Correspondent expresses the belief that this record for Randolph Field is as high as at any other Air Corps field and requests comments.

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FLIGHT OF ARMY AIRPLANES TO COLOMBIA

Due to a change in training plans, the composition of the proposed flight of United States Army airplanes to Bogota, Colombia, will consist of one flight of three B-17 Bombers from Langley Field, Va., instead of the flight from Panama, as previously stated.

This flight, as announced on July 6, 1938, by the State Department, will participate in the inaugural ceremonies of President-elect Dr. Eduardo Santos on August 7th, at Bogota, as a gesture of good will and in order to emphasize the solidarity and community of interests between the two Republics.

Personnel included in the flight will consist of fourteen officers and twelve enlisted men.

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A. C. NONCOMMISSIONED OFFICERS PROMOTED

The following noncommissioned officers of the Air Corps, having recently been examined and found qualified for a higher grade in the Air Corps (Weather Service), and as vacancies exist therein, were appointed to the grade indicated in the Air Corps (Weather Service), pursuant to authority contained in Army Regulations No. 615-5:

To Mr. Sergeant, A. C. Weather Service)
Technical Sergeants Diran Arakelian, Wm. F. Bernheisel, Harry F. Gordon, Myron E. Howe, of Patterson Field, Ohio; Harry J. Cuskey, Middletown Air Depot, and Martin F. Sebode, Langley Field, Va.

To Tech. Sergeant, A. C. (Weather Serv.)
Staff Sergeants Ralph W. Beatty, Robt. M. Glenn, James L. Hubbard, Herman J. Pryber and William A. Smith, of Patterson Field, Ohio; John S. Hambleton, of Fort Leavenworth, Kansas; and Devon F. Maurer, of Selfridge Field, Mich.

Of the noncommissioned officers above enumerated, Sergeants Bernheisel, Cuskey, Gordon, Sebode, Beatty, Glenn, Hubbard
(Continued on page 10)

AWARD OF THE MACKAY TROPHY

The War Department announced that Captains Carl J. Crane and George V. Holloman, Air Corps, will be awarded the Mackay Trophy for 1937 for their outstanding achievement in successfully developing and actually demonstrating the Airplane Automatic Landing System.

The Board of Air Corps officers, recently convened to make recommendations relative to the award of the Mackay Trophy, was of the unanimous opinion that these two officers highly merited this award. Both of them, well versed in aeronautical engineering, particularly in the functioning of various instruments and devices relating to aerial navigation, devoted intensive research and painstaking effort over a period of two years toward perfecting the automatic landing system. The first flight under this system was accomplished on Aug. 23, 1937, and it marked the first entirely automatic landing in aviation history—that is, the entire landing control was incorporated within the aircraft itself; there was no human manipulation of plane controls at any time.

Associated with Captains Crane and Holloman in the development of the automatic landing system was Mr. Raymond K. Stout, project engineer at the Air Corps Materiel Division, Wright Field, Ohio. Since the Mackay Trophy, through the provisions of the deed of gift, can only be awarded to officers of the United States Army, Mr. Stout was given a letter of commendation from the Acting Secretary of War, the Honorable Louis Johnson, for his work in this striking development.

The automatic landing system was designed by Captain Crane, Director of the Instrument and Navigation Laboratory at Wright Field and, working with Captain Holloman, he conducted practically all of the flight tests which brought to a successful conclusion the automatic landing system. The various units of automatic control were designed by these officers, Mr. Stout, and Mr. C. D. Barbulesco, of the Signal Corps Aircraft Radio Laboratory, which laboratory assisted materially in the design and construction of various units entering into the automatic landing system.

The Mackay Trophy was tendered to the Aero Club of America in 1912 by Mr. Clarence H. Mackay, the deed of gift stipulating that it was to be awarded annually to the officer or officers of the United States Army making the most meritorious flight of the year. The National Aeronautic Association, Washington, D. C., successor to the Aero Club of America, is the present custodian of this Trophy.

Associated with the Mackay Trophy are most of the highlights in the history of

Army aviation, such as the first non-stop flight across the American continent by Lieutenants Kelly and Macready; the first flight around the world under the leadership of Captain Lowell H. Smith; and the Army Good Will Flight around South America, led by Major Herbert A. Dargue. Since 1912, the Mackay Trophy has been awarded annually by the War Department for meritorious flights, with the exception of the year 1917. Of noteworthy interest in connection with the award of this Trophy is the fact that Brigadier General Henry H. Arnold, Assistant Chief of the Air Corps, is a two-time winner thereof. He received the first award in 1912 for a reconnaissance flight in the early Wright biplane from College Park, Maryland, to Fort Myer, Va.; Alexandria, Va., and return to College Park, and the second award, 23 years later, for his leadership of a squadron of ten B-10 Martin Bombers from Washington, D. C., to Fairbanks, Alaska, and return, in July-August, 1934.

Eighteen years ago, the Trophy was also awarded for a meritorious flight to Alaska (New York to Nome, Alaska, and return to Washington, D. C.), that expedition being headed by Captain St. Clair Streett.

Two early Army fliers, still in active service, who won the Mackay Trophy are Colonels Shepler W. Fitzgerald and Byron Q. Jones, Air Corps, the former receiving it in 1914 for a reconnaissance flight and the latter the following year for establishing an American duration record.

Two Air Corps officers still in the service, who share with General Arnold the distinction of being two-time winners of the Trophy, are Majors Lowell H. Smith and Oakley G. Kelly. Major Smith won the award in 1919 for his participation in the Transcontinental Reliability Test Flight in the fall of that year, and in 1924 for his leadership of the Around-the-World Flight. Major Kelly, jointly with former Captain John A. Macready, won the Trophy in 1922 for a record-breaking duration flight, and in the following year for the successful culmination of the first non-stop flight across the American continent. Incidentally, Major Kelly's flying partner (Captain Macready) is the only three-time winner of the Trophy, for he also received it in 1921 for a record-breaking altitude flight. A member of the Around-the-World Flight, who is now in civil life, is also a two-time winner of the Trophy. This individual, Major Erik H. Nelson, Specialist Reserve, participated also in the Alaskan Expedition in 1920.

Captain Crane, a native of San Antonio, Texas, where he was born on October 20, 1900, is an honor graduate of the Univer-

sity of Dayton, Dayton, Ohio, where he received a B.M.E. degree in 1924. Commissioned a second lieutenant in the Air Service, July 5, 1924, he was promoted to 1st Lieutenant, March 28, 1930, and to Captain, August 1, 1935. Following his graduation from the Primary Flying School, Brooks Field, Texas, February 28, 1925, and from the Advanced Flying School, Kelly Field, Texas, where he specialized in Pursuit Aviation, on September 14, 1925, he was assigned to Selfridge Field, Mich., for duty with the 27th Pursuit Squadron as Engineering Officer, and later as Supply Officer.

In June, 1927, he was transferred to Kelly Field, and he served there until November 18, 1927, when he was assigned to duty as flying instructor and academic instructor at the Primary Flying School at Brooks Field, Texas. For one year, from October, 1931, he was on duty as academic instructor at the Primary Flying School at Randolph Field, Texas. From November, 1932, to November, 1934, he was on duty at Albrook Field, Panama Canal Zone, where for the most part of the time he served as engineering officer. In December, 1934, he was assigned to his present station at Wright Field, Dayton, Ohio.

Captain Crane's interest in instrument flying dates from the time he was on duty as instructor at Brooks Field. Here he was associated with Lieut. Colonel William C. Ocker in connection with the training of pilots to fly in hooded cockpits, using radio aids. He is the co-author with Colonel Ocker of the book "Blind Flying in Theory and Practice."

Captain Holloman, a native of Rich Square, N. C., where he was born on September 17, 1902, graduated from the North Carolina State College in 1925, with a B.S. degree in Electrical Engineering. Commissioned a second lieutenant in the Regular Army on September 24, 1925, he was assigned to the 29th Infantry and was stationed at Fort Benning, Georgia, for two years. Detailed to the Air Corps, he completed the primary flying course at Brooks Field, and the advanced flying course at Kelly Field, where he specialized in Observation Aviation, and received the ratings of "Airplane Pilot" and "Airplane Observer," June 25, 1928. He was then assigned to duty with the 88th Observation Squadron at Fort Sill, Oklahoma, where he served for two years.

At his next station, Chanute Field, Rantoul, Ill., he completed the Communications course at the Air Corps Technical School, and on June 24, 1931, he was assigned to duty at the Materiel Division, Wright Field, Dayton, Ohio.

Following his graduation from the 1934-1935 course at the Air Corps Engineering School, Wright Field, Ohio, on August 1, 1935, he returned to duty in the Equipment Branch, Engineering Section, of the Materiel Division.

The National Aeronautic Association, custodian of the Mackay Trophy under the terms of the grant by the donor, will announce in the near future the date and place of the ceremonies incident to the presentation of the Trophy to Captains Crane and Holloman.

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Promotion of Noncommissioned Officers (Continued from Page 8)

Maurer and Pryber are members of the 2nd Weather Squadron, and Sergeants Arakelian, Howe, Hambleton and Smith of the 3rd Weather Squadron.

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TRUE AIR-SPEED METER

The True Air-Speed Meter or Indicator differs from the air-speed indicator now in use in that it indicates the true air speed directly. The present method of air-speed indication must be corrected for temperature and pressure to obtain the true air speed.

The standard air-speed indicator employs a pitot-static head for obtaining a differential between the static pressure (still air) and the dynamic pressure, which is the impact pressure in the open end of a tube facing the direction of travel. The "true air-speed" indication is obtained in a manner similar to that of a screw through a threaded hole. The propeller or impeller turns at a rate proportional to the speed with which it is moving forward. Theoretically there must be no friction retarding the movement of the impeller, but practically this is impossible. However, every effort is made to reduce the friction, and the results obtained in tests to date indicate satisfactory results with this true air-speed indicator. The impeller makes and breaks two circuits which control solenoids in the indicator. These solenoids control the length of time the counting mechanism of a chronometric-type indicator is operating and conversely the length of time the pointer is held. The action is similar to that of a chronometric tachometer except that the speed of the make and break of the circuits is indicated on a suitably calibrated dial in miles per hour.

A service test quantity of ten of this type of instrument is now on procurement by the Air Corps Materiel Division, Wright Field, Dayton, Ohio.

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Lieut. Colonel Joseph T. McNarney, Air Corps, is expected to arrive at Hamilton Field in the very near future from Langley Field, Va., at which post he served as Chief of the G-4 Section of the Headquarters GHQ Air Force. Col. McNarney at one time commanded the 7th Bombardment Group at March Field before it was moved to Hamilton Field in 1934.

HAWAIIAN POLICEMAN WINS PISTOL MATCH

By 1st Lieut. E.W. Suarez, Air Corps

The Wheeler Field Rifle & Pistol Club was represented at the first annual Kauai Championship Pistol Match by Corporal O.J. Witham, of the 26th Attack Squadron, Air Corps. Corporal Witham placed second in the event. The match was well attended, with sharpshooters from all over Kauai participating.

The winner was Mr. Kimokeo, a policeman of Kauai. Mr. Beam, representing the Makaweli Rifle & Pistol Club, and considered one of the best pistol shots on Kauai, came in a close third. The match was fired on the range of the sponsors, the Makaweli Rifle & Pistol Club. The range is one of the finest in the islands for pistol shooting. Corporal Witham says that the true meaning of "Hawaiian Hospitality" was brought home to him by this trip to the Garden Isle. Everyone with whom he came in contact did everything possible to make the trip a pleasant one.

The Wheeler Field Rifle & Pistol Club was organized a year ago through the interest and efforts of Lieuts. G.E. Price, J.G. Russell, and a group of enlisted "Gun-Bugs" of Wheeler Field. Since then they have built their own outdoor, small bore range. It consists of firing points for fifteen shooters at ranges of 50 and 100 yards. The range was built with the volunteer labor of the charter members of the club.

The first annual matches, both rifle and pistol, of the Hawaiian Territorial Rifle Association, were held on the Wheeler Field Range. This is, indeed, a compliment when it is realized that this association is comprised of over twenty rifle and pistol clubs.

The Wheeler Field Club is very much interested in hearing from other Air Corps rifle or pistol clubs throughout the Army.

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SQUADRONS IN PHILIPPINES SWAP STATIONS

A long rumored change of stations between the 28th Bombardment Squadron, stationed at Nichols Field, and the 3rd Pursuit Squadron at Clark Field, became a reality on June 1st, when instructions were received from Headquarters Philippine Department, directing the interchange of these organizations, commencing June 15th.

Tactical considerations prompted the transfer. The landing and hangar facilities at Nichols Field were inadequate for the training requirements of the 28th, whereas ample hangar and landing space are available at Clark Field.

The transfer of these units commenced on June 15th and was estimated to be completed in about ten days. Air and government motor transportation was used

incident to moving of personnel, property and household effects from Nichols Field to Clark Field and vice versa.

The personnel of the 3rd Pursuit Squadron consists of 7 officers and 69 enlisted men. The commissioned complement moved comprised Major Lloyd Barnett, 1st Lieuts. Jerome E. Blair, II, and Norman R. Burnett, and 2nd Lieuts. Cecil E. Combs, Conrad F. Necrason, John M. Bartella and Jackson H. Gray.

The personnel of the 28th Bombardment consists of 6 officers and 91 enlisted men. Commissioned officers moved to Clark Field are Major Guy L. McNeil, 1st Lieuts. David N. Motherwell, Wendell W. Bowman, Hunter Harris, Jr., Stanley J. Donovan and 2nd Lieut. Paul E. Todd.

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GENERAL CHANEY LEAVES RANDOLPH FIELD

General and Mrs. James E. Chaney departed on July 16th from Randolph Field for their new station, Mitchel Field, N.Y. Since May 17, 1935, General Chaney, acting as Assistant Chief of the Air Corps, has commanded the Air Corps Training Center.

On Saturday, July 2nd, a ground review of troops (including all officers, flying cadets and enlisted men of Randolph Field) was held in honor of General Chaney. The twenty-third Infantry Band was generously loaned to Randolph Field to provide music for this review.

On July 9th, the officers and ladies of Randolph Field gave a farewell party, honoring General and Mrs. Chaney. On Saturday, July 16th, many officers and ladies gathered in front of the Administration Building to say good-bye as the Chaney's drove away. A formation of airplanes circled above their automobile, and accompanied them for several miles along the highway.

All personnel of the Air Corps Training Center regret the departure of the Commanding General and his wife. Every officer and enlisted man has thoroughly enjoyed serving under General Chaney.

Mrs. Chaney has been very active in charitable, welfare and social activities, both on the post and in the nearby civilian areas. They will be greatly missed by all who have known them.

Brigadier General Barton K. Yount will succeed General Chaney as Commanding General of the Air Corps Training Center. Word was received that General and Mrs. Yount expect to arrive at Randolph Field about August 3rd. All personnel are looking forward to welcoming them upon their arrival.

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Special Orders of the War Department, recently issued, announce the retirement from active service on July 31, 1938, of First Sergeant Jared Leet, Base Hqrs. and 5th Air Base Squadron, Hamilton Field. V-7807, A.C.

RADIO SCHOOL AT MAXWELL FIELD

Six Air Corps enlisted men graduated on July 2nd from the second class of the Post Radio School at Maxwell Field, Ala., and were immediately assigned to duty as operators, as indicated:

Technical Sergeant G.D. Tomberlin, Privates J.M. Cosby, M.P. Dufalo and R.H. Garrett to Airdrome and Airways Control Station;

Privates D.P. Parker and H.M. Forehand to Post Communications Section.

The purpose of this Radio School is to train enlisted men as radio operators for the Airways Control and Airdrome Control and Post Communications Section. The course consists of the following subjects:

Sending and Receiving International Morse Code,

Practical Radio Technique,

Tactical Radio Procedure,

Airdrome Control Procedure,

Net Operating Practice,

Typing,

Elementary Meteorology,

Installation and Adjustment of Aircraft Radio Equipment.

The third class of this school was scheduled to start on July 25th, with about 15 students. The graduation date for this class is tentatively set for January 25, 1939.

The School is conducted under the supervision of 1st Lieut. R.E.L. Choate, Air Corps, Post Signal Officer, with Sergeant B.F. Borders as Instructor and Noncommissioned Officer in Charge.

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AIR CORPS ACTIVITIES IN HAWAII

Equipped at present with a BT-9 and a number of B-18's, and with the assignment of more B-18's to the organization in the near future, a new high mark will be set for the 23rd Bombardment Squadron at Luke Field, T.H., in so far as modern equipment is concerned.

The Squadron recently made a mass flight to Hilo, Hawaii, and as many as possible took advantage of the short stay at Kilauea.

The 50th Reconnaissance Squadron has been photographing airdromes on outlying islands for the Department Airways Officer.

On June 21st, six officers and twelve enlisted men flew to Hilo, Hawaii, in two flights of Martin B-12 Bombardment airplanes. The News Letter Correspondent of the 50th Squadron states that "a two-day stay at the Kilauea Military Camp enabled us to see some of nature's wonders, volcanic craters, lava tubes, and the Fern Forest. It is a rare treat, and we all hope to make the trip again very soon."

During the period from July 5th to 15th, the 50th Reconnaissance Squadron was scheduled to be at Bellows Field for a two-week gunnery period.

The end of June found the 72nd Bombardment Squadron at Luke Field, T.H., prepared to begin the next year's training in good shape.

The month of June found the Base Headquarters and 17th Air Base Squadron, Luke Field, receiving new men into its ranks as the long discussed shake-up of the 5th Bombardment Group materialized. Although a number of men were lost to the Squadron, transfers from other organizations within the Group and the Hawaiian Department materially increased the strength of the Squadron. The Squadron maintains a detachment of enlisted men at Hickam Field.

Lack of a sufficient number of noncommissioned officers in the Base Headquarters and 17th Air Base Squadron resulted in the appointment of the following Privates, 1st Class, as Acting Corporals: Dorn; Hyatt, Johnson, J.W.; Lafkas, Naugle, Nothstein, Ringo, Robertson and Simpson.

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ACTIVITIES AT THE HAWAIIAN AIR DEPOT

With the gradual increase of Army aircraft in the Hawaiian Department, the Hawaiian Air Depot has been forced to increase the personnel thereof to well over the capacity of the old ferry, which brings the employees across Pearl Harbor to Ford Island every morning and returns them every evening.

Major Charles E. Branshaw, Commanding Officer of the Hawaiian Air Depot, has been wrestling with the problem of working out methods to get his personnel back and forth across the water. Until a new ferry contract can be accomplished, it will be necessary to stagger the Depot working hours: 7:15 a.m. to 3:30 p.m., for Headquarters and Supply, and 7:45 a.m. to 4:00 p.m. for Engineering.

Major Ames S. Albro, the Depot Engineering Officer, together with Major William J. Hanlon, Supply Officer, have been having their usual share of headaches trying to surmount the barrier of ocean water between Hawaii and the mainland in getting equipment and parts for the B-18's, P-26's, etc.

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TENNIS PERKS UP AT BOLLING FIELD

Four new tennis courts which were recently completed at Bolling Field are a fine addition to its recreational facilities and will open up another popular activity for the post personnel.

FIRST WING TO TRAIN IN THE NORTHWEST

The First Wing, GHQ Air Force, will move to the Pacific Northwest during the period August 8th to the 15th.

The Seventh Bombardment Group, Headquarters and Headquarters Squadron, 9th and 11th Bombardment Squadrons from Hamilton Field, with 15 planes, 34 officers and 95 enlisted men, will be stationed at Felts Field, Washington, near Spokane.

The 88th Reconnaissance Squadron will be stationed at McChord Field, Washington (Tacoma Municipal Airport). There will be a total of 33 planes, 79 officers and 220 enlisted personnel.

The primary purpose of this maneuver is to schedule long range reconnaissance missions and to familiarize personnel with the terrain and available military facilities throughout the Pacific Northwest Area.

Operations:

August 8th - Concentration of airplanes and personnel at operating airdromes.

August 9th - Aerial reconnaissance of principal cities and airdromes within operating area.

August 10th - Bombing exercises off Cape Flattery.

August 11th - Bombing demonstration at Fort Lewis.

August 12th - A long range reconnaissance assembly problem.

August 13th - Airplane maintenance and local reconnaissance.

August 14th - Open house for inspection by civil populace.

August 15th - Evacuation and return to home airdromes.

All supplies other than food will be flown by air transport from Hamilton and March Fields.

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RETIREMENT OF MASTER SERGEANT OSBURN

War Department orders were recently received placing Master Sergeant Charley J. Osburn, 63rd School Squadron, Air Corps Advanced Flying School, Kelly Field, Texas, on the retired list, effective July 31, 1938, the date he will have completed thirty years of service in the Army.

This old noncommissioned officer, who has had a colorful and interesting military career, recently arrived in the States with his family aboard the U.S. Army Transport GRANT from the Philippine Department, where he served as Line Chief with the 28th Bombardment Squadron, Air Corps, at Nichols Field. This was Sergeant Osburn's second tour of duty in the Philippines, he having previously served there from December, 1908, to July, 1909, while a member of Company "E", 30th Infantry.

Sergeant Osburn's service in the Army began on September 25, 1908. He has

had "hitches" in the Infantry, Coast Artillery Corps, Signal Corps, and during the past 16 years he has served continuously in the Air Corps, which he joined on March 31, 1922. He holds the unique distinction of attaining the grade of Technical Sergeant, Air Corps, on his first enlistment in his newly chosen branch of the service. He was promoted to the grade of Master Sergeant on October 10, 1932.

All of Sergeant Osburn's Discharge Certificates bear the notation of "Excellent" character, and he was discharged as a noncommissioned officer from all but his first enlistment period, once as Corporal, twice as Sergeant, 1st Class, thrice as Technical Sergeant and twice as Master Sergeant. His current enlistment began on March 31, 1937.

During the World War, Master Sergeant Osburn served at the School of Fire, Fort Sill, Oklahoma, while a Sergeant, 1st Class, Signal Corps, on duty with the Ordnance Department. He points with pride to the fact that, as far as he knows, he is the only soldier to complete thirty years of service who still has in his possession the initial issue of two O.D. blankets, furnished him on his first enlistment. These two comfortable old blankets which have seen such long service were issued to him at Jefferson Barracks, Mo., in 1908, and still have a lot of "wear and tear" left in them.

Although a native of Sundet, Arkansas, Sergeant Osburn has selected San Antonio, Texas, as the place to make his home with his wife, son and daughter. Another son, "J.C.," is a Private in the 28th Bombardment Squadron, Air Corps, at Nichols Field, P.I., and he is well on his way following his Dad's footsteps.

The Air Corps, and his many friends all over the service, congratulate this fine old noncommissioned officer on his splendid record and the service rendered his country, and their best wishes go with him on his well earned retirement.

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NEW RUNWAY CONSTRUCTED AT NICHOLS FIELD

An asphalt runway is being constructed at Nichols Field, Rizal, P.I., extending the length of the flying field and running north and south. Grading is now being done by about sixty laborers. When completed it will be about 60 feet wide and 1500 feet long, and it is expected to be ready for use about December 1st. It is anticipated that construction will have to be deferred during the rainy season.

The newly constructed runway will permit the take-off of airplanes regardless of the condition of the rest of the flying field and will be conducive to higher tactical efficiency of all organizations of the 4th Composite Group.

NEW CLASS FOR FLIGHT SURGEONS

Another routine course of instruction to qualify Medical officers for duty as Flight Surgeons was commenced at the School of Aviation Medicine, Randolph Field, Texas, on July 15, 1938, and will continue for four months. The following student officers are enrolled:

Medical Corps, Regular Army

Captain Clifford O. Bishop, Barksdale Field, La.
Captain Lester O. Crago, Maxwell Field, Ala.
Captain Emmert C. Lentz, Fort Bragg, N.C.
Captain James L. Tobin, Hamilton Field, Calif.
Captain Scott M. Smith, Lowry Field, Denver, Colo.
1st Lieut. Harold A. Myers, Kelly Field, Texas.
1st Lieut. James W.S. Stewart, Randolph Field, Texas.

Medical Corps, U.S. Navy

Lieutenants

Julius C. Early, U.S. Navy Recruiting Station, Pittsburgh, Pa.
Julian M. Jordan, Navy Yard, Puget Sound, Wash.

Lieutenants (J.G.)

Thomas Ferwerda, Naval Medical School, Washington, D.C.
Charles F. Gell, Naval Unit, Edgewood Arsenal, Edgewood, Md.
Merrill H. Goodwin, Naval Unit, Edgewood Arsenal, Edgewood, Md.
Charles F. McCaffrey, Naval Unit, Edgewood Arsenal, Edgewood, Md.
Wesley L. Mays, Naval Unit, Edgewood Arsenal, Edgewood, Md.
Clifford P. Phoebus, Naval Unit, Edgewood Arsenal, Edgewood, Md.

Medical Corps, Cuban Army

1st Lieut. Dr. Francisco Hernandez D'Abriegen, Camp Columbia, Havana, Cuba.

The basic courses are conducted annually, starting in July and December of each calendar year.

In addition to the resident courses, the School conducts throughout the year extension (correspondence) courses of considerable magnitude.

The School of Aviation Medicine is an activity of the Air Corps Training Center.

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PENNSYLVANIANS VISIT LANGLEY FIELD

A distinguished party of visitors, including a son of the Governor of Pennsylvania, stayed overnight recently at Langley Field as guests of Major H.R. Bailey, of Headquarters Squadron of the 8th Pursuit Group.

Mr. George Earle; Colonel Gummy Vinet, Chief of the Division of Aeronautics of Pennsylvania, and Captain A.M. Banks, of the Pennsylvania State Motor Police, arrived at Langley Field on the evening of

July 6th, an hour and 35 minutes after their departure from Harrisburg in a Stinson airplane. The visitors returned to that city the following morning.

Mr. Earle, who made his first solo flight a few days prior to this visit, is reported to be especially interested in airplanes. He spent much time viewing the "Flying Fortresses" at the 2nd Bombardment Group Headquarters, also the various Pursuit airplanes.

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SELFRIDGE OFFICER MAKES SWIFT "HOP"

Flying a new Seversky P-35 Pursuit plane, 1st Lieut. Harold L. Neely, Air Corps, stationed at Selfridge Field, Mt. Clemens, Mich., rocketed across the American continent on July 28th at an average speed of approximately 278 miles per hour, possibly setting a new Army record for west to east flight.

Every Air Corps pilot is required to make at least one 1,000-mile extended navigation flight a year, and Lieut. Neely chose a San Francisco-New York "hop" as his task.

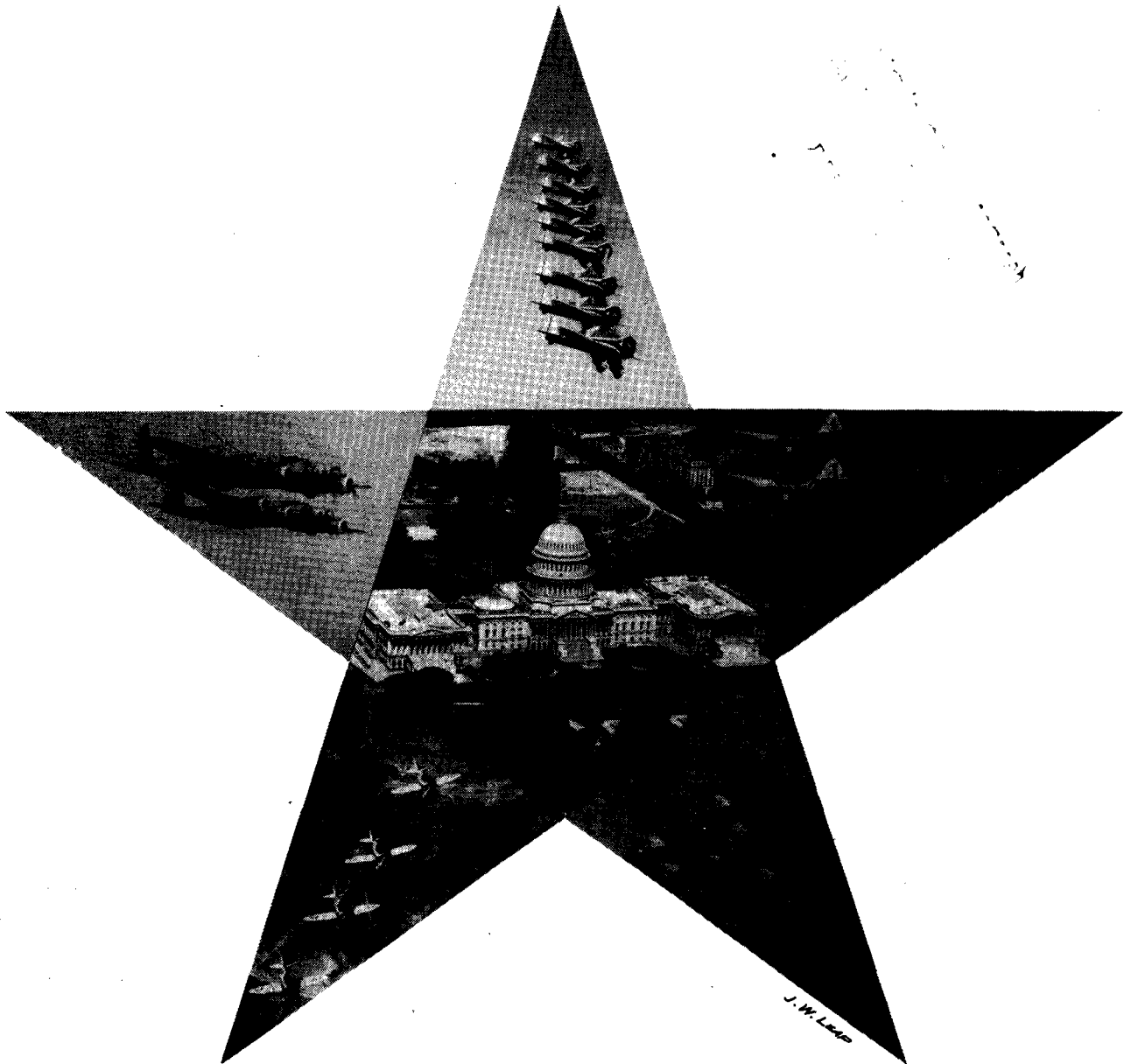
Lieut. Neely took off from San Francisco at 4:34 a.m., Pacific Time, and arrived at Mitchel Field, Long Island, New York, at 4:05 p.m., Pacific Time, for a total elapsed time of 11 hours and 29 minutes. A 25-minute stop at Salt Lake City, a 30-minute stop at Omaha and a 40-minute stop at Cleveland, totalling an hour and 35 minutes, made his flying time across the American continent nine hours and 54 minutes.

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NARROW ESCAPE FOR SERGEANT WEISNER

Staff Sergeant Walter Weisner, 94th Pursuit Squadron, Selfridge Field, Mich., narrowly escaped death on July 24th, when the private two-seater monoplane he was piloting dived into a field on the outskirts of Mt. Clemens, Mich. The Sergeant was flying a commercial Aeronca C-3 model plane licensed to Herbert A. Kertzschman and Floyd D. Damson, of Walled Lake, Mich. He had made several landings during the morning, and on his next take-off, a witness, Mr. John Sonnenberg, of Mt. Clemens, noticed the plane flying in his direction at 500 feet altitude. As it tried to bank it went out of control and crashed. Sonnenberg ran over to the wrecked plane, turned off the gas cock to prevent fire and, assisted by an unidentified man, carried Weisner from the plane. Taken to the St. Joseph Hospital by Deputy Sheriff Isadore Trombley in an ambulance car, the patient was later transferred to the Base Hospital at Selfridge Field, where the Surgeon stated his condition was satisfactory, although he is suffering from a fracture of one of the bones of the face, in addition to lacerations of the face and the left eye.

AIR CORPS NEWS LETTER



WAR DEPARTMENT

ISSUED BY THE OFFICE OF THE CHIEF OF THE AIR CORPS

WASHINGTON, D.C.

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AUGUST 15, 1938

NO. 16

Information Division
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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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THE FLIGHT TO BOGOTA, COLOMBIA

The second "Good Will" flight this year of Army Air Corps planes to a South American republic, to represent the United States at the inauguration ceremonies of a president-elect, terminated successfully at Langley Field, Va., the point from which it started, at 1:45 p.m., Friday, August 12th.

The airplanes used on this flight, three B-17 "Flying Fortresses," under the command of Major Vincent J. Meloy, Air Corps, negotiated the long journey over land and water to Bogota, the capital of the Colombian Republic, and return, without incident.

On the homeward-bound journey, the Army flyers, on August 11th, met in a rendezvous over Chapman Field, Miami, Fla., the Army's mightiest Bombardment airplane, the XB-15, which was piloted by Lieut. Colonel Robert Olds, Air Corps, commanding the Second Bombardment Group, GHQ Air Force, Langley Field, Va. He was accompanied by Brigadier General Arnold N. Krogstad, Air Corps, commanding the Second Wing of the GHQ Air Force.

Colonel Olds was the leader of the expedition of six B-17's on the first "Good Will" flight this year - last February - to Buenos Aires, Argentina.

The rendezvous over Chapman Field was effected at 2:15 p.m., following which Col. Olds landed the huge Bombardment airplane, which is one-third larger than the B-17, at the Municipal Airport at Miami. He had made the flight from Langley Field to Miami in very good time.

The expedition of three B-17's, with Major Vincent J. Meloy, Flight Commander, piloting Plane No. 51; Major Harold L. George, Plane No. 62, and Major Caleb V. Haynes, Plane No. 80, took off from Langley Field on the south-bound journey to Bogota at 9:00 a.m., August 3rd, and landed at the Municipal Airport at Miami at 2:35 o'clock that afternoon, covering the distance of 850 miles in about 5½ hours. After the take-off from Langley Field, each airplane navigated on its own, effecting a rendezvous over Jacksonville, Fla., at 12:30 p.m. From there on into Miami, visual contact was maintained. The weather was favorable throughout, with scattered clouds, good visibility and moderate winds.

After the landing at Miami, the remainder of the afternoon and all of the following day were spent in servicing, maintenance, and adjustment of equipment. On the evening of August 3rd, the officers were the guests of the Miami Rod and Reel Club at an informal dinner. The Press Relations Officer of the flight, Lieut. Frederick E. Glantzberg, delivered a short but effective talk on the purpose and composition of the flight over a local broadcasting station.

Very early Friday morning, August 5th, the Army airmen took off from the Airport at 3:00 o'clock. A run of about 25 seconds was sufficient to lift each plane.

There was no wind at the surface and at 1500 feet there were scattered clouds. By daylight (5:00 a.m.), the flight was well south of Cuba, each plane again being navigated individually. A rendezvous was effected over Barranquilla, Colombia, at 8:55 a.m., and visual contact was maintained from there to Bogota. Strong head winds delayed progress somewhat, and the landing at Bogota was made within thirty minutes of the prediction from Miami sent to the American Legation by cable the previous day. Despite the altitude of the airport at Bogota (8,660 feet above sea level), all planes made perfect landings.

Approximately 3,000 persons were present at the airport at the time of landing. An adequate guard of Colombian soldiers was present and remained to guard the planes during the stay. The Special Ambassador to the Inauguration, Mr. Jefferson Caffery; the Charge de Affaires of the American Legation, Mr. Winthrop S. Greene; the U.S. Naval Attache, Captain John C. Munn, were present and introduced a large number of officials of the Colombian Government, military and diplomatic, to the senior members of the flight.

Due to the crowded conditions in the city, caused by thousands of visitors coming to Bogota to witness the inauguration of the President-Elect, Dr. Eduardo Santos, hotel space was available only for the three airplane commanders, the remaining officers being accommodated in a private home. Another home was turned over to the enlisted

personnel, who were furnished a bus for the movement to and from the field, one man being left with each plane at all times. All of the personnel of the flight were guests of the Colombian Government during the stay at Bogota, and the provisions made for them were entirely satisfactory in spite of conditions in the city.

In the afternoon of August 5th, all members of the flight, except the enlisted men on duty, attended the ceremonies incident to the opening of the Bolivarian games, these being the Olympic tryouts of the Republics liberated by Simon Bolivar, namely, Panama, Venezuela, Ecuador, Bolivia, Peru and Colombia. The President, Alfonso Lopez, and a distinguished gathering of military and diplomatic representatives of all nations, were present in a special stand. The appearance of the members of the flight was the signal for prolonged applause.

In the evening an informal reception was tendered the officers at the Bogota Jockey Club, attended by many of the influential citizens.

On Saturday, August 6th, the senior officers were guests at a reception by the Bolivian Minister at noon at the Jockey Club. At one o'clock, all officers were guests at a luncheon at the Military School, tendered the President and President-Elect. About 500 persons attended, including the military and naval personnel of all delegations to the Inauguration.

In the early evening the officers attended a party given by Captain Munn, U.S. Navy, at which about 150 persons were present. Later, the officers attended the pre-inaugural ball of the Mayor of Bogota, in honor of the President and the President-Elect. This was a most imposing and colorful event, lasting until daylight, and attended apparently by all the great and near-great of the country, as well as the visiting delegations.

On Sunday, August 7th, the inaugural ceremonies were held, beginning at 3:00 p.m. As originally planned, only four senior officers were to attend with the American Ambassador's party. However, at the personal direction of the President-Elect, space was provided so as to permit all the officers to attend. The ceremonies were held in a large hall in the Capitol and,

were most impressive, lasting until well after seven in the evening.

At noon on Monday, August 8th, a brief but impressive ceremony was held in the main cemetery of the city. It had been suggested by the flight commander that a tribute be paid victims of the disaster of July 24th, in which an airplane of the Colombian Air Force crashed into a crowd attending dedication ceremonies of a military parade ground at Santa Ana, near Bogota, as a result of which 64 persons

had been killed and 80 were still in hospitals. As arranged through the Legation, a military band, a detachment of cadets from the Military School, the President with an escort of military dignitaries, the American Ambassador, and the entire membership of the flight were present. A wreath was laid at one of the receiving vaults in the cemetery, and Major Meloy made a brief but effective speech. The newly installed President responded. Although the entire proceedings lasted only about fifteen minutes, the general effect was most impressive.

At three o'clock, the foreign delegates to the Inauguration were received by the President in the Palace, where he greeted the commissioned members of the flight individually. At this ceremony Major Meloy presented a letter of greeting and felicitation from President Roosevelt to President Santos. Later he was given a reply to transmit to Washington.

At six o'clock, a party was given by the Colombian Air Force at the Granada Hotel for all members of the flight. Ambassador Caffery attended and shook hands with the enlisted personnel, praising their work in this flight. A reception by the Chilean Minister in the evening completed the list of official events of the stay.

The American airmen took off on the homeward bound journey at 9:15 a.m., August 9th. With everything in readiness for the departure, no difficulty was experienced in taking off the "Flying Fortresses" from the runway at El Techo, Bogota, despite the high elevation.

Lieut. Glantzberg, navigating officer and press relations representative of the flight, released the following information on the flight to the Canal Zone:

"At 9:22, after passing over Bogota in a salute to President Eduardo Santos, the planes headed northwest through the pass toward Falenquero on the Magdalena River. At 9:40, as the planes passed over Falenquero, the course was changed due north. The 224 miles to San Marcos, Colombia, was covered in one hour and 8 minutes, and at 10:48 the course was again changed and the planes headed directly toward Colon, Panama.

While there was a high overcast and the ground was obscured by low clouds during most of the flight, the planes remained in the clear, between two layers of clouds. An occasional glimpse of the ground through the lower clouds gave the navigators a check on their drift and position. Both radio and celestial navigation was used by the navigators, in addition to dead reckoning navigation.

The route by way of San Marcos, which is 120 miles further than the direct route from Bogota to Colon, was taken because Lieut. Torgils G. Wold, the

weather officer on the flight, predicted bad weather on the direct route. One hundred miles out of Colon, the flight was forced to detour fifty miles to the south in order to avoid a storm."

France Field was reached in three hours and forty minutes. The flight was greeted on arrival by Brigadier General George C. Brett, Commanding the 19th Wing. A reception was tendered the visiting officers from 4 to 6 p.m. at the Officers' Club at France Field.

August 10th was spent on maintenance and servicing. During the morning, the Commanding General of the Panama Canal Department, Major General David L. Stone, and General Brett, flew over from the Pacific side, and made a short flight in one of the B-17's. Very heavy rains set in during the afternoon and lasted well into the night.

In spite of the heavy rains, the field was firm for the take-off, and the weather being clear, departure from Panama was made at 8:30 on the morning of August 11th. The flight across the Caribbean was uneventful and was made through scattered clouds. A rendezvous was effected over Cienfuegos, Cuba, at one o'clock.

Following the rendezvous over Chapman Field with the XB-15, piloted by Lieut. Colonel Olds, a landing was effected at the Miami Airport at 2:45 p.m.

The flight departed from Miami at 9:30 a.m., August 12th, and proceeded by air line route to Langley Field. Detachments representing the units of the 2nd Bombardment Group were on the line upon arrival. A few words of greeting from the senior officer, a brief response by the flight commander, a few pictures taken, and the flight was over.

Lieut. Colonel Olds, in his XB-15, did not accompany the three B-17's from Miami and he arrived at Langley Field later in the afternoon.

The B-17's averaged a speed of 200 miles per hour or better for the flight to Bogota and return. From Miami to Langley Field the average speed was 210 miles per hour.

Many members of this flight participated in the epoch-making flight of the "Flying Fortresses" to Buenos Aires, Argentina, and return, last February.

The Air Corps personnel aboard Plane No. 51, the flagship, in addition to Major Meloy, pilot and flight commander, were Captains Alva L. Harvey, Ford J. Lauer, 1st Lieuts. Frederick E. Glantzberg, Edwin L. Tucker, Staff Sergeant Henry L. West, Corporals John S. Gray, Clarence D. Lake and Private Joseph H. Walsh.

In Plane No. 62, piloted by Major Harold L. George, were also Major Charles Y. Banfill, Captain Carl B. McDaniel, 1st Lieuts. William C. Bentley, William A. Matheny, Master Sergeant Floyd B. Haney, Staff Sergeant Ralph W. Spencer, Sergeant Frank B. Conner and

Private 1st Class Norbert D. Flinn.

The companions of Major Caleb V. Haynes who piloted Plane No. 80, were 1st Lieuts. Curtis E. LeMay, Richard S. Freeman, Torgils G. Wold, 2nd Lieut. James H. Rothrock, Technical Sergeant A. Cattarius, Staff Sergeant Charles S. Guinn, Corporal James E. Sands and Private 1st Class Russell E. Junior.

Majors Meloy, George and Haynes each piloted a B-17 on the Buenos Aires flight. Other personnel who were members of that expedition, in addition to the one to Bogota, were Captain Harvey, Lieuts. Tucker, Glantzberg, Wold, LeMay, Freeman, Matheny, Technical Sergeant Cattarius, Staff Sergeant West, Corporals Lake, Sands, Privates Flinn, Walsh and Junior.

Elaborate precautions were taken to provide the crews against practically any mishap on the trip to Bogota. Safety measures included individual pneumatic life vests and jungle kits, with mosquito nets, medicine, emergency rations, drinking water, fishing hooks and lines, and other necessities. In addition to the life vests and two inflatable rubber boats, each plane has an emergency flotation system which expels the gasoline and uses the gasoline tanks to keep the plane afloat.

The latest and most up-to-date navigation equipment is installed in each plane. Gyro stabilized drift sights make it possible to take accurate drift readings over water, by dropping flares and sighting back at them. Radio compass installation permits taking radio bearings on any ground radio station within range. Each navigator is trained in celestial navigation as well as in dead reckoning and radio navigation, and can navigate by the sun or the stars. This is necessary because frequently there are times when bad weather forces the plane to fly above the clouds out of sight of land or water. At such times static is apt to interfere with accurate radio bearings, and the navigators are forced to resort to celestial navigation to determine their positions.

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MUNICIPAL OFFICIALS VISIT SELFRIDGE FIELD

Selfridge Field, Mt. Clemens, Mich., was visited on August 9th by Mayor Richard Reading, of Detroit, and Staff, and Mayor Don S. Westendorf, of Mt. Clemens. Upon arrival at the field, the officials had the opportunity of watching the Composite 27th Pursuit Squadron, commanded by Major Willis R. Taylor, in a practice formation in preparation for the anticipated October maneuvers to be held at Fort Bragg, N.C.

The party, consisting of Mayor Reading; Mr. Raymond Kelly, Detroit Corporation Counsel; Mayor Westendorf, Commissioners Englund and Longstaff and other

(Continued on page 4).

V-7816, A.C.

NEW BARRACKS FOR MARCH FIELD

Actual construction of new barracks at March Field, Riverside, Calif., to augment present quarters for 330 enlisted men, has begun. The structure, for which a total of \$478,350 Federal funds had been allocated, is the largest building project seen at March Field for some time.

Plans and specifications for the new barracks call for a structure similar to those built a few years ago. The completion of the new barracks will relieve a crowded condition at March Field, one which has made it necessary to house many enlisted men in tents and old cantonment barracks. Its capacity will be such as to afford accommodations for new enlisted men.

The barracks will be situated on the baseball diamond in the rear of the 4th Air Base Barracks.

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CHAMPION SKEETERS VISIT MARCH FIELD

March Field, Riverside, Calif., was host to a group of Los Angeles Skeet Shooters recently. Among the visitors were Mr. S.O. Walding, the National Champion Shot, and Mr. C.H. Rapp, President of the Southern California Skeet Association, as well as members of the Red Lion, Angelus Mesa and other teams of Southern California.

One group of five visitors hit 241 targets out of a possible 250. Another group hit 236 out of a possible 250. The best score made by a 5-man group of March Field was 209 out of 250 targets. Major Bartron shot a 25 and had a high officers' score of 47 out of 50. Major Hackett was runner-up with a 24, and a total of 46 out of 50. Mr. Rapp shot 50 straight without a miss.

The March Field skeet shooters were able to pick up much information concerning form and procedure from the visitors, and evinced much interest in the guns which they used. Their most popular gun appeared the pump type, equipped with compensator; but what guns they were! Their guns were given the care which is normally given to babies. The bores and receivers were honed and kept in perfect operating condition. "Compared with their guns," declares the News Letter Correspondent, "the Army issue shotguns were old and inaccurate." He expresses the hope that there soon will be provided suitable skeet guns which will not cause Army personnel to apologize.

The shooting was done on the new March Field Skeet Range which has every facility and is considered by professionals to be the best range on the West Coast. It is equipped with electric traps, concrete walks, benches and metal ammunition holders.

NOTES ON AIR CORPS PERSONNEL

Major Edwin F. Carey, Air Corps, as announced in Special Orders of the War Department, is to be retired from active service effective August 31, 1938, by reason of disability incident to the service. Major Carey is stationed at Langley Field, Va.

The following-named officers are assigned to the Air Corps stations indicated upon the completion of their present tour of duty in the Hawaiian Department:

Major Harold W. Beaton to Langley Field, Va.

First Lieuts. Willis F. Chapman, Samuel B. Knowles, Jr., and Thomas Wildes to Kelly Field, Texas.

First Lieuts. Leighton I. Davis and Pelham D. Glassford, Jr., to Maxwell Field, Ala.

First Lieuts. Downs E. Ingram and Joseph G. Russell to Randolph Field, Texas.

First Lieut. Herbert B. Thatcher to Mitchel Field, N.Y., and to be assigned to the 97th Observation Squadron.

Major Charles T. Skow has been relieved from assignment and duty at Randolph Field, Texas, and assigned to duty at Langley Field, Va.

First Lieut. James H.C. Houston, stationed at Barksdale Field, La., is under orders for duty as a student at the Air Corps Technical School, Denver Branch, Lowry Field, Denver, Colo., to pursue the 1938-1939 photographic course, reporting not later than August 28, 1938.

MUNICIPAL OFFICIALS AT SELFRIDGE FIELD (Continued from Page 3).

guests, were received by Major Lawrence P. Hickey, 1st Pursuit Group Commander, also Air Base Commander during the temporary absence of Colonel Henry B. Clagett. Major Hickey escorted the party on an inspection tour of the hangars and shops.

Mayor Reading commented favorably on the field in general, and was especially interested in the Instrument Repair Section of the Aero Repair, and the new P-35 airplanes. After a tour of the field, a reception was given the visiting officials at the Officers' Club. Mrs. Henry B. Clagett, wife of the Air Base Commander, and Major and Mrs. Hickey were in the receiving line.

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The work of the W.P.A. on the runways at Maxwell Field, Montgomery, Ala., has been stopped for the present. Although the runways appear to be completed, there is still considerable topping and rolling to be done. The runways are still closed to air traffic.

V-7816, A.C.

GENERAL PRATT LEAVES MAXWELL FIELD
By the News Letter Correspondent

Our beloved Commandant, Brigadier General H. C. Pratt, relinquished active command of the Air Corps Tactical School on August 7th. On that date the General departed on leave of absence, at the termination of which he and Mrs. Pratt will sail from New York on September 9th for the Philippines.

The personnel of the Air Corps Tactical School were very reluctant to see General and Mrs. Pratt leave. Both have endeared themselves to all of us and hold places of deep affection in our hearts. As our Commandant, the General won the respect and affection of each member of this command. Their graciousness, loyalty and spirit will long be remembered by each and everyone of us.

We wish them good luck, happiness, good health and many happy landings.

With General Pratt's departure, the Air Corps Tactical School will be under the able command of Colonel Albert L. Sneed, who for the past year has been our Post Executive.

The following is quoted from the Montgomery ADVERTISER of August 6th:

"City Gives Farewell Barbecue to Maxwell Field Commandant.

More than 200 representative Montgomeries and a number of Maxwell Field officers late yesterday joined at a barbecue, at Summer's Rest, Chisholm, to do honor to Brig. Gen. Henry C. Pratt, commandant of the Army Air Corps Tactical School here since March 14, 1937, and to wish him and Mrs. Pratt continued success and happiness at the former's new command at Fort William McKinley, in the Philippines.

Gen. Pratt, referred to by J. M. Jenkins, president of the Chamber of Commerce, as 'Montgomery's very own general,' will leave with Mrs. Pratt for Washington and other points east in a few days. They will sail for the Philippines, from Brooklyn, on Sept. 9. At Fort McKinley, Gen. Pratt will be commanding officer of the 23rd Infantry Brigade.

Mr. Jenkins, master of ceremonies, told Gen. Pratt that - speaking for all the people of this community - no commanding officer at Maxwell Field so had endeared himself to the people and that his leaving was one of genuine regret. Vigorous applause by the assembly attested to the speaker's words.

Following the brief talk, Mr. Jenkins presented to Gen. and Mrs. Pratt a silver service, engraved 'from your Montgomery friends.'

In turn, Gen. Pratt expressed his and Mrs. Pratt's pleasure at having been stationed here. He assured the assembly that they needed no gift to remind them of the people of Montgomery and that, whenever opportunity presented itself,

they would visit here again.

Gen. Pratt introduced Col. Albert L. Sneed, A. . . , as the able officer who would assume command at Maxwell Field upon his leaving. The General paid tribute to Col. Sneed's ability as an officer and leader. Turning then to a humorous vein, the General said he felt sure that Col. Sneed was Montgomery's most eligible bachelor.

'That,' said the General, 'is all that is wrong with him.'

In addition to his own remarks, Mr. Jenkins read two letters from dignitaries who, because of other urgent engagements, were unable to attend the barbecue. One of the letters was from Maj. General Frank McIntyre, U. S. Army, Retired, of Montgomery, who expressed regret at Gen. Pratt's leaving and wished him well. The other, from Governor Graves, read as follows:

'I desire to express to Gen. Pratt my sincere regret that an engagement which I could not overlook called me away on this occasion, and to say to the General, as I have said personally, that his leaving Maxwell Field, Montgomery, and our State, is a real loss.

'My contact with him, socially and officially, has been most delightful, and I join the other citizens of Montgomery in expressing our great admiration for him as a man and as an officer. His conduct has endeared him to those with whom he had come in contact, and I am sure I express the universal sentiments of our State and our community when I say that he will be greatly missed and that his career will be watched with sympathetic interest wherever he may be.

'Please extend to the General my personal and official regrets and bespeak for him the highest success and happiness that he will so well deserve wherever he may be.'

The barbecue, attended by many of Montgomery's outstanding business, political, civic, educational, religious and social leaders, and Army executives, was sponsored by the Chamber of Commerce. The barbecue was prepared under the direction of Mrs. J. M. Jones."

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AIR CORPS OFFICERS DETAILED AS UMPIRES

Twelve Air Corps officers, stationed at Maxwell Field, Montgomery, Ala., were detailed as umpires for the Third Army Maneuvers. They are equipped with BT-9 airplanes loaned by the Corps Area Detachment at Atlanta, Ga., and with P-6's from Maxwell Field. A detachment of the Photo Section, equipped with one of the new Photo Trailers, is on detached service at Third Army Headquarters.

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BIGGEST FOR DEPOT SUPPLY OF SAN ANTONIO AIR DEPOT
 by the News Letter Correspondent

Of interest to the service of supply in particular is the fact that the San Antonio Air Depot Supply Department, under the able leadership of Major John M. Clark, Depot Supply Officer, has just completed a very busy fiscal year which required the steady grind of all personnel to accomplish.

Statistics are considered dry reading by most people, but a glance at those of the Depot Supply Department of the San Antonio Air Depot is both illuminating and gratifying to the personnel of that Department. A comparison of last year's record, the highest up to that time, with this year's shows conclusively that the Fiscal Year 1938 record marks the highest yet attained, by that organization.

A comparative table is given below:

	F. Y. 1937	F. Y. 1938
Items posted to Stock Card	441,668	477,218
Requisitions Filled	555	568
Number of Items	25,445	29,536
Shipping Orders, etc.	4,077	4,692
Number of Items	10,955	11,173

Two important factors causing the upward trend of Depot Supply activities were the establishment of the Denver Branch of the Air Corps Technical School at Lowry Field, Colo., and the addition of the Arkansas National Guard to this Depot for supply and service. This increase in work was accomplished without the addition of permanent personnel by the Depot Supply Officer in effecting a reorganization in some sections of the Supply Department. By consolidating the bin cards into one unit, only four employees are now required, whereas seven were needed when the bin cards were located in each of the seven warehouses.

The Bookkeeping Machine Operators were formed into a pool, thus guaranteeing that all Stock Record Units would have their work at an even level at all times. Before this was done, some sections would be far behind with their work, while others would be up and idle part of the time.

A number of employees of the Supply Department have made trips to the Materiel Division at Wright Field this past year, receiving instruction and discussing matters pertinent to their departments. In this manner it has been possible to keep in closer touch with the Division and extend better cooperation to the Air Corps at large. Upon the establishment of the Denver Branch of the Air Corps Technical School, at the request of the Commanding Officer and the Supply Officer at that station, one of the supervisors from this Depot spent a

week at Lowry Field instructing the personnel there in supply matters. This promises to improve the service to the Technical School and give the Depot a better understanding of the problems peculiar to that station.

The Depot Supply Officer makes numerous trips to the stations and fields in this area during the year, thereby gaining a better insight into the needs of these stations, all of which makes for better service to them.

The last half of the Fiscal Year 1938 ended with a great increase in activity in warehousing and shipping at this Depot. All of the classifications formerly stored in Warehouse No. 9 were moved to Warehouses Nos. 10 and 11. The removal of Classification O2 from Warehouse No. 5 to the newly renovated Warehouse No. 9 was approximately one-third completed. This involved the inspection and packing of thousands of items and the moving of hundreds of tons of stock not normally included in the Monthly Activity Reports.

In connection with these moves, the Shipping Department constructed boxes as follows:

- 200 No. 5 storage boxes, standard.
- 750 No. 1 storage boxes, standard.
- 520 Engine cylinder boxes.
- 507 Generator starter boxes.

In addition,

- 30 new adjustable type Storage Bins and 55 Box Racks were built.
- 5216 Removable drawers or shelves were built and installed in warehouse bins already in use.
- 35 Straight ladders, and
- 8 Portable platform step ladders were constructed for use in warehouses.

Changes in shipping methods, i.e., the enlargement of interdepot air transport shipping and the pick-up and delivery service, by van, inaugurated by the railroads serving the Depot, made necessary a complete rearrangement of the Depot Supply Shipping Room to meet these changed methods, and the construction of a 22' x 80' loading dock, or branch Shipping Room, at the 3rd Transport Squadron, the San Antonio Air Depot being an intermediate transport terminus.

During the Fiscal Year 1938, the San Antonio Air Depot handled a total of 1,422,377 pounds of in-bound and out-bound air freight, as compared with 713,798 pounds for the Fiscal Year 1937.

The total in-bound and out-bound tonnage for the Fiscal Year 1938 was 16,388,849 pounds.

The personnel of this Department are to be complimented upon the high degree of efficiency and accuracy with which the

(Continued on Page 14)

RESERVE OFFICERS TRAIN AT SCHOEN FIELD

The 51st Training Squadron, composed of Air Corps Reserve officers, terminated on July 30th an interesting and instructive two weeks at Schoen Field, Fort Benjamin Harrison, Indiana.

During this short active duty period, each pilot averaged 39 flying hours, and each observer 37 hours. This is more time in the air than was ever spent before during similar camps at Schoen Field. A combination of circumstances made this possible - the intense interest in flying of all the Reserve officers, coupled with perfect equipment and ideal weather conditions.

The flying activity consisted not only of the usual familiarization, formation and navigation flights, but great stress was placed on instrument flying, reconnaissance missions during which pictures of designated areas were taken and printed, and cross country navigation, using radio aids, including night cross country flights.

At the end of the camp most of the faces and noses of the Reservists were the color of dark leather, but all agreed the experience had been great. Interest has already been aroused in the possibility of including gunnery in the next year's camp, which would include the flying to and from a suitable range.

Major K.C. McGregor, Air Corps, who recently arrived at Schoen Field, was the Regular Army instructor in charge.

The officers of the 51st Training Squadron and their duties follow:

Major Charles E. Cox, Commanding Officer
1st Lieut. Donald T. Canfield, Adjutant.
Captain Fred W. Sommer, Operations Officer.

2nd Lieut. Lewis M. Sanders, Assistant Operations Officer.

2nd Lieut. Kendall Clark, Assistant Operations Officer.

Captain Elmer H. Jose, Engineering Officer.

1st Lieut. Dwight W. Brill, Assistant Engineering Officer.

Captain Charles E. Halstead, Supply Officer.

2nd Lieut. Edwin Voras, Assistant Supply Officer.

Enlisted personnel responsible for the smooth functioning of the camp include:

Staff Sergeant J.J. Stibal,
Sergeants W.S. Cavanaugh and A.S. Evans.

Corporal H. Thompson,
Privates G.C. Garcia, R.F. Jones,
J.L. Kolar, P.L. Moore, W.N. Moore,
W.B. Phillips, R.C. Ratts, D.A. Suddeth,
F.A. Tedrow, H.S. Torrence and G.S. Wisecup.

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Air Corps Instructors are requested to forward news items on Reserve activities.

ACTIVITIES OF THE 27TH PURSUIT SQUADRON

The News Letter Correspondent of the 27th Pursuit Squadron, Selfridge Field, Mich., reports that during the Fiscal Year 1937-1938 this Squadron made considerable progress despite the fact that it was handicapped by the lack of airplanes.

During the year, 4723 hours were flown in airplanes assigned to this organization. The total pilot time for pilots while they were assigned to this organization was 7507 hours. Of this time, 296 hours were flown under the hood, 534 hours at night, 470 hours for gunnery, 18 hours for camera gun, 1250 hours for navigation, 1308 hours for unit navigation, 551 hours of combat exercises, and over 1300 hours were flown in miscellaneous flights.

Approximately 38,547 rounds of .30 and .50 caliber ammunition were expended during the year. Officers with less than two years' service received approximately 2018 hours of instruction. Each officer assigned received approximately 50 hours' instruction in topics of the day.

Enlisted men received instruction in Chemical Warfare, Airplanes and Engines, Instruments, Armament and Radio.

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OLD PILOTS AT KELLY FIELD

Kelly Field has always been known for its old and seasoned pilots. Almost all of the pilots now stationed at this field have been piloting airplanes for many years and have built up enviable reputations for safe flying for many hours. Six of the Kelly Field pilots have more than 4,000 hours solo pilot hours in Army aircraft. These pilots are Majors John V. Hart, Harvey Prosser, Walter E. Richards, Captains Harvey F. Dyer, Burton M. Hovey and Russell E. Randall.

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ENLISTED MEN TO STUDY COMMUNICATIONS

Ten enlisted men of the Air Corps are under orders to proceed to the Signal Corps School at Fort Monmouth, N.J., to pursue the radio communications course.

Five of these men, who are to report at this school on August 26, 1938, are:

Pvt. 1st Cl. Leland E. Williams, 1st Balloon Squadron, Fort Sill, Okla.
Pvts. Ralph Garrett, Headquarters Sqd.; James H. Tillery, 13th Air Base Sqd., and Harry M. Forehand, 91st School Sqd., Maxwell Field, Ala.

Pvt. 1st Cl. John O. Riggs, 2d Transport Sqd., Middletown Air Depot, Penna.

The remaining five enlisted men, who are to report on September 27, 1938, are:

Pvt. 1st Cl. Chester J. Evans, 2nd

(Continued on Page 14)

MORE RESERVE OFFICERS FOR ACTIVE DUTY

The following communication was recently forwarded by the War Department to each Corps Area Commander:

"1. It is estimated that funds will be available to place 75 additional Air Corps Reserve officers, who are not Air Corps Training Center graduates, on extended active duty with the Air Corps during the Fiscal Year 1939. It is desired that this matter be given all possible priority in order that the officers selected may report at Randolph Field on October 3, 1938, and January 5, 1939. These officers will receive a special course of advanced flying training of approximately four (4) months' duration, and upon successful completion thereof will be assigned to duty with the Air Corps. This course will include intensive military training in addition to advanced flying training. Should any of these officers fail to satisfactorily complete this course, they will not be continued on extended active duty.

2. The following will govern the selection of these officers:

- a. The officer must be less than thirty-five (35) years of age.
- b. Must have fifty (50) hours pilot time on the BT-9 or O-46A airplane and have completed the flying requirements of either (1) or (2) below:
 - (1) Minimum of 100 hours pilot time within the twelve (12) months immediately preceding;
 - (2) 400 hours pilot time (300 H.P. or more) during the five (5) years immediately preceding, at least fifty (50) hours of which must have been within the twelve (12) months immediately preceding.
- c. Must be physically qualified on Form 64 within sixty (60) days of active duty orders:
- d. Active duty will be in the grade of Second Lieutenant and for a period of two (2) years. Authorization exists for an additional three (3) years, the last two (2) years in the grade of First Lieutenant, for those recommended for additional duty.
- e. Application must be submitted in duplicate on AGO Form 109 and should reach this office as early as possible.

3. It is desired that each applicant for this active duty have insurance in such amount as may be considered sufficient to properly cover his responsibilities. Government insurance in the amount of \$10,000 is available upon assignment to active duty.

4. Your recommendation is requested with respect to applicants from your Corps Area by individual indorsement on each application. It is desired that no

application be forwarded unless the applicant can qualify under the provisions as stated above, as no waivers will be granted. It is further desired that no application be forwarded unless the applicant has been checked by his Unit Instructor and can be recommended by him as suitable for this detail."

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TWO POPULAR OFFICERS LEAVE HAWAII

"On July 18th the 5th Group and Luke Field lost its most popular member," writes the News Letter Correspondent, referring to Colonel Millard F. Harmon, who has commanded both units for the past year and a half. He then goes on to say:

"During his (Colonel Harmon's) tour as Group and Post Commander the unit piled up a total of over 17,000 hours of aircraft time without a single major accident involving injury to personnel; a high tribute to the quality of his leadership.

Sailing also on the REPUBLIC was Brigadier General Barton K. Yount, former commander of the 18th Wing. All personnel of the Group will miss his able and sympathetic leadership.

Both officers and their families carry with them the sincere Aloha of this unit, which was demonstrated in a small way on the day of sailing by participation in a Wing Aloha Flight which included practically everything with wings in the Department. Pursuit, Attack, Reconnaissance and Bombardment units circled the REPUBLIC as she rounded Diamond Head outward bound.

On July 19th, after giving the REPUBLIC a head start of twenty hours, the Bombardment squadrons of the Group performed an interception mission on the vessel. Clearing Oahu at 0937, the Group with its B-18's made contact with vessel some 285 nautical miles to sea at 1145. Final Alohas were exchanged by radio and the Group returned to its base.

Major John I. Moore, former Post Executive Officer, takes over command of the 5th Bombardment Group and Luke Field pending the arrival of replacement for Colonel Harmon."

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FIELD TRAINING FOR 17TH AIR BASE SQDN.

Monday, July 18th, proved to be an eventful day as approximately 30 men of the Base Headquarters and 17th Air Base Squadron, Luke Field, T.H., moved to Bellows Field, Waimanalo, Oahu, T.H., to establish camp for the 12-day training period of the organization. All members of the Squadron were to fire the pistol as well as the machine gun, ground and aerial targets. Sending the men out in groups of approximately 25 men per day, the range season should terminate on July 30th.

FIRE DESTROYS HANGAR AND TWO PLANES

At Kelly Field, Texas, on the afternoon of July 20th, fire destroyed Hangar No. 23, next to the last hangar at the west end of the line. The fire was caused by the accidental contact of a B-4 type airplane with the hot exhaust pipe of a tractor being used to tow the airplane into proper parking space in the hangar.

In a few moments the blaze swept over the plane, ignited the hangar and another plane - a BT-9 North American Basic Trainer. Men in the vicinity rushed to put out the blaze with hand extinguishers, but it was too hot to get close to the planes. The blaze was so strong that most of the efforts of the Kelly Field Fire Department were devoted to protecting other nearby structures and planes until the arrival of fire apparatus from Duncan Field and San Antonio.

The hangar was a frame building of war-time construction, and most of its contents were beyond saving. Firemen gave their main attention to preventing the spread of the flames. Operations and Engineering Office records of the 64th School Squadron were completely destroyed by the fire.

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BUILDING PROGRAM STARTS AT KELLY FIELD

The construction program finally got under way at Kelly Field on July 27th, when workmen started digging holes for the foundations of eight sets of officers' quarters and nine double sets of noncommissioned officers' quarters.

This project, which will cost \$520,000, is in addition to the \$2,500,000 building and improvement project scheduled to get under way in several months, with Captain E.B. Dunstan, Constructing Quartermaster for San Antonio and vicinity, in charge.

This \$2,500,000 project is for the construction of new barracks, officers' and noncommissioned officers' quarters, hangars, and other buildings - and is the last project to get started in the San Antonio area. Because these buildings are not considered an emergency project, the work will be delayed about three months.

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DETAILS TO THE GENERAL STAFF CORPS

The following-named Air Corps officers, now stationed at Langley Field, Va., have been detailed as members of the General Staff Corps and assigned to the General Staff with Troops and directed to report to the Commanding General, GHQ Air Force, Langley Field, Va., for duty accordingly:

Colonels Walter H. Frank, Walter G. Kilner, Lieut. Colonels Clinton W.

Howard, Ralph P. Cousins and Major James P. Hodges.

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PROMOTION OF AIR CORPS OFFICERS

The following-named Air Corps officers, holding the temporary rank of Major, were given permanent promotion in that grade, with rank from August 1, 1938:

Major John Y. York, Jr.

Major Walter H. Reid

Major John B. Patrick

The following-named second lieutenants of the Air Corps were promoted to the grade of first lieutenant, with rank from August 1, 1938:

Opal E. Henderson

Daniel I. Moler

Lawrance O. Brown

Henry B. Fisher

Clayton B. Claasen

William T. Hudnell, Jr.

Harold L. Kreider

John O. Neal

Watson M. Frutchey

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NEW FLYING INSTRUCTORS AT KELLY FIELD

Eight new officers recently reported at the Advanced Flying School, Kelly Field, Texas, for duty, and five of them were given assignments as flying instructors.

First Lieuts. Richard E. Ellsworth and Kurt H. Landon, the former reporting from Mitchel Field, N.Y., and the latter from Scott Field, Belleville, Ill., were assigned as instructors in the Attack Section.

New instructors in the Pursuit Section are 1st Lieuts. Dyke F. Meyer, from Maxwell Field, Ala., and Earl F. Signer, from Scott Field.

First Lieut. Philip E. Coates, from Maxwell Field, was assigned as instructor in the Observation Section.

Of the three remaining new arrivals, Captain James F. Philips, who came from Edgewood Arsenal, Md., was assigned as Station Air Corps Inspector; 1st Lieut. Lloyd H. Tull, formerly stationed at Aberdeen Proving Ground, Md., was assigned to the 12th Air Base Squadron, and 2nd Lieut. Wilbur W. Aring, from Maxwell Field, was assigned to the 61st School Squadron.

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The entire communications section of the 31st Bombardment Squadron enrolled in the post radio school conducted at Luke Field, T.H., four nights each week, and the men are determined to master the technique of radio operation and theory before very long. The communications section chief of the 31st Squadron, Staff Sergeant Harold S. Cooper, is senior instructor of the school.

4TH AIR BASE SQDN. PHOTOGRAPHIC LABORATORY

With a history which dates back to active duty as a World War unit, known as the 23rd Photo Section, this organization was finally rendered inactive at March Field, Calif., in October, 1937, at which time it was divided into a Base Laboratory and an Aerial Photographic unit in the 38th Reconnaissance Squadron.

The 4th Air Base Photographic Laboratory functions in a highly creditable manner under the command of Major Frederick F. Christine, who has taken over this duty in addition to his assignment as Base S-4. Major Christine served with the Photographic Division of the Air Corps, A.E.F., for nearly two years during the World War and, from his long experience in all phases of photography, is well qualified to organize a base Laboratory.

As tending to show the value of such an organization as a peace-time government agency, the Photo Laboratory, along with the Aerial Photographic Division of the 38th, has rendered invaluable aid to the U.S. Engineers in Los Angeles in the production of nearly 4000 mosaics of all rivers, washes, basins and bridge and highway washouts caused by floods to substantiate estimations of damage and reconstruction costs. In addition to this work, 340 miles of coastline is under process of being photographed to facilitate the study of beach erosion.

Aside from this extra work, the Photo Laboratory has been carrying on regular Air Corps projects which include considerable ground work, printing, enlarging and the photographing of a 23 by 13-mile area at the Muroc Bombing and Gunnery Range.

The Laboratory, in charge of Staff Sergeant Frank Calcagno, has a crew of ten men, who do ground photography and developing and printing. In the 38th Reconnaissance Squadron, the aerial photographers, under the direction of Lieuts. Henry K. Mooney and Paul T. Hanley, include Technical Sergeant Wm. Brees, Staff Sergeants Meeks and Brinkerhoff and Private 1st Class Clark.

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A TRIBUTE TO A SQUADRON COMMANDER

On Tuesday, August 2nd, the members of the Headquarters and Headquarters Squadron, Air Corps Technical School, Chanute Field, Rantoul, Ill., gathered in the Day Room to bid farewell, as the News Letter Correspondent puts it, "to one of the finest officers in the Army, Major Earle G. Harper, our Squadron Commander."

After a brief ceremony, the Major departed with the best wishes of all the members of the outfit. The Correspondent further states:

"It is difficult to estimate the value of the work Major Harper has done for

Headquarters Squadron and Chanute Field as a whole. As Squadron Commander he took a personal interest in the welfare of each individual in his organization. The troubles of his men were his own personal worries and no reasonable request was refused. Volumes could be written on the things Major Harper has done for his men, but limited space prohibits going into that subject any further. No officer ever held a higher place in the hearts of his men than Major Harper.

The entire squadron joins the writer in saying, 'Best of luck, Major.'"

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MAXWELL FIELD'S P-12'S GO TO KELLY FIELD

The twenty-five Boeing P-12 airplanes assigned to the Air Corps Tactical School at Maxwell Field, Ala., were transferred in June to the Air Corps Advanced Flying School at Kelly Field, Texas, and were recently replaced by fourteen P-6 Pursuit planes powered by the Curtiss "Conqueror" engine. A Lockheed C-36 Transport plane has been assigned to Maxwell Field to replace the old Curtiss "Condor" C-30 Transport which is now being surveyed. The "Condor" was at one time assigned to the Office of the Secretary of War, and was also used for air mail duty. It was submerged in the flood at the Middletown Air Depot, Pa., several years ago.

Many Air Corps pilots have a great deal of affection for the old ship and will feel her loss as that of an old friend.

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MAJOR CRUMRINE LEAVES KELLY FIELD

Major Clarence E. Crumrine, Air Corps, commanding officer of the 61st School Squadron at Kelly Field, Texas, has been ordered to report for duty as a student at the Command and General Staff School, Fort Leavenworth, Kansas, to pursue a course of instruction at that institution, commencing September 1, 1938.

Preparatory to reporting at Fort Leavenworth, Major Crumrine is enjoying a month's leave of absence with his family at Yellowstone National Park.

Major Crumrine has been on duty at Kelly Field since June 4, 1935, serving in many capacities, namely: Director of Ground Training, Secretary and Public Relations Officer, Commanding Officer of the 68th Service Squadron, and Commanding Officer of the 61st School Squadron, his latest assignment.

Commissioned a second lieutenant in the Air Service on July 1, 1920, he received his appointment as Major (temporary) on October 12, 1937. He is a graduate of the Air Corps Tactical School (Class of 1935) and is rated a "Military

(Continued on Page 14)

THUNDERSTORMS

A thunderstorm is the result of violent vertical convection which occurs in air possessing marked potential instability when this instability is released by any one or combination of the following:

- (a) Surface heating.
- (b) Mechanical lifting due to frontal surfaces or mountains.
- (3) Overrunning by air the temperature of which is such as to induce overturning.

In the summer time, practically all well-developed fronts will have associated considerable thunderstorm activity; however, these are frequently not continuous along the front. In other words, by flying parallel to fronts "holes" will frequently be found, through which the front may be safely crossed.

In general, thunderstorms become most violent over land in the late afternoon and between midnight and dawn over water areas.

The forward portion of a thunderstorm is the most violent from the point of gustiness and heaviness of precipitation.

In order to exist there must be vertical currents upward of at least 2300 feet per minute within the clouds at the higher levels. By measurement of the velocity necessary to support the larger hailstones, it is indicated that vertical velocities exist in the neighborhood of 20,000 feet per minute. Also within the rain area vertical down currents must exist in the lower levels of an order of 1500 feet per minute.

There have been measured on airplanes carrying V-G recorders accelerations of over six times gravity in thunderstorm areas and accelerations of 4 g are not at all uncommon.

The average level at which freezing conditions may be expected to begin in summer thunderstorms in this country is about 13,000 feet; the clouds themselves will generally extend to well above 20,000 feet.

Horizontal visibility in the area of heavy rain is generally reduced to a few hundred yards.

While conclusive evidence is lacking, it is not believed that lightning itself constitutes a serious hazard. Lightning has caused frequent minor damage to aircraft, such as burning off radio antennae and small holes in the metal skin and propellers, etc., but there is no authenticated record of the destruction of an airplane in the air by this cause.

Anyone desiring to read a rather complete treatment of thunderstorms in not too technical language is referred to Chapter 17, Physics of the Air, by Humphreys; a book which may be found in every Air Corps Weather Station.

SCHOOL FOR CHILDREN AT LANGLEY AIR BASE

In spite of the announced delay in awarding the contract for the new school at Langley Field, actual construction is expected to get underway late in August.

Bids were opened on July 26th in the office of Lieut. Clarence Renshaw, construction quartermaster at the air base, and of the five proposals submitted the Virginia Engineering Company's bid was lowest. However, other firms submitted figures, which were late, contending that rain caused the delay.

The new structure will occupy the site on Dodd Boulevard, between Thompson and Bowen Avenues, just opposite the air base chapel. The approximate cost will be \$75,000.

Plans which were submitted show a one-story brick building which will be fire-proof, sound-proof, and modern throughout. Air conditioning will be used the year round.

Six classrooms, one auditorium and one assembly room have been designated, in addition to a teachers' room, office and library.

It was originally thought that actual work would start about August 10th. However, with the pending delay, the exact time is not known, but it is expected that officials will make every effort to get underway as soon as possible, in order to provide children of the air base with adequate and modern school facilities.

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COL. GILKESON LEAVES 8TH PURSUIT GROUP

The officers and men of the 8th Pursuit Group, Langley Field, Va., regret deeply the loss by transfer of their commanding officer of the past three years. The News Letter Correspondent states: "The assignment of Lieutenant Colonel A.H. Gilkeson to the Command and General Staff School takes away from us a capable leader, respected and liked by the entire Group.

Lieut. Colonel W. E. Kepner has assumed command of the Group, and the same high standard of training is anticipated."

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MAINTENANCE INSTRUCTION FOR CREW OF B-15

Noncommissioned officers of the 49th Bombardment Squadron, Langley Field, Va., Technical Sgt. Cattarius, Staff Sergeants Heldt, Spicer, Hines, Corporals Sands and Itnyer, the crew for the B-15 Bombardment airplane, recently departed for Wright Field, Ohio, to take the preliminary course of instruction in maintenance prior to the delivery of that airplane to Langley Field.

V-7816, A.C.

DEMAND FOR MAINTENANCE TECHNICIANS

With the rapid expansion of the Air Corps in recent years and the increasingly complicated equipment procured there has been a corresponding increase in the demand for properly trained maintenance technicians.

Chanute Field personnel, both Army and civilian, responsible for training selected Air Corps Technical School students, have made every effort to increase the capacity of the school.

Following the transfer to Lowry Field, Denver, Colorado, of the Photographic and Armament Departments, additional hangars were made available for the Department of Mechanics. Remodeling of the buildings was completed immediately. The propeller laboratories were moved into one building, and the electrical laboratory moved into another, increasing their capacity to twelve specialists and twenty-five airplane mechanics each.

Other courses within the mechanics department have likewise benefited. More floor space was allocated to the metal workers branch and machinist branch, thus permitting a small increase in the length of these courses and an increase in the number of students that may be accommodated.

A survey of Air Corps requirements made a year ago disclosed the desirability of abandoning the combined welders-sheet metal work and welding courses. It enables the student to graduate and return to his home station several weeks earlier, thus increasing the number of potential graduates.

The Air Corps Materiel Division is lending splendid cooperation in securing equipment for the school.

The Air Corps Technical School at Chanute Field announces the addition of a course in "Air Corps Fundamentals" for the 1938-1939 school year. It will be a forty-hour course and will include instruction in the following subjects:

- (1) The Air Corps system of airplane and equipment maintenance.
- (2) Purpose and use of Air Corps technical publications, stock lists, drawings and forms.
- (3) Airplane nomenclature.
- (4) Fire regulations and the care and use of fire extinguishers.
- (5) Safety rules for Air Corps shops and hangars.
- (6) General instructions relative to handling airplanes in and around the hangar.
- (7) Parachute instruction (general).

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Captain James E. Parker, Air Corps, received a temporary appointment to the grade of Major in the Air Corps, with rank from August 5, 1938.

RETIREMENT OF OLDEST DEPOT EMPLOYEE By the News Letter Correspondent

The familiar face of the oldest member of the civilian personnel at the San Antonio Air Depot, Duncan Field, Texas, will be greatly missed since the retirement on July 31st of Clarence A. Knowlton, Sr., Supply Clerk in the Aero Repair Section of the Engineering Department. In point of service with aviation supply in San Antonio, Mr. Knowlton, who is 70 years of age, was the oldest employee at the San Antonio Depot upon his retirement. He has been a resident of San Antonio since February, 1891, coming here from Massachusetts, where he served as a post office clerk and letter carrier in Boston and its vicinity.

For 19 years, from 1893 to 1912, Mr. Knowlton was station agent for the old San Antonio and Aransas Pass Railroad in San Antonio. From 1914 to 1916 he was employed with the War Department, Engineer Department at Large, as Receiver of Metals, Surveyman, and Inspector, at Galveston, Texas. On June 4, 1917, he again entered the civil service, continuing uninterruptedly until his retirement. Upon his retirement he was the only remaining employee at this Depot of the seven or eight who started with the small supply depot of the Aviation Section, Signal Corps, which was established in 1917 as a small warehouse at 1903 South Flores Street in San Antonio.

This warehouse was later moved to Duncan Field (old Kelly Field No. 1), became the Aviation General Supply Depot and subsequently the Depot Supply Department of the San Antonio Air Depot.

For some 13 years, Mr. Knowlton was chief clerk of the Depot Supply Department and of the former Air Corps Station Supply Department of this Depot. The week before his retirement, several hundred employees of the Depot presented him with an outboard kicker for a boat which he has on Medina Lake, and on July 28th he was guest at a banquet of Local No. 28, National Federation of Federal Employees, of which he has been a member since 1917, and which presented him with a gold badge for meritorious service.

The only plans which "Pop" Knowlton, as he is affectionately known to the employees, has for the immediate future are for a good rest, boating and fishing at Medina Lake. He and Mrs. Knowlton at present reside in South San Antonio, and they have the sincerest wishes of all personnel of the Depot in this well-earned retirement.

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Captain Don McNeal, Air Corps, received a temporary appointment to the grade of Major in the Air Corps, with rank from June 27, 1938.

FIRST WING MANEUVERS AT GRAY FIELD

Brigadier General Delos C. Emmons, commanding the First Wing, General Headquarters Air Force, alighted at 3:00 p.m. on August 8th at Gray Field, Fort Lewis, Washington, from the B-18 Army Bombardment plane in which he had flown from his headquarters at March Field, Calif. Upon his arrival, General Emmons was greeted by Governor Clarence D. Martin, of the State of Washington; Major General Walter C. Sweeney, commanding Fort Lewis and the 3rd Division, and many other civil and military dignitaries assembled at the flying field to welcome officially the General and his command to the Northwest. An eleven-gun salute was fired upon the General's arrival by a battery of 75 mm. guns from the 10th Field Artillery.

The airplanes of the First Wing, GHQ Air Force, began taking off from their stations at March and Hamilton Fields, California, at 6:20 o'clock on the morning of August 8th, with the first units, belonging to the 19th Bombardment Group, under the command of Lieut. Colonel H.A. Burwell, Air Corps, arriving at Fort Lewis from March Field shortly before 12:00 noon. The remaining elements of the First Wing continued to arrive in groups of three or four planes throughout the afternoon. All planes of the organization assembled at Gray Field at 4:00 p.m.

The organizations arriving at Gray Field during the day consisted of the First Wing Headquarters and Headquarters Squadron, the 38th Reconnaissance Squadron, the 88th Reconnaissance Squadron, and the 19th Bombardment Group. Approximately 300 officers and men and 40 airplanes were involved in the movement, each plane carrying a crew of two officers and nine enlisted men. The pilots reported good weather from California.

