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# **THE FIELD ARTILLERY JOURNAL**

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**Volume XV  
1925**

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**THE UNITED STATES FIELD ARTILLERY ASSOCIATION  
WASHINGTON, D. C.**



# THE FIELD ARTILLERY JOURNAL

VOL. XV

JANUARY-FEBRUARY, 1925

NO. 1

## ANNUAL REPORT OF THE CHIEF OF FIELD ARTILLERY FOR 1923–1924

### INTRODUCTION

THE measure of efficiency of a service is its preparedness to take the field. In reviewing the activities of the Field Artillery during the past year, occasion has been taken to refer to conditions as they existed in this service prior to, during, and immediately after, the World War, in order that a truer conception might be had of the relative efficiency of this arm at the present time.

Less than a year prior to the World War the Field Artillery of the Regular Army was increased from six to nine regiments. These nine regiments were located for economic or strategic reasons in various parts of the United States, and our insular possessions. As a result of this distribution, these regiments were not available upon the outbreak of the World War as training cadres, nor could they themselves undertake efficiently an expansion, as both enlisted and commissioned personnel necessarily were withdrawn in large part for the organization of new units.

The following figures show the expansion which may be expected upon the outbreak of a war. On April 6, 1917, there were 275 officers and 5253 enlisted men in the Field Artillery, with more than one year's service. On November 11, 1918, this service had 22,393 commissioned officers and 439,760 enlisted men. Conditions as regards artillery matériel and war reserves were even more appalling. On February 10, 1918, nearly a year after the declaration of war, conditions in the Field Artillery were so unsatisfactory, in fact chaotic, that the organization of an office to coördinate this important activity became essential, and accordingly the Office of the Chief of Field Artillery was organized, with Brigadier-General Wm. J. Snow, U. S. Army, as Chief of Field Artillery. This brief summary of conditions prior to the war is recited here in order that we may have a basis of comparison of conditions as they existed in April, 1916, with conditions as they exist today.

During the war, the field artillery functioned efficiently. Its record during this period is to be pointed to with pride. Its achievements stamp its importance. However, the relative importance of

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this arm in a modern battle is not to be gauged in figures. It is recognized that each of the separate arms is important in its rôle and necessary to a victory and none can be overlooked, nor can any one arm claim a relatively greater importance if victory is to be attained. However, the question of relative strengths of the various services in an engagement and relative casualties, both inflicted and received, are of vital importance in planning the organization of modern armies.

These are questions of outstanding importance as they effect not only the organization of units, but form the basis on which our peace plans must be formed in the enrolment of National Guard and Reserve Officers as well as Reserve Officer Training Corps Students, and Civilian Military Training Camp Students. The World War has furnished many valuable lessons in this connection.

Modern wars must be fought by nations as a whole. That is, all activities in the nation, commercial or otherwise, must be mobilized for the successful prosecution of the war. Whereas wars in the past were fought by armies of thousands, today they are fought by armies of millions. As a result one of the first considerations upon the outbreak or threat of war, is the training of the mobilized forces. Training in peace must therefore be so planned as not only to meet the requirements of a peace army, but must as well be susceptible of an expansion sufficient to meet the demands of war.

In no one respect was this country more unprepared in April of 1917, than in its inability to supply the machinery of war—guns, ammunition and reserve supplies. This condition would have reacted almost disastrously against our chances for an ultimate victory had the occasion demanded the immediate employment of our Army as a unit.

As previously stated, the efficiency of this service must be measured by judging to what extent the various demands which will be placed on it upon the outbreak of war, can be met. This report in brief, attempts in part to answer this question.

### PERSONNEL

#### REGULAR ARMY

##### *Commissioned Personnel*

Upon the outbreak of the World War in April, 1917, there were in the Regular Field Artillery, with more than one year's service—275 commissioned officers and 5253 enlisted men. Upon the termination of the war in November, 1918, the Field Artillery consisted of 22,393 commissioned officers and 439,760 enlisted men. In addition there were 13,605 students in the Field Artillery Central Officers' Training School in process of being made into second lieutenants.

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With the exception of this small regular field artillery personnel and the National Guard Field Artillery, there were in 1917, no other sources from which to draw trained field artillery troops. The natural result of such an expansion was to call upon the regular forces for trained personnel to undertake the training of the newly mobilized forces. This resulted in a temporary disorganization of our regular forces, which condition was augmented by the fact that these regular units themselves were called upon at the same time to organize additional regular units from the forces remaining. To meet such an expansion should be the paramount thought in undertaking a distribution of our regular forces during peace times.

The Reorganization Act of June, 1920, has, to a large measure, corrected this condition by providing additional officers for training during peace time, such units as the National Guard, Officers' Reserve Corps, Reserve Officers' Training Corps, etc. As the efficiency of these components of the army is increased, the demands for personnel from the regular troops in time of an emergency would be lessened. In fact, the ideal conditions would be such that in an emergency no additional demands would be made on the personnel with regular troops; this, in view of the large demands which will be made on the latter to organize their inactive associates.

The Act, referred to above, provided 1901 officers of field artillery exclusive of the Field Artillery's proportion of officers on the detached officers' list. This quota has never been provided, and as a result the efficiency of this service must suffer in direct proportion to this deficiency, in event of an emergency. Not only should this quota be kept filled, but every officer should be trained and fully competent in every way to handle the command which will fall to his lot in war.

On June 30, 1924, the number of officers in the Field Artillery, including those commissioned in the arm and those detailed for duty with it from other arms, was as follows:

	Colonels	Lieutenant Colonels	Majors	Captains	First Lieutenants	Second Lieutenants	Total
Commissioned in Field Artillery .	26	52	214	415	337	231	1275
Detailed from other arms.....	16	12	1	0	0	3	32
Total.....	42	64	215	415	337	234	1307

It has been the custom of the War Department for the past few years in publishing the allotment of officer personnel for various activities for the coming year to carry under the head of "Duty

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with Branch," only those activities of the Regular Army in which it seems to consider the Chief of Branch is primarily interested. This has doubtless come about due to uncertainty as to just where the line should be drawn when the new system was put into effect.

Sufficient experience has now been had to show that additional activities should be included in this group. The Chief of Branch necessarily is interested as much in seeing that these additional activities have the proper number of officers for their development as he is in seeing that the same is true of the activities which it has been customary to put in the category of "Duty with Branch." The additional activities which it is recommended be carried in the future as "Duty with Branch" are the National Guard, Organized Reserves and the Reserve Officers' Training Corps.

The degree of efficiency of these activities determines to a large extent the degree of preparedness of the field artillery service as a whole. The Chief of Field Artillery, through inspections and direct contact with these activities, has an intimate knowledge of their needs and should be charged in peace with the responsibility which he must assume in war of supplying adequate training personnel for these units. Particularly is this true as, in the event of an emergency, the result of any inadequacy of training of these components must react to the detriment of the regular units as the latter necessarily will be called upon, at this critical time, for additional training cadres which they will be able to provide only at a loss of their own efficiency with resultant delays in concentration.

The Chief of Field Artillery, after consultation with the Chief of the Militia Bureau, submits the table on the following page, as showing a proposed tentative distribution for the coming year of the regular commissioned field artillery personnel.

In considering these assignments, two things should be kept in mind—first, that the expansion which the Field Artillery will be called upon to meet in case of an emergency, will exceed that of any other service with probably the exception of the Air Service; and secondly, failure to provide this service with its full quota of officers reacts to deprive the National Guard and Organized Reserve of their full quota of field artillery instructors in time of peace, the result of which naturally is lessened efficiency and greater demand on the trained regular army field artillery personnel in time of an emergency.

From the table following, it is seen that the number of instructors which it is proposed to allot to the National Guard is 84. This is insufficient to meet the normal growth of the national guard field artillery.

At the present time there are 54 officers allotted to organized reserve duty. The proposed allotment of 75 officers for this duty

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as indicated in the table following is in itself totally inadequate. Eighty-four regular army field artillery officers should be on this duty at the present time. This number is necessary for the development of purely field artillery activities in the Reserves; it does not include the proportion of overhead which this branch should furnish.

DUTIES	Colonels	Lieutenant Colonels	Majors	Captains	First Lieutenants	Second Lieutenants	Total
Duty with Branch:							
Regular Army .....	17	21	95	306	270	231	940
National Guard.....	1	2	24	32	25		84
Organized Reserves .....	16	15	14	30			75
R.O.T.C.....		1	17	38	25		81
Duty with:							
G. S. War Department.....		11	5				16
G. S. with Troops.....	2	5	8				15
G. S. Attaches .....	1	2	1				4
War College—Staff .....	1	1	2				4
War College—Students .....	3	1	3				7
C. & G. S. Sch.—Staff.....		2	7				9
C. & G. S. Sch.—Students.....		2	30				32
Inspector Gen.'s Dept. ....	1	1	2				4
U. S. Military Academy .....			5	5	6		16
Miscellaneous Duties:							
Aides to Gen. Officers .....					8	3	11
Recruiting Service.....			1	1	2		4
Disciplinary Barracks.....			1	1			2
Foreign Languages.....				2			2
Battle Monument Board.....					1		1
Total.....	42	64	215	415	337	234	1307

No one activity in the Field Artillery is suffering more from lack of adequate instructor personnel than the field artillery R.O.T.C. In the proposed distribution of personnel given in the table, eighty-one officers are allotted to this duty. This number is inadequate to meet the important needs of this activity and should be increased immediately to one hundred and nine. The building up of the R.O.T.C. units is too intimately associated with the growth of the



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Officers' Reserve Corps and the proper development of our War Plans to be permitted to decline in strength and efficiency.

To be able to meet the demands made upon the Field Artillery for experienced officers properly qualified to develop the second and third lines of the national defense, one hundred and eighteen additional regular army field artillery officers are necessary.

The field artillery quota can be filled either by detailing officers from other services or by promotion in the service itself. If the

PROPOSED DISTRIBUTION OF ADDITIONAL OFFICERS

DUTIES	Colonels	Lieutenant Colonels	Majors	Captains	First Lieutenants	Second Lieutenants	Total
Duty with Branch:							
Regular Army .....	1				13	21	35
National Guard.....	3	4	6		11		24
Organized Reserves .....		6	6	19			31
R. O. T. C.....		2	3	5	6	12	28
Total.....	4	12	15	24	30	33	118

policy of detailing officers is to be adhered to, it should be assured that every officer so detailed is at once made available for purely field artillery assignments. If lineal promotion were to be adopted, the quota would automatically be kept filled and trained field artillery officers would be assured. If the detail policy is to be adhered to, a longer course at the Field Artillery School for detailed officers should be inaugurated.

Regarding existing regulations pertaining to the assignment of officers to stations, it is the opinion of the Chief of Field Artillery that such assignments should be a direct function of the War Department rather than of the various corps areas. In many instances where replacements are being made, the assignment of officers to stations by the War Department results unavoidably. In instances where vacancies existing in corps areas are filled by the assignment of officers to corps areas by War Department orders, considerable delay must result in determining the amount of mileage funds obligated by the corps areas in assigning such officers to their stations, and no opportunity is afforded the responsible chief of service for effecting an economy in mileage, if such were possible. A change in policy as suggested above would in no way interfere with the ultimate assignment of officers according to the wishes and desires of the corps area commanders and would, on the other hand, save

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considerable mileage, avoid delays in assignment, and save unnecessary correspondence.

Under the law as now written, the payment of mileage is charged to the fiscal year in which the travel is actually performed. In both the General and Special Service Schools the terms are so arranged that travel must be performed by the students at the end of the fiscal year, the start of a new fiscal year or during both fiscal years. As a result great difficulty is experienced in keeping mileage accounts straight and when orders are issued requiring that the travel be executed in one or the other of the fiscal years, it frequently works a considerable hardship on the individual concerned. As a result, either mileage funds for the fiscal year are over-obligated, or unwarranted inroads are made on the allotted mileage funds for the new fiscal year. Always a confusion of accounts results.

It is believed that it would be of advantage to the government and convenience to the individual if the law relative to this matter were changed so that mileage funds would be available for payment of mileage, directed in the travel order, until three months after the close of the fiscal year in which the funds are obligated. This would cover all temporary duty at training camps to which practically all graduates of schools are immediately sent.

In addition to the foregoing phases of the field artillery personnel question, there are certain other aspects to which I desire to invite especial attention.

All four divisional field artillery brigades are commanded today by brigadier generals who have never served with this arm until attaining their present rank. In other words, they did not grow up with the arm and hence are unfamiliar with the minutiae of its operation. Realizing that before assuming command they should know something about the technique of field artillery, they were sent to the Field Artillery School for a short course of instruction varying from two to three months. Experience has shown that this length of course is entirely inadequate. It is no reflection on these general officers whatever, to say that upon their assumption of command and for some time thereafter they lack sufficient technical knowledge to further the efficiency of their commands. They are earnest men of ability, honestly striving for efficiency; but I think they themselves would frankly admit their deficiencies in detailed knowledge of their new arm. I think the War Department's idea in so detailing general officers, appointed from one arm to command troops of another arm, is that such experience is invaluable to the general officers concerned. In this I agree. It is excellent training for a general officer, but the effect on the troops is, in many instances, the exact reverse.

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In this procedure, it is assumed by the War Department that the deficiencies in technical knowledge on the part of the general officer will be supplied by his staff. But at best a staff can merely make suggestions—their adoption or rejection rests with the general. As a result the recommendations of the staff officers are frequently tempered by consideration of the favorable or unfavorable effect of their recommendations upon the general. This effect may be reflected later in their annual efficiency reports when made out by the general. As a result it is only human to expect that consideration of the effect of their recommendations on their efficiency reports will influence them to suggest adoption of measures which they know the general favors rather than measures which they know to be for the best interests of the command and which they suspect the general does not favor.

Again, the general necessarily brings ideas from the arm in which he has grown up, to his new arm. Some of these are impracticable of execution in the field artillery, or can be practical only at the expense of much more important field artillery omissions. The result of these factors is at least uncertainty in the field artillery, and generally lack of leadership. Leadership can come only from the top down—not from the bottom up.

The alternating in command of field artillery brigades, of general officers of field artillery experience with general officers lacking such experience, would in a measure correct the conditions mentioned above.

### *Enlisted Personnel*

No one thing has mitigated against the efficiency of the Field Artillery as much during the past year as the serious shortage of enlisted personnel. Early in March, 1924, a regiment of field artillery submitted a report showing one enlisted man for duty. This condition has improved greatly during the last few months, but the effect on the Field Artillery has been serious, and still continues.

It is self-evident that conditions of living in a unit at full strength are more attractive, other things being equal, than in a unit with less than fifty per cent. strength. It is equally self-evident that the securing of enlistments for a reduced strength unit is proportionally more difficult. Conditions such as this have existed in the Field Artillery during the entire year.

Of all arms of the service the one which outstandingly should not be allowed to run down in enlisted strength is the Field Artillery, and yet it is the Field Artillery which has continuously been allowed to run down in strength. Any recruiting system which acts this way is radically at fault. A field artillery organization is a machine wherein the enlisted personnel have a wide variety of duties, *i. e.*, each man has his particular part in these duties, generally different

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from that of the other men. Each man is thus a cog in the machine, and like any other machine, to operate effectively all the cogs must be present in the machine. In addition this arm has vastly more equipment to care for than any other arm with the consequent result that any considerable shortage of enlisted personnel results in a heavy burden of fatigue on the remaining men in merely caring for the equipment. The men being thus overworked become disgusted and upon the expiration of their terms of service, either do not reënlist or reënlist in some other arm at full strength where the work is much lighter and the pay the same.

In addition to the effect which such a condition has on the efficiency of a unit, it also affects the status of preparedness of a service for duty in an emergency. Every man who passes through a full enlistment of three years is an asset in event of an emergency regardless of whether he reënlists or leaves the service. And where a service is deprived of its full quota of enlistments covering a certain period its preparedness suffers accordingly. This has been the case with the Field Artillery.

The table on the following page, shows the comparative percentages in strength of the various arms during the past year.

It is at once seen from this table that when the Field Artillery was but 71.4 per cent. of its total strength in the month of January, other services were overstrength. This is a matter going to the very foundation of the efficiency of the Field Artillery. In my last Annual Report, I enclosed a table showing that with the exception of four months, the Field Artillery had consistently been shorter in enlisted strength than any other arm during the entire year. I hoped this would be corrected. But it was not. Again this year we have been allowed to drag along and the table herewith shows us still to be worse off than any other arm. And yet this situation is easily remedied.

To correct this condition I recommend that when a service falls below 75 per cent. of its strength and there are other services approximating full strength, that enlistments in the latter services be stopped when they reach 90 per cent. of their full peace strength and be not started again until the weaker service has reached 90 per cent. of its quota. It is believed that a report from the various recruiting agencies would show that the selection of a service by a recruit is influenced, in more than fifty per cent. of the cases, by the recruiting authorities. If this is true, the policy as recommended should unquestionably be adopted.

Contributory causes for the under-strength condition found in the Field Artillery were stressed in the Annual Report of the Chief of Field Artillery for 1922–1923, and it is still believed that these causes, in part controllable, still maintain. They should be corrected.

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**PERCENTAGES OF AUTHORIZED ENLISTED STRENGTH**  
(Philippine Scouts Not Included)

	July	August	September	October	November	December	January	February	March	April	May	June
Infantry .....	86.7.	84.5	83.4	83.6	82.7	83.0	82.4	83.2	86.0	87.8	90.3	93.5
Cavalry .....	89.3.	88.9	88.5	90.6	94.4	101.0	104.8	104.6	102.2	99.8	96.9	95.4
Field Artillery .....	79.1.	77.7	76.4	75.1	73.7	72.7	71.4	72.9	75.8	77.8	80.1	84.7
Coast Artillery .....	94.3.	93.6	90.9	90.2	89.9	91.9	95.2	98.7	104.2	110.1	110.7	117.1
Engineers .....	85.6.	83.9	81.9	81.8	80.6	82.7	85.6	89.1	94.3	97.7	98.8	102.8
Air Service.....	97.7.	101.2	104.4	108.8	113.6	119.7	118.0	115.4	113.4	112.7	112.4	112.9
Signal Corps .....	94.1.	93.9	93.2	94.7	94.2	97.1	100.2	102.5	103.0	103.1	105.9	106.0
Quartermaster .....	98.6.	99.0	99.1	99.8	102.7	108.0	109.1	109.7	108.0	106.9	106.1	106.7
Ordnance.....	94.1.	93.1	91.3	90.6	91.9	93.4	95.2	96.5	99.7	102.3	103.3	105.9
Finance .....	96.2.	96.7	95.4	95.7	93.4	95.4	98.5	98.0	100.8	101.8	100.5	102.8
Chemical Warfare.....	81.6.	78.8	78.9	77.5	80.4	83.1	85.8	86.1	85.2	85.6	92.6	94.2
Medical Department .....	90.8.	89.8	89.1	88.6	91.0	93.5	92.6	93.6	96.5	98.8	101.3	103.7

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## NATIONAL GUARD

Upon the outbreak of the World War, the National Guard Field Artillery consisted, theoretically, of twelve brigades. These twelve brigades had, however, been organized only in small part. Actually there were only some 541 officers and 12,975 enlisted men. The expansion as a result of the war called for 3247 officers and 79,917 enlisted men.

At the present time the National Guard Field Artillery consists of eight brigades of divisional field artillery and ten regiments of corps artillery, with a total strength of 2159 officers and 30,209 enlisted men.

The ideal situation as regards these units will be reached when the expansion which they must undergo in an emergency can be attained without calling on the regular army for trained instructors other than those at the present time allotted to the National Guard. This can be hoped for only if the full quota of regular field artillery instructors is maintained in time of peace and the efficiency of the individual units is maintained at a high standard.

Instructors with the National Guard should be graduates of our service schools, if the best results are to be obtained. Regiments and lesser units should be provided with graduates from the Field Artillery School, while brigades and higher units should be provided with graduates from the Command and General Staff School, and the Army War College. The present quota of regular officers allotted to these schools will not permit of attaining this result and accordingly the quotas in each instance should be increased until this ideal condition is attained.

### OFFICERS' RESERVE CORPS

The following table shows the status of the Field Artillery Section of the Officers' Reserve Corps:

Total number of Officers June 30, 1923 .....		8729
LOSSES		
Died .....	14	
Transferred .....	96	
Discharged .....	137	
Dropped .....	2	
Resigned .....	23	
Declined Reappointment .....	2555	2827
GAINS		
Regular Acceptances .....	1446	
Transferred .....	120	
R.O.T.C. Acceptances .....	421	1987
Total June 30, 1924 .....		7889

The organization of this component of the Army of the United States marks the greatest forward step in preparedness since the

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foundation of this country. Upon the outbreak of the World War the only approximation to an organization of this kind was the training being conducted at Plattsburg. None of this latter training however, was applicable directly to field artillery *per se*.

The fact that 2555 reserve officers declined reappointment is disquieting. However, it should be noted that this number included

DISTRIBUTION OF OFFICERS IN F. A. O. R. C.

DUTIES	Colonels	Lieutenant Colonels	Majors	Captains	First Lieutenants	Second Lieutenants	Total
Branch Assignment Group .....	4	11	65	219	158	72	529
General Assignment Group .....	2	2	5	3	2		14
Total in B. A. G. & G. A. G.	6	13	70	222	160	72	543
Territorial Assignment Group:							
1st Corps Area .....	9	12	37	79	133	356	626
2nd Corps Area .....	11	20	70	154	178	453	886
3rd Corps Area .....	3	7	34	86	148	537	815
4th Corps Area .....	5	9	42	67	137	360	620
5th Corps Area .....	5	5	19	77	124	417	647
6th Corps Area .....	7	7	58	104	145	450	771
7th Corps Area .....	8	11	38	78	144	368	647
8th Corps Area .....	2	6	28	108	116	369	629
9th Corps Area .....	9	14	40	91	149	431	734
Panama Canal Zone .....			1	1	3	5	10
Hawaiian Department .....			1	1	2	5	9
Philippine Department .....			1	2	4	23	30
Total .....	59	91	369	848	1283	3774	6424
Dual Commissions in Reserve Corps and National Guard .....	36	29	68	339	318	132	922
Grand Total .....	101	133	507	1409	1761	3978	7889

400 who were not offered reappointment, and about 2000 who were not officers during the World War, but were in the Field Artillery Central Officers' Training School at the signing of the armistice and were consequently graduated and given reserve commissions. A study of the declinations received shows that the two principal reasons for this action are pressure of business in civil life and increased family responsibilities.

A conservative estimate would place the number of reserve field

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artillery officers, necessary in event of a major emergency, at over 20,000. Considering the present enrolment, it is apparent at once that every effort should be made to increase the strength of this component. To do this the full quota of regular army instructors should be maintained with the Field Artillery Officers' Reserve Corps Units, and particular attention should be paid to the sources from which reserve officers are drawn.

The present status of the Reserve Corps, with its large number of officers who have had extensive experience in the war, cannot be maintained unless trained personnel is secured to make good the losses. Two sources are available, the Reserve Officers' Training Corps units now established at various universities and colleges, and the Civilian Military Training Camp Students.

### RESERVE OFFICERS' TRAINING CORPS

Twenty units of the field artillery R.O.T.C. are now in operation. The total enrolment at the beginning of the last semester of the academic year, 1923-1924, was 6434 as compared to 6069 for the same time in the preceding year. While this indicates a substantial increase, it does not show fully the progress being made. This is shown better by the gain in advanced students as indicated below:

Advanced Students 1922-1923 .....	1095
Advanced Students 1923-1924 .....	1299

As the only tangible asset resulting from the operation of these units is the student who completes the course, the gain in advanced students is particularly encouraging.

The importance of these units as a part of our plan of preparedness cannot be overestimated. The instruction given is thorough in every particular and those graduates who receive commissions are without question well qualified to perform their duties as junior officers, in so far as technical knowledge is concerned.

While concurring in the accepted policy of decentralization, I desire to take this opportunity to point out two features of decentralization,

	I Distribution as it should be Per cent.	II Distribution as it is Per cent.	III Percentage of proper requirements Per cent.
Infantry .....	31.6	64.9	205
Field Artillery .....	25.0	11.6	45
Coast Artillery .....	5.6	7.1	127
Cavalry .....	3.8	4.3	113
Engineers .....	8.5	5.6	66
Air Service .....	12.9	1.4	11
Signal Corps .....	1.5	2.8	193
Ordnance .....	2.2	1.0	45
Quartermaster Corps .....	8.9	1.3	15
	100.0	100.0	



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as applied to the R.O.T.C. units which, in my opinion, are detrimental to the best interests of these units. The first has to do with the question of enrolment. This feature is discussed in the chapter on Training to which attention is invited in this connection. The foregoing table will suffice to show the impracticability of securing an equitable distribution of these students if the various corps areas are to be charged with this duty.

