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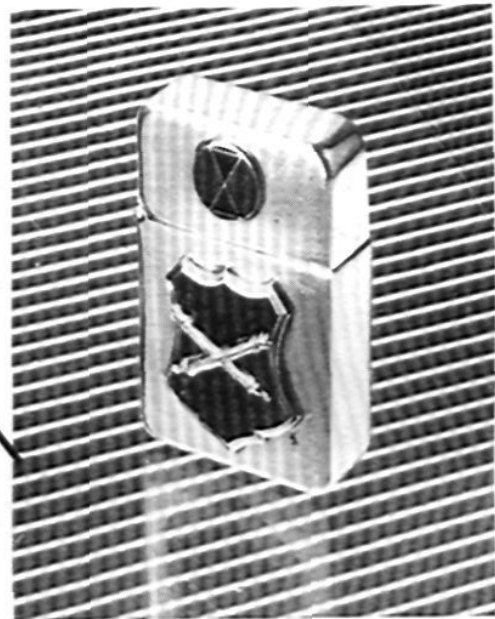
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Ray M. Linn
Lieut. Gen., USA



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The objects of the Association shall be the promotion of the efficiency of the Field Artillery by maintaining its best traditions; the publishing of a Journal for disseminating professional knowledge and furnishing information as to the field artillery's progress, development and best use in campaign; to cultivate, with the other arms, a common understanding of the powers and limitations of each; to foster a feeling of interdependence among the different arms and of hearty cooperation by all; and to promote understanding between the regular and militia forces by a closer bond; all of which objects are worthy and contribute to the good of our country.



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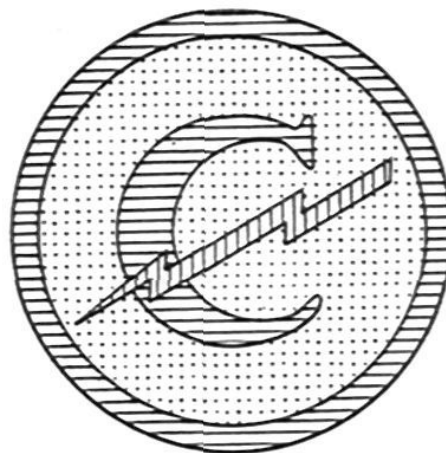
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The United States Constabulary

BY CAPTAIN H. P. RAND, FA



FOR almost two years the U. S. Constabulary has been in existence in the U. S. occupied zone of Germany. It has recently been brought prominently to the attention of field artillerymen through the formation of two organic field artillery battalions. The inception, formation, organization, and functioning of the Constabulary is the story told herein.

INCEPTION

Immediately after the end of combat in the European Theater of Operations the security situation facing the U. S. Army was precarious. On the one hand there was the problem of rapidly decreasing troop strength in the Theater. Between shipments of troops to other areas of combat and the redeployment which was forced upon the army beyond expectations through pressure on the home front the troop strength was diminishing rapidly, and along with the decrease came an unavoidable amount of confusion and disorganization. On the other hand there was the problem of the population in the U. S. occupied areas. Germans numbering in the millions had been set adrift by the war and were living in new and often hostile communities. "DP's" (Displaced Persons) from throughout Europe were in Germany by the millions. The complete breakdown of the German law-enforcing agencies, together with the utter confusion caused by an unprecedented unconditional surrender, contributed to a threatening situation which the army was able to solve only by special measures.

The U. S. Constabulary was the high command's solution. After many conferences on Theater and War Department levels it was decided to form this organization, which was to be the

police force of the army of occupation, with jurisdiction over all military and civilian Americans and Allies, and all indigenous personnel living in the U. S. Zone. By its high mobility, its elite soldiers, and its speed of operations, it was envisaged that it would successfully control the explosive situation. After 19 months of operations it can be said that the Constabulary lived up to the high command's expectations to the fullest. At no time during the first year and a half of its operations did the security situation in the zone become an acute problem.

ORGANIZATION

For the task of organizing this special force Major General Ernest N. Harmon was selected. With his outstanding combat record and his unusually energetic personality to recommend him to his lightning-force troopers, General Harmon accomplished his challenging



task. Battalion-size units from the 1st and 4th Armored Divisions, as well as separate tank destroyer battalions and cavalry reconnaissance squadrons, were redesignated and reorganized into Constabulary squadrons. Field artillery, infantry, and cavalry units from the two armored divisions were chosen, all retaining their numerical designations: for example, the 66th Armored FA Bn of the 4th Armored Division became the 66th Constabulary Squadron. Group headquarters were reorganized into regimental headquarters. The 4th Armored Division Headquarters became 1st Brigade and its two Combat Command Headquarters became the 2d and 3d Brigade Headquarters respectively. VI Corps was redesignated Headquarters U. S. Constabulary, with station at Bamberg.

Immediately following the redesignation of the units, they commenced their special training to prepare for the police mission. The length of the training period varied with different units, depending on the date of their redesignation as well as their strength and receipt of fillers. Thus, in some units the training period extended from late March to 30 June 1946; in others, it was substantially shorter. Through rigorous inspections by the Commanding General all units were brought up to the desired standards.

On 1 July 1946 the Constabulary became operational. It was organized as follows: 3 brigades under the headquarters; 3 regiments under each brigade; 3 squadrons under each regiment.

U. S. Constabulary Headquarters comprised a large number of special

troops, such as Car Platoon, Signal Squadron, Flight Detachment, Band, MP Troop, and several intelligence detachments. Brigade, an operational and administrative headquarters, consisted of the Headquarters and Headquarters Troop. Each regiment was organized to include a headquarters and headquarters troop, a light tank troop, and a service troop. The headquarters troop comprised a horse platoon and motorcycle platoon. Squadrons were made up of a headquarters and headquarters troop and five line troops. These latter were organized as three mechanized and two motorized troops. The former, with a larger number of vehicles, proved to be considerably more mobile and therefore better suited to Constabulary operations. The line troops were equipped with ¼-ton trucks and M8 or M20 armored cars as their only operational vehicles. Throughout the entire Constabulary 1½- and 2½-ton trucks were used for administrative purposes.

No account of the organization would be complete without mention of the Constabulary School. In size, in scope of instruction, and in quality of instruction, this school compares favorably with any service school in the United States. During the course of time it has turned more and more into a Theater School by teaching non-Constabulary subjects, such as courses under War Department Training Circulars 9 and 5, to all personnel in the Theater. Particularly in the early days of the Constabulary the school was a valuable aid in training officers and enlisted men in the duties of a trooper, as well as indoctrinating them with the high standards of military bearing and customs that were expected of all. The school is located at Sonthofen in what Adolf Hitler built as a training institution for future leaders of the thousand-year Reich. The magnificent "Ordensburg" is located in a beautiful Alpine valley, and is inspiring to all visitors by its majestic proportions.

With an initial Table of Organization strength of over 30,000 officers and enlisted men, the Constabulary underwent no major organizational changes during the first year, except that in the spring Major General Withers A. Burress succeeded General Harmon as Commanding General. During the summer, however, the entire Theater

underwent certain reductions in troop strength and the Constabulary was obliged to absorb its share. As a result some units were inactivated and, at the same time, a standardization of line troops was accomplished to give them all the mobility of mechanized troops. In addition to reducing the number of line troops to four in each squadron, and eliminating all but one of the regimental light tank troops, the total number of squadrons was reduced from 27 to 16; regimental headquarters were cut from 9 to 5; and one brigade was eliminated. This is the organization in effect today.

OPERATIONS

In order to fulfill its mission, which is the security of the U. S. Zone of Occupation, less Berlin and Bremen, and the support of Military Government, the Constabulary today is disposed to conform with German political boundaries. The 1st Brigade encompasses the territory of the German "Land" (state) of Hesse with one of its regiments, and the territory of the "Land" Wurttemberg-Baden with the other. The 2d Brigade is responsible for all of "Land" Bavaria, the largest of the three states in the U. S. Zone.

Whereas, in the beginning, troop units down to the size of two-man detachments were located in even the smallest towns, today squadrons are concentrated in the German army posts most of them occupy. In only a few instances are any units smaller than squadrons stationed by themselves, and the trend continues towards concentrating the remaining few. As an estimate it can be said that for

every 100 places in which Constabulary units were stationed during 1946, today 10 places remain occupied by the troopers.

The operations conducted to fulfill the security mission have not changed much in character since the early days. The changes are in quantity rather than in quality. Patrolling is being done regularly in such a fashion that all of the areas assigned to a unit will be visited periodically. Where 18 months ago their visits may have been daily in the case of larger towns, they now occur weekly. Barely enough patrols are being maintained to remind the population that the Constabulary, known as "Blitzpolizei" or lightning police among the people, is still around. Of course where the incident rate indicates that a certain area is getting out of hand, the patrolling is reinforced to the extent where any situation arising can be controlled. As another means of showing themselves to the Germans, the Constabulary conducts "shows of force." These are held by units of not less than troop size. In their best dress uniforms the troopers roll through the town with their shiny armored cars and "jeeps," with machine guns uncovered, ammunition belts dangling, 37mm guns at the ready. From intelligence agents it has been learned time and again that these shows never fail to impress the population greatly and make them appreciate the protection the Constabulary affords against potential law-violators.

Another means to execute the security mission is the regular establishment of checkpoints along major and minor

A "Show of force" in Stuttgart





On the Border Between the U. S. and Russian Zones

roads. All pedestrians and vehicles are being checked there to find improperly documented persons, stolen vehicles, contraband goods, etc. These also aid in spotting vehicles with substandard driving safety, a police function which the Constabulary has among its additional duties. In line with this, speed traps are also among the activities. With a system of stop watches, three stations, and telephone or radio communications between the stations, speeders can be apprehended and brought to justice in an efficient and legally tenable manner. With the poor state of German vehicles, this function is of greatest importance in reducing the accident rates throughout the zone.

Among the special types of operations conducted by the Constabulary are search and seizure operations. When a certain area or installation has been established as the scene of illegal activities, or is strongly suspected, a Constabulary force of appropriate size is designated to stage a raid. Thus, for example, a certain house may be the exchange place for black market goods. At an early hour on the designated day, well before daylight, the entire area is cordoned off and a search party enters the establishment. Honeycombing the entire suspected area in detective style, the troopers collect any illegal possessions found, writing out receipts for every item taken, make such arrests as can be legally supported, and withdraw in the same orderly fashion as they arrived. Many times these well prepared and well coordinated operations have broken up large-scale activities of illegal nature.

In some instances the Constabulary has been employed in sweeping areas of the size of several counties in dragnet fashion

to apprehend criminals. It can be said that any type of police or military operation imaginable can be executed by the Constabulary — and most have been tried out.

Among the functions the Constabulary had during the first year of its existence was the control of the interzonal and international border of the U. S. Zone. By establishing certain authorized crossing points and by maintaining a system of patrols along the border, this extremely difficult task was successfully accomplished. During 1947 this function was turned over to the German border police in several stages. Today it remains for the Constabulary to make occasional checks on the proficiency of the German police and, in special cases, to take such measures as are deemed necessary to reinforce them.

Connected with the border responsibility is the checking of trains entering and leaving the U. S. Zone. Only a few of the so-called international trains, i.e., trains that pass through the U. S. Zone on their way from one European country to another, remain on the list of trains regularly checked. Spot checks on all other trains crossing zone boundaries are conducted at irregular intervals.

In order to keep close track of all developments in the security situation, the Constabulary has its own intelligence agencies. Special Investigation Sections are organic in all units; Counter-Intelligence Corps, Military Intelligence Teams, and others are attached to Constabulary units as needed. Through these special agencies, and through the daily intimate contact of its operational personnel with the population, the Constabulary has developed a highly

effective intelligence collection system. As far as information pertaining to the U. S. Zone is concerned, no other unit in the European Command can boast comparable comprehensive coverage.

When in the Spring of 1947 it became apparent that the operational activities of the Constabulary could be substantially curtailed, the emphasis was shifted to training. Today this process has gone so far that in most squadrons three of the four troops are in training while only one troop maintains the operational commitments. After troop-level training was conducted during the first six months of the training era, platoon-level training was later adopted throughout, in order to emphasize training of junior officers and noncommissioned officers. The results of this training have been excellent.

SPECIAL EQUIPMENT

To distinguish the Constabulary trooper from other occupation soldiers he wears a special uniform. General Harmon himself is responsible for the design of the shoulder patch in the colors of the ground arms—yellow, red, and blue. The lightningbolt in the patch indicates the speed of the operations. The dress uniform, worn not only for parades but also for operations such as shows of force, retains the long blouse, adorned by a yellow scarf tied in ascot style. The helmet liners are painted with the Constabulary patch in front and two yellow stripes and a blue stripe clear around. Sam Browne belts and specially cut-down cavalry boots complete the uniform of the sharp troopers. Every officer and man is armed with a .45 pistol. In addition,

individual weapons are authorized, including M1 rifles and cal. .45 submachine guns. All vehicles are also marked with the blown-up patch and the blue and yellow stripes.

TRENDS

There appears little doubt in the minds of those who have followed the developments in the U. S. Zone of Occupation in Germany that the need for the special police-type force has diminished substantially during the past two years. The German law-enforcement apparatus has been rebuilt, with the assistance of Military Government, to the extent where it can again control the situation. The entire machine of German government has taken hold again. The trend in the Constabulary appears to be toward an orthodox-type army organization, as evidenced by the formation of the two field artillery battalions within the Constabulary.

It must be pointed out that officers of all three ground arms serve side by side in the Constabulary. Except for the cavalry

terminology which is used throughout the organization, the Constabulary does not compare to any other military organization, mainly because it is not a combat-type unit. No doctrine has ever been laid down on paper, so that, depending upon the arm of the commander, some units are trained more as cavalry, others more as infantry. Now, with the field artillery establishing itself firmly, there is no telling what will happen to the unwritten doctrine.

The two FA battalions formed in January 1948 are truck-drawn, one 105mm and one 155mm howitzer. They are stationed together, and have been given a four-month period to train, in a manner similar to mobilization training. At the end of their training they are expected to be proficient in all firing techniques, in order to be able to participate in field exercises for all other Constabulary units during the summer of 1948. They are commanded and staffed by combat experienced FA officers. Since the Constabulary is a branch-immaterial organization, much transferring of officers was necessary so that the 91st and 94th FA Battalions could

be composed of FA officers only. Similar transfers of enlisted men took place on a very limited scale. Although the two battalions are normal T/O FA battalions, they are authorized the special items of Constabulary wear and the distinctive insignia.

As this article leaves the European Command [January 1948] some changes are occurring in the Constabulary. Headquarters, which moved to Heidelberg in early 1947 when Third Army was "ZI'd," is moving again. Its new home will be in Stuttgart. A new Table of Organization is about to become the basis for the Constabulary organization, making some of the changes which have occurred during the past 18 months official. There is no predicting what the future will hold for the United States Constabulary. But even if it should be inactivated tomorrow, it would have made a sufficiently great contribution to the success of the occupation of Germany to go down in the annals of the U. S. Army as one of its finest, most successful, and most distinguished units.

Some of the Constabulary's Varied Means of Transport

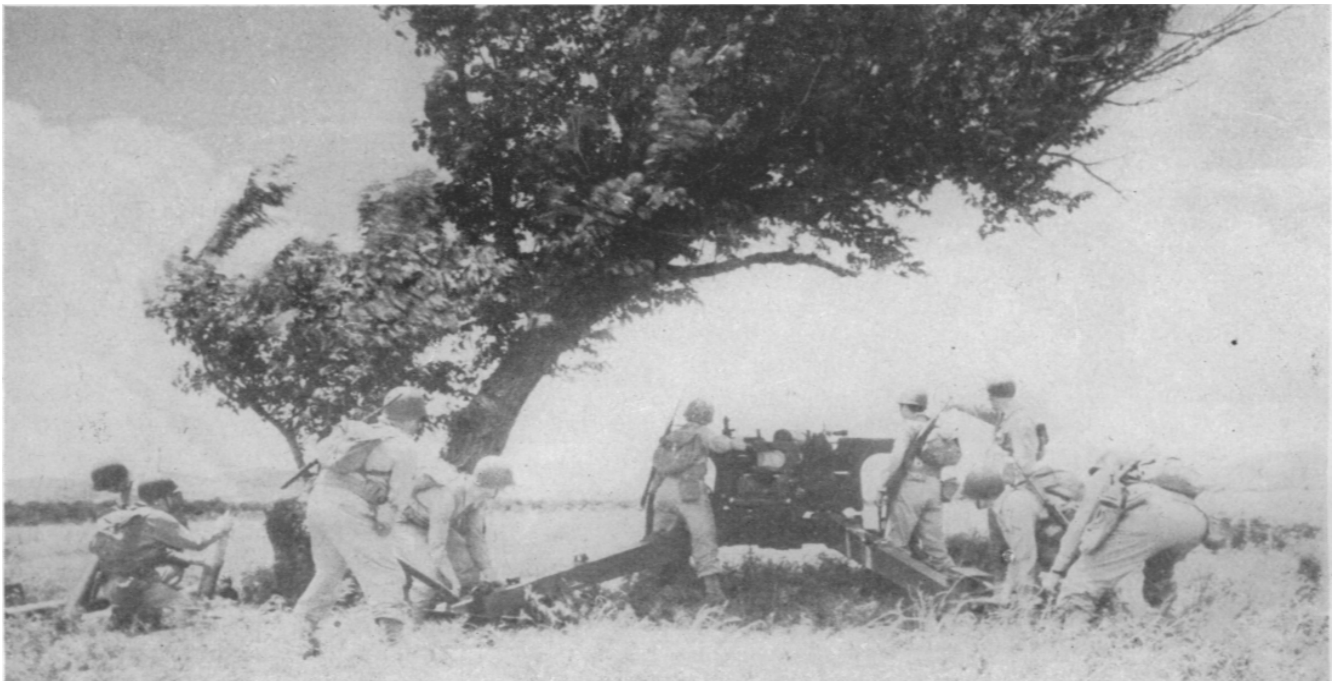


PRIZE WINNERS BY FIELD ARTILLERYMEN



ALASKAN INTERLUDE

By Master Sergeant Henry A. Turlington, photographer of AGF Board Number 1. After winning Post, Army, and Army Ground Forces competitions, this picture won first prize in the Army National Photography Contest. Showing some Task Force "FRIGID" soldiers, it was taken at Ladd Field, Fairbanks, Alaska, in a temperature of 45 below zero.



"TARGET IDENTIFIED"

By Staff Sergeant Travis L. Williams, photographer of the Reproduction Field Printing Plant Photo Shop, TAS. This picture won first prize in the Fourth Army Photographic Contest and fourth place in the Preliminaries of the Army National Photography Contest. Taken at Ft. Sill, Oldahoma; old-time Ft. Sillies can recognize some well-known landmarks.

HIGH BURST WITH A STOP WATCH

By Captain Leslie W. Hamilton, FA Res.

REGISTRATION and observation are the keys to effective artillery fire and every artillery officer knows the constant effort that is put forth to get both. But there comes a time in the life of every artilleryman when registration by any of the normal methods is impossible. I want to tell you about one of those times and about how the problem was met, however crudely.

Our battalion (5th Armd FA Bn) was in direct support of a task force advancing rapidly toward Cologne in March 1945. We had thought ourselves set for the night, when something broke loose ahead and we had to pull ourselves together and dash madly down the road to keep in range. We finally stopped about two A.M. 7,500 yards from the outskirts of Cologne. We occupied position, laid the guns on a compass, and our small survey party set out to locate the battery positions as accurately as possible. It was contemplated that registration would be accomplished at first light in the morning. When the overlay for the attack of the following day was received, we found that we were called upon to deliver unobserved fire on certain points in front of our supported units and inside the city of Cologne. Since the fires were scheduled before dawn, a registration was essential before then. A high-burst registration was precluded by the time element and the uncertainty of locating suitable bases in the dark.

For a few weeks I had been toying with the idea of accomplishing a range registration by an entirely new method and this seemed a fine place to try. I went out to C Battery and went to work. We laid the base piece carefully on a compass. Then we staked out an instrument operator with a well-declined aiming circle on a prominent crossroad nearby. At the gun position we had an operator set up a BC scope.

Using charge 6 and M54 fuse, we fired a round at the elevation setting and time setting corresponding to 6,000 yards. The burst was not observed, although the country was completely flat. We raised the site 10 mils and were rewarded by the flash of light and the delayed report of the air-burst. It was upon this flash of light and the delayed report of the air-burst that I relied for a range registration.

We fired eight rounds with the same data. I had a stop-watch, and each time I observed the flash, the watch was started. It was stopped when the delayed report reached the gun. The watch was graduated to 1/10 of a second and the time interval for the flight of the sound was recorded to the least reading. The BC-scope operator measured the site to the bursts. The aiming-circle operator claimed two accurate measurements to the burst center. I was skeptical of these because of the very tiny size of the bursts at 6,000 yards.

We used our eight recorded times to calculate a median average of the times required for sound to travel from the burst center to the gun position. We multiplied the median average number of seconds by 1,087, the number of feet per second traveled by sound under standard conditions. Thus, by crude sound-ranging methods, we obtained the distance between the gun and the burst center. The distance so obtained was used as the measured range to the imaginary registration point.