While at Fort Lewis, the planes will carry on extensive maneuvers, including long and short range reconnaissance problems and bombing demonstrations. The first exercise, scheduled for the morning of August 9th, was to consist of a reconnaissance of principal cities and airdromes within the operating area. Twenty B-18 type planes, under the command of Lieut. Colonel H.A. Burwell, were slated to take off from Gray Field at 9:30 a.m., on August 9th, on the reconnaissance, the route of the flight being Tacoma, Washington; Olympia, Washington; Vancouver, Washington; Portland, Oregon; Pendleton, Oregon; Walla Walla, Spokane, Ellensburg, Seattle, Bremerton and Tacoma, Washington, and Gray Field. The total distance involved was estimated at about 750 miles.

Colonel Burwell announced that the planes would fly in formation over each of the cities on their itinerary.

A PROMOTION FOR MAJOR CARL A. COVER

Announcement was recently made by Mr. Donald W. Douglas, President of the Douglas Aircraft Company, Inc., Santa Monica, Calif., of the advancement of Major Carl Cover, Director of Sales and Chief Pilot of the Company, to the position of Senior Vice President, formerly held by the late Harry H. Wetzel.

In announcing Major Cover's elevation to his new post, Mr. Douglas stated that his company is fortunate in having among its executives a man of the ability and experience of Major Cover, and he added: "In the air or in the shop, no man knows more about planes than Major Cover."

Carl Cover, who holds a commission as Major, Specialist Reserve, has instructed Army instructors during the War, and subsequently had charge of inspection, assembly and repair of Army aircraft at the various Army posts in the United States and in Hawaii.

Rivaling in importance the steady production of Bombardment airplanes by the Douglas Company have been the flight tests of the world-famous DC-4 airplane, now universally recognized as one outstanding example of four-engined land airplanes. All through the months of June and July, the plane was subjected to severe scientific tests under the personal piloting and direction of Major Cover. These tests have been declared by Arthur E. Raymond, Chief Engineer, highly satisfactory.

Major Cover, who entered the Army during the World War, being commissioned a second lieutenant in the Air Service, National Army, on June 22, 1918, resigned from the service on February 4, 1930, for the purpose of entering the field of commercial aviation. He was considered one of the outstanding engineering officers of the Air Corps. Particularly successful as an organizer and as an executive, he displayed remarkable ability in training personnel along mechanical and industrial lines.

His total flying time, both in military and commercial aviation, has by now probably passed the 6,000-hour mark.

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The Los Angeles Municipal Airport is being improved at the present time to the extent of \$450,000 under WPA with additional sewer lines, improvement of the main east-west runway to a length of 4700 feet by 300 feet wide, and the installation of flush type lights.

Grading and drainage work is also involved in this 4-month program, which will keep 1,500 men employed.

Arrangements for the establishment of a radio range beacon for airway control at this airport are under way. This will be located approximately one mile east of the northeast corner of the field.

V-7816, A.C.

J U S T A M E M O R Y

Five years ago, on the evening of August 27, 1933, Captain Ernest E. Harmon, Air Corps, of the 9th Bombardment Group, Mitchel Field, L.I., New York, was killed when the airplane he was piloting crashed during the course of a night flight from Easton, Md., to Mitchel Field. All indications pointed to the fact that, encountering a fog during the course of his flight, he remained aloft until his fuel supply became exhausted, and he then jumped with his parachute, since his body was found quite some distance from the wrecked plane.

A reader of the Air Corps News Letter submitted the tribute to the deceased officer which is given below. He states he is a former enlisted man who was stationed at Mitchel Field and who had the pleasure and opportunity of working with Captain Harmon at various times and considered him a personal friend. He adds that he discovered this literary effort just recently while going through some of his papers, and expresses the thought that its publication at this time will serve to bring back to mind one of the finest officers he had had occasion to meet in his eight years in the Air Corps - rough and ready "Tiny," - whose friends in the Air Corps and other branches of the service, as well as in civil life, were legion.

Retrospect

"Tiny," old friend, I wish that you knew
How all the boys at the field miss you,
Your booming voice and your happy smile,
Your glad "Hello" to both rank and file,
Your outstretched hand and encouraging
word

And an optimism so undeterred,
But the one thing we can ne'er replace
Is that boyish grin upon your face.

And I'll wager, if only us mortals could
see,
That you're leading the Flight in
Eternity.

- William Joseph Collins,
Schenectady, N.Y.

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Announcement was recently made by the Acting Secretary of War, the Honorable Louis Johnson, that airplanes of the GHQ Air Force would be sent to Los Angeles, Calif., in September, in order to participate in the American Legion National Convention Parade to be held there on September 20, 1938.

Colonel Johnson is Past National Commander of the American Legion, serving as the head of this organization in 1932.

BOY SCOUTS ENJOY BREEZE FROM PROPELLERS

The personnel of Selfridge Field, Mich., especially 2nd Lieuts. Harold E. Kofahl and Clinton C. Wasem, Air Res., were highly complimented by the Port Huron TIMES-HERALD for the splendid treatment they accorded the Port Huron Boy Scouts upon their visit to the Air Corps field on August 4th.

The Boy Scouts were conducted on a tour of Selfridge Field by Lieuts. Kofahl and Wasem, and later they were taken to the Picnic House on the lake where they ate their lunches. The Scouts had a fine time watching the planes, and it being a very hot day they took great delight in standing back where the breeze from the propellers would cool them off.

The Boy Scouts were loud in their praise of Colonel Henry B. Clagett, the Selfridge Air Base Commander; Lieuts. Kofahl and Wasem, and Bob Winslow, Past President of the Kiwanis Club of Mount Clemens, who made arrangements with Colonel Clagett for their visit to the field.

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Depot Supply of the San Antonio Air Depot (Continued from Page 6).

property account is administered. Yes, altogether, it was a big year for the Depot Supply Department of the San Antonio Air Depot.

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Enlisted Men to Study Communications (Continued from Page 7)

Transport Squadron, Middletown Air Depot, Middletown, Pa.

Privates Clifford W. Kropp, Kenneth W. Bradd, Melvin C. Staerk and Private 1st Class Artie J. Adkins, all of the 3rd Observation Squadron, Langley Field, Va.

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Major Crumrine (From Page 10).

Airplane Pilot and Airplane Observer. He holds the Distinguished Flying Cross for his participation in 1920 in the flight of Army planes from New York to Nome, Alaska, and return to Washington, D.C.

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Selfridge Field, Mich., was highly honored and pleased Tuesday, August 9th, when, with little or no advance information, Major General Frank M. Andrews, GHQ Air Force Commander, dropped out of a clear sky and landed onto the field. General Andrews' visit, however, was not an official one, and, after a brief stop for refueling his plane, the General proceeded to Chanute Field, Rantoul, Ill. General Andrews was flying a Douglas C-32. V-7816, A.C.

Langley Field, Va., August 3, 1938.

96th Bombardment Squadron: B-17 #60 was utilized for a series of special tests with the N.A.C.A. for the past three weeks.

Major George attended a board meeting on the Fort Bragg maneuvers at Fort Bragg recently.

All the Reserve officers in the Squadron were relieved from all duties in order to attend the school to prepare for the examination for Regular commissions.

Lieut. Douglass, Air Reserve, joined the Squadron for two weeks' training.

During the past two weeks, Lieut. Hall, of the Department of Commerce, was attached for familiarization training on the B-17.

Second Lieut. R.L. Waldron was promoted to 1st Lieut. Privates Fullam and H.A. Smith were promoted to Private 1st Class.

49th Bombardment Squadron: Since the first of the year, the Squadron has been conducting experimental training of bombardiers with the enlisted aerial armorers. Staff Sgt. Chaput, who is already an Expert Aerial Bombardier, has been training Privates, 1st Class, Mahler and Zamorsky. The progress has been excellent.

First Lieut. Thomas L. Mosley departed for Inglewood, Calif., to secure delivery on the first of the BC-1's which are due the Squadron.

Second Lieut. John B. Montgomery was runner-up in the Chamberlain Country Club golf championship. He came from behind to square the match on the 17th, but the 49th's plucky little champion lost on the 18th. Better luck next time, "Monty."

20th Bombardment Squadron: With four Reserve officers relieved of all squadron duties while they are preparing for regular commissions, and two officers assigned to the Group Navigation School, the Squadron is very much hindered in its operation by an extreme shortage of officer personnel.

Private F.T. Hill was promoted to Private, Specialist 6th Class.

Hqrs. and Hqrs. Sqdn., 2nd Bomb. Group: The following-named officers were assigned to this Squadron during the past month: Majors H.G. Crocker, T.J. Koenig and W.C. Goldsborough, and 2nd Lieut. J.N. Bell.

Privates 1st Class Walsh and Madenfort were appointed 4th Class Specialists.

36th Pursuit Squadron: The personnel roster of the 36th has undergone several changes during the past two weeks. Captain Rich, late of Maxwell Field, joined the organization and soon will take over the responsible duties of Flight Commander. He will replace Lieut. Fowel, who was with us a brief period.

Early in July Lieuts. Stewart, Sakowski, Wells, Wallace and Wenrick reported from the Training Center. They have completed a large part of the preliminary training, which includes transition to combat type planes, and orientation flights within a 200-mile radius. As men, they are well met, and as officers they bid fair to maintain the high spirit of the organization.

Our combat crews suffered the loss of a gunner upon the termination of the enlistment of Private Teliczan. In turn, Private 1st Class

Corinchock transferred in from the Materiel Section, Air Base, and Private Hoopes from the Security Section, Air Base.

35th Pursuit Squadron: The new additions to the Squadron, Lieuts. Lewis, Lydon, Ramage and Meyers, are piloting the PB-2A's like veterans of old. They are always on the alert and willing to take off at a moment's notice. We congratulate them on their successful debut and wish them further luck.

We are proud to say that only a few errors have been found within our organization by the Technical Inspectors. We are very confident that the inspectors will not find a single mistake the next time they come around.

Hqrs. and Hqrs. Sqdn., 8th Pursuit Group: Captain (Gone-again) J.E. Bodle, charter member of the Headquarters & Headquarters Squadron, is now rendering able service to the 33d Pursuit Squadron as Flight Commander. Captain Stuart G. McLennan has taken over command of this Squadron since the departure of Captain Bodle.

Kelly Field, Texas, August 5th.

Colonel Eugene A. Lohman, Assistant Commandant of the Advanced Flying School, accompanied by Mrs. Lohman and their son ("Sandy"), left Kelly Field on August 3rd for a month's leave of absence. While on leave they plan making a leisure motor trip to California and return.

Four student officers of Class 38-C, now undergoing training at the Advanced Flying School, bade farewell to their bachelor days and joined the ranks of the Benedicts, namely:

Second Lieut. Harry F. van Leuven married Elizabeth Earle ("Betty") Dean, daughter of Colonel and Mrs. Elmer Anderson Dean, at the home of the bride's parents, on July 8th. The wedding was followed by a reception at the Officers' Club at Fort Sam Houston, Texas.

Second Lieut. Jack N. Donohew was married on July 2nd to Miss Dorothy Harman, daughter of Mr. and Mrs. K.G. Harman, of Columbia, Mo. The marriage took place at the Alpha Phi Sorority House in Columbia.

Second Lieut. Wilbur H. Stratton was married on July 22nd to Miss Maribelle Farrell, daughter of Mr. and Mrs. William Thomas Farrell, the ceremony taking place at the Randolph Field Post Chapel.

Second Lieut. Robert Taylor, 3rd, was married on August 5th to Miss Nancy Blackburn, the daughter of Mr. and Mrs. M.S. Blackburn.

Maxwell Field, Ala., August 5th.

Regular Army routine cross-country flights and ferry flights were a bit off for the month of July. A number of airplanes of the National Guard and Organized Reserves were cleared through Maxwell Field to gunnery practice at Eglin Field, Fla., and to the Third Army Maneuver Area in Mississippi.

Major Muir S. Fairchild, Instructor of the Air Force Section of the Tactical School, returned on August 3rd from a tour of the principal aircraft factories of the West Coast and the New England Section. Major Fairchild was

at one time an inspector at the Douglas Factory, and we are sure that he had an interesting and instructive trip.

San Antonio Air Depot, Duncan Field, Texas.

Among recent visitors at the Depot were Majors E.R. Page and J.P. Richter, of the Experimental Engineering Section, Materiel Division, Wright Field, July 21st, participating in a routine navigation flight of the giant XB-15 Bomber from Wright Field to Kelly Field and return; Lieut. J.W. Persons, of Bolling Field, July 20-22, cross-country in a BC-1; Lieut. Edward Garbacz, of the Arkansas National Guard Air Corps, Little Rock, July 22nd, flying an O-38; Captain D.J. Ellinger (formerly Operations Officer at this Depot) passing through and greeting old friends, July 26th, enroute to his new station, Fort Sill, from graduation from the Air Corps Tactical School, Maxwell Field.

Major J.M. Clark, Depot Supply Officer, and Principal Storekeeper B.E. Edwards, took off on August 4th by air for Scott Field and the Materiel Division, Wright Field, to confer on the removal of Air Corps supplies from the Scott Field Air Depot to this Depot.

On August 6th, the Depot was pleased to receive a visit from Brigadier General A.W. Robins, Chief of the Materiel Division, Wright Field, accompanied by Lieut. Colonel O.P. Echols, Major B.E. Meyers and Captain C.S. Irvine, of the Materiel Division, who arrived at Kelly Field on the night of August 5th in a B-18. After a conference on Air Corps materiel matters, they returned to Wright Field. Colonel J.W.S. Wuest, Commanding Officer of the Middletown Air Depot, and Lieut. I.W. Ott, of that Depot, paid a visit here August 5-6, enroute in a B-10 to the West Coast.

Luke Field, T.H., July 25th.

31st Bombardment Squadron: The Squadron is proud of its outstanding ball player, Pfc. L.L. Liston, better known as "Cinch," due, of course, to his manner of performance at the mess table. At this writing, Liston is leading the Luke Field post baseball team in hitting and is doing a commendable job at second base.

50th Reconnaissance Squadron: On July 1st, the armament section left Luke Field for Bellows Field at Waimanalo, in order to prepare for a two weeks' gunnery camp. On the 5th, the remainder of the Squadron moved to our temporary base by plane and truck convoy.

Pistol firing and ground machine gunnery occupied most of the time. Aerial gunnery was also on the program. A simulated gas attack was worked out effectively, and the entire camp performed their assigned duties in a fine manner.

On Thursday, July 14th, we held organization day. Old Sol failed us the early part of the day, and everything but our spirits was dampened. Keenly contested games of softball and volleyball were played between officers, privates first class and noncommissioned officers and privates. The event of the day was the finals of the horseshow pitching contest. Staff Sergeant Richards took the measure of Private Arnold, and was \$2.00 richer.

72nd Bombardment Squadron: The REPUBLIC sailing for San Francisco took several men back to the mainland and home, among them Privates Creel, Bishop and Yandle; also Sergeant Helle, of the Signal Corps, who was attached to the Squadron.

The Squadron was scheduled to go to Bellows Field on August 1st for two weeks' field training. This is an annual event to which all men look forward, as it is a break from the monotony of garrison training. There is always a great deal of athletics, such as swimming, softball and volleyball.

The Squadron participated in an Aloha Flight for General Yount and Colonel Harmon, who departed for the mainland on the REPUBLIC.

Base Hqrs. and 17th Air Base Squadron: When the Army Transport REPUBLIC rounded Diamond Head enroute to the mainland there were on board the following men of this organization, who completed their tour of duty in the Paradise Isles, viz: Staff Sgt. Peckham, Corporal Sanders, Privates 1st Class Beck, Sanson, Moore, Peters, Privates Blair, Leimbach, S.E. Williams, Alexander and Stevens. To these men the Squadron extends heartiest Alohas and wishes them success in future life.

Selfridge Field, Mt. Clemens, Mich., Aug. 13.

Colonel Henry B. Clagett, Captain George McCoy, Jr., and 1st Lieut. Roland O.S. Akre returned this week from the plant of the North American Aviation, Inglewood, Calif., ferrying three new BC-1's for the Base Flight Section. These airplanes, together with two recently ferried by Major Lawrence P. Hickey and Major Harold H. George, give this station five airplanes of this type.

Private Robert F. Nelson, Base Hqrs. and 3rd Air Base Squadron; Private 1st Class John F. Rohloff and Private Harland C. Stone, 94th Pursuit Squadron, were selected by the Examining Board to pursue a course of instruction at the West Point Preparatory School at Fort Sheridan Ill., and are to report to the Commandant of the School not later than September 12th.

Eight officers and 17 enlisted men temporarily suspended their duties with the 17th Pursuit Squadron on August 8th and were attached to the 27th Pursuit Squadron in order to prepare for and participate in the anti-aircraft maneuvers at Fort Bragg, N.C., during October. The remaining officers in the 17th Squadron are privileged in being able to carry on the normal program, due to a sufficient number of aircraft and other equipment. During the latter part of the week the last of the eleven necessary changes in engines within the Squadron will have been accomplished.

Second Lieut. Richard V. Black, Infantry Reserve, flew to Selfridge Field on August 3rd from Perkinstown, Wisconsin, to visit his brother, Corporal Gilbert W. Black, who has been stationed here for the past five years. Lieut. Black was flying his own plane, and came across Lake Michigan, stopping at Grand Rapids, where he resides. After a brief stay, Lieut. Black took off the next day on the return trip to Perkinstown, where he is on active duty with the CCC.

KEEPING FIT

Selfridge Field At the annual Officers' Club Golf Tournament held recently, honors went to the 94th Pursuit Squadron.

In the semi finals, Lieut. Hughes, of Headquarters, won from Captain Allison of the 17th, one up in 19 holes. Lieut. Nichols of the 94th won from Lieut. Anderson, also of the 94th, one up. In the finals, Lieut. Nichols won from Lieut. Hughes, 4 up and 3 to play in 30 holes. Major Lawrence P. Hickey, the new commander of the 1st Pursuit Group, defeated last year's champion, Captain Finch. Later, however, he was on the West Coast and was forced to default.

Corporal Gilbert W. Black, of Base Hqrs. and 3rd Air Base Squadron, Selfridge Field's leading boxing contender, won by a knockout in the second round of a six-round bout at Mack Park, Detroit, on the night of August 8th, as a result of which he is billed to enter the ring again on August 22nd to make a bid for the State Featherweight Title. Black has a very fine record back of him, having won the Golden Gloves twice.

Luke Field When it comes to making a big splash in inter-squadron athletics, the 23rd Bombardment Squadron has not been a world beater, but it has contributed some very valuable men to the Luke Field post teams and the Honolulu Sector teams.

When the Luke Field basketball team completed the season as both Department and Sector champions, it utilized the services of three members of the 23rd - Corporal Logan, Pvts. 1st Cl. Roberts and Lively, J.L., all of whom were a big help in obtaining the trophies. Corporal Logan was selected as All Department Guard.

When the Sector track team needed a discus and shot put artist they chose Pvt. J.C. Reichal, who performed in great style. He was not to outshine his Squadron mate, however, Pvt. Gallup, who held down a berth in the 100-yard dash.

With the baseball season in full swing, the Luke Field post team is doing a nice job of batting them out under the direction of Corporal George A. Heard, also from the 23rd.

Inter-Squadron swimming is now in progress, and the 23rd is really "in the swim." The Squadron got off to a rather bad start, but is finishing in the top bracket. Several of the members of the squadron team will be used on the post swimming team.

Even though the 23rd Squadron was not the individual ranking organization in athletics, it was the chief recruiting station for the winning post teams. Therefore, we might say: "What would Luke Field do without the 23rd Bombardment Squadron?"

Nichols Field Bowlers at the field tuned up their trusty arms in preparation for the post ten pin tournament commencing July 18th. All matches were to be rolled on the flying field's bowling alleys in the recreation building. The alleys were recently renovated, and a red hot, closely contested tournament is anticipated.

The 20th Air Base, 2nd Observation and 3rd Pursuit Squadrons are to enter teams in the

League. Each team is to consist of 5 regulars and 3 alternates, games to start at 1:00 p.m. The League standings are to be determined by the number of games won and lost.

The winning team is to be awarded a trophy, which at the present time is in the possession of the 20th Air Base Squadron. This trophy will become the permanent possession of the team winning the post championship three consecutive years. If no team has three consecutive winnings when the trophy has been fully covered with engravings of the winning teams, it will be awarded the team with the greatest number of victories. In addition to this trophy, six individual medals are to be awarded to the members of the winning team. Individual medals will also be awarded to the contestant making the highest average during the tournament, the highest triple and the highest single game.

The high single medal was won last year by Pvt. William Sherwood, 20th Air Base Squadron, with a score of 278. First Lieut. Harry N. Burkhalter, Jr., 2nd Observation Squadron, won the high triple in 1937, with 634. Lieut. Burkhalter and Pvt. Sherwood are still on duty at Nichols Field, and hope to better their performances of last year. The tournament is to be supervised by 1st Lieut. Ralph O. Brownfield, Nichols Field Recreation Officer.

Langley Field The GHQ Squadron baseball team, winners of the recent inter-organization championship play at Langley Field, were honored by members of their Squadron at luncheon at the Squadron dining room on July 23rd. Colonel W.R. Frank complimented the team on its showing and cited Nelson Keyser pitcher from Mitchell Field, who paced his team to the title. The Squadron presented a cup to Elmer Martin, center fielder and manager. Other officers present included Majors William Dick, Adjutant General of the GHQ Air Force; Clyde Finter, commanding officer of the Headquarters Squadron, and 2nd Lieut. Douglas Williams, Mess Officer.

The Langley Field post baseball team opened their away-from-home and at-home campaign on July 30th and 31st, losing Saturday's Norfolk event to the Naval Training Station, 6 to 3, and winning Sunday's home game from the Blue Devils of Norfolk, 3 to 2. Johnny "Vinx" Crapp, of the Administrative Section, striving for his initial win of the current season, allowed the visitors seven well scattered hits. Machen, his opponent, granted the locals but three hits. A smashing triple by "Polak" Maksmyk in the 8th inning, scoring Adams, who got on through an error, gave the locals the one run advantage. A threatening rally by the Blue Devils in the fifth was limited to but one run when pegs from the outfield by Maksmyk and Adams to Marshall at the home plate nipped runners trying to score.

In Saturday's game, Jolley, the Norfolk twirler, had the first seven airmen swatting the old apple in such a manner that his teammates hardly had to shift positions to gather in the long driven slams. Langley had the bases filled in the third by virtue of two singles and an error, after two men were out,

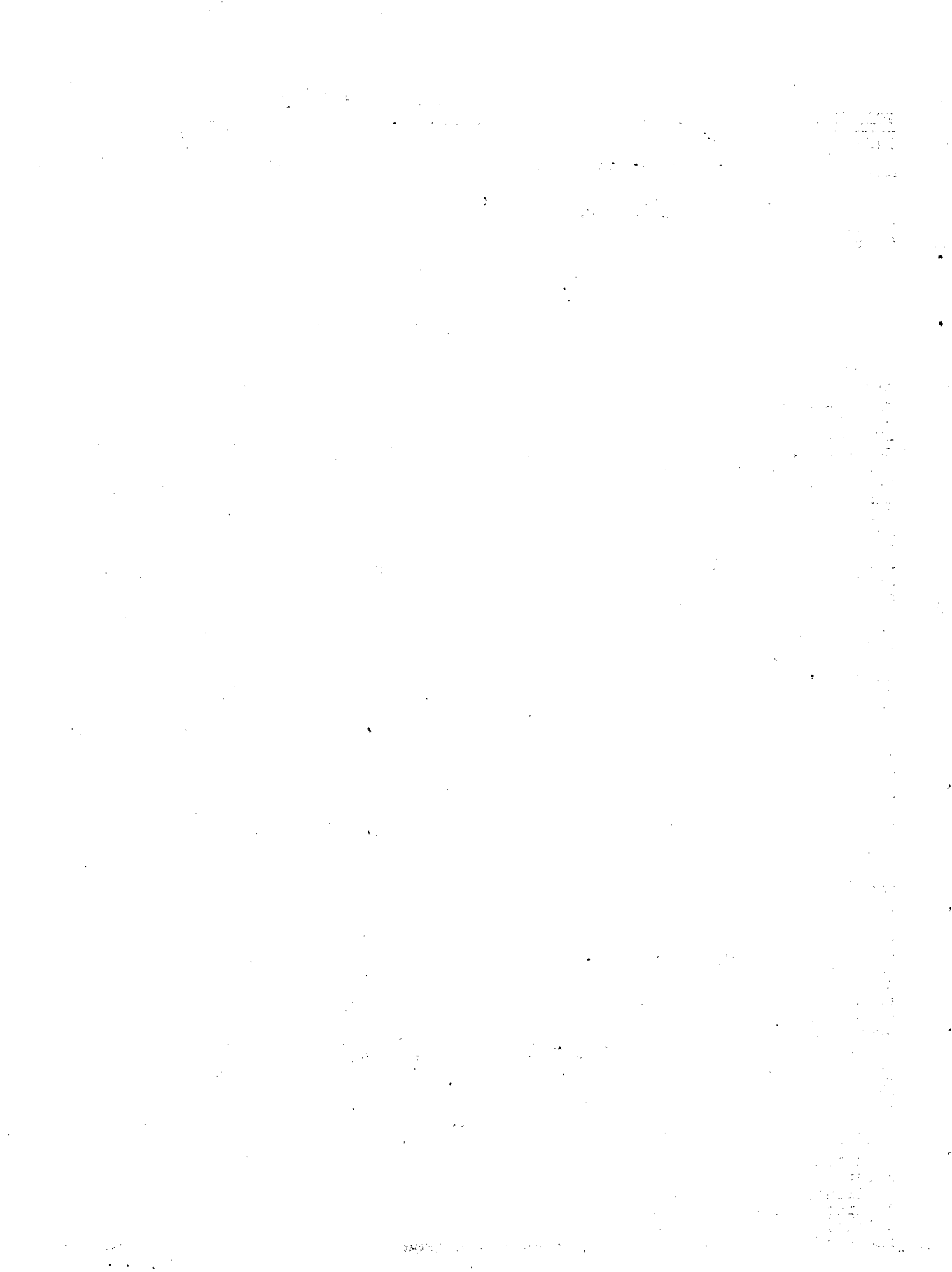
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Information Division
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September 1, 1938

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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PRESIDENT ROOSEVELT VISITS DEFENSE ESTABLISHMENTS IN PANAMA

By Captain Robert F. Tate, Air Corps

Brown from cruising and fishing in tropical waters, President Roosevelt, appearing in the best of health and spirits, made a tour of inspection of both Army and Navy defense establishments of the Panama Atlantic Sector on August 5th.

Welcomed into Balboa harbor the previous day by Pursuit, Attack and Bombardment planes of the 19th Wing, the President boarded a special train of the Panama Railroad early in the afternoon of August 5th. With him, in addition to his own party, traveled President Juan Demostenes Arosemena, of the Republic of Panama; Colonel Clarence S. Ridley, Governor of the Panama Canal, and many senior Department Naval and Military officers. Arriving in Cristobal at 4:15 p.m., the President and his party were whisked away by a caravan of cars, ably protected by Chief Calloway's motorcycle patrolmen.

I wish to leave Mr. President enroute to France Field while we tell of the neat planning that preceded his visit. The entire route to be traversed was gone over in detail, not once but several times, to establish a reliable speed and timing for the tour. Commanding officers were made conversant with the expected time of arrival, honors to be rendered, formations expected of troops, and the routes through their respective posts.

The foregoing paragraph is injected rather tritely to prove that a properly planned event, even as auspicious as a Presidential visit, may go off with a minimum of flurry and a measured precision nothing short of perfection. Airplanes of France Field returning from a Group tactical mission flew over the Presidential party just as it boarded the train on the Pacific side, yet there was ample time to land, line up the planes, eat a late lunch, dress, and be in review formation by 4:35 p.m.

At exactly 4:35 p.m., the Presidential car arrived at the France Field gate. Flourishes, "To the Color" and a 21-gun salute preceded the greeting and welcome by Lieut. Colonel William O. Butler, commanding officer, France Field, and Colonel Fred H. Coleman, commanding officer of the Panama Air Depot. Both

were invited into the President's car, and the procession moved on down the main road through two lines of the "Guard of Honor" at salute, and turned left to the airdrome. Here the remainder of the troops of the 6th Bombardment Group, augmented by those of the Panama Air Depot, were formed in front of the line of airplanes in group review formation. The President trooped the line both down and back as the troops remained at "present arms," and then followed a course through the quarters and barracks areas and back to the gate.

Here occurred one of those things worthy of relating. As Lieut. Colonel Butler and Colonel Coleman left the car, the latter said: "Mr. President, if I am not speaking out of turn, would you mind delivering my warm personal greetings to Colonel Watson, your military aide? I haven't seen him in many years."

To which the President replied with a smile: "Step back to the car just behind us, Colonel, and give them yourself. We are in no big hurry."

And so in a few moments, with a friendly smile, a wave of the hand, he was on his way, with the blaring of bugles and booming of gun.

The President's itinerary included the Fleet Air Base, Submarine Base, Fort Randolph, Fort Davis and then to the locks at Gatun, there to board the "Houston."

It was on his way back from Fort Randolph, enroute to Fort Favis, on the public road past France Field that a memorable incident occurred. All of the France Field soldiers had been marched back to barracks and dismissed. On talking it over, the consensus of opinion was that none had really seen the President at all, what with the fleeting glimpse they were able to register while standing at rigid attention. And so out to the railroad tracks lining the Randolph road went six hundred soldiers to catch a "real look" - not an officer in sight. Would our previous show of discipline be ruined? The President's car came abreast at a goodly clip. Six hundred soldiers came to uncommanded salutes, and as the right flank was passed, spon-

taneously and as one man they uncovered and gave a deafening cheer. Mr. Roosevelt looked back, vigorously waved his hat in acknowledgment and was still waving it as his car passed out of sight.

Mr. Roosevelt may forget that the 7th Squadron hangar was under repair on August 5, 1938; he may forget the really excellent flying done on his behalf; he may even forget that the troops looked unusually snappy standing formation in sun helmets for the first time, but I believe the spontaneous burst of approving cheers from the throats of six hundred France Field soldiers touched a note that he will remember.

At any rate, Mr. President, we enjoyed your visit and were honored by it. We give you best wishes and renew our pledge of everlasting loyalty to our Commander-in-Chief.

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AERIAL REVIEW FOR THE PRESIDENT

On August 4th, at 1:00 p.m., the entire 19th Wing passed in review on the port beam of the Cruiser U.S.S. HOUSTON, as she steamed into the Pacific entrance of the Panama Canal. Aboard her was the President of the United States, returning from a vacation cruise in the vicinity of the Galapagos Islands.

For two days the President and his party remained on the Isthmus, crossing to the Atlantic side by train on August 5th. Brigadier General George H. Brett, Commander of the 19th Wing, was among those officials selected to accompany the President on automobile tours of inspection during his visit.

On the evening of August 5th, the President boarded the HOUSTON at Gatun Locks, and the Cruiser steamed out through Colon Breakwater on her journey home.

According to statements issued to the press, President Roosevelt was entirely pleased with Army and Navy activities within the Canal Zone.

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BOGOTA FLIGHT LANDS AT FRANCE FIELD

The flight of three Boeing B-17's which visited Bogota, Colombia, during the inaugural ceremonies of President Eduardo Santos, landed at France Field, Panama Canal Zone, at 12:50 p.m., on August 9th on their return flight to the States. The distance of 680 miles between Bogota and France Field was covered at an average speed of 207 miles an hour, the elapsed time being three hours and seventeen minutes.

The Bombing planes remained on the Isthmus for two days, several of the officers of the flight visiting both Air Corps posts in the Panama Canal Department. With Miami as their first stop, the planes took off early on August 11th.

PERSONNEL CHANGES AT ALBROOK FIELD

Lieut. Colonel Willis H. Hale, Air Corps, assumed command of Albrook Field, Panama Canal Zone, on July 11th, succeeding Lieut. Colonel Benjamin G. Weir, who was assigned as Executive Officer of the 19th Wing.

The following changes in the assignment of commissioned personnel at Albrook Field took effect on July 20th:

To the 15th Air Base Squadron: Captain Manning E. Tillery, from Base Headquarters; 1st Lieut. Robert O. Cork, from the 74th Attack Squadron; 2nd Lieut. William W. Jones, from the 29th Pursuit Squadron; 2nd Lieut. George P. Champion, from the 74th Attack Squadron; 2nd Lieut. Frank W. Gillespie, from the 24th Pursuit Squadron.

To the 74th Attack Squadron: Captain Edgar A. Sirmyer, from the 15th Air Base Squadron, and to assume command; 1st Lieut. Kenneth R. Crosher, from Headquarters, 16th Pursuit Group; Cyrus W. Kitchens, Jr. (Air Reserve) from the 15th Air Base Squadron.

To the 24th Pursuit Squadron: 1st Lieut. Stephen B. Mack, from the 15th Air Base Squadron; 2nd Lieut. Joseph H. Paul, Air Reserve, from 15th Air Base Squadron.

To the 29th Pursuit Squadron: 1st Lieut. Charles B. Winkle, from Base Headquarters; 2nd Lieut. Sam Maddux, Jr., from the 24th Pursuit Squadron.

To Headquarters, 16th Pursuit Group: 1st Lieut. Millard Lewis, from the 24th Pursuit Squadron.

To 44th Reconnaissance Squadron: 1st Lieut. Edward H. Underhill, from the command of the 24th Pursuit Squadron.

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METEOROLOGICAL TRAINING FOR ENLISTED MEN

The following-named enlisted men of the Air Corps will be sent, without loss of grade or rating, by military aircraft if practicable, otherwise by rail, to the Air Corps Weather School, Patterson Field, Fairfield, Ohio, to report not later than September 12, 1938, for the forecasters course, commencing on that date:

First Weather Region

Corporal Lynn H. Robson and Private First Class Jacob Follmer, from Hamilton Field, Calif.

Private First Class Edward O. Smith, Gray Field, Fort Lewis, Wash.

Private First Class Patrick C. Orum, March Field, Calif.

Second Weather Region

Master Sergeant Frederick A. Matchinski, Langley Field, Va.

Staff Sergeant Louis D. Laurin, Sergeants Walter Pikula and John A. Kapral, from Patterson Field, Ohio.

(Continued on Page 3).

30-TON BOMBER REACHES LANGLEY FIELD

The GHQ Air Force acquired a new and formidable weapon of the air on the morning of August 6th, when a B-15 four-engined Bomber was delivered to the 2nd Bombardment Group at Langley Field, Va.

This mighty leviathan of the air is the newest and largest Bombardment airplane now possessed by the United States Army Air Corps and has a wing spread of over 150 feet, with a weight of 30 tons, and is similar in many respects to the well known B-17's, popularly called "Flying Fortresses."

The B-15 is equipped with four 1,000-horsepower engines, six machine gun placements, a refrigeration plant, toilet facilities and a kitchenette. While information regarding its top speed has not been released, it is described as "the most powerful fighting ship in the world."

The B-15 was delivered to Langley Field by a crew of the Second Bombardment Group, who spent some time at Wright Field, Ohio, familiarizing themselves with the latest army Bomber. Under the command of Lieut. Colonel Olds, the group left Wright Field early on the morning of August 6th.

Others in the crew included Major Edwin R. McReynolds, engineer pilot; Captain Robert F. Travis, navigator; Staff Sergeants James H. Boyles, William J. Heldt, Harry L. Hines, David L. Spicer, John Piper and Sergeant Avrill Foreman, mechanics, and Private 1st Class William A. Bristol, radio operator.

Upon arrival at the Peninsula airdrome at 11:24 o'clock, the crew of the ship was greeted by various high ranking Army officers, who proceeded to inspect the latest and most modern Bomber.

The B-15 exemplifies the tremendous strides made by the aeronautical industry and the engineers of the Army Air Corps in the design and construction of the most efficient fighting unit in the world.

Little imagination is required to visualize what a potent weapon a fleet of these modern flying fortresses would be in the defense of the United States.

Colonel Olds and the crew expressed themselves as highly pleased with the performance of the plane on the flight from Wright Field.

It was announced at Langley Field that the B-15 would be placed in service along with the B-17's, three of which recently returned from a "good will" flight to Bogota, Colombia, South America.

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During July, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled 13 airplanes and 67 engines, and repaired 46 airplanes and 22 engines.

CONSTRUCTION STARTS AT CHANUTE FIELD

Excavating for the foundations of new buildings to be constructed at Chanute Field, Rantoul, Ill., is progressing rapidly. To date, contracts have been closed for the foundations only of two school hangars, an Air Corps warehouse, a Quartermaster warehouse, and the Noncommissioned Officers' Quarters. As plans are completed and bids received, contracts will be let for other foundations and super-structures. Thus far, three contractors have been awarded contracts. The Illinois Central Railroad has completed the spur track necessary to serve the field at its new location.

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BASIC COMBAT PLANES FOR CHANUTE FIELD

Four new basic combat airplanes were recently received at Chanute Field, Rantoul, Ill. Captain George H. Steel, Lieuts. Albert Boyd, Franklin S. Henley and O.E. Henderson made the trip to the factory of the North American Aviation, Inc., at Inglewood, Calif., to ferry these planes to the field.

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Meteorological Training for Enlisted Men (Continued from Page 2)

Sergeant Ambrose L. Koering, Fort Knox, Ky.
Sergeant Stephen H. Martonak, Fort Benning, Ga.
Corporal Franklin P. Finnicum, Middletown Air Depot, Pa.
Corporal Richard H. Miller, Selfridge Field, Mich.
Corporal Linden R. Shoemaker, Aberdeen Proving Ground, Md.
Corporal Carl E. Wagner, Chanute Field, Ill.
Private Oscar H. True, Scott Field, Ill.
Private First Class George R. Mills, Mitchel Field, N.Y.

Third Weather Region

Sergeant Laurier LaMontagne, Dryden, Texas.
Sergeant Henry L. Watters and Private First Class Albert P.H. Heck, Barksdale Field, La.
Corporal August W. Throgmorton, Randolph Field, Texas.
Private First Class Thomas C. Cobb, Jr., Kelly Field, Texas.
Private First Class Odell J. Harrison, Hensley Field, Texas.
Private First Class Albert J. Wilber, Fort Leavenworth, Kansas.
Private First Class Harold W. Zercher, Jr., Maxwell Field, Ala.
Private First Class William E. Zimmerman, Fort Riley, Kansas.

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GENERAL OFFICERS INSPECT KELLY FIELD

Brigadier General George C. Marshall, Chief of the War Plans Division of the War Department General Staff, and Major General Frank M. Andrews, commanding the GHQ Air Force, while making a tour of Air Corps stations, arrived at the Air Corps Training Center on August 16th and paid a visit to Kelly Field on the morning of the 17th, during which an inspection of the post was made. After lunching at the Officers' Club, they departed for Randolph Field, via Duncan Field - where they spent a short time.

Brigadier General Barton K. Yount, Commanding General of the Air Corps Training Center, accompanied by Major John R. Morgan, Air Corps, visited Kelly Field on the morning of August 16th. While at Kelly Field, General Yount, accompanied by Colonel Frank D. Lackland, Commandant of the Air Corps Advanced Flying School, inspected various activities, including the Cadet Detachment barracks, Attack, Bombardment, Observation and Pursuit Sections, and the starting of the new construction project at the Advanced Flying School.

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NEW OFFICER PERSONNEL AT KELLY FIELD

The following-named Air Corps officers recently reported at the Advanced Flying School at Kelly Field, Texas, and were assigned to organizations or duties as indicated:

Captain James F. Phillips, Station Inspector.

Captain Elmer T. Rundquist, Squadron Commander, 61st School Squadron.

First Lieut. Lloyd H. Tull, Mess, Supply, Parachute, and Assistant Armament and Ordnance Officer of the 12th Air Base Squadron.

First Lieuts. Dyke F. Meyer, Earl F. Signer and 2nd Lieut. Wilbur W. Aring, Flying Instructors, Pursuit Section.

First Lieuts. Richard E. Ellsworth and Kurt M. Landon, Flying Instructors, Attack Section.

First Lieut. William J. Holzapfel, Flying Instructor, Observation Section.

First Lieut. William L. Lee reported from the Philippine Department, where he was on the staff of General Douglas MacArthur, Military Adviser to the Philippine Government, as Acting Chief of the Philippine Army Air Corps. While on this duty, Lieut. Lee was responsible for the initial organization of the Philippine Army Air Corps and the training of its first pilots. He has been assigned to the 12th Air Base Squadron.

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BARKSDALE FLYERS BASE AT DUNCAN FIELD

During the recent 3rd Army Maneuvers in the vicinity of San Antonio, Texas,

the San Antonio Air Depot, Duncan Field, was host from August 13th to 17th to a group of 18 officers and 18 enlisted men, commanded by Major A.C. Strickland, of the Third Attack Group, GHQ Air Force, Barksdale Field, La. The Attackers with their A-17A planes were housed at Duncan Field while participating as an air echelon during the Maneuvers.

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ACTIVITIES AT LUKE FIELD, HAWAII

Friday, July 29th, found the Base Headquarters and 17th Air Base Squadron, breaking camp at Bellows Field, Waimanalo, relinquishing possession to the 72nd Bombardment Squadron as they concluded their 1938 field training period. During the training period at Bellows Field the entire organization fired for record with the automatic pistol, and fired approximately 100 rounds per man with the ground machine gun. The anti-aircraft course was also fired by several men.

In the 4th Reconnaissance Squadron, ground instruction and general concentration on all school work were in effect during July. All the Reserve officers of the organization were hard at work studying for the examination for Regular commissions which took place on August 2nd and 3rd. "Their's has been no half-hearted attempt," says the News Letter Correspondent, "but a conscientious and determined one, and it is believed that they all have excellent chances to stand high in the list of competition. Here's good luck to them!"

The Engineering Section of the 4th Reconnaissance Squadron has been studying religiously on various journeymen examinations, as have the Communications and Armament Sections. The men have entered into this enthusiastically and the results will undoubtedly be noticed in their future work.

The 23rd Bombardment Squadron participated in the Group interception problem on July 19th, in which the U.S. Army Transport REPUBLIC, carrying Brigadier General Barton K. Yount and Colonel Millard F. Harmon, Air Corps, was the objective. Twenty-four hours after the transport had left Honolulu, the B-18 airplanes of the 5th Bombardment Group staged an aerial review over the vessel in honor of the departing officers. The mission was carefully planned, and all squadrons received the maximum amount of training involved.

In the quarterly load test held the latter part of July, no outstanding difficulties were encountered in putting the B-18's through their paces. It is stated that the Group is making the most of the new equipment it now possesses.

NON-STOP COAST TO COAST FLIGHT FOR B-18

Prevailing winds aided the B-18 Bomber on the first transcontinental non-stop flight ever made in a craft of this type. Taking off from Hamilton Field, Calif., on August 19th, the plane landed at Mitchel Field, L.I., New York, 15 hours and 38 minutes later.

The Bombardment plane was piloted by Lieut. John G. Armstrong, of the 11th Bombardment Squadron, Hamilton Field. Lieut. David H. Walker was the co-pilot; Private C.E. Dysinger, mechanic, and Private D.L. Eyerly, radio operator. The crew used oxygen masks most of the way, as the flight was made at a high altitude. The distance involved was 2570 miles.

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STUDENT OFFICERS AT A. C. TECHNICAL SCHOOL

The following-named officers of the Air Corps, Marine Corps and the U.S. Coast Guard are pursuing courses of instruction at the Air Corps Technical School at Chanute Field, Rantoul, Ill.:

Maintenance Engineering Course

Air Corps officers

Captain John J. Morrow, from Hamilton Field, Calif.

1st Lieuts. Millard C. Young and John M. Hutchison, from Mitchel Field, N.Y.

1st Lieuts. Dawson S. Moseley, Jr., Paul T. Hanley, Elvin S. Ligon and Clair L. Wood, March Field, Calif.

1st Lieuts. Arnold T. Johnson and Harold L. Kreider, Selfridge Field, Mich.

1st Lieuts. Joseph B. Stanley and Harry Coursey, Langley Field, Va.

2nd Lieut. Homer A. Boushey, Jr., Fort Lewis, Wash.

Marine Corps officer

Captain Booker C. Batterton, Quantico, Va.

Coast Guard officers

Lieuts. E.E. Fahy, Biloxi, Miss.; C.L. Harding, East Hartford, Conn.; William Schissler, St. Petersburg, Fla., and Lieut. (jg) L.H. Seeger, Cape May, New Jersey.

Communications Course

Air Corps officers

1st Lieuts. William M. Canterbury and Richard A. Legg, Philippine Department.

1st Lieuts. Albert T. Wilson, Jr., and Carl Swyter, March Field, Calif.

1st Lieuts. Glenn C. Thompson, Richard C. Weller and 2nd Lieut. Paul H. Dane from Langley Field, Va.

2nd Lieut. Seward W. Hulse, Jr., Kelly Field, Texas.

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Having been found by an Army retiring board incapacitated for active service due to disability incident thereto, Captain David M. Ramsay, Air Corps, is retired from active service, effective August 31, 1938.

NEW TYPE OF OXYGEN MASK

An article in a recent issue of an aviation journal is to the effect that a new type high altitude oxygen mask, designed by three physicians at Rochester, Minn., has been called "completely successful" following extensive flight tests, and that announcement was made by Northwest Airlines that it will equip all its transports with the new masks by the fall of this year. While these masks will be used to prevent pilot fatigue, they will also be necessary for passengers.

Final tests on the mask were made during the course of a flight in a Northwest Airlines' Lockheed from Minneapolis, Minn., to Burbank, Calif. Personnel of this airline volunteered as subjects for the tests.

Dr. W.R. Lovelace, in cooperation with Dr. W.M. Boothby and Dr. A.H. Bulbulian, developed the new type of mask.

Advantages possessed by the new type of mask lie in the fact that it requires much less oxygen, as little as one-tenth as much as apparatus now in general use. This not only tends to reduce the amount of oxygen required to be carried on airplanes but cuts down the weight element.

An important feature in the design of the mask is that it leaves the mouth uncovered, permitting pilots to use standard radio equipment. The mask is of molded rubber, consisting of a nose-piece, resembling an old fashioned football noseguard, and a molded rubber tube which forms a circle from each side of the nosepiece under the mouth. A flexible rubber tube leads downward from this to a valve, which mixes oxygen from the tank with air. A new type oxygen tank is used which, although retaining the same strength, is much lighter than standard oxygen tanks. Another tube from the valve leads to the oxygen supply. Below the valve is suspended a small bladder just large enough for a single breath.

A newly developed reducing valve at the oxygen tank is so designed that it will feed the right amount of oxygen, regardless of the number of masks it serves. As many as 30 outlets have been connected to this valve without, it is claimed, affecting the amount of oxygen going to each mask.

In addition to Dr. Lovelace, nine officials, pilots and mechanics of the Northwest Airlines participated in the final flight test.

The article goes on further to say that tests with Army Air Corps experts at Wright Field, observations in low pressure chambers, and altitude test flights of short duration had been conducted prior to the final test.

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AIR CORPS PARTICIPATION IN AIR RACES

The War Department recently announced the approval of plans for an Army Air Corps demonstration and exhibit at the National Air Races, Cleveland, Ohio, September 3rd, 4th and 5th.

The 27th Pursuit Squadron of the First Pursuit Group, Selfridge Field, Mich., equipped with eighteen P-35 Seversky single-seater fighters, will perform a thirty-minute air drill daily, including mass formation and tactical maneuvers.

The ground exhibit will consist of nine modern tactical airplanes, each representative of a different type of combat plane, as follows:

A B-17 Boeing four-engined Bomber, commonly called the "Flying Fortress;" a B-18, Douglas twin-engine Bomber; an A-18A Curtiss twin-engine Attack plane; a Northrop A-17, single-engined Attack plane; a Curtiss P-36 single-seater fighter; a North American B-C1 Basic Combat plane, a North American O-47 Observation plane; the North American BT-9 training plane and the Kellett Autogiro. These nine planes will be located in an open air enclosure readily accessible to the public visiting the Races, and guides will be available daily to answer questions and describe the characteristics and purposes of each type.

The P-35 Seversky fighter, 18 of which will fly daily, is a low-wing all-metal monoplane, powered with a Pratt & Whitney "Wasp" motor, developing more than 800 horsepower. It has a speed of nearly three hundred miles per hour straightaway and shows high performance and maneuverability.

Major Willis Taylor, commanding the 27th Squadron, explained that his Squadron normally operates at high altitudes and many of the tactical maneuvers common at those fighting levels will perforce be eliminated in the comparatively low altitude work required at the Races. However, his Squadron will be able to demonstrate most of the squadron formations and many tactical maneuvers common to Pursuit flying in war exercises.

Under the plan announced by the Commanding General of the GHQ Air Force, Major General Frank M. Andrews, the 27th Squadron will arrive at Cleveland on Friday, September 2nd, make a practice flight on that date and fly for thirty minutes on the afternoons of Saturday, Sunday and Monday (Labor Day), returning to its home station early Tuesday, September 6th.

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NEW COMMANDER ARRIVES AT TRAINING CENTER

Brigadier General Barton K. Yount, Air Corps, assumed command of the Air Corps Training Center, Randolph Field, Texas, on August 5, 1938. General and Mrs. Yount arrived in San Antonio from the West

Coast the day previous. Colonel Frank D. Lackland, Commandant of the Advanced Flying School, Kelly Field, Texas, met them at the railroad depot in San Antonio, and the officers of Randolph Field met them on their arrival at that station.

Prior to his present duty as Commanding General of the Air Corps Training Center, General Yount commanded the 18th Wing in the Hawaiian Department.

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PERMANENT COMMISSION FOR LIEUT. KAUFFMAN

Special Orders of the War Department, recently issued, announced the appointment of 2nd Lieut. Donald Harry Kauffman, Air Reserve, as a second lieutenant in the Air Corps, Regular Army, with rank from July 1, 1938, and his assignment to duty at Mitchel Field, N.Y., the station to which he was transferred as a Reserve officer in June, 1938, from Selfridge Field, Mich.

Lieut. Kauffman was born at Carlisle, Pa., May 30, 1915. He graduated from the Pennsylvania State Teachers College in 1936. Appointed a Flying Cadet in the Air Corps, he graduated from the Primary Flying School, Randolph Field, and the Advanced Flying School, Kelly Field, and on June 30, 1937, he was given the rating of "Airplane Pilot," commissioned a second lieutenant in the Air Reserve, and assigned to active duty with the First Pursuit Group at Selfridge Field, Mt. Clemens, Mich.

Several weeks following his arrival at Selfridge Field, Mich., Lieut. Kauffman suffered a leg fracture as the result of an emergency parachute jump, and he spent some time in the Selfridge Field hospital and later at the Walter Reed General Hospital, Washington, D.C.

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PERSONNEL NOTES

Three second lieutenants of the Air Corps have been designated as students to pursue the Photographic course at the Denver Branch of the Air Corps Technical School, Lowry Field, Denver, Colo., reporting not later than August 28th for duty. They are Waymond A. Davis and Wallace E. Nau, from March Field, Calif., and Francis L. Rivard, from Mitchel Field, N.Y.

Captain Harold G. Peterson was transferred from Chanute Field, Ill., to Scott Field, Ill., for duty with the 15th Observation Squadron.

First Lieut. Thomas R. Starratt, Air Corps, was transferred to the Cavalry, effective September 1, 1938, and transferred from Lowry Field, Colo., to the Cavalry School, Fort Riley, Kans., for duty as student in the 1938-39 course.

HARMON EFFICIENCY TROPHY TO 79TH PURSUIT

The 79th Pursuit Squadron, 20th Pursuit Group, GHQ Air Force, Barksdale Field, La., having attained the highest efficiency standard of any combat squadron in the Third Wing, GHQ Air Force, during the Fiscal Year 1937-1938, will be presented the Harmon Efficiency Trophy in the near future.

This Trophy was given to Colonel Millard F. Harmon on October 2, 1936, by the business men of Shreveport, La., as a present and token of their friendship for him.

Colonel Harmon in turn presented the Trophy to the Third Wing, GHQ Air Force, with the provision that it be given to the combat squadron of that wing attaining the highest efficiency standard each Fiscal Year.

The computation for the determination of the winning squadron in the award of the Harmon Efficiency Trophy is accomplished each July for the training year ending June 30th. Competition for the Trophy is confined to the combat squadrons of the Third Wing, GHQ Air Force, only.

The following factors are given equal value in determining the total score of each squadron:

- Maintenance of airplanes;
- Conduct of Training Regulations 440-40;
- Completion of War Department (GHQ) Training Directive;
- Maintenance of Barracks and Grounds;
- Appearance of personnel;
- Airplane accidents;
- Forced landings;
- Efficiency of Airplane Maintenance;
- Venereal Rate, and
- Court-Martial rate.

The following is the standing of the combat squadrons of the 20th Pursuit Group, GHQ Air Force, in the competition for the Harmon Efficiency Trophy in the Third Wing:

Fiscal Year 1937-38

1. 79th Pursuit Squadron
2. 55th Pursuit Squadron
3. 77th Pursuit Squadron

The 79th Pursuit Squadron deserves a great deal of credit for bringing their efficiency standing from sixth to first place during the Fiscal Year 1937-1938.

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The gunnery practice at Galveston, Texas, of the 77th Pursuit Squadron, stationed at Barksdale Field, La., has again been completed, with scores so far above the average as to cause the Air Corps News Letter Correspondent to add that: "Any prospective enemy would do well to think twice before getting in range of these experts."

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PERSONNEL TO PARTICIPATE IN AIR RACES

Elsewhere in this issue of the News Letter is an article concerning the participation of the 27th Pursuit Squadron, from Selfridge Field, Mich., in the National Air Races at Cleveland, Ohio, September 3rd to 5th, next.

Advice just received from the Selfridge Field Correspondent is to the effect that the following personnel will participate in these Races:

Major Willis R. Taylor,
Captain Robert S. Israel, Jr.,
1st Lieuts. Allan T. Bennett, Murray C. Woodbury, Winslow C. Morse,
2nd Lieuts. James O. Guthrie, John S. Chemmault, Thomas J. Barrett, Howard B. Nichols, Arthur R. Kingham, Joseph F.B. Parker, Charles E. Grogan, Dale D. Brannon, William J. Feallock, II, Ralph S. Garman, Neil E. Kearby, Harold E. Kofahl, Theodore S. Proxmire, Clinton C. Wasem and James R. Watt.

The enlisted men are:

Master Sergeant Frank O. Wadsworth,
Technical Sergeant George Callaghan,
Staff Sergeants Earl W. Graham and Ford M. Swinney,
Sergeants Fred J. Mathews, Floyd W. White, Walter Shultz,
Corporals Edward E. Winning, Leewood Hall, James A. Pelling, Clarence E. Aborn,
Privates 1st Class Herbert F. Condne, Chester J. Jasinowski, Frank B. Double, Archibald W.G. MacBeth,
Privates Theodore J. Schoolcraft, Thaddeus C. Strong, John I. Ciesla, John A. Ziemba and Roy E. Neal.

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55TH PURSUIT CELEBRATES ORGANIZATION DAY

The 55th Pursuit Squadron, Barksdale Field, La., recently celebrated Organization Day with a picnic at Clear Lake on the Barksdale Field reservation. It was a day of pleasure for all concerned. The refreshments provided the gastric delights, and a prolonged session of Bingo kept the ladies amused while the officers and enlisted men enjoyed a "Tug of War." There were cries of "foul play" when Major Armin F. Herold, Air Corps, back stop for the officers, upon seeing defeat staring him in the eye, wrapped the end of the rope around a tree. The enlisted men pulled so hard that they not only won the tug, but succeeded in leaving a scar on the tree trunk in memory of the festive occasion.

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The 77th Pursuit Squadron, Barksdale Field, La., recently had a change of commanding officers, Major Miln N. Clark being relieved from his duties as Squadron Commander and assigned as Base Adjutant. Captain Orrin L. Grover was assigned to duty as Commander of the 77th.

MID AIR COLLISION FATAL TO TWO CADETS

Flying Cadets Edward DeLaney Willard, of Modesto, Calif., and Robert Rempfer Whitehouse, of Evanston, Illinois, both students in the Pursuit Section of the Air Corps Advanced Flying School, Kelly Field, Texas, were killed in the mid-air collision of their BT-8 airplanes, which occurred at about 10:00 o'clock on the morning of August 15th, about one and one-half miles south of Dilley, Texas.

Both students, with their instructor, 2nd Lieut. John F. Guilmartin, were flying in a three-plane formation which had been performing a routine training mission prior to the accident. Following the collision, Willard's plane crashed from its cruising altitude of 1500 feet, while Whitehouse regained control of his plane and climbed to an altitude of approximately 3500 feet, where he "bailed out."

For some unexplainable reason, Cadet Whitehouse's parachute was not opened and, since inspection of the 'chute after the accident, failed to reveal any defect, it is the belief that the pilot was struck by some part of the airplane as he jumped.

Cadet Willard was born on March 18, 1916, at Modesto, Calif., where he resided when he was appointed a Flying Cadet. His father and mother, Mr. and Mrs. G.H. Willard, are also residents of Modesto. Cadet Willard graduated from Modesto Junior College in 1937, at that time receiving his certificate as an Associate of arts.

Cadet Whitehouse was born on February 16, 1917, at Topeka, Kansas, and was a resident of Evanston, Illinois, when he received his appointment as a Flying Cadet. He attended Northwestern University from 1935 to 1937. He is survived by his parents, Mr. and Mrs. Horace Whitehouse, of Evanston.

Both Flying Cadets had reported on July 1st for the advanced flying course at Kelly Field, after completing the primary course at Randolph Field.

The entire Air Corps extends its most sincere sympathy to the families and friends of these two very promising young pilots, who died in the service of their country.

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On August 17th, the San Antonio Air Depot, Duncan Field, Texas, enjoyed a brief visit from Major General Frank M. Andrews, Commanding General of the GHQ Air Force; Brigadier General G.C. Marshall, Assistant Chief of Staff, War Department; Lieut. Colonel E.L. Naiden and Lieut. Williams, of Langley Field. These officers were visiting Air Corps stations, flying in a C-32 transport, and were returning to the East from the West Coast.

VISITING AIRCRAFT CREW AT MAXWELL FIELD

In a recent issue of the News Letter it was stated that during the calendar year 1937, the Visiting Ship Hangar Crew at Bolling Field, D.C., established what they consider should be a record for the handling of visiting aircraft, in that a total of 2,985 transient airplanes were serviced without accident to aircraft or injury to personnel.

With reference to the above, the News Letter Correspondent from Maxwell Field, Montgomery, Ala., submitted the following:

"With an Emergency Crew of seventeen men, under the supervision of the Station Engineering Officer and under the immediate direction of Lieut. Dyke F. Meyer and Staff Sergeant S.K. Frost, Maxwell Field hung up a new record in servicing visiting aircraft during the fiscal year of 1938. The total number of ships serviced during this period was 3,440. Of this number 2,753 were Army planes of all types. Navy visitors numbered 687.

Visitors included all ranks from the Chief of the Air Corps, General Oscar Westover, to second lieutenants fresh from Kelly Field.

Numerous appreciative comments were made in praise of the efficiency of the Emergency Crew. With the 1938 record behind them, the Emergency Crew of this station bids welcome to all visiting aircraft during the next fiscal year."

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PERSONNEL CHANGES IN GHQ AIR FORCE

Special Orders of the War Department, recently issued, relieves Colonel Walter H. Frank (Air Corps), General Staff Corps, now on duty at General Headquarters Air Force, Langley Field, Va., from detail as a member of the General Staff Corps and from assignment to the General Staff with troops, to take effect August 31, 1938.

Colonel Walter G. Kilner (Air Corps), General Staff Corps, now on duty at General Headquarters Air Force, Langley Field, Va., is assigned to duty as chief of staff, General Headquarters Air Force, to take effect September 1, 1938.

Lieut. Colonel Francis M. Brady, Air Corps, now on duty at Langley Field, Va., is detailed as a member of the General Staff Corps and assigned to the General Staff with troops, to take effect September 1, 1938, and will report to the commanding general, General Headquarters Air Force, Langley Field, Va., for duty accordingly.

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WHY DO THEY CALL THEM "SOLDIER BOYS"?
By the Selfridge Field Correspondent

The expression "Soldier Boys" is troublesome, not only to the present day soldier, but the term continually requires an explanation to the layman. The writer remembers this term was used extensively during the World War. Popular song writers may have wished this on us in order to make their ditties come out even. Now as we grow mellow with years, the term seems quite gratifying. Anyway, the career, record and usual hobby of Staff Sergeant Elbert Dossett, 94th Pursuit Squadron, 1st Pursuit Group, Selfridge Field, Mich., may help to clear this dogma.

The Sergeant was born on March 29, 1901, at Ridgeway, Ill. He enlisted in the Air Corps and was appointed Staff Sergeant during his first enlistment. No one can say that he is not the last word in competency. With these facts before us he is conclusive proof to exemplify the title "Soldier Boys." He rightly deserves same. Perhaps, in a way, holding the grade of Staff for 17 years has been of great service to him and justifies him to be chief contender for the above title under discussion. Now the problem before his many friends is, will there now be a change in his actions, will they lose the companionship they have so long enjoyed? Will he, by his own very actions, eliminate himself from being the one living example of the answer to this question?

Not long ago, the Sergeant returned from furlough. There was a gleam in his eyes when he mentioned he had brought a widow back with him, a black one at that. Many were nonplussed as they gathered around. Then he proceeded to bring forth a small box. It was finally opened amidst ahs and other barrack room expressions. It was found that the Sergeant had brought back a Black Widow Spider, the most dangerous of the species. The one thing foremost in all minds was the fact that the black spider always devours her mate. He has no reason to be jealous of his new pet. She is left to her own devices and is never bothered in her little home. She has, however, proven loyal and has in a way become a benefactor to the Squadron by doing away with all other spiders in the barracks. The boys in turn show her their appreciation by seeing that she is well supplied with flies for her daily rations.

Several months have passed, and the widow continues to thrive and seems content with her present surroundings. Will the Sergeant be advanced in grade before she devours him or vice versa? Will the two continue along in their present happy existence? If so, the 1st Pursuit Group will again gain recognition by being able to tell the world

that one of their members is the living answer to the title "Soldier Boys."

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SQUADRON CONTINUALLY ON THE MOVE

Headquarters Flight Section was recently again on the move. Monday, August 8th, was moving day for Headquarters and Headquarters Squadron, 1st Pursuit Group, GHQ Air Force, Selfridge Field, Mich. This time it was from the hangar of the 27th Pursuit Squadron to the one occupied by the 94th Pursuit Squadron. The move was made to make room for the airplanes assigned to the 27th Pursuit Squadron, which it is expected will take part in the Fort Bragg maneuvers.

In the past, Headquarters Squadron has occupied at some time or other all four hangars at Selfridge Field. This makes the second time they have resided with the 94th. "It looks as if we have started our second cycle of moving, although not in the same order," says the News Letter Correspondent, and he then adds: "The personnel of the flight section are becoming very efficient at moving. This last transfer was made in what we believe to be record time - two hours flat. Operations and engineering, as well as flying, were hardly interrupted. We are a little short of room, due to engine changes being made by the 94th, but in another month we should have the entire west half to ourselves. The office, stock room and radio are located in the southwest corner of the hangar. In the past, the operations and engineering clerk was given a corner in the room used by the other squadron for their office. This has proven unsatisfactory for all concerned, so the new plan we are trying of having the office out in the hangar is being experimented with. So far it has proven a sound idea.

No trouble was experienced during the moving with the exception of one load being dumped from the trailer. The clerks were moving their office equipment with a tug, and after successfully reaching their destination the entire load fell off the trailer. Things were in a pretty mess, though nothing was broken.

Where to next? Gossip has it that we are headed for the tractor shed - maybe so. Should this be true, we will try and make even better time in moving and will undoubtedly transform these sheds into a first class hangar. "Just a little home to call our own." "

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Major Orlo H. Quinn, Air Corps, having been found by an Army retiring board incapacitated for active service on account of disability incident thereto, is retired from active service, effective August 31, 1938.

THE FIGHTING AIRPLANE

In an article in the September-October issue of ARMY ORDNANCE, Mr. Horace J. Alter, an aeronautical engineer of Brooklyn, N.Y., states that the fighting airplane may be considered the opening weapon of offensive tactics, due to its mobility and striking power at long ranges, since it can reach far beyond the frontiers and invade deeper into hostile territory in a few hours than any other branch of the Army, and that with the various types of bombs it is capable of carrying in the air it can bring the effects of war to any portion of the theatre of war into which it has penetrated.

Contending that the fighting airplane will be the main defensive weapon in the air, its mission being to engage the bomber, the author asserts that, in order to compete with present bombers, defending airplanes must possess superior armament, speed, and perhaps climb and maneuverability. He believes that air combats are much more probable between bomber and fighter; that escorts for a bombardment squadron on long missions are improbable, due to insufficient fuel loads of Pursuit planes of the two-place type and, as far as single-seaters are concerned, they cannot defend the rear and must abandon support of a bombardment formation when attacked by hostile airplanes; further, that the modern bombers in formation are well suited to repel a pursuit attack by concentration and volume of fire and, therefore, have little need of an escort.

Other handicaps confronting Pursuit are enumerated, viz:

The speed of the Bombardment plane approaches that of a Pursuit plane, thus aggravating the difficulty of interception by the latter;

The all-metal construction of the Bombardment plane makes it more difficult to destroy, since its structure is such that it can be pierced with machine gun bullets without weakening it;

The use of the automatic pilot and improved instrument flying equipment allows the Bombardment plane to carry out missions under conditions considered impossible during the World War;

The Pursuit or fighter pilot attacking a modern Bombardment plane has to cope with higher speeds and altitude, more efficient airplanes and formations, heavier armament and a multiplicity of gun angles in order to avoid the fire of bomber gunners.

Referring to the defense fighter plane used against Bombers which, it is pointed out, would not be the single-seater, or the slightly larger two-seater, but a mighty, high speed, heavily armed ship, Mr. Alter says that if this defense plane can intercept the Bomber before it

has reached its objective or can impede its progress by diverting it or forcing it to fight, the Bomber would be at a disadvantage, and the defense would then have a chance to bring up reinforcing planes and ground batteries, that is, provided the defense fighter has had previous warning of the impending raid and has had time to gain sufficient altitude to dive and overhaul the Bomber, otherwise it will be impossible to prevent the raid. Since closing in on the Bombardment plane during bombing operations would be hazardous and a serious hindrance to anti-aircraft ground operations, the only choice left to the defense fighter would be to attack the Bomber returning from its raid.

Further along in his article, Mr. Alter enters into a discussion of air-cooled versus liquid-cooled engines. He states that the necessity of high speed indicates the use of motors of high horsepower and low power loading, since these factors have a marked effect on take-off, climb and speed at altitude - all of which are of utmost importance to the military airplane. He points out that, while in the United States the air-cooled radial engine has predominated and the development of the in-line liquid-cooled engine has all but ceased, there is little doubt that for equal horsepower the in-line engine has less drag than the radial. In tests run at the California Institute of Technology, it was shown that there is a 21 percent increase in speed with an 18 percent decrease in power if an in-line engine of 1,000 horsepower is used instead of a 55-inch diameter single-row radial engine developing 1250 brake horsepower.

As the diameter of the radial engine increases, more of the horsepower is used in overcoming the resistance of the engine itself, until a point is reached at which no matter how many engines are added no increase of speed is obtainable.

Efficient and even cooling of the radial engine at high altitude has become more and more difficult with higher horsepowers and may necessitate richer mixture ratios with the same power output as is obtained at sea level, thus reducing the fuel economy.

In taking the stand for the liquid-cooled engine, Mr. Alter asserts that there is no reason to believe that the horsepower limit has been reached with it, but that, in fact, tests seem to indicate more efficient performance with it than with the radial in the high-powered engines. The liquid-cooled engine equipped with the turbo-type supercharger can hold sea-level power, without loss up to an altitude of 40,000 feet, while the radial engine with the centrifugal-type supercharger suffers a

fifteen percent loss at the same altitude. Mechanically, the exhaust-gas turbo-blower is far superior to the gear-driven type, and when starting at slow speeds the former does not produce any appreciable pressure and therefore is not a load upon the engine. It also permits the free passage of the exhaust gases. On the other hand, the centrifugal type is always a load upon the engine, as the power required to turn it is practically constant, even if the air is not being compressed.

More economical performance through use of higher compression ratios may be readily achieved with the liquid-cooled than with the air-cooled engine, since it is accompanied by higher specific heats. With leaner fuel mixture and lower full throttle specific fuel consumption, the liquid-cooled engine should prove of great tactical value to the military airplane in maintaining an air patrol and in providing long range.

Discussing the prospects of the Diesel engine which, like the liquid-cooled engine, presents a field that has been as yet undeveloped, Mr. Alter, after pointing out that the greater weight of the Diesel engine may be offset by the saving in fuel consumption, cites various factors in its favor, such as:

As break mean effective pressure increases and more rugged construction is necessary, the weights of the Diesel and gasoline engines will tend to become more nearly equal.

In climbing from sea level to 10,000 feet, the Diesel will increase its revolutions, thus increasing its power output; hence its power curve does not drop off as rapidly with altitude as does that of the gasoline engine, due to its higher compression ratio.

Under normal combustion conditions in the Diesel cylinder, an oversupply of air and oxygen usually is sustained in ratio to the amount of fuel used, and the revolutions per minute decrease less rapidly than in a gasoline engine at altitudes above 10,000 feet.

The performance of a two-stroke, scavenging, supercharged Diesel engine, besides giving smoother operation and more power strokes per revolution, has a remarkable economical fuel consumption, which is an important advantage.

The Diesel does not interfere with radio apparatus and offers little chance of interference with the ignition system by means of rays, radio, or other such possibilities of future wars.

The Diesel offers reduced fire hazard - an especially favorable feature for the military airplane which may be attacked with incendiary bullets.

In airplanes weighing between 16,000 and 20,000 pounds, two Diesel engines of between 1100 and 1500 horsepower each would be necessary, and for best performance such motors should have opposite ro-

tation to counteract the high torque. Oppositely rotating motors have not been adopted in this country, but have been favored abroad, and in France motors of opposite rotation are compulsory for bi-motored ships.

Mr. Alter claims that with the in-line liquid-cooled engine, or opposed, narrow Diesel engines, it no longer should be necessary to place the propeller in front of the wing. He states that tests conducted at the N.A.C.A. Laboratories indicate that a pusher propeller, driven by an engine inclosed in the wing, has a higher propulsive efficiency than a tractor propeller driven in the same manner.

Discussing aircraft armament, Mr. Alter points out that the high speed of present airplanes places special significance upon long range and destructive effect of the gun. Size, placement and mobility are the important factors and not the total number of guns. The machine guns as used at present can do little damage to bombers and cannot be expected to force the fight. The adoption of shell-firing cannon and explosive shell seems indicated. The explosive shell does away with the need of accurate sighting and timing, since a direct hit is not necessary to cause damage. Large cannon can be placed in bi-motored, multiplace combat airplanes without seriously affecting the performance of the planes. These guns can be mounted to produce a high concentration of fire in all sectors.

Touching on the essential part of any airplane, the crew, the author finds further justification for his advocacy of the multiplace combat plane in the fact that there is not sufficient personnel in a single or dual-place fighter to carry on sustained combat. With the multiplace combat plane casualties to personnel do not decrease its effectiveness materially. In the Pursuit plane the pilot has to maneuver his plane and tend to his guns at the same time, and he has a limited field of fire. If he is wounded, either seriously or fatally, the airplane is effectively out of combat or a menace to both sides.

His arguments in favor of the multiplace combat plane are summed up as follows:

1. It is capable of sustained fighting at all times and under varied conditions.
2. It is heavily armed and can carry large-bore weapons without serious effect upon structure or performance.
3. It has a heavy concentration of fire.
4. It is capable of fighting at high altitudes without undue strain or great discomfort to its personnel.
5. It has adequate personnel and can be effective even when casualties occur.

88TH SQUADRON IN FIRST WING EXERCISES

The 88th Reconnaissance Squadron, stationed at Hamilton Field, Calif., participated in the First Wing, G.H.Q. Air Force, Exercises in the Pacific Northwest during the month of August. The Squadron was attached to Wing Headquarters, based at Gray Field, Fort Lewis, Wash. Nine officers, thirty enlisted men and four B-18 airplanes were taken. The men were quartered in tents, and the officers had a separate C.M.T.C. building to themselves.

The Squadron participated in two long formation flights around the Northwest area, a separate bombing mission over the ocean off Cape Flattery, and furnished airplanes for display on visitors' day. The squadron also ferried line branch officers from Pearson Field to Gray Field, so that they could witness a bombing demonstration conducted by the 1st Wing at Fort Lewis.

Other points of interest included a trip to Seattle, Wash., where several squadron officers and enlisted men visited the Boeing factory. The new clipper ship was seen in all stages of construction, from beginning to completion, and the mock-up of the stratosphere ship was also inspected.

A reception and dance at the Fort Lewis Officers' Club was given for General Andrews and officers of the First Wing.

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A FIRM BELIEVER IN ADEQUATE PREPAREDNESS

Further referring to the participation of the 88th Reconnaissance Squadron in the First Wing Exercises in the Pacific Northwest, the Hamilton Field Correspondent declares that the above Squadron boasts of the most completely equipped officer on the maneuvers. While most of the officers took along an extra pair of pants and shirt, one officer of the 88th included much more.

An inventory was taken, and it was found that this officer not only had the necessary extra clothing, etc., but also the following items:

Five-tube radio	"Rain in the Doorway"
Static eliminator	by Thorne Smith.
Camera outfit	7-cell flashlight
(less tripod)	Playing cards
Brief case	Buttons
Extension courses	Needle and thread
Corn plasters	Nurses' thermometer
Stimulant	Mirror
(medicinal)	Athletic clothes
Mentholatum	plus baseball cap
Listerine	Bed heating pad
Aspirin	Bathrobe
Cathartic	Slippers
Anti cathartic	Electric razor
Vicks drops	Safety razor
Cough drops	Civilian cap
(2 varieties)	Toothpicks

Kleenex	First aid kit,
Chewing gum	(complete)
Paper, bathroom	Candy kisses
Paper, writing	Circular slide rule
Album, stamp	Large protractor
Album, family	Small protractor
Reading lamp	Gloves
Night lamp	S-4 crying towel
Two extension cords	Large pocket knife
Thermos bottle	Small pocket knife

The News Letter Correspondent submits this list only as a matter of interest, and expresses the hope that it will not be included in the prescribed officers' field equipment.

Athletics and exercises during the maneuvers were taken care of through bowling and organized softball between officers and enlisted men.

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PERSONNEL NOTES

Orders assigning Major Harold W. Beaton to duty at Langley Field, Va., upon the completion of his tour of foreign service, were amended so as to assign him to Barksdale Field, La.

Master Sergeant Ruben St. John, Air Corps, stationed at Mitchel Field, N.Y., was appointed Warrant Officer, U.S. Army, effective September 1, 1938, and assigned to the Air Corps. He will remain on duty at Mitchel Field.

Major A.G. Hamilton, formerly stationed at Brooks Field, Texas, arrived at Marshall Field, Fort Riley, Kansas, on August 19th to assume command of the First Observation Squadron.

Second Lieut. Roy Ossin Ralston, Air Reserve, of Dallas, Texas, was assigned to extended active duty at Patterson Field, Fairfield, Ohio, to September 5, 1941.

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1ST OBSERVATION SQUADRON IN MANEUVERS

A motor convoy with all except a handful of men of the 1st Observation Squadron, Air Corps, left Marshall Field, Fort Riley, Kansas, on August 24th, on a four-day trek to Camp McCoy, Wisconsin, to participate in maneuvers of the 14th Brigade (Reinforced) during the period from August 28th to September 10th. Eight airplanes were scheduled to leave Marshall Field for the maneuver area on August 28th.

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Second Lieut. G.H. Snyder ferried an autogiro from Patterson Field, Ohio, to Fort Riley, Kansas, on August 23rd. The Giro is to be utilized for test and experiment by the Cavalry Board to develop the tactics and technique of its use in cooperation with Cavalry.

A MOTOR TRIP DOWN THE OLD MISSISSIPPI

Two Air Corps officers, Lieut. Colonel Gerald E. Brower and Captain Hugo P. Rush, recently returned from a rather unusual vacation. Utilizing a 16-foot open motor boat, they spent 28 days on the water and traveled from Pittsburgh, Pa., down the Ohio River and then down the Mississippi River to New Orleans, La. From the Crescent City they continued along the Gulf of Mexico to the Air Corps aerial gunnery base at Valparaiso, Fla., which is used mostly by the Air Corps personnel at Maxwell Field, Ala., and which also serves as a vacation resort.

The entire trip involved a total distance of about 2200 miles. Captain Rush, owner of the boat, and Colonel Brower ate, slept and lived on it during the entire trip. No difficulties worthy of mention were encountered on the journey. What seemed to interest most of the people they met along the way was the 5 horsepower air-cooled engine with which the boat is equipped. The air-cooled engine is a rather recent innovation and has many advantages over water-cooled engines, especially in waters with a large silt content and in salt water. The motor never missed a lick.

There was only one day of rain during the entire trip, and this seemed rather unusual since the officers heard over the radio and read in the newspapers of bad weather prevailing all over the country during that particular period. There was only one day when they did not travel, and on that occasion they were held up at New Orleans on account of hurricane warnings. They spent that day with Mr. Higgins, of the Higgins Boat Company, and investigated the possibility of utilizing his specially designed boats as airplane rescue craft.

Possibly the most outstanding feature of the trip was that, while the vacationists knew they were in the center of what is supposed to be an inhabited and civilized country, there were very few indications to substantiate that fact. The impression they had all along, especially while they were on the Mississippi, was that they were almost entirely cut off from the rest of the world, except when they neared the big cities, and there were no indications of human beings living anywhere along either shore. For the most part, difficulty was experienced in obtaining food and gasoline.

Due to the seemingly desolate character of the country through which they traveled, and the almost complete absence of houses or shacks along the river banks, except when the vicinity of the large cities was reached, the officers expected the trip to prove very monotonous or boresome during the greater part of it, but actually they were

kept busy all the time. The trip proved such a complete change from the ordinary routine of life that it turned out to be a really fine vacation. Captain Rush grew a luxuriant beard, and both he and Colonel Brower could well have been mistaken for negroes by the time the trip was completed. Certain it is that they absorbed plenty of sunshine.

A most unusual and unexpected incident cropped up on the Mississippi River just above the Red River, when they met F.G. Tinker, the American airman who saw action in the civil war in Spain and who wrote the very interesting story in the "Saturday Evening Post" under the title "Some Still Live." Tinker was on his way down into the Evangeline country and was paddling a canoe. It was quite a coincidence meeting him on the river, and the fact that here were three aviators meeting in the middle of a river in small boats struck them as being quite unusual. They drifted along together for a couple of hours and talked over aviation matters.

The meeting with Tinker marked one of only two other pleasure boats that were met during the whole trip. Apparently very few people make that sort of a trip on the river. It was thought that considerable travel on the river would be in evidence, but it was learned that, outside of a few excursion boats at the larger cities, there is no passenger traffic on it whatever - quite in contrast to the old days on the Mississippi as pictured so vividly by the famous novelist, Mark Twain. The trips of these excursion boats seem to be limited to ten miles or less from the big cities, and even these trips are few and far between. Only one packet was running on schedule. The last packet was met at Vicksburg, Miss., and the unloading of it proved to be quite an interesting sight. The officers visited with the crew of this boat.

It was learned that commercial traffic on the Mississippi had increased somewhat, and that most of this increase is attributed to government subsidies. A number of the old stern wheelers were observed, also some new and fast screw-propelled boats, pushing up and down the river strings of barges usually loaded with oil or gasoline.

The complete lack of activity on the river may be attributed mainly to fears of flood. Other factors are the vast improvements effected in automobile, bus and rail transportation. Still another factor is the presence of many floating logs, making it compulsory for pilots of water craft to be particularly vigilant and to exercise considerable concentration on the job so as to dodge them and avert disaster.

On the Ohio River, between Pittsburgh

and Cairo, Ill., there are nearly fifty locks. Colonel Brower and Captain Rush passed through only about twenty of them and passed over the remainder on the crest of a flood which prevailed at that time. This permitted them to go over the various dams.

It was noticed that Army engineers are performing a great job in connection with flood control along the river. Cut-offs have been effected at many of the bends in the river, and work is proceeding at a constant pace on the channel and on the banks.

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PURCHASE OF AIR CORPS EQUIPMENT

Under date of August 29th, the Acting Secretary of War, the Honorable Louis Johnson, announced the following awards:

To the Sperry Gyroscope Company, Inc., of Brooklyn, New York, a contract for various flight instruments in the amount of \$376,600.

To the Kollsman Instrument Company, Elmhurst, New York, a contract in the amount of \$135,850. for various flight instruments.

These flight instruments are to be installed on new aircraft being procured, and to replace obsolete flight instruments on older aircraft.

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PHOTOGRAPHIC WORK BY 1ST OBS. SQUADRON

The photography has just been completed for a controlled mosaic embracing 30,350 square miles, being made by the 1st Observation Squadron, stationed at Marshall Field, Fort Riley, Kansas, for the Command and General Staff School at Fort Leavenworth, Kansas.

During the month of August, a strip was made covering 1,000 square miles of the flooded Missouri River. The photographs will be used by U. S. Engineers in preparing flood-control projects and in settling claims for flood damage.

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CAPTAIN HONAN GOES TO WRIGHT FIELD

Captain John J. Honan, of the Judge Advocate General's Department, U.S. Army, is relieved from assignment and duty in the Office of the Chief of the Air Corps, Washington, D.C., effective October 17, 1938, and is then assigned to the Air Corps Materiel Division at Wright Field, Dayton, Ohio. Captain Honan is also detailed for duty with the Organized Reserves of the Fifth Corps Area.

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U.S. WAR BALLOONISTS TO MEET IN CONVENTION AT LOS ANGELES.

Veterans of the World War who served with the Lighter-than-Air Division of the Aviation Section, Signal Corps, are scheduled to concentrate at Los Angeles, California, for their annual conclave, September 18th to 21st, next.

In the latest issue of "HAUL DOWN AND EASE OFF," the official publication of the National Association of American Balloon Corps Veterans, it is stated that to Sandbaggers the 1938 American Legion National Convention is but a "side show" compared with the "BIG TOP" attraction of the Balloon Veterans, as planned by the Los Angeles Bed No. 4, and its reunion committee.

The sessions of the convention will be held at the Clark Hotel.

In the official publication, above referred to, numerous terms are applied to the men who served in the Balloon Section during the war, such as "Sandbaggers," "Balloonnaires," "Rope-Pullers," and what have you.