The second question concerns the location of summer encampments. The tendency under the policy of decentralization is to hold summer encampments for the R.O.T.C. units in the particular areas in which the units are located. In following this particular policy, advantage is not taken of the psychology of competition which obtains where students of various institutions are placed in a single camp. Experience in many field artillery R.O.T.C. camps has proved the value of this combined training and as a result it is urgently recommended that, where feasible, this policy of combined training be adhered to. A reduction in the number of these camps will, in addition to many other obvious advantages, assist greatly in solving the difficulties caused by the limited number of regular organizations available for these camps. In each of five of the nine corps areas in the territorial United States, there is but a single battalion of regular field artillery. In each area this small unit is called upon for duty in assisting in the training of Reserve Officers, the National Guard, the C.M.T.C. and the R.O.T.C. A concentration of the R.O.T.C. activities of certain contiguous corps areas would effect a material saving in regular personnel and actually increase the efficiency of the training and do so without affecting, materially, the control of the corps area concerned.

Much dissatisfaction has, of late years, been evinced towards the system of selecting distinguished colleges. The matter has been the subject of considerable study in this office and I desire to renew my recommendation that the practice of attempting to designate the twenty-five best units be discontinued. Student military training has expanded so greatly beyond its state of development at the time this practice was originally instituted, that it is no longer regarded as practicable, with the large number of units and the limited time available for their inspection, to equitably determine those really entitled to be rated as distinguished. An inspection of such a large plant in the space of two days, forces the board to superficialities and to determine largely by appearance.

### CITIZENS' MILITARY TRAINING CAMPS

The recent policy of conducting camps for civilians, with the ultimate end in view of producing officers for the Officers' Reserve Corps and trained civilians available in emergencies, has produced

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most creditable results. An important result of these camps, which must not be overlooked, is the experience being derived by regular and reserve officers in conducting civilian candidate classes—a knowledge which should prove of vast importance in the event of an emergency.

Should not the ultimate idea of the C.M.T.C. be to develop a spirit of patriotism and interest in the defense of the nation, rather than to qualify those who take these summer camps as reserve officers? The short period of training which these students undergo would indicate an affirmative answer to this question. As a matter of fact past experience in some camps, where the commanders apparently had the idea that they were to demonstrate what they could do with these men in thirty days most intensive training, has had the effect of keeping these men from returning to subsequent camps. Rather should these camps be conducted as an institution where young men on vacation may receive a course in good citizenship and physical development.

It would seem therefore that the object of the C.M.T.C. should be above all to spread the doctrine of patriotism and interest in the preservation of our present institutions.

The military training which the candidates will have had in the C.M.T.C., will make their further development much easier and they will be in a position to materially assist in training the other men who may happen to be associated with them in the organization formed in an emergency from the draft. Considered as a source for building up the Officers' Reserve Corps, their basic training in field artillery subjects cannot be considered in any sense as on a par with that received by the R.O.T.C. graduates.

In brief, we should seek to develop a large corps of patriotic young men who will be in sympathy with the purposes of the service and consequently anxious to adapt themselves to military training and discipline when the time comes for their services.

The C.M.T.C. movement is a most worthy one and this year is meeting with more success than ever before.

### TRAINING

#### REGULAR ARMY

It is a recognized fact that the function of command must be the basis of training for commissioned personnel. Instruction given at the special service schools is to amplify the training derived from serving with troops, and to standardize methods.

The great value of training with troops, however, rapidly falls off where the enlisted strength of an organization drops below that necessary to carry on its military duties. The officers on duty

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with an organization depleted in strength fail to derive anything like the full benefit which that type of training offers. Such are the conditions at the present time in many field artillery regiments; more generally so in the West than in the East. In fact, one of the regiments in the 9th Corps Area is unable to maintain even one of its six batteries at workable strength by skeletonizing the others. If regiments in such straits are maintained at full peace strength as to commissioned officers, the time and services of many of these officers cannot be spent to the best advantage.

I believe that the wisest action, where such a situation exists, is to decrease temporarily the number of officers serving with such a regiment and increase proportionately the quota of student officers at the Field Artillery School. In this way officers who would otherwise be serving with depleted organizations and with greatly curtailed opportunities for training, will be devoting their time to the best advantage and to the best interests of the service.

It is, therefore, recommended where field artillery organizations remain for six months or more below 60 per cent. of their authorized enlisted peace strength, that the commissioned strength of these organizations be temporarily reduced by one-third and that the quota of student officers at the Field Artillery School for the year be increased proportionately. This is a temporary expedient, to be put into effect only when the service is far below strength. However, a condition calling for such action existed during the period covered by this report.

Prior to the World War units were enabled, with few exceptions, to devote the entire year to their own training. This resulted in a continued state of efficiency such as to permit of all units being able to take the field at any time. Since the war it has become necessary for the regular units to devote the most valuable training period of the year, the three summer months, to the instruction and training of the other components of the army. This limits the regular units to outdoor training during the fall and spring. Under these conditions, in order that the best results may be obtained, it is essential that all regular field artillery units be enabled to train for at least a month prior to their summer camps with their full strength, unhampered by calls from higher sources for fatigue parties, etc. This modest program is considered essential, not only that the units may appear in camp as models for the components of the army with which they will train, but also in order that they may be able to give efficient instruction to those components. It is recommended that the War Department give expression in orders to this policy.

The following figures will serve to show why such a policy is essential if any degree of efficiency is to be expected of field artillery

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units in the summer training. These figures are for the year 1922–1923:

Field Artillery organizations in the continental United States were on the average 69 per cent. of peace strength. The average present for drill was 47 per cent. of the actual strength. The average present for drill was 37 per cent. of peace strength.

Field Artillery units with only 37 per cent. of their peace strength present for drill can never reach a satisfactory degree of efficiency in training.

### THE KNOX TROPHY

The Society of the Sons of the Revolution of the Commonwealth of Massachusetts has for several years generously offered a bronze trophy to the battery of regular field artillery which showed the greatest efficiency in service firing during the year. Experience of the past two years has shown that the batteries stationed at the Field Artillery School, owing to the large amount of firing they are called upon to perform for the students of the school, have such a decided advantage over the other batteries in the service as to preclude any possibility of competition on equal terms. This spring the donors of the Knox Trophy were asked, in view of the above, to change the terms of the competition, which they did.

Beginning with this year, the Knox Trophy will be given annually to the battery of field artillery which has demonstrated its superiority in mobility, fire power, communications and interior economy. In other words, the best all-around battery. Through preliminary elimination the number of batteries to take the prescribed test is narrowed down to about twenty. Each of these batteries then is given the final test, the terms of which have been worked out carefully in this office. This final test is designed to demonstrate in a very thorough manner the relative efficiency of each of these batteries in the four essentials named above, and is designed to be equally fair to batteries of all calibres and types of motive power. In general the test will occupy about two days' time and require the competing batteries to perform most of the technical operations which they might be called upon to carry out under actual war conditions. By varying the best from year to year, we are enabled to emphasize those features of training which our inspections show are in greatest need of improvement. It is believed that the Knox Trophy competitions will be of the greatest value in raising the general efficiency of our batteries, not only through the stimulus of competition which they will engender, but also through the deficiencies which they will disclose. The competition this year will at least set before the eyes

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of the army a standard to be arrived at; and such a standard is badly needed at the present time.

### NATIONAL GUARD

During the spring of 1924, a representative of the Chief of Field Artillery visited a considerable number of organizations of the National Guard Field Artillery. As a basis for these visits, organizations of divisions considered by the Militia Bureau to be the furthest advanced in organization and training were selected. This was carried out, but the visits also included other organizations, such as certain corps artillery.

The following opinions are submitted, based upon these visits:

(a) Where National Guard organizations are concentrated in the larger cities, such as Chicago, for example, it is possible to give very good instruction. While separate organizations in small towns attract a very desirable class of enlisted men, the cohesion of the regiments and battalions is poor. They meet only at the summer training camps for fifteen days. Under these latter conditions it is entirely impracticable to conduct officers' schools and instruction, due to two causes:—first, the regular army instructor has not sufficient travel allowance to make his visits continuous; and second, it is manifestly impossible to assemble the officers for regular instruction. That the officers need all the instruction that can be given one night per week, and a vast amount in addition thereto, cannot be disputed. Many of them get none at all, except by some type of correspondence course conducted by the regular army instructor.

Much weight is given to the war experience of some of the officers. Officers with such experience are a great asset; however, the number of such officers in the National Guard will grow less and less as time goes on. The regular field artillery has a large number of officers whose first service was war service, and it has been found necessary at Fort Sill, Oklahoma, to start these officers in at the very bottom to insure developing them into balanced field artillerymen. Such steps are still more essential in the National Guard.

In many cases, organization commanders are selected because they have the necessary personality and prestige to give them a following sufficient to build up an organization to maintenance strength quickly, and to maintain it at that strength. While such qualifications are necessarily inherent in leaders, nevertheless, other qualifications are essential to the efficient commander, namely—knowledge of field artillery and capacity to master the requirements of that branch.

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(b) It has been found that instructors detailed with national guard organizations distributed over large areas, have not enough work to do. Such instructors should be given additional travel allowance and work connected with the Organized Reserves. In addition to the constructive work which they might accomplish toward improving the Organized Reserve, there would be another advantage which will be brought out in a later paragraph.

(c) The turn-over of enlisted men in national guard organizations is very large, so large that the average amount of instruction each individual gets is very small. It is impossible to give such a turn-over in figures, but if desired this could be obtained from the Militia Bureau. There is also quite a large turn-over of officers.

(d) The National Defense Act of 1920, made a great step forward in improving the National Guard. This improvement is most marked in the care of equipment. Where paid caretakers are provided the animals and matériel are generally well kept, even where stabling and storage facilities are not good. In the matter of training, however, it is impracticable with the time allotted to do more than to adhere to the rudiments of instruction as far as the enlisted men are concerned. As for the officers, an increase in the number sent to Fort Sill, Oklahoma, would result in great improvement.

This should not be taken as an arraignment of the National Guard. It is not intended as such. It is intended as a portrayal of conditions as they exist. National guard officers will agree with the statements made. Among many, however, there is a feeling of optimism and self-confidence, which is not warranted. One cause for this is the question of rating. Reports of federal inspections frequently rate organizations as "satisfactory." This term is a dangerous one to use. These reports are correct if the term "satisfactory" means that considering the time and facilities available good work has been done. But if such a report means satisfactory with reference to combat service, nothing could be more dangerous. And "satisfactory" is so interpreted in many instances.

What is desired is a real evaluation of the national guard units, so that they may take their proper place and be given their proper weight in our War Plans. Instead of reporting "satisfactory," a far better scale would be one based upon time as a function. For example, an answer to the question: "How long will this (battery, battalion, regiment) require to be fit for combat, assuming that it has its personnel and equipment?"

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To answer this question, the following would be given weight:

- Type of officers;
- Type of noncommissioned officers;
- Type of privates.

The first of these is of greatest importance as it must be realized that the making or training of an officer takes the most time. Based upon such a rating, properly coordinated, certain divisions of the National Guard could then be designated as those first ready for immediate service in the line. From then on the other divisions could be concentrated upon with a view to their rapid development and preparation for early entry. It might be advisable, in time of peace, to make certain national guard organizations inactive, just as certain regular organizations are now,—this with a view of concentrating upon those organizations which are further advanced in organization and training, or which permit of rapid development. In other words, it would be far better to have nine divisions with a rating of 75 per cent. efficiency, than eighteen with a rating of 50 per cent. at the beginning of hostilities.

Summing up, the following points are recommended for serious consideration and study:

- (a) Methods to improve the standard of national guard officers, and to require greater technical efficiency from them.
- (b) Selection of best national guard divisions with a view of concentrating time and money upon them with a view to increasing their value as combat troops.
- (c) Adopt as the "figure of merit" the time which will be required to put the national guard organizations in the line, properly trained for combat.

During the visits made by the officer from this office, he was directed to obtain information as to the progress of reserve organizations; to talk to as many assemblages of reserve officers as possible; and to form an opinion as to how the "One Army Idea" was working out, in so far as the Field Artillery is concerned. The one army idea is well known and accepted as correct in principle. However, the carrying out of this idea in practice is reported upon as unsatisfactory. Instead of there being a close harmony between the National Guard and the Reserve, there exists in large part a complete lack of understanding and sympathy between these two elements of the army. Exceptions to the above are found, but only in sufficient number to prove the rule.

In so far as the regular army officer's activity in this connection is concerned, much has been done in the way of talks on the subject,

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but little can be hoped for in correcting this condition as long as the officers on organized reserve duty and those on national guard duty have very little to do with each other officially. This same condition is believed to exist at higher headquarters.

As our army really consists of two components, the regular army and the citizen army, it is recommended that a study be made with a view to having all our officers on duty with the citizen components, both at corps area headquarters and with organizations, handle both national guard and reserve affairs. It is probable that conditions outlined above as existing in the Field Artillery exist in the other branches.

### OFFICERS' RESERVE CORPS

Training in the Officers' Reserve Corps at the present time consists of a course of conferences during all but the summer months, which conferences are limited to those large centres where a group of reserve officers can be assembled; a correspondence course available to all reserve officers, and summer training of fifteen days, available only to a restricted number. In addition to the above, a few reserve officers annually receive training at the various General and Special Service Schools.

The conferences first referred to are of necessity limited to theoretical discussions and map problems. There being no matériel made available to this component of the army, naturally it can receive no technical training.

The summer training in the past has followed generally the same lines as the training by conference, with the exception that the problems are worked out on the terrain instead of on the map. Such a course of training has many merits in that it is in itself a most valuable course to pursue, is adaptable to large classes, and obviates the necessity for distribution of matériel which is practically impossible from a financial point of view. However, it is believed that better and more far-reaching results would be obtained if the summer course could be so changed as to include practical instruction in gunnery and service firing. It is appreciated that this is not practical in all summer camps by reason of the great shortage of regular personnel to assist in this form of training, but where it is practicable, its adoption is recommended.

At present many 3-inch batteries are being released from field artillery R.O.T.C. units, and can be placed at summer camps for reserve officers; a large amount of 3-inch ammunition is still available which can be used in service practice by these officers. Where 75-mm. batteries are available for this instruction, they should be used; but this is rarely the case. Corps area commanders should



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therefore take steps to provide their camps with the available 3-inch guns, using trucks to place these guns in position from which they can be fired. I am satisfied that practical field artillery work for our reserve officers at the summer camps will do more than anything else to maintain their interest in military work and to assist them in keeping themselves prepared.

Every effort should be made to improve the strength, morale and efficiency of this component of the army. For the field artillery component it is believed that these ends can be accomplished best by introducing practical field artillery instruction in summer training.

### RESERVE OFFICERS' TRAINING CORPS

These units, established since the war, offer a most fruitful source for building up the Officers' Reserve Corps. The instruction which these students receive fits them in every way to undertake the duties of commissioned officers.

The following table indicates the number of reserve officers made available from the various R.O.T.C. units since 1921:

	1921	1922	1923	1924
Tendered Commissions .....	99	296	394	
Accepted Commissions .....	85	288	385	421
Certificates of Eligibility Issued .....	13	29	48	39

A small percentage of these students do not accept commissions. However, in a national emergency it may reasonably be expected that such students would accept commissions, in which case their previous training should tend to make them immediately available as reserve officers and accordingly they can be so considered theoretically.

Under the present policy of decentralization the institutions training R.O.T.C. units function directly under the various corps areas. Accordingly the enrolment of students in the various service subjects taught at the institutions is a function of the corps areas. This should be corrected. The enrolment should be controlled directly from the War Department and should be based on the proportionate strength of the various services in organizing an army for a major emergency. To illustrate this point, consider the 1st Corps Area where the enrolment of field artillery students as compared to infantry students is as one to four. In the 7th Corps Area the proportion is as one to nine. Taking all units in the United States together, the enrolment is as one to nine. Actually it should be in the ratio of four field artillery to five infantry. This can be obtained only by centralized control of enrolment as distinguished from decentralized control.

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The necessity for increasing the output from these institutions, which can be obtained only by increasing the quota of trained instructors on this duty, has been referred to above, and is urgently recommended. As additional considerations in determining the strength of enrolment in the various service units, are the questions of type of institution and nature of civil as opposed to military studies which the students are pursuing. As regards the first of these considerations, it is appropriate that institutions such as medical or veterinary institutions should be in large part, if not wholly, given to medical and veterinary R.O.T.C. units respectively. However, as applied to the second consideration, it is at once apparent that services such as the medical and veterinary corps, where the major part of the officer's duties are concerned with those subjects which the officer makes his life study, both in school and professionally after graduation, there is no need for an enrolment in proportion to the strength of the unit in an army organization.

I renew my recommendation of some months ago, that this question of enrolment in R.O.T.C. units be given careful study and be so centralized as to produce results in keeping with the requirements of a mobilization for a major emergency.

Insufficient regular personnel, both commissioned and enlisted, to carry out efficiently the programs of instruction at the various R.O.T.C. units, and provide for the increasing strength of these units, is to be noted as the most outstanding drawback to their continued efficient progress.

At the present time there are eighty-one field artillery commissioned officers on this duty. The present enrolment of students in the field artillery units of the R.O.T.C. calls for one hundred and nine field artillery instructors. They should be with the units now. Lacking this number the standard of these units must fall.

The necessity for supplying an adequate number of instructors for our R.O.T.C. units was fully discussed in the last annual report of the Chief of Field Artillery. The needs of these units were set forth fully and recommendations looking to improve conditions were submitted. It was again pointed out some months ago. Favorable action on these recommendations was hoped for but none has been obtained. The seriousness of this question cannot be unduly stressed. The effect is far reaching. The Field Artillery Officers' Reserve Corps is inadequate in strength and must be built up if our present war plans are to be considered seriously. The R.O.T.C. units are the only reliable source for building up the Officers' Reserve Corps, and if we permit our R.O.T.C. units to decline in efficiency we strike at the basis of our plans for preparedness. This office can build them up if allowed to do so. It is hoped that this condition

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will be appreciated and that prompt and appropriate action on these recommendations will be taken.

### THE FIELD ARTILLERY SCHOOL

Training at the Field Artillery School is considered of incalculable importance, not only in developing the individual students in the technique of artillery, but in the standardization of field artillery training as well. Considering the limited number of officers who have the opportunity to serve with troops compared to the period prior to the World War, the importance of this school to personnel of this service must at once be apparent.

The school is organized into a Headquarters, and Departments of Gunnery, Tactics, Animal Transportation, Matériel and Enlisted Specialists.

During the past school year six classes of officers completed courses. These courses were as follows:

- (a) Battery Officers' Course (Regular Officers),
- (b) Advanced Course (Regular Officers),
- (c) Two courses for field officers detailed with Field Artillery for four years (Regular Officers).
- (d) Two National Guard and Reserve Officers' Courses.

The Battery Officers' Course has been drawn, as the name implies, to cover those subjects which are considered essential for captains and lieutenants serving with batteries. During the year the course has been well balanced and the results obtained have been most satisfactory.

In the Advanced Course the number of field exercises involving firing has been increased. These field exercises form a most important part of the course, as they permit the student to apply practically, under actual field conditions, the theoretical courses which he has followed during the year. The national guard and reserve officers attending the School have been given assignments on these exercises corresponding to those they occupy in their own organizations. The adjustment of fire by aerial observation and the transmission of firing data by radio from forward observation posts have been given special attention during the exercises held this year. The use of aerial photographs in the preparation of fire has been continued this year and gratifying results have been obtained.

The National Guard and Reserve Officers' Courses were patterned closely after the Battery Officers' Course. A high standard of officers composed both the National Guard and Reserve Officers' Classes this year, and the results of their work was, as in the past, most encouraging.

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Five classes of enlisted men completed courses during the past school year as follows:

- Horseshoers (Regular Army and National Guard),
- Saddlers (Regular Army),
- Battery Mechanics (Regular Army),
- Communications (Regular Army and National Guard).

The following is a brief summary of the number of students attending the various classes during the last school term:

Battery Officers' Course .....	86	regular army officers and 2 officers of the Cuban Army
Advanced Course .....	33	regular army officers and 1 officer of the French Army
National Guard and Reserve Officers' Courses .....	78	national guard and reserve officers
Course for officers detailed with the F. A. for four years .....	12	regular army officers
Enlisted Specialists' Courses	65	regular enlisted
	24	national guard enlisted

The First Field Artillery and the Battalion of the 18th Field Artillery, which have heretofore constituted the School Troops, were augmented by a battalion of the 20th Infantry, which arrived at Fort Sill, Oklahoma, on June 7, 1923. This battalion of infantry has been of great value to the school in assisting in imparting instruction in troop leading and in demonstrating the essential liaison between infantry and field artillery.

With the assistance of the air service unit, retained at Fort Sill, forty-nine field artillery officers completed the course in aerial observation and satisfactorily conducted fire of various types from the air. This is considered a very important element of field artillery training, and it is hoped that as a result of this training a better and more efficient system of communication between the air plane and ground will be perfected.

The question of securing suitable field artillery horses for the Field Artillery School, and for the School Regiment, is of great importance. The batteries at this station should at all times be properly equipped, organized and horsed for the reason that they serve as a model for not only the regular officers attending this school, but for the national guard and reserve officers as well. Animal management and equitation must of necessity suffer at the School unless a satisfactory type of horse is provided. Individual mounts should

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be the hunter class, half-breed or better. Provision for the partial supply of suitable mounts has been arranged during the last few months, and as a result improvement in appearance and training is anticipated.

To improve equitation in the Field Artillery, it is considered essential that a riding hall be provided at Fort Sill. As a temporary expedient, it would be practicable to utilize an air service hanger for this purpose if one were made available. It is urgently recommended that this matter be given immediate and favorable consideration.

In drafting the permanent building program for the army, the value to the service of the Field Artillery School, not only in preparing for an emergency, but during an emergency as well, should recommend the essential needs of the school being given an advanced position on the priority list. The present buildings are rapidly becoming unfit for occupancy and in their present condition represent a serious fire hazard.

During the past term the Cavalry Service has coöperated with the efforts of the Field Artillery School, by detailing a cavalry instructor on the school staff. This step has benefited materially the course of instruction.

The coöperation of the Air Service in the four days' problem, held at the close of the school term, was of the greatest advantage to those who participated in and witnessed these problems. Appreciating the essential need of the closest coöperation between the Air Service and the Field Artillery, and in order to advance the training of these services, it is recommended that the air service unit, on duty at Fort Sill, be increased to a full squadron, and that a balloon unit be added. At the present time there is insufficient air service stationed at the School to carry on the desired course of training which is considered essential.

There is a situation existing, which, I think, the War Department and chiefs of branches possibly, fail to realize, relative to our school system. In general, the system is sound. In the General Service Schools, where officers of all arms meet as students, the training is for higher command than the rank at present held by the students. This is excellent training for war, and criticism cannot well be against it. In the Special Service Schools, pertaining to a particular arm, the training of the officer is toward efficient handling of troops of his own particular arm. This, also, is excellent; especially as the officer is taught the handling of both peace strength units, and war strength units. But it should be recognized that existing conditions require a third class of training which is not now being given. I

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refer to the fact that with the reduced strength of the Regular Army, and with the small maintenance strength of the National Guard, and the absence of any enlisted strength in the Organized Reserves, some system of training of the officer on duty with a skeleton organization is necessary.

Officers now completing a course at a Special Service School join their organizations, filled with high purpose and with a mind fully made up to put into practice the knowledge acquired at the school—and thus in a short time show what a real live and efficient organization is. But they have no more than joined when they find that instead of commanding a unit with a table of organization strength, they have but little more than a skeleton organization to work with. The officer's ground scheme collapses and the average officer becomes discouraged. The result is, that he naturally falls into the easy way of simply taking whatever falls to him as being all in the day's work, and his further development and improvement stops. Even worse than this is his reaction against his late school. He is apt to think that a lot of the things he has been taught as practical, are in reality merely theoretical, in that they presuppose the existence of an organization, while in reality he has no real organization to handle. In some cases the officer jumps from one extreme to the other, and he thinks that the school he has just left has missed the mark entirely. He thinks that not training, but fatigue, is the normal practice for enlisted men. And not training, but paper work or athletics or some other side issue is the normal practice for officers.

This condition, thus briefly sketched by me, should be recognized, and our courses at schools revised so as to contain a well worked-out scheme, showing how training can go forward with a skeleton organization containing only the key men. I think this is the greatest problem before us in the way of training at present.

The attendance of all officers of this service at one, or both, of the courses now being conducted at the Field Artillery School, is without question an essential element in their training. The proportion of the officers of this service that have completed these courses is in part a measure of the preparedness of this service to meet an emergency.