From the quadrant elevation at which the rounds were fired, we subtracted the small average angle of site to the burst center, as measured by the BC-scope operator. This operation gave us the adjusted elevation. We set the adjusted elevation and the "measured" range on a graphical firing table in the usual manner and found the K to equal +50 yards per thousand. We plotted a long ray on the firing chart from the aiming-circle position into the target area,

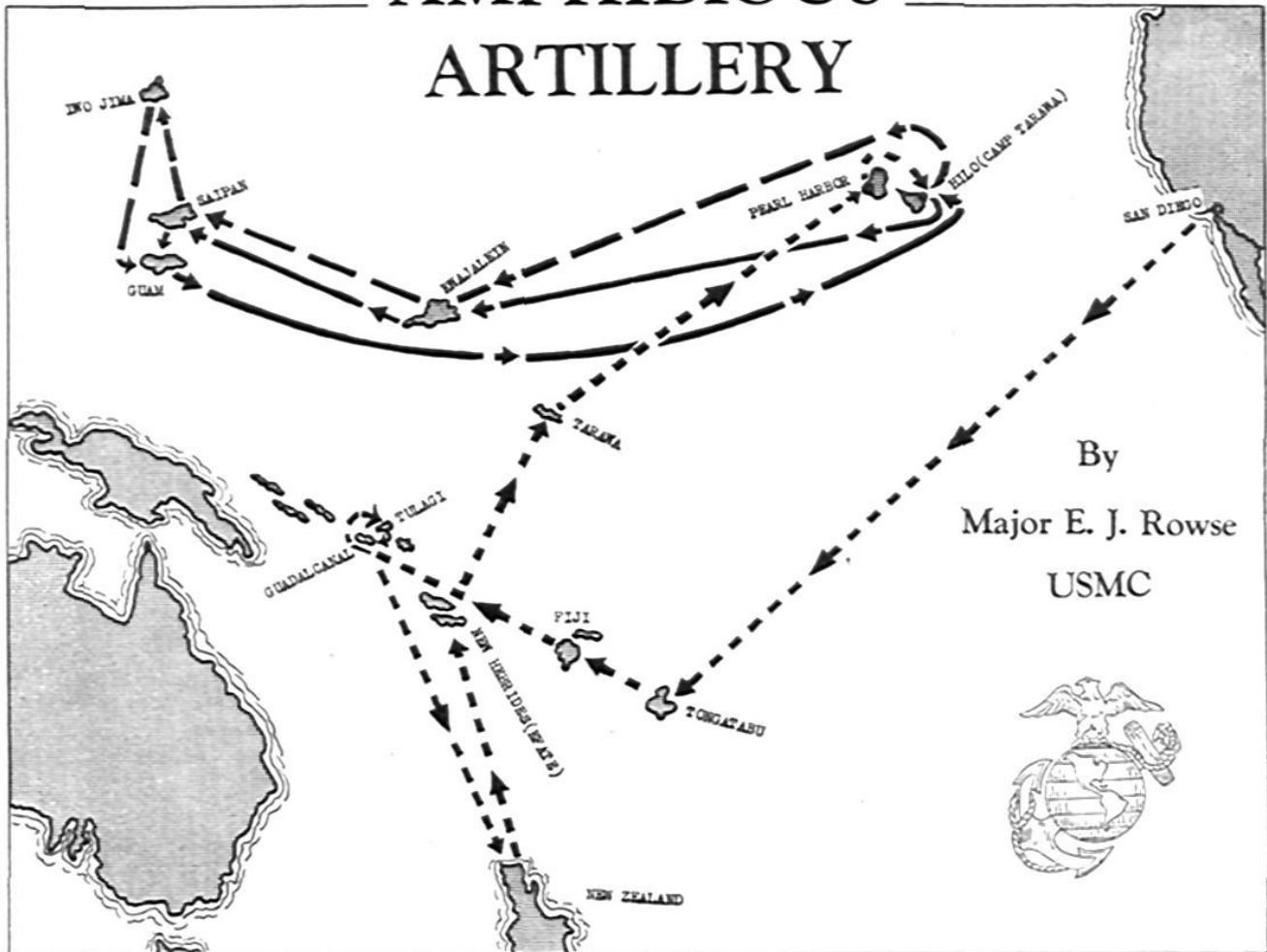
using the average compass reading to the burst center for direction. Then, from the plotted position of the registering piece, with a radius equal to the "measured" range previously obtained, we described an arc to intercept the ray. The point of intersection, by this improvised polar plotting, was the location of the burst center. On the firing chart, we measured the deflection between the compass of the gun and the compass from the gun to the burst center as plotted. From this we obtained a deflection correction of approximately left 10.

In concert with one of our observers, we fired a few test rounds to be sure that the unorthodox data would not endanger front-line troops. He assured us that the rounds seemed to be landing properly as far as he could tell by sound. After that trial, we were certain that although we might not hurt any of the enemy, we would not drop any rounds in our own people.

The attack opened on schedule before dawn. We fired our unobserved missions and delivered a few observed missions adjusted close-in by forward observers. They had no difficulty picking up initial rounds. Shortly after dawn, we obtained a registration from one of our planes. The K so obtained was +55 yards per thousand. The deflection correction was left 7. These results were only 5 yards per thousand and 3 mils in deflection away from the corrections resulting three hours earlier from the improvised sound-ranging method.

Perhaps we were only lucky. I realize that my scheme was subject to the errors involved in the variable speed of sound under changing atmospheric conditions. Lucky or not, the method achieved phenomenal results. Given proper terrain conditions, a fairly accurate range correction would probably always be obtainable by this method.

AMPHIBIOUS ARTILLERY



IN THIRTY-THREE months of continuous overseas duty, Marines of the 3rd Battalion, 10th Artillery Regiment (later the 2nd 155mm Howitzer Battalion), blasted a memorable trail from Guadalcanal to Iwo Jima via Tarawa, Saipan, and Guam. This artillery battalion fired in support of every Marine Division to see action in World War II except the 6th, and in so doing, lobbed some 50,000-odd rounds of assorted 75mm and 155mm shells into the laps of the unfavored sons of heaven. This tour of duty earned for the battalion the Presidential Unit Citation with three stars and the Navy Unit Commendation Ribbon and provided a boundless source of material for a 100% "snow job" of any who were willing to lend an ear to learn of the valiant deeds of the "Fighting Third."

3/10 was formed as a 75mm gun battalion in January 1941 under command of Captain (now Colonel) John S. Letcher at Camp Elliott, San Diego, California. Training periods from early '41 until 7 December '41 were badly handicapped through lack of men, equipment, ammunition, and material, and the overload of guard, working parties, and other peacetime detriments to efficient training. Pearl Harbor literally caught the battalion with its pants at half mast, and the next few months were feverishly spent in making extensive plans for the defense of the Southern California coast line, training new replacements, drawing war gear, expanding to form cadres for new artillery battalions, re-equipping, reorganizing, re-training, — Snafu reigned supreme.

In February '42, the outfit was reorganized (for the last time that year) as a 75mm pack howitzer battalion under command of Major (now Colonel) M. L. Curry. Intensive field maneuvers at Camp Dunlap, Niland, California, and amphibious ship-to-shore training in the San Diego Bay area from March to July readied the outfit for its long-awaited opportunity to strike blows for liberty.

On 1 July '42, as part of the 2nd Marines, reinforced, the battalion quietly sailed out of San Diego Harbor in the pre-dawn haze of a sleepy California coast. Rumors as to the ultimate destination were rampant, but all hands soon relaxed to shipboard routine and were content in the realization that at long last we had made the team—we were on the way to be "Fighting Marines."

Cramped minds and bodies were relaxed

and stretched when the convoy put into Tongatabu (British Friendly Islands) for fuel and supplies. Liberty, in the form of supervised hikes, was granted all hands. To many this first encounter with flesh and blood South Sea Islanders was a revelation, and the work of American missionaries was well reflected in the speech, manner, custom, and dress of the natives.

From "Tonga" the ships sailed to the Fiji Islands, where dress rehearsals for the coming show were held. Our baptism of fire was rapidly drawing near.

On 7 August 1942 the distant booming of naval preparatory fires held an early reveille for all hands. This gala 4th of July show was continued to the great enjoyment of those remaining aboard ship until the sudden unwelcome appearance of a perfect "V" of 27 red aerial meat-balls. Sticks of bombs that straddled various ships soon made believers of the wiseacres who had been hard to convince that a tin hat could do more than wear a man bald.

More convincing along the same general lines was accomplished the next day. After an exciting night, during which we were sure that our Navy had sunk the whole damn Jap Fleet, we awoke to learn that four of our cruisers had been lost. This disaster was still being verbally fought when Nippo surprised us again, this time in the form of 27 torpedo bombers. Hot lead flew in all directions and blood pressure rose on all fronts before 25 of these planes were scratched. At this point all hands were beginning to see the light and were eager to get ashore where life would be a bit more familiar and far safer. The baptism was complete.

"Land 3-I-10 Gavatu. Land 3-H-10 Government Pier Tulagi." Orders were never received more enthusiastically than these. Even the insistence of the skipper of the ship that all tactical doctrines that had been so thoroughly drilled and rehearsed be violated failed to dampen high soaring spirits. CP's were sent in with the howitzers; cannoneers were loaded with ammo; ammo handlers found themselves boated with comm gear; individual craft were dispatched to the beach when loaded. The Navy dropped the ball smack on us that time.

"I" Battery landed and fired the first offensive rounds of artillery fire in World War II at Jap snipers hidden in the tops of coconut trees on Gaomi. "H" Battery landed on Tulagi between Sesapi and Chinese Village and fired a 100-round preparation in support of the landing being made on Makambo Island. Unconfirmed reports later maintained that three Japs and one pig (or vice versa) had been driven off the island under the terrific barrage. Thus, "H" Battery became the first Marine artillery unit ever to fire in support of a landing in the history of the Marine Corps. History was being made by the 3rd Battalion 10th Marines.

After the first blush of combat had subsided and the boys had become men, the war in all its dirtiness and ugliness and bitterness and suffering had its inning. Work commenced on a 24-hour basis. Positions were dug, blasted, and scraped out of the rocky ridges; ammo was hauled, sorted, and stored; shanty towns of corrugated tin roofing sprang up like wildflowers; patrols were sent to neighboring islands to ferret out the enemy hangers-on; rations, water, cigarettes, soap—life's little necessities—all grew scarce; men grew lean and mean; malaria, dengue, and dysentery had a field day. "Home by Xmas" became the byword. The Nips were extremely active from August to November and from the grandstand seats of Tulagi's rugged peaks the frequent naval and air battles provided the only diversification to an otherwise dull existence.

The battalion commenced its overwater displacement by echelon to Guadalcanal in late October. "I" Battery lost most of its personal gear and suffered a few casualties when the Yippee boat, *Endeavor*, and the Navy Tug, *Seminole*, carrying it were sunk in a one-sided running battle with a Jap "tin can." Life was beginning to have its interesting aspects once again.

The remainder of the battalion completed the displacement without incident and began firing in support of the 2nd Marines in the Matinakau sector. After the long monotonous months spent on Tulagi, Guadalcanal provided a welcome change. Unlimited ammo supplies drew sheer sighs of joy from the

gun crews as Bn 5, Bn 10 or Bn 15 rounds were sent on the way. Fire direction was sketchy at best, and the crystal ball and the Ouija board were worked to the point of slipping their gears. The only asset of the W-104 Map (used as an observed-fire chart) was that it provided a rough means of identifying prominent terrain features out in the target area. The "Book" had not provided a chapter covering situations such as these.

Late in December the battalion was in support of the 132nd Infantry, Americal Division, for the capture of Hill 27. This proved to be the most exacting artillery problem met by the battalion during its long career. For the attack, one battalion of Army 105mm howitzers and one battery of Marine 155mm howitzers reinforced 3/10. 3/10 fired one round of smoke shell every 15 minutes on Hill 27 in order to guide the 3rd Battalion 132nd Infantry to the objective in its wide envelopment through the dense jungle. A 1500-round, 30-minute preparation was fired on Hill 27 prior to the infantry jump-off. Forward observation was being conducted about 75% by sound rather than by normal methods. Rounds moved up and right as little as 25 yards for the 2nd Battalion 132nd would bring, "Cease firing for —'s sake" from the 1st and 3rd Battalions. Rounds moved down and right for the 3rd Battalion would bring the same screams for the 1st Battalion. Finally the CO of the 132nd had to issue direct orders to his battalion CO that no cease-fire orders would be sent until "you've had six casualties." Needless to say, the cease-fire calls abruptly ended. Despite all this unbridled confusion, the hill was finally taken and defensive fires were fired in for the night.

True to form, the Japs counterattacked around 2200 the first night. Captain Casey (Army FO) called for a battalion 15 rounds right down on top of the Nips and practically in his own hip pocket. The battalion was blasting out by the time Casey's call ended and Colonel Curry was rocketed out of his sack by the concussion of the rapid firing.

"Rowse (the S-3), where in the hell are we firing now?" yelled the Colonel.

"Hill 27, sir," Rowse weakly replied.

"Hell's delight!—the infantry is all

over that hill," exclaimed the Colonel.

"Yes sir, but they asked for Concentration 76 up 100, enemy counterattack, so I gave it to them," answered Rowse.

To put it mildly the Colonel and the S-3 were both beginning to feel the effects of permanent hardening of the arteries coming over them when Casey (God rest his soul!) finally called and reported: "Excellent effect on last concentration." The counterattack was stopped and breathing commenced once again.

This battle was the highlight in the Guadalcanal campaign for the outfit. On 31 January 1943, after six months of hanging on by its boot straps, the battalion loaded out for New Zealand. Eating orgies on the first real honest-to-God food in months left all hands stuffed to the gills. Clean clothes, bunks that offered plenty of opportunity for good sack drill, lack of mud, filth, flies, mosquitoes; no visits from the Tokyo express or Whistling Willy—life was beginning anew for these (now) veteran Marines. The next nine months were spent in the Wellington, Paekakarika, McKay Crossing, Waiouru area of New Zealand. Initially all hands were given ample opportunity to rest, recuperate, and rehabilitate. Recreation was a very diversified matter and varied from wild-boar and deer hunting in the vast reaches of the interior to night clubbing in the "hot spots" of Wellington, Auckland, Christ Church, et al. No spot was so distant or so remote as to be unfamiliar with the sight of a US Marine.

Page upon page could be written on those nine wonderful, refreshing months. Suffice it to say that warm memories of the generous, openhearted hospitality displayed by the New Zealanders will linger forever in the hearts of those who served "Down Under." Life really began anew for these war-weary Marines in the land of steak and eggs, tea and crumpets, and real Scotch whiskey. With the arrival of replacements and new equipment, training began again and gradually intensified until late September. Amphibious landing exercises held at this time fully readied the 2nd Marine Division for its forthcoming Tarawa operation. 3/10 was ready to strike new blows for liberty.

The familiar pattern of loading aboard APA's by battalion landing teams and of

getting squared away to shipboard routine soon settled down to normal. Practice landings were held at Efate, New Hebrides Islands, and final revisions to operation plans were made. Submarine and air alerts served to break the monotony of an otherwise pleasant voyage. Finally D-day dawned off Tarawa. How so much plain undiluted Hell could erupt out of such a beautiful setting no one had then suspected.

The 3rd did not play too important a part in this operation but its role was unique. For some thirty-odd hours the battalion CO fretted and watched wave upon wave of landing craft go into the beach without receiving orders to land his outfit. Finally, he could stand the suspense no longer. He ordered the Bn 3 ashore to contact the CO of the 10th Marines, and come hell or high water secure orders for 3/10 to get in on the pay-off. The Bn 3 gathered together a small party consisting of the Bn 2, G Battery Exec, a radio operator, and one BAR man, and took off at high port. Contact was made with Colonel (now General) T. E. Bourke and permission to land the battalion was obtained.

As is a well-known fact, Helen Island was too well littered with debris, dead Japs, and more Marines and gear than the spit of coral could adequately provide cover for. It was, therefore, decided to land 3/10 on Diana to support the sweep of the 2nd Battalion 6th Marines through the remainder of the islands in the atoll. Intelligence reports on Diana were extremely sketchy and the presence (or absence) of Nips there at that time was never definitely established. However, time was getting short, so the Bn 3 and his party were ordered to reconnoiter, and report on the possibility of landing on Diana. Needless to say, there was much puckering of draw strings in the party until the recon was completed and the absence of Japs was confirmed. This news was relayed to Colonel Curry and the battalion commenced its landing after dark on D+2. The outfit was ashore by 0400 despite many embarrassing encounters with coral heads and hidden reefs, and was prepared to lock horns with the Nips once again.

In view of the lack of Japs on Diana, the Battalion CO decided to investigate possibilities on the next adjacent island,

with the view of moving 3/10 there to support more effectively the sweep of the 2nd Battalion 6th Marines. So—the Bn 3 organized another recon party, this time making sure to have considerably more firepower available in the event of any little surprise parties. Sight contact was made with a force of about one company of Japs near the west end of Ella. Discretion being the better part of valor, the recon party left well enough alone and reported to the battalion CO.

Early the next morning 3/10 displaced overwater (with no boats)* to Ella and fully organized and occupied position. The artillery really had the laugh on the foot soldiers when 2/6 came storming ashore under the protective guns of 3/10 around noon of D+4. Upon landing, 2/6 immediately reorganized and started its pursuit of the Japs. The plan of attack was to sweep the remaining islands until contact was made and then to attack and destroy the enemy. 3/G/10 was directly attached to 2/6 and all 3/10 motor transportation was turned over to G Battery in order to facilitate its displacements. The remainder of 3/10 was in position to support 2/6 until the pursuit had passed Jennifer.

Finally on D+6 a small patrol from 2/6 established contact with the Japs and it was definitely decided that the bulk of Jap forces was located on Sarah. Late that afternoon, G Battery completed a registration and was prepared to support the attack. The battalion CO of 2/6 decided to attack early the next morning with one company in the assault and to have G Battery prepared to deliver "on call" fire missions. No preparatory fires from G Battery were included in the plans for the attack by the battalion CO of 2/6.

The assault company moved out as planned and was cleverly ambushed by the Japs. A brisk fire fight immediately developed and Marines and Japs became so entangled that no artillery fire could be brought to bear. Finally, when the dust of battle had cleared, over 200

*All displacements made between the various islands of Tarawa Atoll were made at low tide when not more than 3 feet of water covered the coral connecting the islands forming the atoll.

dead Japs were counted in the area.

Although 3/10 actually fired less than 50 rounds in this operation, it was in position and ready to fire at all times, and could have been profitably employed had 2/6 so requested. G Battery did lend invaluable aid in moving most of 2/6's heavy equipment and in maintaining radio communications with the higher echelons in the sweep through the islands. After the fire fight had developed, battery personnel rendered much help in evacuating and caring for casualties. The unique phase of this operation for 3/10 was the difficult problems faced in displacing over such peculiar terrain. Never before had artillery been forced to "displace over water with no boats."

On D+10 the battalion boarded transports and sailed for Hawaii. All hands were keyed up over the prospect of bivouacking in this garden spot of the Pacific and were making rash plans in anticipation of wonderful liberties to come. The transports arrived in Pearl Harbor on 7 December. The Navy band and long lines of ambulances at the docks were a far cry from the dreams of soft guitars and hula girls the boys had been harboring. As soon as the Tarawa casualties had been transferred ashore, the transports pulled out and sailed for Hilo, Hawaii.

The battalion debarked at Hilo and was transferred to trucks for the move to Camp Tarawa, the new 2nd Division camp, before much of an opinion could be formed as to facilities for future liberties. Camp Tarawa proved to be a sad disappointment to these island hoppers. Galleys, storage sheds, and washrooms had been erected and a small percentage of tent decks laid, but that was all. Dust hung thick over everything and the wind blew alternately wet and cold and dry to add to the general discomfort. Plans for recreation and liberty went out the backdoor as work commenced to make something livable out of this "dust-mud bowl" located 60 miles from Hilo, 35 miles from Kona, and not too far from Hell. Hawaii (the version encountered by the bulk of the 2nd Marine Division) was the most overrated "vacation spot" in the world and the forthcoming Saipan operation was looked on with no small amount of anticipation.

In March of 1944, 3/10 turned in its pack howitzers, changed its designation to become the 5th Battalion 10th Marines, equipped with 155mm howitzers. No training manuals were available with which to commence training, so the battalion wrote its own. Training was not so much of a well-grooved routine, since new tactics and techniques had to be developed, and the battalion took a fresh slant on life.

May '44 found the battalion (now designated the 2nd 155mm Howitzer Battalion, 5th Amphibious Corps) ready for its next operation and, with the 2nd Division, reinforced, embarked at Hilo for combined landing exercises with the 4th Division, reinforced. These exercises, held off Maui, were completed and the assault force sailed for the Marianas. The convoy made a brief stop at Kwajalein to refuel, take aboard fresh water and food, and to enable last-minute conferences between the various commanders. Another D-day was dawning over the horizon for the patrons of Saint Barbara.

The battle for Saipan was another hard nut to crack, and proved to be a slight combination of the Guadalcanal and Tarawa operations. The battalion landed on D+1 in the Charon-Kanoa area and fired in support of the 4th Division for a period of four days. On D+5, the battalion was reassigned to the 2nd Division and supported this unit for the remainder of the battle. In all, the 2nd 155mm Howitzer Battalion fired 10,000 rounds at varied and assorted targets with generally excellent effect. Among the targets 53 enemy guns were silenced, 14 supply dumps were destroyed, 2 tanks were disabled, and 2 locomotives and 5 boxcars were rendered inoperative.

Before the howitzers had an opportunity to cool down from firing, orders were issued attaching the battalion to the 3rd Amphibious Corps for the Guam landing. The battalion completed its embarkation aboard ship on 17 July and after an uneventful voyage arrived off Guam early in the morning of 21 July. Orders were issued and executed to land the battalion in support of the 1st Marine Brigade. The ship-to-shore movement was accomplished with no little difficulty, owing to extremely rugged reef conditions over which the landings had

to be made. However, the howitzers were soon blasting out against the Nips once again. The Guam operation provided no new thrills for the battalion except for the final displacement made by the outfit when it found itself dug in ahead of the light artillery and just in the rear of the fluid front lines. Another 10,000 rounds were expended on Guam, bringing the grand total to date for five operations to approximately 35,000 rounds.

With the Guam operation completed, the battalion was re-attached to the 5th Amphibious Corps and ordered back to Camp Tarawa in Hawaii. Loud and long were the moans and groans emitted by the battalion, but — *Semper Fidelis*.

This repeat visit to Hawaii was enjoyed no better than the original one. Preparations for the Iwo Jima operation found the boys ready to boresight on the rising sun once again. This damned war couldn't last forever, and one of these days the "Rotation Policy" would be bound to hit nearby.

The 1st Provisional Field Artillery Group was formed from the 2nd and 4th 155mm Howitzer Battalions, with Colonel J. S. Letcher commanding, in October '45. This group was to be the V Corps Artillery Unit at Iwo Jima.

Early in January the battalion loaded aboard three LST's and shook down promptly for the next six-weeks tour of "sea duty." Many familiar spots were to be sighted prior to the next D-day — Pearl Harbor, Kwajalein, and Saipan. Nautical miles were really being logged by these amphibious cannoneers.

Practice landings were held at Saipan and final preparations were made for the Iwo Jima show. Optimism ran throughout the assault force as a result of preliminary damage-assessment reports, aerial photos, and submarine reconnaissance reports. The Nips at Iwo had (according to Army and Navy reports) been catching hell for some few months. Numerous heavy bombing and strafing attacks had been made by the Army, and Navy carrier forces had executed many strikes against Iwo. The landing should be a pushover, according to the boasts of the boys who had so successfully softened the objective for the Marines. Never before had such a force been thrown against such a small target. Veteran marine officers were

wagering that Iwo would be in the satchel in a matter of days.

D-day dawned bright and clear. The Navy was executing its normal preliminary bombardment and had the tiny island ringed in a solid circle of warships. Carrier planes bombed and strafed. Assault craft approached the line of departure. Little positive reaction was developing on the part of the Japs — everything pointed to just another landing. Assault troops hit the beach and moved inland. Reserve units approached the beach. All commands sent excellent progress reports. The situation appeared to be well in hand. About this time Nippo came to life and all sorts of hell broke loose. The Japs were far from knocked out of the picture, and history details the ruggedness of this desperate battle for the next few days.

Late in the afternoon of D+1 orders were issued to beach one LST carrying a firing battery of the battalion. (In the opinion of this writer, this was in the form of an experiment to see if an LST could be beached and unloaded before it was blown out of the water.) The battery was unloaded and occupied position that night. The next two days saw the remainder of the battalion landed and firing in support of the 4th and 5th Marine Divisions. During the next 23 days the battalion averaged firing 1,000 rounds per day on fire missions of all types, and added more than 1,000 tons of lead and steel to the heavily battered volcanic spit. This operation proved to be a fitting climax to the long combat career of the outfit.