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Major General Oscar Westover, Chief of the Air Corps, was the guest of honor at the first Fort Omaha Reunion Banquet of the U.S. War Balloonists, which was held recently in Omaha, Nebraska.

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TEST OF PILOTS' SUN GOGGLES

Ten pairs of pilots' sun glasses, conforming to Navy Aeronautical Specification No. M-346, have been obtained by the Air Corps Materiel Division, Wright Field, Dayton, Ohio, for the purpose of conducting comparative service test with the Air Corps Type D-1 anti-glare goggles, conforming to Air Corps Specification No. 3064 and Air Corps Drawing 34B4023.

Flight tests under a wide range of atmospheric conditions were to be conducted at five Air Corps stations. Questionnaires have been forwarded to these five stations which are to be accomplished and forwarded to the Materiel Division by September 1, 1938.

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The 4th Annual Convention of the Western Safety Conference, which comprises eleven western States, will be held in Los Angeles, Calif., September 12 to 16, 1938. Invitations have been issued to those in the aviation industry in the western part of the United States to attend and participate in the sessions and discussions of this conference which, it is stated, will be of genuine importance to every division of Western Aviation. Such recommendations as the Conference may make will serve as a guide to the Governors and Legislatures in formulating any legislation pertaining to aviation.

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 AIR CORPS 
NEWS LETTER



ARMY AIR CORPS 27TH PURSUIT SQDN. NAT. AIR RACES

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard, and others connected with aviation.

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ARMY AIR CORPS WINS COLLIER TROPHY FOURTH TIME

Announcement was made on September 15th by Mr. Charles F. Horner, President of the National Aeronautic Association, that the Army Air Corps has been awarded the Collier Trophy, aviation's highest honor. Successful accomplishment in high flying by the pressure cabin method won for the Air Corps this coveted Trophy. This accomplishment paves the way for day by day so called stratosphere flying, by both military and transport airplanes, and it was selected from a field of 35 aeronautical achievements during the year 1937 as most outstanding. An awards committee of nine prominent flyers and engineers, named by the President of the National Aeronautic Association, acted to decide the 1937 award.

By the Army pressure cabin method, passengers, pilots and crew can fly in ease and comfort at all altitudes. By supercharging of the air within the cabin, normal atmosphere conditions are maintained. Although tried many times in the past, the Army's pressure cabin development is the first which has thoroughly demonstrated its safety and practicability. This was done in exhaustive tests extending over many hundreds of hours and many thousands of miles, thus qualifying this research for designation under the terms of the Collier Trophy Award as "The greatest achievement in aviation whose value has been demonstrated in actual use during the previous year."

The citation accompanying the award reads:

"To the United States Army Air Corps for having designed, constructed and completely equipped the XC-35 Sub-Stratosphere plane, the first pressure cabin airplane to be flown successfully anywhere in the world."

Four other important aeronautical achievements during the year 1937 were given honorable mention by the National Aeronautic Association in announcing the award. These were: The Boeing Aircraft Company's completion and demonstration of the huge four-engine flying fortress, known by the Air Corps designation B-17 and XB-15; the successful development by the Buffalo Propeller Division of the Curtiss-Wright Corporation of the full feathering automatic control pitch

propeller; the test piloting research in high altitude flying done by D. W. Tomlinson, of Transcontinental and Western Air; and operating and maintenance methods and equipment developed by American Airlines which helped this airline to complete the flying of 123,074,318 passenger miles without fatal accident.

Major Carl F. Greene, Captain Alfred H. Johnson and Dr. John E. Younger were cited as Air Corps principals in the research and development work which resulted in the award. Major Greene initiated the project and was supervising officer. Captain Johnson acted as test pilot and assisted in the engineering. Dr. John Younger was responsible for the technical aspect. In addition, Lieut. Colonel Oliver P. Echols, of the Materiel Division of the Air Corps at Wright Field, Dayton, Ohio, was cited as the administrative officer under whose executive direction the research was carried on.

The National Aeronautic Association Committee on awards was as follows:

Major James H. Doolittle, Chairman; Mr. E. R. Stettinius, Jr.; Mr. Leighton Rogers; Mr. Edward P. Warner; Mr. William B. Mayo; Dr. George W. Lewis; Mr. S. Paul Johnston; Mr. Henry B. Dupont and Mr. T. P. Wright.

The late Robert J. Collier established the Collier Trophy in 1911. By tradition this award has become the symbol for the year's outstanding aeronautical achievement. Previous winners include Orville Wright, Glenn Curtiss, Grover Loening, Charles L. Lawrence, Harold Pitcairn, Glenn L. Martin and Donald Douglas. The Trophy has previously been awarded to Army Air Corps personnel three times, as follows:

1924 to the U. S. Army Air Service for having accomplished the first aerial flight around the world;

1926 to Major Edward L. Hoffman for his work in the development of the parachute, now universally used;

1934 to Major Albert F. Hegenberger for his achievements in blind flying.

The last award of the Collier Trophy for the year 1936 was to Pan-American Airways for the establishment of the Trans-Pacific Airlines.

ENCAMPMENT OF NATIONAL GUARD AIRMEN

The 120th Observation Squadron, 45th Division Aviation, Colorado National Guard, went into its annual encampment at its home base, the Municipal Airport at Denver, Colorado, from August 1st to 15th, under new leadership. Major Frederick Walker Bonfils, who assumed command of the Squadron in April, had his organization trained to a fine degree of efficiency in anticipation of the Squadron's participation in the Third Army Maneuvers at Cheyenne, which were held for four days during the closing week of camp. Major Bonfils, who in civil life is business manager of the DENVER POST, was graduated from the U.S. Military Academy in 1916, and he has given the greater portion of his time outside of business hours to the affairs of the Squadron.

On July 25th, Major R.R. Brown, who served as Regular Army instructor of the Squadron since November 12, 1936, was transferred to Lowry Field, Denver, Colo., and appointed Operations Officer. He was succeeded by Captain John K. Nissley, and he and Major Bonfils immediately set up an intensive training program for the first week of the encampment. Considerable time was spent effecting efficiency on panel and radio communications, with the result that the 148 hours of flying put in by the Squadron at the war maneuvers in the Cheyenne Area received very favorable comment from the umpires.

On the night before the last day of the maneuvers, arrangements were made to "attack" the City of Cheyenne, Wyoming, and defense preparations included the absolute black-out of the city and the closing off of the radio beams. Six ships from the Squadron were assigned to the attack, and from them flares were dropped in the heart of the city. Two flares dropped on the State Capitol and two landed in the all-important railroad yard, paralyzing headquarters communications and all rail transportation. This was accomplished despite very bad weather conditions. In fact, just prior to the zero hour, a 500-foot ceiling was reported. One of the planes, flown by Lieut. Robert Ainsworth, with Lieut. Harley Teall as his observer, while circling for the rendezvous, noticed a slight break in the clouds and dove into it for one last observation. A violent rain storm was raging, and they were just in time to see an important railroad bridge of the Colorado and Southern Railroad carried away by the turbulent streams it crossed.

Returning to the Cheyenne Airport at full throttle, the airmen reported the washout just in time to stop an important freight train as it was leaving the freight yards, thereby averting what might have been a major catastrophe. The

railroad officials and the Governor of the State forwarded appropriate letters of appreciation to the Squadron Commander.

During the encampment, inspection visits were made by Colonel Clarence L. Tinker, Officer in Charge of Air Corps National Guard activities in the National Guard Bureau in Washington; Colonel Hugh J. Knerr, Air Officer of the 8th Corps Area, and Colonel Edgar A. Myer, Infantry, in charge of National Guard activities of the 8th Corps Area. Colonel Myer, whose headquarters are at Fort Sam Houston, Texas, made his inspection in company with Brigadier General W.E. Gunther, who commanded the Red forces during the maneuvers. During his visit, General Gunther took his first airplane ride when Lieut. Vaughn flew him on an inspection trip over Fort Logan, Colorado.

On Wednesday, July 27th, the officers of the Squadron and their wives entertained Major and Mrs. R.R. Brown in appreciation of Major Brown's untiring devotion and work for the Squadron in his capacity as Regular Army instructor. Major Bonfils, Squadron Commander, acted as toastmaster, and other guests included Brigadier General A.P. Ardourel, Adjutant General of the Colorado National Guard, and Captain Leo H. Dawson, Air Corps, who was on leave from his home station at Mitchel Field, New York.

Drills for the Squadron during the winter season will include two Sunday mornings and two Wednesday nights each month. In addition, orders have been posted that each officer of the Squadron will be required to perform five hours of assigned missions aside from the regular drill period. Pilots are assigned several additional hours of instrument flying each month, and it is felt that, as a result, the Squadron will attain even a greater standard of efficiency than it now enjoys.

Officers of the 120th Observation Squadron and their respective assignments are as follows:

Major Frederick W. Bonfils, Commanding
45th Division Aviation.
Captain John K. Nissley, Air Corps,
Instructor.
Captain Harrison W. Wellman, Jr., Com-
manding Flight "A."
Captain Raymond M. Wilson, Operations
Officer.
Captain Homer G. Sweet, Commanding
Flight "B."
Captain Stanford W. Gregory, Liaison Of-
ficer, Flight "A."
Captain Henry S. Houghton, Liaison Offi-
cer, Flight "B."
1st Lieut. William C. Calhoun, Command-
ing Photo Section.
1st Lieut. Eugene Cunningham, Supply
Officer.

1st Lieut. Baxter L. Ireland, Engineer-
ing Officer.
1st Lieut. Ford E. Williams, Adjutant.
1st Lieut. Howard M. Williams, Assis-
tant Liaison Officer, Flight "A."
1st Lieut. Daniel F. Burns, Personnel
Adjutant.
1st Lieut. Harley A. Tsall, Mess Offi-
cer.
1st Lieut. William B. Ogle, Athletic
Officer.
1st Lieut. Manfred W. Swink, Communi-
cations Officer.
1st Lieut. Charles L. Schliecker,
Range Officer.
1st Lieut. Claude B. Thompson, Assis-
tant Communications Officer.
1st Lieut. Robert L. Ainsworth, Assis-
tant Engineering Officer.
2nd Lieut. John L. Fellows, Armament
Officer.
2nd Lieut. Harry B. Combs, II, Assis-
tant Photo Officer.
2nd Lieut. Thomas E. Halpin, Assistant
Supply Officer.
2nd Lieut. John H. Stark, Transporta-
tion Officer.
2nd Lieut. Alfred E. Bent, Assistant
Transportation Officer.
2nd Lieut. Stanley E. Jamellier, As-
sistant Range Officer.
2nd Lieut. Virgil W. Vaughn, Assistant
Operations Officer.
2nd Lieut. James B. Morris, Publicity
Officer.
2nd Lieut. Trow E. Sebree, Assistant
Liaison Officer, Flight "B."
- By 2nd Lt. James B. Morris,
Colorado N.G. Air Corps.

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"SUPER FLYING FORTRESS AT LANGLEY FIELD"

The Army's "Super Flying Fortress," technically known as the B-15, arrived at Langley Field, Va., on August 6th. It was piloted by Lieut. Colonel Robert Olds, with Major E.R. McReynolds and Captain R.F. Travis as members of the crew. The addition of this airplane to the B-17's of the 2nd Bombardment Group will make possible further tests in long range bombing, similar to those conducted in the past by this Group.

On August 11th, Lieut. Colonel Olds flew the B-15 to Miami, Fla., to greet the flight of B-17's, led by Major Vincent J. Meloy, returning from Bogota, Colombia. Radio communication was established as Colonel Olds and the "Good Will" flyers converged on Miami, and the rendezvous was made over the city.

While taking delivery at Wright Field of the B-15, Lieut. Colonel Olds tested the new P-36 with opposite rotation propellers. He was deeply impressed with the successful torque counteraction at high diving and maneuvering speeds.

SECOND BOMBARDMENT GROUP ACTIVITIES

Cadets from the United States Military Academy, West Point, New York, witnessed on August 17th a bombing demonstration by the 2nd Bombardment Group on Plum Tree Island. The future generals observed the demonstration from a dock at Messick, approximately one mile from the target, and were quite impressed with the accuracy of the bombardiers from Langley Field.

Enlisted personnel attending the Bombardiers' School are nearing the completion of their course. Their improvement in bombing, as evidenced by their accuracy, proved a source of much gratification to the Group Commander.

The 49th Bombardment Squadron recently had a distinguished visitor in the person of Major General George C. Marshall, from the Office of the Chief of Staff, Washington, D.C., who witnessed bombing training by the organization. General Marshall was well pleased with the results of a mission flown in a B-17.

The 49th Bombardment Squadron now has possession of the XB-15 airplane, the Army's largest Bomber, and is at present running a series of tests with the aid of the National Advisory Committee for Aeronautics.

Captain I.R. Hazen, Air Reserve, who is the Senior Airlines Inspector for the U.S. Government in the Chicago district, was on inactive status with the 20th Bombardment Squadron for the period from August 8th to 20th, receiving familiarization and transition flying training on four-engine type of aircraft.

Touching on some of the high-lights incident to the recent visit of the Langley Field personnel to Bogota, Colombia, the Correspondent of the 49th Bombardment Squadron relates that Lieut. Freeman tried his Spanish on the cooks at the place where the flyers were quartered. He said: "Today I am going to get scrambled eggs instead of the customary fried eggs." Into the kitchen charged Lieut. Freeman. After about five minutes of din from the kitchen, he reported to officers at the breakfast table that "we are going to have scrambled eggs." As soon as he was seated, the maid brought in a box of matches. Then, in about five more minutes, arrived the eggs - but fried as usual, not scrambled.

During the ball given in the opera house in President Santos' honor, one of the Langley Field officers saw one of his friends in a box down in the second tier near the President's box,

and he headed in that direction. Upon his arrival at the rear of the box, he started to pass two soldiers. They tried to stop him, but not this man. He entered, pushed his way to the front of the box and found himself shaking hands with the new President of Colombia, much to his surprise and amazement.

"Even we have one-eyed Connollys in the Group," adds our Correspondent.

Because on his previous trip to South America he had to go to a police station in order to find out where he lived, Lieut. "Headset" Tucker, Communications Officer of the 49th Squadron, to guard against a repetition of such an occurrence, wrote the address of the residence of the flyers and pasted same in his hat.

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ADDITIONAL OFFICERS FOR THE AIR CORPS

Effective October 6, 1938, the commissioned strength of the Army Air Corps will be increased by 61 officers, all of whom are graduates of the U.S. Military Academy, West Point, N.Y., and are now attending the Air Corps Advanced Flying School at Kelly Field, Texas.

Special Orders of the War Department, recently issued, announce the transfer of these officers to the Air Corps on the above mentioned date and their assignment to the stations indicated for duty, effective upon the completion of their course of flying training at Kelly Field. These duty assignments are as follows:

To Langley Field, Va.:

Alan D. Clark, Coast Artillery Corps
Harvey C. Dorney, Cavalry
Gale E. Ellis, Signal Corps
Richard P. Klocko, Corps of Engineers
Robert F. Lesser, Field Artillery
John D. Stevenson, Corps of Engineers

To Hamilton Field, Calif.:

Sam W. Agee, Jr., Field Artillery
Woodrow W. Dunlop, Infantry
George L. Holcomb, Corps of Engineers
Maurice A. Preston, Cavalry
Robert Taylor, 3d, Coast Artillery
Kenneth S. Wade, Signal Corps

To Mitchel Field, N.Y.:

John F. Batjer, Field Artillery
Horace Greeley, Infantry
Samuel C. Gurney, Jr., Cavalry
Kenneth O. Sanborn, Infantry
Lawrence A. Spilman, Cavalry
Whiteford C. Mauldin, Signal Corps (to the 97th Observation Squadron)

To March Field, Riverside, Calif.:

Donald B. Brummel, Quartermaster Corps
Jack N. Donohew, Corps of Engineers
Malcolm Green, Jr., Infantry
Robert H. Herman, Coast Artillery Corps
Gordon C. Leland, Infantry
Curtis R. Low, Coast Artillery Corps
William E. McDonald, Cavalry
Floyd J. Pell, Cavalry
Charles B. Westover, Field Artillery

To Selfridge Field, Mt. Clemens, Mich.:

William R. Clingerman, Jr., Corps of Engineers

John G. Eriksen, Field Artillery

Morton D. Magoffin, Infantry

Charles W. Stark, Jr., Infantry

John R. Ulricson, Cavalry

To Barksdale Field, Shreveport, La.:

William G. Hipps, Cavalry

Joseph A. Miller, Jr., Infantry

Ivan W. McElroy, Field Artillery

Charles A. Sprague, Cavalry

Harry F. van Leuven, Field Artillery

Harold B. Wright, Corps of Engineers

To the Hawaiian Department:

Richard R. Barden, Signal Corps

William J. Cain, Jr., Infantry

Render D. Denson, Infantry

Conrad H. Diehl, Jr., Field Artillery

Jasper N. Durham, Infantry

Walter Eckman, Corps of Engineers

Marshall R. Gray, Infantry

Richard H. Hackford, Coast Artillery Corps

Harry E. Hammond, Field Artillery

Thomas A. Holdiman, Quartermaster Corps

Bruce K. Holloway, Cavalry

Nils O. Ohman, Corps of Engineers

James T. Posey, Infantry

Charles L. Robbins, Coast Artillery Corps

Alvord Rutherford, Coast Artillery Corps

To the Philippine Department:

Jack E. Caldwell, Infantry

Richard W. Fellows, Cavalry

William K. Horrigan, Field Artillery

To Fort Lewis, Washington:

Wilbur H. Stratton, Cavalry, to the 91st Observation Squadron

To Moffett Field, Calif.:

Thomas E. Powell, Infantry, to the 82nd Observation Squadron

All of the above-named officers are second lieutenants and members of the June 12, 1937, graduating class from the U.S. Military Academy.

Three other officers, due to graduate from Kelly Field in October, and who are transferred to the Air Corps on the 6th of that month, are 1st Lieuts. Charles J. Bondley, Jr., Coast Artillery Corps (assigned to Langley Field, Va.); John T. Mosby, Infantry (assigned to the 16th Observation Squadron, Fort Bragg, N.C.) and Robert M. Lee, Cavalry (assigned to the 12th Observation Squadron, Fort Knox, Ky.)

All three of these officers are West Point graduates, Lieut. Bondley graduating June 12, 1934; Lieut. Mosby, June 12, 1935, and Lieut. Lee, June 11, 1931.

One other member of the October graduating class at Kelly Field is Captain John A. Tarro, Air Corps, who already holds the flying ratings of Airship Pilot, Balloon Observer and Airplane Observer, and who will receive his fourth rating, that of "Airplane Pilot," upon his graduation. Captain Tarro goes to the 22nd Obs. Squadron, Brooks Field, Tex.

THE OCTOBER, 1938, CLASS AT RANDOLPH FIELD

Thus far a total of 228 candidates have qualified for appointment as Flying Cadets and are slated to report at the Air Corps Primary Flying School at Randolph Field, Texas, on October 10th, next, to begin training with the October, 1938, Class.

Of the above 228 candidates, 16 are enlisted men of the Air Corps, 8 are enlisted men of other branches of the Regular Army, and the remaining 204 are from civil life. Other students who will begin flying with the October Class are 113 second lieutenants of the Regular Army who graduated from the U.S. Military Academy, West Point, N.Y., on June 14, 1938. The names of these officers were published in the August 1, 1938, issue of the Air Corps News Letter.

It will thus be noted that so far 341 students have been selected for the October entering class at Randolph Field.

The candidates selected for Flying Cadet appointments are enumerated below, as follows:

CIVILIANS

Roberts, Donald Eugene	Bessemer, Ala.	Hays, Samuel Wahl	Champaign, Ill.
Williams, Arbery Rudolph	Birmingham, Ala.	Kemp, Edward Knowlton	Champaign, Ill.
McKoy, David Owen	Cullman, Ala.	Robinson, Charles Gordon	Champaign, Ill.
Woodward, John	Ft. McClellan, Ala.	Lee, James L.	Chicago, Ill.
Powell, Lester S., Jr.	Gadsden, Ala.	Lien, James O.	Chicago, Ill.
Wilson, William Driver	Gadsden, Ala.	Scheid, John Morrell	Chicago, Ill.
Campbell, Charles Clay	Helena, Ala.	Siddall, James Joseph	Chicago, Ill.
Caton, Curtis Eugene	Montgomery, Ala.	Smith, Wayne G.	Chicago, Ill.
Cook, Earl Brown	Montgomery, Ala.	Sullivan, Frank Edward	Chicago, Ill.
Bowen, Ferrell Lamar	Tallassee, Ala.	Woltanski, Thaddeus Lewis	Chicago, Ill.
Fant, Richard O., Jr.	Tuscaloosa, Ala.	Beardsley, Henry Lindorf	East St. Louis, Ill.
Campbell, Murry Oates	Cane Hill, Ark.	Lang, William H.	Galesburg, Ill.
Ainsworth, Woodrow L.	El Dorado, Ark.	Stevenson, Roger Armstrong	Lebanon, Ill.
Whitaker, Andrew Wesley	Fort Smith, Ark.	Roberts, Albert Jay, Jr.	Ottawa, Ill.
Leidy, Charles A., Jr.	Little Rock, Ark.	Postlewaite, Robert D.	Palestine, Ill.
McAllister, Eugene W.	Little Rock, Ark.	Whitehurst, Junius Prantice	Peoria, Ill.
Nickels, Clabourne Woodrow	Little Rock, Ark.	Floyd, Harold	Tamlico, Ill.
Tedder, Irby V.	Wilson, Ark.	Street, Harold Mead	Walnut, Ill.
Mann, Lewis Ray	Berkeley, Calif.	Stevenson, Stanley Ray	Centerpoint, Ind.
Viverette, Donlyn	Blythe, Calif.	Warren, Clarence Negley, Jr.	Indianapolis, Ind.
Rains, Lawrence Fossitt	Clovis, Calif.	Swinehart, Marion Louis	South Bend, Ind.
Williams, James Rhue	Los Angeles, Calif.	Wray, Robert Stephen	Cedar Rapids, Iowa
Bennett, Donald K.	Los Angeles, Calif.	Bair, Robert Yarnell	Des Moines, Iowa
Close, Winton Ralph	Los Angeles, Calif.	Parsley, Harold Vincent	Hornick, Iowa
Coffield, Curtis H.	Los Angeles, Calif.	Kempf, Russell Elton	Iowa City, Iowa
Murray, Samuel Fenton	Palo Alto, Calif.	Leffingwell, Charles Edwin	Iowa City, Iowa
Merritt, Ralph L.	Sacramento, Calif.	Eyres, William Gordon	Le Mars, Iowa
Bayley, Harry Moore, Jr.	San Francisco, Calif.	Myers, Edward Payson	North Liberty, Iowa
Reisner, John Arthur	San Francisco, Calif.	Sonnkalb, Charles D.	Postville, Iowa
Hall, Floyd D.	Boulder, Colo.	Ford, Eugene Matthew	West Bend, Iowa
Barr, Clifton Franklin	Colorado Springs, Colo.	Crow, Roger McKee	Fredonia, Kans.
Nowells, Richard Wright	Colorado Springs, Colo.	Pollom, Lester Winner	Topeka, Kans.
Wallace, Oliver Ernest	Denver, Colo.	Tarter, Heber Dana	Mintonville, Ky.
Littrich, Robert Ivan	Bridgeport, Conn.	Davis, Eugene	Noxanna, Ky.
Cloocalone, Thomas James	East Hartford, Conn.	Winterbottom, James M.	Alexandria, La.
Pratt, Ogden Nelson	Hartford, Conn.	Dew, William Edward	Shreveport, La.
Greco, Ralph Louis	Kensington, Conn.	Frost, Robert Vernon	Norway, Me.
Wood, George Alexander	Wallingford, Conn.	Fairfield, Loren Redford	South Portland, Me.
Newton, Preston Carroll	Washington, D.C.	Tower, John R.	Easton, Md.
Renshaw, Claude D.	Gainesville, Fla.	Moore, Alvan Neavitt	Queen Anne, Md.
Epperson, Douglas H.	Lake City, Fla.	Avery, Arthur Chester, Jr.	Amherst, Mass.
Rickett, Robert Edward	Atlanta, Ga.	Blakely, Carl Paul	Boston, Mass.
Jones, Allen, Jr.	Columbus, Ga.	Regan, Paul Gerard	Boston, Mass.
Marshall, John Donald	Savannah, Ga.	McGrath, John Francis, Jr.	Jamaica Plain, Mass.
Poulson, Paul, Jr.	Boise, Idaho	Johnson, Phillip H., Jr.	Milton, Mass.
		Walden, David Carroll	Milton, Mass.
		Metropolsky, Nicholas N., Jr.	Salem, Mass.
		Brennan, Humphrey Charles	Watertown, Mass.
		Finneran, John F., Jr.	Worcester, Mass.
		Frederick, Julian Ross	Ann Arbor, Mich.
		Alexander, Donald Martin	Detroit, Mich.
		Jensen, Walter A.	Birmingham, Mich.
		Bash, Robert Edwin	East Lansing, Mich.
		Kaiser, William Francis	Flint, Mich.
		Patterson, Warren B.	Houghton, Mich.
		Moffat, William H.	Leonard, Mich.
		Stanton, Robert L.	St. Joseph, Mich.
		Farrell, Max Everett	Cass Lake, Minn.
		Wall, Marvin R.	Minneapolis, Minn.
		Johnson, William Edward	St. Paul, Minn.
		Musselwhite, William B.	Jackson, Miss.
		Barns, James Harrison, III	Boonville, Mo.
		Thornton, James Logan	Cape Girardeau, Mo.
		McCorkle, Leon M.	Salisbury, Mo.
		Hauk, Paul Ignatius	Malta, Mont.
		Larson, Robert Sherman	Thompson Falls, Mont.
		Ward, Warren Leonard	Auburn, Neb.
		Watkins, Howard Elroy	Grant, Neb.
		Richardson, John LaVerne	Lincoln, Neb.
		Heffman, John Joseph	Omaha, Neb.

Fuetsch, Frederic Theodore	Reno, Nev.	Coleman, Lee Browning	Buckhannon, W. Va.
Neal, Robert	Rochester, N.H.	Lowman, William Morris	Buckhannon, W. Va.
Planscen, John Louis	Belleville, N.J.	Spotts, Oscar Francis	Keyser, W. Va.
Walmsley, William W.	Montclair, N.J.	Sutton, John Liggett	Mill Creek, W. Va.
Manukas, George N.	Trenton, N.J.	Dawson, James Stenger	Morgantown, W. Va.
Moss, Thayer D.	Westville, N.J.	Milestone, LeRoy M.	Argyle, Wis.
Wood, William Johnston	Albuquerque, N.M.	Lyle, Carl Wentland	Ripon, Wis.
Selby, David Collins	Anthony, N.M.	Reab, Hilary A.	Laramie, Wyo.
Wilson, Keith S.	Bolivar, N.Y.	Wood, Frank Lee, Jr.	Laramie, Wyo.
Kappil, Louis Charles	Elmira, N.Y.	Miller, Charles Reed	Newcastle, Wyo.
Petrie, James G.	Flushing, N.Y.	Doyle, Raymond Wesley	Sheridan, Wyo.
Joiner, Eugene Burton	New York, N.Y.	Moore, Malcolm A.	Kolcs, Kauai, T.H.
Mallinson, Hiram Royal	New York, N.Y.		
Hutchinson, William W.	New York, N.Y.		
Mullen, Marcus Alfred	New Rochelle, N.Y.		
Bear, Charles F.	Syracuse, N.Y.		
Speers, Charles Frederick	Syracuse, N.Y.		
Wheeler, Warren Sanford	Hickory, N.C.		
Hellickson, Dale E.	Medora, N.D.		
Hoffman, Frederic Grant	Alliance, Ohio		
Woolery, Edward Raymond	Columbus, Ohio		
Kelley, Robert Madison	Hamilton, Ohio		
Pomeroy, Don A.	Lakewood, Ohio		
Hawley, John Robert	Toledo, Ohio		
Turner, Carl C.	Altus, Okla.		
Parrish, Johnny	Anadarko, Okla.		
Hale, Samuel Peck, Jr.	Ardmore, Okla.		
Hoffman, Charles Calvin	Dewey, Okla.		
Banker, John J.	Frederick, Okla.		
Hubbard, Edward Francis	Frederick, Okla.		
Berry, Gleneth Boyd	Humphreys, Okla.		
Porter, Stuart Moss	Muskogee, Okla.		
Trosper, Earl Joseph	Oklahoma City, Okla.		
Showalter, Frank M.	Reno, Nevada		
Colt, Freeling T.	Allentown, Pa.		
Shively, Albert Elijah	Minisink Hills, Pa.		
Miller, Robert Hunter	Patton, Pa.		
Sewell, Robert, Jr.	Rydal, Pa.		
Reed, James Franklin	State College, Pa.		
Anderson, George Frederick	Swarthmore, Pa.		
Brownell, William Smith, III	Newport, R.I.		
Garragher, Francis Dean	Providence, R.I.		
Peckham, Arthur E., Jr.	Waverly, R.I.		
Eaddy, Edward Allen	Johnsonville, S.C.		
Vereen, Lindsey Hartford	Little River, S.C.		
Boatwright, Lewellyn T., Jr.	Ridge Spring, S.C.		
Davidson, Robert Carl	Sioux Falls, S.D.		
Bright, Kyle Cecil	Afton, Tenn.		
McConnell, Landon Edward	Bristol, Tenn.		
Davis, Richard Archer, Jr.	Springfield, Tenn.		
Long, Eugene M.	Beaumont, Texas		
Schenck, Carman H.	Fort Worth, Texas		
McKenie, Jack F.	Hearne, Texas		
Nendell, Jack A.	Randolph Field, Texas		
Luma, Bigham F.	San Antonio, Texas		
Tillspaugh, Herbert J., Jr.	Bridgeland, Utah		
Olson, Christian Garth	Payson, Utah		
Smith, Charles John	Rubland, Vt.		
Peters, Herbert W.	Appalachia, Va.		
Travis, Frank H., Jr.	Lexington, Va.		
Lackey, John Herbert, Jr.	Norfolk, Va.		
Sherman, James Christian	Newport News, Va.		
Venable, Eugene Roane	Ronoake, Va.		
Harrell, Richard O., Jr.	South Boston, Va.		
McElroy, Stephen Davenport	Upperville, Va.		
Simmons, Harold Ernest	Seattle, Wash.		
Towler, Harry H., Jr.	Seattle, Wash.		
Flowers, Noel Quentin	Silverdale, Wash.		
Henry, Norman Arthur	Spokane, Wash.		
McFarland, Donald L.	Spokane, Wash.		
Sanders, Richard G.	Yakima, Wash.		

ENLISTED MEN, AIR CORPS

Palm, Lorrill A. (Pvt.)	Visalia, Calif.
6th Pursuit Squadron, Schofield Hqs., T.H.	
Lyantton, Keith Xavier (Pvt.)	Miami, Fla.
8th C.A. Air Corps Det., Lordsburg, N.M.	
Pavel, William T. (Pvt.)	Berewyn, Ill.
Base Hqrs. and 3d Air Base Squadron,	
Selfridge Field, Mt. Clemens, Mich.	
Shea, James Howard (Pvt.)	Springfield, Ill.
Base Hqrs. and 3rd Air Base Squadron,	
Selfridge Field, Mt. Clemens, Mich.	
Russell, Howard W. (Pvt.)	Lebanon, Ky.
12th Obs. Squadron, Fort Knox, Ky.	
Hendrix, James M. (Pvt.)	Trotwood, Ohio
Base Hqrs. and 9th Air Base Squadron,	
Moffett Field, California	
Stenglein, Joseph A. (Corp.)	Seneca Falls, N.Y.
Base Hqrs. and 1st Air Base Squadron,	
Langley Field, Va.	
Kidd, John Leslie	Bristow, Okla.
13th Attack Squadron, Barksdale Field, La.	
Ray, Clyde A. (Pvt.)	Nowata, Okla.
53rd School Squadron, Randolph Field, Texas	
Davis, Clovis Gleen (Pvt.)	Willow, Okla.
12th Observation Squadron, Fort Sill, Okla.	
Johnson, Vernon Chris (Pvt.)	Lapine, Ore.
Base Hqrs. and 4th Air Base Squadron,	
March Field, Riverside, Calif.	
Sienko, Henry P. (Pvt.)	Lake Como, Pa.
Hqrs. and Hqrs. Squadron, Chanute Field, Ill.	
Ols, George Joseph (Pvt.)	Windber, Pa.
Base Hqrs. and 4th Air Base Squadron,	
March Field, Riverside, Calif.	
Stone, Rolle E.	Etowah, Tenn.
1st Depot Squadron, France Field, C. Z.	
Gustafson, Herbert John (Pvt.)	Seattle, Wash.
1st Weather Sqd. Det., Hamilton Field, Calif.	
Herbes, Edward (Pvt.)	Milwaukee, Wis.
3rd Air Base Squadron, Selfridge Field, Mich.	

ENLISTED MEN, OTHER BRANCHES OF SERVICE

Strong, William Dupont	Blakely, Ga.
Private, Infantry.	
Chitty, Charles Dean, Jr.	Fort Gaines, Ga.
Pvt., Hqrs. 3rd Engineers, Schofield	
Barracks, T.H.	
Frizzell, Tedrow B.	Brunswick, Mich.
Corp., Co. H, 29th Infantry, Ft. Benning, Ga.	
Thompson, Joe C.	Shivers, Miss.
Pvt. Hqrs. and Hqrs. Battery, 2nd Battalion,	
1st Field Artillery, Fort Sill, Okla.	
Ellis, Herbert S.	Elizabeth, N.J.
Corp., Hqrs. Battery, 62nd Coast Artillery,	
Fort Totten, New York.	
Matthews, William H.	Brooklyn, N.Y.
Corp., Headquarters Battery and Combat Train	
1st Bn., 62d Coast Artillery, Fort Totten,	
New York.	

Allen, William Hubert Portland, Ore.
 Pvt., West Point Preparatory School,
 Fort Winfield Scott, Calif.
 Houda, Eugene W. Kimball, S.D.
 Hqrs. Troop, 4th Cavalry, Fort Meade, S.D.

Additional Civilians

Oviatt, Karl Eugene Preston, Idaho
 Doherty, Joseph Michael Oak Park, Ill.
 Holm, Florian Hays, Kans.
 Burke, Richard Patrick Newburyport, Mass.
 Clinkscales, Theodore Ross Greenville, S. C.

For the second consecutive time, Illinois, with a total of 29 students, has taken the lead in the matter of State representation among all of the students in a new entering class at the Air Corps Training Center. Other States which are represented by five or more students are: New York, 23; California, 16; Alabama, Massachusetts, Oklahoma and Pennsylvania, 14 each; Michigan, 13; Iowa, 12; Arkansas and Ohio, 11 each; New Jersey and Virginia, 9 each; Connecticut, Georgia, Tennessee and Washington, 8 each; Kansas and Texas, 7 each; Mississippi, 6; Colorado, Florida, Indiana, Kentucky, Louisiana, Minnesota, Missouri, West Virginia and Wyoming, 5 each.

Keeping in step with her State, Chicago leads the cities represented in the new class with 10 students. Other cities represented by three or more students are Little Rock, Ark., 5; Los Angeles, Calif.; Washington, D.C.; New York City and Seattle, Wash., 4 each; Champaign, Ill. and Detroit, Mich., 3 each.

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'HAM' RADIO STATION AT SELFRIDGE FIELD

Under the supervision of the Base Communications Officer, Lieut. R.O.S. Akre, Air Corps, an amateur ('Ham') radio station, WSRVE, has been licensed by the Federal Communications Commission and established at Selfridge Field, Mt. Clemens, Mich., and is being operated by both the Selfridge Air Base and First Pursuit Group communications personnel who have secured the necessary amateur licenses.

Numerous schedules have been worked with other amateurs throughout the United States and other parts of the world. To date the most distant point worked has been Australia. The Hawaiian Islands and Cuba have been worked also. In fact, several messages from Hickam Field, Oahu, T.H., to friends in the United States have been delivered.

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CHANGES AT CLARK FIELD, P.I.

There have been a great number of changes at Clark Field, P.I., since the departure of the 3rd Pursuit Squadron and the advent of the 28th Bombardiers, and the "shaking down" process is still in progress. This is a natural result of a complete change in officer personnel and of the variance in the requirements of the departed Pursuit Squadron and the incoming Bombardment squadron. Headquarters building is being repainted, and the painting of walls and the sanding of floors in the barracks are slowly

progressing. The 20th Air Base and the 28th Squadron men are now separated in barracks, and uniformity in arrangements of bunks, lockers, etc., is being sought.

The Clark Field organization, with department heads, is as follows:

Major Guy L. McNeill, Commanding Officer;
 Captain J.P. Kirkendall, Adjutant;
 1st Lieut. Wendell W. Bowman, Operations and Communications;
 1st Lieut. Hunter Harris, Jr., Armament and Athletics;
 1st Lieut. Stanley J. Donovan, Utilities and Transportation;
 1st Lieut. Leon R. Brownfield, Air Corps Supply;
 1st Lieut. David N. Motherwell, Engineering;
 2nd Lieut. Paul E. Todd, Supply and Mess;
 2nd Lieut. Edward W. Maschmeyer, Air Reserve, aide to the American High Commissioner McNutt.

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PERSONNEL NOTES

The following-named second lieutenants of the Air Reserve have been placed on active duty for a period of two years from October 3, 1938, and assigned to station at Randolph Field, Texas:

James Orrin Beckwith, Waterville, Me.
 Walter Leigh Hawkins, Oklahoma City, Okla.
 Robert John Koster, Cincinnati, Ohio.
 Alvin John Henry Mueller, Jr., Seguin, Texas.
 Claud Alton O'Quinn, Atlanta, Ga.
 Frederick Hayes Postal, Chicago, Ill.
 Cloyce Joseph Tippet, San Francisco, Calif.

Lieut. Colonel Lester T. Miller, Air Corps, has been relieved as a member of the General Staff, from assignment to the War Department General Staff and from further duty in the Office of the Chief of Staff, Washington, D.C., and assigned to duty in the Office of the Chief of the Air Corps.

Announcement was made in War Department Special Orders of the temporary appointment of Lieut. Colonel George H. Brett, Air Corps, to the grade of Colonel, with rank from June 1, 1938.

Upon the completion of their present tour of duty in the Hawaiian Department, the following-named Air Corps officers are assigned to stations, as follows:

Major Charles E. Branshaw to the Rockwell Air Depot, Coronado, Calif.
 First Lieuts. Samuel C. Mitchell and Paul E. Ruestow to Mitchel Field, N.Y.

Major James F. Powell has been relieved from duty at Wright Field, Ohio, and assigned as Air Corps Procurement Planning Representative at Cleveland, Ohio.

Master Sergeants John Hallam, Fort Sill, Okla., and William A. Hixson, of Base Headquarters and 1st Air Base Squadron, GHQ Air Force, Langley Field, Va., have been placed on the retired list at their respective stations, effective September 30, 1938.

23RD BOMBARDMENT SQUADRON FLIES INTERESTING MISSION
By the News Letter Correspondent

On the morning of August 11th, approximately 35 officers and men of the 23rd Bombardment Squadron, stationed at Hickam Field, T.H., participated in one of the most interesting missions in their experience since arriving in the Hawaiian Department. A squadron flight to French Frigate Shoals had been scheduled for some time, but inclement weather for the few days just prior to the flight made take-off plans doubtful. However, weather forecasts were favorable and the morning of the 11th dawned bright and clear.

After a final check on the weather report and positions of surface vessels along the route, five B-18's with combat crews, guns, and bombs, took off at 0845 under the command of Major Harold W. Beaton. At 0925, the personnel in the planes could see Kauai nestling under a heavy blanket of clouds a few miles to the right of the course. Shortly thereafter the Squadron flew directly over little known Niihau.

Flying along in brilliant sunshine at 8,000 feet, a darker shadow than usual was noticed under the clouds about 15 miles to the right. Continued observance proved that this was Nihoa, a tiny island or rock rising from the sea and inhabited only by wild life. About an hour more of flying over low clouds brought tiny Necker Island into view at 1105.

Everyone began craning their necks about that time, as the destination was only a short ninety nautical miles away. Within half an hour a long curving line of breakers and white water appeared dead ahead. Tiny sand spits dotted this breaker line, and as the Squadron continued its westerly course low sand hills and one or two brush covered bars appeared. The largest of these had a tiny wharf and a barn on it, the only sign to indicate that man had ever been there before. The Squadron arrived over the largest of these sand bars at 1133 and spent about fifteen minutes circling the area at low altitude. Birds seemingly countless and large turtles appeared to be the only live things on this tiny spot of land in the middle of the Pacific.

After giving the area the once over, the Squadron picked up a course for Necker Island, opened up the formation and performed individual bombing approaches on the island. Each ship dropped a practice bomb on this barren spot and then rejoined the formation and headed for Oahu.

By this time all members of the flight were beginning to expect the few check points available to appear on the horizon at the proper time, and sure enough, thanks to the navigators, Nihoa, Niihau,

and Kauai all passed beneath the wings at the proper time. At this time, to inject still another problem into the mission, Major Beaton in the lead plane gave orders to take up the Squadron formation for penetration of a bad weather area. His orders called for assembly on the lead plane after all planes had descended safely through the simulated overcast. After assembly, the gunners were given a chance to unlimber their machine guns and to spray the blue Pacific with lead.

After approximately 7 hours in the air, the Squadron landed at their home airdrome, Hickam Field, secure in the knowledge that they had seen land (and water) not previously seen by Army personnel from land type airplanes. The mission constituted the longest over-water mass flight of Army airplanes ever attempted in the Hawaiian Department. It shows the defensive and offensive possibilities of land based aircraft in the Hawaiian Islands.

Of all the personnel making the flight, the greatest credit should go to the navigators who hit their destination and ETA's (estimated time of arrival) right on the nose. According to their calculations, the Squadron covered the 550 miles out at an average speed of 204 miles an hour. The return trip was made in a more leisurely fashion, with the Squadron participating in various phases of training.

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FIELD TRAINING FOR 72ND BOMB. SQUADRON

The 72nd Bombardment Squadron in the Hawaiian Department recently completed an intensive two weeks' training course at Bellows Field and, although a good time was had by all, the Squadron as a whole was glad to return to its home base.

Ground and aerial gunnery was run off with dispatch, and most of the men made scores as good as could be expected. Bombing was another of the training requirements which was performed daily, weather permitting. There were a few rainy days, but most of the time it was cool and comfortable. The swimming, volley ball and soft ball games which were indulged in during off duty hours contributed towards making the stay at the camp an enjoyable one. In fact, it was only the pestiferous mosquito what in any way marred an enjoyable two weeks.

The News Letter Correspondent compliments Sergeant Swendrowski and his kitchen staff on the excellent food which was served throughout the stay of the Squadron at Bellows Field.

(Continued on Page 9).

CONSTRUCTION PROJECTS AT SCOTT FIELD

Announcement was recently made by the Honorable Harry H. Woodring, Secretary of War, of details of the plans for the expansion and development of Scott Field, Belleville, Ill., in order to provide for the Headquarters of the GHQ Air Force. Major General Frank M. Andrews, Commanding General of the GHQ Air Force, will move his headquarters units and personnel from Langley Field, Va., to Scott Field as soon as the necessary new construction can be completed. The headquarters of the Second Wing and various units of that wing will remain at Langley Field.

At Scott Field the headquarters of the GHQ Air Force will be more strategically located than at present. The headquarters personnel will be within a few hours' flying distance from all of the combat elements of the Air Corps in continental United States. The transfer will place the command of the GHQ Air Force more nearly at the geographical center of the United States, instead of on the Atlantic Coast as at present.

In order to provide permanent accommodations for the units now at Scott Field and those to be sent there with the GHQ Air Force headquarters, it will be necessary to rebuild the post. Architecturally the new buildings will, in general, conform to the Georgian designs used successfully at many other military posts. Structures such as the GHQ and Post Headquarters, the Administration Building, the barracks and the hospital will be of fireproof construction. The hangar and the industrial buildings will be of steel frame construction. A large portion of the work will consist of the construction of extensive runways and the facilities now regularly provided at modern airfields.

The following new essential installations will be provided:

Two barracks to provide for 330 enlisted men.

NCO Quarters to provide for 32 noncommissioned officers.

Officers' Quarters to provide for 62 married and 10 bachelor officers.

1 GHQ and Post Headquarters Administration Building.

1 Hangar, 250 x 500 feet, with shops.

Quartermaster utilities, including warehouses, garages, gasoline and oil storage.

New runways, apron, taxiways and night lighting.

Hospital.

Fire and Guard House.

Ordnance Magazine.

Gymnasium and Service Club, including a Post Exchange.

Quarters will be provided at Scott Field for the Commanding General, GHQ Air Force, and the various necessary staff

officers for the operation of the GHQ, also the necessary administrative and maintenance personnel to permit efficient exercise of command by the GHQ Air Force and to operate, maintain and supply the aircraft which makes this the most mobile Headquarters in the United States Army.

Other work to be done will include the dismantling of the airship hangar now on the field, since it is situated on the landing field and creates a flying hazard; the dismantling of the present airship mooring mast, also a flying hazard, and such additional projects as installation of a water tank and supply lines, sewage lines, electrical distribution system and heating plants.

The entire post will be fenced, and suitable air beacons will be erected. The estimated total cost of the new construction is \$4,857,400.

Scott Field is now the station of the following organizations:

21st Balloon Group Headquarters,

15th Observation Squadron,

Base Headquarters and 7th Base Squadron,

Detachments of Ordnance, Signal Corps, Finance Department, Medical Department, and Quartermaster Corps.

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AMERICAN LEGION CONVENTION PARADE

As a result of a further study of Army training activities that are to be conducted during the ensuing month, in which the participation of the Air Corps is essential, the Secretary of War, the Honorable Harry H. Woodring, reluctantly reached the conclusion that it will be necessary to reduce the participation of the Air Corps in the American Legion National Convention Parade at Los Angeles, Calif., on September 20, 1938, below that announced heretofore.

It is now contemplated that the units participating will include the First Wing, which is stationed on the Pacific Coast, Brigadier General Delos C. Emmons, Commanding; the Second Bombardment Group from Langley Field, which is equipped with twelve of the famous "Flying Fortresses"; and the "Super Flying Fortress" recently delivered to the Army Air Corps.

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Field Training for 72nd Bomb. Squadron
(Continued from Page 8)

The moving of the Squadron to and from the field was accomplished with a minimum of delay and inconvenience. Everything went off according to schedule, and there were no accidents of any kind.

V-7844, A. C.

A WEEK AT MITCHEL FIELD
Notes from a West Point Cadet's Diary

First Day:

Some 150 of us took off for Mitchel this morning in a convoy of about twenty trucks. Bunched ten to a truck in neck-chafing dress grey uniforms, we spent most of the windy ride playing mathematical games and staring back at inquisitive townspeople. Breezing through New York's red traffic lights and out over the Tri Bridge through the World's Fair site, we reached the field at noon. Immediate unpacking and a hurried selection of bunks was followed by a greatly enjoyed dinner in the barracks mess. In a half-hour introductory talk by Captain Rodieck we discovered, to our unconcealed pleasure, that we were to be treated as honored guests, and that West Point was miles away in every sense of the expression. Mitchel Field took on additional glamor.

The afternoon found us scattered over the length and breadth of Long Island. Some of the more air-minded couldn't resist the allure of their new flying suits, and consequently Captain Wilson and Lieut. Cunningham played aerial taxi-driver throughout the afternoon and evening. For a few of us, these were the first flights we had ever taken.

Second Day:

A screaming whistle turned us out of our cots at 6:15 a.m. After breakfast, Colonel Hanley extended us a cordial official welcome in the Post Theatre. Lieut. Tibbetts then spoke amusingly and very informatively on "Safety and Parachutes." An inspection of the various types of airplanes assembled on the line occupied the remainder of a highly interesting morning.

Release from quarters followed a delicious chicken dinner. The cadets spent the free time until taps in voluntary flying, swimming, playing tennis and golf, and escorting their visitors all over the island.

Third Day:

Our first scheduled flying day found half of us taking ground instruction during the first period and flying during the second - the other half reversing the procedure. The Bombers (B-10's and B-18's) made familiarization flights to Bridgeport, West Point, Manhattan, Sandy Hook, and return. Riding in these big ships was smoother than in a Pullman, but some of the cadets lost their breakfasts (in paper bags) none the less. The other types of planes - primary and basic trainers, attack ships and observation ships - flew locally, acquainting us with maneuvers, acrobatics and personal use of the controls. The detached carefree sensation, the augmentation of

vision, and the feeling of great power at the fingertips when handling the controls make flying unlike anything else in the world.

The ground instruction consisted of a tour of the Base Headquarters with an explanation of the problems involved in operating a flying field efficiently, and an inspection of machine guns and bomb racks at the hangars.

After a long afternoon lecture on "Bombs and Bombing," about forty of us went over to the Seversky Aircraft Plant on an inspection tour. Since the factory was just closing for the day when we arrived, we had the run of the place. Supper was served in sandwich form out in front of the factory.

We had an opportunity to do night flying in Bombers this evening out over Manhattan, Coney Island and Jones Beach.

Fourth Day:

A slight haze cut down visibility this morning. We inspected the Engineering Laboratory, dope shop and parachute department before flying. Assignments changed today to allow us to fly in different planes so that everyone would get a flight in each type of ship at the field.

The altitude is beginning to get us - we feel sleepy every time we get back on the ground now. This was especially noticeable during a long lecture on Aerial Navigation this afternoon. The subject was interesting, but the struggle to keep awake proved somewhat distracting.

The cadets without engagements had the evening brightened at 9:00 p.m. by a parachute flare used in a night landing demonstration with a B-10B Bomber.

Fifth Day:

A thick, low-hanging fog grounded cadets all day. Instruction was confined to an absorbing lecture on "Weather and Meteorology" and an inspection tour of the Photographic Laboratory, where we saw the huge cameras used in mapping and tactical work, the developers, enlargers, printers, and the jigsaw puzzle mosaic work. The day being free from lunch until taps, most of us passed the time very enjoyably at Jones Beach.

Sixth Day:

The ceiling lifted enough this morning to permit one period of flying. A bombing mission took some of us out to Montauk Point, Long Island, and back in B-10B's, flying at 7,000 feet most of the way. A demonstration of the Link Trainer, a miniature plane used in blind flying instruction, and instruction on a secret bomb sight trainer passed the

time until lunch. A short but interesting lecture in Air Corps Communication brought the day's work to a close.

We inherited the Officers' Club this evening to enjoy a dinner hop, through the generosity of the officers of the post. A hilarious crowd of 250 femmes and cadets packed the place, getting their fill of fine food and music. Everyone had such a good time that the hosts almost had to push people out the door to make them leave when it was over.

Seventh Day:

With clear weather back, we had a full schedule today. Two days on the ground had put us behind in flying time; hence we found ourselves upstairs most of the day, the last cadet landing at 5:00 p.m. An innovation was "slick bombing" - we flew out over the North Shore and dropped bags of aluminum dust on the Sound, circling afterwards to let go sand-filled practice bombs by flights over the floating "slick." There was no ground school at all today.

Eighth Day:

In the air for the last time, we flew for one period to complete the week's schedule. Afterwards we packed to leave and policed the squad rooms. Another excellent meal topped off the week, and Mitchel Field became something to remember and something to look forward to seeing again - as one of her personnel.

-Richard deF. Cleverly
Clifford B. Haughton

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FLYING CADETS MAKE NIGHT FORCED LANDING

Flying Cadets Walter E. Arnold and John M. Knox, both students in the Pursuit Section of the Advanced Flying School, Kelly Field, Texas, had occasion to give exhibitions of their flying ability recently when they had forced landings at night.

Cadet Arnold's landing was near Bay City, Texas, where cross winds had carried him while he was engaged in an individual night navigation mission to Houston, Texas. He managed to land with the aid of flares without injury to himself. The landing gear and wing of his airplane were only slightly damaged.

Cadet Knox, also utilizing flares, made a safe landing at night near Beebe, Texas, where he was forced down when his oil line broke. The airplane was damaged to the extent of one battered wing.

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KELLY FIELD SOLDIERS AT PREPARATORY SCHOOL FOR ENTRANCE TO WEST POINT.

Five Air Corps enlisted men from Kelly Field, Texas, have been placed on temporary duty at Camp Bullis, Texas, to at-

tend the West Point Preparatory School which opened there on September 1st.

Those who will thus compete for the Army appointments to the Military Academy next Spring are Privates W.R. Taliaferro and W.H. Havre of Headquarters and Headquarters Squadron, Privates W.H. Rancier and B.M. Sergeant of the Third Weather Squadron, and Private A.M. Hutchinson, of the 63rd School Squadron.

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ANOTHER TROPHY FOR LIEUT. DENSFORD

First Lieut. Charles F. Densford, Air Corps, flying instructor in the Observation Section of the Advanced Flying School, Kelly Field, Texas, recently added another trophy to his already large collection as proof of his skill with the pistol. During the sixth Mid-Summer Pistol Shoot of the Liberty Pistol and Rifle Club of San Antonio, he won the grand aggregate award with a total score of 1,057 out of a possible 1100. His nearest competitor scored 1,036. In this series of matches, Lieut. Densford had the distinction of winning two matches, taking second place in one and, in addition, being a member of the team winning first place in the entire shoot.

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NAVIGATION TRAINING IN 88TH SQUADRON

Lieut. G.E. Pierce, Air Corps, Navigation Officer and Instructor of the 88th Reconnaissance Squadron at Hamilton Field, Calif., is conducting a dead reckoning navigation school for the new officers in the Squadron. The ground instruction began on August 15th, and has been completed. The class is now in the midst of flying the navigation missions and is progressing rapidly.

Three B-18's and one OA-4C are being used for navigation missions. The B-18's carry two student navigators, both performing a mission on each flight. Thus, seven missions are flown every day. The missions are laid out for out-to-sea navigation, unless the ocean is covered by fog, in which case an alternate mission over land is performed.

The students taking the course are Lieuts. F.P. Bostrom, J.D. Whitt, H.O. Wangeman, C.L. Scott, Jr., G.R. Montgomery, R.L. Cobb, W.E. Bayne and F.T. Crimmins.

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Three Air Corps officers recently received temporary appointment to the grade of Major, viz: Captain Nathan F. Twining, with rank from September 1, 1938; Captains Ralph F. Stearley and Russell L. Williamson, with rank from September 3, 1938.

NEW TYPE OF GERMAN AIRPLANE LANDS AT WRIGHT FIELD

The Fieseler-Storch airplane, a slow-speed, fixed-wing aircraft, equipped with slots and flaps and other high-lift devices, manufactured in Germany, arrived at Wright Field, Dayton, Ohio, on September 9th, piloted by Emil Kropf, a German graduate engineer. The airplane had been on exhibition during the Cleveland Air Races, and the purpose of the visit to Wright Field was to duplicate a demonstration put on in Cleveland, showing comparative landing, take-off, and flight characteristics of the Fieseler-Storch airplane and the Army Air Corps autogiro, for the benefit of Materiel

Division engineers who had not witnessed the demonstration in Cleveland.

The Fieseler-Storch is a so-called "safe airplane" development. This development is a continuation of the one started in this country by the Guggenheim safe airplane competition in 1929, which was won by the Curtiss Tanager airplane. Both the German airplane and the autogiro are powered with 225 horsepower motors.

The German airplane is being used in Germany at present for accomplishing slow-speed, military liaison missions.

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THE AIR RACES AT CLEVELAND, OHIO

Under a plan approved by the War Department, the Air Corps participated in the 1938 showing of the National Air Races at Cleveland, Ohio, September 3rd to 5th.

In addition to the air phase of the demonstration, furnished by the 27th Pursuit Squadron, 1st Pursuit Group, of Selfridge Field, Mich., there was a ground exhibit of nine airplanes, representing one each of the standard modern types now utilized by the Army Air Corps. These comprised an A-17, A-18, B-17, B-18, P-35, O-47, Basic Combat, BT-9 and Autogiro. The interest of the general public in the air equipment of the Army was evident from the fact that more than 150,000 persons viewed this exhibit during the three days of the Air Meet. The Air Corps Materiel Division, Wright Field, Ohio, prepared attractive signs describing the planes, their performances and uses. In addition, Air Corps enlisted men were available as guides to answer the many questions of inquiring observers.

With respect to the air demonstrations of the Selfridge Field Pursuit pilots, it was generally agreed by both civilians and Air Corps officers present that a highly creditable performance was given by this unit. It was the first public appearance of a unit equipped with the Seversky, single-seater fighter. Fears had been expressed that the speed of this plane might make it difficult to give a performance within the limited confines of the airdrome and within the view of the spectators. It was not possible, of course, to match the close formation work and tight maneuvers demonstrated in former years by the P-12 and PB-2A types of Pursuit planes. Nevertheless, a highly representative group of formations were displayed, and the precise character of the flying which was demonstrated indicated an excellent state of training and good squadron lead-

ership in the air. Major General O. Westover, Chief of the Air Corps, Army Representative at the Races, expressed himself as highly pleased with the performance of the Pursuit Squadron and congratulated Major Willis R. Taylor, Squadron Commander, and his men on their excellent work.

The Navy squadron, which had always joined with the Army and the Marine Corps in providing the Service representation at the Races, was not present this year. Navy officials stated that a defect had been discovered in some of the propellers on the fast little fighting ships of this squadron and, rather than risk a possible accident, it was decided to withdraw the entire squadron from the Air Races. And so the Navy was represented this year only by the Marine Squadron. As usual, the Marines brought a well trained unit of 18 planes to the Show and staged their normal demonstration of accurate and excellent formation flying.

The principal interest of the spectators seemed to center on the women entrants at the Races this year, if comments from the crowd and the enthusiasm displayed may be taken as a criterion. First, there was the arrival of Miss Jaqueline Cochran in her Special Seversky as the winner of the Bendix Trophy Transcontinental dash, which brought the huge crowd to their feet roaring with cheers.

A little bundle of femininity of about ninety pounds, a blonde German girl, was the next highlight. She demonstrated all the acrobatic maneuvers in the catalogue, including an outside loop, with her motorless glider. The accuracy of her air work and its versatility was only exceeded by the amazing accuracy of her landing. On the second day of the Races she landed within a fifty-foot circle, and on the other days she was within a few feet of it when her glider came to rest in front of the grandstand.

Two speed contests, the Greve Trophy Race, flown on Sunday, and the Thompson Trophy Race, flown on Monday (Labor Day), proved to be close competitions and were well flown. The Army flyers present were rooting for their old comrade, Leigh Wade, of 1924 World Flight fame, who was an entrant in the Thompson Trophy Race. Wade, however, lacked the necessary speed and finished fourth.

After the races and the performance of the women flyers, perhaps high points of spectator interest came when the German airliner "Nordwind," fresh from a Trans-Atlantic crossing, flew over the crowd, leaving a long trail of smoke from its four Diesel engines. The delayed parachute drops and the mass parachute demonstrations also pleased the crowd.

As usual, Cleveland proved a charming host to the air world at the Races. The Show seemed better organized than ever before, and there were numerous favorable comments on the showmanship displayed by the Air Meet officials in arranging the events so that they followed close on the heels of preceding schedules with clock-like precision. The excellent weather which prevailed conspired to combine with the admirable plant available at Cleveland to make the 1938 Air Races probably the most successful in history. A unanimity of opinion seemed to prevail that it was a striking and most successful air spectacle, fully worthy of its originators and sponsors.

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REUNION IN WASHINGTON OF WAR-TIME FLYERS

Remaining members of the 50th Squadron, A.E.F., who found the Lost Battalion in the World War, staged their annual reunion for the first time in the Nation's Capital, September 3rd to 6th.

From an original personnel of 350 men, including replacements, the Squadron now numbers 250 veterans, and it is the only World War aviation outfit with a continuous record of reunions.

Making their headquarters at the Continental Hotel, the veterans spent four busy days, which were taken up with business meetings, various social affairs, a pilgrimage to the Tomb of the Unknown Soldier and to the Tomb of George Washington, and sight-seeing tours.

The war-time flyers came from many parts of the United States, and numbered among them was Major Charles A. Pursley, Air Corps, now on duty at the Advanced Flying School at Kelly Field, Texas.

Saturday, September 3rd, was taken up mostly with the registration of delegates. A dinner dance was the social event in the evening.

The entire Sunday afternoon was devoted to a sight-seeing tour. There was a business meeting from six to eight, and then three banquets took place - one for the men, one for the women and the third

for the sons and daughters of the veterans. A get-together dance followed these banquets.

At noon on Monday, Labor Day, the veterans wended their way to the Arlington Cemetery, where a wreath was placed on the Tomb of the Unknown Soldier. From there the veterans and their families repaired to the estate on the banks of the Potomac of Milton K. Lockwood, a member of the Squadron, where a luncheon was served. As a reminder to the veterans of the old army life, "Mickey" Lockwood arranged to have the food served from the rolling kitchens of the Engineer Post nearby - Fort Belvoir, Va. Lockwood also provided the only and annual casualty of the reunion. Every year, regularly, Seth Bowman, of Monroe, Mich., arrives with a new straw hat, and just as regularly "Mickey" steps on it. Stuck on the bulletin board, the crushed hat is an emblem and an assurance that both Seth and "Mickey" are in attendance.

The luncheon consisted principally of beans served A.E.F. style in Army mess kits by Sergeant Adam C. Farmann, of Fort Myer. Stew, coffee and rice pudding were "trimmings."

From the Lockwood estate the entire delegation went to Mount Vernon, where a wreath was placed on the Tomb of George Washington.

All hands returned to their headquarters in time for dinner and the entertainment which followed.

On Tuesday the delegation made a final round of sight-seeing, visiting the many public buildings in the Capital.

Next year the war-time flyers of the Observation Squadron which located the beleaguered "Lost Battalion" in 1918, will meet at Jackson, Mich., the home town of their newly-elected president, Harold Hanson.

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AIR ATTACHE FLIES TO NEW POST OF DUTY

Lieut. Colonel Ralph H. Wooten, Air Corps, probably bears the unique distinction of being the first Military Attache of the U.S. Army to fly to his post of duty in a foreign country.

Colonel Wooten, who until recently was a member of the War Department General Staff in Washington, was detailed as Air Attache to Bolivia and Chile, and chose an A-17 Attack airplane as his means of transportation to his new station. He left Bolling Field, D.C., on August 16th and, after a brief stop at Brownsville, Texas, departed for Albrook Field, Panama Canal Zone, via Guatemala City, Guatemala. He landed at Albrook Field on the afternoon of August 20th, and during his stay on the Isthmus he was the guest of Brigadier General George H. Brett, Commanding

(Continued on Page 14)

O B I T U A R I E S

Second Lieut. James Breathitt, III, Air Reserve, piloting a P-35 Pursuit plane, crashed in the vicinity of Glencoe, Ontario, Canada, on September 9, 1938, and was instantly killed. The cause of the accident has not been determined.

Lieut. Breathitt was born in Frankfort, Ky., January 1, 1913. He attended the Virginia Military Institute for two years, following which he graduated from the University of Michigan with a B.S. degree in Aeronautical Engineering and Engineering Mathematics. He next took a one-year course in Aeronautical Engineering at the Massachusetts Institute of Technology, Cambridge, Mass.

Qualifying for appointment as a Flying Cadet, he graduated from the Primary Flying School, Randolph Field, Texas, October 12, 1937, and from the Advanced Flying School, Kelly Field, Texas, February 16, 1938. He specialized in Pursuit Aviation and was rated as "Airplane Pilot" on February 16, 1938, and on that date commissioned a second lieutenant in the Air Reserve. Assigned to active duty at Selfridge Field, Mt. Clemens, Mich., he served as Assistant Engineering Officer.

Funeral services for the deceased Reserve officer were held on September 13 in Arlington National Cemetery. The honorary pallbearers were Major General Allen W. Gullion, Lieut. Colonel Floyd E. Galloway, Lieut. Colonel H.B. Smith, Colonel John Jewett, Edward and Charles Breathitt, M.G. Waddington and Stanley Waddington.

First Lieut. Harold L. Dietz, Air Reserve, died as the result of a crash in a BC-1 airplane at Easton, Pa., on the afternoon of September 11, 1938. The airplane nosed in upon circling the field after the take-off and caught fire following the crash. The cause of the accident has not been determined.

Lieut. Dietz was born in Bangor, Pa., September 2, 1908. He graduated from high school in his native city and attended the Emerson Institute, Washington, D.C., for one year. He was a member of the Pennsylvania National Guard for one year, and served as an enlisted man in the Army Air Corps, with station at Bolling Field, D.C., from April 16, 1931, to July 1, 1932.

Appointed a Flying Cadet in the Army Air Corps, Lieut. Dietz graduated from the Primary Flying School, Randolph Field, Texas, in March, 1933, and from the Advanced Flying School, Kelly Field, Texas, where he specialized in Bombardment Aviation, on June 29, 1933, on which date he was rated "Airplane Pilot" and commissioned a second lieutenant in the Air Reserve.

Assigned to extended active duty, he

served with the 20th Bombardment Squadron at Langley Field, Va., to February 28, 1935, and with the 96th Bombardment Squadron at that station from September 3, 1935, to December 31, 1935, when he reverted to inactive status. He was promoted to the grade of first lieutenant, Air Reserve, August 6, 1936.

On November 15, 1936, Lieut. Dietz was placed on extended active duty for a period of three years, with station at Mitchel Field, L.I., New York. Later, in July, 1937, he was transferred to the Middletown, Pa., Air Depot, where he was on duty as squadron operations officer and as a transport pilot.

The Air Corps extends its deepest sympathy to the bereaved families and relatives of the deceased officers who died in the service of their country.

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Lieut. Colonel Wooten (From Page 13)

the 19th Composite Group.

Colonel Wooten was accompanied by his mechanic, Staff Sergeant Lecheay. He planned to fly to his destination, Santiago, Chile, following the Panagra route, and to make stops at Cali, Colombia; Guayaquil, Ecuador; Talara and Lima, Peru, and Antofagasta, Chile, en route.

Colobel Wooten's present assignment is his second one as Air Attache to a South American country, for he was on duty in Chile from 1929 to 1933.

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PERSONNEL NOTES

Orders assigning Major Harold W. Beaton to duty at Langley Field, Va., upon the completion of his tour of foreign service, have been amended so as to assign him to duty at Barksdale Field, La.



Master Sergeant Ruben St. John, of Base Headquarters and 2nd Air Base Squadron, GHQ Air Force, Mitchel Field, N.Y., was appointed Warrant Officer in the Regular Army, with rank from September 1, 1938. He remains on duty at his present station.

Major Joseph W. Benson was transferred from Randolph Field to Brooks Field, Tex.

The active duty tour of 2nd Lieut. Preston Patton Pender, Air Reserve, of Hendersonville, N.C., and now stationed at Langley Field, Va., was extended to December 8, 1939.

Second Lieut. Lawrence Rea Gibboney, Air Reserve, of Cincinnati, Ohio, was assigned to active duty at Randolph Field, Texas, to October 2, 1940.

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 AIR CORPS 
NEWS LETTER

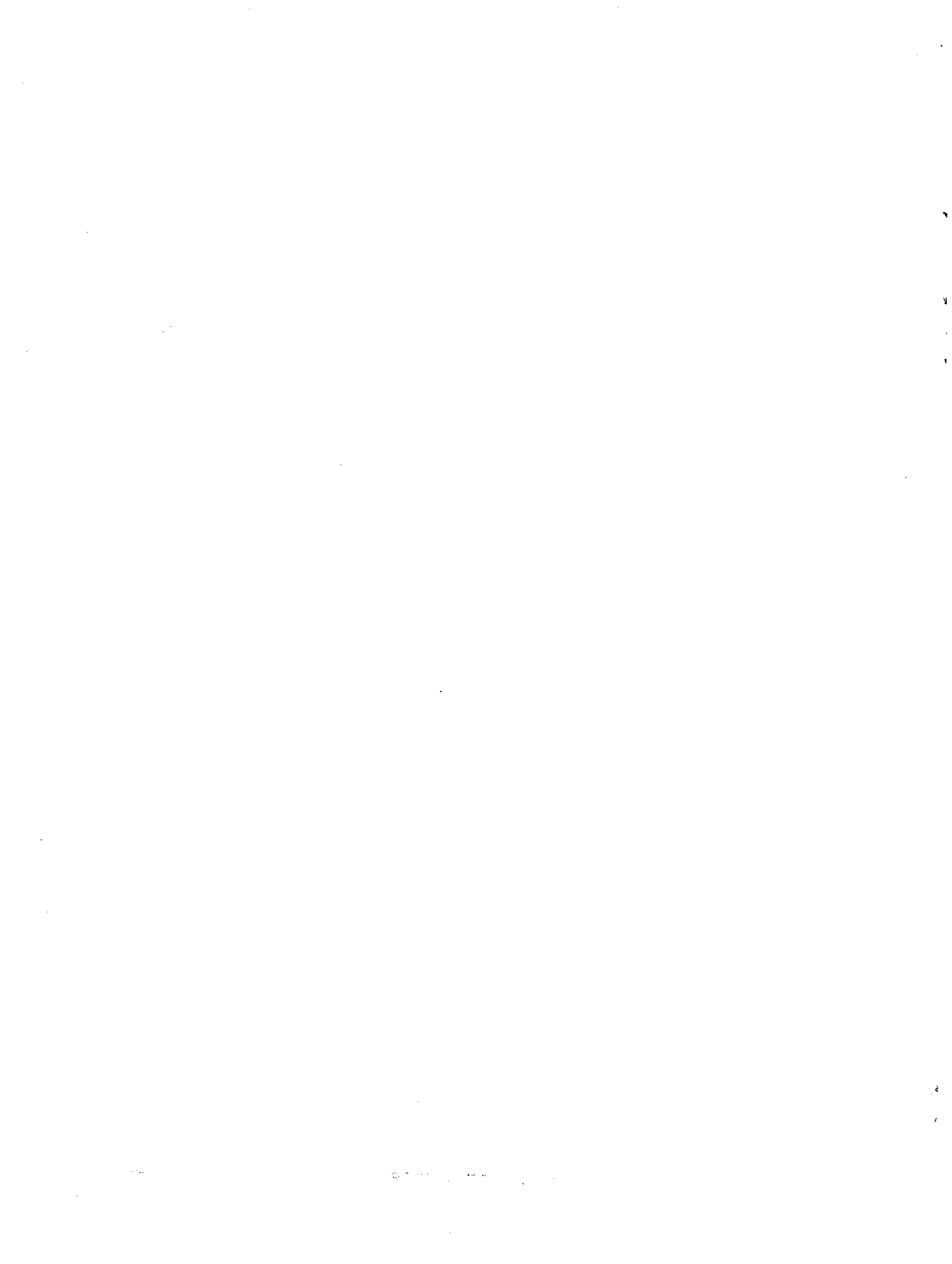


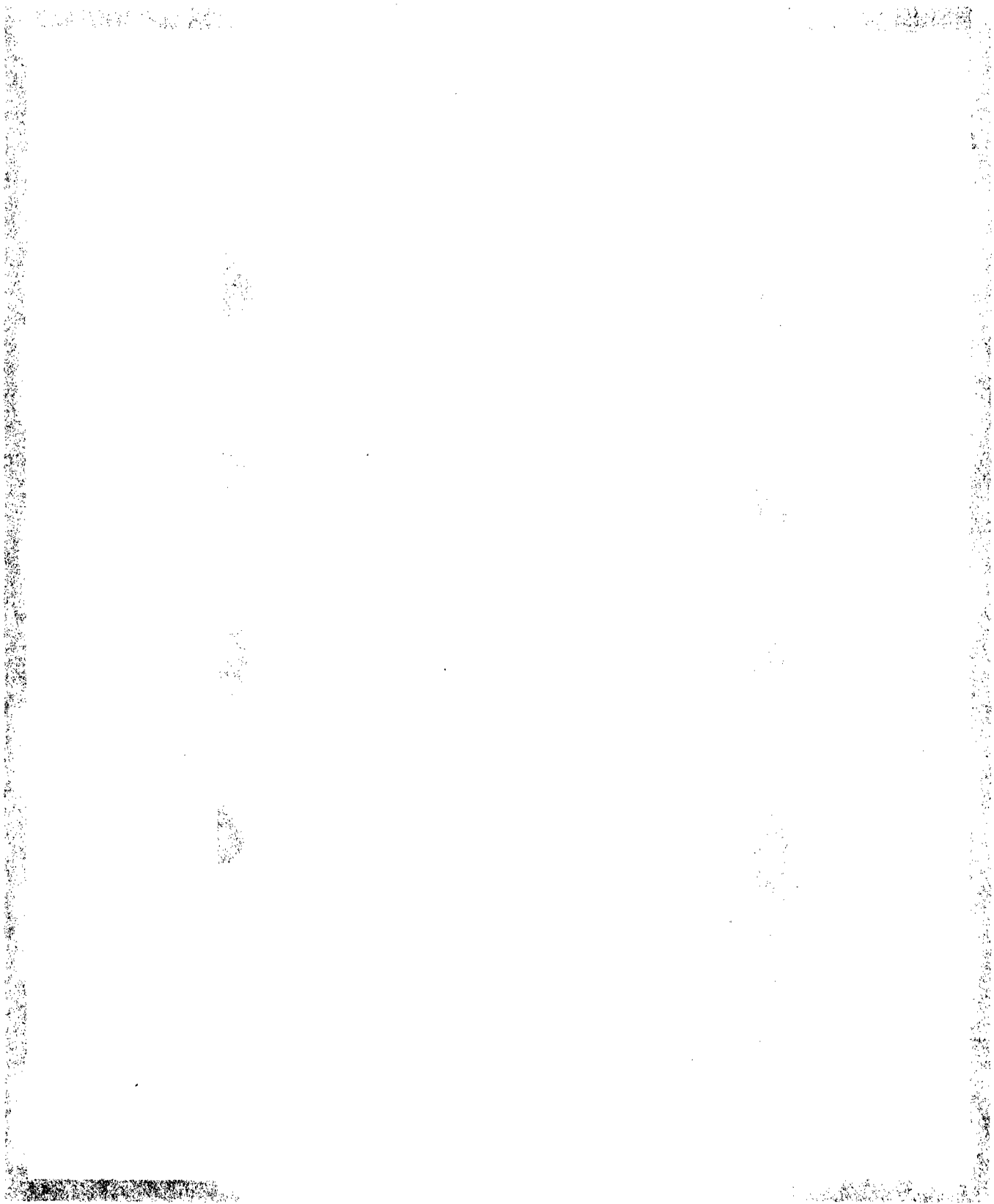
— AIR PARADE —
AMERICAN LEGION CONVENTION
LOS ANGELES, CALIF. SEPTEMBER, 1938

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON

OCTOBER 1, 1938

NO. 19





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**The Air Corps
Mourns its Chief**



Major General O. Westover
Chief of the Air Corps
Dec. 24, 1935 - Sept. 21, 1938

Information Division
Air Corps

October 1, 1938

Munitions Building
Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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THE LAST RITES FOR THE DEPARTED AIR CORPS CHIEF

Tuesday afternoon, September 27th, at the Arlington National Cemetery, proved a very sorrowful occasion, for it marked the final rites, with full military honors, for the late Major General Oscar Westover, Chief of the Air Corps, who lost his life in the unfortunate airplane accident at Burbank, Calif., on September 21st.

It was a bright, sunny afternoon - a day not at all attuned to an occasion of solemnity and sorrow. More than five hundred persons were present to pay their last respects to the deceased Air Corps Chief. These included all Air Corps officers on duty in the Office of the Chief of the Air Corps, other Air Corps officers on duty in Washington and at Bolling Field, and at nearby and distant Air Corps stations. Among those present from stations distant from Washington were Brigadier Generals A.W. Robins, Chief of the Air Corps Materiel Division, Wright Field, Ohio; Frederick L. Martin, Commanding the Third Wing, GHQ Air Force, Barksdale Field, Shreveport, La.; Barton K. Yount, Commandant of the Air Corps Training Center, Randolph Field, Texas; Colonels Henry B. Claggett, commanding Selfridge Field, Mich.; James E. Chaney, commanding Mitchel Field, N.Y.; Frank P. Lahm, Air Officer, 2nd Corps Area, Governors Island, N.Y.; John D. Reardan, Air Corps Procurement Planning Representative, New York City; Davenport Johnson, Chanute Field, Ill.; Herbert A. Dargue, Air Corps Tactical School, Maxwell Field, Ala.; Walter G. Kilner, Langley Field, Va.; Lieut. Colonels Carl Spatz, Langley Field, Va., and C.W. Russell, Hamilton Field, Calif.

In addition to the above, there were many officers from other branches of the military service; foreign government officials; and civilians, among them all of the employees of the Office of the Chief of the Air Corps.

Adjacent to the grave, which is in close proximity to the final resting place of the late Colonel Horace M. Hickam, Air Corps, who several years ago also lost his life in an airplane accident, lay a profusion of funeral wreaths. Shortly before the services at the grave,

and while the minute-gun was sounding, so many additional wreaths were brought that, after a solid background was made of them some one hundred feet away, it was necessary to place others in front of the massed assemblage flanking both sides of the grave.

During the progress of the services at the Fort Myer Chapel, four formations from the GHQ Air Force at Langley Field, Va., totaling 43 planes, flew high over the grave, followed by a formation of four more fighting planes, with the customary blank file. This last formation detached itself from the main formation, circled the grave and then headed southward, soon to be lost in the distance.

The most solemn moment for those who were unable to attend the services at the Chapel came when the Fort Myer Band, playing Chopin's Funeral March, proceeded with slow, measured steps along the road and approached the grave. Close behind the band was the caisson bearing the casket, draped with the Stars and Stripes, followed by the pallbearers and honorary pallbearers, two companies of the 12th U.S. Infantry, one squadron from Bolling Field, D.C.; the Air Corps and other officers of the U.S. Army; the relatives of the deceased Air Corps Chief, and the foreign representatives.

President Roosevelt was represented at the services by Captain D.J. Callaghan, his Naval aide, and Colonel Edwin Watson, his military aide. Admiral William D. Leahy, Chief of Naval Operations, represented the Navy. He was accompanied by a number of other Naval officers.

General Malin Craig, Chief of Staff of the Army, marched at the head of the honorary pallbearers, and with him were Major General Frank M. Andrews, Commanding General of the GHQ Air Force, and Brigadier General Henry H. Arnold, Acting Chief of the Air Corps. The other honorary pallbearers, classmates of General Westover of the 1906 class of the U.S. Military Academy, of which General Andrews was also a member, were Brigadier General Earl McFarland, Assistant Chief of Ordnance; Colonel Joseph A. Green, Coast Artillery Corps; Colonel Charles G. Mettler, Ordnance Department; Colonels Harold W. Huntley and E. DeR.

Hoyle, Field Artillery; Colonel Alexander G. Gillespie, Ordnance Department, and Colonel Jonathan M. Wainwright, Cavalry.

The active pallbearers were noncommissioned officers of the Air Corps, stationed at Bolling Field, D.C.

Foreign officials who attended the services included General Friedrich von Boetticher, Military and Air Attache, Germany; Group Captain George C. Pirie, Air Attache, Great Britain; Lieut. Colonel Andrzej Chramiec, Military and Air Attache, Poland; Engineer Colonel Norbert Champsaur, Air Attache, France; Colonel Vincenzo Coppola, Military and Air Attache, Italy; Squadron Leader Ismael Sarasua, Air Attache, Chile, and several other Chilean officers; Colonel Pedro L. Zanni, Military and Air Attache, Argentina; Colonel Ivan Leontovich Okunev, Assistant Military Attache, and Mr. Constantine A. Oumansky, Counselor and Charge d'Affaires, U.S.S.R.; and Colonel Masafumi Yamauti, Military Attache, Japan.

Before the grave stood General Westover's widow, and on one side of her their son, Lieut. Charles B. Westover, and on the other side their daughter, Mrs. Wilhelm C. Freudenthal. Lieut. Westover is a member of the class scheduled to graduate from the Air Corps Advanced Flying School, Kelly Field, Texas, on October 5, 1938.

Chaplain Ora J. Cohee officiated at the services at the Fort Myer Chapel, and just before he officiated at the grave, a 13-gun salute was heard from the distant Fort Myer parade ground. When the Chaplain concluded his prayer, the firing squad fired three volleys, and the bugler sounded "Taps."

Among the messages of condolence received by the Secretary of War, the Hon. Harry H. Woodring, on the occasion of the tragic death of General Westover, were those from --

Hon. Claude A. Swanson, Secretary of the Navy;

Lieut. Col. A. Chramiec, Military Attache, Embassy of Poland;

Mr. Alexander P. DeSeversky, of the Seversky Aircraft Corporation;

Mr. Thesbac Piccy, of the Society of British Aircraft Constructors, London;

Mr. Guy Lachambre, Air Minister, Paris, France;

Mr. Handley Page, of London, Eng.;

Chief of the Air Staff Air Ministry, London, Eng.;

Colonel I. Okunev, Assistant Military Attache, Union of Soviet Socialist Republics;

Mr. J.T. Hartson, Vice President of the Glenn L. Martin Company, Baltimore, Md., on behalf of Mr. Martin and his whole organization;

Mr. M.M. Mell, Chairman of the Aeronautics Committee, Akron, Ohio, Chamber of Commerce;

Lieut. Colonel E. Lombard, Military Attache, French Embassy;

Mrs. W.B. Kester, President of the Women's Chapter of the National Aeronautic Association of Akron, Ohio;

Mr. Grover A. Whalen, President of the New York World's Fair, 1939, Inc.;

S. Molokov, Chief of the Civil Aviation of the U.S.S.R. and Mavriky T. Slepnev, Chief of the Inspection of the Civil Aviation, U.S.S.R., Moscow.

Mr. Radu Irimescu, Minister, Roumania.

The Turkish Ambassador, Mehmet Munir Ertegun, called in person to express his sincere sympathies.

Among messages of condolence received by the Chief of Staff, General Malin Craig, were those from --

Brigadier General W.P. Upshur, U.S. Marine Corps, Acting Major General Commandant;

Mr. Vilhjalmur Stefansson, of New York, for himself and for the Explorers Club;

Major Jose Bina Machado, Brazilian Military Attache;

Colonel I. Okunev, Assistant Military Attache, U.S.S.R.;

Admiral William D. Leahy, U.S. Navy.

The Hon. Louis Johnson, Assistant Secretary of War, received messages of condolence from --

Mr. Alexander P. DeSeversky, on behalf of himself and the entire personnel of the Seversky Aircraft Corporation;

Mr. Howard Hughes;

Mr. J.T. Hartson, Vice President of the Glenn L. Martin Company, on behalf of Mr. Martin, himself and the entire organization.