### TRAINING REGULATIONS

The preparation of Field Artillery Training Regulations is progressing satisfactorily. The issue of "Tactical Employment of Field Artillery," T.R. 430-105, marks the completion of all the really essential regulations.

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The following table shows the status of the Training Regulations which are being prepared by this service:

Number	Title	Status
T.R. 430- 10	Minimum Specifications	Not started.
T.R. 430- 15	Service of the Piece, 75-mm. Gun, 1897	Printed.
T.R. 430- 20	Service of the Piece, 75-mm. Gun, 1916	Printed.
T.R. 430- 25	Service of the Piece, 75-mm. Gun, 1917	Printed.
T.R. 430- 30	Service of the Piece, 155-mm. Gun	In hand of printer.
T.R. 430- 40	Service of the Piece, 47-inch Gun	Not started.
T.R. 430- 45	Service of the Piece, 105-mm. How.	Not started.
T.R. 430- 50	Service of the Piece, 8-inch How.	In hands of printer.
T.R. 430- 60	Service of the Piece, 240-mm. How.	Manuscript completed.
T.R. 430- 65	Service of the Piece, 155-mm. How.	Printed.
T.R. 430- 70	The Firing Battery	Printed.
T.R. 430- 75	The Field Artillery Driver	Printed.
T.R. 430- 80	Manœuvres Limbered	Printed.
T.R. 430- 85	Field Artillery Firing	Printed.
T.R. 430-100	Field Artillery Instruction and Training	Being prepared.
T.R. 430-105	Tactical Employment of F.A.	Printed.
T.R. 430-130	The Observation Battalion	Not started.
T.R. 430-155	Reconnaissance and Occupation of Position	Printed.
T.R. 430-160	High Burst and Flash Ranging	Preliminary survey made.
T.R. 430-165	Dismounted Drill and Ceremonies	First draft completed.
T.R. 430-170	Camps, Marches and Field Equipment	First draft completed.
T.R. 430-175	Gunners' Examination for F.A.	Under review by G.S.
T.R. 430-180	Transportation by Rail and Water	Under study.
T.R. 430-190	F.A. Officers' Handbook	Not started.
T.R. 75- 90	The Tractor Driver	Manuscript completed.
T.R. 430-115	Pack Artillery	Manuscript completed.

### FIELD ARTILLERY PUBLICATIONS

#### *The Field Artillery Journal*

The United States Field Artillery Association has been rendering a service to which I desire to call attention. While this Association is not an official instrument of the Government, its active membership is composed largely of men who are identified with the interests of the Army through their commissions in the Regular Army, the National Guard or Officers' Reserve Corps.

THE FIELD ARTILLERY JOURNAL, published by the Field Artillery Association, has through the detail of one active regular officer and through the military interest of the members, been able to keep close liaison with field artillery interests and to disseminate field

## ANNUAL REPORT OF CHIEF OF FIELD ARTILLERY

artillery information among field artillerymen. Due to the unofficial status of the Association, the discussions in the JOURNALS, attractively presented, are free from the finality of expression of government publications. The views presented differ from time to time from what may be the accepted policy, but the presentation of both sides of a question serves the useful purpose of inviting free discussion which tends to promote progress.

### *The Field Artillery Information Bulletin*

Since 1918, this *Bulletin* has been issued monthly by this office. Being sent to each commissioned officer of the Regular Army, National Guard and Officers' Reserve Corps, it has served a very useful means of communication with the members of this arm. It contains official data and official announcements of activities within the Army and particularly the Field Artillery. Discussions of topics of current development are included to a sufficient degree to keep officers informed in current progress. Through this means instructional matter is presented to National Guard and Reserve Officers, which is not only useful to individuals but forms the basis for conferences and organizational instruction.

### FIELD ARTILLERY EXPLORATIONS IN THE PHILIPPINE ISLANDS

During the past year the 24th Field Artillery, stationed at Camp Stotsenburg, Philippine Islands, has conducted extensive explorations into the country west and northwest of that camp. The object of these explorations was to improve the artillery target-range, and to open up a trail from Camp Stotsenburg to the west coast of the Island of Luzon. A reconnaissance of the proposed trail by way of Mount Pinatuba has been completed and it is expected that the trail will be completed and mapped within a year. As far as is known, these are the first troops to reach the summit of the Pinatuba. The importance of this pioneer exploration work by the pack artillery in the Philippines cannot be overestimated. Such work keeps this artillery in excellent condition for actual field service and the opening of this trail providing a ready means of approach to the west coast should prove of material value to commercial interests as well as to the military. During the last year the 24th Field Artillery completed a march over the old government road, known as the "Eba Trail," from Camp Stotsenburg to Olongapo by way of O'Donnel. Jungle growth had obliterated in large part the old government road, constructed in 1902, and as no troops had traversed it for more than ten years, the construction of an entire new trail was found to be necessary.



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### FIELD ARTILLERY EXPLORATIONS IN PANAMA

The pioneer exploration work of the 24th Field Artillery in the Philippines has been duplicated in Panama by the 4th Field Artillery. During the last year numerous trips into the jungle have been made by the different batteries of the 1st Battalion, 4th Field Artillery, stationed at Gatun, Canal Zone. One such trip constituted a crossing of the Isthmus of Panama by one complete battery. This is believed to be the first time that any organization of the American Army has marched entirely across the Isthmus. The object of the trip was to determine the feasibility of transporting artillery from the Atlantic to the Pacific by means of pack transportation. The march was accomplished after twenty-three days of most difficult going, after enduring many hardships and after surmounting many seemingly unsurmountable obstacles. The total distance traversed was less than sixty miles, but the time required to complete the march was twenty-three days. On some days only a few miles could be made due to the difficult terrain which had to be traversed and to the large amount of bridge building and clearing of jungle growth which had to be done by the men of the battery. A great amount of valuable data was obtained as to the terrain, topography and hydrography of the Isthmus of Panama which should prove of inestimable value in preparing the future defense plans of the Panama Canal.

*(Continued in Next Issue)*



# **ONE THOUSAND MILES OF SUCCESSFUL MARCHING BY "F" BATTERY, TWELFTH FIELD ARTILLERY**

BY LIEUTENANT REX E. CHANDLER, 12TH F.A.

"THE question of mobility of field artillery is a vital one. . . In the future no officer should be rated a well equipped artilleryman who is not thoroughly conversant with every detail, both theoretical and practical of that part of artillery upon which so much depends—the high degree of mobility demanded of our light guns."—

Lieutenant-Colonel Fred T. Austin, F.A., November 5, 1920.

The essentials of mobility, care and condition of horses, proper adjustment of harness, the principles of draft, may be taught in garrison, but their vital importance to mobility can only be driven home by day after day of long hard marches. In the thousand miles of marching recently completed by "F" Battery, Twelfth Field Artillery, every essential element in mobility was utilized. A review of the salient points of this successful march will bring out many items of interest to the field artilleryman, especially to those who have but lately joined the artillery.

In March of this year one battery from the Second Field Artillery Brigade was ordered to Fort Sill, Oklahoma, for use as a training battery during the R.O.T.C., C.M.T.C., and O.R.C. camps. "F" Battery, Twelfth Field Artillery was chosen to make the march.

On the 15th of March this battery received its orders. April 15th it returned from Camp Stanley, where it had been participating in the tactical and technical firing of the regiment, to prepare for the march. Recruits had been coming in to the battery since the 15th of March in groups of from two to six, totalling sixty-five in all. These had to be drilled as cannoneers and trained as drivers. Sixty new horses had to be drawn from the Post Remount Depot to bring the battery up to strength. These had to be paired, gaited, and conditioned. When the battery left Fort Sam Houston it was virtually a recruit battery.

The policy of the battery commander was short marches for the first week out—a gradual hardening and conditioning of both men and horses. Constant supervision and the closest attention to details were demanded of both officers and noncommissioned officers throughout the entire march.

The battery arrived at Fort Sill on the 31st day of May in excellent condition. Practically every horse was in the place in column

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where he started May 1st. Throughout the entire march no sore necks, injuries or harness abrasions developed worthy of mention. The horses had lost but little weight which was remarkable as the average age of the battery was fifteen and one-half years. The following points show how this exceptional standard of condition was maintained:

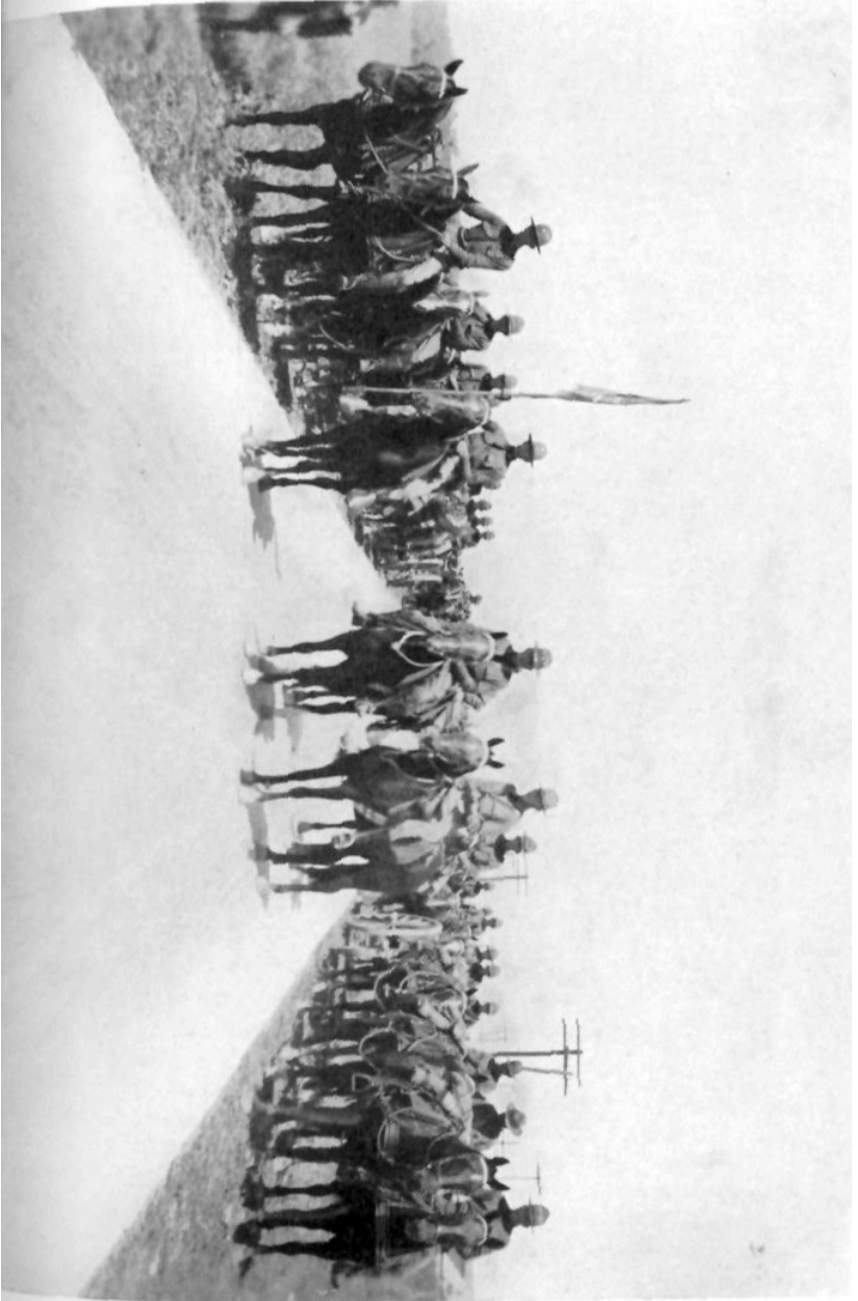
No halt was a rest halt for the men, every man worked. The drivers, immediately upon halting, unloosened cinchas, removed the collar and massaged the necks and shoulders of the "near" horse, a cannoneer working on the "off" horse.

Frequent sponging out of the eyes, nostrils and docks was found to greatly refresh the horse.

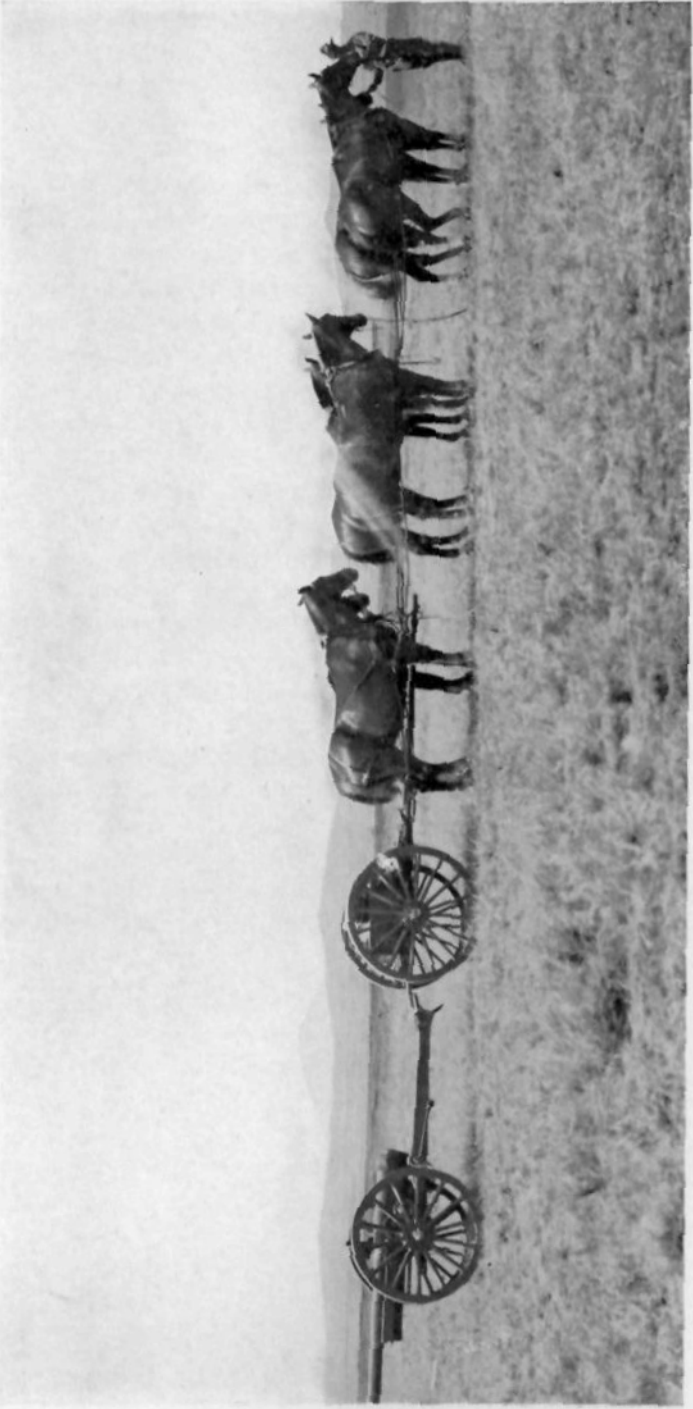
Watering was regular four times each day, in the morning, at noon, during the afternoon stables, and at 7:30 in the evening. When the length of the march required feeding on the road the horses were, when practicable, watered an hours march ahead of the noon halt. Where possible city water was used. The light, cavalry, canvas, watering trough was indispensable for this purpose. It could be quickly set up near a fire plug, rapidly filled, easily taken down and carried in an escort wagon. Upon numerous occasions the entire battery of one hundred and thirty horses and twenty-two mules was watered and on the road again in twenty minutes using only six of these light tanks.

At the four o'clock stables every horse was gone over carefully. The slightest abrasion was reported to the Veterinarian.

The entire harness was carefully adjusted, especial attention being paid to the neck strap, neck yoke, and "hold-up" straps. Harness galls and abrasions were cured without taking the horse out of harness. In the case of a touchy neck a long collar strap was used, removing the collar pad and placing the strap over the pommel of the saddle. This was used only for a short period as continued use might produce fistulous withers. A new experimental collar pad, built upon the principle of the aparejo, was used with excellent results upon the wheel horses, in similar cases. At the first indication of a sore shoulder or breast collar abrasion the offending portion of the harness was covered with sheepskin, or the neck strap adjusted to change the point of pressure until the sore had time to heal. In the case of sore backs or saddle boils the saddle was removed and placed upon the footboard of the caisson and the horse, if a near horse, was changed to the off side. Where a wheeler became injured he was placed on the off side and the back strap joined



READY TO MARCH AFTER A NOON HALT



THE EXPERIMENTAL SKELETON HARNESS

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to the collar pad strap by a coat strap or a loin strap to hold the breeching in place. Cincha sores and breeching rubs were easily taken care of by a slight adjustment of the quarter and hip straps.

A sick line for horses off feed was established. They were given hay at the regular afternoon feeding time. At midnight the guard fed them grain and in almost every case they ate and were in good condition for the next days' hike. Most cases of failure to eat were due to over-fatigue. After about six days of hiking the necessity for this sick line passed.

Every animal in the battery was shod at least once during the march. The battery horseshoers set up forge and anvil as soon as we reached camp and seldom quit before it became too dark to work.

In practically every case of sore neck, or sores generally, that developed, the primary cause was poor driving or improper adjustment of harness. Especial emphasis was placed upon the proper adjustment of the side strap. The brakeman was so trained that the first shock of a down grade or a decrease in gait was not taken up by the neck strap. The neck yoke neck strap was so adjusted as to keep the pole horizontal or slightly above the horizontal. While keeping strictly to the right of the road the drivers were never allowed to put the outside wheel in soft dirt or in the ditch. It was found that where this was allowed the resistance encountered by the right wheel created a diagonal pull and consequently a chaffing of the neck and shoulders. The driving squad was held to be the chiefs of carriage, the three drivers and the brakeman, and upon them was placed the responsibility of proper draft.

The battery spent a very successful summer at Fort Sill, performing in a willing and efficient manner all the duties required by the R.O.T.C., C.M.T.C. and the O.R.C. camps, constantly looking forward to the return trip and preparing to make it even more successful than the march north.

During the summer, upon observations made during the five hundred miles of marching in May, Captain J. Kennedy, commanding the battery, made certain modifications of the present harness. These changes were based upon the principles that weight carried on wheels behind a horse causes less trouble, less worry to the horse, than when carried upon his back, consequently increasing his pulling ability; that skeletonization in harness eliminates numerous causes of harness galls and abrasions; that the essential equipment of a draft horse is a collar with a pair of traces.

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The modifications in detail were:

- a.* Elimination of choke strap, collar strap, back strap with attachments, rein roller and strap.
- b.* Elimination of off saddle.
- c.* Addition of loin straps for lead and swing sets.
- d.* Addition of cross back straps for the wheel set, rear ends secured to the breeching body, forward ends snapped to the breast collar rings.
- e.* Addition of trace loops snapped to the martingale ring to hold up the martingale.
- f.* Remodelling of the reins. Reins for both horses were made of two pieces of three-quarter inch strap four feet and two feet in length respectively. The short piece carried an "H" buckle, the long piece was punched in a series of holes at the end and in the middle. The riding reins were adjusted at one of the end holes in the end series of the long strap so that the reins were held in full hand about eight inches from the body. The off reins were adjusted on the centre series so that with the lash in the bridle hand the reins bore equally on the bit.

Complete sets of this harness for the entire battery were made by the battery saddler. The harness was given a thorough and exhausting trial on the return march. In every respect it proved decidedly advantageous. The horses came in notably fresher after using it than when the regular harness was used. The labor incident to the care of the horse and the harness was reduced to a minimum. It was quickly put on and removed. At the noon halt it was removed entirely and the horses tied to the wheels of the caissons and pieces, free from the tiring weight of harness. While marching the saddle could be changed from the near to the off horse without loss of time. During the hot afternoons the saddles were placed upon the trails of the piece and caisson and the drivers and cannoneers walked alongside the horses. This left the horse free from weight, carrying only the essential collar and traces. In two days of marching between Hillsboro and Fort Worth, Texas, nearly seventy miles were covered using this harness. The road gave it a severe test. Numerous detours were made due to extensive road reconstruction so that every type of highway was encountered from slippery pavement to dusty, rocky trails. The freshness of the horses upon arrival at camp upon both these days was notable. Through the use of the harness the battery was able to make the return march with even fewer harness abrasions and less loss of condition than on the trip north.

Equipped with the new experimental harness, the harness and men in excellent condition, the battery painted and polished until

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it shown like new, the morning of September 5th the battery left Fort Sill for the long trek to the south. Conditions climatically were less favorable than in the spring for marching. The days were hotter and it had not rained for weeks. Water was scarce and the roads disagreeably dusty through southern Oklahoma. Once across the Red River and in Texas marching conditions improved, water could be had almost as desired, the roads with few exceptions were in excellent condition. Hay and grain were of better quality and more easily obtained than in the spring. The health of the command was without equal, an injury during an exhibition drill at the Central Texas Fair being the only casualty. While on the march the daily routine as followed by the battery was:

Revielle .....	5 A.M.
Feed grain .....	
Mess .....	5:30 A.M.
Stable and water call .....	6:15 A.M.
Boots and saddles .....	6:45 A.M.
Assembly .....	7:00 A.M.
When the march was over 20 miles in length:	
Water (approximately) .....	1:30 A.M.
Lunch and food .....	11:30 A.M.
Arrive at camp at 2:30 approximately.	
Pitch camp at once.	
Stables .....	4:00 P.M.
Water and feed grain .....	5:00 P.M.
Conference of officers and noncommissioned officers.	
Mess .....	5:30 P.M.
Water call .....	7:30 P.M.
Taps .....	11:00 P.M.

A complete, model tent camp was pitched each day, camp site permitting.

The return march was spread out over a period of six weeks with intermediate stops at the Hill County Fair, the Central Texas Fair, and the Texas State Exposition at Austin. These intermissions did not mean a rest for the horses. They were used daily in extremely strenuous and difficult exhibition drills. Despite its length in time the last five hundred miles proved the best part of the journey.

October 15th the battery left its scheduled route of march and moved to Camp Stanley, Texas, to represent the Second Field Artillery Brigade in the competition for the Knox Trophy. In the test march for this trophy it was brought out that the essentials of mobility can only be taught by day after day of marching. The day of the test march broke with a light drizzle of rain falling. Heavy rains in the night had softened the roads considerably. The march was scheduled for 7:30 A.M. It was postponed. At 9:10 A.M. it was decided to go ahead. The horses were immediately watered,



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harnessed and packed with a rapidity that surpassed the most optimistic expectations of the officers. At 9:25 the battery left the park. The twenty mile loop was over rough gravel roads, good gravel roads, and muddy, rocky trails. It was completed in exactly five hours. The total time of halts was exactly forty-five minutes. The men had their lunch and the horses were fed in a twenty-three minute halt period obtained by doubling up. Throughout the tests "F" Battery was determined to win in every phase of the competition. In the one test it demonstrated its superiority in the most important and most vital qualification—*Mobility*.



# TANK OR ACCOMPANYING GUN?

BY MAJOR FRANK B. JORDAN, 17th F.A.

## WHY THE ACCOMPANYING GUN?

IN ORDER to consider intelligently the respective merits of the tank and the accompanying gun, it is necessary first to examine into the *raison d'etre* of this particular class of weapon. The World War made it clear that occasions would arise in which the local commander would need a powerful weapon, and need it immediately. The origin of this need is not difficult to determine. It is based upon the time-honored principle that nothing human can be absolutely perfect. Somewhere, in the best-laid plans, a slip is bound to occur. So also, in the most careful and lengthy preparations for an attack, some one item, small in itself, but of potential local importance, will be surely overlooked. Though the artillery of all calibres turns the field of battle topsy-turvy, somewhere in the apparent complete destruction certain enemy units, by either good fortune or excellent concealment, will remain intact. Perhaps in the very crisis of the battle, this relatively unimportant unit, be it machine gun nest, trench mortar, or what not, may be the dangerous rock upon which the bark of the whole assault is doomed to be shattered. Imperfect liaison, failure to clearly describe or locate the target, poor observation conditions, may make it well-nigh impossible for the friendly artillery, probably thousands of yards to the rear, to reduce the obstruction. Upon such a small thing the fate of the whole battle may ultimately hinge. In such a critical situation, the local commander must have some means at hand, some weapon which he can count upon for immediate response, to clear the path to final victory. What means, what weapon? Consider first the conditions to be fulfilled, the requirements to be met.

## REQUIREMENTS TO BE MET

In the first place, the means at hand must be sufficiently powerful to meet and deal with the various types of resistance to be encountered. Machine guns, trench mortars, light field guns and tanks include broadly what might reasonably be expected on the average field of battle. Only in highly stabilized situations will concrete works, in the form of "pill boxes," be encountered. Against machine guns and trench mortars, the rifleman, unaided, can finally prevail. True it will involve heavy loss, and, more important still, the waste of precious minutes. Against the field gun and the tank, though, he is practically helpless. Even the heavier auxiliary weapons

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are of doubtful assistance. A chance hit, and all is well. If the field gun or tank gets the range first, what then? Something that can hit, and hit *hard*, is essential.