The battalion was ordered from Iwo to Guam. Directives were then issued for its disbandment and the return to the US of the officers and men who had served with it since July of '42. Over 75% of the original personnel were still carried on the rolls of the battalion at its disbandment. It was with mixed emotions and memories of varied experiences that the battalion ceased to be. Thirty-three months of close association in work and play, in life and death, and in war and peace were not to be easily forgotten. Tulagi, Guadalcanal, New Zealand, Tarawa, Hawaii, Saipan, Guam, Iwo Jima—a trail firmly etched deep in the minds of these Marine artillerymen.

Searchlights?

HOW CAN THEY HELP US?

Prepared in the Department of Gunnery, TAS

By Lt. Col. Joseph H. Harrison, FA

MOST of you who read this article, regardless of the theater in which you may have served during the last war, will remember seeing the long fingers of light from concealed antiaircraft searchlights, slightly elevated so that they were deflected from a low cloud ceiling. Sometimes these searchlight beams were directed over the front lines; sometimes they were well behind the light artillery positions; in all cases, the beams were stationary and at a low elevation, and the ground beneath them was slightly illuminated, much the same as it would be had there been a bright, full moon shining rather than the black, cloud-choked sky and its resultant inky night.

This was "Artificial Moonlight." It was called by this name for the reasons noted in the previous paragraph and was used quite successfully for illumination of the battlefield as an aid to those units responsible for night patrolling and penetration of the enemy's position, as well as for surveillance in keeping patrols or night attacks from reaching our own positions undetected. It had another top role also, that of lighting up the rear areas, thus greatly facilitating the work of the supply people in the physical handling of supplies at night, and of the truck driver who drove his truck, blackout, in convoy, who could see the road instead of just its outline, and could drive faster and more safely because of the artificial moonlight. The wounded man, lying on his stretcher in an ambulance, undoubtedly gave no thought to the searchlights, but often a life was saved, or the duration of the miserable, bounding ride was shortened, because of the speed with

which the ambulance driver could safely traverse roads which he could see because of the reflected light of the searchlights.

Thus, this use of searchlights is not a new subject. It was tried, tested, and found helpful in the greatest laboratory of our time—World War II. But, can it be of any help to the artillery observer? Can the forward observer actually see well enough to make a satisfactory adjustment at night with his target illumination furnished only by such artificial moonlight? And if such illumination does make possible a night adjustment, where should the searchlights be placed to provide the greatest help? What elevation should the beam describe, and what about the focus of the beam itself—wide or narrow? How about the weather? Will this work on any kind of night, or does it require special weather conditions and if so what are they? And finally, just how practical is the whole thing?

These are the questions which faced the Department of Gunnery at The Artillery School and which could be answered only by opinion, surmise, or guess, so the job of finding out the correct answers was undertaken. Over a period of four months, data were accumulated from sufficient reference material and practical field tests to furnish us with the answers.

Before going into the lessons learned from this research, let's consider for a moment the general theory which is applied in such use of searchlights. The searchlight itself is defiladed from enemy view while the beam of light extends out, above the masking ridge and our observation posts, and hits the low

cloud ceiling over the target area. At this point, the light is deflected by the clouds down onto the ground, thus illuminating a large area indirectly. Much of the light is absorbed by the cloud, and it must not be thought that the ground illumination obtained by this technique is of anywhere near the same intensity as that obtained when the beam of a powerful searchlight is turned directly on an object. The light is sufficient, however, to light up the terrain, showing its characteristics and enabling the larger objects to be seen, as will be brought out later. It must not be thought that only one searchlight can produce adequate results. More are necessary, as will also be shown later.

In this manner, artificial moonlight was created on the Fort Sill Reservation on six different occasions for the purpose of completing practical tests in its use as an aid to the artillery observer. A great many nights on which the tests were scheduled proved to be clear and crisp, or with only high scattered clouds present, thus necessitating their cancellation, night after night, because of the lack of a heavy, low cloud ceiling. Finally, however, all tests were completed, data were compiled, and the report written, showing some rather interesting conclusions. Those which follow are taken from the report and show the principal points learned on this subject:

1. When a heavy, low cloud ceiling exists, searchlights can be used to provide indirect battlefield illumination which is sufficient to allow observed impact fire to be adjusted on targets up to an observing distance of 1,600 yards. The degree of accuracy of a daylight adjustment is difficult to obtain in a night adjustment where searchlights are used.

2. A heavy, solid cloud ceiling from 1,000 to 3,000 feet, with no precipitation, provides the best weather condition for such employment of searchlights.

3. A light rain does not preclude the use of searchlights for indirect target illumination, although it does reduce the resultant visibility.

4. To produce the best illumination, searchlights must not be placed farther than 3,500 to 4,000 yards from the

target area. Those placed deeper in rear areas for illumination of roads, etc., do not provide sufficient light for night artillery adjustment. Searchlights should be placed approximately 1,000 yards apart laterally.

5. A position affording sufficient defilade to conceal at least the first 200 yards of the beam must be used. It has been found by testing agencies that when this much of the beam is concealed, it is almost impossible to locate the searchlight position.

6. The distance of the searchlights behind the observation posts can be altered from 1,200 yards to 2,850 yards without appreciable difference in visibility.

7. The best elevation for the searchlight beams is between 65° and 180°, depending on the height of the cloud ceiling. (Elevations below 65° were not tried during these tests because of the height of the masking ridge, but it appears that when a very low cloud ceiling exists, the beams could be lowered even further, the limiting point being the elevation at which the beams just clear the masking ridge.)

8. Beams from at least three searchlights, converged over the area containing the target, provide the best illumination. Parallel beams from searchlights placed 1,000 yards apart do not provide illumination of sufficient intensity for artillery observation. With converged beams, the point of convergence must be moved by the observer to a position providing the best illumination.

9. The use of less than three searchlights is impractical in that insufficient illumination results.

10. Objects, in order to be seen, must possess not only a definite silhouette but also a color contrasting with their background.

11. Unless silhouetted on the skyline, objects cannot be distinguished nor identified when an observer is facing the source of light. This is due to two reasons:

a. The intensity of the light interferes with the observer's vision and depth perception.

b. The side of objects away from the searchlight, which is the side that

would be seen by such an observer, is in shadow. Everything, therefore, appears very dark and as an obscure mass. However, when an observer looks across a beam, i.e., from a flank position, objects under the beam or within 200 yards of being under the beam can be seen very easily. In using searchlights, therefore, the direction of possible enemy observation must be considered.

12. The binoculars M17 (7 × 50) are the best observing instrument of those normally available to an artillery observer.

13. The use of searchlights on a clear night produces only about half the illumination obtained on a cloudy night and is not at all practical.

14. The target illumination provided by the indirect use of searchlights is less than that from illuminating shell; however, contrasted to illuminating shell, it is a constant illumination which is easily maintained.

15. The unpredictability of the weather makes impossible any definite advance planning on this type of operation for any specific place and time. Its use is therefore better adapted to special operations rather than being a technique that can always be depended upon. To this extent it is impractical, although it always remains a possibility which may be employed successfully.

In searching through the existing reference data on the use of searchlights in a ground-illumination role, it was found that a great deal which is highly interesting has been written both on their direct and indirect employment. The most up-to-date information, based on World War II experience, is found in War Department Training Circular 29, 18 June 1945. Very little information exists, however, on the use of this type of illumination that particularly concerns field artillery. For that reason, it was decided to conduct the series of tests with the role of artillery observer in mind. This involved a detailed reconnaissance for several areas in which a logical set up could be used providing normal howitzer positions, observation posts, target areas, and of course, searchlight positions. Two areas were finally selected which afforded all

of the locations listed above, plus targets of varying colors and silhouettes at varying distances from the observation posts. Tests No. 1 through 4 were conducted in one area, while Tests No. 5 and 6 were conducted in an entirely different area. This allowed the results obtained in one area to be double-checked in the other. Tests No. 1 through 5 were "dry run" tests to determine the best methods of employment as well as to determine what could be seen. Test No. 6 was a shoot, using two 105mm howitzers with fire adjusted on both point and area targets, using both range-bracketing and deflection-bracketing methods, and trying out both impact and time fire. No artificial targets were used, all adjusting points being natural objects such as small groups of trees, a bend in a creek line, and the like.

As an indication of what an artillery observer can do, and of the problems that confront him in this type of adjustment, it is interesting to note the results obtained from four missions which were fired during Test No. 6, and also to note the comments made by the officers who conducted them.

The comments of the observers included the following:

1. Bursts can be seen very easily.
2. Off-line bursts are very difficult to sense.
3. Sensings can be made very satisfactorily on bursts which are on the OT line.
4. Graze bursts and air bursts are very easily distinguished.
5. Bursts must be within the field of

view of the observer's instrument at the instant of impact in order to be sensed.

6. Positive sensings are very difficult to make on bursts falling very close (within about 50 yds.) to the target. For this reason it is possible to get an approximate adjustment but extremely hard to get an exact one.

7. Time fire cannot be adjusted accurately, as the effect on the ground is not visible.

Thus, from the comments of those officers who actually did the firing, it can be seen that adjustment of fire under artificial moonlight presents many difficulties which are not present in a daylight problem. The fact that the fire can be brought as close to the target as the attached figures show, however, indicates that a good observer, with some knowledge of his terrain, can bring effective fire on a target. Searchlights may help us, therefore, by providing a means of battlefield illumination which makes possible the adjustment of observed fire at night.

The future development of battlefield illumination is now a responsibility of Army Ground Forces, with direct responsibility of operation of the searchlights for this purpose transferred from the Antiaircraft Artillery to the Engineers. Whether or not such searchlights are ever used in this role of battlefield illumination to help out the artillery observer remains to be seen.

We do know, however, that it is a possibility which may be employed successfully if proper weather conditions exist.

Mission No.	Type of Mission	OT Distance	No. rounds prior to fire for effect	Amount fire for effect was off surveyed location of target	
				X Coord.	Y-Coord.
1	Base Point (Registration)	1127 yards	6 (1 howitzer)	15 yds	7 yds
2	Area (Deflection-Bracketing)	1213 yards	18 (2 howitzers)	20 yds	48 yds
3	Area (Range-Bracketing Time)	1170 yards	16 (2 howitzers)	40 yds	108 yds
4	Area (Range Bracketing)	1545 yards	10 (2 howitzers)	11 yds	36 yds

NOTE: In Mission No. 3, time fire was used. The observer was unable to see any effect on the ground. Fire for effect was repeated, using impact bursts after reducing the site by the amount of the height of burst, and at this time it was readily apparent to the observer that his effect was very short, whereas with the air bursts this had not been possible.

An Association Medal Winner At Yale University

Cadet Captain John B. Murphy, Jr., was awarded the USFA Association medal at Yale University on 29 January 1948. For thirty-nine months of WW II Murphy served in the USAAF, flying combat missions over Normandy, France, the Rhineland, and the Ardennes; for this service he was awarded the DFC with five OLC's and the AM with eight OLC's. The PMS&T, Col. Lawrence B. Bixby, in his citation, states, in part: "For his outstanding performance as leader and commander he was promoted to Cadet



2d Lieutenant in September 1946, and received a second promotion in November 1946 in recognition of the splendid work he had done in training his platoon. He was made Cadet Captain and commander of Battery B of the cadet battalion in February 1947. He represents true leadership by his integrity of character, his superior bearing, his enthusiasm, and his willingness to assume responsibility." Murphy was commissioned a 2d Lieutenant of Artillery in the ORC on 4 February 1948. He comes from Garden City, Long Island, N. Y.

Biscuit Bombers

(Leyte Style)

By Major Edward M. Flanagan Jr., FA

THE way Fort Sill had it, L-4's and L-5's were air OP's primarily and means of transportation secondarily. And, apparently, that's the way they were usually employed. But the 11th Airborne Division, fighting on Leyte, found it convenient — no, downright necessary—to use its Div Arty air fleet as cargo haulers almost exclusively. That's not a very exciting statement in itself, but when you realize that the steady stream of L-4's delivering their loads to the combat troops permitted the 11th Airborne to break through the Japs in the central mountains of Leyte, then the statement takes on a much weightier importance.

But a brief, broad picture of what the 11th Airborne was up against in Leyte is necessary before it becomes apparent why trucks could not be used, why men could not carry loads on their backs, why carabao, the native pack animal, would not do the job, why C-46's or C-47's were not available, and why the only solution was all-out, dawn-to-dark, day-in and day-out use of liaison planes.

Leyte is mountains: sharp, razorbacked, stream-slit mountains. Leyte is jungle: thick, vine-entangled, toe-stubbing, enemy-hiding, dank, green jungle. Leyte is rain: wet, penetrating, incessant, cold, all-enveloping rain. Leyte is mud: thick, slippery, tiring, vehicle-bogging, deep mud. Leyte, especially the central mountain range, is no place to fight a war. But ours not to reason why.

The 11th Airborne, on the day after it landed non-combat loaded on Bito Beach, Leyte, on 19 November 1944, got as its first combat mission the job of cutting across those mountains from Burauen to Ormoc. Some said it couldn't be done; supply was too difficult. There were no roads, maps, or other niceties of waging modern war. But the Air Liaison sections of the 11th Div Arty battalions made the campaign possible. Without them, the penetration of the Jap-infested mountains could not have been realized. Without a lot of other things it would have been impossible too. But this is the

story of the overworked artillery air fleet doing a steam shovel's job with a spoon.

The division made its way into the mountains, thwarted by mud, inexperience, lack of maps, and, oh yes, Japs. The farther they got, the thicker were the Nips, the longer were the supply lines, and the heavier were the casualties. Two problems faced Major General Joseph M. Swing, the division commander, the solutions of which meant the successful completion of his mission. His and the division's problems: how to take care of and evacuate the wounded and how to supply his short-rationed and rain-soaked troops. The solution of each problem: all-out use of the liaison planes.

The division had by this time reached Manarawat, a clearing 500 feet long by 150 feet wide surrounded on all sides by steep cliffs and situated like an island in the midst of tall mountains on three sides. Here was the advanced division CP, an artillery battery dropped in by parachute, an infantry battalion, and the future hub of all the division's maneuvers in the rain-clogged, fogenshrouded mountains. Trails leading to Manarawat were wide enough for only single-file advances. Vehicles, by no stretch of our imagination, could make their way along them. As a matter of fact, the main highway outside of Burauen was a constant thorn in the sides of the mud-caked Engineers. They tried building corduroy roads through its

mud, but the logs merely sank with a dull sucking sound beneath the churned-up slush. They tried by-passing it, but that just made more mud channels to worry about. So they gave up and spent their time marking the spots where 2½-ton trucks had sunk beneath the rippling road.

Men could not carry the supplies forward on their backs because the trails were so slippery and steep that they had their energy completely sapped hauling just themselves along. Besides, they had to fight.

Carabao, the native plow horse and general pack animal, carried some of the load, but because the trails wound up and down the steep banks of swift-flowing mountain torrents, the carabao balked at such super-carabao tasks. And moreover, they could carry only 175 lbs. pet beast. They were dumb, slow, plodding animals. Division attacks could never be launched depending upon such supply haulers. The ground couldn't supply the 11th Airborne; the air had to do it.

Why not use C-46's or C-47's, designed for such a task? It was tried but among the reasons for halting it were:

(1) Drop zones in the mountains were so small that the fast moving transports scattered the valuable loads over a wide area, causing the cynical foot troops to revalue 10-in-one rations: 10 for the Japs and one for us;

(2) The drop zones were usually hemmed in by mountains, causing one C-47 to crash into a hill before it could pull over it after making its supply drop;

(3) The transports liked fighter cover, which was frequently not available



One of the fleet: Pilot Lt. John D. Sullivan, 457th Prch FA Bn

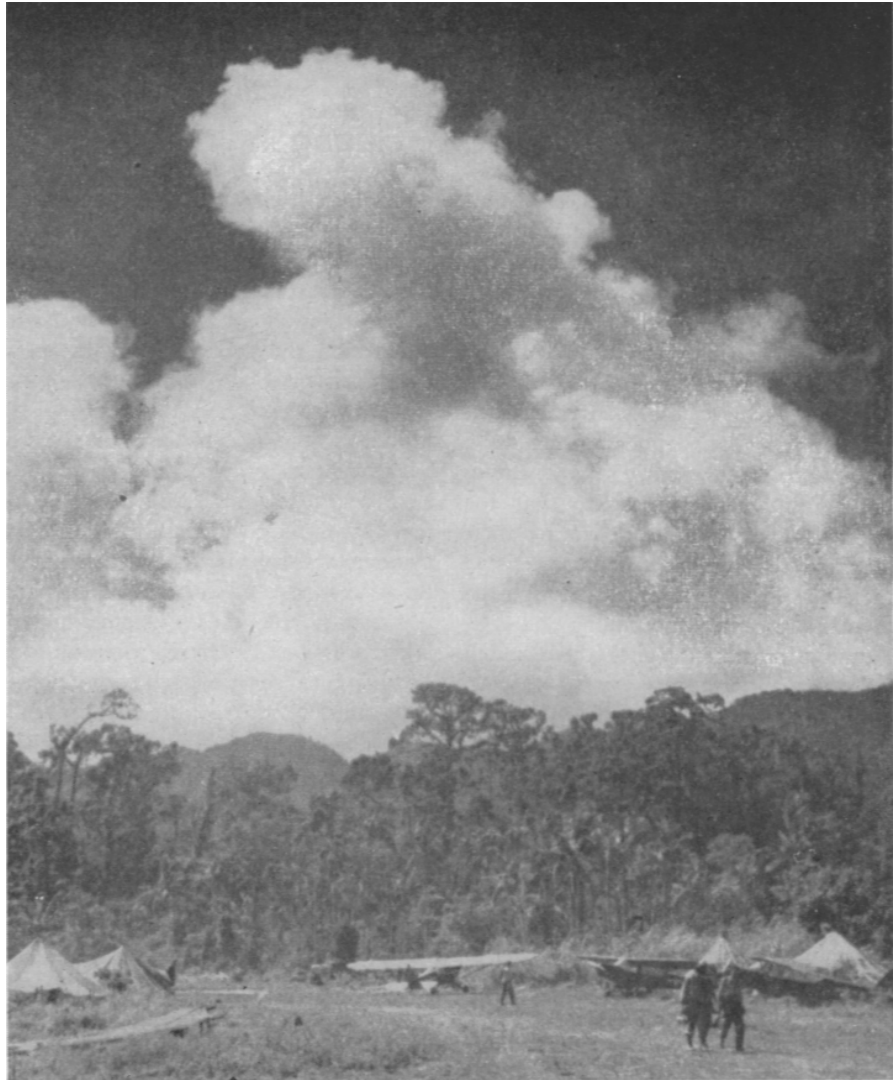
for such missions;

(4) The weather was usually so bad that the transports could not fly; and

(5) The main reason, the transports were required for so many more missions than there were transports available, that the 11th rarely got its resupply missions fulfilled. Resupply by water was reluctantly ruled out because the mud, while wet, could not quite permit naval maneuvers. The only thing left, the use of light planes, was the campaign-saving expedient.

Manarawat, the hub in the hills, the basis on which rested the advances through the mountains, was the scene of furious activity. Engineers, dropped in from L-4's, had hacked the strip at Manarawat to a length suitable for handling the Cubs. But because of the contours of the ground there was a hook in the strip. Pilots landing for the first time found it quite unorthodox. They got used to that, however. Portable surgical hospitals, living up to the full import of their title, had been dropped complete with equipment to Manarawat. There the surgeons operated on the battle wounded in dug-in banana-stalk huts by the light of flash lights incased in shiny number 10 cans. This solved General Swing's first problem—how to care for wounded. They were brought back to Manarawat, to be fixed up or evacuated to the rear. And here again the liaison planes played a major role. They flew the wounded out on improvised stretchers in the planes, thus obviating the back-breaking, man-consuming litter treks over the rough trails. Without the planes to evacuate the wounded the division advances would have been slowed considerably because of the excessive number of men, working in shifts, needed to haul even one litter. A patrol also had to accompany each one, since the Japs were still at large along the way.

But the main task was resupply—resupply of food to troops who were at times reduced to a third of a K ration per day supplemented by what camotes they could gather from abandoned Filipino farms (the Japs were after the camotes, too); resupply of ammunition, bullets for the infantry who had shot too often in the first surge of combat but who quickly learned to shoot only at near-sure targets; howitzer shells for the pack howitzer dropped in to Manarawat by one C-47, which had made 13 trips to



One end of the Manarat strip

accomplish the mission (the division commander scrounged a willing Air Sea Rescue C-47 for the task); mortar shells, grenades, and bazooka shells.

The Div Arty air fleet also took messages and orders from the CG to his unit commanders. One plane, aptly dubbed "The Milk Run," equipped with a radio, made constant courier flights above the troops, contacting them, listening to and noting their gripes, taking orders, relaying commands, and dropping the division newspaper, "The Static Line," to new-shungry men. The fleet dropped an entire infantry company, one man per trip per plane, to a place where it was needed most. The Div Arty planes, supplemented by five L-5's from the New Guinea Short Lines (an Air Corps courier outfit) took

over the job of supplying completely a division in combat, and by working from dawn to dark in weather that would have downed the mail planes, accomplished its mission. Some days were so cloudy that the planes went up only in the hope of finding a hole in the clouds and, when they did, diving through and dropping their precious cargo to the hard-pressed doughboys. Sometimes the planes lowered their supplies by parachute as in the case of surgical equipment, weapons, medical supplies, or men. More often, however, they had the smallest soldier they could find riding behind them to shove out the loads—free fall. During its peak days, the nine L-4's and seven L-5's of the Div Arty air fleet, by constant flights and incessant work,



Some of the dropped supplies. Note parachutes as tents.

dropped an average of 21 tons of supplies per day.

It was not all work and no play for the hard-flying liaison pilots. During their trips up and back they took along adequate supplies of hand grenades, or mortar and bazooka shells. Any Japs, suspected or actual, along the way, were well worked over by the bomber-conscious Cub pilots.

But this is not the end of the story. Before the inevitable happy ending there must be a dirty deed and a villain. The Japs supplied both. From Japanese documents captured later and from interrogation of prisoners, it was learned that the Nipponese planned an all-out attack with as its main objective the seizure of air strips near Burauen, the farthest west town on the east approach to the central Leyte mountains. One of these strips, San Pablo #2, was the field from which the 11th Airborne operated its cub fleet. The Japs felt, and reasonably so, that if they could overrun the strips the 11th Airborne troops in the mountains would not be supplied, and the Japs could then push them back to the beaches. The Jap plans called for a coordinated attack by three units—the 26th Jap Infantry Division, which would push down through the Mahonag-Anas pass; the remnants of the 16th Jap Division, which would attack southeast toward the Buri Strip from the vicinity of Mt. Lobi; and the Katori-Shimpei, a parachute unit, which would jump on San Pablo Strips #1 and #2. Jap D-Day was 6 December; H-Hour 1800.