Messages of Condolence received through the Foreign Liaison Section of G-2, War Department General Staff, were from --

Colonel R.V. Read, Military Attache, British Embassy;

Engineer Colonel Norbert Champsaur, Air Attache, French Embassy;

Colonel Vincenzo Coppola, Air and Military Attache, Italian Embassy;

Colonel Pedro Zanni, Military and Air Attache, Embassy of Argentina;

Colonel M. Yamauti, Military Attache, Imperial Japanese Embassy.

The French Air Ministry, Paris, France.

General Craig also received a letter of condolence from Mr. John Oliver La Gorce, Vice President of the National Geographic Society, on behalf of himself and the officers and staff of that Society.

The German Military and Air Attache, Lieut. General Friedrich von Boetticher, called in person to express his condolences.

Brigadier General Henry H. Arnold, Acting Chief of the Air Corps, received a message from Vice Admiral Meyrick, of

the British Royal Navy, commanding North American and West Indies Squadron, conveying his sympathy and that of the officers and men in HMS YORK.

Among other messages and letters of condolence received by General Arnold were those from --

Vice Admiral Ernest J. King, Commander Aircraft Battle Force, San Diego, Calif.

Admiral R.R. Waesche, Commandant, U.S. Coast Guard.

Air Vice Admiral George M. Croil, Royal Canadian Air Force.

Major General E.S. Adams, The Adjutant General, U.S. Army.

Major General David L. Stone, Panama Canal Department.

Major General Hugh A. Drum, U.S. Army, on behalf of the Second Army and the 6th Corps Area.

Brigadier General George Gruenert, U.S. Army, Fort McKinley, P.I.

Brigadier General Guy V. Henry, U.S.A., Commandant, on behalf of all personnel of the Cavalry School at Fort Riley, Kans.

Admiral A.B. Cook, Bureau of Aeronautics, U.S. Navy Department.

Hon. Clarence D. Martin, Governor of the State of Washington

Hon. F. Trubee Davison, New York City.

Lieut. Colonel Ralph Royce, Philippine Department.

Lieut. Colonel Benjamin G. Weir, Panama Canal Department.

Lieut. Colonel William B. Mayer, on behalf of all personnel of Scott Field, Belleville, Ill.

Major David S. Seaton, A.C., on behalf of all officers and employes of the Philippine Air Depot.

Captain Saba' H. Sueyro, Argentine Naval Attache.

Group Captain Pirie, British Embassy.

Dr. Lyman J. Briggs, Director, National Bureau of Standards.

Major Reed G. Landis, Chicago, Ill.

Mr. Grover Loening, New York City.

Mr. Frank H. Russell, Newtown, Pa. The 18th Wing, Air Corps, Hawaiian Department.

The B.F. Goodrich Company, Akron, Ohio. Clark Aircraft Corporation, Hagerstown, Maryland.

Douglas Aircraft Company, Santa Monica, Calif.

Bellanca Aircraft Corporation, New Castle, Del.

Bell Aircraft Co., Buffalo, New York.

Interstate Aircraft and Engineering Corp., El Segundo, Calif.

Curtiss-Wright Corporation, Buffalo, New York.

Kellett Autogiro Corporation, Philadelphia, Pa.

Pennsylvania Aircraft Syndicate, Philadelphia, Pa.

Ryan Aeronautical Co., San Diego, Calif.

United Aircraft Corporation, East Hartford, Conn.

Wright Aeronautical Corporation, Paterson, New Jersey.

American Airlines, Inc.

Stearman Aircraft Co., Wichita, Kans.

Pittsburgh Screw & Bolt Corporation.

Editor, AVIATION Magazine.

Chamber of Commerce, Denver, Colo.

Chamber of Commerce, Ogden, Utah.

Chamber of Commerce, Sacramento, Calif.

Manufacturers Aircraft Association,

Southern California Section of the

Society of Automotive Engineers.

Northwest Aviation Planning Council.

Aeronautical Chamber of Commerce, New York City.

Air Reserve Officers Association, Louisville, Ky.

National Broadcasting Co., New York City.

Sperry Gyroscope Company, Brooklyn, New York.

Acting Chief, Weather Bureau, U.S. Department of Agriculture.

Colonel Sumpter R. Smith, Chairman, Air Safety Board, Civil Aeronautics Authority, Washington, D.C.

Major General Mason M. Patrick, U.S. Army, Retired, former Chief of the Air Corps, attended the funeral services at Arlington, and Major General James E. Fechet, U.S. Army, Retired, who succeeded General Patrick as Air Corps Chief, forwarded a message of sympathy.

According to a newspaper report, less than 24 hours before his death, General Westover had been feted by some one thousand fliers in Los Angeles at the "Men With Wings" aviation ball in the Palomar ballroom. This was during the course of the Annual Convention of the American Legion. Surrounded by high officers of the Army, Navy and Marine air force units and veteran air fighters of the World War, the General was the center of a night of tribute to the nation's aerial fighting squadrons.

Only some five hours prior to the fatal crash at Burbank, Calif., General Westover was at March Field, Calif., where he presented the coveted Daedalian Trophy for safe flying to the 19th Bombardment Group, commanded by Lieut. Col. Harvey S. Burwell, Air Corps. Also present on that occasion was Major General Frank M. Andrews, commanding the GHQ Air Force.

A test pilot for the Lockheed Aircraft Corporation, who was an eye-witness of the accident and was in the control tower at the field at that time, stated that he saw General Westover's plane coming towards the airport from a southerly direction. The plane flew once across the airport and then headed out for a wide circle preparatory to landing. He then added:

"The ship was, I imagine, about 300 feet high and about a half mile north-west of the field when it went into a

hairpin turn. I was watching it all the time, as we always do in the tower whenever a ship comes in to land. The plane whipped into this steep bank and the wings were almost vertical to the ground. Suddenly I saw the entire ship quiver. I knew there was trouble ahead. The ship nosed downward in the start of a spin. The motor was still roaring; more so, it seemed to me, than before because, as usual, when a plane is starting to land the motor is throttled down. You could see that the pilot was fighting desperately to regain control of his ship. It all happened so quickly - there were just a few seconds between the time the ship started to slip off and the time it hit the ground - but I am certain that whoever was flying thought he could right the plane in time."

The plane struck with the roar of a bursting bomb in the front yard of a residence on Scott Road, less than half a mile from the Lockheed Aircraft Factory's airport, to which General Westover had been gliding for a landing.

One theory advanced as a possible cause of the accident is that the pilot, apparently unable to stretch his glide into the airport, jammed on "full throttle" and nosed it up in a climbing turn to clear power lines ahead. The probability that the landing flaps of the plane were lowered to give it maximum lift for a slow landing indicated that the lowered flaps may have been responsible for what happened in the harrowing seconds which followed.

The plane, nose high, stalled - hung almost motionless and quivering under the surging drive of its engine - then whipped over and nosed straight down in a roaring half turn of a power spin.

Majors Leland C. Hurd and K.B. Wolfe, Air Corps, were at the Lockheed Factory awaiting General Westover's arrival, and they reached the scene of the crash within a very few minutes after its occurrence. Brigadier General Delos C. Emmons, Commanding the 1st Wing, GHQ Air Force, appointed a board of officers, headed by Lieut. Colonel Harvey S. Burwell, which began an immediate investigation at the scene of the accident.

General Westover was born at West Pay City, Michigan, on July 23, 1883. After graduating from high school, he entered the Army as an enlisted man on September 4, 1901, and served with Company "K," 3rd Battalion of Engineers, until June 15, 1902, when he entered West Point as a cadet. He graduated from the U.S. Military Academy on June 12, 1906, and was assigned to the 14th Infantry.

General Westover remained with the Infantry through the grades of second and first lieutenant, in each of which he served five years. During this period he completed tours of duty in the Philippines and in Alaska. He was then assigned to duty at the United States Military

Academy, where he served first as instructor and later as Assistant Professor of Drawing. His marksmanship won for him the Distinguished Marksman's Medal and membership on the Infantry Rifle Team at the National Rifle Matches at Camp Perry, Ohio, in 1911.

On October 20, 1917, he was promoted to the grade of Major (temporary) and assigned to duty in charge of the Signal Office at the Port of Embarkation at Hoboken, N.J. In June, 1918, he was assigned to the Bureau of Aircraft Production in charge of Storage and Traffic, receiving his promotion to Lieut. Colonel, Air Service, on August 14, 1918.

In November, 1918, he was appointed Assistant Executive, Bureau of Aircraft Production, Washington, D.C., which office he held until July, 1919, when he was appointed Executive in the Office of the Chief of Air Service.

General Westover's outstanding service during the World War was recognized by the award to him of the Distinguished Service Medal, and his promotion to the grade of Colonel (emergency) on May 24, 1919.

In October, 1920, General Westover was assigned to take training at Omaha, Neb., and at Ross Field, Calif. Upon graduation from the Balloon School at Ross Field, with the rating of Balloon Observer, in 1921, he was reassigned to duty in Washington as Chief of the Balloon and Airship Division, Office of the Chief of Air Service. While occupying this position, he served on detached duty to participate as aide to Colonel Frank P. Lahm in the National Balloon Race which started from Birmingham, Ala. He next attended the Airship School at Langley Field, Va., from which he graduated in 1922, and received the rating of "Airship Pilot." In that year he participated as pilot in the National Elimination Free Balloon Race at Milwaukee, Wis., and was declared the winner thereof. Landing his balloon in the vicinity of Lake St. John, Quebec, Canada, a distance of 866 miles from the starting point, which he covered in 16½ hours, he almost doubled the distance covered by his nearest competitor. His balloon flight was one of the longest and swiftest on record.

By virtue of his victory in the National Elimination Balloon Race, General Westover represented the United States in the Gordon Bennett Balloon Race, which started from Geneva, Switzerland, in August, 1922. In this race, while drifting low to obtain favorable winds, Hungarian peasants seized his drag rope and hauled the balloon to the ground, which resulted in his being eliminated from the race. This unusual mishap may be attributed to the mistaken notion of the Hungarian peasants that they were performing a service for the aeronaut.

In February, 1921, General Westover was appointed Director of Aircraft Pro-

faction, charged with the liquidation of the United States Spruce Production Corporation, a wartime aircraft production agency, a position which he held continuously up to July, 1928.

In 1924, General Westover was assigned as Executive Officer at Langley Field, Va., this following his graduation from the Air Corps Primary and Advanced Flying Schools in Texas, and his being given the rating of "Airplane Pilot." Later that year he became the Commanding Officer of Langley Field and the Commandant of the Air Corps Tactical School which was then located there. Two years later he entered the Tactical School as a student, graduating in 1927. His next school tour was at the Command and General Staff School at Fort Leavenworth, Kansas, from which he graduated in 1928. For the next four years he was on duty at Fort Leavenworth as a member of the faculty of the above mentioned school.

In January, 1930, General Westover received his promotion to Lieut. Colonel, and two years later, in December, 1931, his appointment as Assistant Chief of the Air Corps, with the rank of Brigadier General, to succeed Major General B. D. Foulis, who had vacated that position to assume his duties as Chief of the Air Corps.

General Westover possessed all four aeronautical ratings bestowed by the Air Corps, and his service was as well rounded as any officer in the Corps. In 1933 he commanded the Air Corps maneuvers at March Field, Calif., during which practically all of the modern conceptions of the employment of air forces were tried out. His summary of the lessons learned during this maneuver furnished a valuable contribution to the advancement of the tactics and supply procedure of the Air Corps. He also participated in the Command Post Exercises held in New Jersey in 1934, in the capacity of Commanding General, GHQ Air Force. These exercises were commanded by the then Chief of Staff, General Douglas MacArthur.

General Westover's sudden and untimely death was a severe blow not only to his immediate family, his other relatives and his host of friends both in the Army and in civil life, but to the United States Army as well.

The Air Corps mourns with the bereaved family the departure of this genial and kindly officer and gentleman who commanded such universal admiration and respect.

Technical Sergeant Samuel Hymes, Air Corps, who also lost his life in the distressing airplane accident at Burbank, Calif., on September 21st, was born in Philadelphia, Pa., on January 12, 1898. He first enlisted in the Third Field Artillery, May 8, 1917. His next enlistment was in the Quartermaster Corps on September 17, 1919. Sergeant Hymes enlisted in the Air Corps on December 21, 1930, and remained continuously in that

Corps until the time of his death.

Sergeant Hymes had been stationed at Bolling Field, D. C., continuously since August 11, 1930, when he returned from duty at Fort Stotsenburg, Philippine Islands. He served as crew chief for General Westover's plane for many years and accompanied his Chief on all of his many flights.

The deceased noncommissioned officer is survived by his widow and two minor children, to whom the deep sympathy of the Air Corps is extended.

Funeral services were held on Monday, September 26th, at the Fort Myer chapel, with Chaplain Ora J. Cohee officiating. Interment, with full military honors, was in the Arlington National Cemetery. Noncommissioned officers and troops stationed at Bolling Field, D. C., served as pallbearers.

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KELLY FIELD STUDENT KILLED IN ACCIDENT By the Kelly Field Correspondent

Second Lieutenant Robert Fales Lesser, Field Artillery, a student in the Pursuit Section at the Air Corps Advanced Flying School, was fatally injured on September 15, 1938, when his P-12 spun in and crashed near the airdrome at Roswell, New Mexico, while he was participating in a student maintenance flight preparatory to graduation from the Air Corps Training Center.

Lieut. Lesser, a native of Newark, New Jersey, was graduated from the United States Military Academy in June, 1937, and reported at Randolph Field, Texas, for training in October of the same year. Coming to Kelly Field in June, 1938, he was assigned to the Pursuit Section for specialized training, and would have graduated from the Training Center on October 5th, his twenty-fifth birthday.

Second Lieutenant Samuel C. Gurney, Jr., a classmate of Lieut. Lesser at both the U. S. Military Academy and the Air Corps Training Center, escorted the remains to West Point, N. Y., for burial.

The entire Air Corps regrets exceedingly this unfortunate accident, and extends its most heartfelt sympathy to the family and friends of Lieut. Lesser.

A MESSAGE FROM THE CHIEF TO THE CORPS

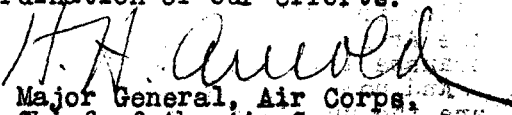
Today, as I am taking over duties and responsibilities as Chief of Air Corps, U.S. Army, I want my first official expression to be a tribute to my able predecessor, Major General Oscar Westover, whose untimely loss has been a blow from which we shall not soon recover. His service as an enlisted man, as a cadet at West Point and as an officer through all the grades from Second Lieutenant to Major General is such as to command the sincere admiration and deep respect of every military man. His tremendous accomplishments during his too brief tour as Chief of Air Corps speak for themselves. They are a lasting monument to the long hours he spent in their execution. His honesty of purpose, complete sincerity, lasting loyalty, and steadfast attention to duty stand out as characteristics that we who are left may well use as a guide, a pattern and an inspiration. These qualities made him outstanding as a man, as an Army officer, and as Chief of Air Corps.

The present period in the history of our Air Corps is a trying one for officers and enlisted men alike. Everyone must put forth at maximum effort to meet the herculean demands incident to our expansion program. The GHQ Air Force has performed an efficient and commendable task of reorganizing our tactical units and raising to a high level their state of training. This has but served to emphasize the urgent need for more combat and maintenance crews. The air base forces must be greatly increased and in some cases created in order to properly operate and care for the airplanes now being produced as the result of high pressure work on the part of the Materiel Division. This necessitates that our Training Center, the Tactical School and the Technical School work at accelerated efficiency, mayhap at longer hours, and increase their output without lowering their present high standards.

Until quite recently we have had marked superiority in airplanes, engines and accessories. That superiority is now definitely challenged by recent developments abroad. This means that our experimental development programs must be speeded up.

This increased effort all along the line is essential if we are to build up our tactical units and supply them equipment in accordance with the War Department program. We of the Air Corps must realize that these results can be obtained only if we have complete accord and thorough coordination of our efforts.

Washington, D.C.
September 30, 1938.


Major General, Air Corps,
Chief of the Air Corps.

THEY TAKE THE HIGH ROAD

By Theon Wright

By special permission from Collier's, The National Weekly

A man had to die before they realized what was wrong. And it was such a little thing that killed him, too. He didn't have enough energy to pick up an oxygen tube and shove it back in his mouth. When they found his body six miles below, he had strangled for want of air.

These were men you hardly ever heard about. They were men who went up where the air was thin and bright and "white blue" - where it was so cold their eyeballs froze in their sockets, and flying machines rolled crazily in mid-air like becalmed ships, suspended between the tug of gravity below and thinning air above. Then, blinded and gasping for breath, they tipped the nose of the plane downward and plunged for earth, sometimes dropping as much as five or six miles with their senses reeling from the strain and shock before they pulled out of the "blank."

You have heard of Lindbergh and Hughes and Balchen and Byrd; of Musick, Earhart, Post and Kingsford-Smith. They were the earth-shrinkers, who spread out over the four corners of the world, bringing them close together. But what of the men who went up - Schroeder, Macready, Foulk and Harris; Gray, Kelly, Soucek, Adam and Greene? Their names ring only faintly in the memory. It wasn't until one of them died that you remembered who he was or what he had been doing - and even then it seemed pretty silly, going way up there where there were no living things, and where nobody wanted to live, anyway. What was the use of it?

This year the highest award in aviation - the Collier Trophy, which goes not to that which is spectacular but to that which is sound - has recognized the use of it. The trophy has been awarded the United States Army Air Corps for demonstrating, for the first time in history, that it is possible to travel safely and comfortably in the substratosphere.

Unsung Heroes of the Air

The Collier Trophy, first awarded in 1911 by Robert J. Collier, son of the founder of Collier's, goes each year to "the greatest achievement in aviation in America, the value of which has been demonstrated by actual use during the preceding year." The names associated with it are the honor roll of aviation history: Curtiss, Wright, Sperry, Burgess, Loening, Hoffman, Reed, Lawrence, Martin, Pitcairn and Douglas; the U. S. air mail, the Army's "world fliers," Pan American's transpacific "clippers."

And now added to this historic list are the unsung heroes of the upper air, men of the Army Air Corps who have labor-

ed unceasingly, and for the most part anonymously, not for adventure nor danger nor just to see if it could be done but because the "upper level," as Collier's pointed out three years ago, is where all of us will be flying tomorrow.

The citation reads:

"To the U. S. Army Air Corps for having designed, constructed and completely equipped the XC-35 substratosphere plane, the first pressure cabin airplane to be flown successfully anywhere in the world."

Behind that somewhat prosy sentence is a story of courage, resourcefulness and death. And in its last chapter it is the story of the unflinching persistence of a small, nervously energetic man who started his career as a builder of bridges and would up as an airplane designer "because it was work that needed to be done." His name is Carl F. Greene, and he is an officer in the Air Corps stationed at Wright Field. Major Greene is one of those retiring gentry you seldom hear about - but every time you climb into a big sky-liner you will be riding on wings he helped to create, and when you step into the cabin of a strato-liner you will be riding in his idea. Major Greene got the idea quite a few years ago, when fliers were going up in open cockpit affairs that looked like box kites, and he has been nursing it along ever since.

Basically, the idea was simply to build an airtight airplane that could fly in the substratosphere, where the air is thin and pressure is low. But, like most simple ideas, it took years to find out just what was needed. At first everybody thought the problem was merely to supply oxygen to the men who went up into the rarefied air eight miles above the earth; and for nearly twenty years the Army Air Service worked on that problem - until they found they were on the wrong track!

Working Under Pressure

As early as 1920, Major Rudolph Schroeder climbed to 38,180 feet in an open-cockpit Packard-Lepere biplane, using a tube to suck oxygen from a tank, but his eyeballs froze, his senses "blanked out" and he fell six miles before he pulled out of it and brought his plane safely to earth.

The next year John A. Macready, a young Army lieutenant at McCook Field, Ohio, decided to find the "absolute ceiling" - for man and machine. His experiment was particularly valuable, because he wrote a record of everything that happened. He had taped a leather oxygen mask to his face and smeared gelatin - his only "de-icing" equipment - over his

goggles. At 35,000 feet the cold became so intense his goggles were coated with ice and his eyes began to freeze. At 39,000 feet he had passed Major Schroeder's mark and began to run into real trouble. His breath froze in the oxygen tube, clogging it with ice. He managed to tear off part of the tape on his face and shove in an emergency tube. He said every time he reached for something, he felt "dizzy and faint."

At 40,800 feet his plane bucked and refused to climb any higher. For five minutes it "swung and rolled in suspension" and Macready held it there, pitching and swaying in the icy air. Then, realizing he could go no farther, he pulled back the throttle and tipped the nose downward and the "bottom seemed to drop out of the plane as it went toward earth."

But it was the death of the Army balloonist, Captain Hawthorne C. Gray, that brought home the real problem in high altitude flying. Gray went up more than six miles in a balloon from Belleville, Illinois, in November, 1927, and died up there because his oxygen tube slipped from his mouth and he was too numb and blind to pick it up again. That started Army engineers to thinking - particularly the persistent little major at Wright Field. "We knew we had to operate at high levels," Major Greene explained, "and we knew that it was up to us to find all the answers. It was too easy for men to die the way Gray did."

Why did they have to go up in the first place? There was not much to see, except a pastel-blue sky and an awful chasm below; and it doesn't sound like very good sport. The answer is that the best flying conditions to be found anywhere - smooth air, increased speed, few storms, no icing hazards, perfect radio reception - are above 25,000 feet. Although the Army does not make a practice of revealing any of the military uses it will make of "upper-level operation" - the official Army term for high flying - it is pretty obvious what the factors are. Bombers would have greater speed for approach and escape, and would also be comparatively free from anti-aircraft fire in the upper levels. Modern anti-aircraft guns have little "aim effectiveness" above 15,000 feet. A projectile requires from eighteen to twenty-five seconds, depending on the angle at which it is fired, to reach the 20,000-foot level, and in that time it is possible for the target to veer away from the trajectory of the shell.

Altitude flight tests showed that human beings begin to show the effects of thinning air at 10,000 feet. Above 15,000 feet there is a definite need for aid to respiration. At 28,000 feet the need for oxygen is acute, and for years it was supposed oxygen taken into the mouth by a tube or through a mask was

sufficient. But at 35,000 feet other things begin to happen. The blood starts to "bubble." There is a certain amount of nitrogen in solution in the human blood at all times, and when outside pressure suddenly is reduced, the effect is like pulling a cork out of a champagne bottle. The nitrogen collects as particles of free gas in the blood stream, and these tiny bubbles may find their way to brain cells or into the spinal fluid, where they are likely to bring on convulsions, paralysis or even death. As the outside pressure decreases there is a "pull" on the surface of the body. Above 43,000 feet no human can think and act rationally and reliably in the open air, even with the use of oxygen. It becomes apparent that pressure, not oxygen, was the problem to be solved.

The first attempt to solve this problem was a contrivance known as a "pressure suit," a sort of supercharged pair of overalls, made airtight by the use of rubberized parachute silk, with an aluminum helmet. Oxygen was fed into the helmet and air pumped into the suit. Wiley Post brought one of these suits to Wright Field in 1934, and an emergency squad from the Dayton police department was called out, with pulmotor, axes and saws, to stand by ready to rescue Wiley if it became necessary during the pumping-up tests. He wore the suit on his first attempted "stratosphere flight" in 1935, and an interesting scene took place when he made a forced landing near a desert town in California. Post pancaked his plane on Muroc dry lake, walked out in his "Man from Mars" haberdashery and scared the California natives out of a few years' growth.

A Problem of Compression

It was obvious that the pressure suit, at best, would take care of only one person, and the Army engineers hardly cared to envision the spectacle of a crew of a bombing plane, clad in pumped up stratosphere clothing, waddling around the inside of the ship attached by hoses to oxygen tanks and air blowers. So, while the fliers with their tin-can helmets and pumped-up clothing were pushing the "absolute ceiling" above 50,000 feet, the Air Corps went into action on the problem of building a non-leakable cabin that would maintain low-level pressure during high-level operation. Fortunately, at all altitudes the percentage of oxygen in the atmosphere is almost constant. The problem was to compress the air to low-level density.

It wasn't as easy as it sounds. Back in 1919 the Army Air Service had tried out the "pressure cabin" idea with a sealed tank in the cockpit of a DeHavilland observation plane. Lieutenant Harold Harris went up in it, and when he

came down his face, seen through the window of the tank, was streaming with perspiration and as red as a boiled lobster. He gestured frantically at the instrument panel. It showed a temperature of 150 degrees above zero and an "altitude" of 9,000 feet below sea level! The pressure control gadgets, Harris explained, had leaked.

Two other nations tried unsuccessfully to build a pressure cabin plane - France in 1932 and Belgium in 1936. The French plane, a Farman two-seater, went up 33,000 feet and started to come apart, and the Belgian plane, a 20-passenger Renard R-35, never completed its tests. The problem included "skin leaks" in the shell of the cabin, danger of the cabin blowing up under pressure, the difficulty of sealing doors, windows and holes through which control wires and rods must pass.

Outwitting the Elements

But finding answers to tricky aeronautical problems was Major Greene's dish. He had been at them ever since he joined the Army (in order to play hockey with the Seventh Regiment hockey team in New York) years before the war. He had initiated the design of the "monoplane wing" that was applied to the Martin bomber, which won the Collier Trophy in 1932. That wing revolutionized airplane building and ended the era of "kite" planes. If you look out of the window of any Boeing, Douglas or Lockheed skyliner of today, you will see something of Major Greene's handiwork in the wing that is holding you up.

After dopping out what was wanted, Major Greene went to Lieutenant Colonel Oliver P. Echols, chief engineer at Wright Field, and laid his plan before him. It was to build a hermetically sealed airplane that would enable passengers and crew to ride in the stratosphere with all the comforts of sea-level flying. Colonel Echols dug out an appropriation from the Air Corps allotment and Brigadier General A.W. Robins, of the materiel division, supplied laboratories. It was all in the day's work to the Air Corps - another routine problem to be solved - but Major Greene knew he had aviation history by the tail.

He called in Dr. John E. Younger of the University of California, who had worked with him years before designing the "monocoque," or shell-type cabin. Theoretically, their problem was to apply theories of air cooling and building heating that had been in use, in one way or another, ever since the first cave man began fanning himself in summer and building fires in his cave in winter. There is a pressure of about 14.7 pounds per square inch at sea level, and at 30,000 feet it is 4.4 pounds. By pumping air under pressure in the sealed cabin with a supercharger, or "blower," the pressure difference could be equaliz-

ed. Then, by use of a pressure regulator and a discharge valve to let out the air, a constant supply of Grade-A sea-level air would flow into the cabin.

By the spring of 1937 they had completed the preliminary stuff, and were ready for the main event. The new plane had been ordered from the Lockheed plant at Burbank, California. It was similar to the Lockheed Electra but built according to Army specifications. The plane was ferried to Wright Field to be tested for leaks - and here Old Man Disaster seemed to have put another "X marks the spot" on the record of pressure-cabin flying.

As the big silver cocoon was pumped up, it began to hiss, then squeal like a thousand peanut whistles. Workmen silently edged toward the exits. Even Major Greene regarded his baby a bit gingerly. Then he ordered the pumping to stop and crawled inside the big metal shell - and signaled for the pumps to start again. The leaks were found and repaired.

By midsummer the XC-35 was ready for its maiden flight into the stratosphere. Captain Alfred H. Johnson, a veteran Army flier, was picked to fly it. There was even a "brain tester" - Dr. Harold G. Armstrong of the Wright Field physiological research laboratory - to test the effect of high flying on the minds of the pilot and crew. With Major Greene and four members of the crew huddled in the sealed cabin they took off - with a stack of oxygen bulbs standing between them and suffocation if things went wrong. At 12,000 feet the superchargers were turned on.

The plane climbed to 28,000 feet - still with no oxygen being used. Captain Johnson then swung it down and landed, completing the first stratosphere flight on record without using an ounce of oxygen. Tests were conducted throughout the summer and fall at all levels from the ground up to 33,000 feet.

On February 3, 1938, the XC-35 prepared to make its first "passenger flight". A take-off was scheduled from Chicago at midnight; the plane was bound for Bolling Field, near Washington, with Louis A. Johnson, Assistant Secretary of War, as the passenger - and the flight was to go regardless of weather, to prove that it could be done. Ten minutes after the take-off the big strato-liner ran into an electric storm so intense that it picked up a halo of sparks along the leading edge of the wing. Climbing at the rate of 300 feet a minute, the monoplane soared up to 22,000 feet and over the storm. Traveling through the night at a 200-mile clip, it roared onward and landed at Bolling, completing a flight that would have been suicide for an ordinary air-liner traveling at ordinary flying levels.

At the conclusion of the tests, the Air Corps announced that the experiment was a success and that the strato-liner could be duplicated by any established commercial aircraft factory in the country. The Air Corps was then invited to submit its data to the Collier Trophy committee, headed by Major J.H. (Jimmy) Doolittle.

To a New Era of Flying

Major Greene was called before the committee to tell about the Army Air Corps' XC-35 - and he began by forgetting his speech! He laid a bundle of data on the committee table and explained, with some embarrassment, that he had "prepared some notes, but forgot to bring them."

"Never mind that," Doolittle said with a grin. "We're pretty hard-boiled in here - we don't go in much for speeches."

Major Greene left the room feeling that he had failed. But the committee wasn't composed of oratorical experts. It was made up of air-minded men - Major J.H. Doolittle; Dr. George W. Lewis, director of aeronautical research for the National Advisory Committee for Aeronautics; S. Paul Johnston, editor of Aviation; Leighton Rogers, president of the Aeronautical Chamber of Commerce; T.P. Wright; Henry B. Dupont; E.R. Stettinius, Jr.; William B. Mayo, and Edward P. Warner.

When the committee came out of the huddle, the men of the Army Air Corps had won the verdict. They had started out to solve a problem of military efficiency and turned in test results that pointed the way to a new era of flying. And they had, incidentally, vindicated the heroism of those early pioneers of the upper air who went up in box-kite flying machines, risking death or disablement in the cold and lifeless atmosphere of upper space, so that a later generation of engineers could solve their problem.

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AIRPLANE PROVES TOO TOUGH FOR CARABAOS

Tough as a Carabao may be, horns and all, though he may be "King" of the buffalo and resent the white man, he must still take the count of nine when he attempts to toss a P-26 over his back with those beautiful horns so characteristic of the water Buffalo. So sayeth Second Lieutenant Cecil E. Combs, Air Corps, who, much to his surprise, saw too late a couple of these animals as he was making a night landing on the air-drome at Nichols Field, P.I. The Carabaos had evidently been attracted by the floodlights, but being too bashful remained in the shadows outside the range of the floodlights. Result: they took the count of nine. Lieut. Combs was not injured and the P-26 Pursuit plane was slightly damaged.

SEVENTH BOMBARDMENT GROUP IN MANEUVERS

The 7th Bombardment Group of Hamilton Field, Calif., commanded by Major Dale V. Gaffney, Air Corps, and consisting of 15 B-18 airplanes, 37 officers and 100 enlisted men, was based at Felts Field, Spokane, Washington, during the maneuver period from August 8th to 15th, 1938.

The objectives of the maneuver as a whole were many. It was planned primarily for the exercise to serve as a test to determine the state of training of combat and service personnel and units, in conjunction with a test of the adequacy of present tactical equipment. By the scheduling of long range reconnaissance missions, an opportunity would be afforded for familiarizing the personnel with the terrain and available military facilities throughout the Pacific Northwest area.

By dint of pre-maneuver preparations, the concentration of airplanes and personnel at the Group's operating airdrome, Felts Field, was expeditiously effected on the afternoon of August 8th.

On the morning of August 9th, the Group participated in a reconnaissance of the principal cities and airdromes within the operating area. On the following day, the Group employed six airplanes in a bombing mission three miles off Cape Flattery, the targets being aluminum slicks.

The entire Group, consisting of 15 airplanes, took part in a bombing demonstration at Fort Lewis, Washington, on August 11th. Silhouette targets one mile east of the field were bombed from a high altitude with 300-pound practice bombs. The demonstration was said to have been very effective in displaying capabilities of the Air Force to the civilian populace.

The mission on August 12th was a long range reconnaissance and assembly problem. The flight covered a sizeable amount of territory in the States of Washington, Idaho, and Montana, and was, in effect, an excellent familiarization flight.

The entire day of Sunday, August 14th, was turned over to visitors, who were afforded an excellent opportunity to inspect the airplanes and equipment.

Evacuation and return to Hamilton Field on Monday, August 15th, concluded the Wing Maneuver. Valuable assistance and cooperation were rendered by the National Guard and Chambers of Commerce of that section.

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Master Sergeant Edcil C. Maxwell, of Flight B, 16th Observation Squadron, Fort Benning, Ga., was appointed a Warrant Officer in the U.S. Army, effective October 1, 1938. He will be assigned to duty with the Air Corps in the Panama Canal Department.

NEW OFFICERS FOR THE ARMY AIR CORPS

The War Department recently announced the appointment of 188 second lieutenants in the Air Corps, Regular Army, as of October 1, 1938. These appointments are the result of competitive examinations among Air Corps Reserve officers who are now or have been recently on extended active duty with the Air Corps.

Of these 188 new officers, 31 are assigned to Langley Field, Va.; 23 to March Field, Calif.; 21 to Barksdale Field, La.; 16 to Randolph Field, Texas; 13 to the Hawaiian Department; 11 to Selfridge Field, Mich.; 10 to Mitchel Field, N.Y.; 9 to Hamilton Field, Calif.; 7 each to Kelly Field, Texas, and the Panama Canal Department; 3 each to Moffett Field, Calif.; Marshall Field, Fort Riley, Kansas; and Brooks Field, Texas; 2 each to Scott and Chanute Fields in Illinois; and one each to Bolling Field, D.C.; Fort Knox, Ky.; Rockwell Air Depot, Coronado, Calif., and the Philippine Department.

The station assignments of these newcomers in the commissioned piloting ranks of the Air Corps, Regular Army, are indicated by numerals, the key to which is given below the list of names, viz:

Francis Henry Macduff (10)	Brockton, Mass.
Harold Lewis Jones (10)	Bath, Pa.
Arman Peterson (1)	Flagstaff, Ariz.
Herbert M. West, Jr. (1)	San Antonio, Texas
Francis Dodge Shoemaker (10)	Bethesda, Md.
Alvin Roubal Luedcke (14)	El Dorado, Texas
Henry Russell Spicer (16)	Los Angeles, Calif.
Willard Van Deman Brown (1)	Dallas, Texas
William Ray Boutz (16)	Deming, N.M.
William Haldane Council (16)	Ingomar, Pa.
Kenneth Ray Kreps (11)	Riverside, Calif.
Peter Havens Remington (10)	Watertown, N.Y.
Patrick William McIntyre (11)	Chicago, Ill.
Donald William Haarman *	Brooklyn, N.Y.
Blaine Ballif Campbell (8)	Salt Lake City, Utah
Morris Henry Shedd (14)	Belleville, Ill.
Kermit Arthur Tyler (13)	Long Beach, Calif.
Mayhue Delbert Blaine *	Cranford, N.J.
Howard Fish Nichols (19)	Newark, N.J.
Philip Beeton Klein *	Dallas, Texas
Marion Malcolm (16)	Iowa City, Iowa
Fred'k Lawrence Moore (13)	Fillmore, Calif.
Charles Emlen Marion (10)	Detroit, Mich.
Ben Ivan Funk (11)	Wray, Colo.
Follett Bradley, Jr. (6)	Moffett Field, Calif.
Richard William Simons (10)	West Plains, Mo.
James Britt League, Jr. (9)	Greenville, S.C.
John Spencer Hardy (1)	Logansport, La.
Thomas Scott Algert *	La Jolla, Calif.
Harry Louis Donicht (14)	Glencoe, Minn.
Charles H. Stockdale (3)	Morgantown, W.Va.
Ladson G. Eskridge, Jr. (14)	Newberry, S.C.
Francis Harry Matthews (7)	Houston, Texas
Ryder Waldo Finn (7)	McCoy, Oregon
Robert Franklin Hardy (11)	Flint, Mich.
William Waring Miller *	San Diego, Calif.
Paul Wietzel Zehrung (18)	Dayton, Ohio
Arthur Jenkins Pierce (6)	Montague, Mass.
Robert Francis Worden (8)	Santa Fe, N.M.
Roy William Osborn (8)	Hankinson, N.D.
James Bradford Baker (18)	Bird Island, Minn.
William Grover Benn (10)	Washington, Pa.
Herbert Reed Volin (7)	Pittsfield, Mass.

Allan Thomas Bennett (19)	Wilmington, Del.
Henry G. Thorne, Jr. (19)	San Antonio, Texas
Wm. Albert Hatcher, Jr. (11)	Detroit, Mich.
Baskin R. Lawrence, Jr. (9)	Seneca, S.C.
Sam Philippe Triffy (9)	Niles, Ohio
Earl Bernard Young (9)	Sidney, Neb.
Robert Alva Ping (9)	St. Louis, Mo.
William Mason Reid (9)	Albany, Ga.
James Thomas Connally (11)	Waco, Texas
Jack Lincoln Schoch (10)	New Ulm, Minn.
Bernard Adolf Schriever *	Seattle, Wash.
Harold Ernest Watson (9)	Farmington, Conn.
Cy Wilson (16)	Hearne, Texas
Craven Clark Rogers (1)	Galveston, Texas
William Lewis Curry (9)	Raleigh, N.C.
Audrin Rotha Walker (8)	Pasadena, Calif.
Calvin Ely Peeler (14)	Corona, Calif.
James Oldham Ellis *	Berwyn, Ill.
Sven Harold Ecklund (11)	Los Angeles, Calif.
Robert Kay Martin (1)	Dayton, Ohio
John Beverly Montgomery (9)	Spartanburg, S.C.
John Hitt Eakin (9)	Natick, Mass.
John Allen Way (6)	Prague, Okla.
James Ferguson (1)	Whittier, Calif.
William Brewer Keese (16)	Wyoming, N.J.
Joseph Frederick Hunker (9)	West Point, Neb.
Martin Ansel Bateman (7)	Camden, S.C.
Robert Curtis Sexton (10)	Las Cruces, N.M.
William Bell David (9)	Calhoun, Ga.
Robert Francis Burnham (16)	Battle Creek, Mich.
Clyde Box (11)	Nevada, Texas
Edward William Ketcham (11)	Madison, S.D.
Chris H. Wm. Rueter (9)	Waco, Texas
Horace Armor Shepard (16)	Mobile, Ala.
Don Louis Wilhelm, Jr. (19)	Bryan, Ohio
Herbert Morgan, Jr. (9)	Freedom, Pa.
Franklin Kendall Paul (14)	Marriottsville, Md.
Ben Allen Mason, Jr. (8)	Houston, Texas
Raleigh Hunter Macklin *	Miami, Fla.
Graeme Stewart Bond (7)	Chicago, Ill.
Marcus Fleming Cooper *	Alameda, Calif.
Raymond Victor Schwanbeck (11)	Ash Fork, Ariz.
Robert Melville Caldwell (19)	Madison, Wis.
Joseph Abbott Thomas (7)	Vinton, Va.
Elbert David Reynolds (11)	Beaumont, Texas
Ralph Sheldon Garman (19)	Whittier, Calif.
Ernest F. Wackwitz, Jr. (16)	Springfield, Mass.
Marvin Christian Demler *	Williamsport, Pa.
Cecil Hampton Childre (16)	Weslaco, Texas
Jacob Jerval Brogger (9)	Butterfield, Minn.
Irvine Alfred Rendle (11)	Rawlins, Wyo.
Junius Waldo Dennison, Jr. (6)	Ojai, Calif.
James Linn Travis (11)	Portland, Ore.
Frank C. Parker, Jr. (9)	Norristown, Pa.
Ernest Wilbur Keating (1)	Blackwell, Texas
George Sutton Brewer (7)	Arcadia, La.
Irving Lewis Branch (7)	Glenbrook, Conn.
George Wilson Hazlett (9)	Tarentum, Pa.
Roy Edward Warren (7)	Birmingham, Ala.
James R. DuBose, Jr. (6)	Aiken, S.C.
Arthur Chas. Carlson, Jr. (11)	Jerome, Ariz.
William Eades (8)	Lexington, Ky.
Donald Wm. Eisenhart (16)	Culbertson, Neb.
Sam Maddux, Jr. (14)	Lawton, Okla.
Karl Lewis Polifka (13)	Watsonville, Calif.
Robert Reed Stewart (9)	St. Louis, Mo.
William Klahr McNown (9)	Lawrence, Kans.
Ted Sinclair Faulkner (6)	Seattle, Wash.
John Howard Payne (6)	Austin, Texas
Robert William Ryder (4)	Minneapolis, Minn.

Wilbur Danner Camp (1)	Arlington, Texas	John Harold Cheatwood (2)	Ruston, La.
Morris Pelham (1)	Anniston, Ala.	Thomas Kerns Hampton *	San Marino, Calif.
Avelin Paul Tacon, Jr. (1)	Mobile, Ala.	Francis B. Gallagher (11)	El Paso, Texas.
Conrad Joe Herlick (11)	San Bernardino, Calif.	Clarence Kinney Longacre (9)	Williamsport, Pa.
Evart, Wilbur Hedlund *	LaGrange, Ill.	Wm. Renolds Stark (6)	Starkville, Miss.
Paul Franklin Helmick (10)	Corvallis, Ore.		
John Marks Ferris (6)	Detroit, Mich.		
Robert Loughery Johnston (16)	Bellevue, Pa.		
James John Roberts, Jr. *	East Orange, N.J.		
Lloyd Atwood Walker, Jr. (7)	Los Angeles, Calif.		
Arthur Wm. Schmitt, Jr. (11)	Madison, N.J.		
Norris Perry (9)	Sedro-Wooley, Wash.		
Kenneth Ray Martin (19)	Kansas City, Mo.		
Maurice Edward Glaser (17)	Coronado, Calif.		
Leroy Alex Rainey (8)	Oak Park, Ill.		
Francis Eastham Brenner (1)	Waterville, Kans.		
Edgar Milton Wittan (9)	Portage, Pa.		
Robert F. Strickland (1)	Clio, Ala.		
Ansley Watson *	Burbank, Calif.		
Edward Gerald Hillery (9)	Boonton, N.J.		
Thomas Ewing Margrave (9)	Gordon, Neb.		
Bela Alan Harcos (9)	Los Angeles, Calif.		
Henry Ovide Bordelon (11)	Marksville, La.		
Edward Lewis Reid (16)	Little Rock, Ark.		
Clyde Chas. Harris, Jr. (1)	Birmingham, Ala.		
Jean Rogers Byerly (11)	Estes Park, Colo.		
Herman Francis Lowery (1)	Hattiesburg, Miss.		
Boyd David Wagner (19)	Johnstown, Pa.		
Edward George Kiehl *	Brownsville, Texas		
Earl Eugene Bates, Jr. (7)	Winnetka, Ill.		
Arch Graham Campbell, Jr. (1)	Fort Worth, Texas		
David Wade (16)	Minden, La.		
J. Francis Taylor, Jr. (19)	Columbus, Ind.		
Edward W. Maschmeyer (15)	Indianapolis, Ind.		
Neel Earnest Kearby (19)	Dallas, Texas		
Leonard Muir Rohrbough *	Roselle, N.J.		
Ray Hamilton Martin (3)	Austin, Texas		
Fred'k John Sutterlin (1)	Miami Springs, Fla.		
Murray Alston Bywater (11)	Salt Lake City, Utah		
Delmer Edward Wilson (11)	Ephrata, Wash.		
Joshua T. Winstead, Jr. *	La Grange, Ill.		
Charles Duncan Jones (1)	Jackson, Miss.		
Ernest Haywood Beverly (9)	Laurinburg, N.C.		
Jess Anders Smith *	Oakland, Calif.		
George Edward Schaetzel (11)	Alhambra, Calif.		
Frederic Grenville Huish (5)	Berkeley, Calif.		
Claude Edwin Putnam, Jr. (1)	Jacksboro, Texas		
Donald Root Strother *	Salt Lake City, Utah		
Dale Leroy Anderson (9)	West Pittsburgh, Pa.		
Eugene Carl Woltz (12)	Wichita, Kans.		
Kenneth Wilbur Lawver	Freeport, Ill.		
Elliott Hartley Reed (12)	Perry Point, Md.		
Frank Edwin Rouse (16)	Pullman, Wash.		
Richard Frederick Lorenz	Chicago, Ill.		
Vernon Lake Stintzi (3)	Chester, Iowa		
Clarence T. Edwinton (16)	Topeka, Kans.		
Theodore S. Proxmire, Jr. (19)	Lake Forest, Ill.		
James Carroll Cochran (7)	Riverside, Calif.		
Richard P. Schumacher (7)	Los Angeles, Calif.		
Arthur Harold Rogers (9)	Raleigh, N.C.		
Whitnell Tompkins Rison (1)	Chatham, Va.		
Donald Ellis Ridings *	Oakland, Calif.		
Leslie Ethridge Martin *	Midlothian, Texas		
Preston Patton Pender (9)	Hendersonville, N.C.		
Gwen Grover Atkinson (1)	Lufkin, Texas		
Harold Michael Keeffe (12)	Adams, Wis.		
Charles Wesseler Bicking (9)	Pittsburgh, Pa.		
Harry Willson Markey *	Seattle, Wash.		
Henry Clay Godman (9)	Honolulu, T.H.		
Howell Galen Crank (4)	Tulsa, Okla.		

Key:

1. Barksdale Field, La. * Unassigned
2. Bolling Field, D.C.
3. Brooks Field, Texas
4. Chanute Field, Ill.
5. Fort Knox, Ky.
6. Hamilton Field, Calif.
7. Hawaiian Department
8. Kelly Field, Texas
9. Langley Field, Va.
10. Mitchel Field, L.I., New York
11. March Field, Calif.
12. Marshall Field, Fort Riley, Kans.
13. Moffett Field, Calif.
14. Panama Canal Department
15. Philippine Department
16. Randolph Field, Texas
17. Rockwell Air Depot, Calif.
18. Scott Field, Belleville, Ill.
19. Selfridge Field, Mt. Clemens, Mich.

Of the above listed newly appointed Air Corps Officers, 27 hail from the State of California, 25 from Texas, 13 from Pennsylvania, 11 from Illinois, 6 each from Alabama, New Jersey, South Carolina and Washington, and 5 each from Louisiana, Massachusetts, Michigan and Minnesota. The remaining States are represented by less than five officers.

Los Angeles, Calif., leads the cities represented by the new officers with five, followed by Dallas, Texas; Chicago, Ill.; Salt Lake City, Utah, and Detroit, Mich., with three each. None of the other cities represented are credited with more than two of the officers.

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GAS MODEL CONTEST AT KELLY FIELD

The Southwest Model Plane Association meet, held at Kelly Field, San Antonio, Texas, on September 4th, under the auspices of the San Antonio Gas Model Airplane Club, provided a highly entertaining week-end for some 4,000 spectators, as well as for personnel stationed at Kelly Field.

Seventy participants from the States of Texas, Louisiana and Oklahoma competed in various events, which began at 8:00 a.m. and lasted until 6:00 p.m.

Prizes, awarded by several San Antonio business firms, were presented the winners of contests, performance and ingenuity of design being stressed. The winner of the endurance contest was awarded a round trip by air to New York by Captain Eddie Rickenbacker, President of Eastern Air Lines.

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During the month of August, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled a total of 13 airplanes and 62 engines, and repaired 54 airplanes and 11 engines.

PROMOTION OF AIR CORPS NONCOMMISSIONED OFFICERS

Effective September 17, 1938, forty Air Corps noncommissioned officers received promotions by virtue of the additional grades and ratings provided incident to the recent increase in the authorized strength of the Air Corps. Three First Sergeants and twelve Technical Sergeants were promoted to the grade of Master Sergeant, and 28 Staff Sergeants to the grade of Technical Sergeant. Last on the list of Staff Sergeants who were promoted was Samuel Hymes, stationed at Bolling Field, D.C., who with General Oscar Westover, Chief of the Air Corps, died in the unfortunate airplane accident at Burbank, Calif., on September 21st.

The names of the promoted noncommissioned officers are given below, as follows:

To Master Sergeant, Air Corps

- Tech. Sgt. Charles H. McKnight, Mitchel Field, N.Y.
- 1st Sgt. Benjamin A. Klinger, Barksdale Field, La.
- Tech. Sgt. Joseph H. Locher, March Field, Calif.
- 1st Sgt. Lynn B. Carr, Panama Canal Department
- Tech. Sgt. William Kretz, Mitchel Field, N.Y.
- 1st Sgt. Waldoe Rohlik, Mitchel Field, N.Y.
- Tech. Sgt. Forest F. Kelly, Panama Canal Dept.
- Tech. Sgt. Leonard L. Bentley, Selfridge Field, Mich.
- Tech. Sgt. John McAndrews, March Field, Calif.
- Tech. Sgt. Stephen A. Malloy, Panama Canal Department.
- Tech. Sgt. James Pearson, Chanute Field, Ill.
- Tech. Sgt. Peder Berg, Hawaiian Department.
- Tech. Sgt. Earl Hobson, Selfridge Field, Mich.
- Tech. Sgt. Clyde L. Walters, Kelly Field, Texas
- Tech. Sgt. Peter Ceccato, Hamilton Field, Calif.

Staff Sergeant to Technical Sergeant, A.C.

- William H. Jernigan, Langley Field, Va.
- Tony Yucius, Langley Field, Va.
- James R. Tucker, Randolph Field, Texas
- Ray R. Willett, Maxwell Field, Ala.
- Robert H. Greene, Barksdale Field, La.
- Leonard Williams, Kelly Field, Texas
- Roland Antrim, Hamilton Field, Calif.
- Frank Hurst, Hawaiian Department
- Edwin Paseman, Kelly Field, Texas
- Jack Wolfe, Randolph Field, Texas
- Lawrence Darcy, March Field, Calif.
- David Steins, Barksdale Field, La.
- Joseph Kramberg, Barksdale Field, La.
- Arthur C. Barker, Langley Field, Va.
- William Mehnert, Kelly Field, Texas
- Edward F. Skelton, Denver, Colorado
- Harry Hicks, March Field, Calif.
- Miles B. Sloan, Hawaiian Department
- Lloyd Carter, March Field, Calif.
- Earl E. Bleish, Selfridge Field, Mich.
- Martin Brucher, Philippine Department
- Clarence E. Bright, San Antonio Air Depot, Tex.
- Elmer H. Fisher, Brooks Field, Texas
- John A. Masterson, March Field, Calif.
- Charles Gardick, March Field, Calif.
- Harold P. Benson, Randolph Field, Texas
- Eli B. Nipper, Fort Bragg, N.C.
- James E. Dearborn, Panama Canal Department
- Chester A. Armstrong, Kelly Field, Texas, to the vacancy in the Air Corps caused by the promotion of Tech. Sgt. Clyde L. Walters.
- Edwin J. McClellan, Chanute Field, Ill., to

the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. James Pearson.

Gerald G. Whitaker, Hawaiian Department, to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Peter Berg.

Tony Dambrosio, Panama Canal Department, to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Forest F. Kelly.

John A. Marshall, Bolling Field, D.C., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Charles H. McKnight.

Luther Shelton, Fort Bragg, N.C., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. William Kretz.

Golden R. Davis, Chanute Field, Ill., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Leonard L. Bentley.

Paul D. Bennett, Scott Field, Ill., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Earl Hobson.

Courtney K. Mueller, March Field, Calif., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Joseph H. Locher.

Joseph M. Fredericks, March Field, Calif., to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. John McAndrews.

Cecil C. Seguire, Kelly Field, Texas, to the Technical Sergeant vacancy in the Air Corps caused by the promotion of Tech. Sgt. Stephen A. Malloy.

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AIR FORCE DEMONSTRATION AT FORT RILEY, KANSAS

Fort Riley, Kansas, will be the scene of a demonstration on Leavenworth Day, October 20th, by the GHQ Air Force. The students at the Command and General Staff School will witness a demonstration by all branches of the Air Force, to include bombing and machine gunning of silhouette targets by Attack Aviation; machine gun fire on a ground target by Pursuit aviation, and bombing of silhouette targets by Bombardment airplanes.

Units to participate in this demonstration are an Attack and a Pursuit Squadron from the Third Wing, GHQ Air Force, and a Bombardment Squadron from the First Wing, GHQ Air Force.

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Major John R. Glascock has been relieved from further assignment and duty at the Air Corps Primary Flying School, Randolph Field, Texas, and assigned to Chanute Field, Rantoul, Ill.

War Department Special Orders relieving Major William W. Welsh from assignment and duty at Maxwell Field, Ala., and assigning him to duty as a student at the Command and General Staff School, Fort Leavenworth, have been revoked.

V-7860, A.C.

WING GET-TOGETHER IN PANAMA

On the evening of August 29th, all the officers of the squadrons of France and Albrook Fields, which compose the 19th Wing, gathered at Rio Hato in the Republic of Panama for the annual Wing Dinner ceremony which is to become traditional. The dinner was held in the newly completed mess hall of the gunnery camp there which has been undergoing reconstruction for several months. Officers were quartered in large, airy barracks - also new - with a degree of comfort surprising to those who have spent days and weeks there in tents.

The dinner itself was for a three-fold purpose: to keep alive the "Wing-Ding" as a primary social function; to honor Brigadier General George H. Brett, Commander of the 19th Wing, whose tour of duty in the Panama Canal Department will be completed on September 9th; and to open the new gunnery camp in the finest possible fashion.

The ceremony was opened by Colonel Fred H. Coleman, serving as toastmaster and secretary, who proposed a toast to the Commander-in-Chief of the Army and Navy. An excellent dinner followed, and upon completion of the meal a number of officers, with little warning, were called upon for short speeches.

An interesting talk by General Brett brought the dinner to its conclusion.

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GEN. BRETT'S SON AN ARDENT AIR TRAVELER

On August 17th, Brigadier General George H. Brett, commanding the 19th Wing, Panama Canal Department, accompanied by his young son, Devol, made a hurried trip to Lima, Peru, as guest pilot and technical observer on the Pan-American-Grace Airways. The main purpose of the trip was to examine landing fields and flying facilities over a new route now being established by Pan Agra, which proceeds from Cristobal, Canal Zone, to Bogota, Medellin, and Cali, Colombia, Quito and Guayquil, Ecuador, and on the coastal route into Lima, Peru.

General Brett's observations, according to the News Letter Correspondent, indicate clearly the feasibility of sending small groups of airplanes well into South America; in fact, as a result of his observations, he believes even planes as small as the P-12 type could make this trip in perfect safety from a standpoint of gasing and lodging facilities.

As guest pilot, General Brett was accorded all the privileges of a co-pilot, and he was intensely interested and enthusiastic concerning the operation of this American airline in South America. He returned to Albrook Field on August 20th.

It might be interesting to add that the young son of General Brett, aged 15,

has now covered by air Central America from Guatemala City to Panama, and from Panama into South America as far as Lima, Peru, a total distance of approximately 3500 miles.

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BUZZARD DISPUTES PLANE'S RIGHT OF WAY

Because of the number of pilots who have narrowly avoided hitting buzzards or crows, the News Letter Correspondent of the 1st Observation Squadron, Marshall Field, Fort Riley, Kansas, believes that perhaps it will be interesting to them to read of an accidental collision between an airplane and a bird, and the effect on the airplane.

Recently, while a three-ship formation was enroute from Duncan Field, San Antonio, Texas, to Fort Riley, Kansas, and was proceeding peacefully at an altitude of 4200 feet above the ground, plane No. 3, an O-25C, struck an unwary buzzard, surprising both the pilot and the bird. The bird hit the upper left wing, about one and one-half feet from the tip, and remained hanging there. Although the pilot noticed no difference in the flying qualities of the ship, he landed at Belton, Texas, to determine the extent of the damage.

It was found that the front spar had been broken in two places, and Brother Buzzard's leg had been caught in one of the cracks, necessitating amputation to free him, and amputation and replacement of the wing panel. The airplane recovered; the buzzard did not.

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FIRST OBSERVATION SQUADRON IN CAMP

The 1st Observation Squadron, stationed at Marshall Field, Fort Riley, Kansas, spent two weeks - August 28th to September 11th - at Camp McCoy, Wisconsin, participating in maneuvers of the 14th Brigade (Reinforced). Activities during the first week consisted of tow target missions for Infantry rifle and machine gun practice, and observation missions in connection with various problems for the Infantry.

On September 6th and 7th, the Squadron furnished observation for both sides on a "controlled" maneuver. For a two-day "free" maneuver, September 8th and 9th, a flight of three airplanes was furnished each side. Despite a low ceiling, the airplanes were able to fly enough so that both the Blues and the Reds were informed at all times as to the activities of the enemy.

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Special Orders of the War Department, recently issued, relieves Captain John M. McDonnell, Air Corps, from his present assignment and duty at Wright Field, Ohio, and directs him to proceed to his home and await retirement.

V-7860, A.C.

1ST OBS. SQUADRON RETURNS FROM MANEUVERS

The 1st Observation Squadron recently returned to Marshall Field, Fort Riley, Kansas, from Camp McCoy, Wis., where the annual maneuvers of the Regular Army troops of the 7th Corps area were held.

The Squadron was handicapped much of the time by low ceiling, fog and rain. During the two-day maneuvers held on September 9th and 10th for Major General Stanley H. Ford, the Corps Area Commander, and his staff, Brigadier General Campbell B. Hodges commanded the Blue Force and Colonel J.C. Pegram, 14th Cavalry, the Red Force.

The 1st Observation Squadron furnished one flight of three airplanes each to both forces. The Red aircraft were commanded by 1st Lieut. Gerry L. Mason, and the Blue aircraft by 1st Lieut. Vernon C. Smith.

The maneuvers of both Red and Blue forces relied heavily on air observation. Radio and drop messages both were used to keep the respective forces informed of the movements of the "enemy."

The maneuvers were remarkably free from umpire restrictions. This gave the commanders of the contending forces a wide choice, and they made free use of it. Wide envelopments, mechanization, horse cavalry and infantry were used to the fullest advantage.

The Air Corps officers participating considered these maneuvers most interesting and instructive. The action of the scout cars in destroying bridges and placing road blocks were a revelation of what is to be expected of these weapons in an open war. The action of tanks against mechanized movements convinced the personnel of the Squadron that they must keep a sharp eye for enemy tanks.

The 14th Cavalry performed in the best traditions of the Service. Their delaying actions were convincing as to their value in open warfare. The opposing flanks were always in danger. The infantry took cover and froze upon the approach of enemy aircraft. The necessity of no movement and no upturned faces had apparently been impressed upon the personnel of the 3rd and 17th Infantry in an effective manner. The 80th Field Artillery knew how to camouflage their guns, for they were very difficult to find, and some installations were not located.

The Squadron operated with borrowed airplanes, due to the fact that the O-47A's have not reached the production stage such as to enable the Squadron to receive its allotment. Despite this handicap, the work performed was complimented by the Corps Area Commander, General Ford; the Blue Commander, General Hodges; and the Red Commander, Colonel Pegram.

NAVIGATION PROBLEM BY 9TH BOMB. SQUADRON

The 9th Bombardment Squadron, commanded by Major T. V. Foster, conducted a unit navigation and assembly problem over the week end of September 2 - 5, 1938. The flight, consisting of 22 officers and 23 enlisted men, in seven B-18 airplanes, departed from the home station, Hamilton Field, Calif., at five minute intervals, starting at 1900 on September 2nd.

The problem consisted of individual, dead reckoning and celestial navigation missions to Randolph Field, Texas, via Bakersfield, Calif., and El Paso, Texas, with a Squadron assembly scheduled at Fort Clark, Texas, at 0440, on September 3rd.

Excellent weather conditions were encountered on the flight from Hamilton Field to Randolph Field and to a point approximately fifty miles west of Tucson, Arizona. In this area, severe electrical and thunder storms were encountered, accompanied by very heavy rain and unusually severe static conditions. This storm area extended along the course from Tucson, Arizona, to El Paso, Texas, and due to the severe static conditions radio communication in this area was impossible.

Prior to the time of entering this storm area, position reports were given on the hour and half hour by all planes to the Squadron Commander's airplane, which acted as the net control station. In turn, the net control station consolidated all reports and transmitted them to Hamilton Field. Static conditions prevented any radio communication while in the storm area, but shortly after passing El Paso, the Squadron Commander issued orders that the Squadron assembly time would be moved up to 0445. The assembly was accomplished on time and the Squadron proceeded to Randolph Field, landing at 0555.

On the return flight, the Squadron departed from Randolph Field as a unit, at 1300, and proceeded as a unit to Tucson, Arizona. At this point, instructions were issued for all planes to take a five-minute interval and proceed individually to Hamilton Field, via Bakersfield, Calif. Excellent weather conditions prevailed along the entire return flight, and the last plane landed at Hamilton Field at 2255.

Appreciation is expressed for the efficient servicing of the airplanes of the flight while at Randolph Field, and for the excellent service rendered by the Weather Section at that field. The flight was given a forecast which turned out to be accurate along the entire return route.

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AIR AMBULANCE SERVICE IN HAWAIIAN DEPT.

The air transportation of personnel requiring immediate hospitalization is becoming almost a common occurrence in the 5th Bombardment Group, Luke Field, T.H. August 14, 1938, marked the completion of the fifth trip of this character within the space of three months. All trips involved transportation from the island of Hawaii to Oahu, and all but one were appendicitis cases. One case was illustrative of the value of good air-ground communications. Private Donald V. Atkinson, 17th Air Base Squadron, on duty as radio operator at South Cape, Hawaii, an isolated point at the southern tip of the island, was stricken with what he diagnosed as appendicitis. He communicated this fact to the headquarters of the 5th Bombardment Group. Word was received in the late afternoon in time to divert one airplane of a flight returning to Oahu from Hilo.

Private Atkinson was picked up just before darkness set in. He was hurried to Wheeler Field, Schofield Barracks, T.H., where his self-diagnosis was confirmed, and the offending member was removed within forty minutes after his arrival.

Air transportation has been of immeasurable value in cases involving immediate hospitalization of patients, since travel by water requires some twenty hours of sailing over extremely rough water and is available only on schedule.

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COOPERATIVE MISSION WITH COAST ARTILLERY

The 4th Reconnaissance Squadron, Luke Field, T.H., recently completed an interesting and instructive cooperative mission with Battery "A," 15th Coast Artillery. The mission was to service test a means of accurate location of targets for 16" battery, located at Fort Weaver, at extreme ranges. After some 48 hours of preliminary practice, the actual test took place and proved to be quite accurate. The battery used three sighting shots before firing for effect, and on the 4th, 8th and 11th shots nearly direct hits were recorded at a range of 44,000 yards.

It would appear that the feasibility of this means of location of targets in war time is dependent entirely for its success on radio and fairly good weather.

The 4th Reconnaissance Squadron has also been working hard at gunnery, and the hope is expressed that record courses will be fired with good results.

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Organization Day, celebrated by the 23d Bomb Squadron, Luke Field, T.H., on August 22nd, proved to be a day long to be remembered. Athletic contests of many kinds occupied the time of nearly everyone throughout the day.

FIELD TRAINING BY 23RD BOMBARDMENT SQDN.

The 23rd Bombardment Squadron in the Hawaiian Department moved by air and motor transportation to Bellows Field, Waimanalo, T.H., on the morning of August 15th, for the purpose of conducting the required annual field training.

Other squadrons in the 5th Bombardment Group had previously been in camp, so this organization had an easy time establishing itself. On the morning of August 16th, both the 1000-inch range and the pistol range were in operation by eight o'clock. These ranges were in daily operation for the rest of the period until all personnel required to fire had completed the course.

On August 18th, the airdrome defense crews started an intensive course of instruction in firing at a target towed by a B-12 airplane. After all members of these crews had completed this course, their next phase of instruction consisted of firing at balloon targets.

By August 26th, all phases of ground gunnery had been completed. All officers and men required to fire had fired both the 1000-inch machine gun range and the pistol range, and the airdrome defense crews had been given an intensive course in the setting up, operation and maintenance of the anti-aircraft machine gun, in addition to firing at towed targets and balloons.

The Squadron returned to Luke and Hickam Fields on the morning of August 27th, having completed its required ground gunnery. In addition, the varied tasks assigned each man had proved a welcome diversion from routine duties. That late afternoon swimming was indulged in by nearly all men was evidenced by numerous cases of sunburn. All in all, the period of annual field training was a complete success for the 23rd Bombardment Squadron.

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GENERAL BRETT LEAVES PANAMA CANAL DEPT.

On September 7th, the 19th Wing honored its departing Commander, Brigadier General George H. Brett, Air Corps, with a Wing Review at Albrook Field. Following a ground inspection of airplanes and crews, the Wing passed twice over the field in column of squadrons. Music for the occasion was furnished by a band from the neighboring Engineer post of Corozal.

General Brett sailed on September 9th aboard the Transport REPUBLIC for San Francisco, and will be stationed in the Office of the Chief of the Air Corps, Washington, D.C.

"The 19th Wing," says the News Letter Correspondent, "regrets losing a Commander who has accomplished so much for the good of the Air Corps in the Canal Zone."

THE NEW CLASS AT RANDOLPH FIELD

A total of 114 newly commissioned officers, graduates of the 1938 class at West Point, N.Y., were scheduled to report the latter part of September to the Commanding Officer at Randolph Field, Texas, ready to pursue the course of flying training at the Air Corps' West Point of the Air. Forty-one States, as well as the District of Columbia and the Panama Canal Zone, are represented by these young second lieutenants, who will start their actual course of instruction about October 15, 1938.

Texas, usually well up on the list in point of numbers, is represented in the new class of student officers by only two - 2nd Lieuts. Norman L. Tittle, of Wichita Falls, and Hugh D. Wallace, of Fort Worth. The State of New York leads numerically with a total of twelve potential aviators, with Illinois in second place with seven, and Pennsylvania in third position with six officers.

An imposing array of sports talent is in the new student officer class, six former captains of athletic teams at the Military Academy having already put in their appearance. Lieut. James H. Isbell, 200-pound tackle and captain of last year's football team, reported early, along with Lieut. Harris E. Rogner, former basketball captain; Lieut. Charles W. Sherburne, captain of lacrosse; Lieut. B.C. Harrison, captain of boxing; Lieut. William H. Blanchard, captain of hockey, and Lieut. G.C. Russell, captain of tennis.

The Air Corps Training Center also has its share of Honor Graduates from the June class. Of the 13 honor men, four of them passed the Air Corps physical examination and are now ready to take the additional training to qualify them as pilots in the Air Corps.

In addition to the 114 newly commissioned officers assigned to Randolph Field for aviation training, there will be four officers from various branches of the service who will take the course, namely, Captain James B. Colson, Infantry; 1st Lieut. R.A. Ridsen, Infantry; 2nd Lieuts. Nicholas T. Perkins, Coast Artillery Corps, and Robert T. Crowder, Infantry.

Finally, approximately 235 Flying Cadets will report to Randolph Field about October 10th, making the total number in the class to start their aviation career about 354.

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PROGRESS OF TRAINING AT RANDOLPH FIELD

The air in the vicinity of the Primary Stage at Randolph Field is virtually alive as the present class of cadets polish up their acrobatics in PT-3's, PT-11's and PT-13's. With only half of the class flying in the mornings and the

other half in the afternoons, more air space is available for the aerial gyrations. Meanwhile, the class on the Basic stage is spending most of its time on cross-country work, both day and night; instrument flying, and formation, preparatory to departing for Kelly Field and the Advanced Flying School on October 7th.

"Although the final figures are not as yet available, it is believed," says the News Letter Correspondent, "that both Primary and Basic stages will graduate about the same percentages as prevalent in recent classes."

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NEW PURSUIT PLANE ARRIVES AT BARKSDALE

Diving out of the afternoon sky on September 9th at terrific speed came the first Curtiss P-36 to be delivered to Barksdale Field, Shreveport, La. Ferried from the factory at Buffalo, N.Y., by Lieut. D.R. Hutchinson, the new Pursuit plane was given the "once over" at Wright Field, Dayton, Ohio, on September 7th and 8th before its flight to Barksdale Field the following day. It will be only a short time until the 20th Pursuit Group will soon be flying on silver wings instead of the old faithful blue and yellow.

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GUNNERY OPERATIONS FOR 74TH ATTACK SQDN.

The 74th Attack Squadron, which is based at Albrook Field, Panama Canal Zone, moved to the 19th Wing's newly rebuilt gunnery camp at Rio Hato, Republic of Panama, on September 10th, for two weeks of gunnery and tactical operations. The new buildings should add a great deal to the comfort of officers and men on duty there during the maneuvers.

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PHILIPPINE AIRMEN SEARCH FOR CLIPPER

When the startling news was received that the "Hawaii Clipper" was long past due at Cavite the evening of July 28th, the Commanding General of the Philippine Department issued orders for the Air Corps to "stand by" to render whatever assistance may be required in cooperation with commercial and Navy forces that may be called into action to assist in the search, if Pan American Airways requested such assistance.

On the following day, the Commanding Officer of the Fourth Composite Group, Nichols Field, P.I., received orders to participate in the search that had been requested by P.A.A. officials. The Commanding Officer of the 28th Bombardment Squadron at Clark Field immediately dispatched six Bombers. The Group operations officer at Nichols Field dispatched V-7860, A.C.

ed the two Amphibians.

The search was carried out for four days in cooperation with the Navy's 13 surface craft, two Navy Amphibians, and the U.S. Transport MEIGS, which was the first craft to approach the scene from which the last radio report of position was sent by the Clipper, approximately 400 miles east of the Philippines. With the discovery by the MEIGS of the oil slick, the search was conducted around that area for two days, after which it was extended southward and eastward.

After the fourth day, the search was regretfully terminated by the Army Air Corps, no trace having been found of the Clipper.

Altogether, planes from the 4th Composite Group covered approximately 127,000 square miles without mishap. Good weather prevailed during the entire search.

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COL. WOOTEN COMPLETES LONG AIR JOURNEY

At 4:10 p.m. on the afternoon of August 20th, Lieut. Colonel Ralph H. Wooten, Air Corps, landed at Albrook Field, enroute to Santiago, Chile, to take over the duties of Military Attache to that country. Flying an A-17 Attack plane, and accompanied by Staff Sergeant John J. Licheay as crew chief, Colonel Wooten departed from Brownsville, Texas, on the morning of August 17th and remained overnight in Guatemala City, Guatemala.

At 8:08 on the morning of the 20th, the A-17 was out for Albrook Field, Panama Canal Zone. Colonel Wooten was reported over San Salvador at 9:00 a.m.; in at San Jose, Costa Rica, for gas at 12:10 p.m. At 1:04 p.m., he took off for Albrook Field, where he landed at 4:10 p.m.

Intending to remain only two days in the Canal Zone, Colonel Wooten was delayed there due to the temporary illness of Sergeant Licheay, who received medical treatment at Gorgas Hospital.

Before the post was well awake on the morning of August 26th, Colonel Wooten had taken off for points south and was making up for lost time. At 10:48 a.m., he landed at Cali, Colombia, and at 11:30 a.m., he took off for Guayaquil, Ecuador, where he landed at 2:55 p.m. Half an hour later he was in the air again, headed for Talara, Peru, which he reached at 5:00 p.m., and where he spent the night. On the following day the only report received at Albrook Field was when the final stop of the day was made at Arica. At 10:10 a.m., August 28th, the plane reached Antofogastia, Chile, and at 2:45 p.m., Colonel Wooten landed in Santiago. More detailed accounts of the long flight were not available. Colonel Wooten's personal narrative of the trip would be of great interest.

AUTOMATIC FUEL SYSTEM

By the Wright Field Correspondent

An automatic fuel system, developed by the Air Corps Materiel Division, Wright Field, Dayton, Ohio, consists of a device for turning the fuel cock to another tank when the supply in one tank has been exhausted. The construction of the device is such that when the fuel pressure drops below a set value, the fuel cock is automatically turned in a clockwise direction to the next tank. In case the next tank is empty, the device continues to turn the fuel cock until a tank containing fuel is contacted, at which time the fuel pressure is built up to that required and the automatic device cuts out. The device does not interfere with manual operation.

It is believed that the automatic fuel system will help to eliminate those numerous accidents which have resulted from running out of gas while taking off, landing, or flying low.

The Materiel Division is desirous of obtaining the comments of the Service in regard to the desirability of further development, with a view towards standardization on certain types of airplanes.

The system has been incorporated in an A-17 airplane at Wright Field, and this plane was scheduled to be flown to Langley and Barksdale Fields during the last week in September for the purpose of enabling the personnel at those stations to become acquainted with and comment upon the system.

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ACTIVITIES OF THE FIRST PURSUIT GROUP

Selfridge Field, Mt. Clemens, Mich., the home of the First Pursuit Group, has been a hive of activity the past summer, and at this late date the future holds no prospect of any relaxation.

With the completion of deliveries of the P-35 Pursuit planes and a minimum of mechanical difficulties, the Group is again ready to take its place in the Air Force.

The 27th Pursuit Squadron, under Major Willis R. Taylor, had the honor of representing Selfridge Field at the National Air Races, and has now returned to the nest to prepare for maneuvers in October.

The 17th Pursuit Squadron departed for Camp Skeel, Oscoda, Mich., for gunnery training.

The 94th Pursuit Squadron seems to be the orphan child. Practically all its officers have been attached to the 17th and 27th to bring those squadrons up to strength.

A great deal of training has been carried on in formation at high altitudes, familiarizing the personnel to the unpleasant conditions involved near the moon.

 AIR CORPS 
NEWS LETTER



MAJOR GENERAL HENRY H. ARNOLD,
CHIEF OF THE AIR CORPS.

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
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Washington, D.C.

The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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KELLY FIELD GRADUATES LARGEST CLASS IN HISTORY

Graduation Exercises for Class 38-C were held at the Air Corps Advanced Flying School, Kelly Field, Texas, on Wednesday, October 5, 1938. The class consisted of 64 Regular Army officers and 80 Flying Cadets, and was the largest graduating class in the history of the Training Center.

The highlight of all the events of the day was the huge Aerial Review at 9:30 a.m., in which 135 planes of all types were flown by 15 Flying Instructors and 144 students. This was the largest graduation aerial review ever flown at Kelly Field and was witnessed by an estimated 5,000 spectators.

A total of 114 student officers and 166 Flying Cadets from the Primary and Basic stages at the Primary Flying School, Randolph Field, Texas, formed a guard of honor for the reviewing party, which consisted of:

Major General F.W. Rowell, U.S.A., Commanding General, 2nd Div. and Fort Sam Houston;

Brigadier General C.F. Humphrey, Jr., U.S.A., Commanding General, 3rd Field Artillery Brigade;

Brigadier General Barton K. Yount, Air Corps, Commanding General of the Air Corps Training Center;

Colonel Frank D. Lackland, Air Corps, Commandant of the Air Corps Advanced Flying School;

Colonel Eugene A. Lohman, Air Corps, Assistant Commandant of the Air Corps Advanced Flying School;

Lieut. Colonel John B. Brooks, Air Corps, Commandant of the Air Corps Primary Flying School;

Lieut. Colonel Selby H. Frank, Ordnance Dept., Commanding Officer, San Antonio Arsenal;

Lieut. Colonel Edwin B. Lyon, Air Corps, Assistant Commandant of the Air Corps Primary Flying School;

Lieut. Colonel Coleridge L. Beaven, Medical Corps, Commandant, School of Aviation Medicine;

Lieut. Colonel J.M. Thompson, Q.M.C., Commanding Officer, Camp Normoyle, Tex.;

Lieut. Colonel H.J.F. Miller, Air Corps, Commanding Officer, Duncan Field, Texas;

Major Douglas Johnston, Air Corps, Commanding Officer, Brooks Field, Texas;

Major John R. Morgan, Air Corps, Director of Flying Training of the Air Corps Training Center.

Following the review, exercises were held at the Post Theater at 10:45 a.m., where the class was addressed by Brig. General Delos C. Emmons, Air Corps, Commander of the 1st Wing, GHQ Air Force, who presented each member with his graduation diploma. All graduates received their wings and the official aeronautical rating of "Airplane Pilot." Hundreds of relatives, friends, and interested persons attended the various exercises.

Among the student officers of the class was Lieut. Charles B. Westover, son of the late Major General Oscar Westover, who at the time of his unfortunate crash was the Chief of the Air Corps. General Westover had been scheduled to deliver the graduation address.

Among the members of each class are some Flying Cadets who form a staff to assist the Commandant of Flying Cadets. These men are picked for their military ability, neatness, their ability in handling men, and their personality, and are given the titles of Cadet Captains and Lieutenants. This honor is coveted by all the Cadets, as it means that the ones selected "have what it takes." In Class 38-C, the Cadet Captain was Robert V. DeShazo, from Leeds, Alabama. The Cadet Lieutenants were William E. McEntire, of Fort Worth Texas, and John N. Carlton, of St. Peter, Minnesota.

The graduation address delivered by General Emmons was as follows:

"First, let me state that I consider it a great honor to be invited to address you at this time, and am grateful for the opportunity.

Next, let me congratulate the class and their instructors for the well executed review just completed.

With the permission of the guests and the instructors, I will direct my remarks to the graduating class. You have just completed a very difficult and thorough course of instruction, and have proven by the acid test that you are worthy of a commission in the Army Air Corps, either as a regular or as a reserve officer. You have made an excellent start on a most interesting and exciting career. We who currently command

tactical units and who receive most of you upon your graduation, find the product of this school to be to our liking because you have had sound flying and disciplinary instruction; because you are in excellent physical condition and do not dissipate; because you are as a rule enthusiastic, studious and anxious to learn; because you obey all orders willingly and cheerfully; because you are self-reliant but modest in your accomplishments; and because you belong to our close brotherhood of Air Corps officers and are loyal to it.

You will find upon arrival at your station a splendid lot of companions and associates who will welcome and assist you. You will learn that your commanders all along the line will take a keen interest in your work and welfare. You will discover a fine lot of enlisted men with very high morale. You will join tactical units which, though understrength, are effective and have an enviable Esprit de Corps. You can count on trained and experienced leadership. You will be busy, but you will enjoy the work because it will be instructive and interesting.

In single-engine units, you will probably be assigned - after a short period of instruction - to the important position of airplane commander. In multi-engine units you will - after a considerable amount of individual instruction - be assigned as a regular member of an organized combat crew as co-pilot, navigator, or bombardier, or on a unit staff. After you acquire the necessary service and pilot hours you will, in multi-engine units become the chief pilot and airplane commander. You will secure the required number of pilot hours by acting as co-pilot in Bombers or in the BC-1, a number of which have been assigned to Bombardment and Reconnaissance units.

It may interest you to know that a number of recent graduates of the Training Center, including some of you, have been assigned to multi-engine units without previous service with a single-engine unit. I am happy to report that the great majority of those that the First Wing received of the last class from the Training Center and assigned direct to Bombardment and Reconnaissance units, are doing very well and appear to be contented with their assignments. I would also like to report that practically all of the younger officers who have been transferred from single-engine units to Bombardment and Reconnaissance squadrons in order to build them up, are delighted with their new assignments and opportunities.

When you arrive at your new station, you will find a lot of new combat equipment. Some of it will be fast, much of it will be heavy, and all of it will be complicated. I just want to say that you need have no worries about handling

this equipment. You have the technique of flying and the fundamentals. You will be given ample instruction and assigned no positions or missions that you cannot handle confidently and safely.

On an occasion like this it seems to be customary for the speaker to offer some advice to the graduating class. I don't want to be an exception and therefore ask you to consider several matters that may prove to be useful.

The first subject is debts. These do more to endanger a young officer's career than anything I know of, and far too many young officers incur more obligations than they can handle. Eventually, overdue bills and notes find their way to official channels with consequent embarrassment to the officer and to the service. I advise you, especially if married, to buy only what you can afford and not to attempt to buy all you think you need at once. Please understand that young people are not expected to have much in the way of furniture, finery, or luxuries, and I can assure you that we - including your contemporaries - respect the man who is free from the worries of debt.

In connection with furniture, let me call your attention to the quarters situation. At many of our stations, including both March and Hamilton Fields, there is a great shortage of married officers' quarters. The chances are that many of you will have to live in adjoining towns on commutation. Oftentimes there are more furnished houses available than unfurnished ones, and the difference in rental is surprisingly small. May I suggest, therefore, that you delay the purchase of furniture, etc., until you arrive at your station and find out what your situation will be.

My last piece of advice is to continue your professional and non-professional studies. To be realistic about it, you are in direct competition for future preferments with the finest group of young men in this nation. You simply cannot afford to fall behind the procession, and you will unless you devote a very substantial amount of your time to furthering and broadening your education.

In conclusion, let me heartily congratulate you on your success at this institution. Most of you are going almost immediately to the GHQ Air Force, and we need and welcome you. Let me wish all of you every possible success."

Of the 144 students who graduated from the Training Center on October 5, 1938, 16 officers and 13 Flying Cadets specialized in Attack Aviation; 6 officers and 14 Flying Cadets in Observation Aviation; 18 officers and 39 Flying Cadets in Pursuit Aviation, and 24 officers and V-7865, A.C.

14 Flying Cadets in Bombardment Aviation.
The roster of the graduating class is as follows:

REGULAR ARMY OFFICERS
Observation Aviation

Captains
Tarro, John Albert, A.C. Ill.
1st Lts.
Lee, Robert Merrill, Cav. Maine
Mosby, John Trueheart, Inf. Virginia
2nd Lts.
Mauldin, Whiteford Carlisle, Cav. Lockesburg, Ark.
Powell, Thomas E., Inf. San Francisco, Calif.
Stratton, Wilbur H., Cav. Seattle, Wash.

Pursuit Aviation

1st Lts.
Bondley, Charles J., Jr., CAC Ohio
2nd Lts.
Cain, Wm. Joseph, Jr., Inf. Bayonne, N.J.
Clingerman, Wm. Ray, Jr., CE Terre Haute, Ind.
Ellis, Gale Eugene, SC Beaver Falls, Pa.
Eriksen, John Gordon, FA Milwaukee, Wis.
Fellows, Richard Wm., Cav. Algoma, Wis.
Hammond, Harry Edwin, FA Pine Bluff, Ark.
Holdiman, Thomas A., QMC Marshalltown, Iowa
Holloway, Bruce Keener, Cav. Knoxville, Tenn.
Klocko, Richard P., Eng. Dunkirk, N.Y.
Magoffin, Morton D., Inf. Deerwood, Minn.
McElroy, Ivan Wilson Austin, Texas
Robbins, Charles Louis, CAC Elkhart, Ind.
Sprague, Charles A., Cav. Bridgeport, Conn.
Stark, Charles Wm., Jr., Inf. Trenton, N.J.
Stevenson, John D., CE Tie Siding, Wyo.
Ulricson, John R., Cav. Milford, N.H.
Wright, Harold Bell, CE Calvin, Okla.