Secondly, but also of paramount importance, this very something must be *immediately available*. When the advance is held up by an unforeseen obstruction, seconds are precious. The local commander must be able to apply the remedy at once, or all may be lost. He must be able to put his hand on the necessary tools at the proper time. The infantry battalion or regimental commander must not be made to depend upon the maintenance, highly problematical in fast-moving situations, of long telephone lines for his salvation. When his advance is held up, in the thick of the fight, he must be able to act quickly, surely, and with decision. The means must be at hand—at *his* hand. He must be able to turn to his gun commander and say, figuratively speaking, "There is your target—smash it!" He must be able to expect results within seconds at best, minutes at the worst. When the need for the remedy is felt, it is invariably felt in the most painful way imaginable. Too late then to make the necessary arrangements! Either the cure for the trouble is there, or it is not. There is no middle course.

### THE GUN

Obviously the only type that need be considered as suitable to meet the requirements outlined is the light field gun. That of 75-mm. seems to be sufficiently powerful, and still offer chance for successful concealment. The six-pounder is powerful enough, but has no particular advantage over the 75-mm. In addition, the question of complicating the ammunition supply must be kept in mind. The 105-mm. gun or howitzer might also answer, but once again the matter of ammunition supply would throw the scales in favor of the standard divisional calibre, *i.e.*, the 75-mm. Furthermore, as direct fire over open sights is frequently employed in this kind of work, the howitzer would appear to be unsuitable. This consideration, as well as the question of ammunition supply, would seem also to eliminate our present type of mountain gun. Along this same line, if anti-tank work is to be seriously considered, some change must be made in the present type of mount for the 75-mm. gun. More flexibility, in fact almost the same "swinging traverse" as the machine gun must be established if any successful "wing shooting" is to be attempted. True, with the present slow type of tank, the 75-mm. would have at least an even chance. In planning for the future, however, we must figure on meeting tanks that can travel from twelve to fifteen miles per hour across country. This puts a rather different light upon the business of snap-shooting at hostile tanks. Given a tank manœuvring at such a speed, with our present

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cumbersome system of sights and transversing gear, it would be practically a physical impossibility to do anything like accurate shooting "on the wing."

### THE TANK

Of the existing types, the light and heavy, the light tank is the only one that need be considered as suited for the rôle of accompanying weapon. Even this type is too slow, too noisy, and not powerful enough to successfully meet the requirements. The present type light tank can carry either a machine gun or one-pounder, but not both. Even the one-pounder is believed to be too light to answer the demand for hitting power. To combine the two weapons, at least two tanks, and preferably a platoon of five, are required. With the new type of medium tank now being developed, the situation is quite different. Each tank is armed with a six-pounder and two or three machine guns. It is practically twice as fast as the present light type, and will be equipped with a much quieter motor. Though larger and harder to conceal than the baby tank, it will fully offset this disadvantage by its added speed, armament, and silence. It follows that the medium type can be employed singly or in pairs, as each tank is a self-contained combination of the weapons needed for use against matériel or personnel.

### ADVANTAGES OF GUN AND TANK

The 75-mm. gun is more powerful than the cannon of the tank. It can be readily concealed, and remain so, except when necessary to fire at hostile tanks over open sights. The ammunition is more plentiful than that of the tank, and more readily replenished. The use of an accompanying gun of the same calibre as the divisional artillery avoids complication of the artillery ammunition supply. Finally, the gun, with its stable platform (*i.e., the carriage*), facilitates more accurate shooting.

The tank is self-contained. It combines fire-power and mobility in the one unit. *It can employ both at the same time.* It affords reasonable security to its crew against everything except direct hits from field guns. It has *two* types of weapon (cannon and machine gun) to bring to bear upon hostile resistance. It can approach in comparative safety and come to grips with hostile machine guns. The new tank radio telephone makes communication practically instantaneous.

### DISADVANTAGES

The gun depends for its mobility upon its limbers, which are extremely vulnerable. Particularly are the limbers of horse-drawn artillery (the usual divisional equipment) at the mercy of the hostile

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machine gun. A low-flying plane, machine gunning the limbers, might completely immobilize the accompanying gun. The same plane would have little or no effect upon a tank. Appreciable delay occurs at each change of position, during which time the gun is entirely out of action and not available as a weapon. Moreover, it is usually drawn from the divisional artillery, and thus hampers the higher artillery commander in the accomplishment of larger and more general missions.

The tank is harder to conceal than the gun, particularly against low-flying aircraft. Its cannon is not as powerful, and shoots from an unsteady platform. Accurate shooting from a moving tank, except at very short ranges, is extremely difficult. The tank has to actually expose itself to accomplish its mission. It must then run the gauntlet of hostile gunfire to come to grips with its prey. Mines and traps add to the danger, but usually are only met with in stabilized situations.

### CONCLUSIONS

In summing up, the high lights only will be touched upon. Both weapons have their good points, and argument can be protracted indefinitely on either side. The gun hits harder, but is generally more vulnerable. The new medium type tank would probably last longer on the field of battle, and fulfil the requirements better. The gun gains security by *concealment*, the tank primarily by *movement*. The tank is the best answer to another tank.

In concluding, it is considered that the present type of field gun has a slight advantage over the present type of light tank in answering the requirements under consideration. Given the new type of medium tank, however, and the advantage is believed to be on the other side. It is the humble opinion of the writer that with the development of the new type of fast medium tank, the necessity for the use of the accompanying gun will gradually but surely disappear.

# THE EVOLUTION OF A RED-LEG

BY FABIAN

WHY did I transfer? I'll be honest with you, gentle reader. NO REAL REASON AT ALL! I had been walking for several years in my earlier service, and then on various odd jobs of a semitechnical nature. Just prior to transferring, I was comfortably located at an Eastern station, and very well satisfied with life. Transferring was far from my thoughts. Then one day came the news that I was on the Benning list. Food for thought, that! I would be moved, whether I liked it or not.

Within the next few days I happened to be in the Personnel Section of the Office of the Chief of Field Artillery. The subject under discussion was the attempt to equalize the several arms by the transfer of commissioned personnel. Suddenly I asked the suave gentleman on the other side of the desk what he thought about *my* transferring. I'll admit right here that he did not encourage me in the presumptuous thought. In fact, he humored me almost as though he thought I had lost my mind. Of course there were vacancies in my grade (that could not be denied!) and the Infantry was overstrength in the same grade—which also could not be denied. But when I stated that I had had no previous experience with their noble arm, they did not seem to feel urgently in need of filling that particular vacancy.

However, I was given to understand that whatever was to be done must be done quickly, or not at all. With this firmly implanted in my mind, I returned to my own station. Benning or Sill? The Chief's office had promised—nay, threatened—that I should be sent to Sill if transferred. Quite gleeful over it, in fact! Later on I was to realize of my own accord the cause of all the glee. But now a momentous decision was before me. And haste! Well, why not go the whole hog? The spirit of adventure, of the unknown, had its way at last. The very next day I applied for transfer, and within ten days I was a bona-fide, though somewhat uneasy, member of the redoubtable Field Artillery.

Then the fun began. Various and sundry visits to the Chief's office did not add much to my already badly shaken self-confidence. I was made to feel, politely, gently, but firmly withal, my vast and almost hopeless ignorance. With a species of sardonic humor I was assured that I was on the list to attend the next course at the Field Artillery School. Whereupon I intimated that I would appreciate it if some very elementary form of instruction would be scheduled for me. Imagine my horror and dismay when smilingly informed

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that I was slated for none other than the Advance Course! Ye gods! Why, oh WHY? With a pitying look they gently broke the news to me. Aye, loosed their barbed shaft, and then snapped it off in me! Yes, of course—the other courses were all rather—er—technical, you know, and would—er—confuse me, you see—and so—er—well,—er—you *understand*, don't you? Oh, yes—certainly! I did not know enough to take the basic courses, and therefore should be satisfied with taking the one that would do the least violence to their noble institution! They had to choose between confusing the school, and confusing me—and they chose to confuse ME. At least, that was the way I felt at the time, and for some weeks after. Later I realized that they had really been very considerate, and had done by me what was best for all concerned. But that comes further along in my story.

In fear and trembling I now sought means to alleviate my prospective suffering. I wanted to take time by the forelock, as it were, and slip one or two over on the old boy. So I petitioned the learned gentleman behind the desk to inform me what I had best study to prepare myself for the coming shock. At which question he looked very wise, and murmured a collection of numerals that closely resembled ye goode olde football signals. At any rate, it was too much for my poor befuddled brain. Then I realized that he was holding out several pamphlets, and as rather dazedly I took them, he appeared to be trying to emphasize the importance of the thickest of the bunch. At the top of it I saw printed in neat type, "Training Regulations," and just below, the mystic symbol, "430-85." Further along was the heading "Field Artillery Firing"—well, *that* did not sound so bad, after all! Little did I realize, in my blissful ignorance, what was being handed me in that little bundle! Little did I realize what those same numbers would mean to me before the year was out! Little did I . . . Oh, let's get on with the story!

I went on leave during the summer, and took the precious pamphlets with me. I tried to read them, and found them unreadable. I tried to concentrate on the "fat boy," and found that it continually babbled about things strange to me, in terms that I could not understand. In great disgust I turned to a book I had received from the Secretary of the school at Sill. Its title warned me that it proposed to cover the width and depth of "Tactics and Technique of Field Artillery." It was in two volumes, and very formidable in appearance. I ruffled the pages with respectful caution. Diagrams—charts—WOW!! Almost in despair, I picked up the first volume and started to read. Then a great light seemed to suddenly shine from the printed page in front of me. Heavens, it was written in everyday, common-folks' common sense language! I fairly devoured it,

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page after page. That book was the bridge over the chasm, the ferry-boat over the river of doubt, the child's A-B-C of field artillery to one poor bewildered transferee. Confidence returned—too soon. I fear, and alas, too much of it!

Westward—Ho! And after a long, dusty trip, Fort Sill at last. Sometime around three o'clock on a mild September afternoon, the train paused at a water tower near a bridge over a small stream. To the right, perched on a small hill, were two buff-colored water towers. Scattered around aimlessly among the trees were various buildings of assorted sizes, most of them built of chipped stone. Corrals, stables, tumbled down shacks—all more like the back door to Chicago than anything else. Just then the train started again, and I heaved a sigh of relief. Glad *that* was not Fort Sill, anyway! But I heaved too soon, for the next minute I heard the brakeman inform someone behind me, "Yes, that is Fort Sill—we stop further down the line." I made a brave effort to overcome my disappointment, and nearly succeeded; but just then we arrived at the station. All out for Fort Sill!

The appearance of the railroad station did not raise my drooping spirits any. But where was the Post? A neat young man with a tiny blonde moustache met me, and cordially invited us (me and my better nine-tenths) to climb into the waiting reconnaissance car while he attended to the baggage. This courteous treatment was our first pleasant impression of the whole place. Soon we were whirling away over a good concrete road toward the same twin towers I had marked earlier in the afternoon. My heart sank again—but just then the road curved sharply in the other direction, and to my infinite joy I found that the aforementioned clump of buildings was *not* our destination. The car then swung off the concrete and down a gravel road, and I saw before me several large brown buildings in a compact group. "The Field Artillery School Area," we were informed. I gazed with intense interest, mingled with curiosity, as I had never seen anything quite like it before. I had come from a cantonment, and had been prepared for *anything*—but this was, well—*different*. It reminded me strongly of the tenement districts in upper New York—say north of 125th Street!

We reported at School Headquarters, registered, and were then shown to the quarters prepared for us. Everybody was very pleasant, and did their best to make us feel at home. On arriving at our quarters, another pleasant surprise awaited us. It was very small—but so was my family. It looked very neat and cosy, and was well equipped with the usual government furniture. We felt sure we would like it. After the beaver-board houses at a cantonment, it was a decided step upward. We so opined—whereupon



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the smiling young officer attending us grinned a bit wider, and said, "Wait till winter"—and little did we know then what a mouthful he had uttered!

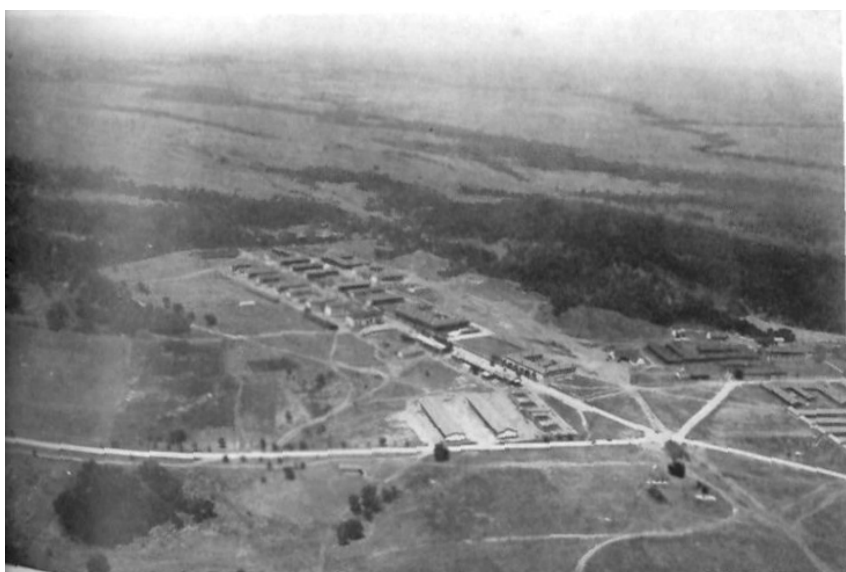
We now found we had a few days respite, and proceeded to look about us a bit. The School Area was very conveniently arranged, the mess, class-rooms, and other tenements all being grouped within a few hundred yards of one another. Accommodations were not the best in the world, but were indeed better than the place we had left behind. Added to that, everybody in authority seemed polite, even cordial at times, and willing to do what lay within their power to make us comfortable. So Cynthia and I looked at each other, and remarked that we were going to enjoy it—(Cynthia being my better nine-tenths, I felt sure we would when *she* said so!)

Alas, it was but the calm before the storm! The first few scattering drops now began to fall. I was invited to report to the school building (Snow Hall), and draw the necessary books and instruments for the course. Some good Samaritan that I met on the road warned me to get the instruments first, take them home, and then go back for the books. Sage advice! It puzzled me somewhat, until I arrived at the instrument window and fully realized what was taking place. A busy little sergeant was gaily piling high the equipment for each officer on the counter at the window. Plane tables, tripods, sketching cases, alidades, jacob staffs—these were the words he said. It was mostly Greek to me, but I obligingly signed on the dotted line indicated by a grimy forefinger, and then endeavored to remove all the property for which I had thus become responsible. After much puffing, panting, and straining, interspersed with several pauses for rest, I managed to deposit all the stuff safely in my new quarters. I then stretched my aching fingers and cramped arms—and bravely returned for the books. This time I was directed to a different window, where a bustling young man pushed a pile of books two feet high at me, and requested me to repeat the dotted line performance. I hastily glanced over the titles, but did not gain much information therefrom. I thought I recognized some of the numeral signal family, and was sure that I recognized my old enemy "fat boy." But I gathered them all up and departed sorrowfully, having received my first intimation of what was about to happen. Dumbly I wondered if they expected a fellow to read, much less learn, all that stuff! Thoughtfully I reflected that I would need an interpreter at my elbow, if I was to gather any knowledge from that collection of printer's ink and paper. But more of this later!

Events now succeeded one another with disconcerting rapidity. On the first day of school we were cordially welcomed by the Commandant, and assured that the mission of the school, and its sole



THE OLD POST  
Fort Sill.



THE FIELD ARTILLERY SCHOOL



THE NEW POST  
Fort Sill.



THE SWIMMIN' HOLE  
Fort Sill.

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excuse for existence, was to put out information. Anyway, that was what I gathered from his talk. All of which greatly encouraged me, for I was sadly in need of information at that particular moment. Then before we could catch our breath came our first class! Questions began to fly right and left, careless of whom they hit. With a feeling of startled dismay it dawned upon me that that tall instructor on the platform seemed to expect a reply identical with the text assigned for that day. When my turn came I floundered through somehow, relying more upon my old friend "Tactics and Technique" than on the current text. But all things must have an ending, and it was over at last.

Having caught my breath again, I made an informal survey of my classmates. There were thirty odd in this illustrious group, and—what cheered me considerably—I soon discovered that they were not *all* old field artillerymen. No, indeed! There were recent transferees from practically every other branch of the service. Others who were "old-timers" had been away from troops on details of one sort or another, and, taken all in all, it was pretty nearly a scratch start for all of us—all but *me!* But we had some interesting types in our class, and I shall describe them for the reader to the best of my poor ability.

First let us consider our distinguished class president. Coming to the school from the General Staff, he was in a position to instruct rather than to receive instruction. As the entire class, and most of the instructors were fully aware of this fact, they were at once most favorably impressed by this same gentleman's democratic attitude. Without being condescending, he was at once courteous, considerate and sympathetic to all, from the "goat" of the class on up to the top. He made everybody feel thoroughly at ease on all occasions. He would ask your opinion on a subject as frankly and sincerely as though he were consulting the Senior Instructor himself. Neither would he hesitate to safeguard the rights of the class against any encroachment on the part of the instructors. He was, in short, an ideal class president. We all felt, at the end of the course, that the courageous assistance and coöperation of our class president had gone a long way toward lightening every man's burden—and we were grateful accordingly.

Another important member of the class was a certain high-ranking gentleman whom I shall call "Morale." He had it, and to spare! More even than that, he had the faculty of imbuing others with his own indomitable spirit. I have become so thorough an admirer of this same man's ready tact, spontaneous wit, and instantaneous repartee, that I must right now cease from singing his praises and devote some time to the other members of the class.

I have said that many branches were represented—let's check

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up. We had several gentlemen fresh from the Coast Artillery, with a knowing, bookish look. Then we had some from the Cavalry, bowed of leg and critical of all horseflesh. Also there were tall infantrymen, with the old distance-eating stride, and a bewildered look curiously akin to mine own. We even had a representative from the exclusive Tanks, quick to dispute his hobby with any instructor, and who could obligingly tell you anything you wanted to know about field artillery by looking it up in a little red book.

We also had the usual assortment of personal characteristics, regardless of age or previous condition of servitude. Our class orator would take the floor upon the slightest provocation, and air his opinion on any old subject at all. It apparently made no difference *what* he talked about, just so he was *talking*. Then we had a politician (later we developed several), who was always ready with a panacea or compromise to appease both of the warring factions. (His rotundity but added to his attractive personality, chiefly in the eyes of the ladies!) Now the class pessimist was a peculiar combination. He could never believe that anything good was intended—there was *always* a "nigger in the woodpile." Yet this same gentleman was always the first to pick you up in his car if you were afoot, and in sundry other ways reveal that his growl really covered a warm heart. Such is humanity! We had several optimists in the class—I was one myself until Gunnery started—who always saw the good and interesting side of every mimeograph placed in the students' boxes. And finally, we had one who could quote Civil War statistics glibly, and another who could ask questions that no one could answer (not even the learned instructor), and many others that I have neither time, space, nor patience to describe here. For I must be getting on, and telling you what happened to this noble assortment of odd lots.

At this time the newcomers first began to feel something of the "mystery" of field artillery. True, most of the subjects we had had in our daily grind were not in the least mysterious. As far as I could see, the schedule was all very general in nature, and needed no unusual intelligence for its complete mastery. But soon I began to feel the undercurrent, strangely disquieting, strong with malevolent foreboding. In many little ways it made itself felt. Carefully camouflaged most of the time, occasionally it would rise to the surface and show its ugly head. Significant was the attitude of one of the instructors, after he had asked me the old familiar question concerning the cause of my transfer. He repeated the question several times, changing its phrasing with each repetition. He apparently labored under the impression that I did not fully comprehend what he was driving at. Did I mean to inform him that I had had absolutely no previous experience with field artillery? Yes, I so

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meant to inform him, and finally managed to inject this idea into the complicated machinery of his intensely tactical brain. At which he favored me with one long, lingering look, and walked away muttering beneath his breath. Which performance did not greatly increase my clarity of thought nor strengthen my tottering optimism.

In line with the above demonstration, hints and rumors now began to reach the ears of the poor transferees. Occasional references to "Gunnery," "Probabilities," "Orientation" and other equally strange titles were heard, and appeared to baffle all but the true "old-timers." Then suddenly I had my first real taste of the mysterious side of this here gun-pointing business. They piled the class into reconnaissance cars, and took us out into the great open spaces—Chatto Ridge, to be exact—where we suffered our first attack, comparatively mild, of "Orientation." It was severe enough to last *me* a long time—but it also had its humorous side. I was greatly amused (after being badly confused), to find that the two "old-timers" working with me (we worked in groups of three) knew as little concerning what it was all about as did my own verdant self. The essential difference was this; *I* was *sure* I knew nothing about it—they *thought* they did, but demonstration proved otherwise.

The aforementioned malady was soon forgotten, however, in the sulphurous and seemingly unending circumlocutions of the Indoor Season. I call it the Indoor Season for several good reasons; primarily, though, because we were at work indoors, day after day, and week after week. The principle cause of this propensity for shelter was, I believe, one thing and one thing only—the weather. Those of my readers who have sojourned at Fort Sill will understand how much of both good and evil can be compressed into that one lonely word. Then did we realize the full meaning of that grinning remark, "Wait till winter!" For the wind she blew—and seemed to blow right through our tiny apartment. The mere fact that the doors and windows were all tightly closed did not seem to inconvenience the wind in the slightest. The curtains would stand away from the windows at all times regardless, and the wind whistled through the aperture the door was supposed to close with a refreshing disregard of the position of said door. We finally were forced to resort to hanging blankets over the doors, and stuffing the crevices around the windows with rags, newspapers, oh, anything to keep out the cold! And with the wind came rain, giving us the questionable pleasure of trying to solve two difficult problems at once. The problem presented by the rain was chiefly that of placing buckets and other suitable receptacles under the exact spots where the roof was most likely to leak, and at the same time attempting to stem the tide that persistently crept in under all the doors to windward. The effect of the wind has already been mentioned.

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As the two usually came hand in hand, both wind and rain gave us considerable diversion during the winter months. Enough of the weather—it makes me cold to think about it!

It was during this period that we were first made aware of the deadly animosity existing between the Blues and the Reds. And what was stranger still, most of this malevolence seemed to be directed against a section of the country surrounding the peaceful little town of Gettysburg, Pa. The Reds and the Blues were continually attempting to take it away from each other, to the utter confusion and nearer destruction of the adjacent countryside. Also at this time we were initiated into the secret rite of "Estimating the Situation." Many were the poor students that covered pages of foolscap proving that the Reds were stronger than the Blues, and then waded in dauntlessly and licked poor Mr. Red clean off the map! And who can say how much paper was wasted on arguments pro and con, when the student secretly knew, deep in his own heart, that he had already "jumped at" his decision! But why open up old wounds? Let the sleeping "US" lie! Sufficient to say that the instructor *always* chose the other flank, and gave you reasons therefor that you had thought favored the flank *you* chose. Of course you knew in advance that the Reds were *bound* to be whipped, so why worry about *what* the Blues did, just so they did *something*! One thing I learned at this time—*NEVER TRY TO OUTGUESS THE INSTRUCTOR*. In the first place, you can never tell which instructor you are trying to outguess; in the second place, *IT CAN'T BE DONE!* Let your conscience be your guide—trust in the little Red Book and keep your charcoal pointed—and don't make too many marks that you cannot read on your map, for they *may* confuse you! These are the cardinal principles absorbed by the average transferee from the bloody battles between the redoubtable Blues and the elusive Reds around Gettysburg.

I was now to experience a really serious illness. The first spasm of Indoor Gunnery made its unwelcome appearance. It took me almost completely by surprise, but so intense was the pain that I was soon reduced to a state of pleasant numbness. My brain was a confused medley of deflections, angles of site, methods of fire, and plus and minus signs. I wrestled nightly with my old enemy "fat boy" (familarly addressed by the instructor as "Four-thirty Eighty-five"), and was usually badly mauled in the operation. My difficulty in solving deflection problems was but the forerunner of the catastrophe of the Terrain Board. I shall never forget my sensations when the instructor stepped lightly to the blackboard, and rapidly made a sketch which resembled four little hen-coops in a row. "That's easy enough to do," I was musing to myself, when suddenly he tapped near each coop with a little pointer, and turned and faced me

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WHAT UNTOLD AGONY!