Initially the plan went well, especially the parachute attack. Exactly at 1800, at

that dusky time between daylight and dark, Jap bombers appeared over San Pablo Strips. The anti-aircraft guns went all out—and as the Japs hoped, used up all the ammunition readily available at their guns. Then came the Jap transports in a perfect V of V's at about 700 feet. Right over San Pablo, 250-300 Japs piled out. Apparently the Japanese used bells, musical instruments, whistles, or various war songs for unit identification, because once on the ground the Jap paratroopers became noisily musical. That night some seven liaison planes were burned or damaged by the Jap jumpers and the remainder of the badly needed planes booby-trapped.

The attack by the Jap 26th Division was only a partial success, because the bulk of the unit ran into the 511th

Regiment of the 11th Airborne. One Jap regiment did get to Burauen but not until 11 December. However, it was in scattered form and was summarily sent scampering back to the hills. The 16th Division attack was on time but in so small a force that the Japanese were quickly handled.

Back on San Pablo the Jap paratroopers were somewhat successful in their mission and the night hours after the jumps were action-packed for the liaison sections on the strip. One pilot lay breathlessly for twelve hours behind a log while the Japs swarmed above and around him. But the day after the jump the Division Special Troops, the 127th Airborne Engineer Battalion, and the 674th Glider Field Artillery Battalion, divorced from its pack howitzers, launched an attack across the strip in pure Civil War style. The Special Troops and the 127th Engr Bn lined up on the left and the 674th on the right and, with the CG in the lead in the center, advanced across the strip to where the Nip paratroopers had taken up defensive positions. The rest, the expeditious clearing of the air strips, is 11th Airborne history. Supplies were temporarily short in the hills, but in a few days the air fleet, with new planes, was delivering as usual. It would take more than a coordinated Jap air-ground attack to stop the biscuit bombing 11th Airborne liaison planes from delivering the goods.

The moral of the story? Liaison planes are more than air OP's or couriers.



Manarat camp; one jumper dropping in

THE STRANGEST MISSION

BY 1st LIEUT. JAMES R. JOHNSON, USMCR

AS THE Martin B-10 bombers joined the rendezvous circle in the predawn darkness off Diamond Head, Oahu, on December 26, 1935, few of Honolulu's early risers knew of the weird mission of the droning giants in the sky above. Had they known they would have probably been staring upward for a glimpse of the formation flying on a mission which had never before been attempted in the history of aerial bombardment and one that probably would never again be flown.

When the tenth bomber joined the formation the leader swung off to the southeast followed by the other nine in stair-step echelon. A reddening horizon off their left wings revealed dark cones jutting upward from the Pacific's haze. These were the islands which made up the Hawaiian group between Oahu and the target on the island of Hawaii itself. This was no training maneuver. Six tons of TNT rested in the black bombs lying in the bellies of the aircraft. Each crew made last-minute checks of the arming wires which would shortly give the go-ahead to the one-tenth second delay fuzes. The bombardiers looked at their sights again, still reluctant to believe that they were going to be using those instruments at the suggestion of a little Hawaiian scientist, Dr. Thomas A.

Jaggar, to bomb a target that consisted not of mere man-made fortifications but of an advancing wall of destruction spat out by the supernatural Madam Pele, the goddess of the volcano. This fiery mass of lava was fast approaching the outskirts of Hilo, Hawaii, and threatening to wash into and poison its water supply in a few hours. Hilo, a city of over ten thousand population, was watching with anxious eyes this crawling finger of molten rock that had spurted out from the side of the 13,000-foot Mauna Loa. The finger was increasing its velocity downward, accelerating from a movement of fifteen feet to one of five miles a day.

As the bombers swung over the island of Lanai halfway to the target the sun broke above the mist. The glistening props steadily increased their revolutions until the planes were straining at their 240-mile-per-hour top speed. It was a race against time, for before the morning would be well established the persistent tradewinds would send the warm air near the Pacific's waters bouncing up against the volcanoes, which would in turn shove the air up into the cool higher altitudes to form hanging clouds which would cling to the peaks throughout the day. This could be no instrument bombing. It had to be precise—very

precise. The fifty-foot thick finger of lava would look small indeed from a height several thousand feet higher than the 8,000-foot altitude of the target area itself, which was near the source of the flow. Gusty winds bent by the volcano's slopes would not add to the sureness of the bombing run.

The charms that had appeased the anger of Madam Pele in 1856 and again in 1881 somehow had no effect on her power now. Descendants of the great uniter of the islands, King Kamehameha, had been rushed to the advancing lava. They tossed in their red handkerchiefs, poured brandy on the spitting slag, and chanted their ancient Polynesian incantations. The flow had snarled and rolled faster. Then Dr. Jaggar, who had been head of the Hawaiian Volcano Observatory for 27 years, advanced a radical theory. Some of those who heard it laughed. He suggested the use of aerial bombs to block and divert the flow near its source. He was called a crackpot by the lesser informed.

The doctor, who probably knows more about volcanoes than any other living person, had not studied the fits of Madam Pele over the years for nothing. He knew that down on the edge of the crater of the active volcano, Kilauea, there existed many tunnels extending for miles in the ground parallel to the surface. Hot lava had once flowed through these tunnels on its way to lower levels. As the lava had rolled downward the air had cooled the outside of the flows and thus formed



Mauna Loa, Mauna Kee in the distance

rocklike tubes through which the hot lava flowed until its source was depleted. Dr. Jaggard had visited many of these empty tubes and examined them. They were brittle. They could be easily broken and crushed by small earthquakes.

As the new lava flow above Hilo drew near the city in the latter part of December, many suggestions were offered the government. Build dykes some suggested; dig canals others argued, but the rapidly dwindling time element prevented such projects. Dr. Jaggard quietly contacted the Army Air Force headquarters in Oahu. The Air Corps was interested. It was worth a try—nothing to lose anyway. Ten heavy bombers were assigned and readied for the mission which would begin before dawn the day after Christmas.

As the small uninhabited island of Kahoolawe faded behind the planes, mighty Mauna Kea on Hawaii reared her 13,823-foot-high bulk before them and partially hid from view her slightly smaller sister, Mauna Loa, from which the lava flowed. The formation roared into the saddle between the two scarred sisters and broke out of the rain mist above the mountainside desert formed by former flows. The crews could easily see the stream of lava moving downward in a curving path. Its slick graphite-colored surface was new and shining in contrast to the older flows, which had taken on the appearance of jagged slag because of the pounding force of the weather. "Pahoehoe" the natives called it.

The 1,000-horsepower Wright Cyclones urged the planes forward to get at this job which would prove their power. Mauna Loa smiled down in contempt for the aircraft dwarfed into insignificance by her mighty bulk. Dr. Jaggard gazed up with confident eyes at the man-made machines which would put to test his theory, as Hilo's citizens looked with awe at the tiny specks in the sky which dared dispute the power of the volcano. The bombers opened formation and fell into a huge circle for a follow-the-leader dummy run over the target area. As the pilot of the lead ship tipped the control column forward for his run he lowered the wheels, so that by the time he neared the clump of koa trees which served as reference point his plane would be mashing along only a trifle faster than the sixty - five - mile - per - hour landing speed.

"OK?" he called to his bombardier as they began their climb after passing over the flow. Standard radio-voice procedure was unneeded.

"OK," the bombardier grunted.

The planes widened their circle so that there would be ample room between aircraft. Their bombbay doors yawned open to gape at the smoking target. The lead plane slipped into position—feeling for the best opening for a knockout punch. The tradewind threw itself forward over the mountain's slopes to jerk the planes violently.

A bomb slipped from the lead plane's underside and streaked toward the flow below. As it popped through the crust a giant fountain of flame announced its arrival. Black boulders of hardened lava

exploded up and outward followed by a rain of fire and spitting liquid as the oxygen in the air dashed into the tube to be devoured in flashes of blinding green flame. Stinging gas stormed skyward to claw at the planes as the lava spilled out of the tubes and spread over the ragged slopes. The flow's broken crust began to choke the tube with a dam made up of itself, and to block the liquid which fed the crawling finger.

The other bombers roared in through the smoke and gases to fling their punches of destruction. When they were through the finger had been completely cut into. The aircraft slid smoothly back into formation and headed northwest for Oahu. They weren't through. They would refuel and rearm for another mission tomorrow on the same target. Mid morning of the next day found them making bombing runs over the flow near its mouth eighteen miles from Hilo in order to burst the end of the tube and let any excess lava out. This too was a success.

At 6 pm on December 28th the flow halted and began to harden into its death as the liquid fire which gave it life grew cool. Hilo's people began to move back again with light hearts from the mountainside sugar plantations to their homes and shops. The little Hawaiian scientist quietly returned to his observatory on the rim of Kilauea's smoking crater with a more respected reputation, and ten bomber crews wondered if ever again there would be another opportunity to use such weapons of war for the attainment of peaceful living.



Eruption of Mauna Loa



Bombing the lava flow

The Army That Speaks Many Tongues

By COL. JAMES L. HATHAWAY

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THE civilian guest at the Officers' Club in the Presidio de Monterey, California, gave a slight start. At the bar a group of officers were conversing in Russian. At a nearby table Chinese was being spoken. From other parts of the room came the sounds of many exotic languages. The groups were American officers, with typically American faces, yet the profusion of foreign tongues would have done justice to a Tower of Babel.

It is all part of the Department of the Army's program to train selected military personnel in foreign languages and to make them more familiar with the backgrounds and modes of thought prevalent in foreign countries. This training is designed primarily to produce qualified linguists and area specialists, to meet the expanding demands of occupation, military missions, and foreign liaison.

An indication of the breadth of this program is reflected in the number of languages being taught at the Army Language School at Monterey. At present, courses are being conducted in Russian, Japanese, Chinese, Turkish, Greek, Persian, Arabic, Korean, Spanish, Portuguese, and French. Courses in Czech, Bulgarian, Hungarian,

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Roumanian, Serbo-Croatian, Norwegian, Danish, Swedish, and Polish will be added in the near future. These courses are distinct from the numerous off-duty courses in foreign languages sponsored by the Troop Information and Education Division.

In its teaching, the Army Language School employs all the modern, stepped-up methods of training, literally saturating the student with the spirit of the particular tongue he has chosen to master. While the amount of time spent in the classroom is no more than that of the average Army school, the military linguist has to use his foreign language wherever he goes during the day—at meals, in the Officers' Club, at the BOQ, in fact, whenever he finds a companion-in-language. As a means of cultural orientation, instructors teach him to play the games and sports of his chosen country; and, on occasion, the intensity of this concentration tends to influence even family life. Wives of students often share in the program, studying with their husbands in their spare time, reading the literature of the countries in translation, even staging costume parties in the native garb of the various countries.

Basic language courses taught at the Army Language School vary in length, depending on the difficulty of the language. The more familiar romance languages are covered in four months, while the more difficult courses take

approximately one year. Courses for officers who are selected for area training—which includes special study in the political, economic, sociological, and topographical aspects of a country—may extend up to four years, with approximately two years spent at educational institutions within the United States and a similar amount of time spent in training overseas.

Combined language and area courses are offered in Russian, Japanese, Chinese, Greek, Persian, Turkish, and Arabic. Area students will use their first year at Monterey gaining language fluency. Japanese area students, upon completion of their first year, will immediately go to Japan for further training. Students of Russian will spend their second year at Columbia University, following which they will be assigned to Germany for area training. Students of Chinese will take their second year at Yale University, then proceed to the Orient for additional training. Area students in Turkish, Persian, and Arabic will probably receive their second year's training at Princeton University and thereafter will be ordered to the American University, Beirut, Lebanon. Announcement of the advanced training for area students of Greek will be made at a later date. Schedules for area students will not necessarily adhere rigidly to the planned



Monterey Harbor as seen from the Presidio's The Army Language School.

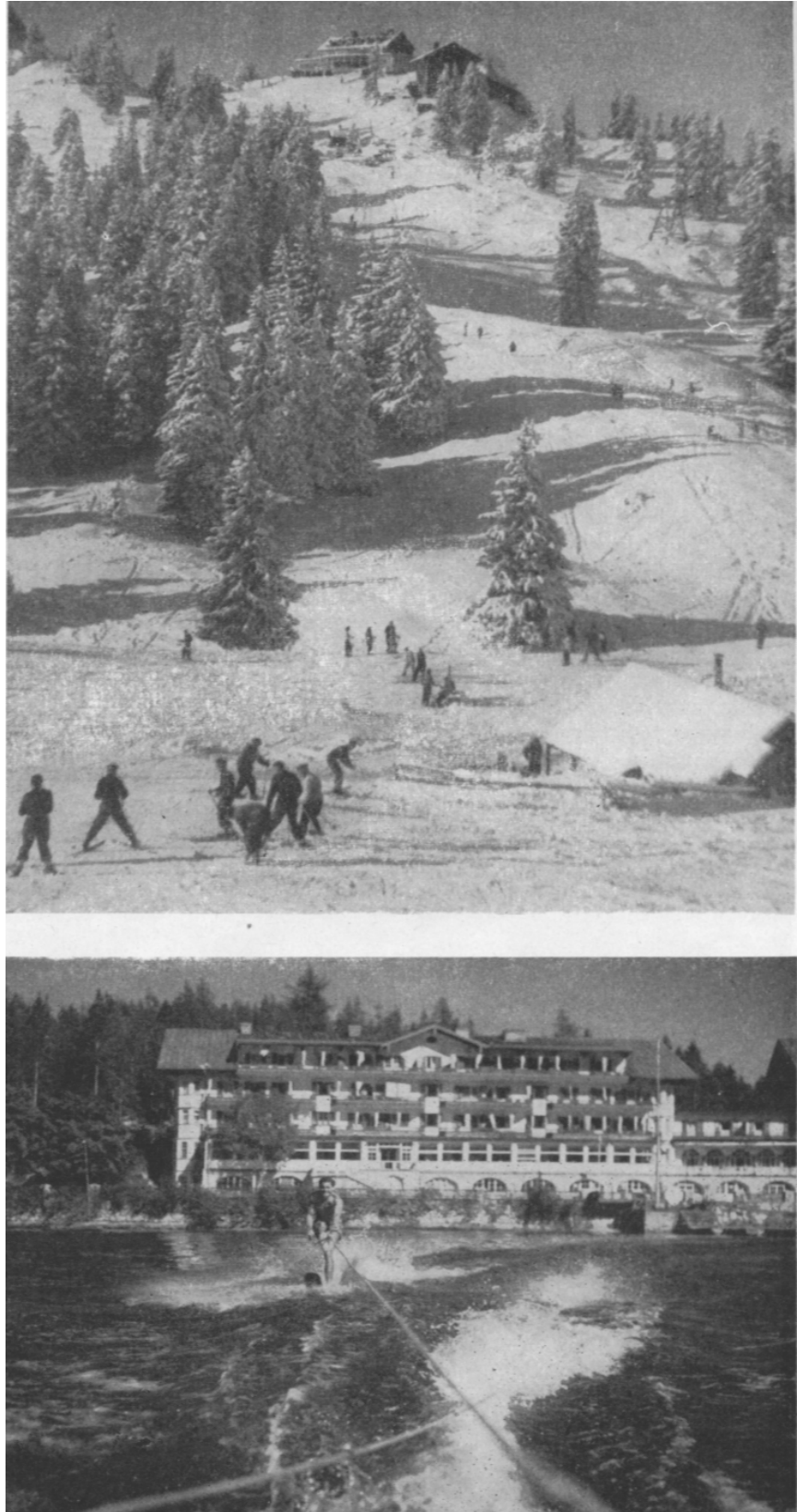
time sequences.

Straight language courses are conducted according to a flexible pattern, depending on the student's capabilities and background. Course lengths are variable, and new classes are inaugurated whenever circumstances warrant. At present, new classes in Russian, Portuguese, and French are formed every two months. Courses in Japanese, Chinese, Turkish, Arabic, Greek, Persian, and Korean begin every six months; while students of Spanish may be accepted at any time.

All Regular Army and Air Force officers and Category 1 officers of both components are eligible to apply for the straight language courses, provided they are under 36 years of age, have an efficiency rating sufficient to indicate high performance of duty in future assignments, and have a proved general aptitude for languages. Applicants for the combined language and area courses, however, are limited to Regular Army and Air Force officers. In addition to having a high efficiency rating and an aptitude for languages, they must be under 31 years of age, fully qualified in a basic arm, adapted or qualified for general staff duties, and must volunteer for this type of training. Any of these requirements may be waived in exceptional circumstances—by the Director of Intelligence, General Staff, United States Army; and by the Chief of Staff, United States Air Force, for Air Force personnel.

Quotas for all courses are allocated, in general, on a basis that gives the Army 60 per cent, of which the technical services are limited to 10 per cent; and the Air Force the remaining 40 per cent. Army personnel desiring to apply for either straight language or combined language and area training will apply through channels to the commanding general of the major force or to the chief of administrative or technical service. Personnel assigned to the Air Force will apply through channels to the Chief of Staff, United States Air Force.

Additional details concerning the language, and the combined language and area, training programs are contained in War Department Circular 260, 17 September 1947.



Scenes at the Recreational Center, European Command Intelligence School.

Indoor Gunnery

BY LT. COL. H. K. HOLMAN, FA

TRAINING in conduct of artillery fire has always been of vital importance to artillery officers. In addition, it is one of the few military skills which interests officers and enlisted men alike of all branches.

Heretofore, officer training in gunnery has been limited by many factors. Range facilities, except on the larger posts, are not suitable for artillery firing. Training ammunition is and has been limited. Since National Guard and Reserve units drill at night and for two hours only per week, it is seldom that they can take advantage of such range facilities as do exist at nearby Army installations. Prior to the war, officers in Regular Army units seldom fired more than a few rounds of service ammunition per year. Such indoor training aids as smoke-puff terrain boards were not realistic. The many indoor classes in "blackboard"

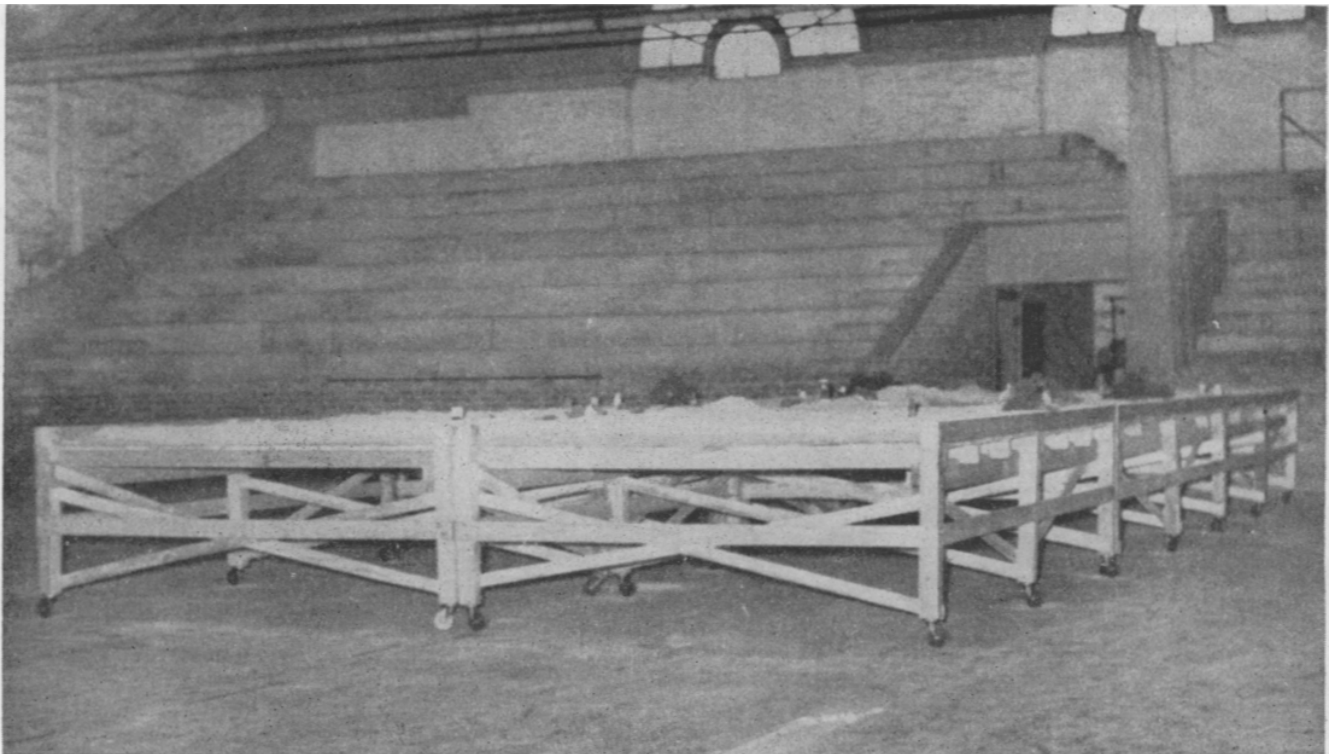
Col. Holman is Senior Artillery Instructor with the Maryland National Guard, stationed in Pikesville.

firing taught procedure but little else.

With the development and issue of the M-3 Trainer, the problem of a satisfactory indoor training aid for field artillery gunnery has been solved. These miniature guns, with an independent line of site and using a panoramic telescope, are artillery pieces. The guns may be shifted on their base to provide varying intervals between pieces. The five charges, obtained by regulating the air pressure, provide realism and permit trajectory variation. The ammunition, consisting of one-inch steel balls, can be re-used indefinitely. The accuracy and operation of this trainer compares favorably with that of an actual piece.

These pictures of officers of the 110th Field Artillery Battalion, Maryland National Guard, show the arrangement at present being used in their armory. The base for the target area consists of six 8' x 12' movable tables. These platforms are constructed as shown with removable 4" boards on the sides and ends. These boards are secured to the

corner posts by wing nuts. The tables, as shown here, form an area 16' wide by 36' long. This target-area base may be changed by simply moving the tables. Possible areas include a square 24' x 24' and a rectangle 8' x 72'. The table legs must be braced in some manner since the sand covering these tables creates a load of 25 lbs. per square foot. After the tables are arranged to make the desired target area, the interior side and end boards are removed and heavy paper, cloth or similar material is tacked over the platform tops. This prevents sand from seeping through the cracks at the points where the tables butt together. Then about three inches of sand is placed over the area and mountains, roads, rivers, etc., are constructed as desired. Since a scale of 1 to 100 has proven to be the most convenient one to use for the entire layout, all terrain objects are constructed to that scale. Painted blocks of woods are suitable for houses, sheet metal for lakes, and white tape for roads. Plastic or metal



Terrain Table for Use with the M-3 Trainer



At the Battery Position

guns, jeeps and trucks add realism.

With the target area completed the remainder of the layout is easily arranged. The M-3 trainer itself is bolted to a movable table. This table should be about three feet high to permit the gunners to lay the battery from a sitting position. Two gunners are sufficient to operate the four pieces. The propelling force for the one-inch steel balls is compressed air supplied by any standard air compressor. By adding 150 or 200 feet of air hose to the trainer the compressor may be placed outside where the operating noise cannot be heard. Guns and target area should be approximately the same elevation to avoid large angles of site. The movable battery allows firing to be done at any range up to 80 yards, the maximum range of the guns. Height of trajectory will limit range in some buildings. The armory of this unit will permit a range of about 40 yards. The lower charges (air pressure) give the most satisfactory results since the trajectory is higher and consequently the fire is more plunging, with less ricochets.