Bombardment Aviation

2nd Lts.
Agee, Sam Wilkerson, Jr., FA Silver City, N.M.
Batjer, John F., FA Houston, Texas
Caldwell, Jack E., Inf. Searcy, Ark.
Clark, Alan Doane, CAC Washington, D.C.
Conway, Walter Clem, CAC Abilene, Texas
Diehl, Conrad H., Jr. FA Washington, D.C.
Donohew, Jack N., CE Slater, Mo.
Dorney, Harvey C., Cav. Olney, Ill.
Dunlop, Woodrow Wm., Inf. Manville, R.I.
Gray, Marshall R., Inf. Newton Center, Mass.
Greeley, Horace, Inf. Jackson Heights, N.Y.
Gurney, Samuel C., Jr., Cav. Ridgewood, N.J.
Hackford, Richard H., CAC Gardenville, N.Y.
Holcomb, George L., CE Kemp, Texas
Horrigan, Wm. Kienle, FA Fort Thomas, Ky.
McDonald, William E., Cav. Urich, Mo.
Ohman, Nils Olof, CE East Dedham, Mass.
Preston, Maurice A., Cav. Tulare, Calif.
Rutherford, Alvord, CAC Washington, D.C.
Sanborn, Kenneth O., Inf. Potter Place, N.H.
Spilman, Lawrence A., Cav. Ottumwa, Iowa
Taylor, Robert, erd., CAC Baltimore, Md.
Wade, Kenneth Sayre, SC San Diego, Calif.
Westover, Charles B., FA Washington, D.C.

Attack Aviation

2nd Lts.
Andrews, Frank Wm., Inf. Glendale, Calif.
Barden, Richard R., SC Pen Yan, N.Y.
Brummel, Donald B., QMC Chicago, Ill.
Denson, Render D., Inf. Birmingham, Ala.
Durham, Jasper N., Inf. Salem, Mo.
Eckman, Walter, CE Houston, Texas

Green, Malcolm, Jr., Inf. Sausalito, Calif.
Herman, Robert H., CAC Middletown, Ohio
Hippes, William G., Cav. Curwensville, Pa.
Leland, Gordon C., Inf. San Jose, Calif.
Low, Curtis Raymond, CAC Needham Hts., Mass.
Marr, Harold Everett, Jr., FA Searport, Me.
Miller, Joseph A., Jr., Inf. Brevard, N.C.
Pell, Floyd Joaquin, Cav. Ogden, Utah
Posey, James Theo, Inf. Henderson, Ky.
van Leuven, Harry F., FA Minneapolis, Minn.

FLYING CADETS
Attack Aviation

Arnold, Walter Erath, Jr.¹ El Paso, Texas
Bylander, Richard Murray² Little Rock, Ark.
Cole, Perry Sherman^{2a} Washington, Ind.
DeShazo, Robert Vernon⁴ Leeds, Ala.
Flack, Rudolph Emil West Los Angeles, Calif.
Howery, Allen Moore Russellville, Tenn.
Hubbard, Ronald Dean Warren, Ohio
Madre, John Douglas Memphis, Tenn.
Moffett, Christopher Otho Fordyce, Ark.
Robinson, Gerald Graham Los Angeles, Calif.
Stuart, Robert Hartwell San Jose, Calif.
Welborn, Kenneth Moses Ky.
Young, Sig Rodgers Tucson, Ariz.

Bombardment Aviation

Adams, Jack, Jr. Walters, Okla.
Bohnaker, William John Platteville, Wis.
Carlton, John Noble St. Peter, Minn.
Courtney, Harold Douglas Fullerton, Calif.
Eisenhart, Charles Marion Culbertson, Neb.
Green, Edwin Smith Imperial, Calif.
Lindsay, James Robert Santa Paula, Calif.
Manierre, Ernest Roderic Hartford, Conn.
McGinity, Frank Joseph³ Denville, N.J.
Nisbett, Charles Albert East Hartford, Conn.
Proctor, John Peebles¹ Athens, Ga.
Sharp, Frank Douglas Salem, Ore.
Sullivan, John Lynn Scranton, Pa.
Wade, Horace Milton Magnolia, Ark.

Observation Aviation

Bacon, Thomas Philip⁵ Bessemer, Ala.
Casey, Edward Richard² Boston, Mass.
Eidson, Harry Taylor Indianapolis, Ind.
Fitzgerald, Maurice Joseph Fort Smith, Ark.
Gilbert, Huntington Kerr Dorset, Vt.
Hamilton, McHenry, Jr. Alexandria, La.
Heinlein, Oscar Allen Sacramento, Calif.
Hopper, Rowland Wells Fresno, Calif.
Kims, Duane Louis Milwaukee, Wis.
Knorre, Frederick James, Jr. San Francisco, Calif.
Lawrence, Reesor Mott Oakland, Calif.
Longino, Houston Walker, Jr. Silver Creek, Miss.
McGowan, Leland Stanford Alhambra, Calif.
Nothstein, Charles Lewis Norman, Okla.

Pursuit Aviation

Baxter, Forrest Houston Hazel, S.D.
Bullis, Harry J. Portland, Mich.
Cleveland, William H. San Francisco, Calif.
Feeny, Francis Robert Boston, Mass.
Fontaine, Willard Asa Hialeah, Fla.
Greasley, Philip Henry West Hartford, Conn.
Healy, John Patrick North Bergen, N.J.
Holcombe, Elton Earl Atlanta, Texas
Hubbard, Glenn Elwood Durand, Wis.
Kluever, Arnold F.A.^{3a} Atlantic, Iowa
Knox, John Max Nashville, Tenn.
Mason, Joe Lemard Columbus, Ohio
McEntire, William Elza² Fort Worth, Texas
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McKechnie, Robert Ross	Cleveland, Ohio
O'Brien, Frank Edwin ⁵	Concord, N.H.
Osborn, John William	Lincoln, Neb.
Pinkston, Gladwyn Earl	Phillipsburg, N.J.
Prichard, William Jesse	Inverness, Miss.
Quinn, Robert Sidney	Rochester, N.Y.
Roberts, John Alva, Jr.	Beebe, Ark.
Rockey, Guy Hamilton	Athens, Ohio
Salzarulo, Raymond Paul	Richmond, Ind.
Schwartz, Paul	Tampa, Fla.
Shilling, Eriksen Emerson	Washington, D.C.
Slayden, Van Hatton ²	Fort Sam Houston, Texas
Sparks, Walter William, Jr.	Inverness, Miss.
Starkey, James Fred	Greeley, Colo.
Stefonowicz, LeRoy Len	Wildrose, N.D.
Sullivan, Wm. Alexander, Jr. ²	Aspinwall, Pa.
Taylor, Ozburn Early	Nashville, Tenn.
Thurman, Wayne Earl ³	Lincoln, Neb.
Toliver, Raymond Frederick	Fort Collins, Colo.
Tuell, Joseph Charles	Bisbee, Ariz.
Walker, Arthur James	New Orleans, La.
Ward, Brewster	Buffalo, N.Y.
Westbrook, Sam Wilkins ^{3a}	Faunsdale, Ala.
Wintermute, Ira Francis	Salem, Ore.
Wiper, Samuel Bey	Sheldon, N.D.
Yurkanis, Paul John	South Boston, Mass.

Note: 1 - 2nd Lieut., Cavalry Reserve
 2 - 2nd Lieut., Infantry Reserve
 3 - 2nd Lieut., Field Artillery Reserve
 3a- 1st Lieut. Field Artillery Reserve
 4 - 2nd Lieut. Engineer Reserve
 5 - 2nd Lieut. Coast Artillery Reserve

Special Orders of the War Department assigned the commissioned graduates of the Air Corps Training Center to the following Air Corps stations for duty, as follows:

To Barksdale Field, La.: Lieuts. Hipps, McElroy, Sprague, van Leuven and Wright.
 To Brooks Field, Texas: Captain John A. Tarro.
 To Fort Bragg, N.C.: Lieut. Mosby.
 To Fort Knox, Ky.: Lieut. Lee.
 To Fort Lewis, Wash.: Lieut. Stratton.
 To Hamilton Field, Calif.: Lieuts. Agee, Wade, Dunlop, Holcomb, Preston, Taylor.
 To Hawaiian Department: Lieuts. Barden, Cain, Denson, Diehl, Durham, Eckman, Gray, Hackford, Hammond, Holdiman, Holloway, Ohman, Posey, Robbins and Rutherford.
 To Langley Field, Va.: Lieuts. Bondley, Clark, Dorney, Ellis, Klocko, Stevenson.
 To March Field, Calif.: Lieuts. Brummel, Donohew, Green, Herman, Leland, Low, McDonald, Pell and Westover.
 To Mitchel Field, N.Y.: Lieuts. Batjer, Greeley, Gurney, Sanborn, Spilman and Mauldin.
 To Moffett Field, Calif.: Lieut. Powell.
 To the Philippine Department: Lieuts. Caldwell, Fellows and Horrigan.
 To Selfridge Field, Mich.: Lieuts. Clingerman, Eriksen, Magoffin, Stark and Ulicson.

With respect to the assignment to extended active duty at Air Corps station of the Flying Cadet graduates, it is expected that War Department orders will shortly be issued covering such assignments.

RETIREMENT OF MASTER SERGEANT HIXSON

Master Sergeant William A. Hixson, Air Corps, was placed on the retired list, September 30, 1938, after three decades of service, and on September 28th a banquet was tendered him by the personnel of the Administrative Section, Base Headquarters and 1st Air Base Squadron, Langley Field, Va.

Colonel Lawrence Churchill, Base Executive Officer, complimented Sergeant Hixson on his long and efficient service, and stated that the best wishes of the entire personnel would accompany him into his well earned retirement. Major Paul J. Mathis, Commanding Officer of the Administrative Section; 2nd Lieut. Paul Dane, former Adjutant, and 2nd Lieut. William D. Lee, Jr., present Adjutant of the Section, also lauded Sergeant Hixson's services. The members of the organization with which he was connected presented Sergeant Hixson with a high-powered automatic rifle.

Born at Dunlap, Fetchie County, Tenn., Sergeant Hixson enlisted in the U.S. Army at the age of 18, joining the 118th Company, Coast Artillery Corps, at Fortress Monroe, Va. He remained with this unit until June 15, 1914, when he reenlisted for the Sixth Company, Coast Artillery, in the Philippines. He remained with the Coast Artillery until 1922, when he joined the Air Corps at Kelly Field, Texas. When the Fourth Air Park stationed there was disbanded, Sergeant Hixson was transferred in grade to the newly organized 59th Service Squadron, located at Langley Field, Va., where he has remained for twelve years.

The Sergeant, Mrs. Hixson and their son, William A., Jr., will reside at 704 Libby Avenue, Richmond, Va.

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MANY PROMOTIONS AMONG ENLISTED MEN AT RANDOLPH

As the result of the additional increase in personnel allotted to the Army Air Corps, 15 Sergeants, stationed at Randolph Field, Texas, were promoted to the grade of Staff Sergeant; 27 Corporals were elevated to the grade of Sergeant, and 39 Privates and Privates 1st Class were made Corporals. At the same time, Randolph Field was given an increase of 120 men, and the News Letter Correspondent expresses the hope that these will be recruited within the 8th Corps Area.

The list of new Staff Sergeants include -- Frank Lewis, Eugene J. Baldauf and Ramon C. Bradford, Headquarters and Headquarters Squadron;

Albert Lessard, Alonzo Jacobs, Jr., and Porter W. Ferguson, 46th School Squadron; Herman G. Mize, Howard R. Bilby and Frank A. Bulgawicz, 47th School Squadron; James S. Battle, Vance Z. Cornelius, 52nd School Squadron;

Roy L. Morris and Ladislaus J. Laisewski, 53rd School Squadron;

Henry Fennel and Jack S. Walters, 11th Air Base Squadron.

19TH BOMBARDMENT GROUP WINS DAEDALIAN AND COLOMBIAN TROPHIES
By the March Field Correspondent

In an impressive ceremony on the morning of September 21st, before troops of the 19th Bombardment Group, drawn up on the parade ground at March Field, Riverside, Calif., the late Major General Oscar Westover and Major General Frank M. Andrews presented the Daedalian and Colombian Trophies to Lieut. Colonel Harvey S. Burwell, Commanding Officer of the Group. Both Trophies, won by the 19th Group for the splendid record of 10,942 hours of flying during which only one minor accident occurred, were presented as a blazing morning sun beat down on the assembled troops.

The initial presentation of the new Daedalian Trophy, given to the Air Corps by the Order of the Daedalians, an organization of Air Corps officers who saw active duty as pilots during the World War, was made by Major General Westover only a few hours before his tragic death. Standing before the tall, gleaming Trophy, General Westover spoke feelingly of his pride in the achievement of the 19th Group. He said: "Records show that the 19th Bombardment Group flew more hours per airplane than any other organization

in the GHQ Air Force or in the entire Air Corps."

General Andrews, in presenting the Colombian Trophy, won in 1936 and 1937 by the 3rd Attack Group of Barksdale Field, La., stated that exceptional ability of officers and men was necessary in being able to acquire this Trophy, in view of the fact that during the year the Group had to fly and maintain a new type of airplane. The Trophy was originally given to the Commanding General of the GHQ Air Force for presentation, as he saw fit, to any tactical unit of the GHQ Air Force, by the Colombian Government.

Lieut. Colonel Burwell, himself a Daedalian, received both trophies for his men and himself, and stated that credit should go first to the enlisted mechanics for their expert maintenance work and, second, to airplane commanders and pilots. Colonel Burwell's leadership and strict supervision of the 19th Bombardment Group was no doubt one of the main contributing factors in the fine record made by that organization during the past year.

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ARKANSAS NATIONAL GUARD AIRMEN COMPLETE FIELD TRAINING
By Lieut. Chester A. Cockrill, 154th Sqdn.

The 154th Observation Squadron, Arkansas National Guard, Little Rock, Ark., returned from Eglin Field, Valparaiso, Fla., on September 3rd, after completing one of the most successful field training periods in its history. During this ten-day period, practically all the pilots and observers qualified in aerial gunnery. Lieut. William D. Hopson, pilot, was high scorer on front gunnery, and Lieut. Lindley H. Clawson, observer, on rear gunnery. Over thirty thousand rounds of ammunition were expended which, we understand, is more ammunition than any peacetime unit has expended since the World War. Much of the success of aerial gunnery practice is due to the wholehearted endeavors of Lieut. Francis M. Coates, Armament Officer; Lieut. Gilbert Leigh, Jr., Assistant Armament Officer, and the entire Armament Section which worked day and night.

The total flying time during the encampment was 363 hours, 35 minutes, or 27 hours and 58 minutes per pilot. The total observer time was 64 hours and 20 minutes, or 8 hours and 2 minutes per observer. Captain Robert H. Baker, Operations Officer, and Lieut. John D. Howe, Engineering Officer, plus perfect flying weather, are largely responsible for so much flying time. Also, the desire to get away from the hordes of

Florida "biting" flies had a lot to do with it. "Florida swagger sticks" (fly swatters) were standard equipment among all officers.

Chief credit for the success of our 1938 encampment is due our Commanding Officer, Major Adrian Williamson, in coordinating the work of the various sections and upholding the discipline and efficiency of the entire Squadron.

During the encampment all pilots were given an opportunity to fly the new North American O-47A Observation plane, and they handled it perfectly. Our Instructor, Major Robert D. Knapp, has just returned from the North American factory with one of these planes, and the Squadron is very proud of it. All pilots are required to read all technical orders pertaining to the O-47A, get in ten hours of airdrome flying, and make at least twenty landings before being allowed to make cross-country trips in it. Lieut. Howe, our Engineering Officer, spent several days in the North American factory, and he and Major Knapp gave a very interesting lecture at the officers' meeting on Wednesday evening, September 28th, on the operating characteristics of our new airplane.

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The News Letter would like to hear from other National Guard organizations.
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CONSIDERABLE TIME BY FLYING INSTRUCTORS

One thousand and ninety-four times around the earth at the equator, at 100 miles per hour - 27,369,000 miles - 31 years of continuous flying - 273,697 hours. These are the calculations arrived at when a recent study was made of the total flying time of a representative group of officers at the Air Corps Primary Flying School at Randolph Field, Texas. Only those with more than 2,000 hours' time were considered in the tabulation, which showed that 95 pilots had reached this figure.

Dean of them all is Captain B.A. "Bunk" Bridget, with a total time of 6113 hours, or approximately 24 times around the world - again figuring at only 100 miles per hour. Close on Captain Bridget's heels comes Major J.R. Glascock, with 5836 hours, followed by Captain J.W. Andrew with 5623 hours; Major S.T. Smith with 5053 hours; and, finally, Major John R. Morgan closing the select "over 5000 hour" group with a "bare" 5022 hours.

Of the 95 pilots amassing the figures set forth in the first paragraph, above, a majority of them are either Stage Commanders, Assistant Stage Commanders, Flight Commanders, Flying Instructors, or directly connected with the Flying Department of the Primary Flying School, thus giving an insight into the experience and background of the flying personnel of the school.

To look at the current picture regarding flying time, during the month of August, 1938, personnel of the Primary Flying School, including instructors and students, flew a total of 16,504 airplane hours, or a distance equivalent to more than 66 times around the earth, still using 100 miles per hour as the basis.

"And speaking of Captain Bridget, who is in the ultra exclusive '6,000-hour Club,'" concludes the Randolph Field Correspondent, "how many pilots are there in the Air Corps, if any, who can top this record?"

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REFRESHER COURSE FOR RESERVE OFFICERS

Eighteen second lieutenants of the Air Reserve, who are not graduates of the Air Corps Training Center, recently reported at Randolph Field, Texas, for the purpose of taking a special "Refresher" flying course. All of the officers reporting have had considerable flying experience, either in commercial, private, or military aviation in the form of two-week tours on active duty.

Scheduled to start their training on the Primary Stage on October 10th, it is expected that they will progress sufficiently to enable them to go to the Basic Stage when the regular class starts flying there, about October 21st.

The course for the Reserve Officers will be based entirely on the proficiency of the individual, sufficient time being spent on each of the two stages at Randolph Field and also the Advanced Flying School at Kelly Field to acquaint them thoroughly with the Air Corps method of flying. It is expected that the entire course will occupy about 12 weeks.

Upon the completion of the course, these officers will be ordered to two years' active duty with tactical organizations, with the possibility of an additional tour on active duty as a first lieutenant.

A roster of the second lieutenants taking the course includes:

F.M. Adams	Burbank, Calif.
W.S. Bagnick	Detroit, Mich.
J.O. Beckwith, Jr.	Waterville, Me.
L.R. Gibboney	Cincinnati, Ohio
W.L. Hawkins	Oklahoma City, Okla.
W.W. Holmes	Mineral Wells, Texas
R.J. Koster	Cincinnati, Ohio
C.J. Langmack	Albany, Ore.
Eugene McCurdy	Tulsa, Okla.
C.W. Maynard	Putnam, Conn.
A.J.H. Mueller, Jr.	Seguin, Texas
C.A. O'Quinn	Atlanta, Ga.
F.H. Postal	Chicago, Ill.
L.E. Thomas	Austin, Texas
C.J. Tippet	San Francisco, Calif.
N.K. Warner	Saginaw, Mich.
L.W. Sanders	Fort Wayne, Ind.
D.D. Cascio	New York, N.Y.

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THE FLOWERS THAT BLOOM IN THE FALL, ETC.

The organizations at Kelly Field, San Antonio, Texas, have worked industriously and conscientiously in the policing of areas around buildings. Even though the buildings are more than 20 years old, the post always appears neat and well kept.

The 63rd School Squadron has paid particular attention to landscaping, planting and in the development of a variety of types of plants and flowers. The landscaping was planned so that flowers with color variety adorn the barracks area all twelve months of the year. The cape jasmines would be a credit to any tropical garden. Even now in the fall months a new crop of giant zinnias are blooming in abundance. The chrysanthemums, with large heads and showy flowers, have begun to bloom. But the 63rd has the greatest pride in its roses. It has no less than 200 rose bushes, representing the most beautiful variety in America. So, even though the barracks are old, Kelly Field is a beautiful and fine place in which to live.

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Major Armin F. Herold, Air Corps, was promoted to Lieut. Colonel (temporary), with rank from October 8, 1938.

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A VISIT TO BOGOTA, COLOMBIA

By 1st Lieut. Carl M. Parks, Air Corps

Ed. Note: First Lieut. Parks, of the 24th Pursuit Squadron, Albrook Field, Panama Canal Zone, spent a period of two weeks in Bogota, Colombia, during the month of August, as a fencing official at the Bolivarian Olympics which were held there. The following article is an account of his visit.

The "Sabana of Bogota" lies at an altitude of 8,500 feet in the mountains east of the Magdalena River of Colombia. It is a long tray-like work of nature, which Indian legend says was formerly a Lake - Lake Bogota. The legend would have us believe that many years ago a priest in search of water struck a rock with his staff and water gushed forth - pure water - forming a lake. This subsequently drained, leaving a wide expanse of practically level terrain with a few hills which possibly were once islands in Lake Bogota.

Since Bogota is so high and so near the equator, the temperature is fairly constant the year 'round. The air is cool and invigorating - downright cold to those unaccustomed to it - but the people of Bogota scoff at the idea of heating their homes.

The city has a population of about 325,000, and at the present time is undergoing intensive reconstruction. Old houses and buildings are being demolished to make way for new and modernistic structures of Spanish design. Wide new streets are being laid, and beautiful parks crowded with native flowers dot the city.

One of the several points of particular interest is the Cathedral of Monserate, which is situated atop a mountain overlooking Bolivar Pass just outside of the city. The cathedral proper is an old building to which an addition has recently been made, materials for which were carried up the mountain in the arms of natives. He is a proud Colombian who had any part in this reconstruction. A cable-car scales the mountain now, and there is an excellent view of the surrounding countryside from the top. At night, flood lights illuminate the building, and from the city below the effect is that of a cathedral in the sky.

At the point where the priest presumably struck the rock with his staff there is a waterfall called "Techandarna Falls." The river drops three hundred feet and the clouds of mist arising from the base obscure at times the hotel situated there. Vari-colored lights which play on the falls at night make it a beautiful sight, indeed. Here religious fanatics, disappointed lovers and such, constantly bring annoyance to the authorities by diving into the river from the brink of the falls. Their bodies are never recovered.

About 25 miles from the city to the north lies a mountain which to all outward appearances is much like any of the others. It is literally a mountain of

salt. Huge corridors have been dynamited out of the pure rock salt which forms the mountain, with solid pillars of salt left to support the roof. There is a constant haze of acrid smoke from dynamite in the vast halls, and the air is charged with the sharp, pungent smell.

At the foot of this mountain of salt lies a typical Colombian village. In a small restaurant there I had my first taste of the rice wine, considered such a delicacy by the natives. White and milky, it has a heavy, sweetish taste which is not agreeable at the first try.

The average Colombian apparently possesses quite an appetite, for at meal time two complete and separate meals are set before you. If anything, the second is larger than the first, and it usually happens that the uninitiated has no room whatsoever left for the second. All of the food is excellent, and something might be said for the advantages of having an entirely separate dinner to resort to in the event that No. 1 is not to one's liking.

Motion pictures provide the bulk of the entertainment. Occasionally there are dances - the maidens heavily chaperoned - and there are no dance halls or cabarets. A new country club is under construction just outside of the city, and it is anticipated that it will help the entertainment situation considerably.

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DEATH OF TWO VETERAN AIR CORPS OFFICERS

The sad news was just received of the death of two veteran Air Corps officers - Colonel Percy E. Van Nostrand, commanding officer of March Field, Calif., who succumbed to a heart attack, and Major John H. Gardner, a student at the Command and General Staff School, Ft. Leavenworth, Kans., who, walking across the ramp preparatory to making a flight, did not see a plane being taxied slowly by another Air Corps officer of the School.

The deep sympathy of the Air Corps is extended to the bereaved families of these two officers.

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LITTLE ROCK, ARK., INVITES AIRMEN

The 154th Observation Squadron, Arkansas National Guard, Little Rock, Ark., now operates a Hotel DeGink in conjunction with the officers' club room. The News Letter Correspondent of that or-

(Continued on Page 8)

EYEBROWS FOR BT-9 AIRPLANES
By the Randolph Field Correspondent

The recently devised "eyebrow" slots, a product of the Air Corps Materiel Division, Wright Field, Ohio, are being installed on all BT-9 type airplanes at Randolph Field, Texas. It is expected that the total complement of planes at this station will be so equipped by the time flight training is started for the class now being transferred to the Basic Stage of the Primary Flying School. The installation of these "eyebrows" has somewhat hampered the extended navigation flights usually accomplished by the instructor staff between classes, but arrangements have been made to permit a limited number of the 9's to be available for this purpose.

The installation of the slots is being carried out at Randolph Field under the supervision of a crew from the San Antonio Air Depot, Duncan Field, Texas. As soon as the Randolph Field personnel become familiar with the installation, it is expected that the work will be turned over to them.

Many favorable comments have been heard on the operation of the slots, which are of the fixed type rather than those which go into operation when approaching a stall. Affixed to the leading edge of each wing, directly in front of the ailerons, the slots protrude about three inches from the leading edge, and pilots who have flown planes equipped with them state that they offer little or no added resistance. Their function is to permit a smooth flow of air across the ailerons at low speeds, thus aiding in the more rapid recovery from stalls and potential spins.

An acute engine shortage, which for a time threatened to disrupt student training, was solved partially when a Technical Order, changing the time for engine change on the R-975-7 from 350 hours to 300 hours, was rescinded. During the time the order was in effect, both Duncan Field, the overhaul depot for the area, and Randolph Field personnel worked overtime supplying and changing engines in the BT-9's.

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SERGEANT SAYS GOOD-BYE TO ANOTHER CLASS

The graduation exercises at Kelly Field, Texas, on Wednesday, October 5th, marked another occasion for Sergeant Joseph E. Bigley, Air Corps, one of Kelly Field's "old-timers," to say good-bye to a class at the Advanced Flying School. In Sergeant Bigley's opinion, working with the Cadets is "old stuff," and yet always fresh and exciting. He has been the First Sergeant of the Flying Cadet Detachment for seven years, and says he has met as fine a group of young men as can be found anywhere in

the country today. As the result of his close contact with the Cadets, it is only natural to expect that the Sergeant made many friends among them, and he bade them farewell with reluctance.

Sergeant Bigley is a native of Vinton, Iowa. He ran away from home in 1915 and enlisted in the Canadian Army. He was a member of the Canadian Black Watch of the World War, and was a British Air Force observer. He returned to Canada in 1919 and was mustered out at Toronto. After five years in civilian life, he enlisted at Fort Snelling, Minnesota. Since then he served in Hawaii and various Air Corps fields in this country. He came to Kelly Field in 1932.

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SCOOTERS BECOME POPULAR AT RANDOLPH

According to the News Letter Correspondent, putt, putts, and not golf putts either, are all the rage at Randolph Field, the "West Point of the Air."

Motor scooters of all sizes, types and descriptions are in use on the post, and almost every day more are being added to the list of two-wheeled agencies of transportation. All are registered with the Provost Marshal's Office, and bear a Post identification tag, just like their big brothers - the automobiles.

Captain James S. Stowell, Commandant of Cadets, owns a blue and cream colored creation, with a padded seat, lights for night driving, and even a tiny horn. His scooter, however, is a "store bought" one, and is much scorned by Lieut. Joe W. Kelly, whose dingy red job is a product of his own ingenuity. A washing machine motor, retired after honorable service in motivating the automatic wash tub, furnishes the power. An automobile fan belt transmits the power to a clutch arrangement, and from there a bicycle chain and sprocket take up the burden of carrying the quarter horsepower to the rear wheel. A cigar box lid is the brake pedal, and the handle bars were salvaged from a bicycle on the junk heap.

Between these two extremes are at least 20 other scooters, some of them challenging Captain Stowell's medium of transportation for top honors. Others vie with Lieut. Kelly's pride and joy for the position at the bottom of the list.

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Little Rock Invites Airmen (From Page 7)

Organization states that all pilots and their passengers will be shown every consideration by the Squadron, and he hopes Air Corps personnel will avail themselves of these facilities. Very good meals at reasonable cost can be secured at the Municipal Airport Cafe, which is in close proximity to the hangar and administration building of the Squadron.

RIO HATO - GUNNERY CAMP OF THE 19TH WING
By 2nd Lieut. J.H. Paul, Air Reserve

Those Air Corps pilots who have served in the Canal Zone will find an old familiar ring in such names as Chama, Chepo, Chorrera, Aguadulce, Pooari, Las Lajas, David and Jaque. They will remember rain closing into Chama Pass, and the lights of the Canal locks at night, and many other things. But most of all, they will remember Rio Hato, the gunnery camp of the 19th Wing.

The landing field at Rio Hato lies 65 miles southeast of Albrook Field, along the ragged coastline of the Bay of Panama. The country thereabouts is quite similar to sections of southwest Texas - rolling lowland, veined with arroyos, and sparsely scattered with scrubby timber. In a steady northward slope the land rises to the crest of a mountain ridge midway between the Pacific and Atlantic Oceans - the Continental Divide.

Nearby are the little villages of Anton and La Venta, the latter now in the process of commercializing a mile-long beach of great beauty, and a half mile offshore in deep blue water lies the "Parallon de Chirú" - a massive rock which is a landmark for miles around and where live the hungriest fish in Christendom. A modern inn, justly famous throughout the Panamanian Republic, stands on a bluff overlooking the sea. Its owner, Mr. Asger Kierulff, a native of Denmark, is the principal landholder in the vicinity, and it is from his land company that the Army leases the land at Rio Hato.

In April of 1934, Major R.L. Walsh, Air Corps, who then commanded the 16th Pursuit Group at Albrook Field, recommended in a letter to the late Lieut. Colonel Wm. C. McChord, Commander of the 19th Wing, that the landing field at Rio Hato be considered as a base of operations for ground and aerial gunnery and for field maneuvers. Major Walsh drew attention to the fact that the area was particularly suitable because of the fact that there were no populated areas nearby; that the country was not heavily wooded, and he pointed out other favorable facts. Mr. Kierulff had stated in a letter to Colonel McChord that the Air Corps was quite welcome to the use of his property for gunnery purposes, pointing out that the place was ideal, with a good well, the absence of malarial mosquitoes, and with decidedly less rainfall than areas nearer the Canal. He further stated that there would be no cost to the government involved.

Thus the project was initiated. Since the spring of 1934, there has been a constant and growing use of the field at Rio Hato. Barracks and sheds were built, the field improved, gunnery ranges laid out, more land was secured from the own-

er through leases. Gunnery camps were held; Wing maneuvers were based there, and from time to time additions were made to equipment and installations.

Early in the summer of 1938, with the procurement of additional funds, the 19th Wing commenced a program of construction and re-construction at Rio Hato, with a view to converting it into a permanent auxiliary base, with buildings to replace tents and facilities to care for a larger number of officers and men. Work was commenced immediately, with troops of the 11th Engineers from the post of Corozal, commanded by Captain Warren N. Underwood, taking charge of new construction.

Barracks were built to house a hundred men and eighteen officers. A long and roomy mess hall was constructed, and kitchen fixtures were installed. A sewage disposal system was planned and constructed. Sheds and storage houses were repaired and concrete walks were laid. An officers' recreation hall came into being by building an addition to an old adobe cabin. Facilities for a post exchange were built into one end of the mess hall. A new well was dug, thus increasing the formerly scanty water supply.

When the detachment of Engineers left, the camp at Rio Hato was ready. The buildings were newly painted, and all installations were complete. On the evening of August 29th, all of the officers of the 19th Wing were on hand for the opening of the camp with a Wing Dinner, and enthusiasm ran high. Everywhere it was agreed that field maneuvers there would take on a new degree of comfort, convenience and efficiency.

The camp at Rio Hato becomes of ever increasing importance in the projects of the Air Corps in Panama.

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PAVED RUNWAYS AT ALBROOK FIELD

A call for bids has been made by the War Department for the construction of paved runways at Albrook field. The specifications call for one runway of approximately 2,500 feet in length by 200 feet in width and another approximately 1,000 feet in length by 75 feet in width. The runways will fill a need at this station which has been felt for some time, as operations are greatly hindered at times due to the heavy rainfall. No dates have been announced for the commencement of the project, but it is anticipated that it will go forward with all possible speed.

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A VERSATILE AIR CORPS ORGANIZATION

The Base Headquarters and 20th Air Base Squadron, with station at Nichols Field, Rizal, P.I., and commanded by Major E.J. Carpenter, Air Corps, is well represented in practically every activity on the post. In addition, it furnishes 62 men to Clark Field and a smaller number to several units in Manila, such as operators for the Air Corps Crash Boats, to the Philippine Department Headquarters, Philippine Division Military Police, Philippine Department Motor Transport Pool, Camp John Hay and students at Fort William McKinley, P.I.

With its present strength of 363 men and the activities to which they are distributed, it is readily understood how many vocations are required by the members of this organization and their importance.

Captains Alden R. Crawford, Mark K. Lewis, Jr., and 1st Lieut. Charles H. Anderson, Air Corps, are attached to the Office of the Military Advisor, Government of the Commonwealth of the Philippines. Captain Crawford is the Acting Chief of the Bureau of Aeronautics, and Captain Lewis is the Acting Chief of the Philippine Army Air Corps, while Lieut. Anderson is the Operations Officer and Chief Flying Instructor of the Philippine Army. Captain J.P. Kirkendall is on detached service at Clark Field. He is the Adjutant of that post and looks after the welfare of the 62 men detached from this organization at that station.

Other officers of the Squadron are 1st Lieut. John Paul (Paddy) Ryan, who is Squadron Adjutant, Custodian of Funds and Chemical Warfare Officer, with additional post duties as Range Officer and Officer in Charge of the Air Corps Maintenance. He is at present supervising the construction of a runway, which is nearing completion and which will be beneficial to the taking-off and landing of aircraft, particularly during the rainy season, when much of the field heretofore was inundated during that time. First Lieut. German P. Culver is Squadron Mess Officer and Assistant Post Transportation Officer, and 2nd Lieut. William E. Covington, Jr., is Supply Officer and Assistant Squadron Adjutant.

Major Carpenter has been instrumental in bringing about several improvements within the Squadron, namely, the construction of sidewalks, enlargement of the squadron mess and the installation of ten large ceiling fans in the barracks which provide practically "Air Conditioned" sleeping quarters for the entire personnel.

In spite of the enormous turnover of personnel, the organization operates methodically, with a high morale and a minimum of the difficulties experienced by similar organizations of its size. Incidentally, the 363 men previously

mentioned did not include 39 Philippine Scouts and 5 enlisted men from other branches. The Philippine Scouts maintain the Philippine Department Stables which are located at Nichols Field.

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AERIAL GUNNERY TRAINING IN PHILIPPINES

Air Corps officers of the 4th Composite Group, Nichols Field, P.I., recently completed another phase of their Group Training Directive at the completion of aerial gunnery and bombing practice. Fourteen officers participated in the record practice and ten of them made qualifying scores.

In firing for the qualification of Aerial Gunner, nine of the ten officers fired Observation Course 3 and one, 1st Lieut. Norman R. Burnett, fired Pursuit Course 4. This officer, with a score of 680, attained the qualification of "Marksman."

Officers who attained the qualification of "Expert" were 2nd Lieut. W.E. Covington (800); Captain J.P. Kirkendall (704); 2nd Lieut. C.K. Bowen, Jr. (662); 1st Lieut. Tom W. Scott (652) and 2nd Lieut. J.J. Nazzaro (603). The qualification of "Sharpshooter" was attained by 1st Lieut. H.N. Burkhalter, Jr., and 2nd Lieut. J.R. Gunn, whose scores were 568 and 517, respectively. First Lieut. Andrew Meulenberg with a score of 436, and Captain Fred O. Tally, with 432, qualified as "Marksman."

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ANNUAL INSPECTION OF SELFRIDGE FIELD

Lieut. Colonel Junius W. Jones, Air Corps, (Inspector General's Department), who visited Selfridge Field, Mich., for the purpose of making the regular annual inspection of the activities of this post, commented very favorably on its condition and offered assistance in obtaining the required needs for a field of this proportion.

Col. Jones, accompanied by Major Lawrence P. Hickey, 1st Pursuit Group Commander, made an inspection of the hangars and barracks of the Group during the morning of October 6th. The afternoon was devoted to inspection of the Air Base Supply, Commissary, Base Communications, 2nd Weather Squadron Detachment and the Security Section. On October 8th, the personnel of the Base Headquarters and 3rd Air Base Squadron were inspected in ranks, followed by fifteen minutes of close order drill. During the remainder of the day, Colonel Jones, accompanied by Colonel Henry B. Clagett, Air Base Commander, and Lieut. Colonel Laurence F. Stone, inspected the Base Squadron Barracks, Officers' Club and Mess, N.C.O. Club, Chaplain's activities, Base Hospital, Base Engineering and Ordnance.

CHANGES IN THE OCTOBER, 1938, CLASS AT RANDOLPH FIELD

In the issue of the Air Corps News Letter of September 15, 1938, it was stated that a total of 228 candidates had qualified for appointment as Flying Cadets and were slated to report at the Air Corps Primary Flying School at Randolph Field, Texas, on October 10th to begin training with the October, 1938, class.

Since the publication of the above, the number of Flying Cadets in this new class was increased to 236, but quite a number of changes were effected in the personnel of this class. A total of 54 candidates among those already listed for Flying Cadet appointment declined same for various reasons, the majority of them expressing their desire to enter the July, 1939, class. Among these latter are quite a number of Reserve officers of other branches of the service who are now on active duty status and who preferred to delay their flying training until the termination of their active duty tours. Others who are still attending college decided to wait until their graduation therefrom. These 54 vacancies were filled by other eligible candidates and eight additional ones were also selected, thus making the numerical strength of the Flying Cadet student body in the October, 1938, Class 236, as previously stated.

The candidates previously listed as being selected for Flying Cadet appointment and who subsequently declined same are given below, as follows:

Woodward, John	Fort McClellan, Ala.
Campbell, Murry Oates	Cane Hill, Ark.
Nickels, Clabourne Woodrow	Little Rock, Ark.
Viverette, Donlyn	Berkeley, Calif.
Williams, James Rhue	Clovis, Calif.
Barr, Clifton Franklin	Colorado Springs, Colo.
Nowells, Richard Wright	Colorado Springs, Colo.
Ciccalone, Thomas James	East Hartford, Conn.
Greco, Ralph Louis	Kensington, Conn.
Marshall, John Donald	Savannah, Ga.
Poulson, Paul, Jr.	Boise, Idaho
Beardsley, Henry Lindorf	East St. Louis, Ill.
Whitehurst, Junius Prentice	Peoria, Ill.
Floyd, Harold	Talamco, Ill.
Swinehart, Marion Louis	South Bend, Ind.
Bair, Robert Yarnell	Des Moines, Iowa
Parsley, Harold Vincent	Hornick, Iowa
Eyres, William Gordon	Le Mars, Iowa
Ford, Eugene Matthew	West Bend, Iowa
Pollom, Lester Winner	Topeka, Kans.
Davis, Eugene	Noxanna, Ky.
Tower, John R.	Easton, Md.
Blakely, Carl Paul	Boston, Mass.
Regan, Payl Gerard	Boston, Mass.
McGrath, John Francis, Jr.	Jamaica Plain, Mass.
Walden, David Carroll	Milton, Mass.
Frederick, Julian Ross	Ann Arbor, Mich.
Bash, Robert Edwin	East Lansing, Mich.
Kaiser, William Francis	Flint, Mich.
Ferrell, Max Everett	Cass Lake, Minn.
Wall, Marvin R.	Minneapolis, Minn.
McCorkle, Leon M.	Salisbury, Mo.
Hauk, Paul Ignatius	Malte, Mont.
Larson, Robert Sherman	Thompson Falls, Mont.
Wood, William Johnston	Albuquerque, N. M.
Baar, Charles F.	Syracuse, N. Y.
Spears, Charles Frederick	Syracuse, N. Y.

Hoffman, Charles Calvin	Dewey, Okla.
Trosper, Earl Joseph	Oklahoma City, Okla.
Showalter, Frank M.	Reno, Nevad.
Boatwright, Lewellyn T., Jr.	Ridge Spring, S.C.
McKemie, Jack F.	Hearne, Texas
Nendell, Jack A.	Randolph Field, Texas
Travis, Frank H.	Lexington, Va.
Sherman, James Christian	Newport News, Va.
Venable, Eugene Roane	Roanoke, Va.
Harrell, Richard O., Jr.	South Boston, Va.
Simmons, Harold Ernest	Seattle, Wash.
Flowers, Noel Quentin	Silverdale, Wash.
McFarland, Donald L.	Spokane, Wash.
Lowman, William Morris	Buckhannon, W. Va.
Dawson, James Stenger	Morgantown, W. Va.
Raab, Hilary A.	Laramie, Wyo.
Burke, Richard Patrick	Newburyport, Mass

The 62 new candidates selected for Flying Cadet appointment for the October, 1938, class are listed below, as follows:

Wood, James William, Jr.	Birmingham, Ala.
Parker, Harry	Jerome, Ariz.
Seeburger, Francis F.	Crockett, Calif.
Ehret, Roland C.	Los Angeles, Calif.
Albin, George Louis	San Diego, Calif.
Wetherell, Wells Seymour	Manchester, Conn.
Eager, Howard, Jr.	Washington, D.C.
Cauthen, Columbus Frank	Atlanta, Ga.
Behm, Raymond Gaston	Decatur, Ga.
Arp, David Hayden	Ellijay, Ga.
Sapp, Russell Hale Vincent	Nampa, Idaho
Hanes, Horace Albert	Armington, Ill.
Booth, David F.	Chicago, Ill.
Brennan, Edward Joseph	Chicago, Ill.
McCorkle, John	Chicago, Ill.
Nowak, Albert C.	Chicago, Ill.
Ford, John Willard	Indianapolis, Ind.
Brady, Patrick Andrew	Boston, Mass.
Bacon, David	Jamaica Plain, Mass.
Evans, John Richard, Jr.	Newton Center, Mass.
McCulloch, John R.	Newton Highlands, Mass.
Oswin, Leonard Walter	Northampton, Mass.
McWilliams, George E.	Detroit, Mich.
Fanckboner, Austin F.	Grand Rapids, Mich.
Strathern, William E.	Gilbert, Minn.
Korte, Heimo John	Grand Rapids, Minn.
Mathieu, John Ralph	Middle River, Minn.
King, Arthur Christere	Kansas City, Mo.
Martin, Bert C.	Harlowton, Mont.
Lindberg, Allen	Westfield, N.J.
Freeman, Daniel W.	Brooklyn, N.Y.
Freeland, Frank	Brooklyn, N.Y.
Genovese, Joseph R.	Brooklyn, N.Y.
Bennink, Donald Thomas	Chautauqua, N.Y.
Harsh, Forrest R.	New York, N.Y.
Landes, Sidney Winston	New York, N.Y.
Passage, John T.	Charlotte, N.C.
Sloan, William Green	Wilmington, N.C.
Dahl, Alva Elroy	Minot, N.D.
Chapin, William E.	Dayton, Ohio
Hoffman, Gerald Ward	Claremore, Okla.
Burhus, John L.	Eufaula, Okla.
Askew, Richard Franklin	Oklahoma City, Okla.
Boyce, Robert B.	Bridgeville, Pa.
Evans, Robert W.	Kingston, Pa.
Steinmetz, Joseph Alexander	Pittsburgh, Pa.
Piollet, Victor Emile	Wysox, Pa.
Kinnard, Claiborne H., Jr.	Franklin, Tenn.

Griggs, Lyndall	Friendship, Tenn.
Anderson, Thomas Wilson	Nashville, Tenn.
Brown, Malvern Hill W.	Nashville, Tenn.
Femington, Richard B.	Old Hickory, Tenn.
McDonald, Wm. Emory	Corsicana, Texas
Davis, Phillip Martin	San Antonio, Texas
Schauer, Paul C.	San Antonio, Texas
Easley, Samuel J.	Alexandria, Va.
Wertebaker, George L., Jr.	Charlottesville, Va.
Kinney, Charles B.	Brownston, W. Va.
Bathke, Burton C.	Milwaukee, Wis.
Hutchinson, Arthur Mills	Cheyenne, Wyo.

Flying Cadets, Enlisted Men

Harper, Henry A.	Belleville, Ill.
Company G, 11th Inf., Ft. Benj.	Harrison, Ind.
Walsh, Rayfield Wm.	Texarkana, Texas
6th Air Base Sqdn., Barksdale Field,	La.

In the October class as now constituted, including the 113 second lieutenants of the Regular Army, who graduated from the U.S. Military Academy, West Point, N.Y., in June, 1938, and were assigned to the Air Corps for flying training, Illinois leads the States represented with a total of 32 students, followed by New York with 27. Other States which are represented by five or more students are Pennsylvania with 18; California, 17; Oklahoma, 15; Alabama and Massachusetts, 14 each; Tennessee, 13; Michigan and Ohio, 12 each; New Jersey and Georgia, 10 each; Arkansas and Texas, 9 each; Iowa, 8; Virginia, 7; Connecticut, Kansas, Minnesota and Mississippi, 6 each; Florida, Indiana, Louisiana, Missouri, Washington and Wyoming, 5 each.

Keeping in step with her State, Chicago leads the cities represented in the new class, with 14 students. Other cities represented by three or more students are New York City with 6; Los Angeles, Calif., and Washington, D.C., 5 each; Little Rock, Ark., Seattle, Wash., and Detroit, Mich., 4 each; Brooklyn, N.Y., and Champaign, Ill., 3 each.

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STATION ASSIGNMENTS FOR NEW AIR CORPS OFFICERS

In the previous issue of the Air Corps News letter there was listed the names of 188 second lieutenants, who recently passed the competitive examination, and were commissioned in the Air Corps, Regular Army, as of October 1, 1938. The station assignments of these new officers were also given except in the cases of those enumerated below who recently received orders assigning them to stations, as follows:

To Randolph Field, Texas: 2nd Lts. Philip Beeton Klein, Donald William Heaman.

To March Field, Calif.: 2nd Lieuts. Richard Frederick Lorenz, Thomas Kerns Hampton, Marcus Fleming Cooper, John Mark Ferris, Ansley Watson, Jesse Anders Smith.

To Hamilton Field, Calif.: 2nd Lts. Donald Root Strother, Bernard Adolf Schriever, Harry Wilson Markey, Donald Ellis Ridings.

To Langley Field, Va.: 2nd Lieuts. Raleigh Hunter Macklin, Joshua Thomas Winstead, Jr.

To Mitchel Field, N.Y.: 2nd Lieuts. Mayhue Delbert Blaine, James Oldham Ellis.

To Bolling Field, D.C.: 2nd Lieut. Marvin Christian Demler.

To San Antonio Air Depot, Texas, for duty

with 3rd Transport Squadron: 2nd Lieuts. Leslie Etheridge Martin, Edward George Kiehle.
To Middletown Air Depot, Pa., for duty with 2nd Transport Squadron: Leonard Muir Rohrbough, James John Roberts.

To Rockwell Air Depot, Coronado, Calif., for 4th Transport Squadron: 2nd Lieuts. Thomas Scott Algert, William Waring Miller.

To Fairfield Air Depot, Patterson Field, Ohio, for duty with 1st Transport Squadron: 2nd Lts. Ewart Wilbur Hedlund, Kenneth Wilbur Lawver.

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COMMISSIONS FOR MARCH FIELD RESERVE OFFICERS

Of 63 March Field Reserve officers who took the competitive examination for Regular commissions, twenty-four, or 38%, were appointed 2nd Lieutenants in the Air Corps, Regular Army, on October 1, 1938, viz:

32nd Bombardment Squadron
Connally, James T. Waco, Texas.
McIntyre, Patrick W. Chicago, Ill.
Schmitt, Arthur W., Jr. Madison, N.J.

30th Bombardment Squadron
Byerly, Jean R. Estes Park, Colo.
Bordelon, Henry O. Marksville, La.
Schwanbeck, Raymond V. Ash Fork, Ariz.
Reynolds, Elbert D. Beaumont, Texas
Ketcham, Edward W. Madison, S.D.
Hardy, Robert F. Flint, Mich.
Ferris, John M. Detroit, Mich.
Schaezel, George E. Alhambra, Calif.

19th Bombardment Group
Kreps, Kenneth R. Riverside, Calif.

38th Reconnaissance Squadron
Ecklund, Sven H. Los Angeles, Calif.
Herlick, Conrad J. San Bernardino, Calif.

34th Attack Squadron
Rendle, Irvine A. Rawlins, Wyo.
Box, Clyde Nevada, Texas
Hatcher, William A., Jr. Detroit, Mich.

95th Attack Squadron
Travis, James L. Portland, Ore.
Funk, Ben I. Wray, Colo.
Lorenz, Richard F. Chicago, Ill.
Wilson, Delmar E. Ephrata, Wash.

73rd Attack Squadron
Bywater, Murray A. Salt Lake City, Utah
Carlson, Arthur C., Jr. Jerome, Ariz.
Gallagher, Francis B. El Paso, Texas

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AIR CORPS OFFICER ON DUTY WITH NAVY

Lieut. Colonel Early E.W. Duncan, who has been Public Relations Officer at March Field, Riverside, Calif., since 1936, was recently ordered to San Diego, Calif., for one year's duty as War Department Representative on the staff of the Commandant of the Aircraft Battle Force.

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COLONEL FRANK APPOINTED BRIGADIER GENERAL

Colonel Walter H. Frank, Air Corps, was appointed, effective September 30, 1938, as temporary Wing Commander, with the rank of Brigadier General in the Air Corps.

NATIONAL GUARD AIRMEN FAIL TO QUALIFY AS SAILORS

Lieut. Chester A. Cockrill, author of the article on the encampment at Valparaiso, Fla., of the 154th Observation Squadron, Arkansas National Guard, and which appears elsewhere in this issue, tells a very amusing incident which occurred shortly following the arrival of the National Guard airmen at the camp.

The convoy and flight arrived at Camp Eglin, Valparaiso, Fla., on Saturday. The next day, being Sunday, all officers were granted leave, with the understanding that they would be back at the camp in time for retreat at 5:30 p.m. An important officers' meeting was scheduled for 6:30 p.m., in preparation for flying operations during the camp.

That afternoon, Captain Charles M. Taylor, Lieut. Joel Y. Ledbetter and Lieut. Cockrill, clad only in swimming trunks, rented an 18-foot sailboat at Fort Walton and attempted to sail it down Choctawhatchee Bay to Valparaiso, a distance of approximately eight miles. Just before leaving, the owner of the boat very carefully explained to us how to operate the running lights. I thought it was funny at the time. He assured us, however, that there would be no need for the lights; that once we got out in the middle of the bay we would strike a strong wind, and that it would not take us more than an hour and a half at the most to get to "Val-p." We had no difficulty getting started and soon arrived at the highway bridge, which we had to pass under.

Our mast was too high, so, as instructed, we blew on the ship's horn three times and, after tacking around several times, the bridge was finally opened, tying up traffic, and we were away like a house on fire. We had no more than passed under the bridge than the wind died down. We never did strike the promised breeze, and from that time on we barely moved - and then sometimes backwards. At dusk we arrived at the entrance of Valparaiso Bay, where we encountered a strong land breeze. Despite my comrades' claims that they were experienced sailors, they could not tack successfully into the narrow bay. Shortly after dark, the wind died down and we were again becalmed. We began drifting aimlessly out into the bay towards the Gulf and could tell from the drag on our anchor that the outgoing tide was going to carry us out into the Gulf. We attempted to light our running lights and found that only the red light had any wick or coaloil. We attempted to signal for help with the red light, but with no result. We shouted and I blew SOS on the ship's horn until I was out of breath, but try as we might we could attract no attention. Not having a paddle, we tried to tear up the floor boards, but they were securely nailed. We had no

tools of any kind. We frantically worked the tiller back and forth, but the tide was too much for us. We just knew all the fish breaking around the boat were sharks and had visions of going to sleep and falling off the boat, which was not big enough for three people to sleep on.

At 10:30 p.m., we heard the motor of a boat and finally attracted its attention with our red lantern. Luckily, we had drifted into the Gulf in the path of a fishing boat returning from a two days' fishing trip in the Gulf. We were towed in to "Val-p" and none of us has been in the boat since.

Eight and one-half hours in a small sailboat, clad only in swimming trunks, with no food, water, cigarettes or stimulants was an experience that none of us wish to repeat. We all decided that the air was much safer than the water. Just before we were rescued I suggested that we use our last match to burn the sails, as they weren't doing us any good anyway. Captain Taylor, being the instigator of the trip, was blamed for all our ill luck, and we accused him of having shot the Albatross. What we needed was a sea captain and not a captain in the National Guard. Major Adrian Williamson was so relieved to find us that he forgot to discipline us for missing the officers' meeting.

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AVIATION ORDNANCE SCHOOL STARTS NEW CLASS

Lieut. Commander Ernest W. Litch, Naval representative of the General Headquarters Air Force staff, spoke briefly on October 3rd at the opening of the fourth annual two-month's course of instruction at the School of Aviation Ordnance at Langley Field, Va. He discussed the relationship and the importance of properly assembled bombs and equipment in the airplane of today and stated the Navy was interested in aviation ordnance.

Lieut. Colonel Russell L. Maxwell, Commanding Officer of the Tenth Ordnance Service Company and Ordnance Officer of the GHQ Air Force, and Captain Edward P. Mechling, Commanding Officer of the First Platoon, also presented viewpoints on the importance of ordnance in the Air Corps.

At the time the Langley Field branch of the School of Aviation Ordnance officially announced its enrollment of eleven students in the study of bombardment bombs, five other air bases also started their respective courses of instruction, including pyrotechnics at Mitchel Field, N.Y.; administrative study at Hamilton Field, Calif.; Attack bomb course at Barksdale Field, La.; ma-

chine gun and aircraft at Selfridge Field, Mich.; and at March Field, Calif., instructors will train Ordnance Reserve officers as assigned to the GHQ Air Force.

T.L. Gaines, Hampton, will be instructor in ammunition at the local school, with Sergeant Fred A. Riley as instructor in small arms. The students include Staff Sergeants G.A. Aamold and R.R. Fitzwater, of the First Platoon; Privates Henry Charletta and R.L. Vick, of the 49th Bombardment Squadron; F.L. Poisker and J.J. Guzewich, of the 96th Bombardment Squadron, and W.A. Brown, W.W. Boyd, C.E. Jackson, B. Kinley and C. Lambert, of the First Platoon.

Commander Litch arrived at Langley Field on October 3rd from Pensacola, Fla., where he has been stationed for some time. Born in Boston, Mass., on November 22, 1897, he graduated from the Naval Academy at Annapolis, Md., in 1919. During his years of Naval aviation service he has served on all the airplane carriers in the United States Fleet.

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AIR CORPS ACTIVITIES IN HAWAII

The 4th Reconnaissance Squadron has been engaged in transition and familiarization flights in B-18 airplanes with the 23rd Bombardment Squadron. At this writing, all pilots have been checked off and are now making additional flights for more thorough familiarization. Five of the Squadron's B-12's have already been transferred out, and the hangar is being made ready with additional hoists and wing lifts for B-18 assembly.

The activities of the 23rd Bombardment Squadron during the first two weeks of September were devoted primarily to checking off and giving B-18 transition flying to all assigned officers of the 4th Reconnaissance Squadron. These officers, who are shortly to begin operations with their own B-18 airplanes, tackled the transition flying with much eagerness. As a result, all were checked off as soon as the minimum flying time requirements were fulfilled in either the pilot or co-pilot status, depending upon their qualifications. After checking off, all were given five hours additional flying to become more familiar with the B-18's before they start work with their own planes.

With the aid of the two B-12's from the 4th Reconnaissance Squadron, the 23rd Bombardment Squadron has been carrying on aerial gunnery off shore from Kaena Point. So far, only practice courses have been fired, but the entire Squadron is waiting for the record firing to see how the combat crews compare.

The first four months' course for enlisted combat crewmen has been completed and all who took the Squadron course of

instruction were given their final examination the first week of September. The grades have not yet been published, but all who had anything to do with the school feel that the results will be satisfactory.

The 31st Bombardment Squadron has taken over the rehabilitation of the Hickam Field tent camp for the month of September. In addition to many minor construction details, the men of this organization will construct a new mess hall, kitchen and day room. Flying has been cut to a minimum for the month.

The 72nd Bombardment Squadron was busy during the last two weeks of September familiarizing the personnel of the 50th Reconnaissance Squadron with the B-18 airplane. It is anticipated that in the near future the 50th Squadron will be equipped with B-18's to replace the B-12's they are now using.

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PERSONNEL NOTES

The following-named A.C. officers, who held temporary appointments in the grades indicated, received permanent appointment in such grades, with rank from October 1, 1938, viz:

Lieut. Colonel Oliver P. Echols, Majors Ralph B. Walker, Clarence B. Lober, John K. Cannon, Arthur J. Melanson, Theodore J. Koenig, Grandison Gardner, Alvan C. Kincaid and Omer O. Niergarth.

Effective October 1, 1938, Captain Kenneth N. Walker was appointed to the grade of Major (temporary).

Upon their own application, Major Edward D. Jones, of Hamilton Field, Calif., was retired from active service, effective September 30, 1938, after more than 21 years' service, while Colonel Albert L. Sneed, stationed at Maxwell Field, Ala., is to retire from active service, effective December 31, 1938, after more than 34 years' service.

Lieut. Colonel Charles B. Oldfield, Air Corps, was assigned to duty as Commanding Officer of Air Corps troops at Fort Lewis, Wash.

Upon the completion of his tour of duty in the Hawaiian Department, Captain Frank D. Klein, Air Corps, is assigned to duty at Hamilton Field, Calif.

Air Reserve officers assigned to active duty at Randolph Field, Texas, to October 2, 1940, are 2nd Lieuts. Lewis A. Sanders, Fort Wayne, Ind., and Don Monenick Cascio, Staten Island, N.Y. Other Reserve officers assigned to this station are 2nd Lts. Joseph C. Mackey, of Columbus, O., and John A.H. Miller, Coffeyville, Kans., to October 9th and 7th, 1940, respectively.

AIR DEMONSTRATION AT LEGION CONVENTION

With its customary phrase - "A routine flight" - twelve B-17's of the Second Bombardment Group took off at sufficient intervals and on different routes, so that each flight would be individual, for March Field, Calif., to participate in the exercises incident to the American Legion Convention. All kinds of weather was encountered, with headwinds of considerable force. The weather at March Field, the terminal, was quite bad, but all ships got through without any mishap.

As is fitting for a superior airplane (the B-17), the 2nd Bombardment Group of Langley Field led the parade, and the B-17's aroused much comment due to their appearance of streamlined efficiency.

Touching on the participation of the 49th Bombardment Squadron in the aerial demonstration during the American Legion Convention, the News Letter Correspondent states that the officers who navigated to and from the West Coast were those other than the qualified Celestial navigators, but that the 49th came through as usual. The Squadron completed the mission non-stop from Langley Field to March Field, as originally planned. The respective elapsed times of the planes of the 49th were 12:30, 12:40 and 13:10 hours.

All officers of the 20th Bombardment Squadron, with the four B-17 airplanes, participated in the aerial demonstration during the Legion Convention at Los Angeles. This Squadron flew individual navigation missions approximately eight minutes apart.

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CONGRATULATIONS FOR GENERAL KILNER

Officers and enlisted men at Langley Field, Va., were elated when the news was received that Colonel Walter G. Kilner, Chief of Staff, GHQ Air Force, had been promoted to the post of Assistant to the Chief of the Air Corps, with the rank of Brigadier General. The newly appointed Brigadier General was at his desk when the news was received, and throughout the day he was kept busy answering congratulatory calls from military associates and over the telephone.

"The appointment came as a complete surprise to me," the new Assistant Chief said, "and I am gratified with the many felicitations that have come to me. I have nothing more to say at this time."

General Kilner is a native of Syracuse, New York. He graduated from the United States Military Academy, West Point, N.Y., in 1912, and two years later he joined the Aviation Section, Signal Corps. He served at a number of fields, attended the Tactical School at Maxwell Field, Ala., the Army Industrial College and the Army War College at Washington,

D.C., and the Air Corps Engineering School when it was located at McCook Field, Dayton, Ohio. He came to Langley Field, Va., about two years ago as Chief of Training and Operations. He was assigned as Chief of Staff of the GHQ Air Force on September 1, 1938.

Special Orders of the War Department, recently issued, relieved Brigadier General Walter G. Kilner, Assistant to the Chief of the Air Corps, from detail as a member of the General Staff Corps and from assignment to the General Staff with troops, and from further duty as Chief of Staff, GHQ Air Force, Langley Field, Va., and assigned him to duty in the Office of the Chief of the Chief of the Air Corps, Washington, D.C.

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NOTES ON LANGLEY FIELD ACTIVITIES

Since the B-15 has been assigned to Langley Field and to the 49th Bombardment Squadron, so many senior officers have evinced a desire to see this plane that tours are conducted, and Lieut. Robertson was made "Chief Guide" for the inspection of the B-15. The scribe of the 49th states that "Robbie" has proved to be quite an orator, with a vast fund of information, and so he was delegated as Chief of the Rubber-Neck Section of the 49th.

All of the Reserve officers of the 49th Bombardment Squadron who took the examination for commission in the Regular Army Air Corps received them, and so the 49th again came through a hundred percent. Congratulations and best wishes are extended to the new second lieutenants - John B. Montgomery, Henry C. Gedman, Bela A. Harcos and John H. Eakin.

During the latter part of August, the 96th Bombardment Squadron was given one of the new B-18A Bombardment planes for comparison tests with the B-18. All officers who had the opportunity of flying this airplane commented on the increased comfort of this latest type plane.

The 96th Bombardment Squadron is proud to announce that all enlisted men assigned to the Bombardiers' School successfully passed the course and qualified as Bombardiers.

Lieut. G.E. Williams, of the 20th Bombardment Squadron, recently established what is believed to be a military record at skeet shooting. One hundred and fifty birds were broken before one got away intact.

The Hqrs. and Hqrs. Squadron, 2nd Bombardment Group, now has two BC-1's, Captain C.E. O'Connor recently ferrying one to Langley Field from the North American Aircraft Corporation, Inglewood, Calif.

AIR CORPS OFFICERS IN THE PHILIPPINE DEPARTMENT
By the News Letter Correspondent

For the information of the readers of the Air Corps News Letter, we publish the following list of officers who are now performing duty in the Philippine Department, showing also the date their foreign service commenced:

<u>Rank</u>	<u>Name</u>	<u>Name</u>	<u>Tour started</u>	<u>Remarks (Principal duty)</u>
Lt. Col.	Royce, Ralph		June, 1937	Air Officer
Lt. Col.	Crom, William H.		Oct. 1937	C.O. Nichols Field and 4th Composite Group
Major	Seaton, David S.		Feb. 1937	C.O. Philippine Air Depot.
Major	Blackburn, Lloyd C.		May 1938	C.O. 2nd Observation Squadron
Major	Carpenter, Earle J.		Oct. 1937	C.O. Base Hqrs. and 20th Air Base Squadron
Major	McNeil, Guy L.		Feb. 1938	C.O. 28th Bomb. Squadron (Clark Field)
Major	Backes, Charles		Oct. 1937	Group Operations Officer
Captain	Crawford, Alden R.		Oct. 1937	Duty with Philippine Commonwealth Govt.
Captain	Kirkendall, John P.		Feb. 1938	Adjutant, Clark Field, (temporary duty).
Captain	Bacher, Frederick A. Jr.		Oct. 1937	Philippine Air Depot.
Captain	Lewis, Mark K., Jr.		May 1937	Add. duty Commonwealth Government.
Captain	Harbold, Norris B.		May 1937	C.O., 3rd Pursuit Squadron.
Captain	Tally, Fred O.		July 1937	Philippine Air Depot
1st Lt.	Brownfield, Ralph O.		July 1937	Post Exchange Officer
1st Lt.	Pillet, Frederick A.		Oct. 1936	Group Com. and Armament Off.; Post Sig. Off
1st Lt.	Imlay, Talma W.		May 1937	Philippine Air Depot
1st Lt.	Hood, Reuben C., Jr.		July 1937	Post & Group Adjt.; Publicity and Inf. Off.
1st Lt.	Ryan, John P.		Feb. 1937	Base Hq. and 20th Air Base Sqdn. A.C. Maint.
1st Lt.	Brownfield, Leon R.		May 1937	28th Bombardment Squadron, Clark Field
1st Lt.	Scott, Tom W.		Oct. 1937	2nd Obs. Sqdn. (Engr. and Parachute Officer)
1st Lt.	Calhoun, Frederick E.		July 1937	Philippine Air Depot
1st Lt.	Burnett, Norman R.		Oct. 1937	3rd Pursuit Sqdn. Operations and Engr. Off.
1st Lt.	Miller, Joseph A.		May 1937	Post Engr. Off. and Post Inspector
1st Lt.	Motherwell, David N.		July 1937	28th Bomb. Squadron, Clark Field
1st Lt.	Bowman, Wendell W.		July 1937	28th Bombardment Squadron, Clark Field
1st Lt.	Anderson, Charles H.		July 1937	Add. duty Philippine Commonwealth Gov't.
1st Lt.	Harris, Hunter, Jr.		Feb. 1937	28th Bombardment Squadron at Clark Field
1st Lt.	Meulenberg, Andrew		Feb. 1938	2nd Obs. Sqdn. Photographic and Armament Officer; Provost Marshal
1st Lt.	Burkhalter, Harry N., Jr.		July 1937	2nd Obs. Squadron, Adjutant, Operations and Communications Officer.
1st Lt.	Blair, Jerome E. II		Oct. 1936	3rd Pursuit Squadron Supply and Parachute Officer
1st Lt.	Donovan, Stanley J.		Oct. 1936	28th Bombardment Squadron at Clark Field
1st Lt.	Culver, German P.		May 1938	Base Hqrs. and 20th Air Base Squadron Transportation Officer
1st Lt.	Neal, John O.		Oct. 1937	Headquarters Squadron, Assistant Post Engineering Officer and Inspector
2nd Lt.	Maschmeyer, Edward W. *		July 1937	2nd Observation Squadron, Assistant Operations Officer
2nd Lt.	Combs, Cecil E.		Feb. 1938	3rd Pursuit Squadron Communications Officer and Assistant Engineering Officer
2nd Lt.	Gunn, James R.		May 1938	2nd Observation Squadron, Supply Officer
2nd Lt.	Bowen, Carl K., Jr.		Feb. 1938	2nd Observation Squadron Communications and Operations Officer
2nd Lt.	Bartella, John M.		Feb. 1938	3rd Pursuit Squadron Adjutant
2nd Lt.	Gray, Jackson H.		May 1938	3rd Pursuit Squadron Mess Officer
2nd Lt.	Covington, Wm. E., Jr.		Feb. 1938	Base Hqrs. and 20th Air Base Squadron Supply Officer
2nd Lt.	Nazzaro, Joseph J.		Feb. 1938	Headquarters Squadron Adjutant and Supply Officer
2nd Lt.	Necrason, Conrad F.		Feb. 1938	3rd Pursuit Squadron Armament Officer
2nd Lt.	Todd, Paul E.		May 1937	28th Bombardment Squadron at Clark Field

* Air Reserve

 AIR CORPS 
NEWS LETTER



PRESENTATION OF MACKAY TROPHY FOR 1937
GEN. ARNOLD. CAPT. CRANE. CAPT. HOLLOMAN. MR. STOUT

14637

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON

NOVEMBER 1, 1938

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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NAVIGATION OF THE HOWARD HUGHES AROUND THE WORLD FLIGHT By Lieut. Thomas L. Thurlow, Air Corps

The navigation for the Howard Hughes Around the World Flight was performed by Harry P.M. Connor, Lieutenant, U.S. Navy Reserve, and Thomas L. Thurlow, First Lieutenant, Air Corps. The instruments carried and used during the flight were as follows:

Drift Meter: The meter was of the optical, bent tube type, with trail sighting feature. The instrument was of unit power with an erect image and 20 degree real field. The line of sight was rotatable from 10 degrees forward of the vertical to 65 degrees aft by means of a prism rotated by a push-pull cable. The reticule was fixed, and was edge illuminated for night work. Drift was measured by rotating the instrument about the axis of the vertical tube which passed vertically down through the fuselage forward of the navigator's table. The exit pupil was 10 m.m. in diameter and the eye distance 1 and $\frac{1}{4}$ inches. The instrument was designed for the particular installation by Lieut. Thurlow and built by the Vard Mechanical Laboratory and Penn Optical Co., both of Pasadena, Calif.

Remote Directional Control: A controller for the directional unit of the automatic pilot was mounted in a convenient location in the navigator's compartment. Incorporated in the controller was a mechanism to allow for the backlash of the flexible cable connecting the controller with the automatic pilot. The backlash mechanism plus a dial indicator permitted the navigator to turn the airplane the exact amount desired. This controller is being supplied to the Air Corps by the Sperry Gyroscope Co., Brooklyn, N.Y.

Aperiodic Compass: A Pioneer aperiodic compass, similar to the Air Corps Type D-10, was mounted in an accessible position to the right of the navigator's seat.

Vertical Face Compass: An experimental Kollman vertical face aperiodic compass was mounted at eye level near the rear edge of the navigator's table.

Pelorus: An optical pelorus, similar in principle to the Air Corps Type A-2, was carried. This instrument was built by the Vard Mechanical Laboratory,

Pasadena, Calif.

Sextant: The sextant used was a standard Bausch and Lomb bubble sextant, similar to the Air Corps Type A-6.

Chronometers: A pair of Longines chronometer watches set to GCT and GST were used as standard timepieces. Longines hack watches were worn for observing.

Dead reckoning computer: A Dalton Model G Dead Reckoning Computer, manufactured by Keuffel and Esser Co., was used for the solution of graphical dead reckoning problems. This instrument is identical with the Air Corps Type E-6.

Line of Position Computer: A mechanical computer for reducing celestial observations, the computer incorporating certain Nautical Almanac data.

Miscellaneous Computers: Several speed-time-distance, airspeed, and altitude correction computers were carried, these being identical with Air Corps Types E-1 and D-3.

Miscellaneous Devices and Tables: Airspeed calibration and compass deviation cards were located in clearly visible positions. The Hydrographic Office publications carried were Ageton, Dreisonstok, Red and Blue Azimuth Tables, Useful Tables, and Radio Aids to Navigation. Necessary plotting equipment and several Air Corps navigation tables in common use were carried by the individual navigators.

Maps and Charts: Two complete sets of maps, charts, and plotting sheets for the entire route, including alternate and emergency stops, were stowed convenient to the navigator's seat.

Drift Signals: Twenty drift signals were carried, these being identical with the Air Corps Type X-1C.

A hatch with a demountable windshield was provided for celestial observations. In addition, the glass in two windows near the rear of the fuselage was replaced with a superior grade to enable reliable observations to be made through them. Mounting brackets for the pelorus were placed by each of these windows.

Prior to the flight it was decided that the navigators would stand four-hour shifts, these to be reduced one half if deemed advisable near the finish

of the flight (the reduction was not made). The navigator on duty was to be held completely responsible for the navigation during his watch.

The navigation during the flight was unique only in that celestial navigation was used to a much greater and radio navigation to a much lesser extent than on usual flights of this nature. The celestial navigation was unique in that weather conditions made necessary the use of the moon in approximately 60 percent of the observations taken.

Of the total flight time, approximately 10 percent was made in instrument conditions, 60 percent over an overcast, and 30 percent contact. Since the maps for the greater part of the flight were of extremely small scale and sometimes sketchy over large areas, little use could be made of pilotage during the 30 percent of the time that weather conditions permitted. Frequently, during periods when pilotage normally would have been possible, the maps were put away and plotting sheets were used in their place.

The flight was made near full moon (sun and moon opposite) and in high latitudes (extremely long days). Consequently, it was seldom that more than a single celestial line of position could be obtained. Due to the weather encountered, no running fixes using a single body could be made. Every effort was made to discover rivers, coast lines, mountain ranges and other prominent surface details which previous position lines could be made to cross for a fix. Numerous fixes of this nature were made.

After several hours of instrument conditions over the Atlantic, two radio fixes were attempted, using loop bearings on 6 surface craft from 300 to 500 miles distant. These were decidedly unsatisfactory, one fix resulting in a very large triangle with center of gravity 60 miles south of the course and the second in a smaller triangle with center 40 miles north of the course. Following these fixes, a sun observation was immediately taken and the line laid down. A twilight star line was brought forward to cross it, the resulting fix being 15 miles south of the course. A later sun sight, with the sun at right angles to the course, verified the fix as to distance off course. A landfall (Ireland) was made within five miles of the point indicated by the above fix and the subsequent dead reckoning. The above were the only radio fixes attempted during the flight.

As soon as it was possible to do so when approaching a destination, a radio bearing was taken on the station at that point as a check upon the other navigation. Since in all cases the above bearings were within 5 degrees of the nose, the bearing was disregarded and the dead reckoning and celestial navigation were

assumed correct. The assumption was justified in all cases.

Exclusive of take-offs and landings and short period before reaching Paris when it was necessary to dodge some extremely low skud, the automatic pilot was in continuous operation, thus permitting the navigator, by using the remote control, to exercise complete directional control over the airplane and free the pilot for calculations involving fuel consumption, power, and balance. The opinion of the crew was unanimous that such an arrangement is essential in extremely long range flights.

Exclusive of a few short periods, the altitude maintained was from ten to sixteen thousand feet. The navigator not on duty relieved other members of the crew so that each member was able to sleep about three hours per day. The effect of altitude and lack of sufficient sleep was exhausting, making a mechanical computer for the reduction of celestial observations highly desirable. This was borne out during the Fairbanks-Minneapolis leg. It became necessary on this leg to check the compass several times by sun bearings, the sun's azimuth being determined from the Red Book. The computations required triple the time normally required, due to simple mistakes even though the observer took oxygen several minutes before making and reducing the observations.

No trouble was experienced in measuring drift over water during daylight hours. Overcast conditions at night allowed the use of only three drift signals, from each of which a satisfactory drift was measured.

Due to generally smooth air and the extreme stability of the airplane on the automatic pilot, after the first few observations the number of sights used for an average was reduced to five. As nearly as can be ascertained, all observations yielded lines well within 10 miles of true. On several occasions an average of only three observations was used. It is believed that these observations also fell within the above maximum limit.

Every reasonable means for determining wind information for the dead reckoning was employed. The Air Corps Type E-6 Dead Reckoning Computer was used for the solution of dead reckoning problems, both in determining and applying the wind. The extreme versatility and compactness of this computer made it a valuable accessory for the purpose used.

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Colonel George H. Brett, Air Corps, has been detailed as a member of the General Staff Corps and assigned to the General Staff with troops and as Chief of Staff of the General Headquarters Air Force, Langley Field, Va.

THE 1937 AWARD OF THE MACKAY TROPHY

In one of the many shields on the silver-covered base on which is mounted the Mackay Trophy, another inscription was recently added, and it reads as follows:

1937

Captain Carl J. Crane, Air Corps
Captain George V. Holloman, Air Corps

For development and demonstration of the original automatic landing device for aircraft.

On Friday morning, October 14, 1938, the office of the Hon. Harry H. Woodring, Secretary of War, in the State Building, was the scene of the presentation by him to two Air Corps officers, Captains Crane and Holloman, of gold medals emblematic of the Mackay Trophy which bear the inscription given above.

This automatic landing system was designed by Captain Crane, Director of the Instrument and Navigation Laboratory at Wright Field, Dayton, Ohio, and, working with Captain Holloman, he conducted practically all of the flight tests which brought to a successful conclusion the automatic landing system. The various units of automatic control were designed by these officers, Mr. Raymond K. Stout, project engineer at the Air Corps Materiel Division, Wright Field, Ohio, and Mr. C. D. Barbulesco, of the Signal Corps Aircraft Radio Laboratory, which laboratory assisted materially in the design and construction of various units entering into the automatic landing system.

In presenting the Mackay Trophy to Captains Crane and Holloman, Mr. Woodring stated:

"Twenty-six years ago the first award of the Mackay Trophy was made to the then Infantryman and now Chief of the Army airmen, Major General Henry H. Arnold. The occasion was - for those days of aerial pioneering - a momentous and monumental reconnaissance flight from College Park in Maryland, via what is now the Army War College, to Fort Myer in Virginia and return. General Arnold successfully accomplished his flight of 41 minutes in a ship powered with a 40-horsepower engine.

Since 1912, the National Aeronautic Association and its predecessor, the Aero Club of America, have awarded the Trophy for long distance flights, altitude flights, non-stop transcontinental flights, Pan-American, California-Hawaii, Washington-Alaska and Around the World flights, mid-winter flights and photographic flight - all record-breaking achievements in their time. The award has also been bestowed for speed records attained in peace and for gallant service on the aerial front in war.

Today, somewhat of a new note is struck. The Mackay Trophy goes to Captains Crane and Holloman for the development of the original automatic landing

device for aircraft. Not only did they develop this control system, but they conducted the many and tedious test flights which demonstrated the practicability of the automatic landing system. Their achievement may not have been as spectacular as any of the feats for which the Trophy heretofore has been awarded, but the successful accomplishment of their experiments promises as much for the advancement of aviation - commercial as well as military - as did the army's aerial exploits of the years gone by. Assurance of the maximum safety in aerial travel is the goal towards which all airmen continuously strive. These two Captains of the Air Corps have achieved much towards the attainment of that goal. A history-making stride has been taken towards the elimination of the possibility of human error in the landing of aircraft under adverse weather conditions.

We all regret that illness prevents Mr. Mackay from being with us today. We are happy to have with us, however, Mr. Horner, Chairman of the National Aeronautic Association, who is custodian of the Trophy donated by Mr. Mackay in 1912 for award to the officer or officers of the Army making the most meritorious flight of the year. It is also our pleasure to greet on this occasion Mr. Raymond Stout, from the Air Corps Materiel Division at Wright Field, the very able engineer whose cooperation with Captains Crane and Holloman so materially advanced the project to a successful conclusion.

In presenting this gold medal emblematic of the Trophy, I express to Captain Crane and to Captain Holloman my personal admiration, and I extend to them the sincere congratulations of all their comrades in the Army of the United States."

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NEW OBSERVATION PLANE FOR COLORADO N.G.

The 120th Observation Squadron, 45th Division, Colorado National Guard, received its first new O-47A Observation plane on October 22nd, when Captain John K. Nissley, Regular Army Instructor for the 120th, flew it from the North American plant in Los Angeles, with Lieut. James B. Morris as his observer.

This latest type plane exceeded the Squadron's fondest hope, attaining a remarkable speed on the trip from the West Coast. Captain Nissley reported that the plane handled perfectly. It is the first of six which will eventually be delivered to the 120th Squadron.

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Major Earl H. DeFord, Air Corps, has been relieved from duty on the staff and faculty of the Air Corps Tactical School and assigned to Hamilton Field, Calif.

V-7879, A.C.

ECHOES FROM THE FORT BRAGG MANEUVERS

The truck convoy of the Headquarters and Headquarters Squadron, 8th Pursuit Group, Langley Field, Va., left that station at 5:00 a.m., September 29th, and arrived at Fort Bragg, N.C., at 4:00 p.m., for participation in the Joint Antiaircraft-Air Corps Field Exercises.

The air echelon, scheduled to leave Langley Field on the same date, transporting a number of officers and enlisted men to Fort Bragg, was forced to remain there until the morning of October 1st, due to unfavorable weather conditions. After raining almost steadily for the first two days, the weather became very favorable, and operations went on steadily and uneventfully.

A 45-minute "Black-out" between the hours of 7:00 and 10:00 p.m., on October 13th, presented a very impressive, war-like scene, creating wide interest among the residents of this section, who co-operated nicely during the "Black-out."

The largest concentration of troops ever held on the east coast has been very successful and, fortunately, it was carried out with no casualties to mention, and now that the conclusion of the "war" is drawing near all units will soon be making preparations for returning to their home stations.

The 33rd Pursuit Squadron, 8th Pursuit Group, Langley Field, Va., went "up front" in the recent Anti-aircraft - Air Corps Joint Maneuvers, operating out of "defense" airdrome at Maxton, N.C., with 18 PB-2's. The boys got the feel of some realistic Pursuiting in the patrols and intercepting of "enemy" aircraft. The pilots figure that tactically this was one of the best wars they have participated in for a long time, and that it served to bring out much valuable information of great interest to all Air Corps personnel. Needless to add, getting home to Langley Field was the best part of the maneuver, since tents at night, even in the Sunny South, are cold affairs.

Encamped at Knollwood Airport, Southern Pines, N.C., during the Fort Bragg Maneuvers, the 36th Pursuit Squadron, 8th Pursuit Group, Langley Field, Va., were guests of a most delightful southern hospitality. They had a very convenient set-up for the maneuver exercises with anti-aircraft. Aside from the chilly nights and early morning alert periods, everything was quite pleasant. According to the scribe of the 36th, the most appealing factor was the accessibility of some of the best golf courses of the country, located at Southern Pines and Pinehurst. He added, however, that two weeks proved to be long enough to live in tents and that the personnel were not at all averse to returning to their home station.

With a heavy coat of tan, and in the pink of condition, the 27th Pursuit Squadron, 1st Pursuit Group, returned to Selfridge Field, Mt. Clemens, Mich., from Fort Bragg, N.C., where they participated in the Anti-aircraft Exercises held at that station. Approximately 150 enlisted men were brought back in 15 B-18 Bombers. Part of them returned in the evening, and the remainder the following morning. All of the pilots, flying P-35 Pursuit planes, returned a few days earlier.

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NEW HANGAR AT ALBROOK FIELD

Construction work on a new hangar on the flying line at Albrook Field, Panama Canal Zone, continues, with the steel work nearly complete. The hangar will be occupied by the 24th and 29th Pursuit Squadrons, while the 44th Reconnaissance Squadron will take over the hangar which the two Pursuit squadrons are now using. Changes in plans for the concrete runways which are to be laid have delayed that project, and construction has not yet begun.

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RANDOLPH FIELD MEN CATCH UP IN TRAINING

With as many as fifty airplanes on extended navigation flights on a single day, Randolph Field personnel were taking advantage of the lull between classes to comply with their War Department training directive. The Post Operations Office estimated that airplanes from Randolph Field flew approximately 250,000 miles - equal to ten round-the-world trips - without a forced landing or accident, and all this during a period of three weeks, the interval between student training classes.

"This record," says the News Letter Correspondent, "is particularly enviable when it is realized that these BT-9's were used daily on the final stages of the last class, and during the last few weeks of training built up an average of almost 100 hours per plane per month.