Cartoon by Captain A. B. Butler in *The Fort Sill Guidon*.

squarely. "He's lost his mind!" I hazarded to myself, when my reverie was rudely interrupted. "Sense those, please," he barked at me. I had watched the whole performance with a sinking sensation in the neighborhood of my diaphragm. Some facetious remark, such as "Nonsense!" and "Total miss!" occurred to me—and then my mind suddenly went blank. I was experiencing my first Gunnery cramp! Dimly I realized that the whole class was watching me expectantly, but I felt as though I had lost control of my faculties. As from a great distance, I heard a brilliant student behind me offer four terse suggestions that led me to believe that although he appeared to be normal, he was very, *very* doubtful. I was aroused from my miserable introspection by the dismissal of the class. Better than that, I was pleasantly surprised to observe that the rest of the class apparently thought nothing about my deplorable mental hiatus—it was a state of mind to be expected in the practice of the gentle art of Gunnery! But the worst was yet to come.

...

Right in the middle of the Indoor Season (based on the weather conditions and my own humble opinion), the Outdoor Season began. "Open Season on Transferees" was what it should have been called. "Service Practice" was the euphonious title found upon the weekly schedule. With what dread was I to scan the schedule to come in search of the two fateful words! What untold agony, physical and mental, was to be mine before they should finally appear no more upon the printed page.

The first day of Service Practice was carefully hidden under the deceptive expression "Smoke Bomb." If I had known the full meaning of that expression, I probably would have played hookey; but thinking it was some new variety of pyrotechnics, I went gaily to meet my Waterloo. My experiences on that day were an aggravated



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repetition of Deflection and Terrain Board—with old "fat boy" getting by far the better of the argument. In the first place, the strangeness of the instruments confused and finally unsettled me altogether. The day before, I had had a hasty explanation of the functions of fire-control instruments from one of the obliging Gunnery Instructors. Just enough to show me that I didn't know anything at all about it! So when the whip-like tones of the Instructor designated me as the next victim at the altar of Smoke Bomb, I proceeded to put on a show for the benefit of the rest of the class. I loosened all the clamps I could lay hands on, and then fell over the legs of the darned thing in trying to get into a more favorable position. I tried to make my mental and physical operations coincide, and had wonderful success in keeping the rest of the class at bay with my frantic gyrations. But as a Gunnery problem, the Instructor was forced to sorrowfully allow that it was a total loss. As for me, I was too busy trying to resuscitate my nearly-suffocated brain to pay much attention to what he was saying.

Shock now succeeded shock with awe inspiring rapidity. For Service Practice was now on in earnest! My first problem was remarkably like my Smoke Bomb display—slightly worse, if you can stretch your imagination any further. To insure my total discomfiture, one gun laid on *one* aiming point, and the other three on *another* some hundred mils or so off to the flank. Of course the results were—er—marvellous! And to turn my retreat into a rout, two other batteries opened up on my target at this time, and I was placed in the unhappy position of trying to observe twelve bursts per salvo—more need not be said! Following which, the instructor tartly advised me, in reviewing the details of the cataclysm, to hereafter "look along the line of metal" whenever the battery was visible from the observation post. I afterwards discovered what he meant by those words, but just then I was past feeling any further injury. My only consolation at this time was to observe the difficulties that seemed to beset the other members of the class. While hardly comparable to my own, still, I could see that they all had fits of mental depression when called upon to fire. For example, my friend "Morale," when firing a problem, so systematically and thoroughly loosened the instrument that it had to be entirely readjusted before being fit for further use. He never missed a solitary clamp!

Gunnery went from bad to worse. The weather, bitterly cold most of the time, did not seem to stimulate mental arithmetic to any noticeable degree. Keeping warm was a problem in a class entirely by itself, and warranted constant and careful consideration. We often wondered, audibly and profanely at times, why the observation post was always selected where the coldest blasts were sure

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to seek it out. The answer was surprisingly simple—so we could see! Well, well—we never thought of that! As if it mattered to me whether I saw anything or not—I wanted to be WARM!

About the time the weather relented, Lateral Observation set in. Right away we all longed for the bleak North wind again! We were now treated to the phenomenon of a man being able to shoot the other fellow's problem perfectly, but making a beautiful fizzle of his own. In my own particular case, it was due to the fact that my brain automatically ceased to function whenever my name was called. The very landscape, lately so familiar, looked strange and distant; the instrument suddenly became a ferocious beast, ready to devour poor little me; the rest of the class seemed far away, and the face of the Instructor took on an ominous, icy expression. Small wonder that I found "solutions" so elusive. After the day's work was over, I could recall every fool mistake that I had made with bitter clarity. I had "jumped my bracket"—up, down and sideways; I had forgotten (sinniest of sins!) all about the corrector; I had—in short, I had committed every mistake and error known to the Gunnery Department, and had added a few brand new ones of my own!

Spring at last! From now on we were to experience some of the more pleasant aspects of climatic conditions in Oklahoma. The rolling hills, vividly green in the spring sunshine, the leafy shade of the woodland, the limpid coolth of the numerous streams—all contributed toward rejuvenating the weary student officer, and making him feel that life was still worth living. I have heard many say, and heartily agree with their opinion, that April at Fort Sill yields a climate hard to surpass anywhere in the United States.

With the spring we were outdoors practically all of the time. We now suffered from a peculiar form of mental inertia closely akin to spring fever. The schedule named it "Terrain Exercise," and, literally speaking, it was sublimely correct. For the greater part of the day we were riding hither and you over the green landscape, and if *that* is not "terrain exercise," what is it? The mere fact that we were fighting imaginary battles with imaginary troops did not prevent us from making a spring holiday of the occasion. And the further fact that we were trying to handle maps in the fresh breeze, or matching up tracings that somehow never wanted to fit the coördinates, did not materially interfere with the great joy of being outdoors in spring. What a grand and glorious feeling!

At this point I consider it fitting to make some slight mention of the subject of Equitation. Right here it is also fitting and just that I express my sincere appreciation and heartfelt gratitude to the Chief's office for requiring me to take the Advanced

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Course. For when I saw the amount of horse-work required of the other classes, I certainly thanked my stars, the gods, and the Chief's office that I was, through their kind interference, a member of the exalted Advanced Class. Early in the season I had been politely introduced to a horse, and had critically observed its four visible means of support, with the two curious appendages at either end. Rapidly I learned which end was the more dangerous, as well as which side I was expected to utilize in mounting, and which in dismounting. I soon demonstrated to the rest of my class that I was full of unexpected surprises when it was a case of dismounting gracefully (?) and without loss of time. (I might add that I was usually surprised myself at the happenstance!) But with the spring I acquired a remarkable proclivity for staying on top of my horse. Again and again, to the great surprise of my classmates (they remarked quite audibly on the fact), the horse and I returned to the stable together—side by side, as it were. Perhaps it may be accounted for by stating that I had developed a decided aversion to walking; and that with this I had also discovered that when the horse and I parted company "for better or for worse," I had a painfully long trek confronting me. Be that as it may, the horse and I continued to bounce along in the same general direction, though the odds *were* slightly in favor of the horse. But pardon this digression—let us return to the story itself.

Closely following the Terrain Exercises came a new form of physical and mental exertion. "Field Exercise" was the promising epithet bestowed by the Faculty; and I, for one, thought that it was aptly chosen. We had some twenty odd before the course was over, and I certainly enjoyed all but one of them. I decline with pleasure to state that I enjoyed FE No. 1, during which I stood in six inches of snow on top of MB 4, with the wind blowing a gale, and tried to keep my physical heat up to the degree of my mental condition regarding the faithfulness of Lady Spring. For all that, the Field Exercises were, as one Instructor expressed it, "the meat of the whole course." I, for one, learned more from watching one Field Exercise than I had from reading all the text-books in my possession, I am no slouch of a student, either, if I *do* say it myself! However, the book-learning formed a very essential ground-work, without which I would have been sadly at a loss to identify the various movements executed. We could see our mistakes almost as soon as we made them, and were duly impressed by the consequences arising therefrom. For example, I shall never forget the time I led a battalion, moving at a trot, cross-country to a certain road, only to find on arrival thereat that a wire fence prevented my further progress until after I had gone a mile or more out of my way in search of a gate! Such lost motion—lost time—and cussing withal!

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“ FIELD EXERCISE ”

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One of the attractive features of the Field Exercises that must be mentioned before I proceed farther was the Rolling Kitchen. (It was more commonly and affectionately referred to as "Cafe Ginsburg.") I should indeed be without gratitude or human feeling of any sort if I neglected to mention the joy so often brought to the heart of the student officer by the appearance on the sky-line of this lumbering, unlovely, but always welcome "goulash cannon." Many the time we had to ride miles to reach it, but were always amply rewarded for our exertion at the end of our journey. Some few objected occasionally to the character of the menu, but my observant gaze was unable to ever mark anyone objecting to eat. What mystified *me*, and most of the other students as well, was how so many *Umpires* always managed to be at the head of the line, regardless of how well concealed the rolling kitchen and its attendants might be. How did they do it? I believe the mystery remains unsolved to this day.

There was an aftermath to every Field Exercise that unfailingly left a bad taste in everybody's mouth. "Critique," it was unofficially called; "Conference" was the word appearing on the schedule; the words applied by student officers are not very pretty, and altogether unfit for the eyes of my gentle readers. Nevertheless, at these conferences we learned many things. We learned that we invariably chose the only incorrect way of doing things, out of countless correct methods circumstancing. We learned that "ideal positions" always existed just in front, to the rear, or on the flank of the ones chosen by our own unfortunate selves. We were always being accused of the crime of "undue exposure," or of deliberately building "nests of observation posts" on the loftiest peak at hand, to the scandal, disgrace, and evident irritation of the Tactics Department. The Evil Eye of Signal Mountain dogged our faltering footsteps with Nemesis-like persistence everywhere above ground. The one lasting impression remaining with me might be expressed briefly as follows: "The excellence of a gun position is only limited by the thoroughness of one's reconnaissance, which in turn is limited only by the time at one's disposal. Reconnaissance—and then more reconnaissance!"

During all this war of words, peaceful personal relations and friendly good nature surprisingly endured. Differences of opinion were caustically aired without apparent damage to personal feelings, and when the smoke of battle would blow away, the one-time dead or mortally wounded reputations would joyfully spring up and commence to preen their ruffled plumage in readiness for the next scrap. Both sides seemed to act in a curiously detached, impersonal, manner—apparently the last word in the development of the "Umpire" and "Student Officer" complexes. The Umpire seemed

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to automatically credit the student with forever doing things in the worst possible way imaginable; the student *always* firmly believed that he himself had done the best for all concerned, and that *all* Umpires were—?—er—just plain *ignorant!* Which of the two might be correct is as difficult to arrive at, as it is to attempt to explain the deadly animosity existing between the brave Blues and the retreating Reds.

Summer—and orders! A few at first, then half a dozen—and then it became a common sight to see nervous individuals haunting the bulletin boards in search of an answer to their prayerful, long-cherished "preferences." Through the whole gamut of emotions, from the dizzy heights of unspeakable delight to stuttering disgust and unplumbed despair, these same individuals would course with the breath-taking speed of light itself! "Ah, HARVARD! Just what I'd asked for!" or "TRAVIS! Ye gods, how I HATE San Antoine!" All honor to the Chief's office, for, from my own observation, at least three-fourths of the orders received gratified first or second preferences as expressed by the recipients thereof. Better than that can hardly be expected—you can't please *everybody*, you know!

And now the sun began to really shine—Whew! How distant did the bleak January days seem! Did we *ever* complain about the cold? Say, what time is it by the thermometer, anyway?—Look at it go up! Among all the bustle of packing, finishing up the last of the Field Exercises and trying to write one on our own account, the deadly heat prevailed. Older residents warned us that summer had not yet come—"Wait till it gets up to one-one-zero, and *stays* there," they would remark. Whereupon I would rejoin that "it" might stay there, but *I* certainly would not. Which was an unkind way of reminding them that I was *leaving*, and they were *not*.

The home-stretch at last! The last long, busy week of school. Clearances, property being turned in, arguments with custodians of books and instruments, the clatter and bang of the packers on the porches. Handfuls of invoices, memo receipts, unpaid bills, transportation requests. Finally the empty rooms, the open trunks, and the pile of crates on the sidewalk below. The old wanderlust has seized us again—we are going away, so let's be moving—what are you waiting for?

Graduation! Oh, yes, we *must* wait for *that!* It comes—AT LAST! Gone are the weeks of study, the days on the windy hills, the mad galloping over the wide, open spaces. A speech on the excellence of the School, and a mention of our own individual prowess—a calling of names, a stumbling over chairs and feet to clutch the big square envelope and grasp the congratulating hand,

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and we are graduates—Graduates of the Advanced Course of the Field Artillery School! I can hardly believe it—me, that was just plain Doughboy slightly over a year ago! Slyly, furtively, I slip the imposing documents out of the envelope in search of any cruel, damning red lines—not a one! Whoopee!! A clean slate—passed 'em all, even *Gunnery!*

The Parting of the Ways! Hurried good-byes—solemn promises to write—and the mad rush for the station! A ruthless speeder booming through the quiet village street is slow as a snail compared to the way people leave Sill when once told that they are foot-loose and fancy-free. Personally, I felt a slight twinge of regret—or was it remorse?—at leaving the old place, with all its associations of the past nine months. But I didn't feel that way until I was safely on the train! Everyone seemed to be murmuring to himself—"Good-bye, FOREVER (I hope!), but good-bye, *anyway!*"

Fort Sill is now behind us in the distance. Thoughts come crowding around me as I write, and I feel cramped for elbow room. The many warm friendships formed in the intimate association of the "tenements"; the many good times enjoyed, openly on Saturday nights, often surreptitiously during the studious week! The many comic events that flock back, the near tragedies closely in their train! The peculiar personalities of the individual instructors—how this one always roared, how that one lulled us to sleep—the critical, never-satisfied one, and the one that was always "reiterating!" The stock phrases—"Blockhouse on Signal Mountain," "MB-4," "Medicine Creek," "Lawton," "Artillery Ridge," and not to forget "Camp Doniphan"! The bitter exasperation of not being allowed to fire after carefully selecting and brilliantly occupying an excellent position—all for the flimsy excuse that you might kill someone! The glorious exhilaration of seeing your name on the Gunnery list, with "Solution" written after it! Overwhelmed momentarily by the conflict of emotion, I regain control of myself with an effort, and hereby pronounce the calm, deliberate sentence of the greenest of all transferees:

Hear ye! Hear ye! Hear ye!

All things to the contrary notwithstanding, I came away from Fort Sill and the Field Artillery School a better and (arrogance personified!) a *wiser* man!

Hail and Farewell!!

# FOREIGN MILITARY JOURNALS A CURRENT RÉSUMÉ

ENGLAND

**"The Journal of the Royal Artillery," October, 1924**

THE EVOLUTION OF ARTILLERY IN THE GREAT WAR  
(LIEUTENANT-COLONEL A. F. BROOKE)

THIS is the first of a series of articles and it reviews the situation on the eve of the war. In considering the artillery evolution up to 1914, the author goes back as far as the Napoleonic Wars. At that time the effective range of artillery was very short and it was necessary in order to get superior fire at a decisive point, to have an actual concentration of guns and this led to massed artillery. Then too, when guns approached so close there was a loss of control. This led to the employment of a large "reserve of artillery."

In the Campaign of 1866 the Prussians stuck to this idea of the large reserve though it was no longer necessary on account of the increase in the range. There was widespread discontent in the Prussian Army and the main lesson of this period lies in the necessity for the evolution of tactics to conform to the evolution of matériel. In the campaign of 1870 the artillery duel formed the beginning of the decisive action, and when the hostile guns were silenced the hostile infantry became the objective. Batteries concentrated in large groups. The normal positions for batteries were on the crests, where the best view obtained.

The following are points worthy of notice in connection with the Boer War. The employment in the field of heavy guns and howitzers appeared. Smokeless powder made it difficult to locate targets. Initial steps were taken toward obtaining concentration of fire from dispersed guns. The infantry's need for artillery support up to the moment of the assault was made clear.

The Russo-Japanese War shows a centralization of artillery control. Also it should be noted that this higher control was facilitated by the fact that there was artillery at the disposal of the higher command outside of the artillery belonging to divisional organizations. There was distinct growth in the germ of concealment. The Japanese used enormous amounts of ammunition and they made use of many heavy guns and howitzers.

We therefore found ourselves on the eve of the War with five main problems to be solved, namely:



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- The problem of the supply of ammunition;
- The possible use of heavy artillery in the field;
- The possibility of maintaining guns in the open;
- The advisability of organizing higher artillery commands for the purpose of coordinating artillery action;
- The imperative necessity of good communications.

When we compare the equipment before the war, we find that Germany had developed heavy artillery to a large extent, whereas France had not. France relied on her 75's and the preponderating power of manœuvre over fire. Germany sought a means of counteracting the 75 and also of reducing the forts on her frontier.

No radical difference existed in the organization of France, Germany and England. Both Germany and England had 54 guns and 18 howitzers in the division. France had only 36 but she had a corps reserve of 48 guns. England and Germany had 6-gun batteries while the French favored 4-gun batteries. All three countries had an artillery commander in the division but only France had such commander at corps headquarters.

In 1914, in England, artillery tactics had reached this stage: Mobility was considered of more importance than fire power. Decentralization was the rule and centralization the exception. Artillery was considered still an accessory, to be used by the infantry when necessary but was not mentioned in a combined plan of attack. There was still the idea of a preliminary artillery duel but this was based upon the hope that batteries would continue to occupy open positions. It did not consider the difficulties of counter-battery work against concealed positions. The idea of supporting infantry in the assault was for the commander of the guns to control the battery by voice and thus move the guns forward with him so as to see the ground over which the infantry was advancing.

As stated before, France was "mobile mad" and believed that with a light gun and rapidity of fire, the targets which the infantry disclosed could be quickly dispelled. It was believed that four guns of 75-mm. calibre would develop absolute efficiency over a front of 200 metres.

The Germans appreciated the essential value of manœuvre but recognized that in modern war manœuvre can only be ensured by developing fire power. We find the Germans also recognized the advantage of concealed positions and the coördination of fire. It was seen that the larger the force of artillery the more important it was to have control in the hands of an artillery commander so that the full power of each battery might be developed to the best advantage.

## FOREIGN MILITARY JOURNALS—A CURRENT RÉSUMÉ

At the beginning of the war the ammunition supply was not sufficient in any of the countries. In England and France there were 1300 rounds for each light gun and in Germany only 800 rounds.

In 1914 the means of intercommunication in the artillery were very poor. There was very little wire and the 'phones were poor. The equipment was not sufficient for control of fire and liaison with the infantry.

### POST-WAR TRAINING OF FIELD ARTILLERY (MAJOR CREWDSON)

The author takes up the two branches in the training of a field artilleryman, tactics and gunnery and he discusses the relation of these two. Gunnery enthusiasts insist that insufficient time is given to technicalities, while those of the opposite camp point out that if mistakes are made in gunnery they can be corrected, while mistakes in tactics are apt to be followed by disaster. The writer suggests a compromise and advises that in manœuvres and firing, the tactical side be emphasized at one time and the gunnery side at another. They will always go together, however, though the tactical situation will decide the gunnery method.

### ANTI-TANK DEFENSE (LIEUTENANT MURLEY)

In this article the writer starts off by discussing the anti-tank defense gun used by the British, the 3.7" howitzer. He shows that it has not enough traverse to engage quickly any target. Rapid all-around traverse is essential for a gun used in anti-tank defense. Another fault that he finds with this gun is that it is not sufficiently mobile. Then too, it necessitates the dumping of large amounts of ammunition near the gun and this ammunition if not fired is difficult to collect.

The writer thinks that a six pounder mounted on a central pivot would be suitable for anti-tank gun. His idea is to mount the gun on a tank chassis and to have the traversing done by means of a shoulder piece such as is used with the light coast defense guns.

It is admitted that the six pounder is not so well suited to support the infantry as the howitzer now used, though it could support the infantry to some extent. The weight of the shell is not so great but the muzzle velocity is greater and the six pounder is quite sufficient to stop a tank. Mounted on a tank chassis it would have more mobility and could take up a selected position quickly. The vehicle could carry at least one hundred rounds of ammunition right with the gun. There would be a shield of armor from one-quarter to one-half inch thick protecting the cannoneers from overhead as well as from any other direction. The engine would be driven from inside the shield and a smoke cloud from the exhaust could

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be used if surprised by the enemy. Two Lewis machine guns could also be mounted with the gun.

### FRANCE

#### "Revue d'Artillerie," July, 1924

"The Reconstitution of the German Army," by Major F. de Castelnau, is a sketch of the army allowed Germany by the Treaty of Versailles, the way the treaty is being observed, and the trend of future development in the army. The author states that while the treaty is observed in general, numerous subterfuges and evasions violate the spirit of the treaty. A skeleton general staff and war college are maintained under other names, and an organization somewhat like our C.M.T.C. turns out men capable of becoming officers in an emergency. The author believes that as soon as Germany is freed from restraint and supervision, she will ignore the military terms of the treaty, and will establish her army on the prewar pattern.

"The Best Distribution of Bursts in Zone Fire." Captain F. Royal recommends the firing of all rounds at the probable range of the target, rather than covering with fire of uniform density the zone which probably contains the target. If measurements are accurate, double efficiency is obtained with this method. If measurements are inaccurate, the fire is wasted under any circumstances.

In "Theoretical Studies on the Life of Gun Tubes," Captain Justrow takes up the effects of the pressure and temperature of the propelling gases, as well as other influences, such as the particular metal of the tube, speed of firing, methods of cleaning, etc. All are treated in some detail, particularly as they affect wear.

The concluding installment of the article, "New German Artillery Combat Regulations," takes up, among other subjects, the attack of positions, the defensive, and conduct of fire. Some points of interest are: "Under all circumstances, the artillery should be given sufficient time (to make the proper preparations for fire)—and this for the sake of the attacking infantry."

A heavy artillery preparation is considered normal. "The first infantryman enters the enemy position just as the last artillery projectile falls."

On the defensive, "often an active artillery, which occupies positions close behind the infantry just at the moment of attack, is more effective than that which is more logically placed, but in positions which have been discovered by the attackers."

## FOREIGN MILITARY JOURNALS—A CURRENT RÉSUMÉ

### "Revue d'Artillerie," August, 1924

"The General Organization of War Manufactures in Germany (1914–1918)," by Lieutenant-Colonel A. Gavard, describes briefly the systems of organization which directed Germany's tremendous peacetime manufacturing resources into the channels of war material production. In the early years of the war the agencies of control were many and varied, but in October, 1916, these were reorganized and centralized in the *Kriegsampt*. This agency controlled raw materials, labor allotments, imports and exports, food for workers, development, testing, and manufacturing of war materials. It functioned until the end of hostilities, and increased in duties and powers until the final crash in November, 1918.

In "The Penetration of Oblong Projectiles," Captain L. Gabeaud derives a formula which gives the penetration in a homogenous medium, such as sand or soil. The formula is based upon one derived for the penetration of spherical projectiles, founded upon experiments carried on at Metz in 1835. The formula deduced accords very closely with experimental results.

"The Causes of Munitions Accidents," by Major E. Ardaillon, classes such accidents as prematures, etc., as epidemic or sporadic. The former are easily traced to the cause but the latter are difficult to solve. Isolated accidents may be assigned to five general causes: maliciousness, disregard of the regulations for handling munitions, poor condition of the ammunition, defects of raw materials, and defects in the manufacture. The last is blamed for the majority of accidents, and is discussed in detail. The author warns against condemning a lot of ammunition due to a single accident, particularly during war, when ammunition is always extremely valuable.

"Theoretical Studies on the Life of Gun Tubes," is the concluding installment of Captain Justrow's examination of this subject. He deduces a formula among whose members is an empirical term which varies with the calibre, and another which is a function of the powder pressure and nature of the propellant.

"Comments on Theoretical Studies on the Life of Gun Tubes," by Captain L. Gabeaud, is a rather complete review of Captain Justrow's article. The author does not agree with Captain Justrow on many points, which he takes up in detail, but believes that it is an important contribution to the subject of ballistics and gun design.

**"Revue Militaire Générale," August and September, 1924**

General Boelle concludes his absorbing narrative, "The Fourth Army Corps on the Ourcq," in the August number. Because of the necessity of reorganizing units after the dash from near Paris, the remaining division of the 4th Corps, the 7th, was not able to get into the line until 11:30 A.M., September 8, 1914. On its left was the attached 61st Reserve Division; and securing the flank of the French Army and harassing that of the Germans, was a cavalry corps of three divisions. Due to hostile reënforcements, his 105's and 150's (the French had only 75's), and the fact that this corps could hold out no reserve, only slight advances were made by General Boelle's troops; however, they held their ground. Attacked on three sides by five German divisions on the afternoon of September 9th, the two divisions of the Fourth Corps lost but little ground. The general retreat of the Germans the next day ended the operation, and the Corps then played its rôle in the race to the sea.