Observation posts are located as desired. Observation ranges of the equivalent of from one to eight thousand yards have been used here. If the target area is three feet high, a standing observer has the effect of being on an

O.P. 200 feet high, since the observer's eye level is two feet higher than the target area. Sensing becomes more difficult at the greater ranges but satisfactory problems can be fired with an OT of eight thousand yards. Wire communication should be established between OP and firing battery.

Almost any firing layout may be

obtained—from the simple set up of one OP and one firing battery to the battalion arrangement with an FDC, three firing batteries, battery observers, and a complete battalion wire net. An executive and at least one chief of section should be assigned to each trainer during firing.

At a scale of 1 to 100, the new gunnery methods of change 2, FM 6-40 and WD TC #1 adapt themselves perfectly for use with the M-3 Trainer. The 100-yard bracket is actually 1 yard. Shifts in deflection and changes in range are sent to the guns or FDC in hundreds of yards and there converted to mils by using the M-3 Trainer range table and any simple deflection-shift table. S and d factors are computed and used exactly as they would be in normal firing. Officers conducting fire will find that field glasses will assist in their adjustments. In addition to providing a mil scale they give the observer a more realistic picture of the terrain.

The M-3 Trainer enables any unit to train personnel indoors in conduct of fire. In addition, and using the same equipment, FDC personnel, executives, chiefs of section, and gunners can receive valuable training. With a little ingenuity this trainer can be made to answer the artillery problem—"How to Shoot Indoors."



Observing Impact of a Round (Note Splash of Sand)

Ground O.P. Photography . . . Its Place in Counterbattery

BY MAJOR HAROLD F. KLEINDIENST, FA-RES.

IMAGINE YOURSELF on the typical static OP — in a concealed spot on a hill overlooking a considerable portion of enemy-held terrain. You've been up there all night and during that time you've picked up the telltale pin-point flashes from the tubes of German artillery. The eerie whine of the incoming shell and ensuing crash somewhere within our lines sends a shiver down your spine. Your contributing effort toward the apprehension of the guilty weapon is a shellrep, sent along the wires or through the air to higher headquarters; a plea for action. If the geographical situation permitted the use of a bilateral OP setup, and the man on the other leg of the triangle was lucky enough to pick up the same flash in his shellrep, no doubt the area containing the bothersome gun or battery of guns was TOT'd or at least counterbattered by some of our own artillery. Too, perhaps sound and flash was able to apprehend the annoying party.

My suggestion is by no means intended to replace any of our tried and dependable methods of specifically locating enemy gun positions; it's intended merely as a supplement and mainly as a guide to the observer during daylight observation. It's simple and, briefly, here it is.

On the above mentioned OP, set up a camera—any camera—on a *sturdy* tripod base. Face it toward the area you believe to be concealing enemy gun positions. During the hours of darkness when the enemy has "opened up," you too open up—the shutter of your camera. Leave it open just long enough to pick up a few flashes (it would probably work to best advantage where the enemy guns give up subdued flashes; i.e., most German artillery). Having closed the shutter and replaced the pack of film or wound the film, depending on the type of camera used (be especially careful not to move camera or alter its position in any way), wait until daylight for a shot of the exact same area. Have the film developed and place the print of the picture snapped during the night very

carefully and accurately over that made during the hours of daylight. Thrust a pin through each of the flash points or the center of the flash areas so that holes are made on the daylight print. This, then, is the area to be observed on the ground. Realizing full well how deceiving terrain can be, this will very often give you the direction rather than the accurate location, on the ground, of the gun position. Regardless, isn't it (1) a means of locating, (2), once located, a record in black and white set before you for easy reference, and (3) in static situations, a quick and practically complete record for passing vital information on to the relieving observer? Having observed artillery fire under most conditions, I would readily have welcomed the above during the last war; that is, where the situation warranted. How much simpler than the shooting of azimuths to the flashes at night and trying to remember them quickly during the day, especially when the enemy start throwing them your way.

As an addenda to what has already been said on the subject, any number of "shots" can be made during the night, but only when the camera is faced in the *exact same* position, so that shots of the same area can be made during daylight. The possibilities of placing the camera on a swivel mount similar to that of a BC scope may also be considered, so that any number of directional shots may be made during the night through the use of a fixed reference point and, simply by jotting down the settings, a comparable number of daylight shots can be made on the exact settings. I sincerely feel this would be a boon to observers during the hours of daylight—observers in the air as well as on the ground.

Finally an admission. This method has not (to my knowledge) ever actually been tested on the ground, but from my own experience and the results of consultation with authorities on photography, I am firmly convinced that the possibilities are tremendous.

T.A.S. COMMENTS

(Before we decided definitely to publish this article, The Artillery School was requested to analyze the suggestions contained therein and to submit their comments. The gist of the School's reply follows.—Ed.)

It is believed that the proposed procedure would have the following advantages and disadvantages:

a. Advantages.

- (1) The position of the flash would record automatically on the photo, whereas many flashes would be lost to an observer with an instrument, because they would be gone before he could bring his crosshair to them.
- (2) Flashes recorded on the photo would be more accurately located, because the time lag in getting the crosshair of an instrument to the flash would cause errors.
- (3) Many simultaneous flashes could be recorded on the photo, while the instrument could handle only one at a time.
- (4) The photo method is more fool-proof because of its simplicity.

b. Disadvantages.

- (1) Additional equipment would be required, i.e., camera, film, developer, etc.
- (2) It is questionable as to whether or not a gun flash has sufficient illumination to show on a night photo at any range other than extremely short ones. However, this could be determined by tests.

The article also suggests a camera on a swivel mount similar to that of a BC Scope. Assuming that the basic idea of the article is feasible, it is believed that a camera with a wide angle of view, approximately 90°, or two cameras, would be more practical.

It is noted that a recent decision of the Department of the Army has placed all photographic development, including Air OP Photos, in the Division Signal Company; therefore the Division would have developing equipment as well as the Corps.

NOTES FROM FA-CMG

THE Field Artillery Branch of Career Management Group, Personnel and Administration Division, General Staff, is now located in room 4B 465, The Pentagon, Washington 25, D. C. Officers who are in Washington are encouraged to visit the Field Artillery office, where efficiency files are available for examination and information may be secured regarding school credits and career management as it applies to each individual officer.

This year's Officers Advance Class, The Artillery School, Fort Sill, will be the largest class yet to attend. There are to be 212 Field Artillery and 85 Coast Artillery officers. These figures are roughly double those of the preceding class. In addition, 23 Field Artillery officers are being assigned to the Armored School. They will receive credit equivalent to attendance at the Artillery School.

The Artillery has as a goal attendance for all officers at the Officers Advance Course by the time they become 30 years of age or complete 6 years of service. This goal is not attainable at the present time because of the heavy backlog of eligible officers created by the war. The increased size of the 1948-1949

class is an answer to this problem. Age 30 is set as a goal as this age insures each officer's getting the fullest possible consideration for selection as student to each of the schools to which his record will in the future entitle him; meanwhile, also insuring him the opportunity to apply his schooling. Thus the Field Artillery is going on the assumption that each officer is a candidate for higher schooling until he becomes disqualified by age.

Lest officers gain the impression that attendance at higher schools is a prerequisite to and synonymous with advancement, it is well to remember that class standing is disregarded in establishing efficiency ratings. Attendances at service schools are carried as nonrated periods. This follows the concept that school proficiency is an indication of potential value — not value itself. Schools merely provide a means for gaining knowledge later to be applied. Efficiency ratings are produced by "on the job" performance, thus the importance of an assignment permitting application of the lessons learned. In the same vein is the assurance that demonstrated ability will always be the final criterion in determining an officer's assignment.

The latest information on movement of dependents to overseas theaters is as follows:

Area	*Coordinated Movement Now	Present Delay
a. Europe	October 1948	Application may be made for dependents, movement as soon as orders are issued. Movement is on a point system based upon months of overseas service. 1-2 months to get on list; 3-4 months lag thereafter.
b. Japan		
c. Korea	Not in foreseeable future	12 months to get on list; 3-6 months lag thereafter.
d. Marbo (Guam)	Not in foreseeable future	20 months delay.
e. Ryukus	Sometime in 1949	8-13 months delay.
f. Philippines	Sometime in 1949	8-13 months delay.
g. China		8 months to get on list (expected to sharply decrease in late summer); 2-3 months lag thereafter (dependents normally moved initially to Shanghai).
h. Hawaii		3-4 months delay.
i. Panama		4-6 months delay.
j. Puerto Rico		4-5 months delay.
k. Alaska		6-8 months delay.
l. TRUST		8-10 months delay.

*Coordinated movement may be either shipment of family within a few days of departure date of officer or concurrent, depending upon transportation situation at time of movement.

THE CONTENTIOUS MR. BRAGG

BY GEORGE T. NESS, JR.

Whatever may have been the merits of General Braxton Bragg as a leader in the Confederate Army, it is generally recognized that he was a man of certain striking personal characteristics.

A native of North Carolina and a West Point graduate of 1837 with Early, French, Sedgwick, Hooker, and other prominent Civil War generals, Bragg was notorious for his irascibility and argumentative nature. Always jealous of his rights as a junior officer, he was constantly in trouble with his superiors, and strict in the enforcement of his prerogatives as a senior he was often at odds with his subordinates. Although one of the favorites of Jefferson Davis he had many difficulties with his Confederate brothers-in-arms.

An interesting story is told about him when, as a first lieutenant and acting company commander, he was also serving as temporary post quartermaster.

As company commander he drew up a requisition upon himself as quartermaster. In the latter capacity he refused to honor the request and endorsed his reason on the reverse side of the paper —to himself as requisitioner.

Then as company commander he wrote himself as quartermaster, setting forth the reasons why the requisition should be filled and stated that it was the duty of the quartermaster to do so. Acting in the latter capacity he stood firm on his original rejection.

All the papers in the matter were then referred to the post commander for his final disposition. After studying the case the latter turned to the young lieutenant and said:

"My God, Mr. Bragg, you have quarreled with every officer in the army, and now you are quarreling with yourself."

To Never Forget

By Robert E. Kleiner

A SECOND mysterious booming sound rolled through the June night, through the thick concrete walls of the gun emplacement, and to our ears. "Blasting, Hell! That's gunfire," the battery commander snorted at my sleepy explanation of the first explosion that had awakened us.

Gunfire? On the Oregon Coast in 1942? The idea was preposterous. But the excited cry of one of the guards certainly was real enough. "Corporal of the Guard, Machine Gun No. 1," it rang through the night once and then, insistently, again and again.

We hurriedly pulled on a few clothes and rushed from our sleeping quarters under one end of the emplacement to our stations. The captain ran to his battery commander's station between and above the two huge, ancient disappearing guns which had for nearly forty years stood guard over the mouth of the Columbia River. The range officer ducked into the plotting room beneath the decks of the gun pits. I took the steps leading to the main level of the guns three at a time—all the while trying to sound the alert on my tumbler whistle. There I abandoned the whistle and shouted, "Artillery Alert! Artillery Alert!" at the top of my lungs to urge the cannoneers rushing up from their huts to greater speed.

Suddenly the thought struck me that a ground attack might be in progress so I drew my pistol, jacked the slide back, and allowed it to return forward to carry a round into the chamber. After easing the hammer forward I returned the arm to its holster just as another booming sound rolled in from the sea and over the coastal sand dunes to finally be muffled into oblivion by the dense, lonely rain forests of hemlock and spruce.

"Who was firing? What were they firing at?" the questions shot through my mind as I ran to the steel ladder on the carriage of the No. 2 gun which led to the gun pointer's platform. Other questions followed them in rapid order,

"Were the batteries north of the river firing an unscheduled practice? Or, were they engaging an enemy vessel? Was there a naval battle being fought offshore? Were we being attacked?"

Once atop the pointer's platform I pushed aside the camouflage netting that was stretched over the top of the entire emplacement and thrust my head up to look seaward. I there saw the waters of the Pacific tranquil on a quiet summer night. Above them I saw the moon riding full and low over the horizon with its path of soft, shimmering light reaching landward like a heavenly highway. Suddenly, about fifteen degrees to the left of that moonpath, a brilliant flash burst from near the horizon. Immediately the meaning of it hit me—it seemed impossible and absurd, but it couldn't be escaped—"There's a shell on the way. It's coming toward you. You're being fired upon." The instinct of self-preservation (call it fear if you wish) quickly overcame a momentary curiosity to keep looking out to the sea and I leapt down from the gun carriage to the deck of the gun pit. There I lay close by the front wall of the pit and awaited the shell.

It soon came and hit much nearer than its predecessors had. The unknown enemy gunner had for some reason (perhaps someone at the battery had accidentally flashed a light during the excitement of the alert) corrected his firing data so that his last shell had landed uncomfortably close to us.

By the time I had returned to the pointer's platform the gun crews were arriving on the dead run. Without hesitation some of the men swarmed over the top of the emplacement to remove the camouflage, others trundled the carts bearing the ready ammunition to the rear of the guns, and they all readied the pieces for action. The many long hours they had spent drilling on those guns since the regiment had been ordered to active duty in 1940 now paid off. For, although under fire, and in the

poor light of the moon, they prepared for action with the speedy efficiency of veterans.

Another flash lit up the horizon. Another period of fearful waiting followed it. The undulating, whistling scream of the shell's travel came only to be cut short by its explosion. The concrete of the emplacement shook while the uneven, swishing sound of sharp steel fragments tumbling end over end through the air convinced us that the war had come home. "Whoever's shooting—he's shooting at us!" the captain's voice sounded through the night.

The blackness of the guns' breeches hungrily awaited the loading of the huge, armor-piercing shells and the bulky bags of powder. The cannoneers stood tense at their posts while the time-interval bell tolled off the passage of the minutes. Everyone eagerly anticipated the order to load which would send them into smooth, orderly action: First, the ramming detail would dance forward until the heavy head of the rammer struck the projectile's base. Then, with rhythmic power they would force the four hundred pound shell into the breech until it met the rear end of the rifling with a dull "Ka-THUNK." The rammer would then be quickly withdrawn to allow the powder detail to insert the front end of the wooden powder tray into the breech. Again the rammer would be brought forward—more gently this time—and the four silk bags containing nearly two hundred pounds of powder would be shoved into the chamber and against the projectile's base. Next, the breech would be swung shut with the last, final motion of the operating handle. The chief of breech would insert the firing mechanism, the gun would be tripped to allow it to swing silently and ponderously upwards on its four pivoted arms and move forward into firing position until its muzzle looked out over the parapet. All the while the gun pointer would have been tracking the target with his telescopic sight. With the command to fire he would pull the firing handle which sent the electric impulse to the primer. The terrific noise and concussion would momentarily stun everyone and the rush of suddenly displaced air would tug at

their clothing as the gun spoke. Finally it would, in recoil, sit back down in its pit to be again loaded while acrid fumes of burned powder bit human nostrils.

However, to everyone's regret, no orders to load or fire were given. The gun pointer searched for but found no target on the distant horizon until another flash appeared there. After another wait the shell's scream sounded and it hit and exploded but fifty yards in front of the battery. The observation stations read the azimuth to this last muzzle flash and reported it to the plotting room where by mechanical triangulation, the enemy was located—at a range exceeding the maximum of our guns by over one mile. We were helpless before an enemy vessel whose modern guns, which fired shells little more than half the diameter of those our guns fired, greatly outranged any piece we could direct on him.

Apparently he did not know our predicament for that was his last shell. We waited out the hours until morning came, sunny and beautiful, and no further incident occurred. With light, and no evidence of the enemy on the ocean's surface, the crews were released and many of the men forgot their weariness to rush out in search of shell fragments. Some were found in the emplacement area and many others nearer their craters. A brass nose-cap from one shell bore oriental inscriptions, a sizeable portion of another's base indicated it had been of about five and one-half inches in diameter — intelligence said some Japanese subs carried guns of about that caliber. Thus, a few handfuls of broken metal and shallow craters were all the visible remaining evidence of the brave foolhardiness of the Jap sub crew. No damage had been inflicted, no one had been hurt, but it has been said that the attack did give certain officers who, at the time of the shelling, were in the main fort area (nearly two miles from where the shells landed) cause to later wear a campaign star on their American Defense ribbon.

Thinking back on that night I remember a story told in the summer of 1941 by an ordnance man who had worked around the West Coast forts for many years. It was of the years between the great wars when but a handful of men and officers, a mere housekeeping

detail, was garrisoned at the fort. One year a number of obsolescent, heavy-caliber projectiles stored in the very emplacement mentioned herein were sold to an American junk dealer for shipment to Japan. However, when the captain in charge of the battery heard of the sale and the ultimate destination of the shells, he refused to allow them to be removed. High headquarters sent more orders to release them. He again refused to do so. Finally, more and very strict orders arrived and, without any choice but to obey, he accordingly released the shells—but without their machined base-plugs or fuses. Since that night in June of 1942 I have often speculatively wondered: "Did parts of those shells later, on the night of June 20, 1942, return home to the battery where they had so long lain unused?" Highly improbable? True, but the moral is there. Even today we do not fully appreciate the extent to which the iron, steel, oil, and other materials we trustingly sold the Japanese made possible their attack on us and the long, bitter fight they put up before being defeated.

Many of the men who heard Jap shell fragments fly over their heads that night went on to battlefields where larger shells came in in greater numbers. Some of them did not come back. We who did will never forget the incident of that June night, I am certain. We should never forget the significance of those shells to our country's and the world's future.

Atom bombs seem to be a long haul from disappearing seacoast rifles, Model 1898. Shells bursting on an Oregon beach in 1942 seem a drunkard's nightmare when one thinks of seventy million Japanese obediently and perhaps happily living under our occupation government while their once-mighty fleet lies on ocean bottoms from Guadalcanal to Bikini. Our newspapers sound the grim warnings that we must continue to pour hundreds of millions of dollars into Germany to keep her people from starving. Three, four, and five years ago we'd have rejoiced to hear of such starvation.

Yet, it has been only a few years in which so much has changed—to our advantage most of the time, fortunately. But we must face the fact that another five years, or less, would see projectiles of a destructive power millions of times that of those which landed in Oregon rain down on us in far greater numbers if we refuse to face our internal and the world's problems with hardheaded realism. That train of events and causes which weakened France before 1940 and us before Pearl Harbor can again come to pass if we refuse to live up to our responsibilities as the world's greatest (and democratic) state. That is why we must never forget dead Americans on Tarawa and Iwo, in Normandy and at Salerno, everywhere else they fell in the two great conflicts, bombs on Pearl Harbor and, yes, the few little shells that burst on that Oregon beach.

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PERIMETERS in PARAGRAPHS



By Col. Conrad H. Lanza, Ret.

THE GENERAL SITUATION

Prepared by a widely-known military scholar and writer, PERIMETERS IN PARAGRAPHS is a recurring feature dealing with the military, political and economic realities in world affairs. Whereas an understanding of these realities is deemed essential to the American soldier, it is emphasized that PERIMETERS IN PARAGRAPHS reflects the opinions of the author, alone. This installment covers the period 16 December 1947 - 29 February 1948.—Editor.

THIS is the first PERIMETERS since the close of 1947. It is an appropriate occasion to note the strategical changes which occurred during that year and which became the basis for the 1948 situation.

EUROPE

More than 2½ years have passed since the close of the war with Germany. The major change which has become evident is the rise of Russia as a major power in place of Germany, now impotent and occupied by foreign troops. Prior to 1947, Russia had annexed the three small Baltic states and had organized satellite communist states in Poland, Yugoslavia, and Albania. The Russian organization was materially increased during 1947. In that year strong satellite communist governments replaced existing democratic governments in Hungary, Bulgaria, and Romania. Since the commencement of 1948 a similar government has taken over Czechoslovakia. As these lines are written, initial steps appear to be under way to alter the government of Finland into one more satellite communist state.

By a multiplicity of treaties, the satellites mentioned have agreed to support Russia and each other in war. All have been brought within the

Russian economic system. The iron curtain which prohibits people within Russian-controlled areas from getting out, and those outside from getting in, has been pushed outward to include the new communist satellites. This iron curtain provides a certain amount of military security, by making it difficult for other nations to ascertain what military measures are going on in rear of it. In every case the installation of communist governments in the satellite states has been forced by a minority element. This duplicates the original organization of a communist state in Russia, which was also by violence. In Poland there never had been a communist party. Romania and Hungary had been strongly anti-communist. Bulgaria alone had a substantial communist party, although not a majority.

As 1948 opens, the result of World War II to date has been the replacement of Germany, as the major power in Europe, by Russia. The latter is a larger and more dangerous nation, and fully as unscrupulous. It has annexed, or brought under its control, more peoples and more states than Germany had when war was declared against her in 1939 as a threat to the world.

The geographical position of Czechoslovakia is of great importance strategically. A power holding it may debouch therefrom to north, west, or south. The country to the north is held by Russia, leaving the west and south as probable lines of action. An advance southwards into Austria would undoubtedly be supported by another advance north from Yugoslavia and Hungary, and would be most difficult to

oppose successfully, even if large armies were available, which is not the case. The absorption of Czechoslovakia into the communist camp threatens the independence of Austria, which is likely to fall at any time Russia elects.

An advance from Czechoslovakia, Austria, and Yugoslavia might go north of the Alps into American-held Bavaria, or south of the Alps into Italy. The only information about this is that a Cominform CP is operating at Belgrade. This officially announced that its first offensives would be to seize Italy and France by 5th Column operations. The latter part of March and the month of April, 1948, have been reported as the time when the operation is scheduled.

Indications are that the Russian High Command — its Politburo — believes it can organize quicker than the Western powers and that the time is appropriate to conquer all of them one by one in a steady advance, in the hope that no one step will start a World War III, which is not wanted, at least not at this time. This plan is the same as that of Hitler, who successfully made a series of advances before the world turned against him.

Before their defeat, during 1944 and 1945, the Nazis predicted that should they be defeated, Europe would fall under Russian communistic domination; that when that happened Europeans would find themselves worse off than they had ever been under Germany. Recent events enable ex-Nazis to say *I told you so*. This has led to a strong Underground in favor of Nazism and Fascism, which must not be ignored. This is exactly the same reaction as first

brought Nazism and Fascism into being — saving Europe, and the world, from dread of communism. The new Underground can be counted on to repudiate the abominable. Hitler ideas of wholesale murder and concentration camps. In fact, there is a strong tendency for the union of Protestant and Catholic churches for a united effort against the common enemy. At the moment this movement is strongest in Germany.

The general strategical situation in Europe as of 1 March, 1948, is similar to that of 1 April, 1939, just after Germany had made itself master of Czechoslovakia. It is very dangerous. This has led to France's becoming so alarmed that for the first time it has openly aligned itself with the Anglo-Saxon powers in a joint protest against the communist seizure of Czechoslovakia. This protest is perfectly useless; what followed is important. According to reliable reports, an offer has been made that France, Italy, Belgium, and the Netherlands are ready, and desire, a definite alliance with the Anglo-Saxon powers, similar to the treaties which Russia has made with its satellites, already referred to.