"During the past thirty days, ending on October 15th, a total of 260 clearances was issued by Post Operations, the ultimate destination of the planes being almost every State in the Union. A-17 airplanes led the list of visiting ships during the month, 16 of them dropping into the "West Point of the Air." Close on the heels of the A-17's came the B-18's, 13 of them visiting the station during the month. A total of 20 types were cleared through Post Operations, including 4 B-17's."

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Lieut. Colonel David A. Myers, Medical Corps, has been relieved from duty in the Office of the Chief of the Air Corps and assigned to duty at Moffet Field, Cal.

NEW WING COMMANDER ARRIVES IN PANAMA

Shortly after noon on October 14th, the 16th Pursuit Group, which is based at Albrook Field, passed in aerial review above the Transport ST. MIHIEL as it approached its dock at Balboa, welcoming Brigadier General and Mrs. Herbert A. Dargue to their new station in the Canal Zone.

General Dargue is the newly appointed Commanding General of the 19th Wing, succeeding Brigadier General George H. Brett. On the following evening, at the Union Club in Panama City, a reception was held in honor of General and Mrs. Dargue, which was attended by the officers and ladies of Albrook Field.

The 19th Wing welcomes its new Commander and wishes for him a happy and successful tour of duty.

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RECORD FLYING TIME FOR GRADUATING CLASS

According to the Kelly Field Correspondent, Class 38-C, which graduated from the Air Corps Training Center on October 5, 1938, is believed to have established quite an enviable record in flying and maintenance.

During the period from July 5 to October 5, 1938, a total of 26,781 aircraft hours was flown by airplanes at Kelly Field. The average hours flown per student was 111:43. The average number of airplanes on hand daily was 152, or a daily average in commission of 75.5%. The average number of hours flown per airplane in commission during the period was 179:35.

The 61st School Squadron, commanded by Captain Elmer T. Rundquist, Air Corps, led the Air Corps Advanced Flying School organizations in maintenance. During the three-month period, that organization maintained a daily average of 89% of their airplanes in commission. Considering the fact that these airplanes are obsolete, this record speaks well for the efficiency of this Squadron.

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LECTURES FOR PHILIPPINE ARMY OFFICERS

Twenty-six Philippine Army officers from different stations throughout the Philippine Archipelago, who are now attending the Philippine Army Supply School in Manila, visited Nichols Field during September for the purpose of receiving practical and theoretical instruction in the U.S. Army Air Corps Supply System.

The officers were escorted about the hangars and the several activities of the station to afford them first-hand information as to the daily function of the 4th Composite Group, after which illustrated talks were delivered on the following subjects:

"Kits and Sets in Maintenance of A.C.

Equipment," by 1st Lieut. Tom W. Scott, Air Corps.

"A.C. Shops in Manufacture and Maintenance of Air Corps Supplies," by Captain F.A. Bacher, Air Corps.

"Procurement, Preservation and Storage of Air Corps Supplies," by Mr. G.D. Cline, Philippine Air Depot.

"Storage and Maintenance of Photographic Supplies," by Tech. Sgt. George H. Fisher.

"Supply Procedure in the Air Corps Squadron," by Sergeant Clayton Hall.

"Movements of Supplies and their interruption by Airplanes," by Major Charles Backes, Air Corps.

"Emergency Landing Requirements" by Captain Alden R. Crawford, Air Corps.

"Airplanes for Supply Distribution," by 1st Lieut. F.E. Calhoun, Air Corps.

Upon the completion of the lectures, an examination was held on September 23rd.

First Lieut. Frederick E. Calhoun, who is Property and Supply Officer of the Air Depot, coordinated the instruction in connection with the visit of the Philippine Army officers.

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PAN-AMERICAN CO-PILOT FLIES AT NICHOLS

As a recent article in a Manila newspaper put it, "Clipper Pilot Takes a Busman's Holiday," so does it appear when some young man reports at Headquarters, Nichols Field, P.I., and requests that he be permitted to put in a little time in an Army plane. As a great number of the Pan-American co-pilots are also members of the Air Corps Reserve, they are accordingly permitted to pilot Army aircraft. Such was the case when Clifton George, navigating officer of Clipper planes, recently put in some time while awaiting the departure of the China Clipper on a trip to China.

Asked to comment on his experiences back and forth over the "Blue," he would only say "It's a lot of water we fly over." And all the Nichols Field Correspondent can say is - "That Uncle Sam is putting out some mighty fine products from the West Point of the Air," and when one of the boys steps into Headquarters while on scheduled flights to the Orient it seems as though the United States mainland is "only over the hill" instead of seven thousand miles distant.

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A group of about 116 student officers of the Air Corps Primary Flying School, Randolph Field, Texas, in charge of Major W.H. Reid, Engineering Officer of that station, made tours of inspection through the Engineering and Depot Supply Departments of the San Antonio Air Depot, Duncan Field, Texas, September 27th to 29th, inclusive.

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AERIAL GUNNERY TRAINING OF AIR CORPS PERSONNEL

Flight "B" of the 16th Observation Squadron recently completed the initial period of aerial gunnery training for the current fiscal year. Moving by air and motor convoy, 8 officers and 20 enlisted men of this unit, with two attached officers from the 1st Battalion of the 83rd Field Artillery, Fort Benning, Ga., and one attached medical attendant, arrived at Eglin Field, Valparaiso, Fla., on September 10th and 11th, 1938, for a two-weeks' period of training, beginning on Monday, September 12th.

Following the example of the Flight "B" personnel, the attached officers took along their fishing and swimming equipment, but proved to be better range officers and convoy officers than fishermen, in which latter capacity they were about down to par with Flight "B" officers.

Left at home in command was 1st Lieut. James Van G. Wilson, newly assigned to the Flight from the Autogiro School, with one autogiro, one BT-2B-1 and 25 enlisted men. First Lieut. Frank P. Hunter, Jr., also newly assigned from the Autogiro School, was on leave. The following officers made the trip:

Captains Reuben Kyle, Jr., W.H. Tunner, 1st Lieut. T.D. Ferguson, Air Corps; 2nd Lieuts. W.W. Amorous, T.M. Bartley, Jr., P.W. Tibbets, M.S. Zipp, B.B. Taylor, Air Reserve; 1st Lieut. D.E. Means, Field Artillery, and 2nd Lieut. G. McCutcheon, Field Artillery Reserve, both from the 1st Battery, 83rd Field Artillery, Fort Benning, Ga.

For firing, three O-46A airplanes were used, two of which were loaned to Flight "B" by the Commanding Officer of Maxwell Field, Ala., to whom thanks are due for such valuable cooperation and assistance.

The firing was conducted with a freedom from jams and malfunctionings, which reflected favorably on the efficiency of the armament personnel. A total of 8,000 rounds was expended, with gratifying results shown on the score card. High score was made by 2nd Lieut. Paul W. Tibbets, Air Reserve, who, firing with a wing gun, scored 50 hits out of 50 rounds on Phase 2-500, and 46 hits out of 50 rounds on Phase 1-500 while engaged in record firing, for a total score of 414 points out of a possible 500. The News Netter Correspondent believes that this may constitute a record for total rounds placed in a target with a wing gun.

A portable SCR-192 radio set was taken along and set up in the operations tent, from which point two-way voice radio communication with pilots in the air was maintained. Communication with the range was via field telephone. This system of communication has been tested by Flight "B" during previous gunnery periods at Eglin Field, and has been satis-

factory as an additional safety measure and a very valuable convenience in many different ways.

All firing was completed during the morning hours. Afternoon activities consisted principally of fishing and swimming. Some very fine fish were almost caught but, of course, the big ones got away. Surf swimming and sun bathing were excellent at Tower Beach, at which place the majority of the Flight could be found during the afternoons, with manly muscles, sunburned backs and newly cultivated moustaches on display. One entire day was devoted to deep sea fishing by the enlisted personnel of the Flight, and this time some of the big ones did not get away.

At the end of the first week, the attached officers were replaced by 2nd Lieuts. B.M. Barksdale, Field Artillery, and J.P. Hines, Field Artillery Reserve, who functioned as range officers during the second week and as convoy officers on the return trip.

At the beginning of the second week, a very unwelcome mass of Polar Continental Air arrived non-stop from the North Pole. Record firing had to be discontinued for two days, due to very rough air, and Tower Beach was the most deserted spot in West Florida. This interval was utilized in making practice instrument flights on the Mobile beam.

With the return of smooth air, record firing was resumed, and the training period was successfully completed. However, it was still cold at 4:15 a.m., and the beach was still bleak and barren. Although Lieuts. Tibbets, Zipp, Taylor, Barksdale and Hines made a final sally and brought in some nice snappers and groupers, also a pair of non-edible bonitos, for photographic purposes, still everyone agreed by the end of the week that it was time to call it a season. On Friday and Saturday, September 23rd and 24th, the air and ground echelons returned to Lawson Field.

The Third Pursuit Squadron, stationed at Nichols Field, Rizal, P.I., has been industriously pursuing considerable practice in aerial gunnery. Fortunate in having a former National Match contender, who is also a Chanute graduate, 1st Lieut. Robert O. Brownfield, we started off by a little analysis and discussion of the basis of Pursuit operations - the ability to shoot. This was followed by explanation of gun and sight positions, particularly in a P-26 synchronization, trajectories, harmonization, and bore sighting. All Technical School data was culled, also the excellent articles of the late Lieut. Norman H. Ives, in our search for enlightenment. Ground target firing convinced us of the benefits of our preliminary efforts. Even in bumpy weather and in cross wind firing all personnel

showed marked improvement. Following the ground practice, we began on sleeve targets. This phase of firing produced many experiments in method of approach, speed and point of aim. Strict avoidance of any plain or fancy methods of fouling to obtain hits has been the rule. In spite of early disappointment, it was felt that there must be a speed of approach and a point of aim that would obtain hits.

Success is gradually beginning to crown our efforts, and from scores of one to six hits out of 100 rounds we have crept up to an average of around 15, with a high score of 55 hits.

The one difficulty we have been unable to surmount is the ability of a properly harmonized machine gun to fire where it is pointed, hence all this effort to develop the aiming device, the Class 13 Non Standard Peashooter, Type X-1 (Experimental).

The 29th Pursuit Squadron, based at Albrook Field, Panama Canal Zone, encamped at Rio Hato, Republic of Panama, beginning on October 3rd, for two weeks of gunnery and field maneuvers. Upon their return to Albrook Field, the 24th Pursuit Squadron was scheduled to take over the gunnery camp for a similar period of time.

The 74th Attack Squadron completed their gunnery on September 27th and reported a successful season. One phase of the 74th's program consisted of a demonstration of an attack on an anti-aircraft battery by a flight of A-17's. Every weapon available to an attack ship was used against the target, a mock-up of log guns and silhouettes. The battery was screened in smoke by a single ship and attacked with machine gun fire, chemicals and bombs by the flight in elements of three. The gun position was completely wiped out, one bomb scoring a direct hit upon a log gun and smashing it.

The 29th Pursuit Squadron returned from the gunnery camp at Rio Hato, Republic of Panama, on October 17th, and reported a successful season. With the restrictions placed on dive bombing with Pursuit aircraft, bombing for record became a more intricate and difficult affair than heretofore, there being a little matter of not being able to see the target. With a little practice, however, the 29th seems to have done quite well. The 24th Pursuit Squadron took over the camp on October 17th for two weeks of gunnery.

During the month of September, the Engineering Department of the San Antonio Air Depot, Duncan Field, Texas, overhauled a total of 10 airplanes and 99 engines and repaired 96 planes and 14 engines.

NEW CLASS STARTS TRAINING AT RANDOLPH

Class No. 39-C, the twenty-second to enter the Primary Flying School at Randolph Field, Texas, started training on the Primary Stage on October 21st, with 107 student officers - graduates of the June, 1938, Class of the U.S. Military Academy, West Point, N.Y., seven other officers from line branches; five National Guard officers, and 229 Flying Cadets, for a grand total of 348 students.

Although the 229 cadets reported to the line, several of them had not been cleared for flying by the School of Aviation Medicine. In addition to the 348 starting out on PT-13's, a total of 189 potential pilots began to learn the art of flying the BT-9's on the Basic Stage. These include 7 officers of the Regular Army, 2 foreign officers, 178 flying cadets, and 2 cadets from the Philippine Army.

"A" Stage now boasts of eight flights, with a total of 63 instructors on duty and several more in the process of going through the Instructors' School. In addition to the 63 instructors, each flight is commanded by a Flight Commander. Captain James W. Andrew was named Stage Commander, replacing Major John R. Glascock, who was transferred to Chanute Field, Rantoul, Ill. Captains Charles A. Harrington and Emmett F. Yost are Assistant Stage Commanders. The Basic Stage is commanded by Captain Bernard A. Bridget, with Captain Roger M. Ramey as assistant.

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COMMERCIAL PILOTS TRAIN ON PT-13'S

Twenty-two Reserve officers, non-graduates of the Air Corps Training Center, reported at Randolph Field for a special refresher course which, if completed, will enable them to go on extended active duty with tactical organizations. These Refreshers are all commercial pilots, the average flying time of the twenty-two being 1410 hours prior to reporting at the Training Center. Many of them have considerable experience on BT-9's which they received at Reserve bases.

Approximately 50 hours per day are being flown by the students, and eight instructors are assigned to this special flight. The News Letter Correspondent expressed the hope that the majority of these student pilots would be qualified for transfer to the Basic Stage before the regular class started on October 21st. The present schedule calls for about ten days' training on the Primary Stage, advancement to the Basic Stage being made on a proficiency basis.

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NEW CLASS REPORTS AT ADVANCED FLYING SCHOOL

Class No. 39-A reported at Kelly Field, Texas, on October 8th, to complete its instruction at the Air Corps Training Center. This class, the largest yet to be sent to the Advanced Flying School, consists of 176 students, four of whom are Regular Army officers, six National Guard officers, and the remaining 166 are flying cadets. Of this number, 46 have been assigned to the Attack Section, 40 to Bombardment, 24 to Observation and 66 to Pursuit for specialized training.

Of the 36 States, including the District of Columbia, having members in this class, Texas (with 27 students) again has the largest representation. Following in close succession are Illinois with 13, Ohio, 11; California and West Virginia, 10 each; Oklahoma, 9; New York and Pennsylvania, 8 each; Kansas, 7; Arkansas and Iowa, 6 each; Kentucky and Virginia, 5 each; Georgia, Michigan, Mississippi and Nebraska, 4 each; Alabama, Louisiana, Massachusetts and Minnesota, 3 each; Florida, New Mexico, North Dakota, Tennessee and Wisconsin, 2 each; and Arizona, District of Columbia, Indiana, Maine, Montana, New Jersey, North Carolina, South Carolina and South Dakota, one each.

Twenty-four of the flying cadets in this class already hold Reserve commissions in branches of the Army other than the Air Corps, but will vacate these upon the completion of the course of instruction to accept, with the other graduates, commissions in the Air Corps Reserve.

The following statistics may be of interest: Five sons of Army officers are members of the Class, namely: Flying Cadet John H. de Russey, son of Major Rene E. de Russey, Q.M.C.; Flying Cadet Clarence L. Tinker, Jr., son of Colonel Clarence L. Tinker, Air Corps; Flying Cadet Paul M. Brewer, Jr., son of Captain Paul M. Brewer, Infantry Reserve; Flying Cadet Woodrow B. Wilmot, son of Major C.M. Wilmot, Medical Reserve; and Flying Cadet Harold C. Smelder, son of 1st Lieut. Laurence B. Smelser, Infantry Reserve.

Although the range of ages of the flying cadets includes the minimum and maximum limits for eligibility, it has been found that the average age of cadets in this class is 23 years and 8 months. Extremes in height vary from 5 ft. 4 in. to 6 ft. 3 in.

The actual flying training commenced on October 17th.

The roster of the class follows:

REGULAR ARMY OFFICERS

Nall, Eugene *	Cav.	Atmore, Ala.
Kelly, Colin P., Jr. **	Inf.	Madison, Fla.
Broadhurst, Edwin B. **	F.A.	Smithfield, N.C.
Sebastian, Henry A. *	Inf.	Gainesville, Tex.

* 1st Lieut.; ** 2nd Lieut.

All these officers specialize in Bombardment

NATIONAL GUARD OFFICERS - 2ND LIEUTENANTS

Railsback, John Benjamin	Moline, Ill.
Hughes, Robert Jerome	University City, Mo.
Huston, Vincent George	Philadelphia, Pa.
Dunning, John Affleck	San Antonio, Texas
Cantrell, Raymond Lee	Spokane, Wash.
Jones, Robert Lee	Spokane, Wash.

All of these officers are specializing in Observation Aviation and are members of Air Corps National Guard units of the States as hereinafter indicated, viz: Lieuts. Huston and Railsback, Pennsylvania; Dunning and Hughes, Missouri; Cantrell and Jones, Washington.

FLYING CADETS

Ellison, Holden Fowler	A	Altoona, Ala.
Yarbrough, Eugene Terry	A	Guntersville, Ala.
Gray, Leon Welton	P	Tucson, Ariz.
Breckenridge, John P.	A	Paragould, Ark.
Chaffin, Harold Newt	B	Fort Smith, Ark.
Fletcher, Thomas, Jr.	O	Scott, Ark.
Galusha, Harry Leslie	A	Little Rock, Ark.
Sheffield, Charles Paul	B	Mt. Ida, Ark.
Terry, David Dickson, Jr.	A	Little Rock, Ark.
Edwards, Albert B., Jr.	O	Berkeley, Calif.
Ford, Ernest Gordon	B	Pacific Beach, Calif.
Gilmore, Jean Dowell	A	Anderson, Calif.
Hall, Byron Eugene	A	Campbell, Calif.
Lanford, Wm. Archibald	A	Wood Lake, Calif.
McCauley, Clarence V.	B	Armona, Calif.
Oliver, Ralph Lorimer	A	Palo Alto, Calif.
Parker, Kingsbury E., Jr.	P	San Francisco, Cal.
Smith, Weldon Halliwell	A	Berkeley, Calif.
Wilson, Harold Fred'k	B	Los Angeles, Calif.
deRussy, John Huie	A	Washington, D.C.
Manson, Hugh Boyd, Jr.	B	Jacksonville, Fla.
Babb, Harold Thaddeus	O	Dalton, Ga.
Carmack, John Edgar	A	Decatur, Ga.
Holbrook, Thomas Harber	O	Commerce, Ga.
Turner, Sullins Preston	P	Atlanta, Ga.
Allen, Frank	A	Chicago, Ill.
Cellini, Oliver George	P	Chicago, Ill.
Jarek, Frank William	O	Chicago, Ill.
Schwind, Burton Eugene	B	Chicago, Ill.
Setchell, James Fred'k	O	Chicago, Ill.
Swanson, William Howard	P	Chicago, Ill.
Petry, Robert Gregory	A	Champaign, Ill.
Waller, William III	P	Chicago, Ill.
Wilmot, Woodrow Burton	P	Dunlap, Ill.
Holt, Harry Joseph	A	Great Lakes, Ill.
Wiltjer, Clarence P.	O	Watseka, Ill.
Peffer, David McNair	B	W. Lafayette, Ind.
Beightol, Willis Eugege	P	Webster City, Iowa
Holsteen, Theodore F.	B	Burlington, Iowa
Lewis, Dwight Francis	A	Corning, Iowa
Neely, Clarence Arthur	B	Ames, Iowa
Price, Bruce Burns	B	Sac City, Iowa
Van der Zee, John Jacob	B	Iowa City, Iowa
Berry, James Dean	P	Gridley, Kans.
Coyle, Lawrence Wm.	A	Coffeyville, Kans.
Humfeld, Harold Emmett	O	Anthony, Kans.
Mayden, James Daniel	P	Junction City, Kans.
Thornbrough, George W.	A	Lakin, Kans.
McNay, Joe Kenneth	P	Louisville, Kans.
Moore, Paul L.G.	P	Wichita, Kans.
Crouch, Robert Edward	B	Mt. Washington, Ky.
Fields, James Robert	P	Danville, Ky.
Hooks, Ferrell Douglas	B	Lamasco, Ky.

Howard, James Alva	P	Bowling Green, Ky.	Banks, Wilson Harper	B	Brownfield, Texas
Wright, Adolf Milton	O	Louisville, Ky.	Faulkner, Cecil Lee	P	Bellevue, Texas
Barrow, Leonard J., Jr.	A	New Iberia, La.	Locke, Cecil James, Jr.	A	Austin, Texas
Hardy, Otha B., Jr.	P	New Iberia, La.	Strickland, Eugene L.	P	Arlington, Texas
Stansbury, Wm. G.	B	Iota, La.	Gayle, Charles Afton	P	Bellaire, Texas
Bourgoin, Raoul Jos.	P	Frenchville, Me.	Henry, John Bailey, Jr.	P	Charlotte, Texas
Draper, Harry Engman	P	Boston, Mass.	Crabtree, Martin F.	A	Decatur, Texas
Philbrick, Fred'k Neil	A	Brookline, Mass.	Sneed, Charles Roy	A	Evant, Texas
Schofield, Parker F.	B	Malden, Mass.	Bond, Charlie R., Jr.	P	Dallas, Texas
Barnett, James Alex	P	Detroit, Mich.	Barksdale, Ralph A.	B	Gainesville, Texas
Birchard, Glen R.	A	Bay City, Mich.	Riddle, Kyle Loyd	P	Decatur, Texas
Bruce, James R., Jr.	P	Saginaw, Mich.	Bogan, Charles Wm.	B	McLean, Texas
McClure, Wm. Allen	A	Royal Oak, Mich.	Jenkins, Jack Simmons	A	Levelland, Texas
Dougherty, John Eugene	B	Minneapolis, Minn.	Lane, William, Jr.	A	Marshall, Texas
Evans, John Scrimgeour	P	St. Paul, Minn.	Jenkins, Harry Albert	P	Montalba, Texas
Randall, Heman W., Jr.	P	St. Paul, Minn.	Dunn, Frank Lowry	A	San Antonio, Texas
Compton, Keith Karl	A	St. Joseph, Mo.	Gimble, Sidney B., Jr.	O	San Antonio, Texas
McKee, Seth Jefferson	A	Illmo, Mo.	Schriever, Gerhard J.	P	San Antonio, Texas
Mueller, Robert Burl	P	St. Joseph, Mo.	Glober, George Edward	B	San Angelo, Texas
Armstrong, George H.	P	Billings, Mont.	King, Henry Preston	A	San Marcos, Texas
Bloszies, Raymond Fred	A	Omaha, Nebr.	Hubbard, Wm. Edward II	A	Sweetwater, Texas
Gutru, George H., Jr.	A	Newman Grove, Nebr.	Barksdale, Wm. S., Jr.	A	Randolph, Va.
Morrissey, Robert L.	P	Tecumseh, Nebr.	Garrett, Skidmore Neal P	P	Cumberland, Va.
Romberg, Edgar Allen	P	Lincoln, Nebr.	Mathewson, Philip L.	A	Richmond, Va.
Dechaene, Andre J.	O	Elizabeth, N.J.	Tinker, Clarence L., Jr.	P	Arlington, Va.
Harman, Harold M.	B	Grants, N.M.	Van Auker, Robert D.	P	Fort Belvoir, Va.
Spencer, Truman A., Jr.	B	Carrizozo, N.M.	Gustafson, Roy Wm.	O	Seattle, Wash.
Doerr, John Joseph	B	Poughkeepsie, N.Y.	Momyer, Wm. Wallace	P	Seattle, Wash.
Fendrich, Charles N.	P	Staten Island, N.Y.	Gilles, Virgil Monroe	P	Shinnston, W. Va.
Heber, Malcolm McM.	B	White Plains, N.Y.	Hindson, Wm. Simms	A	Oak Hill, W. Va.
O'Neill, Brian	B	Yonkers, N.Y.	Marcum, Jake McD., Jr.	P	Hamlin, W. Va.
Rouse, John Albert	O	Rochester, N.Y.	Marshall, Charles S.	O	Grafton, W. Va.
Rudell, Raymond Frank	P	Buffalo, N.Y.	Moore, Archibald W.	P	Huntington, W. Va.
Saunders, Jack Wm.	A	Athens, N.Y.	Murrell, Carrell T.	P	Barrackville, W. Va.
Schroeck, Franklin E.	O	Buffalo, N.Y.	Smith, Thomas Cullen	P	Marlinton, W. Va.
Busse, Raymond Joseph	B	Glenburn, N.D.	Weltman, John Wm.	P	Rowlesburg, W. Va.
Skow, Delmer Norris	P	Devils Lake, N.D.	Whiteman, Harold J	P	Salem, W. Va.
Brownwell, John L.	P	Bexley, Ohio	Wood, Curtis Edward	P	Huntington, W. Va.
DeBolt, Arthur Ray	P	Columbus, Ohio	Wrigglesworth, Wm. J.	A	Eau Claire, Wis.
Gould, Campbell H.	B	Toledo, Ohio	Busch, Chester Chas.	B	Kenosha, Wis.
Grambo, Frederick C.	P	Cleveland Hts., Ohio	Stinson, William E.	A	Benton, La.
Keiser, Donald McKay	B	McComb, Ohio	Potter, Philip Orville	A	Sao Paulo, Brazil
McNeal, Thomas Carl	B	Cleveland, Ohio			
Newman, Neil Arnold	P	Lakewood, Ohio			
Opeil, Charles Martin	P	Cleveland, Ohio			
Rowland, Robert R.	P	Lodi, Ohio			
Spurgeon, Raymond R.	P	Cincinnati, Ohio			
Tucker, Theodore W.	O	Cleveland Hts., Ohio			
Brewer, Paul M., Jr.	P	Oklahoma City, Okla.			
Carter, Roy Milton	O	Britton, Okla.			
Dick, Newton Robert	P	Tulsa, Okla.			
Jackson, J. Garrett	P	Altus, Okla.			
Johnson, James Allison	A	Wagoner, Okla.			
Storm, Leonard Boston	P	Norman, Okla.			
Summers, Thomas B.	P	Weatherford, Okla.			
Von Tungen, Herbert A.	A	Norman, Okla.			
Willis, Harold	A	Asher, Okla.			
Worley, Earl Wilson	B	Littlestown, Pa.			
Stiles, Joseph Erhart	B	Red Lion, Pa.			
Aylesworth, Theo. R.	B	Knoxville, Pa.			
Baseler, Robert Lee	P	Ardmore, Pa.			
Clark, Eugene Louis	P	Clairton, Pa.			
Giannatti, James	A	Uniontown, Pa.			
Teats, Edward Charles	A	Pittsburgh, Pa.			
Roberts, Wagner E.	P	Hartsville, S.C.			
Veatch, Bernard W.	O	Conde, S.D.			
Chiles, Clarence S.	B	Corryton, Tenn.			
Smelser, Harold C.	B	Nashville, Tenn.			
Camp, Marshall Pyron	P	Arlington, Texas			
Morgan, Maurice Allen	B	Austin, Texas			
Smith, Joseph Columbus	P	Brownsville, Texas			

Note: A - Attack Aviation
 B - Bombardment Aviation
 O - Observation Aviation
 P - Pursuit Aviation

Among the students listed above who hold commissions in the Reserve of other branches of the Service, the following are listed below:

Infantry

1st Lieuts. Cellini, Fendrich.
 2nd Lieuts. Busch, Ford, Gould, McCauley, McNay, Riddle, Weltman, Worley.

Cavalry

1st Lieut. Harman
 2nd Lieuts. Thornbrough, Wrigglesworth.

Field Artillery

1st Lieuts. Fletcher, Von Tungen
 2nd Lieuts. Garrett, Neely, Rowland, Schroeck, Schwind.

Coast Artillery

2nd Lieuts. Barksdale, Wm. S., Jr.; Dick, Mayden, Teats.

The class listed above constitutes approximately 50% of the number which began training at Randolph Field in March, 1938.

NEW BRAKE TEST EQUIPMENT

By Marguerite Jacobs Heron

The old balloon hangar at Wright Field, which for some years has been used for storage purposes, is about to retrieve its importance and assume the status of a testing laboratory. This change is the result of the delivery at Wright Field of certain mammoth machinery known as "Inertia Brake Testing Equipment," and the balloon hangar is undergoing interior modifications to prepare for its installation and the type of test work henceforth to be done there.

The new equipment, which was constructed by the Adamson Machine Company of Akron, Ohio, to Air Corps specifications, consists of two testing machines, the combined weight of which is 110 tons. The purpose of the equipment is the dynamic testing of brakes, wheels, and tires under conditions duplicating those encountered in all varieties of actual airplane landings. On the smaller machine will be mounted for testing 21 to 44-inch wheels; on the other, 44-inch and larger.

Each machine consists principally of a flywheel, driven by an electric motor, a spindle upon which the airplane wheel to be tested is mounted, a large air pressure cylinder for actuating the spindle, a large operating and instrument recording panel. When the flywheel, which in the larger machine weighs 55 tons and has a diameter of 120 inches, is set revolving, the spindle, with the wheel mounted, by means of air pressure from the cylinder located aloft, is moved toward the revolving flywheel so that the airplane tire is brought to bear against it. The contact sets the airplane wheel and tire revolving. Brake pressure is then hydraulically applied by means of fluid forced into the brake mechanism by a hydraulic pump.

The flywheel revolving at a speed approximating 80 m.p.h. stores up 11,000,000 foot-pounds of kinetic energy. When the brake is applied this energy is transformed to heat energy in the brake and brake drums. The amount of brake torque resulting from deceleration of the flywheel mass is transmitted hydraulically and graphically recorded by an instrument on the instrument panel. The hydraulic pressure required to operate the brake, and the r.p.m. of the moving flywheel are simultaneously recorded graphically on two other instruments on the panel, so that complete records of the test process and reactions are obtained. The amount of time consumed in bringing the moving masses to a stop by the brake mechanisms, and the resulting effect upon the tire, wheel, and brake equipment form the principal test information sought. The peripheral speed of the flywheel in these tests represents the speed of the airplane in relation to

the ground. The airplane wheel, therefore, when it comes in contact with the revolving flywheel, is set in motion in the same manner as it would be on contact with the ground in landing. The brake mechanisms also function as they would in a ground landing. The revolutions of the flywheel may be set to simulate the landing speed of any type or model of airplane. The length of time properly required by the brake to stop the moving mass is known. If the brake under test accomplishes its task in from 10 to 13 seconds, and accomplishes it repeatedly without failure or breakdown of the brake mechanism, it is proved to be satisfactory equipment.

Similar but smaller equipment is used in testing locomotive and automotive braking mechanisms. These Inertia Brake Testing Machines, however, are the only ones of their kind in existence.

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RETIREMENT OF COLONEL SNEED

Colonel Albert L. Sneed, a ranking executive at Maxwell Field, Montgomery, Ala., since his arrival there on July 14, 1937, and who has been serving as Acting Commandant of the Air Corps Tactical School since the transfer two months ago of Brigadier General Henry C. Pratt to Fort William McKinley in the Philippines, will retire from active service with the U. S. Army Air Corps on December 31st, next. Colonel Sneed, who has had thirty years' service with the Army since his graduation from the United States Military Academy, West Point, N. Y., in 1908, left Maxwell Field on October 1st on a leave of absence.

By virtue of his rank, Colonel John H. Pirie, Air Corps, transferred to Maxwell Field from March Field, Calif., several weeks ago, will succeed Colonel Sneed as Acting Commandant of the Tactical School. Colonel Pirie, one of the Air Corps' higher authorities on aeronautical tactics and development, also is director of the Air Corps Board. This Board, designed to study new developments in aeronautics and to promote and instigate research work in that field, was reorganized by the War Department in December, 1934. Maxwell Field was at that time chosen for the headquarters of this Board, and the members thereof were assigned to full time duty in conducting its affairs.

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Major Charles A. Pursley, Air Corps, received temporary appointment to the grade of Lieut. Colonel, October 8, 1938.

V-7879, A. C.

TORNADO NEAR RANDOLPH FIELD

Tornadoes do occur in the vicinity of Randolph Field, Texas. The questioning of oldtimers has revealed that a small tornado occurred during the construction of the field, but that the damages resulting therefrom were very slight.

On September 7, 1938, alert weather men were surprised to see a dark funnel extending downward from a thunderstorm cloud about three miles northwest of Randolph Field. The dark vortex bored its way downward and reached the ground in the vicinity of Converse, a small town three miles northwest of Randolph Field, pulled up about two acres of cotton and, as one man put it, "It was raining cotton all around." The entire phenomenon lasted about five minutes.

Flying Cadet Fendrich made an enviable record in the weather course - he achieved the notable feat of taking photographs of this brief prank of nature.

A 20-hour course in weather is being offered for the first time to the Reserve officers assigned to Randolph Field for refresher training. Since this course is given between regular student classes, flying instructors have been invited to attend, this being the first opportunity for many of them to attend the modern course in "Air Mass Analysis."

Several of the Post Weather Office personnel are increasing their knowledge of meteorology twofold by attending classes at St. Mary's University, San Antonio, Texas, and acquiring the fundamentals of meteorology, physics and algebra.

Corporal A.W. Throgmorton, formerly of the Post Weather Office, reports a very instructive course at the Weather School at Patterson Field, Fairfield, Ohio, which he is now attending. Prior to his attendance at this school, he pursued a three-weeks' course in teletype maintenance, given by the Teletype Company at Chicago, Ill.

The assignment of two of the enlisted weather forecasters on flying status has filled a long-felt need. These flights are being scheduled to make weather predictions more accurate. It is felt that pilots will have more confidence in the men who have actually seen flying weather.

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Captain Charles G. Brenneman, Air Corps, was placed on the retired list, effective October 31, 1938, for disability incident to the service.

Master Sergeant Arthur C. Foster, of the Headquarters and Headquarters Squadron, Air Corps Advanced Flying School, Kelly Field, Texas, was placed on the retired list at that field, effective October 31, 1938.

OFFICERS OF OTHER BRANCHES FAMILIARIZE THEMSELVES WITH AIR CORPS FUNCTIONS

In order to familiarize other personnel of the Army with the function and operation of the Air Corps, eight officers of other branches of the service were slated to arrive at Hamilton Field, Calif., to undergo instruction for a period of two weeks in Meteorology, Operations and Dispatching, and to observe the working of the Photographic and Parachute Departments.

These officers are Major Walter A. Dumas, Infantry, from the 9th Corps Area Headquarters, Presidio of San Francisco, Calif.; Captain William G. Holder, 1st Lieuts. Joe C. Rast, John E. Metzler and 2nd Lieut. Iver A. Peterson, all Coast Artillery and from Fort Winfield Scott, Calif.; and 1st Lieut. Robert L. Love, 2nd Lieuts. Leon J.P. Rouge and John A. Norris, all Infantry, from the Presidio of San Francisco.

Although none of the officers were to be required to fly, permission was to be accorded them to accompany different flights on photographic, bombing and reconnaissance missions.

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COMMENDATION FOR AIR CORPS ENLISTED MAN

In a letter to the Commanding Officer of the 4th Air Base Squadron, March Field, Calif., 1st Lieut. W.G. Carter, Air Reserve, 9th Bombardment Squadron, Hamilton Field, Calif., writes as follows:

"During our stay at March Field, September 16-20, 1938, we received splendid service from all technical maintenance and supply departments, and I wish especially to commend the work of Sgt. David F. Miller.

Serious leakage of oil from both engines on BG-17 caused an unusual job of 'Trouble-Shooting,' during which the assistance rendered by Sgt. Miller was outstandingly noticeable for the efficiency and willingness with which it was given.

This is the second time this man's work has come to my attention, and in each case he gave a demonstration of steady, energetic skill and resourcefulness which expedited the job to an extent plainly apparent to any observer. He headed the crew that brought an engine to my disabled B-12 at Lordsburg, New Mexico, several months ago, and performed an engine change in the manner stated, under difficult circumstances.

I feel it is not amiss that his noticeably good performance be brought to the attention of his Commander."

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Captain Edgar T. Selzer, Air Corps, received a temporary appointment to the grade of Major, effective October 16, '38.

V-7879, A.C.

STATION ASSIGNMENTS OF GRADUATES OF AIR CORPS TRAINING CENTER

The 80 Flying Cadets who graduated from the Advanced Flying School, Kelly Field, Texas, October 5, 1938, and who have been commissioned second lieutenants in the Air Corps Reserve, have been assigned to extended active duty at the Air Corps stations indicated below, viz:

To the Hawaiian Department:

Ferry Sherman Cole
Rudolph Emil Flack
Ronald Dean Hubbard
Arnold Frederick Adolph Kluever
Gladwyn Earl Pinkston
Robert Sidney Quinn
John Alva Roberts, Jr.
Gerald Graham Robinson
Raymond Paul Salzarulo
Walter William Sparks, Jr.
James Fred Starkey
Robert Hartwell Stuart
Joseph Charles Tuell
Ira Francis Wintermute

To Fort Lewis, Wash.:

Rowland Wells Hopper
Reesor Mott Lawrence

To Fort Riley, Kansas:

Houston Walker Longino, Jr.
Charles Lewis Nothstein

To Langley Field, Va.:

Forrest Houston Baxter
Harry J. Bullis
Charles Marion Eisenhart
Francis Robert Feeney
Willard Asa Fountain
Philip Henry Greasley
John Patrick Healy
Elton Earl Holcombe
Glenn Elwood Hubbard
William Elza McEntire
Frank Edwin O'Brien
Guy Hamilton Rockey
Paul Schwartz
Eriksen Emerson Shilling
Van Hatton Slayden
William Alexander Sullivan, Jr.
Ozburn Early Taylor
Arthur James Walker
Sam Wilkins Westbrook

To March Field, Calif.:

Jack Adams
Walter Erath Arnold, Jr.
William John Bohnaker
Robert Vernon DeShazo
Edwin Smith Green
Frederick James Knorre, Jr.
James Robert Lindsay
Charles Albert Nisbett
Sig Rodgers Young

To Mitchel Field, N.Y.:

Thomas Philip Bacon
Richard Murray Bylander
Edward Richard Casey
Huntington Kerr Gilbert
McHenry Hamilton, Jr.
Allen Moore Howery
John Max Knox
Frank Joseph McGinity
Robert Ross McKeechle
John Douglas Madre

To Mitchel Field, N.Y.:

Ernest Roderic Manierre
Joe Lennard Mason
John Peebles Proctor
LaRoy Len Stefonowicz
John Lynn Sullivan
Wayne Earl Thurman
Raymond Frederick Toliver
Samuel Bey Wiper
Paul John Yurkanis

To Moffett Field, Calif.:

Duane Louis Kime
Leland Stanford McGowan

To Hamilton Field, Calif.:

John Noble Carlton
William Hubbert Cleveland
Harold Douglas Courtney
John William Osborn
William Jesse Prichard
Frank Douglas Sharp
Horace Milton Wade

To Selfridge Field, Mich.:

Brewster Ward

To Scott Field, Ill.:

Harry Taylor Eidson
Maurice Joseph Fitzgerald
Oscar Allen Heinlein

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RANDOLPH FIELD NONCOMS. HOLD SMOKER

The Noncommissioned Officers' Club, Randolph Field, Texas, held its monthly smoker in the form of a "Dutch Lunch" in the west club building on Thursday, October 13th. These smokers have gained popularity among the membership of the Club to the extent that the present club building does not meet the requirements for such activities. The Club's present membership, although not compulsory among the noncommissioned officers of the command, boasts of more than 200 members.

Many of the newly appointed noncommissioned officers who have become members of the Club made their initial visit to it on the night of the smoker. They were welcomed by the President, Master Sergeant Brainard D. Booth, who officiated as master of ceremonies. The entertainment committee justified their offices in true Army form and made the evening very enjoyable.

It is difficult to estimate the true value derived by all from this organization of noncommissioned officers in social activities, but it is obvious that it tends to increase the morale and good fellowship of the command. There were yarns of away back, when the "Jenny" and the "DH" were "it" - yarns of the days when we all choked on that standing collar, and parachutes were not in general use. "These reminiscences of the evening are enjoyed by all, for tomorrow we return to the modern Air Corps and equipment, and carry on to yet higher

(Continued on Page 14)

13TH ATTACK SQDN. IN FT. BRAGG MANEUVERS

Early on the morning of October 1st, the 13th Attack Squadron, composed of 25 A-17A Attack airplanes, commanded by Major Aubrey C. Strickland, Air Corps, departed in formation from Barksdale Field, La., for Langley Field, Va., to participate in the joint anti-aircraft-General Headquarters Air Force Maneuvers at Fort Bragg, N.C. The Squadron arrived at Langley Field at 5:00 p.m., having made one stop enroute at Atlanta, Ga.

A number of interesting dawn and night attack missions were conducted during the exercise, some in support of Bombardment Aviation, and several independent Attack missions. These exercises afforded an excellent opportunity for the study of existing methods of attack, development of new methods and the further training of personnel in this type of flying. Several of these missions were carried out under weather conditions unfavorable to flying but favorable to concealment, and the effects of varying conditions of visibility on both the hostile (Blue) defensive forces and friendly (Black) offensive air force were such as to merit further study.

The officers of this Squadron with those of other visiting organizations were entertained at a dinner dance at the Langley Field Officers' Club on the night of October 8th. An excellent mess was served visiting organizations by the 1st Air Base Squadron, and comfortable quarters were provided the 13th Attack Squadron by the 35th Pursuit Squadron.

The Squadron departed from Langley Field on October 16th, taking off by elements and climbing through a low overcast. Assembly was effected enroute, and excellent time was made on the return trip. One stop was made at Maxwell Field, where efficient ground personnel completed refueling operations in a remarkably short time.

The News Letter Correspondent expresses his belief that, from the standpoint of Attack Aviation, many valuable lessons were learned from these exercises and that the training afforded in conjunction with Bombardment, Pursuit and anti-aircraft forces was invaluable.

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COOPERATIVE MISSIONS BY 90TH ATTACK SQDN.

The major portion of the month of October was spent by the 90th Attack Squadron in preparing and participating in the cooperative missions with ground forces conducted for the Command and General Staff School of Fort Leavenworth, Kansas. The base of operations was at Fort Riley, Kansas. A flight of 9 A-17A's, led by Major Paul L. Williams, Air Corps, Commanding Officer, left Barksdale Field, La., on October 15th, for Fort Riley. Ten more A-17A's joined

the first flight on October 20th to participate in the GHQ Air Force demonstration held there.

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P-36A's BEGIN ARRIVING AT BARKSDALE

Almost every day now, pilots of the 20th Pursuit Group, Barksdale Field, La., are leaving for Buffalo, N.Y., the home of the Curtiss aircraft factory, to ferry back the long awaited P-36A's. Each Squadron of the Group has three airplanes now and hopes to have more in a few days. Every pilot in the Group who has been checked off in the new ship seems to be very enthusiastic about it. A series of tests are being prepared for this airplane to determine its fuel consumption and general performance for tactical use.

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LUKE TROPHY GOES TO 77TH PURSUIT SQDN.

The 77th Pursuit Squadron, stationed at Barksdale Field, La., proudly claims acceptance of the Frank Luke Memorial Award for the second consecutive year. This coveted Trophy is awarded annually to the GHQ Air Force Pursuit unit scoring highest in aerial gunnery training.

Brigadier General Frederick L. Martin, Commanding General of the Third Wing, will formally present the Trophy to the 77th Pursuit Squadron on November 5, 1938.

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Smoker by Randolph Field Noncom. Officers (Continued from Page 13).

standards of this branch in which we have all grown from recruits to old soldiers," is the way one veteran non-commissioned officer summed up the evening.

Noncommissioned officers of other stations are cordially invited to partake of the hospitality of this Club while sojourning Randolph way.

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BOLLING FIELD OFFICERS FLY IN "DST" PLANE

Lieut. Colonel Floyd E. Galloway, Commanding Officer of Bolling Field, D.C., and a number of other officers of the post had an opportunity on October 20th to fly in the latest "DST" sleeper transport, built by Douglas and flown on American Airlines on the transcontinental service. The occasion was the demonstration of the new Sperry-RCA Automatic Direction Finder.

Several officers from the Office of the Chief of the Air Corps, Washington, D.C., also flew in the "DST" which is the largest commercial airplane in regular service in the country.

NEW COMMANDER FOR MAXWELL FIELD

Colonel John H. Pirie, Air Corps, who came to Montgomery, Ala., recently from March Field, Calif., assumed command of Maxwell Field, Ala., on October 4, 1938, and became Acting Commandant of the Air Corps Tactical School, replacing Colonel Albert L. Sneed, Air Corps, who, scheduled to retire from active service on December 31, 1938, returned to his home in the vicinity of San Francisco, Calif.

As a token of their esteem, the officers at Maxwell Field presented Colonel Sneed with a golf bag when bidding him goodbye. Colonel Sneed had been among the most popular officials at Maxwell Field since his arrival there on July 14, 1937.

Colonel Pirie, in addition to being Commanding Officer of Maxwell Field, is head of the important Air Corps Board, a group of ranking officers with authority to promote and instigate research into aviation problems and to study developments in this field as they occur.

While expressing regret over the retirement of Colonel Sneed, the Tactical School personnel joined in welcoming the return thereto of Major W.W. Welsh, following his recovery from an illness which confined him at the Army and Navy General Hospital, Hot Springs, Ark., for two months. Major Welsh will resume the duties of Adjutant of the Tactical School, with Lieut. D.B. Schanep as assistant.

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RECENT CLIPPER TALE BELIEVED FALSE ALARM

Manila papers recently devoted much space to reports from Filipino citizens living along the west coast of the Island of Samar that the "Hawaiian Clipper" was sighted, in flames, and that it crashed into the sea in that vicinity on July 29th. It is thought, however, that the plane which the natives sighted was the Nichols Field Amphibian piloted by 1st Lieut. Ralph O. Brownfield, who was assigned the coastal regions of Samar as part of the area to be covered by him in the extensive search which was then being conducted by six airplanes from Nichols and Clark Fields, as well as by airplanes dispatched by the Navy.

Lieut. Brownfield stated that many of the recent reports from Samar coincide with his movements on that date, in that he put the "Duck" down during the afternoon of July 30th in the region described by the reports, which was between the Tagapulan and Destacado Islands. He also stated that he flew through a cloud bank before landing, and that the "black smoke" described in the reports might have been from the exhaust of his plane which emits heavy vapor when the engine is "gunned" just before landing.

INTERCEPTION PROBLEM BY 5TH BOMB. GROUP

On September 29th, the 5th Bombardment Group, Luke Field, T.H., performed another interception on the U.S. Army Transport REPUBLIC, when the vessel was some 24 hours out of Honolulu. Departing from Makapuu Head at 1106, the Group, flying B-18 planes and led by Major John I. Moore, proceeded on a northeasterly course and intercepted the transport on schedule at 1319 $\frac{1}{2}$ at a distance of 329 nautical miles from Oahu. The flight was made over scattered to broken clouds at an average altitude of 8,000 feet. Lieut. Colonel Robert C. Candee, commanding the 18th Wing, accompanied the formation.

After passing over the vessel in salute, the Group returned to Oahu, the squadrons performing individual navigation. The landing at Hickam Field was made at 1600, after an uneventful but extremely valuable training mission.

On board the transport REPUBLIC was Brigadier General Walter H. Frank, Air Corps, coming to Hawaii to assume command of the 18th Wing; Colonel Shepler W. FitzGerald, Air Corps, to assume command of Luke Field and the 5th Bombardment Group; and Lieut. Colonel William E. Lynd, Air Corps, to take over the command of the 18th Pursuit Group.

Messages were exchanged between Colonel Candee and General Frank shortly after the formation departed from the transport enroute to Oahu.

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COOPERATIVE MISSION BY 2ND OBS. SQUADRON

The 2nd Observation Squadron of the 4th Composite Group, Nichols Field, P.I., recently conducted cooperative training missions with the 60th Coast Artillery regiment, stationed at Fort Mills, Corregidor.

Two missions were carried out daily with anti-aircraft machine gun training. White sleeve targets, approximately 30 feet long and 12 feet in circumference, were towed by an Observation airplane. The targets were operated from a windlass reel located under the fuselage of the plane and extended about 800 feet, attached to a cable.

Approaching and parallel courses were flown. Upon the completion of each mission, the targets were released and dropped on the Fort Mills landing field for the purpose of affording the Coast Artillery personnel an opportunity to observe the maneuver. Communication was coordinated between the airplane flying the mission and the radio stations at Fort Mills and Nichols Field.

First Lieuts. Tom W. Scott, John O. Neal, Andrew Meulenber, Frederick E. Calhoun, 2nd Lieuts. James E. Gunn, Edward W. Maschmeyer and Joseph J. Nazarro participated in the missions. Private Lester E. Gates operated the tow targets.

STUDENTS GRADUATE FROM TECHNICAL SCHOOL

The academic section of the Chanute Field Branch of the Air Corps Technical School announces the graduation on October 7, 1938, of twelve students in the "Airplane Mechanics Course," and on October 21, 1938, of 48 students in the following courses: Radio Repairers and Operators, 22; Airplane Mechanics, 14; Aircraft Welders and Sheet Metal Workers, 12.

Of the twelve students who graduated on October 7th from the Airplane Mechanics Course, three are from Hamilton Field, Calif.; two from March Field, Calif.; and one each from Barksdale Field, La.; Air Corps Detachment, 5th Corps Area; Fort Knox, Ky.; Brooks Field, Texas; 7th Corps Area Air Corps Detachment; Chanute Field, Ill. One unassigned student has been ordered to duty with the Air Corps Detachment at East Boston, Mass.

Of the 48 students who graduated on October 21st, 8 Radio Repairers and Operators, 11 Airplane Mechanics and 8 Aircraft Welders and Sheet Metal Workers were unassigned. These were distributed to Air Corps stations, as follows:

Radio Repairers and Operators: Air Corps Detachment, Pittsburgh, Pa., 2; Lowry Field, Denver, Colo., 1; Hawaiian Department, 3; Chanute Field, 1.

Airplane Mechanics: Air Corps Detachment, West Point, N.Y., 1; Lowry Field, Denver, Colo., 1; Hawaiian Department, 2; Panama Canal Department, 3; Philippine Department, 2; Chanute Field, 2.

Aircraft Welders - Sheet Metal Workers: Lowry Field, 1; Post Field, Okla., 1; Kelly Field, Texas, 1; Fort Lewis, Wash., 1; Panama Canal Department, 3; Chanute Field, 1.

The graduates who came to the Technical School from various Air Corps stations are enumerated below, as follows:

Radio Repairers and Operators: Scott Field, Ill., 1; Barksdale Field, La., 5; Fort Lewis, 1; Chanute Field, 1; Hamilton Field, 3; Moffett Field, Calif., 1; Maxwell Field, Ala., 1; Bolling Field, D.C., 1.

Airplane Mechanics: Barksdale Field, 1; Fort Lewis, 1; March Field, Calif., 1.

Aircraft Welders - Sheet Metal Workers: Fort Lewis, 1; Maxwell Field, 1; March Field, 1; Kelly Field, 1.

On October 28, 1938, 44 Radio Operators and Repairers and 25 Airplane Mechanic students at the Air Corps Technical School, Chanute Field, were scheduled to start training in their new departments. These are the first students to complete the basic instruction course started this year. The addition of this new course has made it possible to increase the Airplane Mechanics course from 15 to 25 students and the Radio Repairers and Operators course from 30 to 44 students.

RANDOLPH FIELD ENGINEERING NOTES

With the completion of the training of the July Class of students at the Air Corps Primary Flying School, Randolph Field, Texas, came a 15-day lull in flying, which was very welcome, enabling the engineering department to catch up with its work. During this period, when the maintenance personnel of the school squadrons get a little vacation, the station engineering personnel are kept busy on the task of complying with technical changes which could not be made during the training period. The Air Corps shops make these changes and other repairs at this time, so that very little, if any, time is lost during the regular training period, when a maximum number of airplanes are required.

Randolph Field is confronted with a problem not present at any other Air Corps station, in that during the last portion of a class the majority of airplanes average from five to eight hours of flying daily, thus calling for many additional forty-hour inspections.

The Station Engineering Officer and Technical Inspector, Major W.M. Reid, being on leave, the duties of that department during the month of October fell on the shoulders of Captain H.W. Dorr who, in addition to these duties, is the Engineering Officer of the 11th Air Base Squadron and Shop Superintendent. He is assisted in the shops by Master Sergeant H.F. Carmean. The inspection staff consists of Master Sergeant Wallace (chief); Technical Sergeants Hohensee, Williams and Shaw; Staff Sergeants Griffin, Robinson, Hadley and Sobell. The Chief Clerk of the Station Engineering Department is Staff Sergeant A. Brown, whose assistant is Sergeant J.H. Carleton.

At this time there have been 46 sets of slot assembly, wing, leading edge, installed on the BT-9B series airplanes at Randolph Field. This installation was designed to overcome certain undesirable stalling characteristics of this type airplane.

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MORE LAND FOR RANDOLPH FIELD ACTIVITIES

An option has been secured by the Quartermaster at Randolph Field, Texas, Major Franklin D. Shawn, Q.M.C., for 25 acres of land, located $1\frac{1}{2}$ miles south of that field, on the Converse-Graytown Road, together with right-of-way thereto, for the erection of radio control towers and the necessary buildings. Funds for the purchase of this land were appropriated by Congress last year. No definite plans have been as yet formulated for the completion of this project.

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O B I T U A R I E S

The whole Air Corps was shocked and deeply grieved to learn of the death of Colonel Percy E. Van Nostrand, Air Corps, commanding officer of March Field, Calif., as the result of cardiac failure. Those who knew him well realized fully the ability and professional attainment of this popular officer, and his death leaves a gap which will be hard to fill.

Colonel Van Nostrand was born on August 6, 1887, at Washington, Iowa. He graduated in 1912 from the State University of Iowa, receiving an A.B. degree.

After serving as a commissioned officer in the Iowa National Guard Infantry from August, 1909, to February, 1913, he accepted a commission as second lieutenant in the Infantry, Regular Army, on March 3, 1913. He was promoted to 1st Lieutenant on July 1, 1916; to Captain on May 15, 1917; to Major, Signal Corps, October 23, 1917; to Major, Air Service, October 16, 1920; to Lieut. Colonel, Air Corps, August 1, 1935, and to Colonel (temporary) June 17, 1938.

During the World War, Colonel Van Nostrand was one of the early settlers at Kelly Field, Texas, and he was Adjutant of that post until May 14, 1918, when he was transferred to the Army Balloon School at Fort Omaha, Neb., for duty as a student. Upon the completion of the lighter-than-air course at that school he was, on August 15, 1918, rated as a Balloon Observer. He remained at Fort Omaha, serving as Executive Officer, until December 26, 1918, when he reported for duty as Executive Officer, Balloon and Airship Division, Office of the Director of Air Service, Washington, D.C. During his tour of duty in Washington, he served at various times as Acting Chief of the Balloon and Airship Division and was a member of several boards and committees, among them the Aeronautical Board and the Helium Board.

For several months during the latter part of 1921, Colonel Van Nostrand was on temporary duty in England in connection with the inspection of the Airship R-38. He was also on temporary duty in France and Germany in connection with airship activities. Shortly following his return to Washington, in October, 1921, he was temporarily assigned to duty at Langley Field, Va., as a student at the Airship School and, upon the completion of the course of instruction he was, on January 21, 1922, assigned as Acting Assistant Chief of the Lighter-than-Air branch of the Training and War Plans Division and Chief of the Schools Section, Office of the Chief of Air Service.

In November, 1922, Colonel Van Nostrand was assigned to duty as Army observer in connection with the airship ZR-1 at the

Naval Aircraft Factory at Philadelphia, Pa. In March, 1923, he was assigned to duty at the Naval Aircraft Station at Lakehurst, N.J., to take a rigid airship training course.

From March to July, 1924, he was on temporary duty at Brooks Field, Texas, and he was then transferred to the Advanced Flying School at Kelly Field, Texas, where he completed the course in advanced observation. During the two years following, he completed the course at the Air Corps Tactical School at Langley Field, Va., and the Command and General Staff School at Fort Leavenworth, Kansas.

Colonel Van Nostrand began his tour of foreign service in the Hawaiian Department in August, 1926, being on duty as Commanding Officer of Luke Field and the 5th Composite Group until August, 1929, when he returned to Langley Field for duty as Instructor at the Tactical School. In May, 1931, when the Tactical School was moved to Maxwell Field, Ala., he was in command of that post to August 11th of that year, and served temporarily as Acting Commandant of the Tactical School. Thereafter, until July, 1932, he was Executive Officer at Maxwell Field.

Upon his graduation from the Army War College in June, 1933, Colonel Van Nostrand was on duty for a year as Assistant Commandant of the Air Corps Technical School at Chanute Field, Rantoul, Ill. He then returned to Washington to pursue the one-year course of instruction at the Army Industrial College and, following his graduation therefrom in June, 1935, he was detailed as a member of the War Department General Staff. Three years later, in June, 1938, he was assigned to duty at March Field, Calif.

Funeral services for the deceased Air Corps officer were held at the Arlington National Cemetery on the morning of October 22nd, the following officers serving as honorary pallbearers: Colonels Rush B. Lincoln, H.H.C. Richards, Clarence L. Tinker, Lieut. Colonels M.F. Davis and H.M. McClelland, Air Corps, and Lieut. Colonel W.E. Shipp, Cavalry, General Staff Corps.

Major John H. Gardner, Air Corps, was the victim of a very distressing accident at Sherman Field, Fort Leavenworth, Kansas, on October 15, 1938. He was walking across the ramp preparatory to making a flight and, unaware of the approach of a BC airplane which was being slowly taxied in his direction, he was struck by the propeller. The pilot of the airplane did not see Major Gardner.

Of a pleasing personality and one

which inspired confidence, Major Gardner was held in high regard by his brother officers, and his death constitutes a distinct loss.

Born on May 30, 1896, at Alamo, Calif., he graduated in 1916 from the Mt. Tamalpais Military Academy, San Rafael, Calif., and then entered as student at the Leland Stanford, Jr. University at Palo Alto, Calif., which he attended for about six months when, on October 1, 1917, he enlisted as a Private, 1st Class, in the Aviation Section, Signal Corps.

Assigned as a student at the School of Military Aeronautics, Berkeley, Calif., from which he graduated in January, 1918, he was transferred to Kelly Field, Tex., for his flying training and, upon completion of same, was commissioned a Second Lieutenant on March 26, 1918, and assigned to active duty at Camp Dick, Dallas, Texas, as assistant to the Chief Wireless Instructor. The following month he was transferred to Taliaferro Field, Hicks, Texas, and he served as flying instructor at the Aerial Gunnery School thereat until September, 1918, when he was assigned to duty as Assistant Engineering Officer.

In September, 1919, Major Gardner was assigned as Engineering Officer of the 90th Aero Squadron at Sanderson, Texas, and he served with this organization until November 7, 1920, when he was transferred to Kelly Field, Texas, for duty as Chief, Airplane Division, Air Park Group.

On March 31, 1921, he reported at the Air Service Communications School at Post Field, Fort Sill, Okla., where he was on duty as a student for five months; in the Engineering Department for one month; as instructor and supply officer for five months and as commanding officer of the Post Field detachment at the San Antonio Air Depot for two months.

Assigned on June 25, 1922, to duty at Chanute Field, Rantoul, Ill., he was stationed thereat for slightly over a year, performing the duties of instructor at the Air Service Communications School and Property Officer.

In September, 1923, and for a period of four years thereafter, Major Gardner was stationed at France Field, Panama Canal Zone, and he served as Adjutant of the Post and later as Commanding Officer of the 6th Composite Group Headquarters and as Adjutant of the 24th Pursuit Squadron. He also performed squadron duty with the 25th Bombardment Squadron.

For a period of six years from October 1, 1927, Major Gardner was on duty at Nashville, Tenn., as Air Corps instructor of the 30th Division, Tennessee National Guard. During the school year 1933-1934, he was a student at the Air Corps Tactical School at Maxwell Field, Ala., and, following his graduation, he

was assigned to the Municipal Airport at Seattle, Wash., for duty with the Organized Reserves of the 9th Corps Area. He began his duty as a student at the Command and General Staff School at Fort Leavenworth, Kansas, in September, 1938.

Major Gardner was commissioned a Second Lieutenant in the Air Service, Regular Army, on July 1, 1920, and was promoted to First Lieutenant on the same date; to Captain, Air Corps, on November 1, 1931, and to Major (temporary) on June 16, 1936.

The Air Corps expresses its deep sympathy to the bereaved families of the deceased Air Corps officers.

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WAR DEPARTMENT SPECIAL ORDERS Changes of Station

Upon the completion of their tour of duty in the Hawaiian Department, the following-named Air Corps officers are assigned to stations, as follows:

To Chanute Field, Ill.: 2nd Lieut. Graeme S. Bond.

To Duncan Field, Texas: 2nd Lieut. Martin A. Bateman.

To Fort Bragg, N.C.: 1st Lieut. George F. Kehoe, to 16th Obs. Squadron.

To Maxwell Field, Ala.: 1st Lieuts. Leland S. Stranathan and Kenneth A. Rogers.

To Langley Field, Va.: 2nd Lieut. Joseph A. Thomas.

To March Field, Calif.: 2nd Lieut. James C. Cochran.

To Mitchel Field, N.Y.: 2nd Lieut. Earl E. Bates, Jr.; Captain Donald W. Titus and 1st Lieut. Maurice M. Simons, for duty with 97th Observation Squadron.

To Randolph Field, Texas: 2nd Lieut. Louis W. Proper.

The following-named officers were assigned to duty in the Hawaiian Department: Captain George R. Bienfang, from Barksdale Field, La.; 1st Lieuts. Gordon A. Blake, Chanute Field; Hugh F. McCaffery, Langley Field; Arno H. Luehman, March Field.

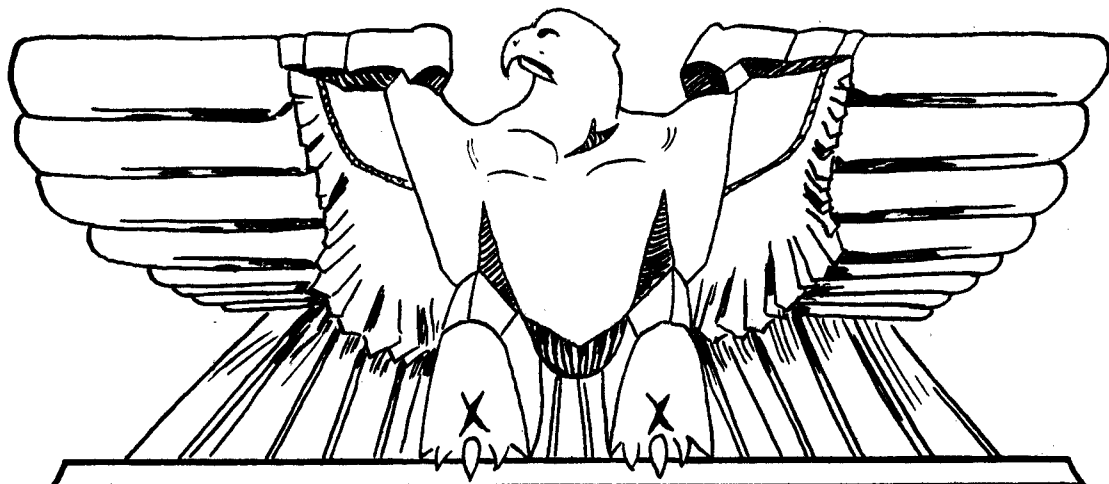
To Bolling Field, D.C.: 1st Lieut. Eugene H. Beebe, from Wright Field, O.

To Mitchel Field, N.Y.: 1st Lieut. Arthur A. Fickel, from Panama Canal Dept.

The following named Air Reserve officers have been assigned to extended active duty at the stations indicated: 2nd Lieut. Andrew Dale Moore, of Berwyn, Ill., to Selfridge Field, Mich., to November 1, 1941.

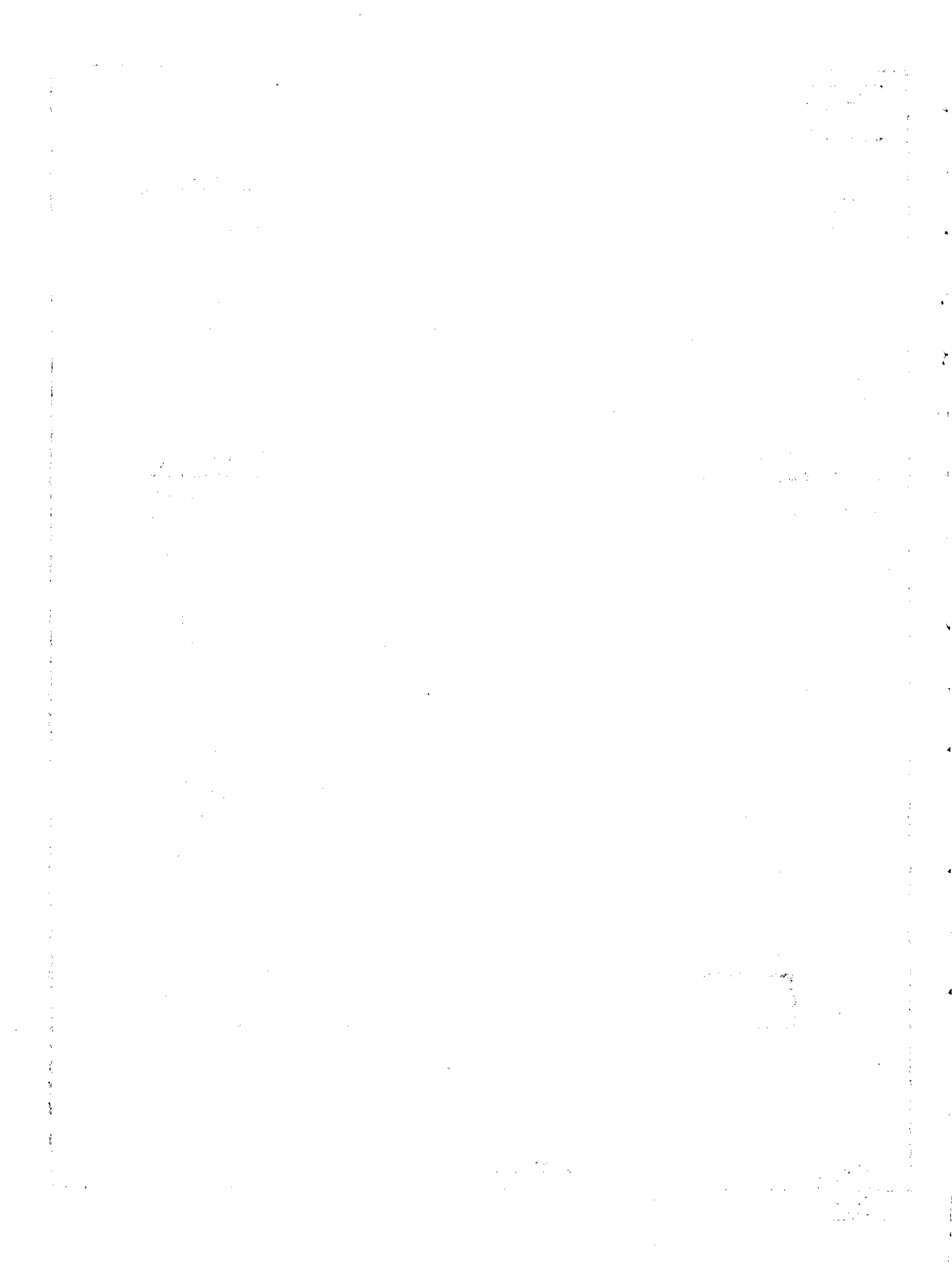
2nd Lieut. Jon Ansel Laird, of Waco, Texas, to Randolph Field, Texas, to October 13, 1940.

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Air
Corps
News Letter

Issued by the Office of the Chief of the Air Corps
War Department, Washington, D. C.



The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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HOSE CLAMPS

By Lieut. D.J. Keirn, Air Corps

It is often said of an engineer that he cannot see a forest because of the trees. It might be said with equal suitability of a botanist that he cannot see the trees because of the leaves. Often the aeronautical engineer must adopt the botanist's point of view and direct the closest kind of scrutiny to the most insignificant parts. Today at the Materiel Division, Wright Field, we glorify the hose clamp.

To the uninitiated, a hose clamp is a simple mechanism composed of a strap of soft steel that may be wrapped around a rubber hose, and a screw clamp of some sort by which the two ends of the strap are pulled together, squeezing a rubber hose to a pipe. But let us take a look at the hose clamp through the eyes of an engineer.

There have been some hose connection failures. What's to be done about it?

There are three phases to the solution:

1. Hose nipples with greater bead height.
2. Hose with more flexibility to permit use with nipples having greater bead height.
3. Hose clamps that are stronger, less subject to abuse in installation, more easily installed, and that incorporate no important disadvantages.

The first two phases are comparatively simple of solution, but the hose clamps present quite a problem. Approximately a dozen different types have been tested and at least two or three times that many have been considered and inspected. To improve this equipment, we must first determine as far as possible what the desirable characteristics are; second, set up equipment and a test procedure whereby we may accurately evaluate desirable qualities of various clamps; third, with the knowledge thus gained, prepare a specification; fourth, invite manufacturers to design and submit clamps to meet this specification; and fifth, type test the clamps submitted to determine their ability to meet said specification.

Many of the hose clamp characteristics cannot be evaluated by any method other than inspection, speculation, or service testing, preferably the latter. That's

why Unsatisfactory Reports were born. Certain performance characteristics, however, can be determined by laboratory testing; for example, the strength of the clamp, the pressure exerted by the clamp, the required wrench torque needed for any degree of tightness, the amount of wrench torque that causes failure, and the evenness of the gripping action. To accomplish these tests it is necessary to design and construct special equipment. A torque wrench and a special hydraulic load testing machine have been developed, the latter to test the tension load with the clamp properly installed. Special fittings are used to measure the gripping action, and evenness of grip is measured by deformation of an aluminum tube. Five hundred man hours have been expended to date; another two or three hundred should finish the investigation.

Other current power plant tasks are an oil cooler to be investigated, a hydraulic fuel pump drive and a simple exhaust collector ring sleeve to be developed. There are always defects to be eliminated and improvements to be made to perfect the equipment of the future. There is always that optimum visible just around the corner but never reached

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CLASS 39-A STARTS FLYING, AND HOW!

The largest class of students to report to the Air Corps Advanced Flying School, Kelly Field, Texas, from the Primary Flying School, Randolph Field, Texas, consisting of 4 Regular Army officers, 6 National Guard officers and 166 Flying cadets, started flying training on Monday October 17th, with a bang.

The Kelly Field Correspondent says that the weather man failed to give this section of the country enough rain to settle the dust, and Kelly Field was so hidden in the dust at times that it required extreme caution by the students and numerous approaches on some landings before the plane successfully reached the ground.

The School Squadrons at Kelly Field
(Continued on Page 4)

RETIREMENT OF MASTER SERGEANT FOSTER
By the Kelly Field Correspondent

Orders recently published by the War Department placed Master Sergeant Arthur C. Foster, Air Corps, on the retired list of the Army, effective October 31, 1938, on which date he completed over thirty years of service with the colors.

This noncommissioned officer, who has reached the half century mark in age and who has had a varied and very interesting as well as colorful military career, first entered the service on January 18, 1908. He served four 3-year enlistments in the Cavalry, a one-year enlistment in the Quartermaster Corps, and for the past 17 years he served continuously in the Air Corps. Sergeant Foster is the possessor, and proudly so, of nine Discharge Certificates, all of which bear the notation of Character "Excellent." On each discharge date, except the first, he held noncommissioned officer grades of Sergeant and higher ranks. For about six years he held the grade of First Sergeant, and he received his appointment as Master Sergeant, Air Corps, on March 1, 1938.

This colorful soldier, in addition to seeing active service on the Mexican border, served in France and Germany during the World War, and had another tour of foreign service when he was on duty in the Panama Canal Department from 1931 to 1934, while a member of the Air Corps at France Field. He has had two tours of duty at Kelly Field, his service at that field totaling eleven years. His first tour was from 1924 to 1930, and his second tour started on April 18, 1933, when he returned from Panama. His latest assignment at Kelly Field was with the Headquarters and Headquarters Squadron, Air Corps Advanced Flying School, as its popular First Sergeant. He has been attached to that organization since receiving his appointment as Master Sergeant, awaiting retirement orders.

Sergeant Foster holds a commission as Second Lieutenant in the Cavalry Reserve, and is the proud possessor of the Mexican Border Medal and the World War Victory Medal.

A dinner in his honor, held by the Headquarters and Headquarters Squadron on the date of his retirement, was attended by several staff officers of the School as well as the entire organization.

Major George M. Palmer, Air Corps, Executive Officer, representing Colonel Frank D. Lackland, Commandant, congratulated Sergeant Foster on his retirement, and Captain John C. Crosthwaite, Air Corps, Commanding Officer of Headquarters and Headquarters Squadron and Post Adjutant, after a few well chosen remarks, presented Sergeant Foster with a beautiful set of silver on behalf of the enlisted men of the organization.

A native of Westford, Vermont, Sergeant

Foster will make his permanent home in San Antonio, Texas, with his wife (Mrs. Ivy Foster) and daughter (Dixielee) at their newly purchased home at 255 Taft Boulevard.

Sergeant Foster has been the recipient of congratulations from many of his friends throughout the service. Kelly Field and the Air Corps wish this splendid soldier success in the future, and congratulate him on his well earned retirement.

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PROMOTION OF NONCOMMISSIONED OFFICERS

Technical Sergeants Ralph McNeely, of Moffett Field, Calif., and John M. Suggs, of Hamilton Field, Calif., were promoted to the grade of Master Sergeant, effective November 1, 1938.

Staff Sergeants Johnny V. Yocum, stationed in the Philippine Department, and Harold F. Carlow, of Fort Bragg, N.C., were promoted to the grade of Technical Sergeant in the Air Corps, effective November 1, 1938.

Technical Sergeants McNeely and Suggs were Nos. 28 and 29, respectively, on the list of noncommissioned officers qualified for appointment as Master Sergeant, which list was published in the issue of the News Letter of February 15th of this year. The promotion of these two noncommissioned officers leaves Technical Sergeant John A. Wupperfeld No. 1 on this list for promotion to the grade of Master Sergeant. He was No. 30 on the original list.

Staff Sergeants Yocum and Carlow were Nos. 56 and 57, respectively, on the list of Staff Sergeants qualified for appointment to the grade of Technical Sergeant, published in the Air Corps News Letter of March 1, 1938. The promotion of the above two Staff Sergeants leaves Staff Sergeant Graham Platt, who was No. 58 on the original list, in line for the next promotion to the grade of Technical Sergeant, Air Corps.

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NEW PURSUIT PLANE FERRIED TO WRIGHT FIELD

Lieut. William M. Morgan, Air Corps, recently ferried to Wright Field, Ohio, the new XP-40 (Curtiss Pursuit) from the plant of the Curtiss Company, for performance testing by the Air Corps Materiel Division. The XP-40 is similar to the P-36, but the engine is liquid-cooled.

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Before a meeting of the Philadelphia Chapter of the Institute of Aeronautical Sciences, on October 28th, Lieut. H. F. Gregory, Air Corps, of the Aircraft Branch at Wright Field, presented a paper entitled "Army Experiences with Rotating Wing Aircraft."

AIR FREIGHT TERMINAL BUILDING AT FAIRFIELD AIR DEPOT

The most recent innovation in supply warehousing is the establishment at the Fairfield Air Depot, Fairfield, Ohio, of an air freight terminal building for the purpose of storing supplies ferried by air to inter-area and intra-depot stations.

Heretofore supplies received by air transport were stored in the main warehouse, three-quarters of a mile distant from the hangar line. This involved considerable warehousing and clerical effort to effect air shipments. With this new system, supplies for air transport are delivered direct to this terminal.

Platforms have been constructed on both sides of the terminal building the same height as a standard truck, so as to provide accessible loading and unloading facilities. Supplies are placed in allocated areas and suitable records made of the cubical content and weight of the commodities. Within the allotted area supplies are further classified as to "extra priority," "priority," and "normal." With this new system a transport load may be assembled from records maintained by the Storekeeper of this building, whose office is in the main Supply Building.

During normal working hours, a civilian crew is used to load and unload transports. After normal working hours this task is performed either by civilian employees, whose hours of duty are staggered, or enlisted personnel under supervision of the Terminal Storekeeper.

The only available building for this terminal was Hangar #4, an old war-time hangar, which has almost served its usefulness and is in line for razing in the near future. A Project Estimate has been submitted for the construction on the flying line of a brick building which will be more suitable for this purpose.

It is expected that an additional number of new transports will be assigned this station in the near future, and likewise the shipment of Air Corps supplies will increase, due to the fact that contracts have been let with commercial contractors to deliver supplies to one of the continental Depots for subsequent delivery by air transport to the other Depots. When a shipment which is to be apportioned among the various Depots is received at the Fairfield Air Depot, the contract quota for the Fairfield Depot is inspected and placed in storerooms, the quota for the other Depots is stored temporarily in the Terminal. It is believed that the location of a building on the flying line for a freight terminal is the most efficient method of handling supplies delivered by air.

Coincident with the increase in trans-

porting supplies by air has been the general increase in business in the Depot Supply Department of the Fairfield Air Depot. In contrasting the accumulated business from January to October, 1937, with the same period this year, the following increases have been noted:

Freight and Express tonnage in and out	42% increase
Material carried by other means	47 $\frac{1}{2}$ % "
Parcel Post	15 $\frac{3}{4}$ % "
Air Transport	117 $\frac{1}{2}$ % "
Number of shipments received and made	7.8% "

Recently the binning program was completed in the Depot Supply Department by the removal of the old obsolete type wartime bins and the construction of wooden bins of modern design, which are 10 feet high and 55 inches wide, with a ledge 36 inches from the floor on both sides. The hotel system of numbering is used, which provides flexibility in the numbering of bins. The master number for bins is taken from the numbers on concrete columns. A particular bin may be subdivided into four sections and identified with the alphabetical prefix "A", "B", "C" and "D". Small cleats and shelves have been provided in some bins which are removable in the event the entire space is required.

Only one article is stored in a bin or subdivision of a bin. The rear and side partitions of these bins are removable. In general, these bins have the majority of the features of metal bins with the exception that they are not fireproof.

The system of warehousing in use is that of storing one classification of property in one section of bins. As far as practicable supplies are stored in the numerical sequence of the catalogue or stock list. This is impracticable for large bulky articles such as chain hoists, cawling, vises, crank cases, etc., which are stored in racks opposite the aisle of the corresponding section of bins. Bins and racks have been painted white with black letters and cement paint has been applied to the floors.

Plans are in effect to concentrate the storage of propellers, engine accessories and aircraft accessories in one storeroom, which is in accordance with the recent classification change in the above property to Class O3. This will provide additional space in some storerooms, but will necessitate the construction of a few bins in the proposed department.

Due to the general increase in work, it has been found necessary to establish a new section in the office - that of raw stock, instruments, school supplies and miscellaneous equipment.

All of the above increase in accounting, warehousing and construction has been accomplished with no appreciable increase in permanent personnel. It is believed, however, that if shipments and receipts continue to increase, it will of necessity require the employment of additional personnel.

The problem of storage space in the Supply Building has become very acute with this increase in business, and it is anticipated that an additional Supply building will be required in the near future. It is believed the ideal location for the main Supply building is adjacent to the Engineering Factory Building, for engine spares, plane spares and very active property, permitting the more bulky and less active items to be stored in a distant warehouse. If the main Supply Warehouse were placed adjacent to the Engineering Factory Building a conveyor system and message tubes would be a future possibility.

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GUNNERY PRACTICE FOR AIR CORPS TACTICAL SCHOOL STUDENTS.

About 23 airplanes and a convoy of trucks, carrying 38 officers and 78 enlisted men departed from Maxwell Field, Montgomery, Ala., on October 26th for Eglin Field, Valparaiso, Fla., to participate in gunnery practice over the week end.

The officers, members of Section A of the Air Corps Tactical School, with the exception of Majors Otto G. Trunk, Ralph B. Walker, Oakley G. Kelly, James A. Mollison, Henry H. Reilly, Captain John N. Jones and Lieut. Austin A. Straubel, who traveled by automobile, proceeded to Eglin Field by airplane. With the exception of those accompanying the fliers as observers or passengers, the enlisted men traveled by truck and automobile. Both officers and enlisted men were scheduled to return on Sunday, October 30th.

Upon arrival of the personnel at Eglin Field, Major Warren A. Maxwell assumed the duties of Officer in Charge of the camp and Operations Officer, with Captain R.L. Easton as Engineering Officer; Captain F.G. Allen, Communications Officer; Lieut. Louis A. Gunther, Armament Officer, and Sergeant Dean, Line Chief.

Those piloting the ships to and from Eglin Field were Captains A.Y. Smith, Carl J. Crane, John H. McCormick, Walter G. Bryte, John P. Doyle, Jr., Alfred Johnson, Walter S. Lee, George W. McGregor, Frank J. Coleman, William C. Ritchie, D.R. Gibbs, E.K. Warburton, Donald F. Stace, Forrest G. Allen, R.L. Easton; Majors Fred Nelson, Ray G. Harris, William Souza, Frederick D. Lynch, E.P. Gaines, Lieuts. A.L. Moore, Stanley K. Robinson, L.F. Harman and Robert Choate.

Among the other officers, flying as

observers, were Lieut. Colonel Edward M. Almond, Infantry; Major Donald L. Dutton and Captain Darwin Martin, Coast Artillery Corps; Major Harry Vitzthum, Signal Corps; Captain Gilman C. Mudgett, Cavalry, and Captain Frederick Gerhard, Chemical Warfare Service.

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BACHELOR OFFICERS' MESS AT RANDOLPH FIELD

The members of the Bachelor Officers' Mess at the Primary Flying Field at Randolph Field, Texas, constitute about as cosmopolitan a group as can be assembled at any Air Corps station.

The Philippine Army is represented by two student officers taking the course of flight training. The Nicaraguan Army has one of its officers pursuing the same course. A medical officer of the Cuban forces is attending the course offered by the School of Aviation Medicine. Naval officers of the Medical Branch, although not members of the Mess, are frequent visitors. Several of them are students at the School of Aviation Medicine.

The line branches are represented by officers from the Infantry, Field Artillery, Coast Artillery, Cavalry, Engineers and Signal Corps. In addition, the Medical Corps and the Medical Corps Reserve have representation in the Mess, as has the National Guard. Finally, bringing up in the minority, are the Air Corps and the Air Corps Reserve, with a total of 33 of the 134 members of the Bachelor Mess at this Air Corps station.