The leading article in the September issue is the first installment of General Camon's "The Battles of Ludendorff on the Russian Front, 1914–1915." In strategy, Ludendorff had a leaning toward the Napoleonic manœuvre against the rear of the enemy. As to whether or not he had this predilection in the realm of tactics, it is necessary to analyze his battles of Tannenberg, the Mazurian Lakes and of Insterburg or Augustowo. As a basis for this study, the tactics of certain great captains, which has inspired that of the great German chiefs, must be recalled. At Cannae in 216 B.C., as Hannibal's centre fell back before the numerically superior Romans, his wing forces of seasoned African veterans were more and more thrown against the hostile flanks and the Numidian cavalry completed the encirclement. The Roman Army was annihilated—50,000 killed and the remainder taken into captivity. If an adversary is numerically inferior, Hannibal's method can still be followed by bringing on, by a quick stroke at one point of the hostile front, a local disorganization which will spread throughout the entire force. This was the tactics of Epaminondas in 371 B.C. at Leuctra. He threw the half of his forces against the Spartan right, the remainder only serving to occupy the enemy and prevent him from sending reënforcements to the threatened flank. First having arranged his order of battle parallel to that of the enemy, he suddenly pivoted his line on its right in order to assail the hostile right with his assault mass.

In the epoch of Frederick II, his troops were still so difficult to manœuvre that, once deployed, a modification to meet an unexpected attack could not be thought of. His victory at Leuthen in 1757 was gained by a manœuvre essentially similar to that of Epaminondas.

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Frederick's successes were largely due to his cleverness in concealing his assault mass thus obtaining the element of "surprise." But, about 1800, if not held in place by an attack, troops were mobile enough to be moved to meet the assault mass. The grand tactics of Napoleon also rested on a principal attack against one of the hostile wings—not necessarily the one which could be approached under cover, but the one behind which was the enemy's line of retreat. This main thrust was made only after having immobilized the enemy by an attack against his whole front which has forced him to throw into the combat all his reserves. But, in order to shake the chosen wing, Bonaparte first threw behind it a surprise turning attack, preceded by a cavalry screen, which menaced the line of retreat. The cavalry withdrew to the flank and raced to this line. Not having reserves to meet the turning movement, troops were taken from the threatened flank at the moment, indeed, when the assault mass (mass of rupture) was about to assail it on its front.

In 1866, Bismarck and Moltke believed that such improvements had been made in the range, effectiveness, and rapidity of fire of the rifle and cannon that it was no longer possible to make a decisive attack of the Napoleonic battle, the moral sources of which they did not understand. Their idea was to crush the enemy by an envelopment with superior forces. Moltke's sole strategy was the converging of three armies on the presumed concentration point of the enemy, resulting in a battle with envelopment of both hostile flanks. But, due to the failure to synchronize these attacks, enormous losses were received at Koniggratz and St. Privat.

Schlieffen meditated on the great losses sustained by and the insufficient encirclement of Moltke's grand tactics. He discarded Frederick's method because the single envelopment did not prevent the enemy enveloping the other flank; and, not understanding Napoleon's plan of battle, he felt that the powerful weapons of the day precluded the possibility of success. He believed that Moltke's errors were in having a too enterprising general leading the principal army against the enemy's front without awaiting the enveloping masses which were also too weak to insure the encirclement. Schlieffen decided that the distribution of forces should be changed—to decrease the numbers attacking the enemy's front and to increase the troops of the enveloping masses. If the enemy did advance in the centre, the enveloping masses would come together on his rear and he would be in a trap. This is the system of Hannibal at Cannae. It is this system that Schlieffen recommended for fifteen years as chief of the German General Staff; and the author believes that it had a strong hold on the German generals of 1914. The aim is to bring, by surprise, a mass against one point of the enemy capable of

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producing the disorganization of the whole front. Secrecy and rapidity of movement are required.

Captain Salmon's "Study of the Movement of an Infantry Division by Motor Transportation" describes the advance of the 38th Division, September 10 and 11, 1914, into the thirty kilometre breach made by von Kluck in his left. While the motor column had its advance guard, the move was made behind a screen of two cavalry divisions, the necessity of which is stressed. Road repairing detachments were sent ahead; and flank protection was assured by units stationed out on cross roads during the time of passage of the column. The author points out the interdependence of the cavalry for the screen—which is charged with the security and the uninterrupted advance of the infantry division, the seizure of a desirable position and the covering of the detrucking—and the infantry division, transported by motor, which will eventually support the cavalry, if heavily engaged, or cover its withdrawal.

The concluding portions of Commandant Biswang's study, "Accompanying Weapons of France and Other Countries," appear in these numbers. Outstanding facts concerning the infantry accompanying weapons—and their doctrine—in Russia, the United States, Italy, and Germany are set forth. All are searching for a more effective piece—probably a combination howitzer and gun. The infantry is certain to need such pieces from time to time during an advance and an efficient weapon will obviate the drawing of accompanying guns from the divisional artillery. Though belonging to the infantry the author believes that these guns should be manned by artillerymen as they are really artillery weapons and the infantry already has an excessive number of weapons. Characteristics of the ideal weapon are described. The necessity of an anti-aircraft machine gun of about one-half inch calibre for the infantry is pointed out, if possible, capable of being used against tanks.

Other articles in these issues are Commandant Padovani's "Infantry in Open Warfare" and "The 6th Cavalry Division in the Great Manceuvres of the Rhone and the Tanks."

### ITALY

#### "*Rivista di Artiglieria e Genio*," July, 1924

The organization of large units is the subject of an article by Major Fernando Gelich, Artillery, continued from the last number of the *Rivista*. The author favors an organization based upon mixed brigades for mountain warfare, the mixed brigades to be composed of two regiments of infantry and one regiment of artillery.

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The artillery regiment would have two 75-mm. battalions and one 100-mm. howitzer battalion. A division of mixed brigades would consist of three of these brigades, additional artillery, engineers, services and some special Alpine infantry, and would be a sort of small corps. In mountain warfare, where frontages are often great, communications difficult and units more or less isolated, the advantages of such an organization are obvious. It is claimed that this arrangement would work well in heavily wooded country or on plains where it is difficult to obtain observation for the artillery except by going forward with the infantry.

Major-General Ettore Cavalli contributes an article on methods of obtaining ballistic formulas to supplement those arrived at by the famous ballistician, Siacci. The article is of a very technical nature and goes deeply into higher mathematics.

Under "Historical Notes," Lieutenant-Colonel Francesco Laviano contributes an extremely interesting work on the massing of artillery for the battle of Vittorio Veneto.

It appears that recently the French *Revue d'Artillerie* published an article describing a new method of computing firing data called the graphic firing table. The *Rivista* claims that this method and the instrument used are singularly similar to Major Speranzini's arrangements which are about to be tried out by Italian batteries. The Speranzini graphic firing table is explained and illustrated in this number of the *Rivista*. It consists of a metal disc on which are incised curves, graduations, numbers, etc., in various colors. A segment of another disc which also bears various graduations, lines, etc., is superimposed on the first disc. In addition there is a sort of slide rule, at one end of which is a pin which goes into holes in both the segment and the disc at their centres, allowing the three elements to be fastened together, but at the same time to revolve on each other. The graduations, figures, curves, etc., all have to do with figuring elevation and deflection, giving the necessary data such as temperature, distance of target and so forth. The firing tables are operated by setting off the proper elements of fire on the proper scales, then moving the scales so as to get the correct reading, somewhat like an elaborate slide rule. It can compute graphically the range corrected for the various atmospheric and ballistic factors, the corrected deflection, site and fuse setting.

Captain Justrow's work on the wear of artillery, trench mortars and small arms bores and the influence of wear on the trajectory is continued in this number.



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Considerable attention is given to a report submitted by the board which examined the possibilities of the Holt, Model 1920, 6-ton submergible tractor, which was published in THE FIELD ARTILLERY JOURNAL.

### **"Rivista di Artiglieria e Genio," August–September, 1924**

The leading place in this number is given to an article by Major Italo Caracciolo in which he claims that one of the greatest lessons to be learned from the World War is that modern artillery must prepare itself to fire for effect without adjustment. Otherwise, it becomes a slave to visibility and is rendered more or less useless by darkness, smoke, fog, or dust. While the author admits that observed fire and careful adjustment are desirable under certain circumstances, he claims that "fire surprise," concealment of one's positions, strength and intentions, and the necessity of firing at defiladed targets, makes unobserved fire of the greatest importance, especially on the offensive. General Herr of the French artillery, Ludendorff, and the 1923 Italian firing regulations are quoted to show the necessity of instruction and progress along the lines of unobserved artillery fire. This article is to be continued.

Major Sallustino Regii presents a study on interior ballistics in which he works out several formulas for the movement of the projectile in the bore as affected by shape and rate of burning of the grains in the powder charge.

The Captive Balloon Service of the Italian Army, its history, equipment, organization, tactics and development during the war, forms the subject of a very interesting article by Lieutenant-Colonel Enrico Zicavo of the Engineers. He states that telephonic communication with the ground is by means of the cable alone, without any return circuit wire. Colonel Bardeloni's invention makes it unnecessary to have a metallic return circuit, the circuit being closed by grounding one end to the earth and by sending the current out into the air at the balloon end by a special device.

A discussion of methods of instruction in advanced military schools forms the subject of an article by Major Paolo Berardi, who approves greatly of the manner in which the Italian Naval War College is conducted. At that institution every effort is made to get away from narrowness, formality and school atmosphere, even to the extent of avoiding scholastic nomenclature. For example, instead of calling the place a college or school, it is called an institute, the course is called a session, the sections are called offices,

## FOREIGN MILITARY JOURNALS—A CURRENT RÉSUMÉ

the instructors are lecturers or members of the directorate and the students are frequenters (!).

Accompanying batteries is the subject of a communication from Lieutenant-Colonel Spartaco Targa, Artillery, who contributes two noteworthy documents in this connection. They are important principally because they were published toward the close of the war, when war of movement was an actuality. The first document is a circular dated October 23, 1918, from the Italian Commando Supremo on the employment of 70-mm. mountain guns as accompanying guns and accompanying batteries. The other is an extract from the information bulletin of the Third Army showing the manner of employment of batteries accompanying the infantry in the German Army, dated October 20, 1918.

Under Miscellaneous, the following are of interest:

Extracts and illustrations from a book called "How to Avoid Aerial Observation," by Major F. Porro and Captain F. Volla of the Royal Italian Air Service.

A table showing the composition of the French National and Colonial Artillery.

Illustrations of the new great high-power French railway gun—maximum range 120 kilometres (74.5 miles), 210-mm. calibre, length 110 metres, weight of projectile 108 kilos (238 pounds), propelling charge 160 kilos (353 pounds), muzzle velocity 1450 metres per second.



# REGIMENTAL NOTES

TENTH FIELD ARTILLERY

CAMP LEWIS, WASHINGTON

Colonel William M. Cruikshank, *Commanding*

## *Roster of Officers*

Lieutenant-Colonel George M. Brooke  
Lieutenant-Colonel Fredrick M. Jones  
Major Joseph Andrews

### CAPTAINS

Henry B. Parker  
Lawrence V. Houston  
Louis W. Hasslock  
Albert C. Searle  
Francis H. Boucher  
Arnold W. Shutter  
William E. Corkill  
Zenas N. Estes  
Martin C. Walton, Jr.

### FIRST LIEUTENANTS

Stewart F. Miller  
Doyle O. Hickey  
Francis H. Vanderwerker  
Russell D. Powell  
George F. Wooley, Jr.

Henry B. P. Boody  
Raymond G. Miller  
Robert T. Strode  
David D. Caldwell  
Charles D. Calley  
Henry J. D. Meyer

### SECOND LIEUTENANTS

Edward A. Routheau  
Harold F. Handy  
Edward J. McGaw  
Henry L. Love  
Herbert W. Kruger  
Thomas E. Meyer  
Robert K. Haskell  
Kenneth S. Sweany  
Paul D. Michelet  
Roy P. Turner  
Dalies J. Oyster

DUE to a shortage of men the Tenth Field Artillery has maintained only four active organizations during the past year, *viz.*: Headquarters Battery, Service Battery, and Batteries "A" and "D", under command of Captains Lawrence H. Bixby, Francis H. Boucher, Louis W. Hasslock, and Arnold W. Shutter, in the order named.

One hundred and eleven recruits were received on September 15, 1924, and from these Captain Henry Burr Parker is organizing Battery "B." The horses are whites and grays and will make a smart showing in a few weeks time. Three hundred and thirty more recruits are shortly expected; and, from these, Headquarters 1st and 2nd battalions and Battery "E" will be recruited, Captain Albert C. Searle and First Lieutenant George F. Wooley, Jr., commanding.

Since January 10th we have lost sixteen officers and gained eighteen. The regiment lost also during this time one hundred and sixty-nine enlisted men by discharge and gained one hundred and thirty through enlistment and reënlistment and two hundred and ten recruits from depots.

Colonel George G. Gatley, who commanded the regiment for the past two years and who had endeared himself to the entire personnel, left on August 4th to assume command at Fort McDowell, California.

## REGIMENTAL NOTES

He was escorted to the main gate of the camp by the regiment in a body and given an affectionate farewell by all hands wishing him bon voyage as he started in his Willys-Knight coach with all sails set bound south over the Pacific Highway to join his new command. Long may he and his name endure!

Major Francis W. Honeycutt left the regiment on July 1st to take over his new duties as instructor at Fort Sill, Oklahoma, and Major John R. Downer left also on July 1st to take the course at the Command and General Staff School, Fort Leavenworth, Kan.

The new regimental commander, Colonel William M. Cruikshank, joined the regiment on August 17th from duty in the War Plans Division, War Department General Staff at Washington, D. C. Colonel Cruikshank as Brigadier-General commanded the 3rd Field Artillery Brigade on service in the A.E.F. Of this brigade the Tenth still forms a part, and the regiment welcomes him as a former and highly esteemed commander.

Captain Innes H. Bodley, 10th Field Artillery, was retired July 1st for disability incident to the service. The regimental order announcing his retirement paid a tribute to Captain Bodley in the following words, "While on the active list, Captain Bodley was an efficient and gallant officer, and a courteous and kindly gentleman of all-round type that the regiment and the service can ill afford to lose." Also during the past year were retired with long and faithful service the following noncommissioned officers, *viz.*: Master Sergeant Leslie L. Frank, January 8th, First Sergeant Patrick Pepper, February 19th, and First Sergeant Frank J. Hilton, October 8th.

The summer training camp this year was very successful. The Tenth furnished personnel and matériel for assistance in this work to the 146th Field Artillery (Washington N. G.), the 145th Field Artillery (Utah N. G.), and the 143rd Field Artillery (California N. G.), as well as to units of the Field Artillery of the National Guard of the states of Idaho and Oregon and to the field artillery units of the Officers Reserve Corps. The officers and men on this duty enjoyed the work and the opportunity of a friendly get together with the National Guard and the Organized Reserves.

The regiment was inspected by the Chief of Artillery, Major-General William J. Snow, in July, and the personnel was happy in this opportunity to meet its chief and glad for the General to see for himself the conditions at Camp Lewis. The command was also inspected by Major-General Charles G. Morton, the Corps Area Commander, and by Brigadier-General H. A. Drum, General Staff, Assistant Chief of Staff G-3, during the period of summer training.

In order that our comrades of the service may appreciate the conditions at Camp Lewis, it may be said that the cantonment is extensive and the buildings, being of a temporary nature as is the

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case with all war cantonments, are rapidly deteriorating. In addition to these, there are large quantities of supplies to be safeguarded and cared for. These combined with the necessary overhead of Third Division and Camp Headquarters and the general shortage of men in all organizations at the camp makes the military training and instruction of the men a difficult problem. It is hoped that the way will be clear for the establishment of a permanent post at Camp Lewis within the next few years. With half the present old cantonment removed under contract and substantial barracks and quarters erected, Camp Lewis would take on a new lease of life. With its mild climate and fertile soil, the post can be made very attractive; and with a permanent post established and transportation to the adjacent cities cheapened, a most attractive station would be established.

The camp stands on an extensive reservation, a large part of which is in forest, and there are facilities for hunting and fishing on the reservation itself, unsurpassed at any other post of the Army. The Rainier National Park and Forest Reservation with its great snow-covered mountain is an easy week-end trip by motor, and so also are the Olympic Mountains in which there is excellent hunting and which are accessible in a few hours over fine paved roads. Camp Lewis is on the Pacific Highway now practically paved all the way to California and then to the Mexican Border. In addition to these advantages, Victoria and Vancouver, British Columbia, are within easy motoring or steamer distance, affording an opportunity for week-end visits, so to speak, to our friends just across the northern border. For those to whom the changing Orient or Alaska offer an attraction, the steaming distance and facilities are superior to those in any other portions of the United States. Camp Lewis is close to the hub of the great Northwest. It is of interest to note that Captain William E. Corkill, the regimental adjutant, and Mrs. Corkill, a few months ago, took advantage of this situation and ended by making a round-the-world tour including the journey by airplane from Paris to London.

ELEVENTH FIELD ARTILLERY

SCHOFIELD BARRACKS, HAWAII

Colonel Otho W. B. Farr, *Commanding*

### *Roster of Officers*

Lieutenant-Colonel William H. Peek  
Major Harold E. Miner  
Major Francis T. Colby  
Major Joseph M. Swing

#### CAPTAINS

H. Crampton Jones  
Stacy Knopf  
Sidney F. Dunn

John M. Fray  
Stanley W. Root  
Charles R. Doran  
Patrick E. Shea  
Theodore E. T. Haley  
Guy O. Kurtz  
John A. Chase  
Keith K. Jones

## REGIMENTAL NOTES

### *Roster of Officers (continued)*

#### CAPTAINS

Frank G. Rogers  
Albert C. Gale

Thomas McGregor  
Maurice K. Kurtz  
Urban Niblo  
John M. Works.

#### FIRST LIEUTENANTS

Francis J. Achatz  
Ralph C. Benner  
Leonard S. Arnold  
William A. Enos  
William C. McCarthy  
Charles F. Fletter  
Boyce M. James  
Robert G. Gard  
Anthony C. McAuliffe  
Albert R. S. Barden  
Julius E. Slack  
Charles N. McFarland  
Charles A. Pyle  
Foster J. Tate  
Clarence J. Kanaga

#### SECOND LIEUTENANTS

Richard C. Partridge  
Auguste R. Taylor  
John R. Culleton  
George DeGraaf  
William W. Ford  
William S. Wood  
John G. Howard  
Francis H. Lanahan, Jr.  
Richard C. Singer  
Richard M. Costigan  
Wilbur S. Nye  
Charles H. Swartz  
Alexander G. Sand  
Robert DuV. Waring

The 11th Field Artillery as these notes are sent in, has just completed its course of summer instruction culminating in the Department Manœuvre. During the three day problem testing the defense of the island, the regiment was commanded by Lieutenant-Colonel William H. Peek, Colonel Farr acting as brigade commander. The staff and headquarters detachments were given valuable instruction and training during the problem. The firing batteries did not participate.

On August 26th, the regiment returned to Schofield Barracks, after a six weeks' summer encampment at Hauula. The camp was very instructive and enjoyable. Morning periods were devoted to drills, reconnaissances, and firing with various methods of observation and adjustment. The afternoons were devoted to officers' schools in conduct of fire, and recreation for officers and men. The swimming on the excellent beach at Hauula was the principal diversion. The conclusion of the encampment was marked by a regimental party for the officers and ladies at the regimental beach house. The marches of thirty-five miles to and from camp were executed in about nine hours, and showed a marked improvement in the matériel of the regiment.

An interesting feature of the firing while in camp was the adjustment by high-burst ranging methods. Directed by Major Harold C. Miner, Commanding Officer, 3rd Battalion, the fire gave the most convincing proof of the practicability and accuracy of this method of adjustment. The problems were fired by methods prescribed in T. R. 430-85 and Field Artillery Information Bulletin No. 63. Three

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observation posts were used, gun-target range 5780 yards (map), gun-adjustment point range 4600 yards. The difference in deflection was 300 mils. For the first and second problems the adjusting point was 120 feet above the howitzers, for the third problem 240 feet, and for the fourth problem 450 feet. During the trial and improvement fire, shrapnel was used with one howitzer; during fire for effect, shell was fired from two howitzers. The following results were achieved: First problem, two overs and four shorts; second problem, three shorts and one target; third problem, five overs and one target; fourth problem, three shorts and three targets.

Upon return from camp to barracks, the regimental track team succeeded in winning both the Brigade and Division Meets. Much credit is due to Sergeant Tremont, Corporal Provence, Private Baldwin, Private Ellis, Private Buchanan, and Corporal Neil for their untiring efforts in practice, and their unconquerable spirit against stiff competition in the meets. The team was ably coached by Lieutenant William C. McCarthy, and Lieutenant Charles N. McFarland.

Polo is progressing in the regiment with about eight good players. The retention of the post polo team mounts on the Coast due to the quarantine against foot and mouth disease, has, however, crippled polo during the past season. The Eleventh Field Artillery Team composed of Lieutenant Joseph Tate, Lieutenant Charles N. McFarland, Major Francis T. Colby, Lieutenant William C. McCarthy, Lieutenant Albert S. Barden, Lieutenant John M. Works, and Lieutenant Thomas McGregor, succeeded in winning the Post Championship after a severe contest with the 13th Field Artillery Team. An extra game was necessary to determine the final result of the tournament.

The regimental football team coached by Major Joseph Swing and Captain Douglas L. Crane shows promise for championship honors this season, and is anxiously awaiting the opening game October 18th.

The regiment has received about three hundred recruits during the past season and is now as follows: Officers, present and absent 52, effective 31; enlisted men, present and absent 810, effective 610.

Much interest is shown in G. O. 36, Headquarters Hawaiian Department, which provides for a progressive schedule of drills and instruction for one year. The salient features of the order are that all available personnel of the post will drill in the mornings; afternoons are to be devoted to fatigue, courts, boards, and post schools; Wednesday and Saturday afternoons are holidays to be used for recreational activities; the morning drills to be scheduled in cycles of one year, starting with individual and squad instruction and progressing to brigade, division and department manœuvres.

## REGIMENTAL NOTES

The last year has seen a complete turnover of the personnel of the regiment which arrived in Hawaii in January, 1921. The only old-timers are Lieutenant-Colonel Beverly Browne, Major Joseph Swing, Lieutenant William A. Enos, 1st Sergeant Marquette, 1st Sergeant Edlavitch, Sergeant W. L. Smith, Sergeant Mahacik, Sergeant Delahunt, Sergeant Moskoff, Sergeant Creedon, Sergeant Tremont. All others are newcomers, or *malahinis*.

Hawaii continues to smile upon us with her unequalled sunshine, moonlight and balmy breezes so suitable for continuous training and delightful recreation.

TWELFTH FIELD ARTILLERY

FORT SAM HOUSTON, TEXAS

Lieutenant-Colonel Clifton R. Norton, *Commanding*

### *Roster of Officers*

Major Francis A. Doniat

#### CAPTAINS

Joseph Kennedy

Alpha Brumage

Robert Van K. Harris

Josiah A. Wallace

George R. Hayman

William H. Quarterman, Jr.

Audley M. Post

Allen H. Platt

Lewis F. Kosch

Philip T. Quinn

Stanley Richardson

Charles M. Thirlkeld

#### FIRST LIEUTENANTS

Lawrence B. Bixby

Clark H. Mitchell

Burdette M. Fitch

Guy C. Benson

John J. Burns

#### SECOND LIEUTENANTS

Walter D. Webb, Jr.

Alfred Vepsala

Floyd R. Brisack

Thomas E. Lewis

Walter H. DeLange

Dan Chandler

Michael Buckley, Jr.

Rex E. Chandler

John J. Binns

Rochester F. McEldowney

Chas. H. Hennessey

Peter Sather

George D. Crosby

Thomas E. Binford

William J. Eyerly

John G. Moore

Joseph R. Burrill

Nathaniel C. Cureton, Jr.

William J. Cleary

Louis G. Friedersdorff

John P. Maher, Jr.

Thomas J. Holmes, Jr.

Robert C. Cameron

Kenneth N. Decker

Joseph Massaro

Malin Craig, Jr.

Will K. Stennis

The Twelfth Field Artillery during the year 1924 has had three regimental commanders; won a baseball championship; furnished the battery for duty at the R.O.T.C., etc., at Fort Sill; been used as the demonstration unit with the 61st Field Artillery Brigade, Texas National Guard; and Battery "F" has been selected to compete for the Knox Trophy from this Post; coupled with these items a complete turnover of officers—altogether a fair year.