THE LEVANT

In an effort to settle the disturbing conditions in Palestine, the United Nations, with the approval of the United States and Russia, decided, on 29 November, 1947, to partition that country into separate Jewish and Arab states. The Jews accepted this decision, while the Arabs refused. All Arab states subsequently aligned themselves with the Palestine Arabs and promised to go to war with them against any UN efforts to enforce the partition. The Arabs undertook preliminary operations which indicated they meant what they said. Then on 24 February, the United States announced that it would do nothing to enforce partition of Palestine, on the ground that the United Nations had no authority to take or enforce such action.

Comment. In the opinion of this writer the decision not to recognize the authority of the United Nations to partition a state on the demand of a minority element was sound. If the United Nations is given such authority, what is to prevent a demand for a partition of our southern states, for

example, into Negro states and white states, for exactly the same reasons as were alleged for justifying the partition of Palestine.

The 29 November 1947 decision to partition Palestine was a trap into which the United States walked. It is not surprising that Russia voted for this. It would probably vote to partition the United States without much hesitation. Fortunately the United States withdrew in time and on proper principles.

AFRICA

Great Britain has withdrawn from Egypt less the Suez Canal. A major military base is under organization in Kenya for ground, air, and naval forces. It replaces former bases in Egypt, Palestine, and India. It is sufficiently far from probable hostile airfields to make air attack unlikely. Besides, the area is large enough to disperse large forces and supplies. The Kenya base requires that no power likely to be unfriendly become installed in the Anglo-Egyptian Sudan or in Ethiopia. The Union of South Africa is associated with the British in making Africa a first-class military base.

The withdrawal of the British from Egypt and India, and its proposed withdrawal from Palestine, has led to pronounced independence movements within French North Africa. This is being supported by the Arab states which are already independent. Here is another potential source of trouble.

THE AMERICAS

Communism has received a check in Argentina, Chile, and Brazil. These states have taken energetic action against local communists. They have broken diplomatic relations with Russia on the ground that that country was aiding and abetting 5th Columns within their territories to initiate strikes and bring about chaos. This is the only area where, during 1947, the communists have not made some advance.

ASIA

(Less the Levant)

A military front exists in China, with communists fighting the National Government. In spite of American aid the communists during 1947 made substantial gains (see section on China).

This situation is similar to that in Greece, but on a vaster scale.

India and Burma have secured their independence from Great Britain by peaceful methods. The British hold Ceylon, Malaya, and Singapore. With Kenya, the Suez Canal, Cyprus, Malta, and Gibraltar, there is a strong line of British bases uniting Great Britain with the Far East and Australasia.

In Indo-China a deadlock exists between the French and the natives who are in revolt and who hold most of the country. The French hold the large cities and ports. They are seeking by negotiation to restore peace.

In the Netherland Indies a truce has been made between the revolting natives and the Dutch. The latter through superior military forces have held certain key production areas and thus have been able to exert heavy economic pressure upon the Indonesians. The latter have ceased military opposition.

Both Indo-China and the Netherland Indies remain potential sources of war. The natives want their independence, and believe they have as much right to that as India and Burma.

COMMUNISM

Communism has become a cult replacing old religions rather than an economic theory on nationalization of property and labor, which is what it started out to be. It arose at the very time when there was a decline in religious beliefs, which has led many to look toward communism as leading to a better world.

Communism has its equivalent for the Bible in the writings of Marx, Lenin, and Stalin, which are accepted not only as directives but as prophecies of what is to come. Communism has a hierarchy in the three leaders mentioned, who receive the same respect from its followers as Christ from Christians, Mahomet from Moslems, etc. Everywhere it sends its missionaries, who act as 5th Columns within nations not yet brought under communist control. Like religions, it claims allegiance to itself as superior to fidelity to home and country. It calls upon all to abandon present affiliations to join the new communism, which promises when universally adopted to bring peace on earth to all

mankind. To those without religion or strong national attachments communism has had a singular attraction; it is advancing. A fuller discussion of the advance of communism was contained in the previous installment.

Few people read Marx. His writings are terribly long, confused, and dry. Nevertheless our military men should pay attention to them in order to combat communist propaganda and to ascertain communist objectives.

There is similarity between the writings of Marx and the symptoms exhibited by paranoiacs. Their resemblances include exaggerated claims as to the importance and truth of what is stated; an intolerance for opposing views; a deep suspicion of persecution; an interpretation of past acts to suit the author's ideas; and a belief that there is no possible solution other than that presented. Speeches by prominent Russians in the United Nations and in Moscow follow this line. There is usually the claim that what is said is the last word, admitting of no argument; that foreign nations are planning to attack Russia (paranoiac persecution complex); the interpretation of past acts as being directed primarily

against Russia (i.e., that the United States aided Hitler for the express purpose of overthrowing Russia); that peace in the world will come only when all nations adopt the Russian solution of communism. Marx and most Russian speeches are verbose, which is also a characteristic of paranoiacs, who seek at enormous length to explain the justness of their ways.

Marxian communism is a cult with paranoiac symptoms. It is like Mahomedanism in its palmy days when that cult sought to replace other religions and establish itself universally. The original Moslem leaders and the present communist ones have been fanatics. They have been earnest and intelligent men striving to extend their type of government to include all nations and peoples.

A WORD ON MILITARY TRAINING

Arguments have appeared that the next war will be an atomic one, where large armies, navies, and air forces will be useless. Those influenced by this view are opposing efforts to require compulsory military training.

No one knows what the next war will be like. There never has been a major

war which did not bring out situations which nobody had foreseen. It is almost certain that a World War III will have its share of surprises; the idea that it will be limited to a few planes slinging atomic bombs around is highly improbable.

World War III may well start with a surprise offensive against atomic plants. Everybody knows where they are. The offensive may be limited to bombing, or it might be an airborne raid to seize the plant, capture bombs, learn methods, and, if the plant can not be held, to destroy it. Major operations to seize, and to defend, atomic plants may arise. If the few existing atomic plants are destroyed, or seriously damaged, atomic bombs may have no major effect on the ensuing war for lack of enough of them.

There is no present reason to believe that we can dispense with large ground, naval, and air forces. The United States is now vulnerable to air invasions which if not defeated en route may land hostile forces in the interior.

Persons who are against compulsory military training on the ground that our stock of atomic bombs alone suffices to insure our winning a war are risking the independence of the country.

CHINA

THE POLITICAL SITUATION

The civil war between the National (Kuomintang) Government, headed by Generalissimo Chiang Kai-shek, and the communists led by Mao Tze-tung, continues. For over 20 years this war has been in progress and it shows no signs of ending. On the contrary, more troops are fighting than ever before. Neither side is willing to surrender, while agreement between communists and non-communists is impracticable.

On 25 December, 1947, the Kuomintang Government issued a proclamation announcing the new Constitution, which is modelled on that of the United States. On the same date general orders were issued stating that pending the election of an Assembly, and of a President and other officials, the present government would rule as usual. The Constitution on paper is the law, but everything goes on as before.

Also on Christmas day the communists proclaimed that a Cominform was being established. It is to be similar to the one established by Russia last September and now functioning at Belgrade for Europe. The new Cominform is presumably to supervise communist major policies and strategical decisions for the Far East. There is no information as yet as to who are the leaders of the new Cominform nor where its CP will be.

On 31 December, Generalissimo Chiang Kai-shek replied to the foregoing communist announcement in a broadcast. He charged that the China communists were supported by an exterior power. He didn't mention which, but there was no doubt whom he meant. He referred to the Communists as follows:

"Unless checkmated they will cause the downfall of our nation.... In their attempts to realize their aims, they

hesitate not the slightest to strike at the very roots of our national life. By destroying social and economic foundations, the communists seek to produce general poverty and death in China, instead of law and order."

This statement is probably correct.

It will be noted that the Generalissimo referred to a possible downfall of his government. He did not claim that this could be certainly avoided. Many observers in China foresee a collapse of the Kuomintang and the ascendancy of the communists. The political situation is worsening, parallel to the deterioration of the military situation as explained in following paragraphs.

It has been unofficially reported that the American ambassador in China has made a new effort to secure amalgamation of the two hostile Chinese parties into a single one. However, the United

States has not recently stressed this point, which they previously had urged. There is no likelihood of this happening. The Kuomintang has seen what has happened to the European states which tried this method with most unfortunate results.

The communist political activity in China is the same as that in Europe. It is directed towards:

1. Obtaining key positions, particularly those controlling the police, the army, the press, and propaganda.
2. Having accomplished the foregoing, destroying the existing government by killings, and by bringing about universal poverty.
3. Establishing a mob rule, labeled *The People's Courts and Police*, to remove all opposition.

The Kuomintang believes that if they permit the communists to obtain key positions in a coalition government, as had been proposed by the United States until recently, the sequence of events to follow would be as shown above. They have decided never to admit a communist to government positions.

Comment. The insistence of the United States on seeking to force a coalition between the communists of China and the National Government is the opposite of the policy being followed in Greece and other European countries.

This difference has led to a suspicion that the United States agreed at the Yalta Conference to such an arrangement for China and has felt bound to comply with it.

RUSSIAN ACTION IN CHINA

Russia is acting with great caution throughout the Far East. There is no evidence that she is directly supporting the Chinese communists by furnishing them arms or munitions. Very few Russians are reported present with the communist armies, and those may be there without their government's consent. There are present with the communists a considerable number of Koreans from the Russian zone and of Mongolians from Russian-occupied territory. These are supposed to be volunteers, and it is impracticable at the moment to prove that they are not. Russia's lack of open support for the

communists in China is in sharp contrast to Russia's action along the Greek border, where the communists are openly and extensively supported by Russia and its satellite states.

Comment. The reason for the contrasting policies of Russia along the Greek and China borders is not known. It leads to the suspicion as above that Russia agreed secretly to its present line in return for concessions not yet released.

MILITARY OPERATIONS

Changes during 1947. The situation of the communists materially improved, while that of the Kuomintang declined notwithstanding superior equipment and numbers. The main causes were corruption and inefficiency on the Kuomintang side. There were too many corrupt commanders who exploited occupied areas for personal profit and thereby alienated popular support. Commenting on this, the Generalissimo asked that China not be condemned too harshly; corruption had always existed and could not be instantly removed. He claimed that the percentage of corrupt commanders and officials had been reduced to a new low record.

The High Command for the Kuomintang failed to seriously attack the enemy, which their superior numbers indicated as the correct policy. Instead they dispersed troops to hold large cities which were widely scattered. As these were swollen with refugees the defense perimeters were very large and required numerous troops. The communists thereupon seized the initiative and generally maintained it.

The strength of the military forces employed is hard to ascertain. The Kuomintang reports about 4,500,000

men under their colors and the communists 1,500,000 in their armies. There are four main theaters of operation. The forces in these theaters, as given by American observers from Kuomintang sources, are listed below. The corresponding communist forces are also listed, as determined by the communist reports and the Kuomintang Intelligence reports. As will be seen, these vary widely.

The communist strength has increased rapidly. It was estimated as only 50,000 regular troops in 1937. At the end of the war with Japan, this had increased to an estimated 400,000, not all of whom were well armed. Through occupation of Manchuria the communists secured weapons and munitions for about a million men. They captured substantial quantities of arms, largely American, through victories over the Kuomintang during 1947. The estimate of 1,500,000 communists troops may be about right. Of these the communists claim that 77% are combat froces in line, as shown.

The Kuomintang strength cannot be checked. If accurate, only 25% of their forces are confronting the enemy. The explanation is that large numbers are required to keep south China tranquil; to garrison allegedly critical cities; and to attempt to maintain certain long lines of communication.

The Kuomintang has an Air Force with American planes and American training. Communists have no air force other than a few liaison planes. There is consequently no air combat. The Kuomintang planes are largely employed in transport operations to furnish replacements and supplies to widely scattered occupied cities, which are under siege, and to evacuate sick and wounded. Some bombing is done. Targets are usually villages supposed to be

Theater of Operations	Kuomintang Troops		Communist Troops	
	Own Reports	Kuomintang Estimate	Own Reports	Own Reports
Manchuria	400,000	320,000	600,000	
North	400,000	120,000	150,000	
Center	250,000	150,000	320,000	
South	125,000	75,000	90,000	
Totals	1,175,000	665,000	1,160,000	
Presumed in rear areas	3,325,000		340,000	
Totals, own reports	4,500,000		1,500,000	

occupied by the enemy, which are bombed either day or night. Transport planes are frequently employed, the bombs being just thrown out. Some villages have been damaged, but there is no evidence of the communist forces having suffered losses. Kuomintang officers explain that the bombing probably hasn't resulted in any worth-mentioning losses to the enemy, but that it was believed that the exploding bombs would strike terror in enemy hearts. Unfortunately the communists are not that kind of troops. They are disciplined.

During the past year the communists issued a FSR. Who wrote it is unknown, but the principles prescribed are sound. These include:

1. Annihilation of the enemy is more important than the capture of a city.
2. Notwithstanding overall inferior numbers, secure local superiority before engaging the enemy. Then prepare for the battle prior to commencing it.
3. Preferably attack the enemy while in march, rather than in defended places.
4. Between operations, rest, reorganize, and train at appropriate centers, with a view of fighting a series of engagements without intermediate pauses.

In general communist operations show a guiding hand by some competent authority. They are better led than the Kuomintang troops.

During 1947, the communists have been destroying religious establishments of Christians wherever they have been in control. During the Japanese occupation, interference with religious organizations was restricted. Now it is in full blast, and has been extended to include Chinese as well as foreign missionaries. Many have been tortured and murdered.

Communist propaganda has been primarily directed against the United States, which is represented as a reactionary, imperialistic, monopolistic Power seeking to impose the Fascist government of Chiang Kai-shek upon a freedom-loving Chinese people.

Communist action against religion, and its propaganda against the United States, follow closely similar action in Russian satellite states in Europe. A common directing origin is indicated.

Displaced Persons. On 1 February, 1948, the Kuomintang Ministry of Social Affairs reported that the number of DPs on hand included, approximately, in:

Manchuria	3,000,000
North Theater	6,000,000
Center Theater	10,000,000
South Theater	10,000,000
Totals	29,000,000

The presence of such large numbers of DPs in defended areas complicates the military situation. The communists put to death persons believed to be anti-communist. As all Kuomintang officers and men are included in this classification, or are liable to be, it has become customary for garrisons to have their families with them. They are therefore loath to undertake a field operation which separates them from their dependents who, while the troops are engaged elsewhere, might be captured by raiders.

Industrial Resources of Manchuria. One of the major excuses of the Kuomintang for lack of success against the enemy is that the Allies at the end of the war against Japan failed to secure for them Manchuria's extensive industrial plants and mines.

The Kuomintang held Mukden during 1947. Within the perimeter of the defense was Fushun, which has major oil, gasoline, cement, chemical, and steel plants with large adjacent coal mines. It was a little Ruhr. This was nearly closed down, many plants being completely so. The extensive coal mines west of the Peiping and Mukden RR have been held, but continuous communist raids have made it impracticable to ship substantial tonnages. The hydro-electric plants are either held by the communists, or their lines of transmission are, and little electric power is available in Kuomintang territory. Business is at a standstill.

Principal Changes in Occupied Areas during 1947.

Manchuria. In the triangle north of the Peiping and Kalgan RR and the Peiping & Mukden RR, the Kuomintang lost all territory, and with that the ability to operate these RRs. The Kuomintang also lost all territory east of the South Manchuria

RR between Yingkow and Changchun. Supply to cities held is now by air.

North Theater. The area south of the Peiping and Kalgan RR and north of the Lung Hai RR from Sian to the sea was lost by the Kuomintang, less certain large cities which are encircled by the enemy. After partially clearing Shantung, that rich province was once more lost by the Kuomintang, less Tsingtao (USN base), Chefoo, and Weihaiwei.

Center Theater. At the beginning of the year there were few communists south of the Lung Hai RR. Now there are substantial communist forces operating here.

South Theater. The Yangtze River, which is a major line of communication, for the first time in the civil war is now subject to interruption by communist forces. Some communist troops have crossed the Yangtze and have established bases to the south with a view of initiating major operations during 1948.

RECENT MILITARY OPERATIONS

Manchuria. At the beginning of the period the communists launched an offensive against Mukden, whose outer defenses are 30 to 40 miles out from that city. On 16 December a communist force reported as 5 divisions attacked from the northwest and broke through the Kuomintang line. On 19 December the advance reached the Liao River and established a bridgehead on the south bank. This success caused the Kuomintang High Command to consider the abandonment of stations between Mukden and Changchun in order to concentrate sufficient troops to save Mukden. However, no order to that effect was issued. On the 20th the communist attack appears to have been halted along the railroad 10 miles from Mukden, but at this date new communist attacks commenced to the east and to the south.

This communist offensive is their seventh in Manchuria, and the first since September, 1947. At that time they had failed to drive the Nationalists out of the railroad posts held by them. The communists then withdrew the bulk of their forces to north of Peiping, presumably

to draw hostile troops to that area. Having accomplished as much as possible in that direction, they marched rapidly (usually about 30 miles a day) towards Mukden, and now are conducting the new campaign. Its mission appears to be to clear out the Kuomintang completely from Manchuria.

On 22 December the Mukden garrison counterattacked and recaptured terrain to the north. However, they lost on the south side, where the communists reached a point 20 miles from Mukden. Major problem in Mukden was food, as all lines of communication to the outside were cut. Next most important problem was inefficient troops. As replacements failed to arrive, vacancies in ranks were filled by seizing any man found in the neighborhood. These individuals received no basic training, and have a low morale. There are no Tables of Organization. Each commander organizes as he sees fit. Some divisions, with a reported 14,000 men, had weapons for only 3,000. The armored division has been reduced to about 40 tanks. For lack of proper maintenance motor vehicles are largely inoperative.

The 1st Army (really a corps), American trained and equipped, had three divisions. These have been detached and stationed one each at Mukden, Szepinghai, and Chungchun. To each of these divisions have been added two new divisions, apparently of untrained men. This makes three armies (corps). The 6th Army, also American trained and equipped, has been similarly broken up to form three new ones, of which at least one is at Mukden. The other two armies have not been reported and their

whereabouts are unknown; also another army, making seven in all. This makes a total of 21 divisions, supposed to be 14,000 strong each. With other troops (service, corps, etc.), the total strength is said to be around 400,000, as previously mentioned.

Winters in Manchuria are very cold, below-zero temperatures being frequent. Kuomintang troops are largely improperly clothed for winter, and that discourages operations. During January fighting declined. It was renewed in February when a communist attack captured Liaoyang on the 5th from the 54th Kuomintang Division. The Mukden garrison now commenced an offensive to reopen the railroad to Peiping. It made only slow progress. South of Mukden the communists captured Anshan (very large steel works) on the 20th. In the last days of the month the Communists captured Yingkow (port and base, but temporarily ice bound); Penki (important coal mines); and Sinmin, which seems to have been as far as the relief column from Mukden had been able to reach.

North Theater. The communists have been on the offensive. During the last half of December their raiders interrupted the railroads leading into Peiping, presumably to prevent the dispatch of replacements and supplies to Manchuria. A month later, Kuomintang troops commenced a simultaneous series of offensives to north, east, and south from Peiping, to reopen interrupted lines of communication. As this account closes this had not succeeded.

Center Theater. At the beginning of the period Kuomintang forces along the Lung Hai RR, and others north of the Yangtze

River, were moving towards one another with a view to capturing a communist force, highly mobile, which was between them. These communists had prevented the operation of the Hankow & Peiping RR south of the Yellow River. The communists had received considerable help from the local inhabitants because of their elimination, in areas held by them, of corrupt officials. The Kuomintang offensive accomplished nothing. The communists continue to operate in this area, and they still interrupt the railroads.

South Theater. Small communist bases have been opened in six provinces. Operations are as yet limited to raids. These are reported as being by disciplined and well equipped troops. It is believed, but not certain, that part of the equipment is American which had been dropped during World War II for guerrillas, now in part become communists. The communist bases are appealing for support of the people on a program calling for land distribution, reduction of taxes, and elimination of corrupt officials.

Total number of communist troops in this theater has not been ascertained. Their 10th Division has been identified in Kwangsi. One of the duties of these communists is to maintain liaison with the communists of Indo-China. Main force appears to be north of the Hong Kong and Canton area.

Numerous raids are made on shipping along the Yangtze River. This has a serious effect on the economic situation, particularly in the distribution of food.

Summary. As of 29 February the communists have the initiative. They made substantial gains during 1947, and are on the way to make more.

GREECE

The war in Greece between communist guerrilla forces and the national government has not developed satisfactorily for the latter. The United States has supported Greece with a military mission and the supply of rations, weapons, and munitions for its troops. It has given liberally of its advice. On the other hand, the guerrillas

have received steady supplies and replacements from the satellite states of Albania, Yugoslavia, and Bulgaria. This has more than offset what the United States supplied.

The results during the year 1947 have been that the guerrilla combat forces have increased from about 10,000 to 25,000. They now have a small artillery

force; are reported to have a navy of two submarines; and have planned to have an air force for the spring campaign of 1948. All this notwithstanding an alleged guerrilla loss (according to official Greek reports) during 1947 of 8,500 killed; 5,000 captured and 4,000 surrendered; plus 3,000 wounded who may be included in part

among prisoners taken. These figures, if correct, indicate that the guerrillas raised over 32,000 troops during the year, and equipped and trained them.

The attack by the communist guerrillas is lauded by the Russian press, and according to reports of United Nations representatives on the ground, is directly supported by the adjacent satellite states, who provide shelter and camps when military operations compel the guerrillas to leave Greece.

The guerrilla leader is Markos Vafiades, who refers to himself as General Markos. His CP opened near Lykorraki in the Grammos Mountains about 17 miles northeast from Konitsa on 22 December. His radio at once announced the establishment of the *1st Provisional Government of Free Greece*. On 30 December our State Department issued a warning that recognition of the so-called provisional government by any countries "would have serious implications." No recognitions have been given.

Vafiades was born in Turkey, and came to Greece in 1923 when he was 17 years old. He then started life as a peddler and joined the communist party. Prior to World War II he was convicted for robbery, rioting, etc., eight times. He became a guerrilla during that war, and showed considerable energy. Consequently the British helped him to operate in the general vicinity of Salonika. He then organized a secret police who mercilessly executed anti-

communists. According to reports of POWs, the communist CP is directed by a Yugoslav general to whom a Russian general was added as an adviser during the latter part of 1947. This Russian general is believed to be General Kovpak, who is an experienced guerrilla leader.

Recent Military Operations. On 25 December, 1947, a guerrilla force reported as about 5,000 men with one battery of 65mm mountain guns launched an attack against Konitsa, with a secondary attack towards Philiates along the road from Agirocastro to Ioannina. Both attacks made initial progress, and Konitsa was encircled. The 8th Greek Division was in charge of this sector, and at once launched a counterattack to free Konitsa. This took a week before Konitsa was reached, and then the enemy mountain guns remained in position shelling the main axis of advance. This prevented wheeled transportation from reaching Konitsa for another week. The guerrillas finally retreated to the Albanian boundary. It is believed that the guerrillas wished to establish a capital for their newly proclaimed Free Government at Konitsa. That failed. So did the efforts of the 8th Division to capture the guerrilla CP at Lykorraki, which continues to function.