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New Class Starts Flying at Kelly Field (Continued from Page 1)

flew a total of 4,836:05 hours during the month of October, 1938, as follows:

61st Squadron	1,680:00
62nd Squadron	972:50
63rd Squadron	1,227:35
64th Squadron	955:40
Total	4,836:05

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NEW RADIO EXPERIMENTS AT WRIGHT FIELD

Recent test flights at Wright Field, using the structure of the airplane as an antenna for radio communication purposes without additional wires, either fixed or trailing, have proved successful to the extent that it is believed the method can be made practical, declares the Wright Field Correspondent. This experimentation is of special interest in that it opens up possibilities for the elimination of the hazards due to the breakage and subsequent loss of antenna wires under icing conditions. It is also hoped that transmission and reception during periods of bad static will be possible using present channels of communication.

ADDITIONAL CONSTRUCTION AT RANDOLPH FIELD

The project involving the construction of two barrack buildings for housing Flying Cadets at Randolph Field, Texas, is progressing satisfactorily under the supervision of Captain Edwin V. Dunstan, Quartermaster Corps, Constructing Quartermaster. Colonel John B. Brooks, Commanding Officer of the Field, indicated on June 30th, last, a rectangular area parallel with First Street as the site for the barracks, which will locate the buildings at right angles to the two existing barracks, and Captain Dunstan broke ground on July 5, 1938, utilizing W.P.A. workers made available by the local relief authorities under an appropriation of \$50,000 allotted by the Works Progress Administration through the War Department in Washington, for the purpose of constructing the foundations and the full basement up to and including the first floor structural concrete slab. The work above that level is being done by contract.

The preparation of plans and specifications were rushed to completion by the Quartermaster General, time being the essence for two reasons, namely: to give impetus to employment and commercial activity and particularly to provide quarters urgently needed for the increased classes of Flying Cadets.

The sum of \$350,000 had been set up in the War Department for the project, and it was estimated that, together with the W.P.A. allotment of \$50,000, two barrack buildings could be constructed from the available funds. Bids were accordingly invited on July 18, 1938, by the Constructing Quartermaster for the erection of either one or two buildings. The bid of \$247,476.00 was accepted for the two buildings, the second building to be located parallel with First Street West and at right angle to the existing barrack building.

Each building will house 106 cadets. The structures are a two-story type, of concrete and steel, with cement corridor and paved tile porch, with tile roofs and full basements. Each building provides 53 bedrooms, 30 shower baths, 6 toilet rooms, and a hot water heating system.

In design, materials and construction, these buildings will be the same as the two existing barrack building except that toilet rooms and shower will be revised and improved. The barracks on the west side of the Cadet Group will have a full size basement and conform somewhat to the basement of the East Barracks, except the storage room will be on the south end of the barracks and suitably barred and made secure for the storage of ordnance equipment and supplies.

Parking space for 188 cars will be

provided just south of "H" Street West, and between First Street West and the Cadet Swimming Pool.

Award was made to Christy-Baskett Company, San Antonio, Texas, on August 3, 1938, and work started on September 22, 1938. Time of completion is specified as follows: "200 calendar days from the date of the receipt of notice to proceed."

Favorable weather conditions have aided the contractor in making rapid progress in the work and, unless adverse conditions are encountered, it is expected that one barrack building will be ready for occupancy about April 10, 1939, and the other building about May 10, 1939.

The Commanding General of the 8th Corps Area notified the Commanding Officer of Brooks Field, Texas, that the extension of underground telephone plant to serve the two new Cadet Barracks was approved by the Chief Signal Officer, the project to be effected by the Post Signal Officer at Fort Sam Houston, Texas.

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STATUS OF WARRANT OFFICER APPOINTMENTS

Since the publication by the Office of The Adjutant General of the pamphlet, dated March 1, 1937, listing the names of 740 noncommissioned officers of the U. S. Army eligible for appointment to the grade of Warrant Officer, there have been 154 promotions, the latest one being received by a Master Sergeant of the Signal Corps on November 8, 1938. Technical Sergeant Edcil C. Maxwell, who was No. 146 on the list, was the last Air Corps noncommissioned officer to receive promotion to Warrant Officer.

Heading the Air Corps eligibles on the list is Master Sergeant Harvey H. Hewitt (No. 169) who for a number of years was on duty at Selfridge Field, Mich., and is now stationed in the Hawaiian Department. Master Sergeant Hewitt will probably receive his appointment as Warrant Officer sometime in February or March, 1939, basing this on the normal flow of appointments thus far. Below him are 101 other Air Corps noncommissioned officers, the first ten being --

182	Master Sergeant Charles C. Leiby
188	Master Sergeant Murton K. Morrill
190	Technical Sergeant William J. Riley
198	Master Sergeant Gervais J. Garner
205	Master Sergeant Harry Wilson
213	Master Sgt. Walter J. Johannsen
217	Master Sergeant James D. Mehegan
219	Staff Sergeant Jacob S. Brown
223	Master Sergeant Carlton P. Smith
235	Master Sergeant Thomas J. Kelly

FLYING IN FULL SWING AT RANDOLPH FIELD

Flying Cadets from every State in the nation, have two, are among the 332 student pilots now in training on the Primary Stage at the "West Point of the Air." They are divided, as follows: 118 student officers and 214 Flying Cadets. A few eliminations by the School of Aviation Medicine, due to inability to pass the physical examination, has threatened somewhat to thin the ranks, eight student officers and sixteen Cadets having been recommended for elimination. A few other Cadets are still awaiting the decision of the medical officers prior to their start of flight training.

A study of statistics relative to the new class of Flying Cadets shows that their average age is 23.7 years. This figure is slightly higher than the average over a period of years, it is the belief of the News Letter Correspondent, and he attributes this to be partly due to the fact that many of the new class spent a year on active duty with line branches of the service as Reserve Second Lieutenants under the Thomason Act.

Meanwhile, on the Basic Stage side of Randolph Field, 190 embryo pilots are undergoing their training. This figure includes seven student officers and three foreign students. In addition, 21 of the Reserve Officers assigned to the Training Center for a special Refresher course have graduated from the PT-13's and are now at work mastering the BT-9's. They will be advanced on a proficiency basis to the Advanced Flying School at Kelly Field.

Much favorable comment has been heard from the Instructor Staff on the Basic Stage concerning the recent installation of "eyebrow" slots on the BT-9's. "The stall and spin characteristics have been greatly improved, and instruction work on this phase of training has been much facilitated," is the comment of the News Letter representative on the Basic Stage.

In connection with the "eyebrow" installation, the Station Engineering Officer reports that this work is 100% complete, and all BT-9's at Randolph Field are now equipped with this ingenious product of the Materiel Division.

As stated in a previous issue of the Air Corps News Letter, the "eyebrow" slots are of the fixed type rather than those which go into operation when approaching a stall. Affixed to the leading edge of each wing, directly in front of the ailerons, the slots protrude about three inches from the leading edge, and pilots flying planes equipped with them state that they offer little or no added resistance. Their function is to permit a smooth flow of air across the ailerons at low speeds, thus aiding in the more rapid recovery from stalls and potential spins.

MEDICAL OFFICERS GRADUATE FROM THE SCHOOL OF AVIATION MEDICINE.

The following-named medical officers, who have been pursuing the four months' basic course of instruction at the School of Aviation Medicine, graduated as Flight Surgeons on November 12, 1938, and were assigned to the station appearing after each name, viz:

Medical Corps, U.S. Army

Captain Clifford O. Bishop, Barksdale Field, La.
Captain Lester O. Crago, Maxwell Field, Ala.
Captain Emmert C. Lentz, Fort Bragg, N.C.
Captain Harold A. Myers, Kelly Field, Texas.
Captain Scott M. Smith, Lowry Field, Denver, Colo.
Captain James L. Tobin, Hamilton Field, Calif.
Lieut. James W. S. Stewart, Randolph Field, Texas.

Medical Corps, U.S. Navy

Lieut. Julius C. Early, USS Yorktown.
Lieut. (jg) Clifford P. Phoebus, Naval Air Station, Pensacola, Fla.
Lieut. (jg) Wesley L. Mays, Naval Air Station, Pensacola, Fla.
Lieut. (jg) Thomas Forwerda, USS Saratoga.
Lieut. (jg) Merrill H. Goodwin, Naval Air Station, Pensacola, Fla.
Lieut. (jg) Charles F. Gell, Naval Air Station, Pensacola, Fla.
Lieut. (jg) Charles F. McCaffrey, USS Enterprise.

Medical Corps, Cuban Army

Lieut. Francisco Hernandez D'Abrigeon, Cuban Army.

Two officers of the Medical Reserve Corps, Captains John S. Minnett, of Dallas, Texas, and Victor E. Frazier, of Kansas City, Mo., joined the class on September 30, 1938, for the six weeks' practical work, both officers having already completed the extension course prior to coming to the School. They graduated with the resident class as Flight Surgeons.

Brigadier General Barton K. Yount, Commanding General of the Air Corps Training Center, delivered a very interesting and inspiring address to the class, following which he presented diplomas to each of the students and added his personal congratulations and words of good cheer.

The introductory remarks were made by Lieut. Colonel C. L. Beaven, Medical Corps, Commandant of the School of Aviation Medicine. The invocation and benediction were delivered by Chaplain J. W. Westerman, of Randolph Field. A number of distinguished guests, relatives and friends of the student officers was present.

The present class makes the forty-
(Continued on Page 7)

AIR CORPS OFFICERS ASSIGNED AS STUDENTS AT COMMAND AND GENERAL STAFF SCHOOL.

The following-named Air Corps officers have been selected for detail as students at the Command and General Staff School, Fort Leavenworth, Kansas, for the 1939-1940 course:

- Majors Samuel M. Connell, Mitchel Field, N.Y.
- Majors James E. Parker, Elmer D. Perrin, Edmund P. Gaines, James A. Mollison, Randolph P. Williams, Captains James B. Burwell, Charles P. Cabell, James K. DeArmond, David R. Gibbs, Glen O. Jamison, Laurence S. Kuter, John H. McCormick, Donald F. Stace, Walter C. White, 1st Lieuts. Charles T. Arnett and Leonard F. Harman, Maxwell Field, Ala.
- Major Edward W. Raley, Office of the Chief of the Air Corps, Washington, D.C.
- Major Ned Schramm and Captain Frank H. Robinson, Langley Field, Va.
- Major George P. Tourtellot, Detroit, Mich.
- Captain Frank F. Everest, Jr., Schofield Barracks, T.H.
- Captain Thomas M. Lowe, Columbus, Ohio.
- Captain George McCoy, Jr., Selfridge Field, Mich.
- Captain Russell A. Wilson, March Field, Calif.
- 1st Lieut. Reuben C. Hood, Jr., Nichols Field, P.I.

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School of Aviation Medicine Graduation
(Continued from Page 6)

eighth to graduate from the School since its establishment in 1919. In addition to the resident courses, the School also conducts a correspondence course for medical officers of the Organized Reserves and National Guard. There are 466 students enrolled in this course at the present time.

The staff of the School of Aviation Medicine is as follows:

- Commandant: Lieut. Colonel C.L. Beaven.
 - Assistant Commandant and Executive Officer: Lieut. Colonel N.C. Mashburn.
 - Adjutant and Secretary: Captain W.H. Kernan.
 - Director, Department of Ophthalmology and Otology: Major J.M. Hargreaves.
 - Director, Department of Psychology: Captain W.A. Carlson.
 - Director, Department of Aviation Medicine: Captain C.L. Leedham.
 - Assistant Director, Department of Aviation Medicine: Captain N.W. White.
 - Director, Department of Neuropsychiatry: Captain E.J. Kendricks.
- All of the above-named officers, with the exception of Captain Kernan, are members of the Medical Corps of the Regular Army. Captain Kernan's commission is in the Medical Administrative Corps of the Regular Army.

LARGEST STUDENT OFFICER DETACHMENT STARTS TRAINING AT RANDOLPH FIELD.

The largest student officer detachment in the history of the Air Corps Primary Flying School at Randolph Field, Texas, is now undergoing training. The usual influx of recent graduates from the United States Military Academy in the October class was augmented by 23 Reserve officers taking the Refresher Course, also by five National Guard officers who are taking the regular one-year course at the "West Point of the Air." These, in addition to three foreign students, bring the total to 159 officers.

According to the News Letter Correspondent, recent graduates of the U.S. Military Academy who are now undergoing flying training at Randolph Field are inclined towards eccentricities. Lieut. Bertram Harrison attempted to raise a raccoon, and Lieut. Gabriel Russell was lately seen with a wild cat. Scooters and shot-guns have become objects of desire.

Bowling has become one of the favorite pastimes of the Detachment. Alleys were not available at West Point, and so the majority of officers are novices. In spite of this fact, many are becoming quite proficient, and a good bowling league may be organized.

The daily athletic period shows that company spirit and a certain amount of inseparable tendencies extends outside the Military Academy. Nearly every base ball team is composed of officers who have been in the same company together for the past four years. This continuation of the West Point association is especially noticed in the I and K Company teams.

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SENSITIVE ALTIMETER DEVELOPMENT

Much has appeared in the press recently about a new sensitive altimeter developed by the Bell Telephone Laboratories. An airplane, with the new instrument installed therein, arrived at Wright Field, Dayton, Ohio, on October 25th, for demonstration to officers and engineers of the Materiel Division and the Signal Corps Aircraft Radio Laboratory. The plane was a trimotor Ford. The pilot was Mr. P.G. Lucas, and those accompanying him as passengers were Messrs. J.A. Merquelin, E.L. Nelson, D.K. Martin, William Higgins, R.J. Zilch and F.H. Smith, all of whom are connected with the Bell Telephone Laboratories. No comments were released as to the efficacy of the equipment or its possible value to the Air Corps.

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2ND BOMB. GROUP IN FORT BRAGG MANEUVERS

On October 15th, the 2nd Bombardment Group, Langley Field, Va., completed two weeks' participation in the Joint Anti-aircraft - Air Corps Exercise held in the vicinity of Fort Bragg, N.C.

The work during the period was very intense for both flying and ground personnel. Many missions were executed day and night at high altitudes. The following letter from the Wing Commander is quoted:

"During the recent Joint Antiaircraft - Air Corps Exercises at Fort Bragg, North Carolina, from October 3-15, 1938, the 2nd Bombardment Group flew 375 hours on actual day and night missions in all kinds of weather, where the distance to the objective averaged 325 miles, making skillful navigation and the exercise of good judgment by combat crews imperative.

As the Commander of the 'Black Force,' which included the 2nd Bombardment Group, GHQ Air Force, I desire to commend the outstanding performance of the group, which was due to its leadership, spirit and all-around efficiency."

20th Bombardment Squadron: On October 15th, this Squadron completed a two-week period of participation in the Joint Anti-aircraft - Air Corps Exercise.

"Fortunately," says the News Letter Correspondent, "we were a portion of the Black Force, and as such did not change our base. All missions were of approximately four hours' duration, and when the majority of these were above twenty thousand feet, the operating personnel suffered slightly from fatigue. However, the ground crews had the real soiree when, after a night mission, returning around ten or eleven o'clock, they had to remove all night camouflage prior to an early morning mission. One hundred and four men from Mitchel and March Fields were quartered and rationed with the Squadron during the Exercise."

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The Headquarters and Headquarters Squadron of the 8th Pursuit Group, which returned from the Air Corps-Antiaircraft field exercise at Fort Bragg, N.C., on October 18th and 19th, did very little of the local flying in connection with the various problems, but by means of plotting boards and the civilian intelligence net, directed the 33rd and 36th Pursuit Squadrons, based at Maxton and Southern Pines, N.C., respectively, to many successful interceptions of the invading "Black" Bombardment, Attack and Reconnaissance. Much valuable experience was acquired by officers and men alike

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Mr. C. J. Stewart, Director of Civil Research and Production, British Air Ministry, visited Wright Field on October 19th.

FIELD TRAINING FOR 23RD BOMB. SQUADRON

Ten officers and 46 enlisted men of the 23rd Bombardment Squadron took off from Hickam Field, T.H., to spend five days of training on the auxiliary airport at Hilo, Hawaii.

Camp was pitched on the grounds of the airport, and a little more difficulty than usual was encountered in pitching the tents, due to the presence of coral rock in every place a tent stake was supposed to be driven. Picks were used to dig a hole that would hold the stake.

Ferry trips were made between Hilo and Hickam Field by this Squadron and the 50th Reconnaissance Squadron.

Ground familiarization trips were made by the officers to different parts of the island under the guidance of Major Beaton, who pointed out the values of the different sections to the newer officers in the Squadron who had not had a previous opportunity to become acquainted with Hawaii from the military standpoint. The facilities of the Military Rest Camp were inspected, and the military trails and all available facilities were noted.

The return trips were made with the help of the 72nd Bombardment Squadron, which furnished four B-18 airplanes, thereby making a total of twelve planes available. The residents of Hilo were treated to a sight of twelve planes lined up down the entire length of the airport.

The entire trip and time spent at Hilo constituted a welcome break in the regular routine, and the field exercise proved very instructive and beneficial.

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COMPETITIVE PISTOL SHOOTING

Since the discontinuance of Air Corps Regulation Pistol Shooting, the 46th School Squadron, Randolph Field, Texas, has nevertheless been active in competitive matches held on their own target range, which is located in the basement of their barracks.

Recently, the Squadron held its annual pistol and small bore rifle tournament. Corporal Norman G. Hower repeated as champion over a field of more than 20 competitors. Hower's aggregate total was 438. Corporals Charles Jones and Myron Lamparty placed second and third, respectively, with scores of 427 and 415. The matches featured slow and rapid pistol firing, while the rifle shooting included offhand, kneeling and prone firing.

The next tournament matches will be held in the Spring of 1939. This tourney will be sponsored by Major Stanton T. Smith, Squadron Commander, who each year does his share in promoting interest in the target range.

OBITUARIES

The whole Air Corps was shocked and grieved to learn of the death of Colonel Leslie MacDill, as the result of an airplane accident on the morning of November 9, 1938, at Anacostia, D.C. The accident occurred several minutes after his take-off from Bolling Field in a BC-1 airplane.

Accounts pieced together from numerous eyewitnesses indicate that something went wrong with the motor and that Col. MacDill tried first to get back to Bolling Field, and then with death staring him in the face he aimed his plane for a narrow space between two houses on S Street, a block away from the intersection of Good Hope Road and Nichols Avenue, Southeast. The plane cut down telephone and power wires, knocked down a pole, clipped off tree limbs and plunged to the ground, bursting into flames immediately thereafter. Colonel MacDill and his passenger, Private Joseph G. Gloxner, Air Corps, were instantly killed.

The death of Colonel MacDill leaves a gap in the Air Corps which will be hard to fill. He was one of the "Early Birds" in aviation, and those who knew him well realized his special ability, his highly analytical and mathematical mind, as well as his professional attainments. His sound conclusions and helpful advice were constantly relied upon.

Colonel MacDill was born at Monmouth, Ill., on February 18, 1889. Following his graduation in 1909 from Hanover College with an A.B. degree, and from the University of Indiana in 1911 with an A.M. degree, he was commissioned from civil life as a second lieutenant, Coast Artillery Corps, April 13, 1912. He served with the 6th Company, Coast Artillery Corps, from May 28 to December 8, 1912, and with the 122nd Company, Coast Artillery Corps, from December 10, 1912, until his detail in 1914 in the Aviation Section, Signal Corps. Upon the completion of his flying training at the Signal Corps Aviation School at San Diego, Calif., he was rated a Junior Military Aviator on July 2, 1915, which automatically advanced him to the rank of first lieutenant. He was promoted to Captain on May 15, 1917; to Major, Air Service, July 1, 1920; to Lieutenant Colonel, Air Corps, August 1, 1935, and to Colonel (temporary), Air Corps, on August 26, 1936.

Assigned to the 1st Aero Squadron upon his graduation from the Signal Corps Aviation School, he served with that organization from July to November, 1915, and with the 1st Company, 2nd Aero Squadron, in the Philippine Islands, from January, 1916, to May, 1917.

Upon his return to the United States, Colonel MacDill was on temporary duty in

the Office of the Chief Signal Officer, Washington, D.C., for a brief period, and was then ordered to duty overseas. From October 11, 1917, to May 16, 1918, he was on duty with Headquarters, Air Service, Lines of Communication, as Materiel Officer, Training Department. He was then assigned to the command of the Aerial Gunnery School at St. Jean de Monts, France, and he was responsible for the organization and building of this school.

Returning to the United States in February, 1919, he was assigned to duty in the Office of the Director of Air Service, Washington, D.C., in the Aerial Coast Defense Section, Operations Division, Training and Operations Group. In addition to this duty, he served as a member of the Advisory Board from July 28, 1920, to September 26, 1920, when he was assigned to pursue a two-year course of instruction at the Massachusetts Institute of Technology, Cambridge, Mass. He graduated in June, 1922, with the degree of Doctor of Science, following which he was assigned to duty at McCook Field, Dayton, Ohio, as Assistant to the Commanding Officer.

On June 18, 1923, Colonel MacDill was assigned as Chief Engineer Officer of the Engineering Division, McCook Field, and, save for the period of one year - August, 1924, to July, 1925 - when he was a student at the Command and General Staff School at Fort Leavenworth, Kans., he occupied this position continuously until December, 1929. He assumed the additional duty of Chief of the Procurement Section on September 12, 1927, following the removal of the Air Corps Engineering Division from McCook Field to the New Wright Field and the changing of its designation to the Materiel Division. During the remainder of his tour of duty at Wright Field, he served as Assistant to the Executive Officer, Materiel Division, and at various times was Acting Executive Officer.

On September 2, 1930, Colonel MacDill reported for duty in the Office of the Chief of the Air Corps, Washington, D.C., and was assigned to the Plans Division. During the course of his duty in Washington he served on various boards of officers and committees.

Relieved from duty in the Office of the Chief of the Air Corps in the fall of 1933 to attend the Army War College, he graduated therefrom in June, 1934, and from the Naval War College, Newport, R.I., in June of the following year. He was then assigned as a member of the War Department General Staff in Washington.

Colonel MacDill is survived by his widow, Marilla Augusta MacDill, two daughters, aged 14 and 11, residing in Washington, D.C., and his brother,

Wilfred E. MacDill, residing in Monmouth, Ill.

Funeral services for the deceased Air Corps officer were held on Saturday morning, November 12th, at the Arlington National Cemetery, at 11:30 o'clock. The Honorary pallbearers were Colonel Frank S. Clark and Lieut. Colonel Harvey C. Allen, General Staff Corps; Lieut. Col. Floyd Galloway, Rosenham Beam, Majors Ennis C. Whitehead and Donald D. Fitzgerald, of the Air Corps. Colonel MacDill's final resting place is adjacent to that of the late Air Corps Chief, Major General Oscar Westover. In addition to relatives, a large gathering of friends was present to pay their last respects. Many beautiful funeral wreaths were in evidence, indicating the esteem in which Colonel MacDill was held by his friends both in and out of the military service.

Private Joseph G. Gloxner, Air Corps, who was flying with Colonel MacDill, was a member of the First Staff Squadron, Bolling Field, D.C. He was single, and was born at Reading, Pa., May 28, 1907. At the date of his death he had completed five years and nearly three months' service with the Air Corps. He held the rating of Specialist, 6th Class. His father, Stephen Gloxner, of Reading, Pa., survives him.

The Air Corps extends its profound sympathy to the bereaved relatives of these two men who died in the service of their country.

Wright Field personnel wish to extend their sympathy to the family of Colonel MacDill. "He was with us for many years," declares the Wright Field News Letter Correspondent, "and his unswerving sense of fairness and sound technical ability won their meed of respect and esteem."

SWISS AIRMEN VISIT MATERIEL DIVISION

Colonel Robert Fierz, Chief of the Technical Division of the Swiss Military Department, and a group of Swiss Army pilots visited the Air Corps Materiel Division, Wright Field, Dayton, Ohio, on November 3rd. The Swiss Mission is in the United States for the purpose of purchasing military airplanes and has been granted permission to fly and test such of the aircraft as have been released for export, are not government-owned, or being manufactured to apply on government contracts. Those accompanying Colonel Fierz were:

Colonel Damian Lang, Chief of the Sub-division for Aviation and Service of Transmission;

Lieut. Colonel Robert Ackermann, Chief of Section in the Division for Aviation-Pilot;

Lieut. Colonel Walter Burkhard, Director of the Military Airports - Pilot;
Captain Emil Schaetti, Technical Adviser of the Division of Aviation;
Captain Ruetschi, Test Pilot.

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NEW PHOTOGRAPHIC UNIT AT WRIGHT FIELD

Major Frederick W. Hoorn, Signal Corps, reported for duty at the Air Corps Materiel Division, Wright Field, Ohio, on October 30th, to take charge of the Signal Corps Training Film Field Unit. This is a new unit, the purpose of which is to produce sound motion pictures for the training of personnel in various Air Corps functions.

Moving pictures recording test work, or produced for public educational or historical purposes, will continue to be handled by the Materiel Division Motion Picture Unit. Where subjects overlap, the two units will cooperate.

The new laboratory is in its beginning stages, and it will take some time, Major Hoorn says, to gather suitable personnel and the necessary equipment. When organized, however, the production of 20 reels a year will be its objective. All preparation of scenarios, editing, and other creative work is to be performed by the New Unit at the Materiel Division. Processing of films is to be done at the Army War College Photographic Laboratory in Washington. Release of film will be by the Chief Signal Officer.

In preparation for his new work, besides several years of photographic training, Major Hoorn spent eight months in Hollywood at the various leading motion picture laboratories.

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TRAINING METHODS TO UNDERGO STUDY

Major Isaiah Davies, Air Corps, Director of Flying at the Air Corps Advanced Flying School at Kelly Field, Texas, has been named as a member of a board of officers which convened in the Office of the Chief of the Air Corps, Washington, D.C., on November 7, 1938, to study training methods. Major Davies left Kelly Field, enroute to Washington, on November 5th, and expects to be away about a month.

During the absence of Major Davies, Major Harvey W. Prosser, Air Corps, Secretary and Public Relations Officer, will take over the duties of Director of Flying at the Advanced Flying School, in addition to his other duties.

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Two hundred and sixty students from the University of Cincinnati visited Wright Field on October 25th, last. This visit, which is an annual event for the aeronautical engineering students, is incorporated as part of the class curriculum.

PASSING OF DONOR OF MACKAY TROPHY

The death on November 12th, at his home in New York City, of Mr. Clarence H. Mackay, marked the passing of one of this country's outstanding citizens.

For a long time Mr. Mackay was a leader in the business and civic activities of New York City. He generously supported the arts and sciences and was a great philanthropist.

In the field of aviation his name was associated for over a quarter of a century with the Trophy bearing his name and which he donated in the year 1912 with the provision that it was to be awarded annually to Army officers making the most meritorious flight of the year. The huge silver cup bears the names of Army aviators whose outstanding flying achievements made the most notable contributions to the science of aviation since it was first awarded in 1912 to Lieut. Henry H. Arnold, Infantry, now Major General and Chief of the Army Air Corps.

Because the winners of the Trophy had nothing to show that their achievements had gained formal recognition, Mr. Mackay, in 1929, provided a gold medal for each of the flyers whose names adorned the Trophy, and continued to award medals each year thereafter. The medal bears the holder's name on one side and a representation of the Trophy on the other.

Mr. Mackay was born on April 17, 1874, in San Francisco, Calif. He was educated for the most part at Vangirard College in Paris and Beaumont College in Windsor, England, completing his studies at the latter place. In 1894, at the age of 20, he entered his father's office. Two years later he was elected president of the American Forcite Powder Manufacturing Company, serving for three years. In 1896 he became a director of the Postal Telegraph Company and the Commercial Cable Company, and a year later he was elected a vice president by each, a position which gave him the administrative control of operations.

Armed with practical knowledge, Mr. Mackay now directed all his energies toward extending these enterprises. The construction of a cable to the Orient had always been a great hobby with his father, but owing to various obstacles it was left to the son to carry out the project.

Eighteen months were consumed in constructing and laying the cable, the landing of the eastern end of which took place at San Francisco in December, 1898. During the entire period, Mr. Mackay gave his personal attention to every detail. The capital involved amounted to more than \$9,000,000.

In 1928 the Postal Telegraph-Commercial Cables Companies and the International Telephone and Telegraph Corpora-

tion effected a \$300,000,000 merger, Mr. Mackay, president of the Mackay system, and Sosthenes Behn, president of the International Telephone and Telegraph, pooling their interests. This operation merged telegraph, cable, telephone and radio systems on a scale never previously attempted. Shortly before this merger, Mr. Mackay had announced that his companies, the Postal Telegraph, the Commercial Cables and the Mackay Radio and Telegraph Company had acquired control of the high-powered transoceanic radio station at Sayville, L. I.

This acquisition of the Sayville station for Atlantic ship-to-shore service completed the radio system which was started by the Mackay companies in 1927, when they acquired the Federal Telegraph Company's properties on the Pacific Coast and started Pacific ship-to-shore service, with direct land wire connections. In the summer of 1931, Mr. Mackay, as president of the Mackay Radio and Telegraph Company, announced that two factories had been acquired in Newark, N. J., for the manufacture of an international radio broadcast receiver and of high-powered vacuum tubes for transmitting purposes, and for radio development and research work.

In 1930, in his annual report as chairman of the board, Mr. Mackay showed the wide expansion of radio communication the Postal Telegraph and Cable Corporation had developed, and reported that approximately \$10,000,000 had been spent in one year in extending communication facilities throughout the world.

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NEWSPAPER FEATURES TRAINING CENTER IN ROTOGRAVURE SECTION.

A double page spread in the St. Louis, Mo., POST DISPATCH, in the rotogravure section of October 16, 1938, featured the life of a Flying Cadet at the "West Point of the Air" from the day he entered and started training on the Primary Stage until final graduation from the Advanced Flying School, Kelly Field, Texas, one year later.

The Photographic Department of Headquarters Squadron at Randolph Field and the Kelly Field Photo Department cooperated in furnishing the material.

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The News Letter Correspondent of the 49th Bombardment Squadron, Langley Field, Va., reports that during the last storm which hit the New England States, the XB-15 airplane was placed in the hangar for the first time. "Figure how a plane of 150 feet wing spread can be placed into a hangar that is only 110 feet wide," the Correspondent asks, and then he adds: "It can be done, because the 49th did it."

MANY VISITING PLANES AT RANDOLPH FIELD

Seventy-one visiting airplanes landed at Randolph Field, Texas, during the month of October, according to an announcement from Post Operations. Many of the new BC-1's, being ferried east from the factory, stopped overnight at the "West Point of the Air," 18 of them being cleared for points east.

Many Navy pilots, enroute either east or west, also made use of the servicing facilities at Randolph Field during the month.

The following is a partial list of visitors during the month and their home stations:

General A.H. Blanding, National Guard;
Lieut. Colonel A. Tucker, National Guard;
Lieut. Colonel K. Buchanan, Cavalry;
Lieut. Colonel A.B. McDaniel, Majors
T.W. Blackburn and J.F. Powell, Air
Corps, Washington, D.C.

Colonel R.C. Rowell, U.S. Marine Corps,
Anacostia, D.C.

Lieut. Colonel R.E. O'Neil and Major
H.K. Ramey, Air Corps, March Field, Cal.

Majors E.M. Powers and S.M. Umstead,
Air Corps, Wright Field, Ohio.

Captains D.T. Laubach and W.E. Whitson,
Air Corps, Mitchel Field, N.Y.

Lieut. R.L. Poor, USN, North Island,
New York.

Captain F.L. Fair, Air Corps, Marshall
Field, Kans.

Captain A.C. George, Air Corps, Barks-
dale Field, La.

Captain S.W. Van Meter, Air Corps,
Maxwell Field, Ala.

Major B.S. Thompson, Air Corps,
Hensley Field, Texas.

Lieut. R.W. Ryder, Air Corps, Chanute
Field, Ill.

Lieut. C.H. Leitner, Air Corps, Lowry
Field, Colo.

Lieut. L.E. Hobbs, Air Corps, Nat'l
Guard, Houston, Texas.

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MORE "BACON" CARTED HOME BY LT. DENSFORD

According to the Kelly Field Correspondent, 1st Lieut. Charles F. Densford, Air Corps, popular flying instructor in the Observation Section of the Air Corps Advanced Flying School, Kelly Field, still continues to "mow 'em down," having again made history by his ability in the use of shootin' irons.

Flying to Savannah, Ga., on a routine navigation training flight, and while on his authorized delay in that hospitable city, Lieut. Densford participated in the South Atlantic Pistol Championship held there. He was the lone Texas entrant, and while resting up from his flying trip he established a new world's record for .38 caliber revolvers in rapid firing. His score of 196 bettered the long standing, oft-tied high of his shooting partner, Tate, of San Antonio.

Three new records out of four matches on the first day of the "shoot" eclipsed Kelly Field's own Densford's creditable scores, until his shooting feat - which brought him up to a fourth place in the Georgia State Championship Match, just behind National Champion Al Hemming, of Detroit.

All of Kelly Field's shootin' fraternity have been awaiting the return of Lieut. Densford, being anxious to learn the results of the Regional Meet, as well as the identity of the winner of the coveted money pot and trophy. They were all feeling confident that Lieut. Densford would "bring home the bacon," - as usual.

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CONFERENCE ON TRAINING MATTERS

Brigadier General Barton K. Yount, Air Corps, Commanding General of the Air Corps Training Center, Randolph Field, Texas, recently flew to Washington, D.C., accompanied by Colonel Frank D. Lackland, Air Corps, Commandant of the Advanced Flying School, Kelly Field, Texas, for the purpose of a conference in the Office of the Chief of the Air Corps on training matters. The journey to Washington was made in a B-18 airplane, piloted by 2nd Lieut. Leroy A. Rainey, Air Corps, with General Yount acting as co-pilot. First Lieut. Norman L. Callish, Air Corps, accompanied the flight as Navigation Officer.

Upon the completion of his mission in the nation's capital, Colonel Lackland availed himself of five days' leave of absence. During the absence of General Yount and Colonel Lackland from the Training Center, Colonel Eugene A. Lohman, Air Corps, Assistant Commandant of the Advanced Flying School, assumed command of that school and the Training Center.

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WAR DEPARTMENT SPECIAL ORDERS

Changes of Station

To Middletown Air Depot, Pa.: Majors William J. McKiernan, Jr., from duty in the Office of the Chief of the Air Corps, Washington, D.C., and Samuel C. Eaton, Jr., from Bolling Field, D.C.; 2nd Lieut. Franklin K. Paul, from Panama Canal Department (previous orders in his case revoked).

To Bolling Field, D.C.: Captain Charles H. Deerwester from Middletown Air Depot.
To Hawaiian Department: Lieut. Colonel Rosenham Beam, from Office of the Chief of the Air Corps, Washington, D.C.

To Office of the Chief of the Air Corps, Washington, D.C.: Lieut. Colonel Hume Peabody, from duty as a member of the Air Corps Board, Maxwell Field, Ala.

To his home to await retirement: Major Romeyn B. Hough, who is relieved from duty in the Hawaiian Department.

V-7892, A.C.

GROUND SCHOOL INSTRUCTION AT RANDOLPH

Ground School instruction for both classes at the Air Corps Primary Flying School at Randolph Field, Texas, got under way on October 24th, the same day training was started on the flying lines. For the new class, ENGINES will be the first major hurdle to scale in ground school, but at the same time they will be taking courses in Mathematics, Military Hygiene, and Personal Equipment of the Pilot. For the upper class, the inevitable radio code, better known as "Buzzer," is supplemented by ground courses in Airplanes and Gunnery.

Numerous elaborate displays of working models of various types have been installed in the Engine Laboratory recently. They include:

(1) An operating display which includes an R-1820-45 engine, Hamilton controllable propeller and instrument panel, with instruments, as installed on the B-18 airplane. This equipment will be used for the first time in instructing the present lower class.

(2) A table display of a dynamic damper, which was furnished by the Wright Aircraft Corporation. This equipment is standard on all Wright Aircraft engines of recent design.

(3) A table display of an XR-1830-17 engine used to instruct students in the construction and operating principles of recent 14-cylinder engines.

(4) A table display of the 1,000 h.p. V-1710-7 Allison engine.

(5) An operating display of a liquidometer, an electric fuel level gauge, consisting of one tank unit, selector switch and dial change list.

(6) Operating and table displays of eclipse autosyn, consisting of transmitter and indicator.

(7) Operating and table displays of the Breeze and Cambridge fuel mixture indicators.

(8) A table display of propeller spinner and anti-icer.

(9) A table display of the NA-F7C carburetor.

(10) A table display of heater assembly, canvas hood type, used for engine preheating under winter conditions.

(11) A table display of the Curtiss constant speed propeller, electrically operated, complete with cockpit controls.

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Evidence of the popularity of the Air Corps as a branch of the service was recently demonstrated in the 11th Air Base Squadron, stationed at the Air Corps Primary Flying School at Randolph Field, Texas. During the month of October, this organization's record for reenlistments was one hundred percent, twelve men reenlisting to fill their own vacancies in the organization.

RANDOLPH FIELD CHILLED BY FRIGID BLASTS

The first of Texas' famed Northerners swept down on Randolph Field on the night of October 22nd, when balmy weather was supplanted suddenly by frigid blasts. The thermometer slid downward 20 degrees during the night, and the following night it dropped to a low of 37 before starting upward again. The "Norther" was of short duration, and by the end of the month flying was again being carried on in summer flying suits.

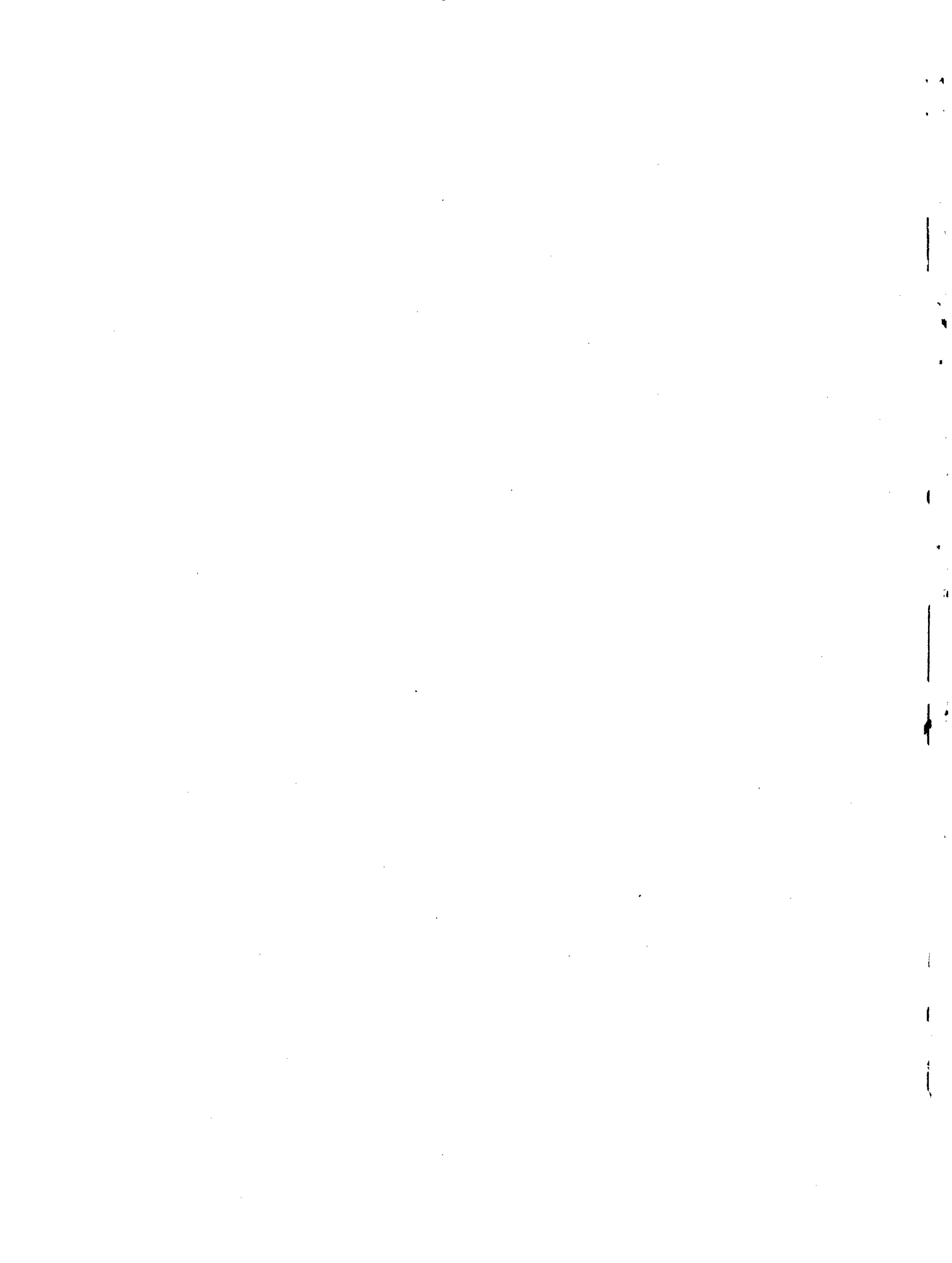
In addition to forecasting from the synoptic weather map, the forecasters at Randolph Field are now plotting and drawing Isentropic Charts from data received from airplane meteorograph and radio meteorograph soundings made at selected stations throughout the United States and Canada. After studying the air-motions and physical properties of the upper-air, the forecaster is able to visualize where there will most probably occur certain meteorological activities, such as: cloudiness, precipitation, icing, thunderstorms and cyclonic or anti-cyclonic circulation. It has proven to be a valuable aid in forecasting so far, and it is believed that it will be a major part of forecasting in the future.



The Post Weather Officer gave a short talk to the new student officers who recently graduated from the United States Military Academy at West Point, N.Y. After the short lecture, they were conducted through the Post Weather Office. The office was grouped into four sections and a trained enlisted man was stationed at each section to explain instruments, map plotting, map drawing, forecasting, teletype maintenance and uses of the radio. The student officers seemed to take very readily to their first baptism on modern weather. They were invited to visit and familiarize themselves with the Weather Office in more detail at any time during their stay at Randolph Field.

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ELECTRICAL CONNECTORS FOR AIRCRAFT USE

Standardization of mating dimensions of electrical connectors for aircraft use was successfully accomplished at a conference held recently in the Equipment Branch of the Air Corps Materiel Division, Wright Field, Dayton, Ohio. These dimensions involved contact pin length and diameters, and the coupling thread. It is reported that necessary data will be prepared and used as a basis for revision of Air Corps Specification 32151. Two manufacturers, the Bureau of Aeronautics, Signal Corps and the Air Corps were represented at this conference.



 AIR CORPS 
NEWS LETTER



BT-9 "EYEBROWS"

ISSUED BY
THE OFFICE OF THE CHIEF OF THE AIR CORPS
WAR DEPARTMENT
WASHINGTON

DECEMBER 1, 1938

NO. 23

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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THE N. A. C. A. STALL WARNING INDICATOR By Captain Charles A. Ross, Air Corps

The trend in airplane design toward the monoplane type has given aviation airplanes which are much faster and of higher performance than the biplanes of yesterday. Nevertheless, certain of the monoplanes, particularly those of the low wing type, have inherent stall characteristics which may at times be dangerous, especially if the pilot inadvertently causes the airplane to stall close to the ground. If the wing tip stalls before the major portion of the wing, there is a tendency for the airplane to roll when the stall occurs. The unfortunate part of the wing tip stall is that loss of aileron control occurs and the pilot is entirely helpless to regain control before possible damage to the airplane may result. Wing tip stalls occur very suddenly, and there is a distinct absence of that "certain feel" which the pilot experiences just prior to stalling in the biplane or high wing monoplane type.

Flight tests have been in progress at Wright Field on a stall warning indicator developed by the National Advisory Committee for Aeronautics. These indicators which warn a pilot of the approach of the stalling condition in flight were installed for test purposes on North American BT-9 and BC-1 airplanes.

The operation of the N. A. C. A. stall warning indicator is dependent on the angle of attack of the airplane instead of air speed, as have been previous stall warning indicators. Angle of attack operation results in a true indication regardless of the airplane loading condition.

Near the leading edge of each wing, well out toward the tip, is mounted a pitot-static head. The pitot or dynamic opening is so placed as to be near the surface of the wing. Adjacent to it is located the static head. At the leading edge of the wing is mounted a sharp edge which causes a small portion of the wing to stall somewhat before the major portion, the shape or thickness of the sharp edge determining the margin of safety or the air speed differential between the local stall of the pitot-static head and the actual stall of the

entire wing. Connected by tubes to the pitot-static heads are contacting devices which consist essentially of standard air speed bellows so arranged that their collapse closes contact points attached to them. Current from a battery passing through the electrical circuit actuates relays which in turn operate some method of giving the pilot warning, such as a vibrator on the rudder pedal, a horn or a signal light. It may be said that the air speed heads near the wing tips measure the flow of air over the surface of the wing. It has been found that the air flow over the wing is considerably higher than the indicated air speed of the airplane. When the angle of attack is increased to near the stalling point, the air flow over the wing decreases to zero with a very small decrease in the indicated air speed of the airplane. During an actual stall, an airspeed indicator connected to the stall warning device gives negative air speed readings, indicating that some air flow occurs from the trailing edge toward the leading edge of the wing.

The amount of warning necessary before the actual stall of the airplane takes place unquestionably varies with each particular design of airplane. For example, with an airplane which is inherently stable longitudinally, the pilot does not need as early a warning of impending stall as with an airplane which is unstable or which is exceedingly sensitive to control in pitch. It is important that the warning occur at a safe angle of attack before the stall, but the warning must not be given too frequently at times when the pilot knows he is perfectly safe, or the warning indication loses its value. Tests indicate that a warning given approximately ten to fifteen miles above the actual stall for any flight condition, whether power off or on, flaps up or down, seem to be satisfactory. Rapid changes in acceleration, affecting the airplane wing loading, such as the "pull-out" from a dive, steep banks, and the countering of air bumps, will cause the warning signal to be given, even though the air speed of the airplane may be re

lately high. The warning, however, is a true one since additional accelerations increase the angle of attack while the air speed remains high.

The stall warning indicator will not only permit an airplane to be flown with a greater degree of safety, but also shows considerable promise as an aid to the pilot in the making of instrument landings. If the glide path of the airplane is maintained in such a manner during an instrument approach that the warning signal, in just starting to operate, is intermittently on and off, the pilot is relieved of the necessity of watching his air-speed indicator and

may devote his attention entirely to the other instruments.

The question has arisen as to whether or not the installation of the edges which produce the local stall on each wing affect the flying characteristics of the airplane. The N.A.C.A. had made a full-scale wind tunnel study of an airplane with the indicator installed and with it removed, and found no apparent difference in performance. One theory as to why there is no apparent difference in performance is that the air flow effected by the edges returns to normal flow a short distance in the rear of the pitot-static heads.

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SUPPLY ACTIVITIES AT RANDOLPH FIELD

More than 1300 complete sets of flying equipment were issued by the Randolph Field Air Corps Supply during the past year, according to a recent survey of that activity. A total of 1,367 sets of equipment was handled, all of it going to the student officer classes and the Flying Cadets.

Considerable activity in all phases of their work is reported by the Air Corps Supply. Gasoline consumption has increased almost fifty percent, as compared with the similar period of last year, a total of 233,236 gallons being issued in September, 1938, as compared with 165,310 gallons issued in that month in the year 1937.

The number of airplanes on hand also has increased more than fifty percent in the past year, 345 being carried on the books on October 1, 1938, as compared with 201 on the same date last year.

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LINK TRAINER INSTRUCTION

Two enlisted men from each of the four School Squadrons of the Air Corps Advanced Flying School at Kelly Field, Texas, are undergoing a course of instruction on the Link Instrument Trainer, which instruction is being conducted by the 12th Air Base Squadron. The course includes operation and maintenance, and when it is completed it will qualify the men receiving the instruction to act as assistants to commissioned instructing personnel whose duties include giving this important phase of instruction to the large classes of students at the Advanced Flying School.

At present there is a total of 176 students in Class 39-A undergoing instruction at this school, this number including 4 Regular Army officers, 6 National Guard officers and 166 Flying Cadets.

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FIRE DESTROYS OLD-TIME BOMBER

While mechanics were performing a welding job on one of the engines of a B-4 airplane which was parked on the hangar line at Kelly Field, Texas, on November 18th, a sudden gust of wind caught sparks from the welding equipment and ignited the wing, which was completely destroyed. The fabric on the fuselage was also burned. The men on the line took steps promptly to extinguish the flames which threatened the old-time Bomber - one of the last two of that type remaining in active service at the Advanced Flying School, and they had everything under control when the station fire department arrived a few seconds after the alarm was given. Quick action on the part of the fire department personnel prevented further damage and destruction of property and possible injury to personnel.

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LECTURES ON ENGINES BY CAPTAIN SMITH

Captain George F. Smith, Air Corps, on duty at the Air Corps Materiel Division, Wright Field, Dayton, Ohio, arrived at Kelly Field, Texas, on November 20th, and delivered lectures on the following two days to the student body of the present class undergoing instruction at the Air Corps Advanced Flying School on "Modern Engines and Equipment." The lectures, which were very interesting and informative, were attended by a large representation of the permanent personnel of Kelly Field. Captain Smith returned to his home station on November 23rd.

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Brigadier General Barton K. Yount, Air Corps, Assistant to the Chief of the Air Corps, has been relieved from command of the Air Corps Training Center and from assignment and duty at Randolph Field, Texas, and assigned to duty in the Office of the Chief of the Air Corps, Washington, D.C.

V-7909, A. C.

DIVISIONAL ARTILLERY DEMONSTRATION

An excellent demonstration of the use of Divisional Artillery was the "show" put on by the Infantry School at Fort Benning, Ga., on the afternoon of November 14th for the benefit of the students in the current class of the Air Corps Tactical School.

The fast moving program of about two and one-half hours, in which the various types of artillery fire were demonstrated, gave the students an excellent picture to combine with the instruction which is being imparted in "Field Artillery" by Lieut. Colonel Harold H. Ristine, Field Artillery.

The entire class of 76 students made the flight to Fort Benning in the forenoon and were given lunch at the Officers' Club prior to the demonstration. The faculty was represented by Colonel Millard F. Harmon, Air Corps, Assistant Commandant; Lieut. Colonel Charles P. Hall, Infantry, Director of the Ground Arms Department; Lieut. Colonel Harold H. Ristine, Field Artillery; Major Alden H. Waitt, C. W. S., Chemical Warfare Instructor; and Lieut. Commander William H. Buracker, U. S. N., Naval Instructor.

Due to the shortage of airplanes at Maxwell Field, it was necessary to secure the loan of a C-33 airplane from Langley Field, Va., to assist in the ferrying of the students.

This was the second of the annual Fort Benning demonstrations, and the third, which shows the "Battalion in Attack," is scheduled for the afternoon of December 2nd and will be a supplement to the Infantry course which has recently been completed under the direction of Major Allison J. Barnett, Infantry.

Tentative arrangements have also been made to send the class to Fort Knox, Kentucky, about December 9th, for a demonstration of mechanized cavalry. This demonstration will be similar to the one which was initiated a year ago. It is planned to fly to Fort Knox on the morning of December 9th, give the student officers an opportunity to ride the various types of equipment that afternoon and then witness a firing demonstration by the combined mechanized units on the morning of December 10th. The return flight will be made either that afternoon or the following day, as desired by the individual pilots. At this writing Lieut. Colonel John C. Mullenix, Cavalry, with Captain Robert C. Oliver, Air Corps, as pilot, are at present on a flight to Fort Knox to complete the necessary details for the flight and demonstration.

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PROGRESS OF INSTRUCTION AT TACTICAL SCHOOL

Section B of the current class of students at the Air Corps Tactical School, Maxwell Field, Ala., were prevented by

weather from completing gunnery practice at the Eglin Field gunnery base at Valparaiso, Florida, on November 4th and 5th. The Section flew to Valparaiso on November 3rd, but when very threatening weather blew in on Friday morning and was forecast to remain for at least two days, authority was given the commander to return the students at his discretion. The entire class returned the afternoon of November 4th. Operations at the gunnery camp were conducted under the direction of Major Warren A. Maxwell, Air Corps, Post Operations Officer. The fall trips of the Sections to the gunnery camp are preliminary for the entire week of instruction which is scheduled for next May.

With the completion of courses in Combat Orders, Maps and Photographs, Combat Principles, Basic Tactical Functions of Air Force, Infantry and Field Artillery, the class has become well accustomed to the routine of instruction and the fairly regular quizzes and map problems. Many of the students are beginning to feel more at home now that instruction is being carried on in Observation and Pursuit Aviation and Anti-aircraft Defense, these being the first of the Air Corps subjects in the curriculum.

Classes were scheduled to close at 10:30 a.m. on Wednesday, November 23rd, for the annual Thanksgiving holiday, and were to be resumed the following Monday. This break is appreciated by the students, many having made plans to take short trips during this recess.

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FIRST PURSUIT GROUP ACTIVITIES

On November 12th, the 17th, 27th, 94th and Headquarters hangars at Selfridge Field, Mt. Clemens, Mich., were prepared in A-1 shape for an inspection of hangars by the Group Commander. Following the hangar inspection, an aerial review was flown, with 44 planes taking to the air, going into formation and passing a colorful review before the Group Commander.

The 27th Pursuit Squadron has been industriously pursuing considerable practice in ground gunnery at Camp Skeel, Oscoda, Michigan, prior to actual ground gunnery. A series of discussions were held concerning the machine gun sights, and various problems which were to be encountered with the P-35 airplanes. For most of the pilots in the Squadron this marked the first actual gunnery practice, and they were all very well pleased with the results.

The 94th Pursuit Squadron is receiving some new P-36A Pursuit airplanes from the Curtiss airplane factory, and the personnel are taking great pride in shining these new "Sky Chariots."

IMPORTANT NEWS

Reprinted from "American Aviation"

In these days of fast-moving historic events it is easy to overlook happenings of far-reaching socio-political significance. The daily news reporter snatches bits of the stories of the hour but in the pressure of the routine news he is rarely able to portray impassively the broad import of the great changes taking place in the world today.

Six months ago the Czechoslovakian crisis was merely a scheduled event for the future. The President of the United States had his mind on many problems but it could not be said that aviation or air defense was really one of them. Civil aviation was still being directed by a single government bureau in a large federal department and commercial air transport was merely a nuisance factor in two other large governmental agencies.

But history moves fast these days. The Czechoslovakian crisis brought bitter realization to more than one European country that aerial force was the greatest single determining factor in the relationships of nations. Some have realized that for a long time, but it took this one crisis and the resulting shift in the balance of power in Europe to drive home this one dominant new factor in the world's history.

Aviation in the United States has entered a new phase of its advancement and development. The creation of the Civil Aeronautics Authority was not born of a European crisis, but its creation and organization is now playing a vital part in this nation's national defense - and the key to national defense is air defense.

Within six months all domestic civil aviation has been centralized in an independent federal agency; within six months the White House has changed from an attitude of mild concern about aviation to an attitude of vital concern; and within six months the military and naval aviation interests have become linked closely with commercial development. Within a short space of time the federal recognition of aviation has been raised from a minor to a major status.

In the extensive plans for expansion of our air defense, commercial aviation will benefit. The airways are to be completed, the airport system strengthened, and pilots and mechanics are to be trained in large numbers. The vast machinery of building a great air force cannot be set in motion overnight; results will not come quickly. But it is clear that we are entering a new era of expansion on all fronts that will place aviation out in the front. For the first time, really, aviation is getting a major attention in Washington. There has been much ballyhoo in the past about air defense and about the promotion of aviation, but the ballyhoo has exceeded by far the actual consideration these mat-

ters were getting from the sources of power in the capital.

The big news of today is that aviation is moving into high gear. It is no longer a side issue. It is a matter of vital national and international concern. The airplane has made itself felt in many ways and a few nations had the foresight to see it as the one dominating weapon. As one airline president said in a recent advertising message: "The new era of aviation is not coming. It is here."

- From AMERICAN AVIATION.

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COLONEL WEIR DEPARTS FROM PANAMA

Lieut. Colonel Benjamin G. Weir, formerly commanding officer of Albrook Field, sailed from the Panama Canal Department on October 28th upon the expiration of his tour of duty there. Until his departure, Colonel Weir was Executive Officer of the 19th Wing, and after a vacation at his camp in Maine he will proceed to March Field, Calif., for station. Ironically enough, Colonel Weir, who has honored so many departing officers with aerial salutes, was himself denied that honor when heavy rain, always unpredictable in Panama, closed in behind the take-off of the parading squadrons of Bombardment and Attack planes, cutting them off from transport and field alike. Unable to return home, the pilots beat the rain into Rio Hato by a scant margin, and there the crews were thrown upon the hospitality of the 24th Pursuit Squadron's gunnery camp for the night.

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PANAMA PURSUITERS RETURN FROM AERIAL GUNNERY PRACTICE.

The 24th Pursuit Squadron returned to Albrook Field, Panama Canal Zone, from the gunnery camp at Rio Hato on the morning of October 31st, after two weeks in the field. Despite an unusual amount of rainfall, all events went through on schedule, and the entire program was completed. Upon their return they found some shiny P-26's in their hangar. Santa Claus had come and gone!

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Colonel Rush B. Lincoln, Air Corps, has been relieved from duty in the Office of the Chief of the Air Corps, Washington, D.C., and assigned to station at March Field, Riverside, Calif.

Colonel Byron Q. Jones, Air Corps, has been relieved from duty as instructor at the Army War College, Fort Humphreys, D.C., and assigned to the Panama Canal Department.

Captain Alfred A. Kessler, Jr., Air Corps, stationed at Wright Field, Dayton, Ohio, has been assigned to the Office of the Chief of the Air Corps.

V-7909, A.C.

SIGNIFICANT AVIATION NEWS

Under the heading "White House Plans World's Greatest Air Force for U.S.," the semi-monthly publication AMERICAN AVIATION, for November 15th, states that "Most significant aviation news in many a moon is determination of the current Washington administration to build for the United States the world's greatest air force. Coincidentally the plans will be a boon to all commercial aviation. We quote from AMERICAN AVIATION:

"This new policy represents a conversion of President Roosevelt - a Big-Navy man - to airplanes as the greatest single need for national defense. The Munich Conference was the predominating reason for the present concern in the White House for air defense. Two men - Col. Louis Johnson, Assistant Secretary of War, and the President's son, James, are credited with being the two most influential persons in focusing the mind of the President on aviation.

"Second most significant aviation news is the fact that Civil Aeronautics Authority is being drawn into national defense plans in a close and intimate way. It appears clear that the United States will now follow the European method of coordinating civil aviation closely with the military and naval.

"It was also learned that the President had abolished the inter-departmental committee on aviation and is now relying solely on an unofficial 'air cabinet' comprised of the Army, the Navy and the CAA. Other agencies such as the State Department are included but not on the same par.

"With Louis Johnson as the ringleader and spokesman, many conferences have been held within the past month, with the CAA represented each time. The next few months will see numerous important national defense plans announced.

"The number of Army planes will be increased to a total estimated at 7,000 to 10,000, according to unofficial reports. It is significant that the White House has laid stress upon the Army, while nothing has been said about increasing the number of Navy aircraft.

"A program of training mechanics is to be undertaken at an early date, probably by the National Youth Administration with the aid of the Civil Aeronautics Authority.

"A broad training plan for pilots is in the wind with likelihood of federal aid or subsidy in some form. This subsidy may take the form of 'educational grants,' but the actual plan has not yet been completed.

"Those who have visited at the White House recently indicate that national defense is uppermost in the President's mind and that his chief interest is in the air force. To the industry this is encouraging news as the President has never been personally avid about avia-

tion in any of its phases. The European situation with its complete surrender of Great Britain to the Fascist powers and consistent reports of Germany's large air force, is the principal reason for the new interest by the White House in the air.

"Any program that will be undertaken will of necessity be a long-term one. The Air Corps and the industry well know that airplanes can't be built in a short time and that if a goal of 7,000 craft is established, some years will be necessary for fruition. But there is no question now that the administration is determined to have an air defense second to none in the world.

"The national defense program will benefit every phase of civil aviation. Part of the program is the strengthening of the air transport system, while other parts will be the training of pilots and mechanics and the improvement of airports. The airways system will be completed at an early date. This will require man power and airplanes. But the coordination of civil aeronautics with the military is a new step in the American government and will tend to bring the civil phases into the sphere of influence of the military.

"Washington was no little interested when the President, on Oct. 28, visited the Naval Air Station at Anacostia to see some of the new Navy airplanes. With him were Army and Navy officials and members of the CAA.

"Chief attraction at Anacostia was the Navy's new \$1,000,000 experimental long-range bomber constructed by Consolidated Aircraft Corp., San Diego, which had flown non-stop from San Diego in 13 hours and 55 minutes. At the controls of the huge 25-ton boat was Lieut. Comdr Andrew Crinkley, who has been conducting acceptance tests. With a crew of 15 the flying boat is capable of flying 4,000 miles without refueling. Without landing gear equipment, the boat flew 2,300 miles across land.

"The Consolidated boat is powered with four 14-cylinder Pratt & Whitney engines. Its wing span is 115 feet and it measures 23 feet 3 inches in height. The President also viewed other types of planes and indicated that he will keep close watch on aviation in the future."

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Major George L. Usher, Air Corps, Chief of the Personnel Division, Office of the Chief of the Air Corps, Washington, D.C., was promoted to the grade of Lieut. Colonel (temporary) from November 20, 1938.

Captain Edward A. Hillery, Air Corps, was promoted to the grade of Major (temporary) from November 21, 1938.

Major Albert W. Stevens, Air Corps, for a number of years on duty at Wright Field, Dayton, Ohio, has been assigned to Hqs. 2nd Corps Area, Governors Island, New York, for duty.

ACTIVITIES IN HAWAIIAN DEPARTMENT

During the latter part of October, the 23rd Bombardment Squadron was engaged in flying nightly cooperative missions for the 64th Coast Artillery (Anti-Aircraft). Flying at a high altitude without lights on predetermined courses, the B-18's of the Squadron gave the searchlight batteries good practice in tracking. Excellent radio contact enabled both units to cooperate to the utmost. On several missions officers of the Coast Artillery Corps flew in the tracking planes to observe the practice from the air.

The News Letter Correspondent states that as a result of the missions, it is expected that in the future both the Air Corps and Coast Artillery personnel will have a better insight into the problem of illuminating airplanes during night attacks.

The 23rd Bombardment Squadron conducted the Quarterly Load Test on October 28th with satisfactory results. A performance flight involving the use of oxygen, a bombing attack, machine gun practice and a communications check were incorporated in the mission.

A strenuous two-week period of maneuvers by the 4th Reconnaissance Squadron with the Coast Artillery was on the program for the month of November, the operations involving a series of day and night missions to develop and test methods of attack and defense. This maneuver period was to be followed by two weeks of demolition bombing practice.

The 31st Bombardment Squadron during the past two months limited its flying activities to the minimum requirements, devoting most of its energies to the construction of temporary buildings for mess and recreational facilities. At this time all of the scheduled construction is well under way, and the job should be completed during the month of December, provided the weather and the supplies on hand permit. "Tent City" at Hickam Field is beginning to blossom forth with a new growth of bermuda grass which should tend to beautify the scenery to a considerable extent.

With the assembly completed on four B-18 airplanes, the 50th Reconnaissance Squadron of Luke Field finally entered into select company with, as the News Letter Correspondent puts it, real "honest-to-gosh" airplanes to fly. Under the supervision of Captain J.R. Anderson, Squadron Engineering Officer, the assembly was completed rapidly in spite of a Keystone environment. For the first time in several months, the Squadron is now able to carry out tactical flying.

October was a very busy month for the

72nd Bombardment Squadron, with heavy schedules daily in bombing and gunnery training. This training is well under way to being completed.

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79TH SQUADRON'S FIRST MARINE DISASTER

Lieut. "Skipper" Woolams, owner of an 18-foot sailboat, while giving his crew a work-out on Cross Lake one windy afternoon in November, ran into difficulties with cross winds and the boat capsized in the middle of the lake. Lieuts. Chick and Marett began swimming toward shore for help, while Lieuts. Ferguson and Woolams upheld the tradition of the high seas and stayed with their ship.

Later on in the evening, another boating party, sighting the disabled sailing craft, rescued the two mariners clinging desperately to its sides, also Lieut. Marett, who was found about a hundred yards from shore in a very exhausted condition. Lieut. Chick had finally succeeded in reaching the mainland, after shedding the greater portion of his attire in the icy waters of the lake, and was found struggling along toward civilization on cramped legs, still intent upon finding help.

The News Letter Correspondent states that, although there is a marked lack of enthusiasm on the subject of sailing among the junior officers of the 79th Pursuit Squadron, Barksdale Field, La., since the above incident occurred, "we are nevertheless very proud of our true sons of the 'Briney deep.'"

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MORE MEDALS FOR LT. DENSFORD'S COLLECTION

First Lieut. Charles F. Densford, Air Corps, returned to Kelly Field, Texas, on November 9th, after establishing a new world's record for .38 caliber revolvers in rapid firing at Savannah, Ga., as reported by the Kelly Field Correspondent in the previous issue of the Air Corps News Letter.

Enroute to Kelly Field, Lieut. Densford, who participated in the matches held in that fairest of southern cities while on a routine navigation training flight, was taken ill at Fort Benning, Ga., and put to bed at the Station Hospital until he recovered sufficiently to fly his plane back to his home station. Upon reporting, he proudly displayed some eight medals he captured at the meet and, above all, was full of praise of the hospitality extended him by the good people of Savannah, who had charge of conducting the South Atlantic Pistol Championship matches and which, according to Lieut. Densford, were a decided success.

Meriting particular praise, according to Lieut. Densford, was Captain J. J. (Continued on Page 11).

ACTIVITIES AT RANDOLPH FIELD, TEXAS

The Primary Stage at Randolph Field, the "West Point of the Air," starting the October class with 333 student pilots who reported to the line for training, has soloed almost one-half of the class—150 to be exact—with the only accident being a bent axle. With the class flying time average at nine hours, this large number of solos is considered outstanding. The Primary Stage reports that two days have been lost due to weather.

Meanwhile, on the Basic side of the field, soloing the BT-9's is a thing of the past for the student pilots. It is expected that instrument training, as well as night flying, will be started in the near future in order that a portion of this work may be completed before the Christmas holidays. Praise continues to come in for the "eyebrow" slots recently installed on all Basic trainers at Randolph Field. (See cover page).

Many Flying Cadets at Randolph Field financed their own college careers to obtain the necessary educational requirements for admission. They have raised the necessary educational funds by various means, but few of them have been more unusual than the method employed by Cadet R. B. Boyce, of New York City, who gave up his own life's blood in order to fly for his country. Cadet Boyce replenished his exchequer by acting as a professional blood donor.

First Lieut. Frederic H. Miller, Jr., Air Corps, was detailed to duty with the Academic Department on November 1, 1938. Lieut. Miller is considered especially qualified for this detail in view of his educational and military attainments, having graduated from Purdue University with a B.S. degree in Electrical Engineering in 1932, and from the Air Corps Training Center in October, 1933. Since entering the Army as a Flying Cadet on October 8, 1932, with the exception of three days which intervened between details to active duty while a Reserve officer, Lieut. Miller's service with the Air Corps has been continuous.

Captain Guy B. Henderson, Air Corps, the instructor in Air Navigation, has received orders to proceed to the Materiel Division, Wright Field, Dayton, Ohio, and procure data on recently developed instruments, which data will supplement the texts used in the navigation course at the Primary Flying School.

Telephones will be installed at the three outlying airdromes of the Primary Stage at Randolph Field, according to an approval recently received from the War Department. The three fields in use by the Basic Stage will not be so equipped, since there are radio facilities thereat.

Rights of way for these telephone lines have been tentatively secured from the numerous property owners. The installation of telephones at these fields is deemed necessary in case of emergency, as well as for the handling of routine business during flying training.

Bexar County, Texas, State Highway Department; the M-K-T Railroad, Texas and New Orleans Railroad, as well as many private owners, all were involved in the securing of the right of way by the Randolph Field Quartermaster's Office.

Model airplanes are all the rage in the Student Officers Detachment at Randolph Field. "Kits" are purchased with much regularity by the student pilots, who spend much of their spare time in the construction of the models. For the price of a dime, if one is lucky, after innumerable hours of slivers, cement and general cussing, a real flying model is produced. If, however, as often happens, a "crack-up" mars the initial flight, another "Kit" is purchased and the task is started all over again.

Captain Bernard A. Bridget, Air Corps, was assigned to the 52nd School Squadron and joined it on November 1, 1938. In addition to his duties as Basic Stage Commander, he was detailed as Squadron Adjutant.

The second real Norther of the season swept down on Randolph Field on the afternoon of November 6th, when the thermometer dropped 40 degrees in seven hours, according to the Post Weather Station. A low of 28 was reported during the cold snap that sent all flying personnel into winter equipment for the second time.

Extensive research is being carried on by the Post Weather Office personnel concerning fog formation. The research covers the relationship of the temperature and dew-point of a wet or dry surface on a cloudy or clear day. Two charts are being drawn up, one showing the temperature and dew-point on a cloudy day with a wet or dry surface, and the other showing the temperature and dew-point on a dry day, with a wet or dry surface. This is slow and tedious work, but it is believed that the results shown from these charts will be well worth the time and trouble.

Lieut. Don Zimmerman, Post Weather Officer, and Private 1st Class Spikes, Student Forecaster in the Post Weather Office, made an extended cross-country flight to Patterson Field, Ohio, on official business. They photographed va-

(Continued on Page 8)

HARMON TROPHY AWARDED 79th SQUADRON

On November 12th, each member of the 79th Pursuit Squadron, Barksdale Field, La., was very proud to receive the Harmon Efficiency Trophy, which is awarded each calendar year to the most efficient squadron at Barksdale Field on the following factors: Maintenance of airplanes; conduct of T.R. 440-40; completion of War Department (GHQ) Training Directive; maintenance of barracks and grounds; appearance of personnel; airplane accidents; forced landings; efficiency of airplane maintenance; venereal rate and Court-Martial rate.

This Trophy was awarded by the business men of Shreveport, La., in honor of Colonel Millard F. Harmon, former Commanding Officer of the 20th Pursuit Group, and it was presented to Captain Thayer S. Olds, Commanding Officer of the 79th Pursuit Squadron, by Brigadier General Frederick L. Martin, Commanding the Third Wing, GHQ Air Force, in the absence of Major General Frank M. Andrews, GHQ Air Force Commander, who was unable to attend the presentation ceremonies as had been planned.

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INSIGNIA FOR 55TH PURSUIT SQUADRON

For the first time since its inception as an active unit in November, 1925, the Squadron insignia of the 55th Pursuit Squadron greets the eye of the onlookers from the sides of its planes.

The insignia as approved is described as follows:

On a yellow disk bordered in blue, placed in saltire and interlaced with a blue annulet a winged arrow point up and winged sword point down, both black and that portion on the yellow border. The yellow disk and blue border represent the sun and sky, and the winged arrow the fast rate of climb of a plane starting into the sky, passing through the sun's rays and again into the sky. The winged sword symbolized power and destruction, and with the point placed downward denotes the pursuit plane's method of launching an attack. The annulet interlaced with the sword and arrow produces a fret, which signifies unity. The colors are those of the Air Corps.

As a result of an unsatisfactory report, the 55th Pursuit Squadron recently received authority to change squadron identification color from white to blue. This change was requested due to the fact that all new planes are aluminum in color, making the white nose cowlings show up very poorly in contrast. Letter from the Chief of the Materiel Division, dated November 12, 1938, states that Technical Order O7-1-1 is being revised to authorize the changes.

77TH SQUADRON RECEIVES LUKE TROPHY

The Frank Luke Memorial Award, which is presented annually to the Pursuit squadron of the GHQ Air Force with the highest scoring average in aerial gunnery, was presented to the 77th Pursuit Squadron, 20th Pursuit Group, GHQ Air Force, stationed at Barksdale Field, La., on November 5, 1938, by Brigadier General Frederick L. Martin, Commanding the Third Wing, GHQ Air Force.

This is the second consecutive year that the 77th Pursuit Squadron has won this coveted honor.

Congratulations are in order for Lieut. Cecil P. Lessig, of the 77th Pursuit Squadron, winner of the Flournoy Harris Award, given in recognition of the highest individual gunnery score in the 20th Pursuit Group.

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RECRUITING DRIVE FOR KELLY FIELD

As a result of the intensive recruiting drive made by the various recruiting agencies at San Antonio and adjacent cities and posts, all vacancies in the enlisted ranks of Kelly Field, Texas, have been filled. Kelly Field was allotted an increase of 100 enlisted men during the month of September, and all vacancies were filled during the first week of November, bringing the enlisted strength of the Air Corps Advanced Flying School to 1079. Most of the men who were enlisted and assigned to the various organizations have been receiving recruit instruction, and as they become qualified they are being turned to duty to help the man-sized job of maintaining the 156 various type airplanes now assigned to Kelly Field.

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Randolph Field Activities (Continued from Page 7)

rious types of cloud formations enroute, mainly the type of clouds found in the vicinity of a warm or cold front. Since cloud formations are a distinct advantage to the forecaster, these photographs should be of great value to the Post Weather Office.

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During two weeks in November, the Transient Aircraft Hangar, 11th Air Base, Randolph Field, Texas, serviced 66 Army airplanes, including one flight of six.

The Aero Repair completed repairs on 13 airplanes during this period. The types of airplanes repaired were as follows: 4 BT-9's, 1 PT-3 and 8 PT-13's.

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O B I T U A R I E S

A lamentable airplane accident at La Grange, Ga., on the night of November 18th, exacted a toll of eight lives, the dead being:

1st Lieut. James W. Stewart, Medical Corps, Randolph Field, Texas.

2nd Lieut. Robert Kirkland Black, Air Corps, Mitchel Field, N.Y.

2nd Lieut. John D. Madre, Air Reserve, Mitchel Field, N.Y.

2nd Lieut. Robert R. McKechnie, Air Reserve, Mitchel Field, N.Y.

2nd Lieut. Allen M. Howery, Air Reserve, Mitchel Field, N.Y.

Staff Sergeant Harry T. Jones, Mitchel Field, N.Y.

Corporal Jerry E. Galloway, Hensley Field, Texas.

Private Joseph J. Nanartowich, Mitchel Field, N.Y.

Six of the eight men listed above were killed at the time of the crash. The two who temporarily survived the crash were Lieut. Madre and Private Nanartowich. The latter died in a hospital at La Grange shortly after he was taken there, and Lieut. Madre, also taken to a hospital at La Grange, died on the morning of November 22nd.

The Bombing plane, piloted by Lieut. Black, was enroute from Mitchel Field to Maxwell Field, Ala. The flight was of a routine nature. The trip was without incident until a wind and rain storm were encountered over Georgia.

Major Warren A. Maxwell, Air Corps, of Maxwell Field, Ala., stated that he obtained a description of the crash from Private Nanartowich before he died.

"We were following the lighted airway from Atlanta to Montgomery, flying under the overcast," Major Warren said the dying man told him. "Without warning, we hit an air bump which dropped us between 100 and 200 feet. Then we crashed into the tree tops. The ship broke into flames as it struck. Several of the injured were thrown about 150 feet from the wreckage."

Lieut. Stewart was born in New York City on January 26, 1909. He received his B.S. degree from the College of the City of New York in 1931, and his M.D. degree from Cornell University in 1935. He was commissioned a first lieutenant in the Medical Corps, U.S. Army, June 2, 1937.

Lieut. Stewart graduated from the Army Medical School in 1937, and the Medical Field Service School, Carlisle, Pa., in 1938. For several years he had been quite interested in aviation and had progressed to such an extent that he was granted a pilot's rating by the U.S. Department of Commerce. Following the completion of his duties at Carlisle, he was assigned to the School of Aviation Medicine, Randolph Field, Texas, for the

course beginning July 15, 1938, and he was graduated from this institution on November 12, 1938. His last assignment was the Station Hospital, Randolph Field. At the School of Aviation Medicine he was considered an outstanding student and was referred to in their estimate of him as alert, aggressive, very cooperative, conscientious, resourceful and diligent.

He is survived by his mother and wife. In his death both the Medical profession and the Army lost the services of a valuable and stimulating member.

Lieut. Black was born at Brooklyn, N.Y. June 7, 1907. After graduating from grammar school and high school, he attended the Sewanee Military Academy for one year and Amherst College for 2½ years.

Appointed a flying cadet in the Army Air Corps, he graduated from the Primary Flying School, Brooks Field, Texas, June 29, 1928, and from the Advanced Flying School, Kelly Field, Texas, October 20, 1928. He specialized in Pursuit aviation. Rated as Airplane Pilot and appointed a second lieutenant in the Air Reserve upon his graduation from Kelly Field, Lieut. Black was assigned to extended active duty with the 1st Pursuit Group at Selfridge Field, Mt. Clemens, Mich.

At his own request, Lieut. Black was relieved from active duty on April 20, 1929, in order to accept a position in commercial aviation as a flying instructor. During the course of his career in commercial aviation, he was a flying instructor with the Chinese Army, and later was employed as a pilot by a commercial aviation company in Manila, P.I. On several occasions he served short periods of active duty with the Air Corps under his status as a Reserve officer.

While in Manila, Lieut. Black passed the examination for appointment in the Air Corps, Regular Army, and he was commissioned a second lieutenant on October 1, 1936, and assigned to duty at Mitchel Field, N.Y. He qualified as a Dead Reckoning Navigator with the GHQ Air Force.

Lieuts. McKechnie, Howery and Madre, classmates at the Air Corps Training Center, graduated from the Advanced Flying School, Kelly Field, Texas, on October 5, 1938, when they were given the rating of "Airplane Pilot," commissioned second lieutenants in the Air Reserve, and assigned to extended active duty at Mitchel Field, N.Y. Lieut. McKechnie specialized in Pursuit Aviation, and Lieuts. Howery and Madre in Attack Aviation.

Lieut. McKechnie, a native of Cleveland, Ohio, where he was born on June

10, 1915, graduated from grammar school and high school in his native city and, prior to his appointment as a Flying Cadet in the Army Air Corps, was a student for two years in the college of mechanical engineering, Ohio State University. He is survived by his mother, Mrs. Elizabeth McKechnie, of Cleveland, Ohio.

Lieut. Howery was born at Russellville, Tenn., November 13, 1910. He graduated from Morristown, Tenn., High School and from the University of Tennessee, receiving from the latter institution a BS degree in Electrical Engineering. In civil life he was employed as radio engineer by several broadcasting stations. He is survived by his parents, Mr. and Mrs. Lewis Bryant Howery, of Russellville, Tenn.

Lieut. Madre, a native of Dresden, Tenn., where he was born on October 18, 1914, graduated from grammar school and high school, and in 1937 from the University of Mississippi with a BA degree. He is survived by his mother, Mrs. Frank H. Rayhorn, residing in Memphis, Tenn.

Staff Sergeant Harry T. Jones was born on September 24, 1902, at Montrose, Calif. He enlisted in the Air Corps on February 2, 1926, and was assigned to the 28th Bombardment Squadron, 4th Composite Group, at Nichols Field, P.I. Upon his return to the United States, he joined the 11th Bombardment Squadron, 7th Bombardment Group, on May 20, 1929, at March Field, Calif., and on June 24, 1932, he was transferred to the 32nd Bombardment Squadron at that field. Returning to the Philippines for another tour of foreign service, he joined the 3rd Pursuit Squadron at Clark Field on December 2, 1934. On July 3, 1937, he joined the 99th Bombardment Squadron at Mitchel Field, N.Y.

Sergeant Jones is survived by his widow, Mrs. Dawn E. Jones.

Corporal Jerry E. Galloway was born on December 7, 1915, at Sulphur Springs, Texas. He enlisted at Kelly Field, Texas, on February 27, 1936, and was assigned to the Advanced Flying School Detachment. On July 1, 1937, he was transferred to the 3rd Weather Squadron, with station at Hensley Field, Dallas, Texas. He is survived by his father, Mr. J.C. Galloway, of Sulphur Springs, Texas.

Private Joseph J. Nanartowich was born on July 19, 1914, at Hancock, Mich. He enlisted at Newburgh, N.Y., March 5, 1937, and was assigned to Base Headquarters and Second Air Base Squadron, Mitchel Field, N.Y. Assigned as student at the Air Corps Technical School at Chanute Field, Rantoul, Ill., he graduated on July 15, 1938, from the Radio Repairers and Operators course, and then

returned to duty at Mitchel Field. He is survived by his mother, Mrs. Ursula Nanartowich, who resides at Highland Falls, New York.

The Air Corps extends its deep sympathy to the bereaved relatives of these officers and enlisted men who died in the service of their country.

NEW HEADS OF AIR CORPS TACTICAL SCHOOL

Two seasoned Air Corps executives, both of whom served overseas during the World War, recently assumed charge of the Air Corps Tactical School at Maxwell Field, Ala.

Colonel Millard F. Harmon, Jr., former Assistant Commandant, became the Commandant, succeeding Colonel John H. Pirie, and Lieut. Colonel Donald Wilson, Director of the Department of Air Tactics and Strategy, became the Assistant Commandant.

Colonel Harmon recently completed a tour of duty in the Hawaiian Department. Prior to that time he commanded the 20th Pursuit Group at Barksdale Field, La.

Lieut. Colonel Wilson has been at Maxwell Field since August 15, 1936, and was transferred to this post following his graduation from the Command and General Staff School, Fort Leavenworth, Kansas.

The assignment of Colonel Harmon as Commandant relieved Colonel Pirie of double duty, for he had been acting as the head of the Tactical School in addition to being chairman of the Air Corps Board.

Colonel Harmon's military career dates from his entrance to West Point and his subsequent graduation therefrom in 1912, when he became a second lieutenant of Infantry. He was given assignments in Minnesota, Kentucky, Texas and the Philippines. In 1915, while with the 27th Infantry, he was attached to the Aviation Section, Signal Corps, to undergo flying training at the Signal Corps Aviation School at San Diego, Calif., from which he graduated in 1916.

Later he was attached to the First Aero Squadron with the Punitive Expedition into Mexico. In 1917, he was one of three U.S. Army officers to attend French schools with a view to acquiring knowledge of methods employed in France for the training of aviation personnel.

During the World War, Colonel Harmon was on duty in connection with the inspection and laying out of landing fields and, in addition thereto, he performed various staff duties. For a brief time he commanded the First Air Depot, and later served as pilot with French Escadrille No. 65. For his service with this organization he was highly commended by the commander of the French Combat Squadron No. 2, who re-

ported that he (Harmon) "insisted on taking part in all of the patrols of that Escadrille and had made, besides, many voluntary patrols, thus setting the best example of enthusiasm and scorn of danger."

For his meritorious service overseas the French government awarded him the Croix de Guerre, with Star.