Colonel Henry B. Farrar, having completed two years' command of the regiment July 1st, was assigned to the Organized Reserves,



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Fort Sam Houston. Colonel Farrar won the love and admiration of the regiment and took it through three years manœuvres by the division and corps. The last regimental manœuvre in May was termed by the Brigade Commander, General Paul B. Malone, "As a most successful manœuvre and instructive problem." The problem lasting ten days was prepared by Colonel Farrar and solved by the regimental executive, Lieutenant-Colonel C. R. Norton, and the battalion commanders Major Clifford M. Tuteur, commanding 1st Battalion, and Major Fred T. Cruse, commanding 2nd Battalion. All possible conditions were incorporated in the problem involving meeting engagements, advance against prepared positions, retreat, withdrawal from action, and accompanying guns and batteries. A portion of the problem was at night and service ammunition was used, making conditions as nearly "war-time" as was possible. The manœuvre was witnessed at different stages by the various commanders stationed at Fort Sam Houston.

The usual number of manœuvres for brigade, division and corps have taken place during the past year; interesting, instructive, and *wet*—"it ain't going to rain anymore" being a song of prayer rather than prediction when the Second Division takes the field. During the last three years division manœuvres have been occasions for heavy rain, in this unusually dry state.

Colonel F. LeJ. Parker assumed command of the regiment on July 1st, as it was preparing to act as the demonstrating unit with the 61st Field Artillery Brigade, Texas National Guard, General Claud V. Birkhead Commanding. The success of the regiment on this duty is attested in the excerpt from a letter of General Birkhead to Colonel Parker: "I desire to express to you, Sir, my sincere appreciation for your splendid spirit of cooperation and willingness to aid, that has been so marked in our associations during this encampment. I do not know of a single request that failed to receive immediate and considerate attention, nor a single unpleasant incident in the dealings between your Headquarters and mine."

The regiment entertained the officers and ladies of the Texas National Guard with a controlled ride and supper at Camp Stanley; and were in turn entertained right royally at the Alamo Country Club at a dance by the 61st Field Artillery Brigade.

Though only with us a short time, being assigned to the office of the Chief of Staff, Washington, D. C., November 15th, Colonel Parker accomplished for the regiment, a change from the cantonment to the permanent Post making this the finest quartered regiment in the United States, bar none. He built up an esprit de corps which is evident to the casual observer, and laid the foundation for what appears to be a most successful year. The regiment is now commanded

## REGIMENTAL NOTES

by Major F. A. Doniat who took over from Colonel Parker, Colonel Norton being on special duty.

The regiment won the Division baseball championship for the year 1924 coming from behind with the aid of Lieutenant Buckley at first base and 1st Sergeant James K. Brought on the mound for 10 games of the 18 played. The football team although not as successful as the baseball team, was "in" to the last game.

For the first time enough recruits are in sight to fill the regiment, 150 being due to arrive in December and 200 in January. Although a shortage of officers exists, the 1924 class from the Military Academy furnished fourteen prospects who will finish their basic course in the spring.

THIRTEENTH FIELD ARTILLERY

SCHOFIELD BARRACKS, HAWAII

Colonel Andrew Moses, *Commanding*

### *Roster of Officers*

Lieutenant-Colonel James P. Barney  
Major Ralph Hospital  
Major Harleigh Parkhurst

#### CAPTAINS

Wesley J. White  
William A. Campbell  
Edward F. Hart  
David S. Doggett  
Russell H. Dixon  
Arthur O. Walsh  
Charles W. Mays  
Robert H. Crosby  
Richard G. Hunter

Elmer R. Block  
Leon E. Savage  
Henry E. Tisdale  
Irwin B. Warner  
Melville S. Creusere  
Charles C. Knight, Jr.

#### FIRST LIEUTENANTS

Henry L. Kersh  
Albert J. Hastings  
William R. Schaefer  
Emmett A. Niblack  
Lawrence E. Heyduck  
Franklin H. Canlett

Raynor Garey  
Albert Brill  
Charles R. Carlson  
Charles W. Hensey  
Shirley R. Hurt  
Alexander S. Bennet  
Robert M. Montague  
Edwin V. Kerr  
Edward L. Strohhenn  
Marion P. Echols  
Henry C. Sanderson, Jr.  
Fredrick B. Porter

#### SECOND LIEUTENANTS

Harold A. Doherty  
Edward J. McGaw  
Frank A. Henning  
James M. Lewis  
James A. Samouce  
Russell O. Smith  
Homer W. Kiefer  
Maurice W. Daniel  
Park B. Herrick  
Edward T. Williams  
Leon V. Chaplin  
Allen E. Smith  
William E. Waters

The Thirteenth Field Artillery has a reputation for marching, made in France, and maintained to the present time. Our marches over the Oahu roads are frequent and are occasionally made under adverse conditions. We are handicapped with a combination of paving and grades that, during wet weather, would be impossible for horse-drawn artillery. The eighty-mile circuit road of the

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Island is paved for approximately fifty miles. Our permanent station, Schofield Barracks, is located on the paved section, so that we are obliged to use this paved road frequently. Our alternative is to use the dirt roads through the cane or pineapple fields, but these are impassible for trucks in wet weather. As a rule our tractor and truck columns are not permitted to use the paving during daylight so our marches usually start or finish at night. Battery "B" completed a series of test marches with Porté Artillery. These tests proved the practicability of the Class "B" Liberty Trucks for motive power, with capacity load,—gun, ammunition, and personnel, and 3-ton rubber tired trailer carrying a 5-ton Holt tractor over paved and improved roads of Oahu, under all weather conditions. The time required for loading and unloading was negligible. One march of eighty-seven miles was made in eight and one-half hours. The average of the running time was about twelve miles per hour.

The regiment goes into summer camp for six weeks during the year. The last three encampments have been on the northern shore, "Windward Oahu," near Kahuku, approximately twenty-five miles from Schofield. Intensive training in manœuvring, and night firing over water with search light illumination is featured. A system of "battery days" was inaugurated whereby the entire organization is at the disposal of the battery officers for training one day per week. This system has continued since our return to the garrison.

Due to the tropical climate we are able to manœuvre during the entire year. Our manœuvres are more or less progressive in that certain months are set aside for the Brigade, the Division, and the Department. Within the regiment we have specified days allotted to the battery (battery days), the battalion, and the regiment. These days are utilized for manœuvres to include the entire personnel and equipment, or are otherwise used for communication problems where only the headquarters of each unit functions. We anticipate the extensive manœuvres in which all troops in this Department will participate on the arrival of the combined Atlantic and Pacific Fleets in April, 1925.

The 13th Field Artillery has been one of the leading regiments of the Hawaiian Division athletically in the past six months. In the Division Track and Field Meet the Regiment won the most points in the track and field events, though it was nosed out of the lead in total points by the 11th Field Artillery which won more points in military events. The tug-of-war team of this Regiment, unbeaten over a span of seven years, continued its success this year by winning the event in the Brigade and Division Track and Field Meets. This team entered competition in the Hawaiian Territorial Fair and defeated the best military, collegiate and commercial tug-of-war teams

## REGIMENTAL NOTES

in the Islands. The Fair Commission presented each member of the team with a gold medal, emblematic of the championship of the Hawaiian Islands. The remarkable success of the 13th Field Artillery tug-of-war teams is due to systematic coaching and training of Sergeant William J. Bailey, 13th Field Artillery.

The football team has just won the Schofield Barracks Championship for 1924, defeating our closest competitors by a score of 46 to 7. This is the second consecutive season that the regiment has won the Schofield Championship.

The 13th Field Artillery was well represented on the team which was sent to Baltimore, Maryland, to represent the Hawaiian Division in the Olympic tryouts. Three officers and five enlisted men of the organization were selected to go.

Polo in this regiment is going forward at a rapid pace. Although handicapped considerably by lack of mounts, with the few mounts assigned to a motorized regiment and more that officers have purchased from the Parker Ranch, a polo stable has been organized. The 8th Field Artillery and the 13th Field Artillery combined their efforts and a good polo field has been built. Match games have been held with the regimental teams of the Post about twice weekly. Captain Wesley J. White of this regiment has just returned from the mainland where he distinguished himself by umpiring all the recent international Polo Games at Meadow Brook, and refereeing the United States Open Polo Championship Games.

On October 4th the regiment gave a dinner dance in honor of Brigadier-General Moseley the new Brigade Commander and the newly arrived officers and their families. The Lanai of the Haleiwa Hotel was the scene of the festivities and was beautifully decorated with artillery red. Music was furnished by the 13th Field Artillery Orchestra and Haleiwa Hawaiian Orchestra.

### FOURTEENTH FIELD ARTILLERY

FORT SHERIDAN, ILLINOIS

Major Robert F. Hyatt, *Commanding*

#### *Roster of Officers*

##### CAPTAINS

Orville M. Moore  
George R. Middleton  
Philip Ramer  
Arthur B. Wade  
Peter P. Rodes

Herbert E. Baker  
James E. Bush  
Donald F. Carroll

##### SECOND LIEUTENANTS

Stephen Y. McGiffert  
Lauren B. Hitchcock  
Clayton H. Studebaker  
Everett L. Young  
Willard F. Millice  
Richard S. Marr

##### FIRST LIEUTENANTS

William J. Epes  
John H. Lewis  
Ernest C. Norman  
Richard H. Slider

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The First Battalion, Fourteenth Field Artillery, a horse drawn 75-mm. organization, forms a part of the Twelfth Reinforced Infantry Brigade. Headquarters Detachment and Combat Train, Service Section, and Batteries "A" and "B" are stationed at Fort Sheridan, Illinois. Battery "C" is stationed at Jefferson Barracks, Missouri.

The battalion came into existence on December 14, 1922, and was formed from Batteries "D", "E", and "F", Third Field Artillery. Battery "D", Third Field Artillery, was formerly the Sixth Training Battery which was formed in Camp Grant, Illinois, from the Seventy-eighth Field Artillery when that organization became inactive. It is a black horsed organization. Battery "E", Third Field Artillery, was formerly the Fifth Training Battery, which was formed from the Eighty-first Field Artillery. It is likewise a black horse organization. Battery "F", Third Field Artillery, was formerly the Fourth Training Battery, and like the Fifth Training Battery was formed from the Eighty-first Field Artillery.

The first time the battalion was together was last summer at Camp Custer, Michigan. The organizations from Fort Sheridan left that station the latter part of May and hiked to Camp Custer, arriving there on May 29, 1924. This hike required about ten days. Battery "C" arrived at Camp on June 1, 1924, from Jefferson Barracks, Missouri, having come by rail.

Having settled down, the battalion then began its training. The first part of the training period, the month of June, was devoted to the training of the personnel of the battalion. Both officers and men during this period became quite proficient in firing. In July the O.R.C. came. The entire officer personnel of reserve field artillery regiments were superimposed upon our battalion for their training. This proved to be beneficial to both ourselves and the reserve officers and it is believed that this system is the best for the training of our reserve officers. During the C.M.T. Camp, which covered the entire month of August, our animals and matériel were used by their field artillery batteries. Advantage was taken of this period to fire out pistol practice. The C.M.T.C. being over, our attention was now devoted to our return to our permanent station. On September 6, 1924, the battalion was again broken up, Fort Sheridan organizations leaving for their station *via* hiking, and Battery "C" for Jefferson Barracks, by rail.

One of the features of Camp Custer are the reviews. The battalion participated in every review held during the summer. Its black horses with white halter shanks, red nose and brow bands, red and gold saddle cloths, "clean and shin'y" harness and carriage, not to speak of the "spoony" personnel, made a picture of lasting impression not only in the mind of every field artilleryman present,

## REGIMENTAL NOTES

but for all officers, enlisted men, and civilians who had the good fortune to be present. Our appearance this summer brought us much favorable comment and has made us the talk of the Sixth Corps Area.

For those not fortunate enough to see us last summer we bid you come to Camp Custer next summer for we'll be there more "spoony" than ever and perhaps with a few tricks up our sleeves.

FIFTEENTH FIELD ARTILLERY

FORT SAM HOUSTON, TEXAS

Colonel Clarence R. Day, *Commanding*

### *Roster of Officers*

*Lieutenant*-Colonel Laurin L. Lawson  
Major Louis R. Dougherty  
Major Clifford B. King

#### CAPTAINS

Arthur S. Harrington  
Samuel G. Fairchild  
Cyril Bassich  
Claude A. White  
Samuel D. Bedinger  
Norbert C. Manley  
Walter Hitzfeldt  
John G. White  
George E. Cook  
William J. Egan  
Warren H. McNaught

#### FIRST LIEUTENANTS

Charles H. Brammell  
W. Sturat Zimmerman  
Michael C. Shea  
John Hinton  
John A. Smith, Jr.

#### SECOND LIEUTENANTS

Edwards M. Quigley  
Roy P. Huff

Richard Sears  
Alfred L. Price  
Robert F. Hallock  
William R. Grove, Jr.  
Sheffield Edwards  
George W. Hartnell  
Joseph A. Cella  
John E. Adkins, Jr.  
Francis A. Garrecht, Jr.  
Frank Dorn  
David S. Babcock  
Ernest O. Lee  
Francis M. Day  
Charles D. Daniel  
James G. Anding  
Howard E. Kessinger  
Walton G. Proctor  
Thomas G. McCulloch  
Daniel F. Healy, Jr.  
Frank S. Kirkpatrick  
William H. Bertsch, Jr.  
William L. Coughlin  
George E. Wrockloff, Jr.  
Thomas A. Jennings  
James B. Kraft  
Frank F. Carpenter, Jr.  
Thomas A. Doxey, Jr.

The close of the year 1924 marked the completion of a full year of strictly garrison duty for the Fifteenth Field Artillery, broken only by the usual marches to Camp Stanley, Texas, for target practice and firing for training camps.

On March 15th, under command of Colonel C. R. Day, the regiment marched to Camp Stanley, Texas, where it participated in technical and tactical firing until April 30th, when it returned to its regular station, Fort Sam Houston. During this period the six batteries fired approximately 12,500 rounds of shell and shrapnel in approximately 300 technical problems of all classes and ten tactical

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problems, ranging from battery to participation with the Second Field Artillery Brigade.

On the 18th of May the regiment marched again to Camp Stanley where it participated in the tactical inspection of the Division and Corps Area Commanders, returning on May 28th. The manœuvres ended in one of the most drenching rain storms ever seen in a section of the country that can do itself extremely well in this regard. Despite this handicap, the field artillery communications were put through, most of the wire being laid in the black darkness of the night of May 26-27th.

The period until June 14th passed uneventfully. Then the batteries of the Second Battalion, under command of Major Lewis R. Dougherty, were detailed for the summer training camp at Fort Sam Houston, until August 30th. During this time, Battery "F", commanded by Captain William J. Egan marched twice to Camp Stanley. On each occasion they fired for the R.O.T.C. and C.M.T.C. and twice participated in demonstrations. The regimental band went to the summer training camp at Denver, Colorado, where they made several trips with the Denver Commercial Club from whom they received several commendations as well as from Brigadier-General Paul B. Malone, commander of that camp and also of the Second Field Artillery Brigade.

From August 1st to 15th, the 343rd and 344th regiments were superimposed upon the balance of the 15th for their annual training. Such prominent reserve officers as Colonel Fred A. Logan, Colonel Dan T. Moore and Lieutenant-Colonel John T. Wakefield, were included in the number. When the training period was over the visitors gave the regular officers a banquet at the Gunter Hotel in San Antonio which will long be remembered as a most enjoyable affair. The regiment received two commendations from Corps Headquarters as a result of this work.

Gunners examination was completed November 15th, with a total of 85.3 per cent. qualified.

In December, a large draft of recruits was received from the 2nd Corps Area, which materially lessened the irksome shortage of personnel.

The regiment was particularly active in athletics and sports. In both baseball and football, up to their last game, the regimental teams tied for the divisional championship, being the runner up in baseball. In polo, while the regimental team did not participate in any tournament this season, two members, Major Clifford B. King, and First Lieutenant John A. Smith, Jr., were selected in December to represent the Corps Area at the tournament in Mexico City. Lieutenant Smith was also selected as a member of the American

## REGIMENTAL NOTES

Polo Team and played in many tournaments during the summer in New York and vicinity. Second Lieutenant Blackshear M. Bryan was ordered to Baltimore as a member of the 3rd Corps Area football team, and 2nd Lieutenant Donald Q. Harris, and Corporal Huston C. League, 2nd Combat Train, were selected to represent the Corps Area at the Army Olympic tryouts as lightweight wrestler and heavyweight boxer, respectively. Unfortunately Corporal League broke his hand in preliminaries and was unable to go, but Lieutenant Harris lasted through until the national tryout, when he was eliminated for being slightly overweight, after having thrown his man.

Socially, the regiment has been active. Several large dances and receptions were given throughout the year and the regiment has also been entertained by the 12th Field Artillery and the officers of the 61st Brigade, Texas National Guard, with whom the most cordial relations were established during the summer training period of 1923, when this regiment was brigaded with them.

Major Whitmon R. Conolly was assigned to the regiment in July, but his service with it was but short as he passed away at the Walter Reed General Hospital, Washington, D. C., on October 25th after a short illness. Although he had been with the regiment such a short time he had impressed upon all the members the feeling that they had associated with a loyal and efficient officer and gentleman.

During the year the following members have been retired after 30 years service in the United States Army: Master Sergeant Andrew J. Jackson, Master Sergeant Max Weinberger, Master Sergeant Edward R. Fann, Staff Sergeant Andrew Robertson.

SIXTEENTH FIELD ARTILLERY

FORT MYER, VIRGINIA

Major R. E. D. Hoyle, *Commanding*

### *Roster of Officers*

#### CAPTAINS

Joseph S. Tate

Steele Wotkyns

Edward R. Roberts

James L. McIlhenney

#### FIRST LIEUTENANTS

Robert W. Hasbrouck

Stuart M. Bevans

Isaac L. Kitts

Edward M. Taylor

Robert G. Hood

Louis B. Ely

Walter T. O'Reilly

#### SECOND LIEUTENANTS

Edward H. Lastayo

Douglas Johnson

Charles D. Palmer

Samuel V. Krauthoff

Harry Van Wyk

William Barksdale, Jr.

James A. Watson, Jr.

Lester J. Tacy

George D. Pence



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The First Battalion, Sixteenth Field Artillery, is stationed at Fort Myer, and in addition to the usual garrison duties at that station participates yearly in the training of the various components of the Army at such stations as Tobyhanna, Pa., and Camp Meade, Maryland. For the training season just ended the command has been twice at Camp Meade for periods of one month each. The first period, June 1st to 30th, was for its own service practice, and the second period, September 1st to 30th, was for two groups of field artillery reserve officers assigned to the Branch Assignment Group. This latter period was the first held for officers of the B.A.G. designation. A total of forty-one officers received instruction for fifteen-day periods. Due to the enthusiasm and professional qualifications of these officers the month of September was an extremely satisfactory period.

During the month of September the command participated in both the Defense Day Parade held in Washington, and the parade incident to the unveiling of the First Division Monument.

The Sixteenth Field Artillery is a strong supporter of polo, and despite lack of practice due to summer training, the team, composed of Major Hoyle, Captain Tate, Lieutenants Kitts and Hood, succeeded in holding the War Department First Team to a score of 8 to 9 in the fall War Department High Goal Tournament, and won the Low Goal Tournament, winning successively from Camp Humphries, 6th Field Artillery, 3rd Cavalry and War Department Second Team. It is contemplated that indoor polo will be played throughout the closed season with local and outside teams.

A soccer team of men from the Sixteenth Field Artillery is competing with success for local soccer honors and is receiving excellent support.

The preceding six months have seen the loss by orders of many officers: Captains P. G. Black and J. M. Sanderson being sent to U. S. M. A. and Pennsylvania N. G. respectively; Lieutenants E. W. Searby and O'F. Knight, to U. S. M. A.; and Lieutenants L. W. Prentiss and F. W. Crary to 4th Field Artillery, Canal Zone. Seven graduates have been assigned and joined: Lieutenants S. V. Krauthoff, L. J. Tacy, C. D. Palmer, H. Van Wyk, W. H. Barksdale, J. A. Watson, and G. D. Pence. Captains J. S. Tate and J. L. McIlhenny, and Lieutenant R. W. Hasbrouck, joined from the Field Artillery School. Major R. E. D. Hoyle relieved Major C. P. George upon the departure of Major George to the Command and General Staff School.

The annual tactical inspection of the command by Brigadier-General S. D. Rockenbach, Commanding the District of Washington, was held on October 5, 1924. The inspection consisted of full pack review and showdown, followed by a short march and an occupation

## REGIMENTAL NOTES

of position. The air service from Bolling Field sent out observation planes, and an adjustment from the air was effected with marked success.

SEVENTEENTH FIELD ARTILLERY

FORT BRAGG, NORTH CAROLINA

Colonel Conrad H. Lanza, *Commanding*

### *Roster of Officers*

Lieutenant-Colonel Creed F. Cox  
Major Thomas D. Sloan  
Major Frank B. Jordan  
Major Raymond Marsh

#### CAPTAINS

Charles W. Gallaher  
George R. Rede  
Robert G. Mangum  
John H. Ball  
Dale M. Hoagland  
Sidney J. Cutler  
Dover Bell  
Ben C. McComas  
Peyton Winlock  
James C. Patterson  
Erle D. Ferguson

#### FIRST LIEUTENANTS

Severn T. Wallis  
Osgood C. McIntyre

Charles R. Forrest  
Samuel R. Deanes  
Robert O. Montgomery  
William L. Kay, Jr.  
Crowell E. Pease  
Ellis V. Williamson

#### SECOND LIEUTENANTS

Joseph P. Wardlaw  
Clifford C. Duell  
Donald F. Fritch  
Ulysses J. L. Peoples, Jr.  
Paschal H. Ringsdorf  
Briscoe A. Trousdale  
George F. Williams  
James L. McKinnon  
John M. England  
Ernest T. Owen  
Martin H. Burckes

During the past year this regiment has had very interesting and highly instructive training. In the early part of the year we succeeded in qualifying 62 per cent. of our men as gunners, with only 12 per cent. of the above, second class gunners. This training was carried out under the handicap of being much below authorized strength and having large overhead details of special duty and fatigue. The good showing made was partly due to our having examined a few men at a time, when they became qualified, and then placing these men on special duty and relieving other men for instruction. Two boards were formed and met and examined candidates, whenever five or more were ready to take the examination.

During the period July 9th to 23rd the regiment trained one hundred and fifty-seven reserve officers. These officers were quartered in our area, and were divided for instruction purposes into four classes: general and field officers, field artillery; battery officers, field artillery; field officers, engineer corps, and company officers, engineer corps. Instruction was given by officers of the 17th Field Artillery, assisted by a few officers of other arms of the service. Part of this instruction was theoretical but the most of it was practical, consisting of field exercises. For this purpose the field

## THE FIELD ARTILLERY JOURNAL

artillery reserve officers were assigned to a provisional brigade, consisting of the 17th Field Artillery, two batteries of the 5th Field Artillery equipped with three-inch guns, and one battalion of the 2nd Field Artillery, all on duty at this post. The officer personnel for this provisional brigade consisted entirely of reserve officers. In this way the reserve officers had direct control and performed all the duties pertaining to all ranks in a brigade.

Several field exercises were held and the reserve officers say they received more benefit and instruction this year than they ever had before. A total of 6373 rounds of artillery ammunition was fired by the reserve officers during this period, under as near actual service conditions as possible to obtain in time of peace. Rifle and pistol practice was held and many reservists qualified with these weapons. In addition, many demonstrations were given from which both regular and reserve officers profited greatly.

During the period August 2nd to 17th this regiment turned over its entire equipment to the 117th Field Artillery, North Carolina National Guard. The officers of the 17th Field Artillery were used as instructors for this regiment. Their instruction, like that of the reserve officers, was mostly practical and it is believed that they received great benefit.

After the National Guard left, this regiment had more time to devote to its own training, and many tactical problems were held. We were very amply repaid for this training when this regiment was inspected by the Corps Area Commander. All our lines of communication worked. This excellence of communication was commented on by the Corps Area Commander and other officers. We completed our service practice on November 25th, and feel that we have gained much from the past years training.

On July 4th we won the Post field meet and on the same day defeated our old rival the 5th Field Artillery in a thrilling baseball game. We won the Post baseball championship and later on, had a very creditable football team in the field, coached by Captain Roehm, but unfortunately our team was disbanded in order to help form a Post team.

During the last year we lost two of our old-timers through retirement: Master Sergeant Magee and Master Sergeant Jacobs. At this time we are nearer full strength than we have been at any time in the last few years and we are able to perform our many routine duties with less hardship.