On 10 February another guerrilla force made a surprise night attack on Salonika. The mission was to seize inhabitants for forced service in the guerrilla ranks. This operation was not discovered by Greek

troops, nor by British troops stationed in Salonika, until shells fell in the city. The Greek reaction was prompt in this case. It appears to have been advised by an American liaison officer present with the II Greek Corps, whose CP is in this city. The counterattack captured over 120 prisoners and drove off the rest with considerable losses. It did not succeed in capturing the enemy guns.

Other guerrilla forces have appeared north of the Gulf of Corinth, where an amphibious expedition failed to capture them; in the Peloponnesus; in Samos (supposed to have been brought over by submarines); and at other places. These forces are small, not over 500 men each. They avoid action with regular troops, but attack detached posts, burn villages to cause a refugee problem, waste crops, murder opponents of communism, forcibly impress young men for guerrilla service, and in general seek to disrupt the economy of Greece, by causing as much chaos, misery, and suffering as possible.

The Greek Army is now well equipped with American materiel. A considerable number of new battalions are being trained to take over the defense of inhabited places and thereby free the regular troops for offensive operations. The beginning of April usually ends the winter season, with its snow-blocked mountains and inundated valleys, and permits of field movements. New roads and railroads are being opened with American aid to facilitate new operations.

TURKEY

No military operations have occurred. The country remains on a war footing.

Released information is that the Third Army has withdrawn about 100 miles inland from the east boundary to a defensive position, in front of Erzerum, astride the main line of communication leading from Russian Armenia. This position is a good one against a frontal attack, but is otherwise defective.

There is no good position in rear if the present one is lost. The Erzerum position (sometimes called the Pasinler Line) can be turned by a wide turning

movement south of Lake Golu, or by an amphibious expedition landing on the south shore of the Black Sea, or by both. Lines of supply are poor—a single-track RR and indifferent and few roads.

It is now apparent that, to make the Turkish Army over into an efficient fighting machine, a much larger expenditure will be required than the moderate sum of \$100 millions already authorized by the United States. It might well be 20 times that amount. That would include providing a

respectable road and RR system and base ports—absolute necessities.

The First Army is guarding the west frontier. The Second Army is in reserve near the Istanbul Straits. Here it is available for local defense, or to reinforce the First Army. Poor communications would probably prevent its being able to reinforce the Third Army should an emergency arrive. The Turkish Air Force is reported good, but needs more fields. Combat planes are reported to be about 1,000.

INDIA

India as part of the British Empire used to be an important military factor. Its forces during the two World Wars fought in France, Italy, Libya, Egypt, Ethiopia, Malaya, and Burma, where they formed material elements in the Allied armies. The breaking up of India in August, 1947, into the two Dominions of Pakistan and India, has resulted in the disappearance of a strong state and its replacement by two weak ones. The new Dominions are predominantly of races which were habitually hostile to one another, until British power forced them into a united state by military victories in 1799. There were minor troubles thereafter, but India steadily advanced in civilization. British sovereignty lasted just under 150 years. British accomplishments included the use of the English language as a general means of speech, for India is composed of numerous races and as many languages. Uniform laws were introduced, pagan customs (such as burning widows alive) were abolished; lines of communication were constructed; and law and order maintained. A large and efficient army was organized, which was recently supplemented by air and naval forces.

A demand from India for independence first arose in 1905, at which time the British Empire was at its zenith. This demand came about from the victory of Japan over Russia. Never before had an Asiatic nation defeated a white nation. This was an epoch making precedent, which led to the movement of *Asia for the Asiatics*. Prior to World War II the British were able, without too much effort, to prevent independence in India, but during that war it was necessary to keep large military forces to prevent a revolution. After the conclusion of the war, the British decided that rather than have a civil war it was preferable to grant unconditional independence and, if possible, continue friendly relations. The new Dominions are provisional only for a 2-year period, at the end of

which period the people will be free to leave the British Commonwealth if they so desire.

The governments of the new Dominions of India and Pakistan are respectively Hindu and Moslem. The leading officials are friendly to each other, but their nationals are not. In spite of earnest efforts by both sides, their people have murdered and oppressed those of the other side, and a real war has broken out in Kashmir. There has been a forced exchange of populations: Moslems in India fleeing to Pakistan to escape death from Hindu mobs; and Hindus in Pakistan seeking shelter in India from Moslem assaults. These movements have amounted to many millions; they have been on such a large scale as to make population statistics based on the 1941 census unreliable. Subject to correction for this reason, the population of Pakistan is about 90,000,000, of which only 50,000,000 are Moslems and the balance Hindus, now in strange and hostile surroundings. New India has a population of nearly 300,000,000, of which 38,000,000 are Moslems. Both states have substantial dissatisfied minorities.

Pakistan is divided into two provinces —Punjab, west; and Bengal, east—about 900 miles apart. This division is a major military weakness. Both provinces are self-supporting for food, and Bengal normally raises a large surplus.

The Dominion of India is not self-supporting as to food. Even with the aid of the food surplus from Bengal, frightful famines occurred in the past. It has always been necessary to import millions of tons of rice. Several million tons came from Burma, which was arranged for by the British authorities. Now Burma is independent. Its rice districts are partly in revolt against the new government and it is doubtful how much rice can be had from this source. Other rice came from Indo-China. This supply has been cut off, owing to the revolt against the French. There remains Siam, which is still furnishing food products but

at a rate which may become uncertain. India at its birth as an independent country is faced with a first-class food problem, for which no satisfactory solution has yet appeared. This is a major reason why the government of India is strenuously opposed to demands by Hindu fanatics for an extermination campaign against all Moslems.

Pakistan is also in no position to wage war. Not only is its population separated into distant areas, but their total strength is only 1/3 that of India. Besides, the latter state contains all the arsenals and great industrial plants which the British had organized. Practically all mineral resources are in India. Pakistan is an agricultural state. It can not equip its own troops with weapons and munitions except by importing them. It is able to purchase not a little, for one of its crops is jute, which is sold throughout the world at advantageous prices. However, prices vary from year to year, and there is always the possibility that substitutes will come into more general use. For military purposes, the jute crops are not a proper basis for the national economy in these modern days when materiel is an absolute necessity for military forces.

The dependence of India upon Pakistan for food, and the dependence of Pakistan upon India for manufactures, will force serious attempts to maintain peace between Moslems and Hindus. It will be precarious, for the two have fought each other for centuries. Each dislikes the other's religion, each being an abomination to the other, and this is not likely to change. Each race is fanatical on religious questions, and history shows that that kind of situation is almost hopeless to solve by peaceful methods.

For the time being, neither India nor Pakistan is a serious military factor in the international situation. Together they constituted a strong nation; separated, neither is economically independent and their mutual hostility renders both weak.

INDONESIA

An *Ad Interim* Government has been installed by the Netherlands in Java. The Indonesian Republic has been invited to join, but at date of writing had not done so. Fighting has ceased. The Indonesian Republic occupies a

part of Java which is not economically very productive; for that reason its decision is of no particular concern.

Foreign ships now trade freely in Indonesia. Products from estates owned by natives may be sold

anywhere. But if the estates are European owned, or believed to be so, they must pass through Dutch authorities, to insure that Europeans receive their compensation.

PALESTINE AND THE ARAB WORLD

PALESTINE

It will be remembered that the United Nations on 29 November, 1947, decided to partition Palestine into Jewish and Arab sections, with a neutral Jerusalem. The boundaries for the proposed new states were drawn so that neither would be economically self-sufficient. Lines of communication, of power, and of water crossed and recrossed boundaries, so that either of the proposed states would be able to throttle means of life. The UN appears to have assumed that Jews and Arabs would arrange this matter so that life in the future could go on as it has been in the past. This assumption has turned out to be erroneous. Jews and Arabs are not cooperating. Instead they have engaged in a serious minor war of a particularly ferocious nature. The occupying British are having a hard time suppressing constant attacks by one faction or the other. The Jews are willing to accept the partition decision, but the Arabs are not. All independent Arab states have united in a League which has pledged aid to the Arabs of Palestine to maintain their country intact.

The British have announced that they propose to surrender their Mandate over Palestine on 15 May, 1948, and thereafter will only defend themselves, pending as rapid an evacuation as possible. This leaves the Jews and Arabs free to fight against each other after mid-May. Elsewhere in this article has been presented the UN situation, amounting to no decision up to the end of February. A committee from the UN to investigate and report has arrived in Palestine. This problem has been investigated so often that it is unlikely that another investigation will develop

a solution to a difficult problem in time to place it into effect by 15 May.

THE OIL PROBLEM

There is a shortage of oil throughout the world, including the United States. Much oil comes from Iraq and is piped to Mediterranean ports in Lebanon and Palestine, all of which are Arab states. Large new oil fields have in recent years been developed, largely by American companies, on the Arab side of the Persian Gulf. At this date these fields are too distant to make it commercially profitable to ship this oil by tankers to the United States. To obviate this condition, a pipe line is proposed to connect the fields with the Mediterranean ports of Lebanon and/or Palestine. In the meantime the Persian Gulf oil is of major importance to south and southeast Asia. The ultimate production and distribution of this oil is a primary strategic factor. The average production of oil wells in Arabia is just under 4,000 gallons each per day as against less than 12 gallons for American wells. This extraordinary difference makes Arabian oil the cheapest known. Any war with the Arabs will enable them to interfere with oil exports from their states and thus intensify the world crisis in an essential commodity. Disadvantage to the Arabs would be the loss of large royalties which they now receive for their oil.

NORTH AFRICA

This great area includes the entire south side of the Mediterranean and flanks the lines of communication through that sea. Any power controlling North Africa would be in a position to block the Mediterranean. The Arabs inhabit the entire area. It is true that the Berbers have a majority in places, but

that race is closely united with the Arabs and usually acts with them. The Arabs are not a power. Even if they solidly occupied North Africa their lack of an air force would prevent them from materially affecting the interests of the Western powers in the Mediterranean. However, a hostile Arab occupation might open their countries to a power which did have an air force. And just now the North Africa Arabs are not friendly to the Western powers.

The most important of the Arab states is Egypt. It is the only one in North Africa which is independent. The British have withdrawn from Egypt, less the Suez Canal, in an effort to maintain friendly relations with the leading Arab states. The British hold the Suez Canal, Cyprus, Libya and Cyrenaica, the Sudan, and Eritrea—they have Egypt surrounded. Libya and Cyrenaica, former Italian colonies, are awaiting disposition by the powers. For air force purposes their location is important.

Tunis, Algeria, and Morocco are held by the French. These states have considerable local autonomy and representation in the French Parliament. This does not satisfy them. They want their independence. Algeria and Morocco point out that, excepting Egypt, they are larger, more civilized and wealthier than the other independent Arab states. Why then, they ask, are such small states as Lebanon and Syria given independence and a vote in the United Nations while the North African Arab states are denied the same rights? Arab dissatisfaction is a smoldering volcano, kept from exploding by a strong French army. This makes

France correspondingly weaker in Europe.

THE ARAB ESTIMATE OF THE SITUATION

The Arab League has made a decision which is not yet known. The Arabs realize that their military forces are completely inadequate to war against even one of the powers. They understand that they can force the powers to much trouble and expense to establish a Jewish state in Palestine. Probable Arab action is to oppose a Jewish state in Palestine, if possible without overt war against the powers.

The Arabs are cognizant of the increasing difficulties between the Eastern and Western powers. They plan that if a World War II starts they will stay out of it. They believe that if that war comes the present powers will mutually exterminate each other. When this happens, and some think it will, the Moslem nations will come into their own, and Mahomedism will spread throughout the world. Mahomet prophesied that this would come about and it now looks as if the prophecy may be about to be fulfilled. These Arabs are hoping that World War III will commence as soon as practicable.

Comment. The decision of the United Nations to partition Palestine was intended to provide a peaceable solution by which Jews and Arabs could continue to inhabit that country side by side, with each race having whatever government it preferred. It was presumed that the two races would consider it hopeless to antagonize the United Nations, would accept the partition, and then cooperate.

Exactly the opposite of what was expected has happened. The Arabs have elected to defy the United Nations. Arabs and Jews have refused to cooperate and have, since the UN decision, intensified their hostile operations against each other.

This situation puts the United Nations in the position of having to do something to enforce partition. This means war, if undertaken. If not undertaken, the futility of UN decisions will be apparent. That will be an invitation in future cases to disregard them whenever they are unacceptable to a party in a dispute.

The Balm To End All Bombs

By M. Hoyle

THE air was bright and crystal clear, and a couple of the gods were lounging on a pink cloud, resting after a heavy meal and basking in the warm sunshine.

"Did you hear all the racket this morning?" enquired the fat one, adjusting himself more comfortably on the fleecy cloud.

"No, I just got back before lunch today," replied his tall, thin companion. "Been over in that new universe for a couple of eons—little troubleshooting job—one of the new planets got in a mixup with a satellite."

"Yeah, they always do get in some kind of a jam sure at first," said the fat god. "But this fracas this morning was the finish of that gold-plated little pest we used to call 'EARTH'—remember *that* one, don't you?" The fat god leaned forward and poked his companion in the stomach, for the thin form was relaxed and drifting off to sleep. The nudge roused him.

"Oh, *that!* What was the beef this time?" he murmured drowsily.

"Well," said the fat god, "you know there's been a hell of a big holler going up at HQ about the inhabitants of that little pill for a long time. Call themselves 'human' they do," he snorted scornfully. "So long as they kept fairly quiet and ran about the surface and killed each other off every year or so and all like that, why we thought we'd let it ride along, see?" He shifted his weight angrily and went on in an aggrieved tone. "And even after they learned to paddle around in the air a bit, and found out how to yowl at each other over that 'wireless' gadget they had, why it didn't hurt anything much. And even when they began squatting off into space in those little pea-shooters they called 'Rocket Ships,' it was bad—but still an' all—we let *that* ride too."

The speaker gestured toward the void below, and his voice rose irritably as he looked angrily at his companion. "But the other day," he rasped, "we found out they been messing around with them ATOMS! Weren't satisfied with the way we had 'em laid out, see? Well," he said after a pause, "you can see for yourself—it hadda stop!"

The thin god stirred and looked at the speaker. "Yep," he replied, "can't let that sort of stuff get going too far—might be dangerous." He paused and added, "So that was the row this AM, was it? So we bumped 'em off, did we?"

"Yeah," said the fat one shortly, "we did. And they made a hell of a lot more noise than I expected at that."

The thin god roused himself with some effort and peered over the edge of the pink cloud into the shining void. He spat reflectively through his front teeth, an accomplishment of which he was inordinately proud. "Seems to have left quite a hole down there," he remarked. "Think the management will ever make another one to go in that space?"

The fat god leaned back once more against the wooly pink cloud, yawned and pulled his halo down over his eyes. "Oh no—I hardly think so," he murmured, drifting off to sleep.

ILLUSTRATION CREDITS

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"Some books are to be tasted, others to be swallowed, and some few to be chewed and digested."—FRANCIS BACON.



Revolutionary Yarn

EAGLE IN THE SKY. By F. van Wyck Mason. 500 pp. J. B. Lippincott. \$3.00.

By A. Lincoln King

There have been a plethora of historical novels published recently, but from the standings of many on the lists of best-sellers, they apparently are most popular with the reading public. Some of these are distinguished by profound historical research, while the romantic element has seemed superimposed and artificial, as if it were a necessary evil. In others the romance is all important and references to history are casual and often careless.

In "*Eagle in the Sky*", the author has achieved a most satisfactory balance. The historical events are well ordered and well presented, and his familiarity with the customs and manners, speech and dress, of our Revolutionary period furnishes a background that is always sound but never oppressive.

The rest of the book is romance and high adventure. The story opens with the beginning of 1780, that dark year when the fortunes of our struggling colonies were at their lowest ebb. Their militia was discouraged and unreliable, their currency depreciated, their ports blockaded, and their Navy non-existent. The book ends with the surrender of Cornwallis at Yorktown after the defeat of Admiral Graves by de Grasse off the Virginia Capes.

A capable doctor is *persona grata* in any society today and this was even more true in the early days of our history. So our author has chosen wisely to have as his principal characters three young and gifted Bachelors of Medicine, and the story is developed by following their experiences during this period. Such a choice has enabled him to have at least

one present at the most important events which occurred.

Peter Burnham, forced to leave Boston hurriedly, joins a privateer bound for the West Indies. An excellent picture is presented of this important phase of our struggle, when in the absence of a Navy patriotism developed from rich profit. There is action aplenty, with sea fights and surgery, and at the end, by the ancient method of rescuing a damsel in distress, our hero finds his love.

Lucius Devoe, equally gifted but not of the same moral fiber as his two confreres, joins the medical department of the Army. From his career we are permitted to witness the sorry spectacle of Benedict Arnold's treachery at West Point. Impelled by material considerations, Devoe joins the British Army and serves with them until Yorktown.

Asa Peabody, after a necessary sojourn at his native Mochias, also serves with distinction in the American Army, and proves the stoutest of the three.

The lives and loves of these three provide a most interesting tale. The book is highly recommended as enteraining reading for that majority who prefer their history with a sugar coating.

Broad Military History

AMERICA AND WAR. By Col. Marion D. French, USA, Ret. 486 pp. Bibliography; appendix; index. Military Service Publishing Co. \$5.00.

By Col. John E. Coleman

Hundreds of histories of our country have been written. A good many of them have been specialized ones, emphasizing political developments, economic growth, military campaigns,

or the changes that occurred in our army or navy. Few of them, however, have made any pretense of touching on more than one central theme. This is especially true of single-volume works, perhaps largely because of the sheer mass of material involved.

Col. French has been singularly successful in filling a gap in our literature. Because of his background and interests *America and War* is of course essentially a military history of our country. But the author was not content to write merely "another military history." He wisely realized that troop movements and engagements are meaningless unless other current developments are kept in mind. Hence, throughout, he recalls briefly and ties into his main account the principal political events, economic developments, and geographical expansions of this nation. Furthermore, unlike most military historians, he understands the importance of our Navy and the role it has ever played in determining the strategic and tactical employment of the Army. Thus it is that the chief naval movements are also mentioned.

Seventeen eighty-nine, or 1775 or '76, is often taken as the starting point for histories of our country and of its institutions. Col. French, however, realizes that what we were has quite a bearing on what we are. Therefore *America and War* begins with 1492 and profitably devotes twenty-nine pages to a summary of the colonial period through 1774.

In short, then, we now have available for the first time a compact and truly comprehensive military history of the United States. Despite its brevity of style it is broad in its coverage. The narrative, especially of campaigns and battles, is crystal clear. Col. French's pithy style compresses events into so

few pages that the reader readily grasps operational plans and does not tend to lose sight of the forest because of the trees. It is, then, an excellent book for any officer's library, and one which R.O.T.C. instructors and students can use with profit.

All books, though, must have their flaws. In the case of *America and War* the major one is of omission rather than commission. There are no maps! On the other hand, it is much better to have to refer to an atlas than to attempt to use those faulty maps so often found—those with places mislocated, their names misspelled, or only part of the spots mentioned in the text shown at all.

This defect is more than balanced by the appendix, an outline discussion of "Conduct of War." Well reasoned, it serves as a good reminder in these twilight years of neither true peace nor active war.

Monty's War

NORMANDY TO THE BALTIC. By Field Marshal The Viscount Montgomery of Alamein. 351 pp. Maps. Houghton Mifflin Company. \$5.00.

By Maj. Gen. H. W. Blakeley, USA Ret'd

This is the first American publication of Marshal Montgomery's account of the Twenty-first Army Group's participation in the European campaign. The book was originally written, according to the author's April 1946 foreword, "to present, for study by the officers of the Rhine Army, a factual account of the part played by 21 Army Group in the conquest of Germany." He also says that he hopes that "the value of this story will lie in recording the factors and reasoning which gave rise to the more important operational plans and decisions within 21 Army Group." It is in this respect, exactly, that the value of the book does lie.

From the American viewpoint, General Eisenhower's "Report by the Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe," which covers the same period, is probably a more generally useful and appealing work, but the Field Marshal's book obviously has an interest for many other than the officers of the British Army of the Rhine, and particularly for

the many Americans who served under Montgomery. In all history, very few American commanders have ever had as many American troops under their command as Montgomery did. He commanded all of the American ground forces in Europe until 1 August 1944, and continued to exercise operational authority until 1 September 1944. Thereafter varying numbers of American troops were under his command, including the entire First and Ninth Armies during the Ardennes counteroffensive, up to the end of the war. There is no unfavorable comment on American troops or commanders. He says, without qualification, that "the battle of the Ardennes was won primarily by the staunch fighting qualities of the American soldier" and refers to "the splendidly steady American troops."

There is much sound professional thought clearly presented. Some differences in terminology will strike the American ear, of course. The Break-through becomes the Break-out and once, more surprisingly, it is referred to as a "break-in assault." In general, American units are named in accordance with American custom (Roman numerals for corps, for example), but the 7th Armored Division appears once as the "7 United States Armoured Division." The forty-six maps with diagrammatic presentations of the campaign are excellent.

There is little for the sensation seeker in this book. In the cases where the author disagreed with the Supreme Commander, he says so, in most cases at least, and gives his reasons. The single concentrated thrust to the Rhine as opposed to the advance on a broad front idea is an example. That disagreements should and did occur was inevitable, but Marshal Montgomery could ask no finer tribute to his loyalty to the Supreme Commander than that contained in General Eisenhower's letter to him in which he says that "it will always be a great privilege to bear evidence to the fact that whenever decision was made, regardless of your personal opinion, your loyalty and efficiency in execution were to be counted upon with certainty."



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National Destiny

THE PRICE OF POWER. By Hanson W. Baldwin. 361 pp. Harper & Brothers. \$3.75.

By Dr. Rudolph A. Winnacker

Any book by Hanson Baldwin is worth reading. You may not always agree with what he says and with how he says it, but his writings are always stimulating and deal with important current problems with which every citizen should be familiar.

The Price of Power is such a book. Here are marshalled together for the first time the essential facts dealing with our national security. The author sketches the problems we face in our foreign relations, discusses at length the strength and weakness of our military position, and comments on the economic and psychological problems we are currently encountering. He argues for a "defense-by-offense" strategy, for an intensified merger of the armed forces in which air has first priority, the navy second, but with the army "by no means neglected." He champions the Central Intelligence Agency as the hope of the future, the Research and Development Board as the great coordinator of all scientific progress, the National Security Resources Board as the arbiter between so-called civilian and military needs, and a civilian defense board which will direct the effort of preventing hysteria in a nation unable to disperse its industries. He believes that UMT in its present form will weaken rather than strengthen us and that by voluntary enlistment with better advertising we will have a more efficient force in being than by any other method.