After the war, Colonel Harmon served in many important positions, among them being those of Chief of the Flying Branch, Schools Section, Office of the Director of Military Aeronautics; Assistant Chief of the Training Section, in charge of heavier-than-air training; Commanding Officer of the First Provisional Wing, Mineola, L. I., New York; Commanding Officer of France Field, Panama Canal Zone; Air Officer, Panama Canal Department; Commanding Officer of Bolling Field, D. C.; member of the War Department General Staff; instructor at the Command and General Staff School, Fort Leavenworth, Kansas; Commanding Officer of the Primary Flying School at March Field, Calif.; Commanding Officer of the 20th Pursuit Group at Barksdale Field, La., and Commanding Officer of Luke Field, T. H.

Colonel Harmon is a graduate of the Command and General Staff School and of the Army War College.

Lieut. Colonel Wilson, a native of Hiner Hill, W. Va., became interested in aviation in his boyhood days. Some years before the war he became the center of interest in his community when he built a large biplane glider in which he made hundreds of flights. His assistants, who needed no urging, were members of a Boy Scout troop.

After attending the Baltimore Polytechnic Institute for three years, Colonel Wilson, for six years thereafter, was engaged in securing data and making maps of all kinds used in railroad work, including surveying. In 1916 he enlisted in the Fifth Maryland National Guard Infantry, and served as corporal, sergeant and supply sergeant until April 9, 1917, when he was commissioned a second lieutenant. The following month he became a first lieutenant. In the same year he took a special course in aeronautics at the Massachusetts Institute of Technology. During the year 1916, Col. Wilson saw service along the Mexican Border. When his regiment was mustered into the Federal service to serve in the World War, he went to Camp McClellan, Ala., and sailed for overseas duty in June, 1918. He served in the Vosges-Switzerland Sector; attended the school for flying officers at St. Maxient, France; the Field Artillery School at Camp DeDouge, France; served as aerial instructor at the Second Aviation Instruction Center at Tours, France, and later at the Aeronautical School, Chantillon Sur Seine. In addition, he was

attached to the 20th Company, Fourth Motor Mechanics Regiment, Air Service, as post adjutant. At Kettig, Germany, he was aerial observer for the 186th Aero Squadron.

Honorably discharged from the service in 1919, he reentered the Air Service the following year, being commissioned a first lieutenant on July 1st and being promoted to captain the same date. His first assignment under his regular commission was as Acting Air Officer of the Third Corps Area. Later, in 1920, he was transferred to Post Field, Fort Sill, Oklahoma, where he took a refresher course in aerial observation at the Field Artillery School of Fire. He served as instructor in the garrison school at Fort Sill as well as in the Air Corps Observation School at that post.

In the year 1922, Colonel Wilson completed the course of instruction at the Air Service Primary and Advanced Flying Schools, and received the ratings of "Airplane Pilot" and "Airplane Observer." At Kelly Field, Texas, he served as senior instructor, Department of Observation, Advanced Flying School. He also commanded the 42nd School Squadron.

From Kelly Field Colonel Wilson was transferred to the Office of the Chief of Air Service in 1924. In the years 1927 and 1928 he was stationed in the Philippines, commanding Flight B, 2nd Observation Squadron, Nichols Field. He was both instructor and student at the Air Corps Tactical School, when it was located at Langley Field, Va., and later at Maxwell Field, Ala. He graduated from the Tactical School in 1931, and from the two-year course at the Command and General Staff School, Fort Leavenworth, Kansas, in 1936.

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More Medals for Lt. Densford (From p. 6)

Clancy, of the Savannah Police Department, who contributed so much toward the success of the "shoot."

According to further reports, some 145 competitors were entered in the meet, representing to a great extent the cream of the crop among the shootin' gentry. Four new world's records were broken during the three-day meet, and all winners received, in addition to medals, some mighty nice cash awards. No trophies were awarded. Lieut. Densford informed the Kelly Field Correspondent that for the time being anyway he plans on hanging up his shootin' irons, but looks forward to attending the pistol matches to be held next March in Tampa, Fla. All followers of the shooting sport at Kelly Field feel confident that Lieut. Densford will mow 'em down again, given the opportunity, be it at Tampa, Paducah, or what have you.

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NEW AIRPLANES FOR ALBROOK FIELD

New equipment, long awaited, arrived at Albrook Field, Panama Canal Zone, on October 28th, aboard the U.S. Army Transport LUDINGTON. In this shipment of airplanes were P-26A's and BC-1's. The new Pursuit planes will be divided between the 24th and 29th Pursuit Squadrons, and it is expected they will be placed in service with the advent of the coming dry season. Two are being assembled by the 24th Pursuit Squadron, to be used at the aerial gunnery camp at Rio Hato, where the field remains in excellent condition the year round. Two of the BC-1's will go to France Field, and the remaining number will be used by the two Pursuit Squadrons for instrument flying training.

Later advice received from Albrook Field is to the effect that the 24th and 29th Pursuit Squadrons have commenced the assembly of the new P-26's and expect to have them all ready late in December. The BC-1's are already in daily use.

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SOLDIER MEDAL AWARD TO CORPORAL STONE

The 18th Pursuit Group at Wheeler Field, Hawaii, held a presentation formation on November 4, 1938, at which Corporal Paul W. Stone, 6th Pursuit Squadron, was presented with the Soldier's Medal and received the following citation for heroism:

Paul W. Stone (Army serial number 6,240,215) Corporal, 6th Pursuit Squadron, Air Corps, United States Army. For heroism displayed near Haleiwa, Oahu, Territory of Hawaii, on December 26, 1937. When a civilian swimmer became exhausted 150 yards from shore and called for help at about 11:00 A.M., December 26, 1937, Corporal Stone with utter disregard for his own safety, immediately swam to his rescue in squally weather in a rough and choppy sea against the tide, the ocean current and the river emptying in the sea, and reached the drowning man just as he was on the point of sinking. Corporal Stone assisted the semi-conscious man to shore and there administered artificial respiration, thereby saving his life.

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RETIREMENTS

Warrant Officer Wilburn C. Dodd, Airplane Pilot, last stationed at Mitchel Field, N.Y., was placed on the retired list on November 30th.

Two Air Corps noncommissioned officers were placed on the retired list, effective November 30, 1938, namely: First Sergeant Percy E. Guppy, Base Headquarters and 8th Air Base Squadron, Brooks Field, Texas, and Staff Sergeant Hugh J. Duffy, Base Headquarters and 14th Air

Base Squadron, Bolling Field, D.C.

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WAR DEPARTMENT SPECIAL ORDERS Changes of Station

To Hawaiian Department: 1st Lieuts. Donald H. Baxter, from March Field, Calif.; Richard T. Coiner, Jr., Mitchel Field, N.Y.; Herbert L. Grills, Barksdale Field, La.; Charles W. Haas, Chanute Field, Ill.

To Mitchel Field, N.Y.: 1st Lieut. Wm. M. Garland, from Panama Canal Department; 1st Lieut. Marvin S. Harding, from Hawaiian Department.

To Washington, D.C.: Major Burton F. Lewis, from Mitchel Field, N.Y., for observation and treatment at Walter Reed General Hospital.

To Langley Field, Va.: 1st Lieuts. Edward W. Suarez and Archibald M. Kelly, from Hawaiian Department, the latter for duty with duty with 3rd Observation Squadron.

To Sacramento, Calif.: Major Edward V. Harbeck, Jr., from San Diego, Calif., for duty as Air Corps Technical Supervisor.

ACTIVE DUTY FOR AIR RESERVE OFFICERS

2nd Lieut. Christopher Otho Moffett, of Fordyce, Texas, to Kelly Field, Texas, to November 6, 1941.

2nd Lieut. Edward Farmer Tindall, of Maryville, Mo., to Barksdale Field, La., to November 13, 1941.

2nd Lieut. Elton Lewis McCune, Air Reserve, Dallas, Texas, to Hamilton Field, Calif., to November 29, 1941.

Active duty of 1st Lieut. Fred Nathaniel Ward, of El Paso, Texas, now stationed at Kelly Field, Texas, extended to November 15, 1939.

Second Lieut. Wm. S. Crocker, Jr., Corps of Engineers, has been relieved from assignment and duty at the Air Corps Training Center, Randolph Field, Texas, and assigned to the 1st Cavalry Division, with station at Fort McIntosh, Texas.

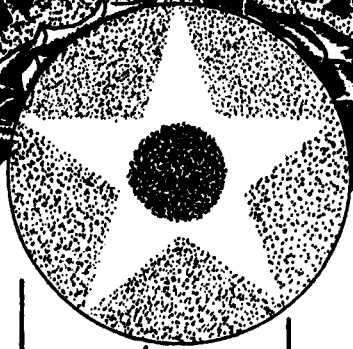
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LOST AND FOUND

An Air Corps officer wrote to a station which he recently visited, requesting that his coat and gloves he left behind be forwarded to him. When the package arrived he found it to contain a coat and a pair of gloves similar to his own, but much smaller, and which another officer was evidently missing. He would like to forward the clothing to the rightful owner, but has no way of knowing who that individual is. The Air Corps Materiel Division suggests the inauguration in the News Letter of a "Lost and Found" column, believing property could be recouped through such a column. This will be done, but it remains for the Air Corps stations to cooperate.

AIR CORPS

NEWS LETTER



The old wish again,
In a friendly and
lasting way -

Merry Christmas
to you.

War Department
Vol. XXI

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December 15, 1938.

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Air Corps

December 15, 1938

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The chief purpose of this publication is to distribute information on aeronautics to the flying personnel in the Regular Army, Reserve Corps, National Guard and others connected with aviation.

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THE URGENCY OF ADEQUATE PREPAREDNESS

Addressing the Industrial Session of the 14th Annual New England Conference of the New England Council at Boston, Mass., on November 18th, last, the Hon. Louis Johnson, Assistant Secretary of War, referring to America's struggle during the Revolutionary War and during the World War to attain and preserve the principles of tolerance and justice, stated that "we cannot afford to blind ourselves to the affairs of the world. The chaotic status of international relations in Europe and Asia are casting their evil shadows upon our peace and upon our American way of life. We must take steps to halt any conceivable advance on their part to these shores. ** Today, it rests upon us of this generation and upon you, who by example and by precept, are upholding it in the fine tradition of the New England town meeting. The tenets of free speech, freedom of religion and tolerance you fondly cherish, proudly exalt and steadfastly maintain. Tomorrow, we or our children again may face a challenge, not only of intolerant ideas but of brute force and we must be prepared to meet it. * * * The United States has an interest in the world second to none. With only six percent of the world's area and seven percent of its population, we consume seventy-three percent of the world's silk, sixty percent of its petroleum, fifty-six percent of its rubber, more than half of its tin, forty-eight percent of its coffee, forty-seven percent of its copper, forty-two percent of its pig iron and twenty-one percent of its sugar.

"Our people own four out of every five automobiles in the world and three out of every five telephones. We have one-third of its railroads. We own more than one-half of all of its monetary gold. The purchasing power of our one hundred and thirty million people is greater than that of the entire five hundred million of Europe. It surpasses that of the billion inhabitants of all of Asia.

Ours is a happy nation. We have our faults but we are honest enough to admit them and are making every effort to correct them. Despite shortcomings here and there, we still provide greater security to property, more protection to

life and greater happiness to our individual citizens than does any other nation on the face of the globe. To belong to America is indeed a rare privilege. To enjoy its citizenship is a priceless treasure. * * *

"Unfortunately, all nations do not march in step with our policy of good will. In the seething cauldron of discontent, many European and Asiatic peoples now boil. Imperialistic designs and selfish ambitions control national policies and no one knows the full extent of their evil machinations.

"With international society in such a state, we must gird our loins. We must prepare ourselves. The forces of evil must not overtake us. How much in the way of men and munitions we may need for our defense against these dire influences, no one at present can definitely foretell. We do know, however, that today, right now, we are weak in the sinews of battle to protect even our own shores.

"Yesterday, we believed that a program calling for 2,320 airplanes of all types by 1940 would protect us against any enemies from the air. Today, these figures are far below our immediate needs. Not so long ago, we boasted that our Air Corps was the pride of the skies. We held records for speed and endurance. Our pursuit ships, our attack planes, our flying fortresses and our super-flying fortresses were the envy of the world.

"Today, we no longer can make good our boast. Our air supremacy is threatened. From Europe come reports of pursuit ships and attack planes of greater speed and better performance. Even the marked superiority of our flying fortresses and our super-flying fortresses is challenged. To meet the tremendous pace that the rest of the world is setting, we must double, yes, treble and perhaps even quadruple our present air force with the best airplanes that can possibly be produced.

"We are falling behind in our development program. This lag is due to a loss neither of our inventive genius nor of our skilled craftsmanship. It is due to our failure to give enough attention to the importance of a continuous program of research and development.

V-7922, A.C.

"Last year, we are told Great Britain spent fifteen million dollars in its research laboratories on military aeronautics. France spent more than ten million dollars. No one knows how much Germany and Italy devoted to this purpose. In contrast with these expenditures for development among European powers, we spent only six million dollars.

"To stay at least abreast of the world's developments in aviation, we immediately must construct and install additional laboratory facilities at Wright Field. Those now in existence, we must expand and improve. To attract high-grade scientists and engineers, we must offer well-paying jobs and attractive careers. Once supreme in the field of military aeronautics, we must remain supreme. An investment of a few extra million dollars in research and experimental work spent today, tomorrow may bring us dividends in security that no amount of money could buy.

"Our air force is tremendously important in the early stages of conflict. We should therefore augment its numbers and keep it close to a state of readiness at all times.

"While we still speak in terms of units, of tens, or perhaps of hundreds of military airplanes, the rest of the world has stepped up the production of aircraft to the thousands. England claims the building of three thousand planes a year. Germany boasts of an annual productive capacity of more than twelve thousand fighting craft. During the calendar year of 1937, we, in the United States, produced a little more than three thousand for all purposes - military, commercial and private.

"Our present productive capacity we must now increase many fold. Contracts must be given to the aviation industry to build us enough planes to meet our full military needs on M-day, and this must be done at no sacrifice to the growing and pressing needs of our commercial aviation which today leads the world. Mass production of airplanes we must achieve in this country, and we must do so immediately.

"Not only planes, but tanks and machine guns in greater quantity and of better performance we must immediately procure. We must add to our new semi-automatic shoulder rifles which the world regards as the peer in small arms. We must add anti-aircraft guns. We must streamline our infantry and cavalry divisions. We must build up our reserves of munitions and it is to that phase of national defense that we must now turn.

"If an emergency were to arise tomorrow, we would call out 400,000 men. This would include most of the Regular Army in the United States and the whole of the National Guard, to which your own Yankee Division is an indispensable asset. Within four months, we would have to be ready to put into the field an

army of one million men.

"These minute men of America, upon whom the brunt of defense in the early stages of battle may fall, are entitled to their full complement of supplies and equipment and to the best obtainable anywhere in the world. The richest country, with the greatest stake in peace and preparedness, must in no way prove penurious in providing for the needs of America's first million. If called to battle today, our Army would find itself short of artillery and tanks, of combat cars and airplanes, of machine guns and of semi-automatic rifles, of anti-tank guns and of ammunition, of gas masks and of searchlights, of telescopes and quadrants. Those shortages we must make good now.

"We must fortify ourselves against the possibility of shortages in an emergency. We must build up a six months' supply of all our military needs except food and clothing. With such a physical reserve on hand, there would be no need, in an emergency, to dislocate industry's normal services. During that six months we have time to put our factories into full gear, fully equipped to pick up their responsibility of war production until the end of the emergency. * * *

"In the past few years, we have made a great deal of progress toward the achievement of our industrial mobilization program. We have smashed a number of bottlenecks but we have not broken enough of them. We must keep abreast of military developments. We must build our defenses so that no nation in the world would dare attack us."

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RANDOLPH FIELD HAS RECORD FREEZE

Thanksgiving Day at the Primary Flying School, Randolph Field, Texas, was a typical north country type, for the mercury slid almost out of sight when it touched a record low of 21 degrees during the night. This low climaxed several days of below freezing weather. Prior to the "Norther," typical Texas fall weather was experienced, and following the cold snap the thermometer again returned to normal.

Flying weather has been remarkably good at the Primary Flying School during the entire month of November. The Primary Stage reports that only four hours of flying time were lost during the last 15 days of that month due to inclement weather.

New ratings have been given to several of the Post Weather Office personnel. The following changes were made: Privates 1st Class Jay T. Treat and William J. Stricker were promoted to Sergeant and Corporal, respectively, and Private Lyon O'Brien to Private 1st Class. Privates Richard L. Parker and William S. Dawson received 4th and 5th Class Specialist ratings, respectively.

MOFFETT FIELD, CALIF., EXTENDS WELCOME TO VISITORS

Pilots from east of the Rocky Mountains are reminded that the Air Corps occupies Moffett Field and keeps open house for visitors.

Moffett Field is located 38 miles southeast of San Francisco, Calif. The huge lighter-than-air hangar, 1100 feet long, 310 feet wide, and 200 feet high, affords a landmark visible for many miles in all directions.

Night lighting equipment is excellent. There is no radio range at Moffett Field, but the Oakland range, only five to ten minutes away, makes Moffett Field easily accessible even in bad weather. There are no hills or other obstacles other than the usual bridge piers and high tension lines between Oakland, Calif., and Moffett Field. Caution, however, must be exercised to avoid a radio tower, over 600 feet high, 6 miles

northwest of Moffett Field. Traffic control facilities on 201 kcs are available during daylight hours and at all times on request. Weather is broadcast on the same frequency at 10 and 40 minutes past the hour and oftener when necessary.

Expert service of all kinds and a good Hotel de Gink are available day or night, and the Welcome Mat is always displayed.

The garrison at Moffett Field now comprises 24 officers and 292 enlisted men, consisting of the 82nd Observation Squadron, Air Corps; Base Headquarters and Ninth Air Base Squadron, Air Corps, and detachments of Medical Corps, Quartermaster Corps, Signal Corps, and Finance Department.

Colonel Follett Bradley, Air Corps, is the Commanding Officer of Moffett Field.

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IMPROVEMENTS ON RANDOLPH FIELD PRIMARY STAGE

The War Department has approved a locally sponsored State W.P.A. Project, involving the expenditure of \$30,564.61, to construct curbs, ramps and service pit slabs; relocate service pits; install air, water, gasoline and electrical service lines to pits, etc., at the Primary Flying School, Randolph Field, Texas, according to a recent announcement of Major F.D. Shawn, Quartermaster.

This project was listed under Priority No. 2, among several items of construction which a Board of Officers, headed by Lieut. Colonel E.B. Lyon, Air Corps, recommended as most urgent for consideration incident to the expansion of training activities at Randolph Field. The item given first priority by this Board covered the construction of two barrack buildings required to house members of the increased Flying Cadet classes. Work on these two buildings has proceeded rapidly and is about fifty percent complete.

The Board found that the proposed ramp construction, as now authorized by the War Department, was necessary incident to the utilization of Hangar "J," the present transient aircraft hangar, to provide an additional flight on the west or Primary side of Randolph Field, with offices and other facilities required for the training of approximately 50 students.

The transient aircraft facilities will be moved to Hangar "U," and the \$30,564.61 provided by the War Department and the Works Progress Administra-

tion will be used to increase the width of the present ramp in front of Hangar "U" by 110 feet. This will facilitate the handling of the larger type transient aircraft, and extending the ramp now in front of Hangar "J" to the north to meet the ramp to be extended in front of Hangar "U," moving the gas pits in front of Hangars "U" and "V" to new locations, and moving the flood lights to a more suitable location out of the way of aircraft taxiing towards the ramp of Hangar "U."

Major Shawn declared that "this will provide a completely surfaced area, clear of obstacles, on which visiting aircraft may be maneuvered without interference with the control and coordination of Primary training activities."

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TRAINING DIRECTIVE INSTEAD OF TURKEY

While most people were enjoying their Thanksgiving turkey dinner, 23 Randolph Field pilots were off on navigation missions as part of their War Department Training Directive. The three-day lapse in student training afforded an opportunity to pilots, most of them instructors, to comply with this phase of their personal training which often is handicapped when student instruction is scheduled.

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LANGLEY FIELD ACTIVITIES

Three ranking officers from Langley Field, Va., returned on November 30th an official visit paid them the previous day by Brigadier General Frederic H. Smith, recently appointed commander of the Third Coast Artillery District, with headquarters at Fort Monroe.

Representing Langley Field were Major General Frank M. Andrews, Commanding General of the GHQ Air Force; Brigadier General Arnold N. Krogstad, Commanding General of the Second Wing of the GHQ Air Force, and Colonel Walter R. Weaver, Commanding Officer of Langley Field.

Arriving at Fort Monroe, Va., at ten o'clock, the Langley Field officers were greeted with a salute of 13 guns fired by the Ordnance detachment. Later they made a tour of the post, accompanied by a guard of honor.

A reception was held at the Officers' Club at Fort Monroe in honor of Brigadier General Smith and Colonel William E. Shedd, the latter being advanced the following day to the rank of Brigadier General.

The 36th Pursuit Squadron returned not unwillingly to Langley Field, Va., on November 20th, after two weeks of gunnery at Valparaiso, Florida. All pilots were qualified either as Marksmen, Sharpshooters or Experts. Everyone enjoyed the stay on the sunny Florida coast, but, not having seen much of the old home station for the past month, they cherished the opportunity of spending Thanksgiving Day with families and friends.

During its gunnery activities at Valparaiso, Fla., the 36th Pursuit Squadron was inspected by Brigadier General Arnold N. Krogstad, Majors Lynn, Glenn and Skow. Desiring a taste of camp life, General Krogstad refused the invitation of Captain Whatley to stay at his home, and so a fine tent was set aside for him and Major Glenn. At 4:30 o'clock the first morning, and much to their surprise, in came a soldier with a flashlight. He flashed the light a couple of times and then queried:

"Which one of youse guys is going to get up and help me cook breakfast?"

Needless to say, the soldier received little help, but plenty of embarrassment for getting into the wrong tent.

On November 7th and 8th, the 20th Bombardment Squadron, 2nd Bombardment Group, reinforced by one airplane from the 49th Bombardment Squadron, conducted a Joint Training Exercise with the Navy. It was similar to past exercises, in that a destroyer towed a sled target which simulated a Carrier. In this problem the target ship was required to remain within 100 miles of the shore, and hence the navigation was extremely simple and it was almost possible to fly out to the re-

ported position of the boat by pilotage. The results of the bombing satisfied even the Group Statistical Section, which is always looking for results which will lower the mil error of our bombardiers.

With the arrival of two B-18A's, the 20th Bombardment Squadron was brought up to a strength of four B-17's, two B-18A's and one BC-1. One of the B-18A's was ferried by Major Meloy, Lieut. Rueter and Staff Sergeant Fields. At the present time the commissioned strength of the Squadron is sixteen officers.

The 96th Bombardment Squadron now possesses two B-18A Bombardment planes and one BC-1. The latest B-18A was ferried from the Douglas factory on the West Coast on November 7th by Lieuts. Mussett and Waldron. The B-18A's and the BC-1 now afford considerable miscellaneous flying for junior officers in the Squadron.

The 49th Bombardment Squadron has deserted its bombing and machine gun practice and turned primitive, having taken up archery. Among the most consistent archers are Major Haynes, Lieuts. Kilpatrick and LeMay.

Majors McReynolds, Koenig, Captain Wolfinbarger, Lieut. Bell, Corporals Lynn and Vick, of the Headquarters and Headquarters Squadron, 2nd Bombardment Group, were ordered to the Douglas Aircraft Company, Santa Monica, Calif., to ferry two of the new B-18A airplanes to Langley Field. The trip to Santa Monica was made by rail, and the new ships were flown back without mishap.

TELETYPE INSTRUCTION FOR WEATHER MEN

During the latter part of November, two men from the Post Weather Office at Randolph Field, Texas, have been detailed to the Kelly Field Weather Office to enable them to obtain experience in handling a teletype machine that is on the "long line." By "long line" is meant a teletype machine which has a direct hook-up with the Department of Commerce circuit. Randolph Field was scheduled to go on the long line on the first of December. This meant added work and added responsibilities for the men in the office and, says the News Letter Correspondent, "it is felt that if they can acquire some additional knowledge beforehand they will be more able to cope with this situation."

Under Special Orders of the War Department, dated December 2, 1938, six noncommissioned officers of the Army were appointed Warrant Officers December 1, 1938; one each from the Medical Corps, D.O.L., Engineer Corps, Ordnance Department, Q.M. Corps and Coast Artillery.

THE ANNUAL CHARITY AFFAIR AT LANGLEY FIELD
By Norman E. Noll

Langley Field and various branches of the military service, manufacturing concerns and merchants of the locality displayed one of the most educational exhibitions ever held on the Lower Peninsula of Virginia, when the Second Annual Charity Fair and automobile show attracted upwards of 50,000 enthusiastic spectators throughout the three-day event, December 2nd to 4th, inclusive.

A varied program, which by far exceeded the 1937 premier, included such celebrities as Virginia's Chief Executive, Governor James H. Price; Major General Robert M. Beck, personal representative of the Honorable Harry H. Woodring, Secretary of War; Miss Helen Jacobs, internationally known tennis star; Allan Jones and Irene Hervey, Metro-Goldwyn-Mayer star motion picture actors, as well as many other notables.

The first day of the fair was designated as "Children's Day," with every Peninsula school child invited as a guest. The second day was known as "Governor's Day," in honor of Governor Price, and the third day was called "Army Day."

General Beck, representing the Secretary of War, who was detained in the nation's capital by official business, opened the gala three-day classic with official recognition from the government at Washington. Greeted at the main hangar with tremendous applause, General Beck stated that Mr. Woodring was very much interested in the project and the noble cause for which it was given.

Governor Price, accompanied by Adjutant General S. Gardner Walter and other members of his military staff, arrived at Langley Field on the morning of the second day of the fair which, as before stated, had been set aside as "Governor's Day." In his message of appreciation and congratulations, Governor Price said that the second annual charity fair was an added contribution to the great work being done and that it deserved the hearty support of all Lower Peninsula.

During the glittering display of Cinderella-like pageantry which marked the military ball, Virginia's Chief Executive crowned the Peninsula's most precious and adorable queen - the beautiful and rather glamorous Miss Mary Watkins Ayler, of Hilton Village, a nearby community.

The identity of the queen remained a secret until the night of the Coronation, when the selection of the Junior Women's Clubs of the Peninsula favored the lucky Miss Ayler. The evening's entertainment included an elaborate floor show, music by Meyer Davis Orchestra of Washington, D.C., with Hughie Prince as master of ceremonies.

Babies from all over Lower Peninsula

were entered in the Baby Show on the first day of the fair. There were five classifications in all, with Albert F. Pearce, Jr., four years old, being awarded the baby championship trophy.

Then there was the airplane model show, under the management of the Virginia Association, and the dog show, sanctioned by the American Kennel Club. Both of these shows proved very successful. Governor Price awarded the main prizes in the airplane model show, while Miss Helen Hull Jacobs, former national women's tennis champion, attended the canine show in the capacity of a judge, exhibitor and trophy-presenter to the owner of the show's best dog.

The exhibits, displays and concessions at the fair represented practically all the leading merchants of the Tidewater area. Displays from outstanding groups which faithfully represented this locality were from the Air Corps, Fort Monroe, Army Aeronautical Museum, Quartermaster Corps, Chemical Warfare Service, Army Ordnance Association, Medical Corps, National Advisory Committee for Aeronautics, Model Airplane Association, Daily Press, Mariners' Museum, Yorktown Restoration, Hampton Institute, Virginia Fisheries Association, Boy and Girl Scouts and the high schools. There were also interesting displays by national manufacturing concerns, such as the Sperry Gyroscope, Wright Engine, United Aircraft, Fairchild Aerial Camera, Kollsman Instrument, B.G. Spark Plug, Aviation Manufacturing, Goodrich, DuPont, Snap-on-Tools National Biscuit, General Baking, Beech-nut, Coco Cola and the A.B. Dick Mimeograph Company.

One entire hangar was allotted for the showing of the 1939 automobiles - displays by many of the leading firms of this locality.

Special afternoon and evening features held the spotlight in the main hangar, with a continuous musical and entertainment program being rendered by organizations such as the splendid group of Hampton Institute Singers, American Legion Band, Fort Monroe Coast Artillery Band, Hampton Junior Drum and Bugle Corps, Newport News High School Band, and a group of well selected singers, comedians and musicians from Langley Field, which was headed by Gene Tyler, famous master of ceremonies of the Peninsula Area.

On the last night of the fair and at the sound of the old familiar eleven o'clock "Taps," the eight hangars no longer bore their brilliant glare and the sounds of laughter, merriment and gaiety which prevailed for three short days became a memory of a successful event which evidenced a spirit of co-operation and appreciation by all.

THE WHEELER FIELD NAVIGATION SCHOOL
By 2nd Lieut. George S. Brewer, A.C.

A course of instruction in Dead Reckoning and Celestial Navigation was recently completed in the 18th Pursuit Group, Wheeler Field, T.H. Lieut. Leighton I. Davis was the instructor, and the students were Lieuts. C.D. Vincent, R.H. Carmichael and R.E. Warren.

The course was quite comprehensive, consisting of both theoretical and practical exercises. It covered a period of three months and kept all four officers quite busy. Navigation training flights were made to all the islands of the Hawaiian Group, and the students became quite proficient in hitting the light-houses on the nose (without peeping, they claim). On one trip to Hawaii, Lieut. Earl E. Bates was pilot of the OA-3 and Lieut. Vincent was the navigator.

About ten miles from Hilo, on the return trip, one motor grew tired of it all and decided to quit. With the skillful navigation of Lieut. Vincent (and very capable flying by Lieut. Bates) a successful landing was made in Hilo Harbor, much to the astonishment of natives who were watching from the pier. After yelling lustily but vainly for a boat, the rubber life raft was unlimbered and a successful, if damp, trip to shore was made.

The course wound up with an all-day mission, running a "landfall problem" on Diamond Head. The students' ability to "shoot the sun" from an airplane was put to the acid test in this problem. All three came within the allowable limits, two hitting within four miles of the objective.

Diplomas of proficiency were given to the students at the end of the course, and the Group now has three more full-fledged navigators.

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ENGINEERS TO STRESS NATIONAL DEFENSE

During the course of the Annual Meeting of the Society of Automotive Engineers, Inc., to be held at the Book-Cadillac Hotel, Detroit, Mich., January 9th to 13th, next, a day will be devoted to national defense, when key men in the nation's armed forces, including the Quartermaster General, the Chief of Ordnance, the Chief of the Air Corps, and the Assistant Chief of the Bureau of Aeronautics of the Navy Department will be guest speakers.

Civil and well as military aeronautical problems will be attacked in the five aircraft and aircraft-engine sessions scheduled during the meeting.

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War Department orders relieving Colonel Byron Q. Jones from duty as instructor at the Army War College and assigning him to Panama Canal Dept. have been revoked.

BORN TWENTY YEARS TOO LATE
- Anonymous -

A new and novel thing they called a BC one was rolled into our hangar yesterday and I knew I'd hafta fly the bloomin' thing pretty soon so I sed I'll just look this fella over and see what makes it tick so I sneaked a peek inside and was amazed that cockpit looked just like the window of a pawn shop I was wont to frequent years ago in those dim days my P twelve sitting yonder was a new and vicious weapon and men had called it the ultimate word it was flown most accurately however from the seat of the britches and one had time now and then to glance about him for the enemy sitting there surrounded by these new and hostile glassy faces and with forty tech orders in my lap I wondered if they hadn't overdone this thing a little so I asked the crew chief if we couldn't get along without just one row of things and handles but he said no they might come in handy some day but I still was dubious about one or two minor items I got out very gently so as not to break anything and my years weighed down upon me as I walked over and patted my unsophisticated little P twelve on its unsophisticated little tail All the way home I wondered if I wouldn't have been a hot war pilot.

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44TH RECONNAISSANCE SQUADRON IN CAMP

The 44th Reconnaissance Squadron, stationed at Albrook Field, Panama Canal Zone, encamped at Rio Hato, Republic of Panama, on December 1st for three weeks of gunnery and field maneuvers. This year's camp marks the first use of the B-18 airplane, recently added to the Squadron's equipment in the field in Panama. It is not known definitely when more of the new Bombers will arrive.

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Major Aubrey Hornsby, Air Corps, who has been holding a temporary commission in that grade, was promoted to the permanent grade of Major, December 1, 1938.

ACTIVITIES AT PRIMARY FLYING SCHOOL, RANDOLPH FIELD

Almost 300 trees are being planted at Randolph Field by the Provost Marshal's office, under the direction of Lieut. R. Heber. These trees are replacing those which have died since the original landscaping project and, in addition, will serve to complete the plan eventually to have all tree-bordered roadways at the Primary Flying School. Ligustrums are being used principally for this work, 210 of them being planted. In addition, 66 Arizona Ash trees and six Weeping Willows are being used.

Randolph Field played host to 136 visiting pilots in 106 airplanes during the month of November, a survey of Operations Office records reveals. A total of 18 Air Corps stations was represented by the visitors, who arrived in 17 different type planes. The BC-1 type was almost displaced from first place as the most popular visitor, the score for the month showing that 21 BC-1's and 21 B-18's dropped in for service or for an overnight stop during the month. The A-17's, mostly from nearby Barksdale Field, were in second place, 20 of them visiting the Primary Flying School during the last thirty days.

Having recently returned from the Thanksgiving holidays, the Flying Cadets are now looking forward to the Christmas holidays. Most of them will be able to go home for Christmas, that is, if their pay will last until the end of December. The Christmas holidays will last about eleven days.

For the first time in the memory of a Flying Cadet, black wool socks are being worn. Always on the lookout for something to improve their appearance and comfort, it was decided to dye the natural color wool socks, as now issued. This was done through a local San Antonio laundry. The results were pleasing, and no more will a Flying Cadet be timid about sitting down in the best of company.

Starting with the next issue of the Air Corps News Letter and continuing intermittently for an indefinite period, portions of a "Dictionary" of Flying Cadet "Phraseology" will be furnished. "It is believed," says the News Letter Correspondent, "that many colorful phrases, expressions and sayings have been originated in the Flying Cadet Detachment since its inception, and that this information should be passed on to the Air Corps in general for its 'information and guidance.'"

Aere Repair, 11th Air Base Squadron, completed repairs on 17 airplanes during the last two weeks of November. A

total of 97 airplanes was serviced and inspected during this period. This included one flight of six B-18's from Hamilton Field, Calif., the bombardiers dropping in after a non-stop navigation mission. They remained at the "West Point of the Air" for a day and then returned to their base on another night navigation flight.

In the 52nd School Squadron, deer hunting stories have been the main source of conversation since the season opened, and several members of this organization have brought back big bucks to back up their stories.

The strength of the Flying Cadet Detachment has decreased somewhat since October 10, 1938. Class 39B was transferred from "A" Stage with a strength of 178 Flying Cadets, plus one "hold over." Up to date, four have been disqualified, due to failure to meet flying requirements, and have been discharged. Nine others have been disqualified and are awaiting discharge.

Class 39C started with 230 Flying Cadets, plus three "hold overs." Of this number, 18 have been disqualified, due to failure to pass their physical examination given at the School of Aviation at Randolph Field. Thirty-one Flying Cadets are awaiting discharge, after having been disqualified due to failure to meet the Flying Department's requirements.

Recruiting was temporarily suspended at Randolph Field on November 22nd, when the station reached its authorized strength. A short time ago, the Primary Flying School was authorized an increase of 250 men. Being over-strength at the time, a total of 120 men were recruited, thus bringing the total number of men in the command to 1484.

The town of Burkburnett, Texas, 15 miles north of Wichita Falls, Texas, and whose population is approximately 3,000, has furnished nine men to Randolph Field during the recent recruiting. Five additional men from that town have filed their applications, and these are being held awaiting vacancies.

"The exceptionally enthusiastic response that Randolph Field has received from this one town is an indication that the desirability of enlistment at the 'West Point of the Air' has spread throughout Texas, for Burkburnett is in the extreme northern tip of Texas," Lieut. R. Heber, Recruiting Officer, stated.

Sixteen members of the 53rd School Squadron were slated to take the Air Mechanics examination on December 5th.

V-7923, A.C.

REFRESHER TRAINING FOR RESERVE OFFICERS

Two groups of Air Corps Reserve officers reported at Kelly Field, Texas, for a fresher course of instruction at the Air Corps Advanced Flying School. The first group, consisting of 14 Reserve officers, reported on November 25th, and the second group, consisting of five Reserve officers, arrived on December 5th. These officers were assigned to sections of the Air Corps Advanced Flying School, as follows:

Bombardment: 2nd Lieuts. Fred M. Adams, Jon A. Laird, Charles W. Maynard, Alvin J.H. Mueller, Luther E. Thomas, Clayce J. Tippet, Norman K. Warner.

Pursuit: 2nd Lieuts. William C. Armstrong, James O. Beckwith, Jr., Walter L. Hawkins, Joseph C. Mackey, Lewis M. Sanders.

Attack: 2nd Lieuts. Lawrence R. Gibboney, William W. Holmes, Robert J. Koster, Charles J. Langmack, Eugene McCurdy, Claude A. O'Quinn, Frederick H. Postal.

It is expected that these refresher students will complete their course in approximately seven weeks and be ordered to extended active duty with tactical units of the Air Corps.

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NEW ARMY PLANES AT MAXWELL FIELD

Several of the Army Air Corps' trimmest and most deadly airplanes dropped in briefly yesterday (December 6th) at Maxwell Field for inspection by students and instructors of the Air Corps Tactical School and visiting students and instructors of the Infantry School at Fort Benning, Ga.

Of major interest, perhaps, was the Air Corps' only B-15, a huge all-metal bombing plane, with four super powerful motors, from Langley Field, Va. The big ship, a monoplane, returned to its home base about two hours following its landing at Maxwell Field.

Other visiting ships, most of them from Barksdale Field, La., included a B-17, one of the 13 four-engine bombing planes already delivered to the Air Corps under present contracts; a B-18, a P-36 Pursuit ship, an A-18 twin-attack plane, and one of the new A-17A's, attack ship with single motor.

Maxwell Field yesterday was host to the "Refresher Class" of Fort Benning, as well as a number of instructors of that post. Besides inspection of the latest type airplanes, the program included a tour of the Tactical School, addresses on various phases of work done there, and demonstrations in military tactics.

- Montgomery ADVERTISER.

A RADIO OPERATOR'S LAMENT

When the goings getting tough,
And the calls are coming in,
You're pounding on your typewriter
Till your fingers hurt like sin.
Your log sheet starts to slipping
And your alert sheet can't be found,
You holler for the weather
For the ceiling's coming down.
That's when the phone starts ringing,
Some Woman wants to know
If her husband went to Hensley,
If not, where did he go?
That's when your eyes start specking,
And your mind begins to jump.
You start to writing words wrong,
And your head begins to thump.
That's the time you start to wishing
For a shovel or a hoe,
And you say, Dear God, just give me
Any job, but Radio.

---oOo---

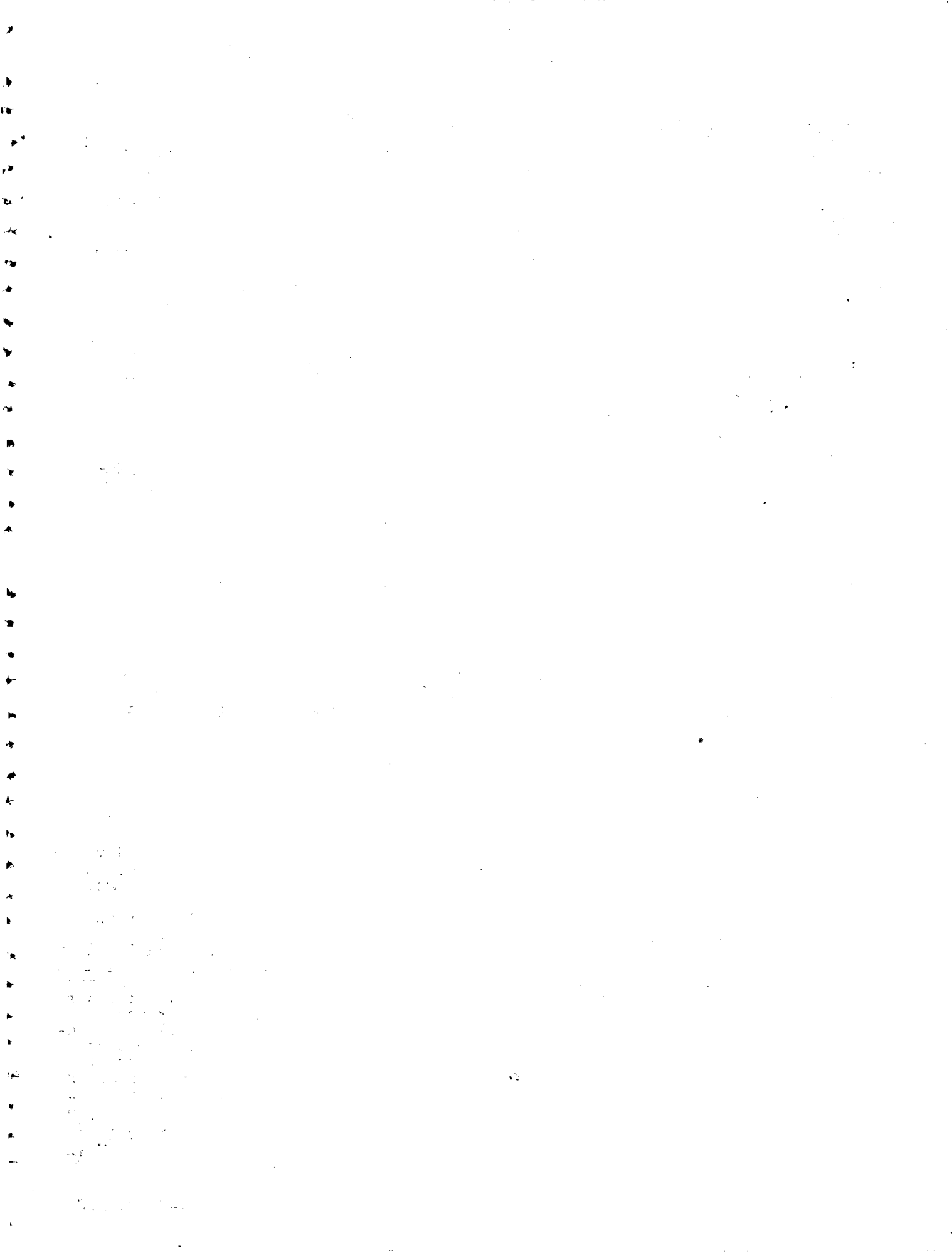
ANOTHER VERSION OF A POPULAR SONG With due apologies to the author

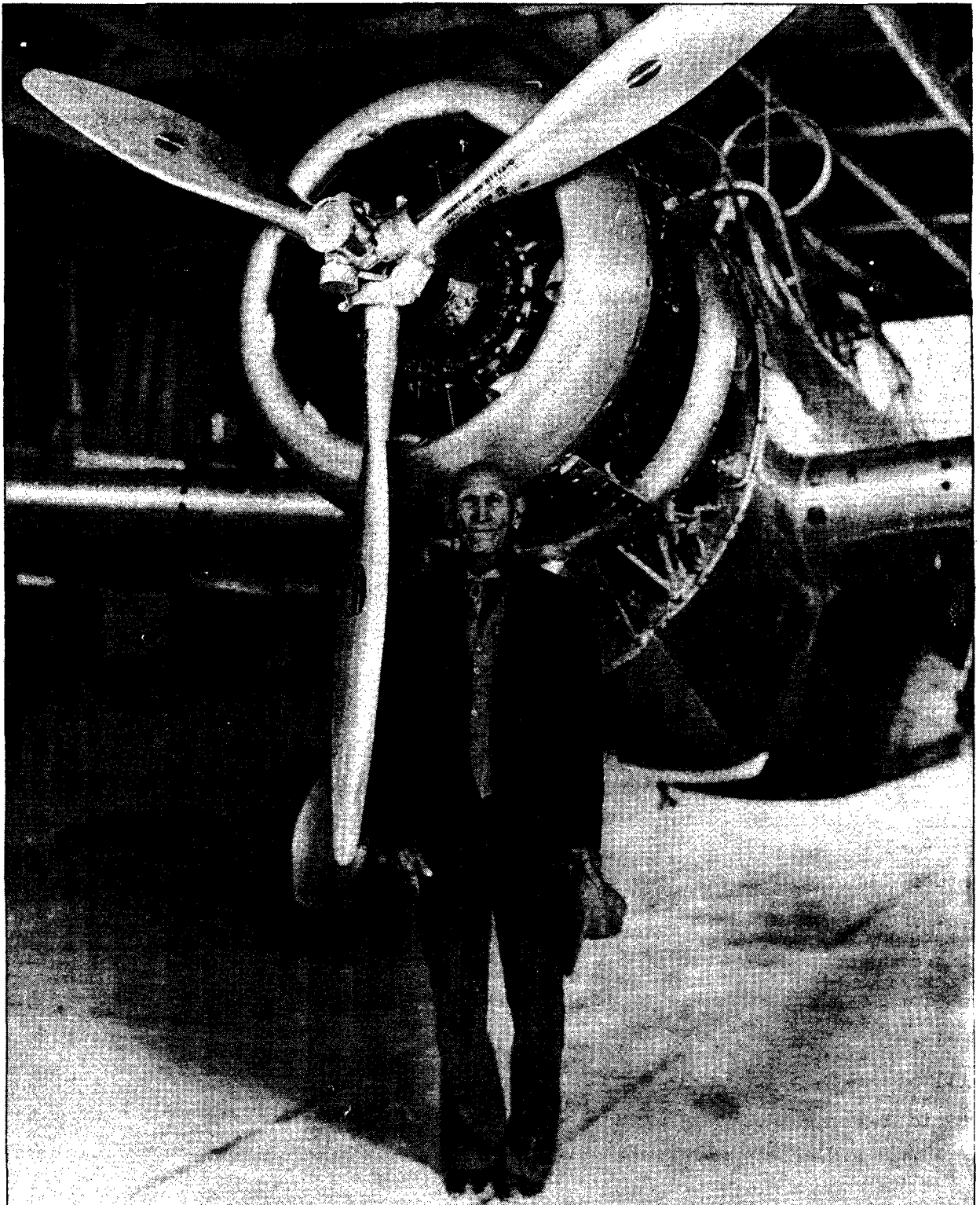
A tisket, a tasket,
A blue and yellow casket,
I took a flight to Maxwell Field
And on the way I lost it.
I lost it, I lost it,
Yes, on the way I lost it,
I passed the cone of silence
And never knew I crossed it.
The clouds and fogs were down below,
My gas supply was running low,
So I stalled her down thru, down and
down,
And darn near ran into the ground.
I landed, I landed,
Yes, on my back I landed,
And if I fly like that again,
I know that I shall die.

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COMPUTATION OF WIND VELOCITIES

It has long been known that wind velocities recorded at Randolph Field, Texas, have been higher than those of neighboring stations. The Assistant Post Weather Officer, Lieut. T.S. Moorman, conducted a series of tests with the hand anemometer at the standard level of six meters above the surface. He assumed that the cause of the high readings was due to the fact that the anemometer was located 197 feet above the surface on top of the Administration Building. Results from his series of tests proves that his assumption was quite correct. It was found that the wind at six meters above the surface was only 7/10 as high as that recorded from the anemometer on top of the building. Since using this correction it is found that Randolph Field's wind speed conforms more nearly to surrounding reports.





"HUNTING HORSE" OLD INDIAN SCOUT LOOKS OVER THE
UP - TO - DATE SCOUT - NORTH AMERICAN O - 47A

AGED INDIAN SCOUT INSPECTS MODERN SCOUT PLANE

Post Field, Fort Sill, Okla., was honored on Saturday, November 19th, by the visit of Chief Hunting Horse (Tsain-Tonkee) of the Kiowa Indians, accompanied by Mr. Albert Cody, also a Kiowa, who acted as interpreter.

Chief Hunting Horse went on his first raid against the "Whites" in July, 1874, near Quannah, Texas. Less than a year later he was acting as an Indian scout with the Seventh Cavalry at Fort Sill, Oklahoma. He was with the group which persuaded the rest of the Kiowa Indians to surrender to Colonel Davidson at Fort Sill, one of the important outposts in the Southwest at that time. Chief Hunting Horse is a pensioned Indian Scout, and was decorated with an Indian War Medal. He is 91 years old and still lives in the vicinity of Fort Sill, close to Mount Scott, Oklahoma.

Chief Hunting Horse inspected one of the new O-47A airplanes assigned to

Flight "C" of the 12th Observation Squadron, both inside and out. He seemed impressed with our modern means of scouting (i.e., Aerial Reconnaissance) as compared with the method used during his active service of sending out individual scouts on horseback.

"We were pleased to have the Chief and his friend accept Lieut. Colonel D.B. Howard's invitation to visit Post Field," declares the News Letter Correspondent, "and hope he will return every few 'moons.' As a memento of this visit and as a record of future historical interest, the Chief was photographed standing 'to head' of the O-47A airplane and its 975 'horses.'"

The News Letter Correspondent submitted a copy of this photograph for publication, and a reproduction thereof appears on the opposite page.

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RECORD NUMBER OF SOLOS AT "WEST POINT OF THE AIR"

Another record in student training has been established at the Primary Flying School at Randolph Field, Texas. A total of 270 student pilots have soloed out of 335 students who started training on the Primary Stage on October 24th, the percentage being almost 78.

This is a record number of solos for a winter class, which is usually hampered by frequent interruptions in training due to inclement weather. This class, both on the Primary and Basic stages, was blessed with unusually fine flying weather. Aside from an official holiday, Thanksgiving, only four hours were lost from the training schedule because of weather during the last two weeks of November.

But accompanying the dry spell came dust, dust and more dust, until the outlying airdromes were at times obscured. On the Primary side of the field, instructors and students alike return to the home airdrome after a "solo stage," begrimed and ready for a shower after an hour of battling the dust clouds.

All of south Texas is suffering from the extreme lack of rain, and the San Antonio Weather Bureau reported that the six months ending November 30th constituted the driest period in the history of the bureau.

The Basic Stage reports that the training is slightly ahead of schedule, due also to the fine weather. Instrument flight training and night flying are both well under way. The average flying time for the Basic students as of December 1st was 32:22, of which 19:35 hours were solo and the remainder dual.

Two officers, recent arrivals, have

been assigned to the Basic Stage. Captain J.T. Sprague, who has had several years' experience at the Training Center, is assuming command of "A" Flight; and Lieut. H.F. Miller, instructor for the past two years on the Basic Stage, was transferred to the Ground School Department.

A new Link Trainer of an improved type has been installed in "B" Flight, on the Basic Stage, replacing one of the earlier models of the instrument training machine. "Many favorable comments have been heard on the performance on the new trainer," the News Letter Correspondent declares. "It flies almost like an airplane," is the usual comment."

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SHIFT IN COMMAND AT MAXWELL FIELD

Another shifting in command at Maxwell Field, Ala., which divides responsibilities between Colonels John H. Pirie and Millard F. Harmon was recently announced at that station.

Under the new order, effective immediately, Colonel Pirie will serve as Commanding Officer of the post, while Colonel Harmon will be Commandant of the Air Corps Tactical School. The revised order places the responsibility for the operation of the Tactical School upon Colonel Harmon, and restores Colonel Pirie to the general command of the post, still enabling him to devote the greater portion of his time to the important Air Corps Board, of which he is the head. Lieut. Colonel Wilson will continue as Assistant Commandant.

INSTRUCTORS ARE HUMAN

By Frank Lambert

Ed. Note: The very interesting article under the above heading appeared in the November 15th issue of the SPORTSMAN PILOT, and is reprinted by special permission of the editor of this magazine.

The March issue carried an article entitled "Those !!!----!!!, !*---* ! Instructors (and Doctors)." The article was a protest against "hard-boiled" instructors and flight surgeons and a severe criticism of our Service flying schools and of their systems of selecting and eliminating students.

These schools are certainly not above criticism and the systems they employ are far from perfect, but the severity of the author's disapproval is hardly justified by the facts. His suggestions are worthy of consideration but their adoption would seriously disrupt the present high morale of our military air forces. His comments are interesting and stimulating but they are based upon misconceptions which are shared by a great many people otherwise well-informed about aviation.

The old, old story that most military flying instructors are "hard-boiled" seems to be just as persistent in the flying world as the similar idea that all pilots are dare-devils is persistent elsewhere. The tough, sarcastic, explosive instructor is one of the grand old traditions of flying and in some respects it is too bad that this picturesque individual has gone with the winds of progress in military flying as well as commercial.

Some very influential men have made careful psychological studies of the processes of instructing students. The conclusions these men reached, as well as the accumulation of experience, became effective several years ago in converting or eliminating those few instructors who believed there was any value in bullying or intimidating students. In commercial flying, of course, practical considerations long ago rendered this practice very obsolete. The same is true in military aviation, except that the practical influence there proved to be "efficiency," which is the military watchword.

A commercial instructor's ability can be judged by his success with students, and a military instructor's efficiency must be measured in the same way. Any instructor whose students consistently failed to make progress, because he was "hard-boiled" or for any other reason, would soon be on the carpet. The instructors have supervisors, too, and if it were true that "a large proportion of these 'bust-outs' can be traced back to some inconsiderate, conscienceless instructor" those supervisors would have

been the first to find it out, and to find out the "conscienceless" instructors as well.

Instructors are chosen as carefully as possible but, of course, some are blessed with more endurance and patience than others. I remember one who was so tolerant and reticent that I was constantly worried for fear he had lost all interest in my efforts. Some students do somewhat better under an instructor who is always critical and demanding, others under one who is easy-going and optimistic. Student assignments are also made carefully, in an effort to match personalities. An apt student can learn from any good instructor, but border-line cases are sometimes shifted even without their asking it, when it is believed that a change might be of some benefit. Students know that they may request a change of instructors at any time, for no other reason than a "personality clash," but such requests are rare.

Admittedly, there have been occasional instructors of the "hard-boiled" type our author describes. But I do not see how they could have done any great damage. Several years ago I attended the flying school which he criticizes so severely and I had an instructor who expressed his displeasure frequently and effectively. Another student of his, whom I knew very well, liked him very much and insisted he was the best instructor in the school. But I was not doing particularly brilliant work and I thought he wasted too much time telling me about it, so I requested a change. It was readily granted. As it happened, that instructor was soon relieved from instructing and eventually left the service. He is now instructing commercially. Since that time I have known scores of instructors, but none of them have been as "tough" as the one just mentioned.

Cursing or intimidating a student, which our author seems to think is so common, is a serious military offense, and I can hardly conceive of an officer risking a blight on his career to indulge in it unless the circumstances were unusual and so serious as to destroy his self-control. There are, of course, students who are inclined to be "bull-headed," and I have seen such students insist upon doing things so dangerous to themselves and others that complete speechlessness was the only guarantee against a verbal explosion. Instructors are even required not to demonstrate difficult maneuvers or acrobatics to any student until he has had a specified number of hours, just to avoid the possibility that such maneuvers would frighten or discourage him.

Furthermore, no student is ever flunked

merely because he flies poorly on one check ride. A careful record is kept of his grades from day to day. If it were true that "he may be dropped at any one of twenty-five stages or checks" not one in twenty would ever finish. It takes a severe and protracted "slump" to eliminate any student who has ever shown promise. The check rides are not for the purpose of eliminating students, but for the purpose of determining when they are ready for the next stage of instruction. Since the check pilot is a veteran instructor himself, he may be able to help the student in some way. I am still grateful to a check pilot who, at his own insistence, rode with me several days in succession and finally pulled me through a phase which had been difficult for me.

At the school which is the target for most of the criticism, no student is ever dropped until at least three people, his instructor and two check pilots, are convinced that he will not achieve the standard of proficiency required of a military pilot. If he can succeed in convincing any one of the three that he even has possibilities, he is given another chance. Some students require a great deal more time and effort than others, but they are seldom, if ever, given up as long as they can show any definite progress as the result of instruction.

After all, instructors and check pilots are human. If you have ever seen the despair and defeat in the face of some kid who simply fails to "catch-on" to chandelles or lazy-eights, you know that there cannot be very many instructors who would get a kick out of telling him that his case is hopeless. The necessity of eliminating students is one of the most painful things about instructing. Most of the pleasure comes from getting students through. Human nature being what it is, it stands to reason that a great deal more time and money is wasted in trying to improve poor students than in discarding or frightening away good ones.

Even among those students who succeed in graduating there are wide differences of ability. The school demands only that the student reach a certain minimum standard before he is sent to a tactical squadron, where his real military training begins. Whether or not that standard is too high or too low can only be judged by the records the graduates make in actual service, and no one is better qualified to make that judgment than the directors of the school, who have themselves seen many years of tactical duty. Decisions on borderline cases can not always be right, and no doubt students have been eliminated who might eventually have become satisfactory military pilots after a considerable further expenditure of public funds and equipment.

I do not know that this is true, but it is a reasonable assumption.

It is a proven fact, however, that a student who is particularly slow during one phase of instruction will almost invariably get even further behind on the next phase. It is well known that many borderline cases have been given the benefit of the doubt and allowed to finish. I know that this is true because I have flown with some of them, barely missed collisions with them in formation, and watched them tie up tactical maneuvers time after time. In active service these fellows form that small percentage which makes most of the mistakes! Would it be wise to increase their number?

It is true that almost anyone can learn to fly. It is not true that almost anyone who flies can become a military pilot. A great many people, however, seem to think so, and the wide acceptance of this fallacy is difficult to explain. A brief consideration of the facts will demonstrate that the idea is wholly erroneous and that it is still interfering with the public's understanding and acceptance of commercial and private flying.

Some day most people who consider themselves informed on aviation will come to understand that students are not "washed-out" of military flying schools because they can not learn to fly. Most of them can and a great many of them do learn to fly fairly well. They are washed out because they appear, for one reason or another, unable to reach the high standard of proficiency at certain kinds of flying which our air force requires.

That standard can be lowered, it is true. And there are forces seeking to lower it which are constantly active. But it is well known to veterans in the Service that when (and if) it is lowered the accident rate will rapidly increase, and efficiency and morale will go down. Recently the mere rumor that this standard had been or would be lowered in the interests of rapid expansion caused considerable apprehension among tactical units, and a temporary disturbance of morale which could be noted even among the enlisted mechanics.

In the early days of our participation in the World War the selective system for military pilots had not been worked out and for a long time poor pilots and even unfit pilots were subjected to the overwhelming nervous strain of aerial combat. The final check pilot in those days was Death. His minimum standard was not high, but it was inflexible, and he rode most often when the enemy was not even in sight.

At the present time the Royal Air Force, faced with a desperate situation, has sacrificed efficiency for rapid expansion to such an extent that their recent accident rate is appalling. The

Chinese are in a similar difficulty. Recently a pilot of my acquaintance quit his work with a Chinese flying school and came home in disgust. He explained the disappointing showing made by the Chinese airmen by the fact that their school, which was once modeled strictly after our own army school, had rapidly degenerated after the Japan-enforced departure of its American organizer and advisor and that its standards had been forced down to the point where anyone who could take a plane off, fly it around and land it safely was considered a military pilot. He said he and the other American instructors had tried to persuade the Chinese authorities to revive the system of checks and minimum standards for military flyers, particularly after they received a shipment of ten new Martin bombers. But the Chinese philosophically refused to discourage their pilots in this manner, and within a few months all the bombers had been damaged beyond repair.

Why is it so difficult to understand that military flying is very different from other kinds of flying? Military flying itself has developed so many technical details that even the military pilots have had to give up trying to be proficient at all branches of it. In pursuit aviation it is just as important to be able to fire a machine gun accurately as it is to fly well. One ability is practically worthless without the other. But the mere ability to shoot does not make a good combat pilot, nor does the mere ability to fly. It is foolish to remind ourselves that the ability to fly is not a great deal more difficult to acquire than the ability to drive a car and then to assume that every pilot is a potential military pilot. Are all automobile drivers good prospects for the mechanized cavalry?

Military pilots are supposed to be officers and to possess, both on the ground and in the air, those qualities for leadership, initiative and self-reliance expected of officers in any branch of the Service. It was never assumed that the mere ability to ride a horse made a man a cavalry officer, or that ability to handle a sailboat in a breeze made a man a sea captain. Any pilot who can take a plane off, find his way from one place to another and land it safely will get along well enough when left to his own devices, provided he has sense enough to stay out of very bad weather and refrain from attempting stunts or maneuvers beyond his ability and training which are, for his purposes, entirely useless.

A military pilot is not left to his own devices. Merely to fly around is for him just a pleasant pastime or an opportunity to rest between difficult tasks. Flying must for him be so easy and so automatic that he need not think about it. The ability to fly serves no military purpose in itself. A military

pilot should be able subconsciously to force his plane to its maximum performance in any situation and never try to force it beyond that maximum. He must be able to do this while maneuvering with his eyes glued to a gun-sight, while he is blacked out in a pull-out or turn, or while all of his attention is required for watching or locating a possible enemy or target. He must be able to fly for hours so close to other planes that they could always collide in a second, and then be in top shape for difficult maneuvers or a tight formation landing at the end of the flight.

Most men can learn to fly safely under ordinary circumstances in about 25 hours. Military schools give their pilots at least 150 before they are graduated. Is it supposed that they spend all of that time learning to fly? Many students know how to fly reasonably well to begin with, and quite often they are the ones who have the most trouble. I wish that some of the people who are so anxious to change our system of military instruction could ride with and try to improve a student who has been taught how to take-off in some easily-flown airplane, skid it around and land it smoothly. He thinks he can fly, and he can, for all practical purposes when there is plenty of time and plenty of room. But he can not fly for military purposes. It requires hours and hours of instruction, far more than would be required to start from scratch, merely to correct the slight habitual errors in technique which become very important when you consider that they would be extremely dangerous in even the most loosely-flown formation.

Many students, some of them with previous flying experience, get along fairly well as long as they have at least a small portion of the air or the landing field to themselves. But when other planes crowd them or block their intended landing path they become tense and anxious and consequently less sensitive to the movements of their own planes. This is a natural tendency and is to be expected in the beginning, but the military pilot must overcome it quickly and completely. The private or commercial pilot should be worried and disturbed by the presence of other planes so that he will give them plenty of room. But military traffic is usually heavy, so heavy that the pilot who cannot readily become accustomed to being crowded and "jostled" does not belong in it. The individualist who must work things out alone may be a great genius, and a great pilot, but he is not a military pilot.

There are other personal and mental characteristics which may be neither "good" nor "bad" under ordinary circumstances but which would seriously hinder a military pilot. For the protection both of the individual and of the Service these things should be discovered at the outset whenever they exist and

the flight surgeon is charged with this unpleasant responsibility. This fact accounts for the "psychological" and "hypercritical" portions of his examination which seems so unnecessary to many people who know a great deal less about psychology than the flight surgeon, and a great deal less about the peculiar requirements of military flying than those who prescribed the tests.

This applies to the physical requirements as well. Despite rumors to the contrary, these requirements have not greatly changed. It is possible that the recent sudden expansion may have caused a few persons to be given the benefit of the doubt concerning some minor disqualification but some of these will have to be eliminated later. Flight surgeons are not authorized to "lay aside material for a rainy day," or to "keep in touch" with disqualified candidates, or to try to soothe their disappointments. They are often overworked by the duties they are required to perform and they are required to conduct a thorough examination, not to engage in a "pleasant interview."

Flight surgeons are military men and they work with others who are, or desire to be, in the same category. Consequently they are supposed to dispense facts, not sympathy. Bad news is always unpopular and I suppose anyone who is failing to pass an examination finds it an ordeal. But the idea that flight surgeons often go out of their way to make enemies is a strange one. In the course of a few years I have "endured" more than twenty detailed examinations by various flight surgeons all over the country and I know of none who are "overbearing, domineering, cynical, insulting" or who could qualify under any one of that remarkable collection of adjectives. Whenever I had trouble with some portion of the examination I was unhappy, even miserable, and I wished that I could blame the surgeon. But after watching a great number of others go through the same thing I can understand that a strict, impersonal fairness to all is the only policy that can succeed. Few of my examiners, even when I knew them personally, ever wasted many words either of sympathy or encouragement. But those sensitive souls who object to brief and business-like methods should not contemplate entering the military service.

In any governmental activity it is only with the greatest difficulty that standards which rule out the majority can be maintained. Those who try to maintain such standards would frequently like to make exceptions and sometimes strong pressure is brought to bear upon them to force them to do so. But it is an obvious fact that the success of such efforts, either to reduce the requirements or to interfere with their application, would be detrimental and unfair. In the case of the physical requirements, "believe

it or not" stories of rare individuals who have succeeded at certain kinds of flying prove nothing. Here again great damage is done to private aviation by the confusion, which often appears deliberate, between ordinary requirements and present-day military requirements. I might have enjoyed trying to follow Wiley Post as he found his way around the world with one eye and Harold Gatty, but I certainly would not have enjoyed flying on his blind side in a close formation.

The requirements for military flyers have been in force for more than twenty years and they are not more rigid today than they were in the beginning of their application. Certainly we should know by now that those requirements do not call for "a superior specimen - physically, mentally, and psychologically perfect." They demand only that the individual be normal in certain respects which would prove important to him in military work. Every one of those requirements is worked out for a normal, healthy individual, and not for a superior one!

Is that such a startling fact? Eyesight, for instance, must be 20/20, which is normal and not perfect. Many eyes are 20/15 and better, but that is superior vision and is not required. The same is true of everything else. And even with things which can be numerically measured, such as heart and pulse action and blood pressure, a very wide latitude is allowed.

The fact that certain peculiarities are very common does not change the fact that they are handicaps in military flying. Astigmatism is widespread, but it is not normal and its disadvantages will increase with age. And it is true that what might be called a "superior" sense of balance, resulting from a highly sensitive inner ear, is inevitably disqualifying because the individual possessing it reacts too strongly to slight changes of altitude and direction. It is a fact well known to medical science that few individuals are normal in every respect, and it is true that a large majority are not normal even in those respects which are important to military aviation. Many applicants who are accepted have various things "wrong" with them along lines which are not important. Fortunately for a great many, such things as poor digestions, falling hair and crooked noses do not greatly matter.

In his informative book Flying Vistas, Dr. Isaac H. Jones explains why the qualifications desirable in service pilots are not those which may be found in a majority of individuals.

"There is a great difference between the requirements of military aviation and of private and commercial aviation. The reasons for the difference in the requirements of a war pilot and those of a private or commercial pilot are sen-

sible. The military aviator . . . is selected to be better than his enemy. The student pilot or the private pilot of commercial aviation today is not planning to fight anybody. He is like the average youth who can play football or tennis. But the military aviator is like the member of the 'varsity' football team, or the tennis champion - one who can defeat his opponents."

This is not to imply, of course, that military pilots are the "best" pilots. There are too many kinds of flying today to permit any such simple and arbitrary comparisons, but even if there were such a thing as "pure flying ability" it is not to be supposed that those who possessed it would necessarily be attracted into the Services. Commercial aviation uses good men too, and private pilots may develop their skill as they choose. But the military pilot should certainly be better at the kind of work he is expected to do - work in which mere flying technique sometimes plays a small though important part.

Whenever any pilot, military or otherwise, gets the idea that he belongs to "a race apart" he naturally becomes the laughing stock of his own comrades. Military pilots are specialists, just as airline pilots, test pilots, racing pilots and stunt flyers are specialists. There are so many aspects of military flight that it is divided into several sub-specialties, each of which has come to require special training and talent, so that no one man can attain a high proficiency in all of them. And each Service pilot must therefore learn as he accumulates experience, that other flying specialists are far better in their fields than he would be, and in many cases better than he could ever hope to be.

But he is proud of his job, of its strict requirements and its difficulties, of its limitless opportunities for progress and improvement. He could certainly not be proud of it if it were true that almost any one who tries may become successful at it! It has been said that graduates of military flying schools are inclined to be proud of the fact that about half the students who enter those schools are unable to complete the course. Certainly! And why shouldn't they be? The college I attended has a reputation for graduating a similar percentage, and I am proud of it. The tough time I had getting through was worth the effort because I felt I was achieving something not supposed to be easy. The standing of any school, professional or otherwise, is based largely upon strict and uncompromising entrance and graduation requirements.

The distinction which a military flying school confers upon its successful graduates is a mere by-product of a larger purpose, and there is no necessity for maintaining artificial standards to

create it. Such a school is run principally by officers who remain there only for a short portion of their careers and who are interested not so much in the school itself as in the efficiency of its graduates. At times when expansion is desired there is undoubtedly strong sentiments from some sources in favor of sacrificing quality for quantity production, even when there is no apparent necessity for such a policy and when it would be sure to cause trouble later.

Even if a crisis should arise there are methods of getting more pilots trained which would prove far less costly in the long run than "letting down the bars and destroying the present high standard of efficiency which has been achieved by twenty years of selective effort. A formation in the air can never out-manuever its own weakest members. And the finest equipment is wasted on pilots who are not capable of exploiting its every advantage. Furthermore, the success of an air force must depend upon the determined aggressiveness of the individual pilot, so it would seem foolish to fill an air force with men who were attracted into it by having everything made easier for them.

Just what kind of a man is a military pilot supposed to be, anyway? Suppose that a great many instructors were actually "tough guys," which they are not, being normal individuals with human sympathies who can well remember their own first experiences of a few years back (and which they would not be allowed to be, after all, since the schools have for years been trying to graduate as many good students as possible). Suppose it were actually true that most of the washouts were frightened by their instructors and that the number of graduates could be greatly increased just by making everything nice and easy for everybody. What kind of an air force would we have in a few years? Would fellows who were frightened out of their wits when they rode with a check pilot be expected to roam the skies in search of somebody to swap 50-calibre bullets with them?

As to the traces of a kind of military "hazing" which may still persist at the Army school, I must confess that I "submitted" to the "indignities" several years ago when they really amounted to something, and that the whole business was not a great deal more annoying than the personalities of the few individuals who sometimes tried to overdo it. I took little part in it as an upperclassman, but I could see the explanation and the reasons for its existence. And the hypothetical type of fellows who would say "Shucks, fellows...we came here to learn to fly and we haven't time for that sort of stuff" would perhaps need some kind of informal initiation most of all. A military flying school does not exist for the purpose of merely teaching fel-

lows to fly. They can learn that anywhere, at any crossroads airport, for a few dollars. A military school must change them into military officers and airmen. The change is a difficult one for some types of personality and it is often aided by a kind of discipline which may at the time seem almost ridiculous.

To an outsider, certain phases of military discipline and ceremony may look like childish horseplay. Maybe some of it is silly. War is silly too, but sometimes it may be necessary and certainly very real. I am afraid our author's serious-minded model student scarcely has the spirit which the nation expects in its defenders. I can imagine him calling an enemy pilot on the radio: "Shucks, fellow, I haven't time for this childish scrapping. I came up here to perfect my flying technique." Let's not kid ourselves about the purpose of an army. It exists not for show or parades or for the education of the public in flying or anything else. It should be concerned not with making itself attractive or with making converts into its own ranks, but to train itself for a difficult and terrible job. Satisfaction in its work should come largely from its ability to do a distasteful job well, better than anyone else, and get it over with. I can not conceive of a war in the air being won by men who have to be "made to feel at home" and "put at their ease" repeatedly just to get them through a flying school.

Flying is not "nine-tenths self-confidence." It would be more correct to say that flying is one-tenth self-confidence. Any student with nine times as much confidence as ability would be dangerous to everybody. The poorest students are often completely unconscious of their faults, and derive a grand and pathetic self-confidence from the very thing that makes them hopeless as military pilots - the fact that they are insensitive to their own errors. A timid, hesitant student who has enough persistence to feel his way through things will eventually learn and his ability will bring him confidence. And the students who learn most rapidly are those who are actually better than they think they are.

No instructor worthy of the name will deliberately do things that impede his students' progress. Each student is a different problem. One works better when he is praised and encouraged, another will "put out" only when stung by sharp criticism. If successful instructing were merely a matter of patting a student on the back and telling him how easy it all is, it would be a cinch. It is a proven fact that when all else has failed, a student's work will sometimes improve after he has been spoken to severely. Perhaps he likes his instructor and becomes more and more tense from trying not to displease him so that he actually relaxes after the inevitable happens

and the instructor expresses his displeasure. Perhaps it is a relief for him to hear just how rotten his work is and get the matter over with.

The great temptation is for the instructor to accept slipshod work as "good enough." Instructing is a tiring and difficult job, so why should an instructor want to make it a disagreeable one as well by creating an atmosphere of hostility between himself and his student? It stands to reason that he is far more likely to become too friendly and agreeable and to let small errors slide instead of pointing them out repeatedly.

The course of least resistance is always in the direction of a gradual relaxing of high standards, of changing demands to fit the easiest source of supply rather than finding means to make the supply fit the demand, of sacrificing the future effectiveness of an organization for the immediate desires and ambitions of individuals. To those who have resisted this tendency in the past we owe much of the present internationally high rating of the American military pilot. In any selective system eliminations are inevitable, and the Service schools are repeatedly explaining that failure to complete their course is no reflection upon the character or the ability of the individual, but they can hardly be expected to assume the responsibility for satisfying the ambitions of every American youth.

Eliminations from the school may or may not prove to be unfortunate for the individual concerned, but anyone who develops an "inferiority complex that will hound him the rest of his life" merely because he failed to "make the team" in military flying is quite obviously the type who would not be successful at anything which required much persistence and courage. A great many successful men began their careers by flunking out of college, and flunking out of college is just as much a reflection upon the mentality of an individual as failing to make the heavy grade at flying school is a reflection upon his flying ability. Many washouts of the more stubborn type have become successful in other fields of aviation as a result of their efforts to prove themselves and others that they could learn to fly well.

Some twenty years have passed since the World War, and private and commercial aviation have come of age. They have outgrown war planes and war pilots, and they need no longer be dependent upon military schools, or upon military designs and specifications either in equipment or in pilots. In keeping with the progress of aviation as a whole, its specialties grow more and more diverse and each has its own purposes, its own methods, and its own requirements. Further progress is aided not when these differences are compromised and obscured, but when they are recognized and encouraged.

O B I T U A R I E S

The death of Lieut. Colonel John G. Colgan, Air Corps, on November 19, 1938, at the Letterman General Hospital, San Francisco, Calif., removed from the ranks of the Air Corps an able officer and a veteran Army pilot, who was among the first of the American flyers to see service in France during the World War.

Colonel Colgan was born December 31, 1888, at Philadelphia, Pa. After graduating from high school, he attended both the Pennsylvania State College and the Michigan Agricultural College. Prior to his entry into the Military Service, he was employed as a civil engineer with the Pennsylvania Railroad for a year, and thereafter for one and one-half years he was engaged in scientific agriculture. He entered the military service as a Private in the Aviation Section, Signal Enlisted Reserve Corps, on December 30, 1916, and was subsequently promoted to Sergeant. After undergoing training at the Curtiss Flying School at Newport News, Va., he qualified as a Reserve Military Aviator on March 15, 1917; was commissioned a first lieutenant in the Aviation Section, Signal Officers' Reserve Corps, April 25, 1917, and was assigned to active duty with the 1st Aero Squadron at Columbus, New Mexico.

Ordered to duty overseas in August, 1917, Colonel Colgan completed training on the Nieuport airplane at Avord, France, and on October 15, 1917, was assigned to Amanty, France, on piloting duty. Later he was attached to the First Corps Flying School where, until March 30, 1918, he performed the duties of instructor in aerial observation, reconnaissance, aerial photography and artillery réglage. He was then once more assigned to the 1st Aero Squadron for duty at the front, with station at Ourche, France. He undertook the most hazardous missions and performed them successfully. In the Chateau Thierry, St. Mihiel and the Argonne offensives, he participated with his squadron as flight commander, and for his bravery and devotion to duty during these front line operations he was promoted to Captain, October 29, 1918.

Upon his return to the United States, Colonel Colgan served for brief periods at Mitchel and Hazelhurst Fields, L. I., New York, and from January, 1920, to October, 1920, he served as flight commander with the 12th Observation Squadron along the Mexican Border, with station at Douglas, Arizona.

Transferred to Kelly Field, Texas, where he took advanced Pursuit training with the First Pursuit Group, he was, upon the completion of this training, assigned as a student at the Field Officers' School at Langley Field, Va. Following his graduation from this school, he was assigned to the Air Depot at

Fairfield, Ohio, October 8, 1922, and served with the 88th Observation Squadron for a period of nearly five years in various capacities, such as Operations Officer, Commanding Officer and Engineering Officer. On August 12, 1927, he was assigned to duty as Commanding Officer of Lunken Field, Cincinnati, Ohio, where he served for a period of five years.

Transferred to Mitchel Field, N. Y., September 1, 1932, Colonel Colgan served at that station as Commanding Officer of the 5th Observation Squadron until January 18, 1934. His next assignment was in the Philippines, where he served as Purchasing and Contracting Officer at the Philippine Air Depot until July 2, 1935. Ill health, from which he did not subsequently fully recover, necessitated his relief from foreign service, and after a period of nearly three months at the Letterman General Hospital, he was, on October 6, 1935, assigned to station at March Field, Calif., where he performed duty with the 17th Attack Group as Commanding Officer, then as Commanding Officer of the 95th Attack Squadron and as Group Exchange Officer and Group Auditor with Headquarters, 17th Attack Group.

Colonel Colgan was promoted to the grade of Major on July 1, 1933, and to Lieut. Colonel (temporary) on August 26, 1936.

On November 13th, at approximately 7:30 p. m., two well-liked officers of the 27th Division Aviation, New York National Guard, Captain Ray Worrall Krout and 1st Lieut. Lansing Colton Holden, met their death in an airplane accident near Nashville, Tenn. Funeral services for Captain Krout were held at Paterson, N. J., and for Lieut. Holden at St. Bartholomew's Chapel, New York City. The passing of these two officers was a great loss to the 102nd Observation Squadron.

Captain Krout was born in Newark, N. J., July 23, 1895. He attended elementary and high schools in Newark, N. J., entering Columbia University in 1915. In August, 1917, he entered the Curtiss Airplane Company at Buffalo, N. Y., as Civilian Inspector for the Aviation Section, Signal Corps, inspecting airplanes being manufactured by that company for the U. S. Government.

In September, 1917, he enlisted in the Aviation Section, Signal Corps, as a Flying Cadet, and was assigned to the School of Military Aeronautics, Princeton University, as a student of military aviation. On February 11, 1918, he was commissioned a second lieutenant, and he remained in the service throughout the World War overseas with the 135th Aero Squadron. He was

honorably discharged from the service on May 20, 1919.

On April 4, 1929, Captain Krout applied and was commissioned a second lieutenant in the 27th Division Aviation, New York National Guard. He was placed in command of the 102nd Photo Section. On July 26, 1930, he was promoted to first lieutenant. He was later reassigned to the 102nd Observation Squadron as Armament Officer. He was promoted to Captain, June 25, 1938.

Lieut. Holden was born in New York City, October 8, 1896. He attended elementary and high school in his native city and then entered Princeton University. At the age of 21, and while a student at Princeton, he enlisted in the Aviation Section, Signal Corps, as a Flying Cadet, June 28, 1917. He was commissioned a 1st Lieutenant, Aviation Section, Signal Corps, March 28, 1918, and was honorably discharged from the service on March 31, 1919. During this period, Lieut. Holden spent approximately 18 months overseas with the service. He was the flight commander of the 95th Aero Squadron, and was credited with bringing down eight German airplanes, thereby gaining the unofficial title of "Ace." For his distinguished service overseas, he was awarded the Distinguished Service Cross, with Oak Leaf; the Legion of Honor Medal, and the Croix de Guerre with palm.

Immediately following his honorable discharge from the military service, Lieut. Holden volunteered his services with the Spanish army to subdue the Riffs in Spanish Morocco. He was one of the first two recipients of the Medal of the Moroccan Peace for unusual service in this war.

Having been discharged from the Spanish army, he returned to the United States and reentered Princeton University. Later he entered Harvard University, and he received his Architect degree in 1924. On February 5, 1926, he enlisted in the 101st Cavalry, Troop K (Squadron "A") New York National Guard, serving as Private and Corporal. He was discharged on January 19, 1929.

On June 27, 1929, Lieut. Holden applied for and received a commission as second lieutenant in the Air Corps, National Guard, and was assigned to the 102nd Observation Squadron as Assistant Operations Officer. He was promoted to first lieutenant on June 26, 1930.

On September 12, 1933, having obtained a civil assignment of highly technical architectural nature with R.K.O. Studios in California, he was transferred to the National Guard Reserve. This civil assignment kept him away from the New York National Guard for a period of about five years.

On August 5, 1938, Lieut. Holden was recommissioned in the 102nd Observation

Squadron, 27th Division Aviation, as first lieutenant, and assigned to duty as Assistant Armament Officer. He was very active in this capacity, which was in addition to his duty as an Airplane Pilot.

In addition to the decorations previously enumerated, Lieut. Holden held the New York State Service Cross.

The Air Corps extends its deep sympathy to the bereaved families of these deceased officers.

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FORMATION FLYING IN PANAMA CANAL ZONE

The 24th and 29th Pursuit Squadrons, Albrook Field, Panama Canal Zone, have recently developed and are now in the process of perfecting a combined close order parade formation to be used on the occasions of Wing Reviews and similar ceremonies. The show consists of flying an oval track, any part of which would be visible from the reviewing stand, with the squadrons forming in varied drill formations, line, echelon, vee and mass, on each successive lap. Purely show formations have been little used by the Pursuit organizations in Panama in recent years, the normal working formation being tightened up for the purposes of aerial review.

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GENERAL ARNOLD VISITS HAMILTON FIELD

Major General Henry H. Arnold, Chief of the Air Corps, arrived by plane at Hamilton Field, Calif., on Wednesday, December 7th, for the purpose of making an inspection of that Air Base and the Air Depot at Sacramento, Calif. He called on Major General Bowley, Commanding General of the Ninth Corps Area, and Colonel Jacob E. Fickel, Air Officer of the 9th Corps Area.

According to the Hamilton Field Correspondent, a "Dutch Treat" dinner was served at the Officers' Club at that Field on Thursday evening, December 8th, with General Arnold as the honored guest. The informal dinner and get-together afforded officers and their ladies an opportunity to meet General Arnold.

General Arnold returned to Washington from the West Coast on December 12th.

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BOMBING PRACTICE FOR 74TH ATTACK SQ'DN.

For the past few weeks, the 74th Attack Squadron, Albrook Field, Panama Canal Zone, has been engaged in live bombing and gunnery practice, utilizing aluminum slicks (bronze aluminum powder) dropped on the surface of Panama Bay, for targets.

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