All this, if done wisely, can be accomplished without upsetting the nation's economy. He is hopeful about the future, if we follow a middle road and aim at a balance of power, discarding our traditional isolationism, our utopian plans about world government, and the fallacious reasoning about preventive war. "If Western Europe can be restored to strength, political integrity and independence, Russian power, despite increases, will be more than balanced by the forces of the West." (p. 319)

This summary does not do justice to the many detailed aspects of the security

problem which Mr. Baldwin discusses with insight and understanding, nor to the debatable generalizations and conclusions which he introduces at inopportune moments. For some reason or other Mr. Baldwin has developed a phobia about the "military mind," which he has never concretely defined, but which he fears like the plague. In every aspect of national defense he sees the military subverting civilian control. The merger, the National Security Council, the Joint Chiefs of Staff, the military allocations to basic research, military officers in CIA, the Munitions Board, etc., all are suspect. Civilians can do no wrong, the military can do nothing right. Little in the record of the armed forces justifies such a superficial attitude. If it is to be total war, is it not about time that we stop thinking about military and civilian as if they were two opposed camps? This restraint is not only the duty of military men, as Mr. Baldwin points out, but also of civilians like Mr. Baldwin.

More should probably have been said about Mr. Baldwin's inclination to have his cake and eat it too, to shock the reader into attention by clever generalizations and then modify his statement in the following paragraphs or a footnote to fit the facts. To say, for example, "the big factories of America won the war" (p. 15) and explain later that this is "an oversimplification, purposely indulged in for the sake of clarity and emphasis" (p. 20) is hardly a fair procedure.

Despite these drawbacks, the book is full of essential data that the average citizen cannot obtain except by a most careful reading of hundreds of publications. Mr. Baldwin has rendered a great service by compiling into one volume most of the information necessary for the intelligent discussion of our national defense problem. This is a "must" book.

Navy Leaders

ADMIRALS OF AMERICAN EMPIRE.
By Richard S. West, Jr. 354 pages.
Notes. Index. Illustrations. Bobbs-Merrill. \$4.00.

By Richard Cordon McCloskey

Would that the Army had as lively and authoritative historians as have taken the Navy under their wing.

There have been some excellent books of Naval history recently, and some fine biographies. This quadruple biography of Dewey, Mahan, Schley and Sampson ranks with the best. Not only does their combined story build up to an exciting climax in Naval and American history, but the retelling of their era arouses an acute realization of the implications to us today of that first venture into world responsibility — the war with Spain.

A more dissimilar quartet it would be difficult to find: Dewey and Schley, the extroverts, Mahan and Sampson, the introverts; Dewey and Schley, the men of action, the popular heroes, loving the life at sea and basking in popular favor; Mahan, the unsocial student who became the greatest of all writers on sea power; Sampson, the scientist, the strategist, whose victory was clouded and whose life was saddened by the stupid but effective attacks of the Yellow Press. All were at the Naval Academy at the same time, each developed in different directions, and yet in many instances they affected one another—and all profoundly affected the destiny of America.

Richard West, an Associate Professor at the Naval Academy, has skillfully intertwined the biographies of these four Naval officers with the history of their times. He writes well, interestingly and with a pleasant touch of humor. I don't know why anyone with the least interest in America and war would not buy and read this book immediately.

POW Saga

BARBED WIRE SURGEON. By Alfred A. Weinstein, M.D. 310 pages. Macmillan. \$3.00.

By Dr. Louis Morton

Barbed Wire Surgeon is the latest in a series of volumes dealing with experiences of the men who fought so gallantly on Bataan and Corregidor, their capture by the Japanese, and their life as prisoners of war. The author has a fluid style and a feeling for effective phrases; he is well qualified to write of what he heard and saw. A graduate of Harvard Medical School, Dr. Weinstein joined the U. S. Army Medical Corps in 1940, volunteered for duty in the Philippines, saw action in Manila and on Bataan.

The first four chapters of the book deal with the campaign from 8 December 1941 to 9 April 1942, when the forces on Bataan surrendered. These chapters have only a limited value for those who are interested in military operations. There are minor errors in the naming of units, spelling of place names, and descriptions of the tactical situation. But for those who wish to know how the hospitals were run, the conditions under which our wounded received treatment, and the diseases from which they suffered, these pages have a vivid and bitter lesson to tell.

The rest of the volume deals with Dr. Weinstein's experiences in prison camps, where he served at times in a professional capacity, and sometimes as an ordinary laborer. Although Dr. Weinstein does not seem to have had as hard a time of it as many others, the picture he draws of prison life is, at best, one of misery and degradation. He saw with the trained eye of the physician the effect of Japanese brutality upon their captives.

The real value of this book lies, therefore, not so much in the description of the already familiar scenes of prison life, but rather in the author's descriptions of medical activities, the symptoms he observed in starved, beaten men who lived on the mere edge of existence, and the practices followed by doctors working under the most primitive conditions. Like all books of this type it has valuable lessons to offer: first, that we must pay a high price for unpreparedness, and second, that the dignity of the human spirit can survive the most brutal and degrading experiences.

Combat in the Air

SILVER WINGS. By Edwin L. Wilbur and Estelle R. Schoenholtz. 281 pages. Illustrated. D. Appleton-Century Co. \$2.50.

By John R. Cuneo

This book contains about sixteen tales of various adventures and achievements of members of the USAAF in World War II. They are told in the usual breathless, "red-blooded" style and differ only from the usual run of such books in that the stories are well chosen and better told.



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The book bears the authorization of the Air Force and seems intended to interest prospective applicants in that unit. There is no doubt that teen-agers will enjoy it and it is ideal for such a class of readers. However, the flood of such tales makes it hard for the adult reader to stay with such books. You should turn to it only if you are a glutton for aerial adventures.

Airplane Encyclopedia

JANE'S ALL THE WORLD'S AIRCRAFT 1947. Compiled and edited by Leonard Bridgman. 446 pages (not including advertisements). MacMillan. \$20.00.

By John R. Cuneo

This edition of the most widely-known and recognized air annual is better than its immediate predecessors. According to the editor there are a total of 630 illustrations of which 87 per cent are new, thus setting a new record. It is apparent from the photographs and their sources that the editor has made a vigorous effort to obtain an unusually wide coverage of types.

The illustrations are much clearer than those in the American edition of last year. The highly desirable outline drawings have returned and the silhouette style has been dropped. The number of such drawings is not as large as it might be but this may be due to the break-down of the illustrator, Mr. H. J. Cooper.

There is more information on civil aviation than on service aviation—indeed the latter has become a rather standardized section. Information on British and American jet engines (particularly the latter) has been increased. While Germany and Japan have been dropped, France and other small nations have reappeared. The sections on Russia and other lands in the Soviet sphere of influence are poor. The illustrations of Russian airplanes seem to have come largely from captured German files.

Unlike other annuals who make the impossible claim of being strictly up-to-date, this volume clearly states that its types and information had been corrected down to December 31, 1946. This frankness is what makes this annual particularly to be commended.

Irish Down Under

HARP IN THE SOUTH. By Ruth Park. 301 pp. Houghton Mifflin Co. \$3.00.
By Robert F. Cocklin

The Surrey Hill slums of Sidney, Australia, do not seem to differ substantially in their griminess and squalor from the ghettos in big cities all over the world. Betty Smith, in *A Tree Grows in Brooklyn*, depicted a mouldy decadence not at all dissimilar to the plot of this story.

The natural comparison of these two books stems from their focus on a poverty and struggle for existence that wears the same brand wherever it is found. However, each of these books has its own particular essence, and the reading of one by no means precludes the full enjoyment of the other.

In the absence of a strong plot, novels of this kind rely heavily on strong characterizations and these are not lacking in *Harp in the South*. This is the story of the Irish Darcy family, who live in a rickety old tenement. Hughie, the father, is a somewhat lovable though irresponsible rumpot, who firmly believes that a man forced into his circumstances richly deserves a go at the bottle, at least once a week. Mumma is the stanchion to whom the family is anchored. Long-suffering and religious, she never ceases searching for her lost son, Thady. Rowena, the eldest daughter, finally finds happiness in her marriage to Charlie Rothe after the tragedy of an earlier seduction at the hands of Tommy Mendel. While the characters of Dolour, the younger sister, Mr. Diamond and Miss Sheily, the two lodgers, are sublimated in the story, they are no less strongly written.

It is difficult to interject warmth and beauty into sordid surroundings such as these without lapsing into boorish sentimentality. Mrs. Park has done an admirable job of supplying the volatile emotion and violence which her setting demands and at the same time infusing among her principals an appealing warmth.

There are many bits of excellent writing throughout the book and several highly humorous passages that will evince a chuckle from the most hard-bitten

reader. The Sidney Morning Herald awarded *Harp in the South* a prize as the best Australian novel of the year.

Fame and Fortune

THE GREAT ONES. By Ralph Ingersoll. 208 pp. Harcourt, Brace & Co. \$3.00.

By Allen L. Otten

Ralph Ingersoll, as most Field Artillery Journal readers know, wrote two terrific books about World War II—one, the fine description of the African fighting, *The Battle Is the Pay-Off*; the other, the highly controversial "inside" story of the invasion, *Top Secret*. After almost 25 years of similar top-grade non-fiction writing, he has here turned his hand to his first novel. The same qualities that have made his non-fiction tops—a superlative reporter's eye, plus a good, crisp, newspaperman's style—raise this story several notches above the average novel.

This is basically a success story—a story of two contemporary Americans who have the Midas wish and the Midas touch. At the same time, it's a powerful commentary on the way of life in the topmost American financial stratum, on the publishing business, and on human beings in general.

In brief, this is the tale of Letia Long, who gained fame and wealth as a socialite, dress designer, and artist before she reached her thirties, and of Sturges Stong, who founded and made millions out of a newsmagazine called *Facts* before he was 28. They meet, love, marry, forget about love, and rise to even greater heights of fame and fortune.

This all makes for whooping good reading. Of course, there are some malcontents who whisper that Mr. Ingersoll hasn't written a novel at all, that he's still writing non-fiction. They point out that for many years, the author was a top executive in the Time-Life-Fortune empire, and that his main characters bear more than a casual resemblance to Timagnate Henry Luce and his playwright-congresswoman wife Clare Boothe. But of course, these are just malcontents, and any resemblance between his characters and the Luces is purely something-or-other.

Three Veterans

THAT WINTER. By Merle Miller. 237 pp. William Sloan Associates, Inc. \$3.00.

By Jean Coleman

Three veterans in an apartment in New York serve as focal points in the new Merle Miller book. Ted, who was born to a IV after his name and to unlimited wealth as well as loneliness, had found the war the best thing in his life. In it he found a purpose and a feeling that he was accomplishing something worth while. Lewis Cole was born Lewis Colinsky and had always been ashamed of it. His one aim was to get as far away from the family race and jewelry business as possible. Peter, who tells the story, came from Iowa to New York and hoped to be as well known as Dick Westing, also of Iowa.

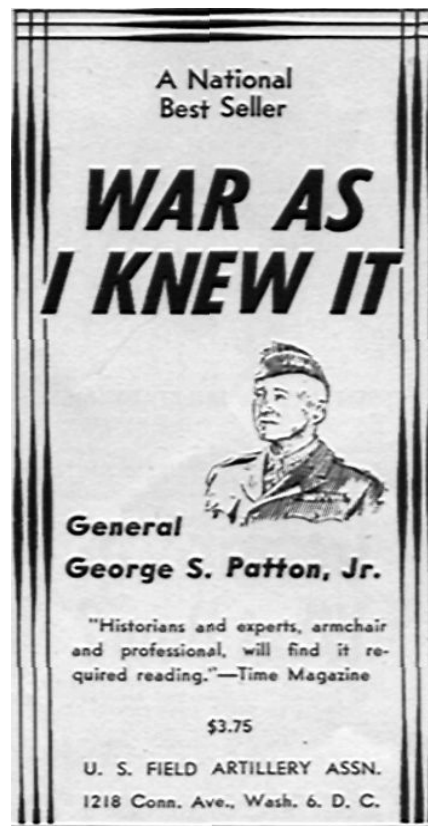
The book reads easily and tells the author's ideas of how these three young men went through a reconversion period of several months of the winter of '45. They seem to have needed a tremendous amount of liquor and no little amount of women to ease the period along.

Ted feels that never again will his life be worth much to himself or anyone else, and terminates it in surroundings that he feels represent the phoniest part of the world.

Lew finds that radio scripting won't, in the long run, change the pattern of his life, so goes home to California to enter the family business.

More space is devoted to Peter, who works for a weekly news magazine. His increasing unhappiness at the rut which stares him in the face is dealt with at length, directly and indirectly through flashbacks to his childhood or war experiences. The author seems to feel that Peter takes full blame for the death of a buddy of his in the war, and that that is the cause of all his uncertainty. The book ends as Peter starts for a little town in Mississippi to think it all out and to write his second book.

The characters are very numerous and are well drawn; the situations make for interesting reading—but how many veterans have been so situated that they could reconvert in the manner these three did or didn't?



This book will make a lot of people wish there were a law, to the effect that all avowed candidates for the Presidency should have to write books telling where they stand.—
JOHN HERSEY, *N. Y. Herald-Tribune*.



WHERE I STAND

By Harold E. Stassen

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Official U. S. Army History—W. W. II
THE ARMY GROUND FORCES—THE ORGANIZATION OF GROUND COMBAT TROOPS. By Kent Roberts Greenfield, Robert R. Palmer and Bell I. Wiley. *Historical Division, Department of the Army.* 516 pp. *index.* Government Printing Office. \$3.25.

By Colonel W. S. Nye, FA

The Historical Division has embarked on a 99-volume project which contemplates the preparation of a comprehensive history of World War II. It is to be divided into several sub-series, the volume under discussion here being the first of seven dealing with Army Ground Forces. Other sub-series will relate to the Air Forces, the Army Service Forces, technical and administrative services, and to narratives of combat within the various theaters of operations. The work began during the war, volume one having been printed originally as a set of six studies describing the origins and operations of Headquarters Army Ground Forces. The bulk of the writing appears to have been done by Dr. Palmer, now professor of history at Princeton. Professor Wiley of Louisiana State University wrote the last study; and Dr. Greenfield (Chief Historical Consultant, Historical Division) collaborated with Palmer on the first study. Thus the Historical Division had the services of skilled historians in the preparation of its initial volume; the resulting product is a strictly professional job.

It is not, however, a book for the general reader. Unlike forthcoming volumes of combat narrative, this represents the portion of the Historical Division's program designed to produce reference works, not necessarily exhaustive, which will be of value to students, historians, and to military researchers. A bibliographical note states that the book was prepared almost entirely from documentary sources. Fortunately, this is not entirely true; the authors were on duty in Headquarters AGF when they did their work, and they were able to consult freely with the various persons mentioned. A number of participants in the events apparently reviewed all or portions of the text. It is to be hoped that the Historical Division will resist any tendency on the part of

their writers to prepare the remainder of the series wholly from documentary sources. Such a work is liable to become merely a history of directives and plans rather than of deeds; it falls far short of portraying the truth. The officers and others who made the history should be subjected to exhaustive official interviews, and the results thereof checked carefully against written reports or other papers.

The book under review traces the origin of General Headquarters and shows how it lost its role as a planning and command agency to become a supervisor of training. The reorganization of the War Department in 1942 and the redesignation of GHQ as Headquarters Army Ground Forces are described, though not fully enough. There is a most interesting "inside story" in this somewhere, not yet told. Perhaps a forthcoming volume on the War Department will treat this more adequately.

Subsequent sections describe the activities of Hq AGF during the war; among the subjects discussed are the planning for and formation of the new divisions, the inception of the Tank Destroyer and Armored Forces, and other new developments which came into being during the war. General McNair's name appears on nearly every page; indeed, the book is a history of his activities and actually is a fine tribute to this distinguished Field Artilleryman whose great contribution to the war effort has unfortunately been obscured in recent years.

This reviewer was disappointed in the small amount of space allotted to the project for including light observation aircraft organically in artillery units. Possibly at the time these studies were prepared, the role of the Cub in combat had not been fully evaluated.

It seems to me that Dr. Palmer's statistical study of the Ground Forces during the period 1941-45 is particularly valuable. Doubtless considerable official use will be made of such sections; it is certain that general staff agencies and the service schools will be saved an enormous amount of research of their own, when formulating plans, policies or instructional material based on the

(Continued on page 104)

BOOKS IN COLUMN

By Major N. L. Drummond, FA

Increasing interest in Russia's role within the worsening international situation is reflected in the continuing series of books to interpret her motives, aims and capabilities. Two small recent publications are unusual in the clarity and force of their presentation: *How to Stop the Russians — Without War* by Fritz Sternberg (John Day, \$2.00), and *I Want to Be Like Stalin* (John Day, \$2.00) which George S. Counts and Nucia P. Lodge translated from an officially approved Soviet textbook. Sternberg has scored some remarkable hits in the past as analyst of economic and political world trends; his concise and graphic presentation of the current rising conflict between ideologies which represent—or at least make use of—clashing economic and social needs illuminates our present danger of committing ourselves to hopelessly reactionary groups as the price of essential opposition to totalitarian aggression. He illustrates the tragically futile result of a major war and pleads cogently for American progressiveness in terms which should convince many and provoke the thought of all. Counts and Lodge present a revealing sample of the methods and motivation employed in the Soviet school system today for educating—or indoctrinating—its youth. There is valuable commentary by the translators, but the book is primarily not another outside interpretation of processes at work behind the iron curtain but a direct presentation of the extremely national form of Stalinist communism now in practice. As such, it reveals future intentions as well as current thought. Both books have impact and brevity.

Several columns should be expended in treating *Sexual Behavior in the Human Male* by Alfred C. Kinsey and colleagues of Indiana University (ad on page 97). Based on a carefully conceived and executed program of confidential surveys supported by the National Research Council and Rockefeller Foundation funds, the book presents in non-technical text and elaborate tabulation a vast amount of factual material on a universally important subject which is generally clothed in terms of conjecture, prejudice and camouflage. Stark facts

are marshalled in meaningful groupings but interpretation is either scientifically objective and cautious or left to the reader. Its revelations teach much and will shock many; a remarkable gap is displayed between our legal, religious or social theories and demonstrable practices. The book should have a far-reaching effect upon current thinking and institutions; it is essential for the doctor, lawyer, church leader or any person interested in the human individual and community.

As the season for outdoor rifle-shooting approaches, several recent books on the subject are recommended. *Hatcher's Notebook* by Julian S. Hatcher, Maj. Gen., U.S.A. Ret. (Mil. Ser. Pub., \$5.00) is an elaborately illustrated treasure-house of detailed scientific and practical data on past and present military small arms by an outstanding world authority—readable yet on a highly technical general plane. F. C. Ness in his *Practical Dope on the .22* (Mil. Ser. Pub., \$4.00) does a similar, more generally usable job on development, ballistics and characteristics of the standard .22 and its remarkably plentiful high velocity variations. Novice or expert in target and varmint shooting should find this the last word necessary on its subject. The other angle on varmint and small game hunting — distribution and habits of the critters and practical gunning lore afield—is presented by Bert Popowski in *Hunting Small Game* (Macmillan, \$2.95). Here is a chatty, non-technical treatment, simply organized and by no means exhaustive, yet containing much usable information for the novice or intermediate hunter. A complementary book is S. R. Truesdell's *The Rifle: Its Development for Big Game Hunting* (Mil. Ser. Pub., \$5.00). In a field which has engaged the imagination of most men and the pens of hundreds, this handsomely organized and illustrated volume furnishes a splendid survey of the American pioneer role of the rifle and its hunting use for the past hundred years throughout the world. Graphic anecdotes of outstanding hunters add high interest to the book; a fine bibliography and tabled appendices contribute value.

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experiences of AGF during the war.

The reader will have to dig for certain interesting nuggets; but they are in the book, or are suggested. For example, even during the war Hq AGF expressed alarm over the gradual disappearance of the fighting soldier and the steady augmentation of the services at the expense of the combat arms. At one time General McNair warned that the fighting troops were vanishing so rapidly as to endanger the outcome of the war. Most readers will recall how a temporary relief measure was put into effect early in 1945. It might be observed that the former trend is still in progress. Another tidbit was the disclosure, new to this reviewer, that the Air Forces exerted powerful influence for the reorganization of the War Department in 1942, with consequent abolition of the chiefs of combat arms, because they saw their own promised autonomy slipping away. This is a subject (propriety of the disappearance of the chiefs of arms) which may properly be reviewed for discussion at this time.

The final chapter on reorganization for deployment will have to be read in conjunction with similar studies prepared in the major theaters—not yet published.

The Hull Story

CAPTAIN OF OLD IRONSIDES. By
Bruce Grant. 416 pp. Illustrations.
Pellegrini & Co. \$5.00.

By Richard Cordon McCloskey

This is the first complete, but by no means definitive, biography of Isaac Hull, captain of the Frigate *Constitution* during the War of 1812. Bruce Grant, a Chicago newspaperman, who has had access to Hull's hitherto suppressed account of the *Constitution-Guerriere* engagement, is considerably overwhelmed by his hero's virtues and abilities, and has him win the War of 1812 practically singlehanded. If this hero-worship approach, liberally larded with journalese and strained-for nautical terms, can be overlooked, the result is a fairly solid analysis of one of America's major naval commanders.

Hull and the *Constitution* entered the Navy together and saw service against France, England and the Barbary corsairs. The climax of their career was the victory over the *Guerriere*, which came three days after Hull's uncle had surrendered

Detroit. This gave American morale a sadly needed boost, and made Hull a hero. He went on to become one of the top ranking Naval officers of his generation.

Fun in Egypt (Illinois)

LO, THE FORMER EGYPTIAN! By H.
Allen Smith. Drawings by Leo
Hershfield. 212 pp. Doubleday and
Co. \$2.00.

By Allen L. Otten

There are two schools of thought on how H. Allen Smith should write. One school likes him brash and bawdy; the other prefers a slier and more subdued Smith. Readers belonging to the latter school will find *Lo, the Former Egyptian!* their meat. Those who prefer H. Allen Smith fast and slightly vulgar may find that it's poison.

In a foreword, Mr. Smith claims that *Lo, the Former Egyptian!* marks a break with his earlier "cute" titles—ones like *Low Man on a Totem Pole* and *Life in a Putty-Knife Factory*. This is true enough, for the title of this latest work is quite logical. Mr. Smith hails from that area of southern Illinois known as Egypt, and the book is an account—with proper Smithian digressions—of a trip back to boyhood haunts.

The book also marks, however, a serious change of pace from his earlier works. Everything is much more leisurely—the stories are told more slowly and more fully, the wacky personalities are fewer and farther between, the smut much scarcer, the points made with light taps rather than sledge-hammer blows.

There are laughs, of course. There are the Smith attempts to break his daughter of her Sinatra craze and his son of a Dale Carnegie period. There is the return to the Idle Hour, a pleasure resort near Huntington with many fond memories for Smith. There is Smith on staying with relatives, autographing books, and suggestions for improving the Indianapolis speed races. But my laughs were only small snickers—they were not the belly laughs with which I used to startle New York City subway riders when I read *Low Man* and *Putty Knife Factory* going to and from work some five or six years ago. You pays your money. You takes your choice.

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