The regiment suffered the misfortune of having two guns blown up during service practice, but happily without injury to personnel. The reason for these explosions is now under investigation, but they appear to have been due to deteriorated boosters and explosive in the wartime ammunition now in use.

## REGIMENTAL NOTES

EIGHTEENTH FIELD ARTILLERY

FORT SILL, OKLAHOMA

Major Fred C. Wallace, *Commanding*

### *Roster of Officers*

#### CAPTAINS

Henry D. Jay  
Howard F. Long  
Samuel Marshall  
William C. Dunckel  
William M. Wiener  
Garth B. Haddock

Arthur E. King  
Warren Hayford, 3rd  
Edwin Y. Argo  
Gerard A. Swarhout

#### SECOND LIEUTENANTS

FIRST LIEUTENANTS  
Henry C. Demuth  
Richard J. Sothern

Paul A. Berkey  
Charles P. Holweger  
Donald Q. Harris  
John P. Kennedy  
William A. Wedemeyer

The First Battalion of the 18th Field Artillery was reconstituted at Fort Sill, Oklahoma, on January 1, 1923. The battalion was formed by making the Second Battalion, 9th Field Artillery, inactive and the transfer of the 9th's personnel, equipment and funds to the 18th. The First Battalion, 18th Field Artillery, as thus reconstituted was more than just a change in the name of the Second Battalion, 9th Field Artillery, for the latter was in reality a very recently organized unit. The Second Battalion of the 9th Field Artillery had been reconstituted at Fort Sill only since October 2, 1922, from the 8th Training Battery, which had just completed a march from Fort Sam Houston, Texas, and an additional one hundred and thirty men that were transferred from the White Detachment, Field Artillery School. The battalion was then assigned to the duty of furnishing firing batteries and special details for the Field Artillery School, which work it has been doing since that time except during the summer months of July, August, and September.

During the summers of 1922 and 1923 the battalion was kept busy with work for the summer training camp. During the summer just past the battalion had its opportunity to follow a regular training schedule. The battalion, less Battery "B", made a road march to the National Forest Reserve in July and good results were accomplished. Particular attention was given to the following: gaits, draft, making and breaking camp and recreation for the men. Battery "B" made a road march to Chickasha, Oklahoma, a distance of 57 miles to participate in a parade for the Confederate Veterans of Oklahoma in July and made an excellent showing. The battery took advantage of this march and good results were attained in draft and gaiting.

The battalion completed gunner's examination and pistol practice during the summer and more than doubled the record made last

## THE FIELD ARTILLERY JOURNAL

year. After the summer training came the annual inspection by the Post Commander. This consisted of a full pack inspection, making and breaking camp and a review the first day. Inspection of barracks, stables and gun sheds took place the second day, and an all day tactical problem the third day.

On October 1st the battalion began furnishing details for the Field Artillery School which will keep every one busy from now until June 15, 1925, at which time the battalion hopes to have another opportunity to properly prepare itself for the next year's work with the School, by being allowed to follow a regular training program.

The football season just finished was a very successful one for the Eighteenth. The battalion lost the first game of the season and then won the rest, finishing second in the Post League. A Post football team now represents the post and the 18th has seven players on the squad. Basketball season starts about December 15th and the Eighteenth will be in there fighting when the final whistle blows. "*Per Aspera Ad Astra.*"

### TWENTY-FOURTH FIELD ARTILLERY

### CAMP STOTSSENBERG, PHILIPPINES

Colonel Philip R. Ward, *Commanding*

#### *Roster of Officers*

Lieutenant-Colonel James P. Robinson  
Major John O. Lackey  
Major Raymond E. Lee

#### CAPTAINS

Stanley Bacon  
Wallace W. Crawford  
Kenneth Rowntree  
Edward T. Eneboe  
Channing R. Toy  
Ernest T. Barco  
John J. Atkinson  
Louis J. Fortier  
Lloyd S. Partridge  
Leslie M. Skerry  
Leonard S. Frasier  
Richardson L. Greene  
Charles R. Hall  
Russell G. Barkalow  
Joseph W. Loeff

#### FIRST LIEUTENANTS

Fidel V. Seguindo  
Salvador F. Reyes  
Robert L. Allen, Jr.  
Stephen E. Bullock

Julius T. Berry  
Harold C. Raymond  
Harry L. Watts  
Raymond T. J. Higgins  
Thomas F. Keefe  
Raymond H. Hutto  
John C. Grable  
Alfred M. Gruenther  
Robert R. Raymond, Jr.

#### SECOND LIEUTENANTS

Mariano Sulit  
Thomas A. Roberts, Jr.  
Francis H. Morse  
Edward M. Edmonson  
William I. Brady  
William H. Bartlett  
Millard Pierson  
Escalus E. Elliott  
Wray B. Avera  
Luis M. Alaba  
Amando Martelino  
Victor Z. Gomez  
Nemesio Catalan  
Alejandro D. Garcia

## REGIMENTAL NOTES

SEVENTY-SIXTH FIELD ARTILLERY, FORT D.A. RUSSELL, WYOMING

Colonel Joseph S. Herron, *Commanding*

### *Roster of Officers*

Lieutenant-Colonel Alden F. Brewster

#### CAPTAINS

Ray L. Burnell

Everett C. Williams

Oliver F. Porter

Ray S. Perrin

Moore A. Stuart

Frank L. Thompson

George E. Duff

#### FIRST LIEUTENANTS

Loyal M. Haynes

Gerald A. O'Rouark

Frank E. Kaufman

Polk J. Atkinson

Fred E. Lyle

Thomas M. Tiernan

Elmer C. Ringer

Newton W. Jones

#### SECOND LIEUTENANTS

Voris H. Connor

Harvey K. Palmer, Jr.

Charles C. Blakeney

Warren C. Stout

Paul R. Covey

The Seventy-sixth Field Artillery (less the Second Battalion) has jumped from a small reduced battery about five months ago, to a full fledged fighting organization with headquarters and service batteries, and three gun batteries completely organized and the battalion headquarters and combat train in the process of organization.

Everyone was very much interested in the visit of the British Military Attaché, Colonel Charlton, also a field artilleryman. An artillery regimental manœuvre and fire problem was held for him. A great deal of interest was shown by all the artillery officers in Colonel Charlton's remarks about the British Field Artillery. On this occasion the officers of the 4th and 13th Cavalry were invited to be present and some of them were heard to express surprise at the power and rapidity of artillery fire, which was demonstrated in the problem.

Each week we have one day of firing by all the batteries, and one manœuvre involving the regiment in some phase of artillery tactics. Those problems are held in conjunction with a class in tactics conducted by Colonel Herron, Commanding Officer of the Regiment. A critique is held after each problem where all errors, which were made, of a tactical, technical or other nature are pointed out. In this way it is felt by all that full benefit is obtained from both the school and outdoor work.

Gunners examinations, record pistol practice, and machine-gun course "B" have been completed. No exceptional records were made but it is felt by all that the men made a very good showing, considering the time available to spend on these subjects, owing to the work this battalion was called upon to perform for the R.O.T.C. and C.M.T.C. this past summer.

Fort D. A. Russell is a wonderful place for anyone interested in hunting and fishing, if you don't mind taking a chance on a blizzard.

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Permits to hunt on the reservation can be had for the asking and small game seems to be in abundance everywhere. Quail, pheasants and rabbits within a few hundred yards of the Post and ducks on small lakes on the reservation and near vicinity. By making a trip of one day some of the best hunting in North America can be had, such as grizzly bear, deer, elk, bighorn sheep and rocky mountain goat. Any one who feels the urge of Daniel Boone or David Crockett, to become a great hunter should visit this place and try a hand.

Several new officers have recently joined the regiment and two more are expected shortly. Those that have already joined are Captain E. C. Williams, 1st Lieutenant Elmer C. Ringer, 1st Lieutenant N. W. Jones, from foreign service; 2nd Lieutenants W. C. Stout and P. R. Covey from 7th Field Artillery at Madison Barracks.

Notwithstanding the many things of interest at Fort D. A. Russell, the regiment will be very glad to return to its home on the Pacific Coast.

SECOND BATTALION, SEVENTY-SIXTH FIELD ARTILLERY,

PRESIDIO OF MONTEREY, CALIFORNIA

Major Charles D. Daly, *Commanding*

### *Roster of Officers*

#### CAPTAINS

John O. Hoskins

William E. Kneass

Charles E. Boyle

Joseph S. Robison

Edgar T. Anderson

Jefferson C. Campbell

#### SECOND LIEUTENANTS

Henry L. Ingham

Charles S. Whitmore

Rex Van D. Corput, Jr.

John B. Hocton

Phillip H. Enslow

Bruce R. King

#### FIRST LIEUTENANTS

John P. Eckert

Bryan L. Davis

At the close of the year 1924, this battalion finds itself at full strength. The majority of the men are recruits enlisted on the east coast during the current year and sent by transport *via* the Panama Canal. The battalion operates under a reduced allowance of horses adequate for drill and training.

The Presidio of Monterey is one of the newest field artillery stations, but probably one of the oldest military reservations in the country, having been used by Spain and Mexico. Because of its exceptionally fine climate and other local advantages, it is potentially one of our most desirable stations. At present the crowded barrack and stable conditions are a serious disadvantage. The Post is hilly, and there is insufficient ground for mounted drill on the reservation, but adequate space is available elsewhere. From an artillery viewpoint, the availability of the Gigling Target Reservation is a tremendous

## REGIMENTAL NOTES

asset. It is a sandy, chappral-covered area, approximately five by seven miles square, lying five miles northwest of the Presidio. The battalion is enabled to fire all the year round. Del Monte, one mile from the Post, is the summer training centre for all troops in this part of the Ninth Corps Area. The services of the battalion are used by the camp from June to August.

Satisfactory progress in polo is being made, the excellent Del Monte fields being used. Enough officers play to maintain two teams. The Monterey Peninsula is one of California's show places. The towns of Monterey, Pacific Grove, Carmel-by-the-Sea, and the fashionable centres of Del Monte and Pebble Beach furnish a variety of diversions. Among the most interesting and attractive features of the locality are the old Spanish architecture, the Missions, the Del Monte Hotel, Forest lodge and the Seventeen Mile Drive and the convenient hunting and fishing facilities. Periodic visits of American and foreign ships of war supply intercourse with the Navy.

During the past year, two events of outstanding interest occurred. The big oil fire in September was an awe inspiring and destructive spectacle that will never be forgotten in the lives of those who saw it. The second event was the Carnival in October known as the Fray Junipero Serra Festival, consisting of a week of parades, pageants, and entertainments. By assisting in the roles of Spanish Conquistadores, Indians, Mexicans and other characters, the soldiers materially contributed to the artistic success of the affair. The heroism of the artillerymen in the one case, and their intelligent cooperation in the other, have done much to cement the excellent relations between the civilian population and the service in this locality.

EIGHTY-SECOND FIELD ARTILLERY

FORT BLISS, TEXAS

Major William H. Rucker, *Commanding*

### *Roster of Officers*

#### CAPTAINS

Jesse B. Hunt  
John C. Cook  
George D. Shea  
Jay W. Mackelvie  
Wilbur B. Summer

#### FIRST LIEUTENANTS

John S. Mallory  
Otto L. McDaniel  
Albert P. Barnes  
Thomas O. Foreman  
Auston M. Wilson

#### SECOND LIEUTENANTS

Clint M. Taylor  
Perry N. Brown  
Walter A. Linn  
Bjarne Furuholmen  
Frederick C. Pyne  
George J. Reid  
John H. Sampson, Jr.  
Charles J. Barrett, Jr.  
Alfred E. Kastner  
Robert L. Taylor  
Stephen C. Lombard  
James L. Kerr  
James V. Collier  
Philip M. Shockley



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EIGHTY-THIRD FIELD ARTILLERY

FORT BENNING, GEORGIA

Major Edward P. King, Jr., *Commanding*

### *Roster of Officers*

#### CAPTAINS

George A. Pollin  
Basil H. Perry  
Charles A. Wickliffe  
William B. Weston  
John Nash

William A. Beiderlinden  
Lowell W. Bassett  
Edward J. Roxbury

#### SECOND LIEUTENANTS

William D. Williams  
Robert C. Hendley  
LeRoy J. Stewart  
John F. Uncles  
Giles R. Carpenter  
David J. Crawford, Jr.

#### FIRST LIEUTENANTS

William H. Barlow  
Boniface Campbell  
Paul A. Reichle

The First Battalion, Headquarters Battery and Combat Train and a battalion section of the Service Battery are the only active units of this organization. Its chief mission is to demonstrate for the students at the Infantry School the tactics and technique of field artillery with a view to acquainting the infantry officer with its limits and capabilities, and how it may best and properly be used to accomplish that support which furnishes the sole reason for its existence as an arm of the present-day Army.

The regiment was organized at Fort D. A. Russell in 1917 as the 25th Cavalry from units of the 1st Cavalry and was later converted into the 83rd Field Artillery. The First Battalion was motorized for experimental purposes at Camp Knox in 1919. It marched from that station and arrived at Fort Benning in November, 1920, the Second Battalion remaining at Knox and later becoming inactive.

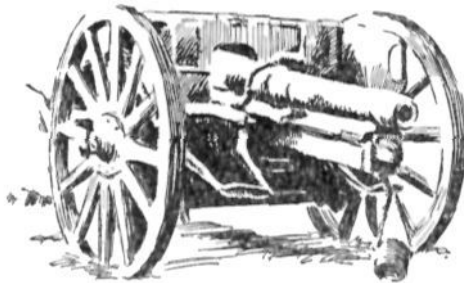
The batteries are equipped with the French Seventy-five and two of them, "B" and "C," are drawn by 5-ton tractors, while "A" has been operating for the past year with new 2½-ton Holt types sent to the battalion for test. This battery marched to Fort Bragg and returned in July and August, submitting these tractors to test under one and two axle loads. It is believed that the new tractor will prove itself as efficient for the light gun as the old 5-ton type, and better adapted than its predecessor to the tactical requirements of this weapon.

Since the battalion functions as divisional artillery in all of its work with the school it should properly be a horsed organization. Lack of stabling facilities, however, when artillery was originally assigned here, necessitated the use of a motorized unit and the dictates of economy together with a shortage of horses have prevented any change since, although there is a realization and desire on the part of both branches of the service that the change should be made.

## REGIMENTAL NOTES

Battery "B" spent the month of July at Camp McClellan, Alabama, it being customary for the 83rd to supply a battery each summer for the training camp there. Since the opening of the school year in September the battalion has given numerous demonstrations of its own particular activities in combat, such as selection and occupation of position and conduct of fire, in addition to participating in those involving the use of all arms.

The work here is varied and interesting, giving the officers full play in the performance of the wide and diversified range of duties required of the artilleryman in the field, and offering unusual advantages for observing and absorbing the methods of the infantry and for obtaining a proper appreciation of the viewpoint of that arm.



## CURRENT FIELD ARTILLERY NOTES

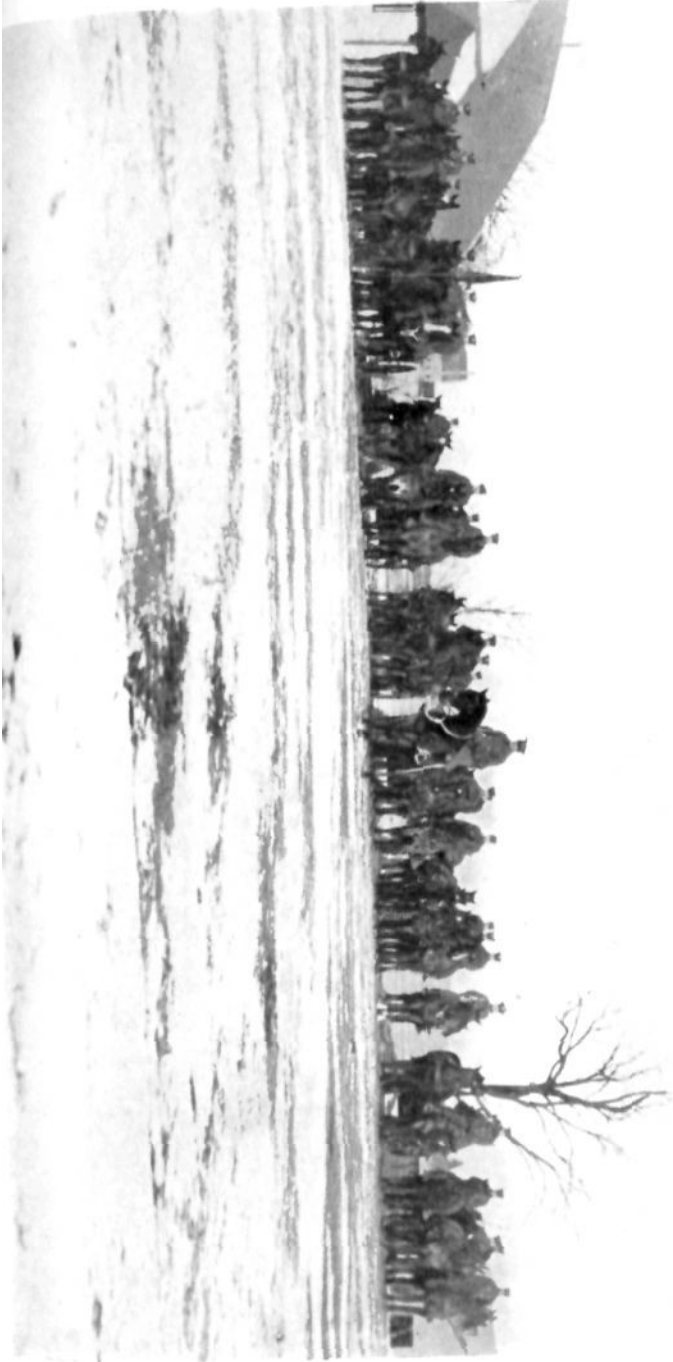
### The Knox Trophy

THE Knox Trophy has been awarded this year to Battery "D," Seventh Field Artillery, stationed at Madison Barracks, New York, with a total score of 349. This battery rated 91 out of 100 in firing efficiency; 95 out of 100 in mobility; 73 out of 100 in communications; in interior economy 41 points were lost and 31 credits received, resulting in an ultimate credit for interior economy of 90. The two nearest competitors received total scores of 343 and 342, respectively.

The Knox Trophy is donated by the Society of the Sons of the Revolution in the Commonwealth of Massachusetts. Before this year it has been awarded annually to that battery of regular army field artillery attaining the highest rating in firing efficiency. The fact that certain batteries have an advantage in this particular phase of field artillery work led to a reconsideration of the basis of award. This year the award was made to the battery of regular army field artillery excelling in firing efficiency, mobility, communications and interior economy. It was deemed this basis would result in an award to the best all-around battery. Furthermore, the details of the competition itself, which are made up by the Chief of Field Artillery, are a desirable means for bringing before the Field Artillery, the important phases of training.

The contest under this new system this year has been a decided success. Representative batteries from Panama, Hawaii, the Philippines and every post containing a battalion or more of field artillery in the United States, with the exception of four, have competed. Unusual interest by the troops has developed. Helpful suggestions and criticisms of the test have come in from the examining boards and interested officers in every part of the country, so that undoubtedly this test will in a few years develop into a valuable and inspiring field artillery institution.

Let no one conclude that the devising of the test as given this year was an easy matter! Can you devise a fair and complete test for horse, horsed, pack, light, medium, heavy, howitzer and gun batteries? Of course, the details of the test will be changed next year, so that competitors cannot rehearse their stunts, and perhaps some difficulties discovered in this year's test will be smoothed out next year; but the practical outcome this year is fully up to expectations. Here is the test for 75-mm. gun batteries. The detailed requirements were revealed to competing batteries not more than two hours before actual execution.



BATTERY "D" SEVENTH FIELD ARTILLERY



CHIEFS OF SECTION AND GUNNERS OF BATTERY "D", SEVENTH FIELD ARTILLERY

## CURRENT FIELD ARTILLERY NOTES

### I. *Firing Efficiency—100 Points.*

(a) One firing problem, range 3000 to 4000 yards, axial observation, shrapnel, target—line of infantry in the open. Four guns will be used. Map will not be used. Time allowed—three minutes from the first shot until the proper command for fire for effect has been given and the bracket or adjusted range has been announced to the board. Credit for perfect performance, 25 points. Deduct for:

- (1) Each fifteen seconds over three minutes, 1 point.
- (2) Failure to obtain a correct range bracket, 10 points.
- (3) Failure to cover front of target, 2 points.
- (4) Failure to adjust corrector by the time bracket is gotten, 2 points.
- (5) Each incorrect setting of battery instruments, 1 point.
- (6) When in the opinion of the board, fire for effect, based upon the bracket or adjusted range obtained, would unquestionably not produce effect on the target, 20 points.

(b) One firing problem, range 2500 to 4000 yards, lateral observation with angle  $i$  between 400 and 800 mils, shell, precision adjustment, target—four panels in line representing four enemy gun sections. Following the adjustment of one gun, the entire battery will be fired on the target, six rounds per gun, the adjusting piece using its adjusted elevation; the other three pieces using this adjusted elevation corrected by their known calibration corrections. All six rounds will be fired with the same data. Time allowed for adjusting the first gun, 15 minutes. Credit for perfect performance, 25 points. Deduct for:

- (1) Each minute overtime, 1 point.
- (2) Each probable error, or major fraction thereof, in excess of one probable error in range that the centre of impact of the six shots from each of the four guns is from the target, 3 points.
- (3) Each probable error, or the major part thereof, in excess of one probable error in deflection that the centre of impact of the six shots from each of the four guns is from its target, 1 point.
- (4) Each incorrect setting of battery instruments, 1 point.
- (5) When in the opinion of the board, fire for effect, based upon the adjusted range obtained, would unquestionably not produce effect on the target, 20 points.

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(c) One firing problem, range 2500 to 4000, lateral observation, angle  $i$  between 200 and 300 mils, shrapnel, time bracket adjustment, target—four enemy machine guns in the open, adjustment with four guns, map not to be used, at least two of the elements battery, target and observer will be changed at least 300 yards from the similar positions in (b) preceding, time allowed five minutes. Credit for perfect performance, 50 points. Deduct for:

- (1) Each 30 seconds overtime, 1 point.
- (2) Failure to obtain a correct range bracket, 20 points.
- (3) Failure to adjust corrector by the time the bracket is obtained, 2 points.
- (4) For each incorrect setting on battery instruments, 1 point.
- (5) For failure to cover front of target, 2 points.
- (6) When in the opinion of the board, fire for effect, based upon the bracket obtained, would unquestionably not produce effect on the target, 40 points.

### II. *Mobility—100 Points.*

(a) A twenty-mile march in full field equipment and with all caissons filled with ammunition. All serviceable animals of the battery will make the march. Batteries unable to turn out at least four complete gun sections will be ineligible to compete. Not more than one team (six horses) will be led. Limits of time for the march, from 5 to 5¼ hours. Credit for a perfect performance will be 100 points. Deduct for:

- (1) Each 5 minutes deviation either way from allowed time, 2 points.
- (2) Each draft or riding animal that it becomes necessary to take out of its regular position, 3 points.
- (3) Each enlisted man who leaves the column, except by direct order of the battery commander, 2 points.
- (4) Each horseshoe missing, upon completion of the march, from a draft or riding animal and each animal that comes in lame, 1 point.
- (5) Each sore neck or shoulder, whether occasioned by this march or not, 5 points.
- (6) Each period of 5 minutes in excess of 45 minutes used in halts, 2 points.
- (7) Each animal assigned to the battery that does not go on the march, 1 point.

### III. *Communications—100 Points.*

(a) Telephones.—The following locations will be selected and appropriately designated. 1. A battery position. 2. The

## CURRENT FIELD ARTILLERY NOTES

battery command post, 100 yards to the right of the battery position. 3. The battery observation post, 600 yards to the front of the battery. 4. The switchboard of the battery on the left, 300 yards to the left of the battery.

The battery telephone detail, and battery reel, under the direction of the telephone sergeant will take post at the battery command post and the test explained to him. When the word "Go" is given by a member of the testing board, the switchboard will be installed at the command post, lines run to the observation post, battery executive and left battery, and 'phone installed with operators at the observation post and battery executive. The reel cart may be used up to 100 yards short of the observation post, but from there wire must be taken on by hand.

The following message, previously given to the operators at observation post and battery executive by a member of the board, will be 'phoned in to the command post and taken down there as soon as these lines are ready: "Base point 135 mils left a large triangular rock."

Time will be taken by the board. It will begin to run at the word "Go" and cease when all three lines have been completely laid and the messages from the observation post and battery executive positions received and transcribed at the switchboard. The time allowed will be 8 minutes.

After the completion of the problem, all of the remaining telephones of the battery equipment will be attached, one at a time, at the position of the battery executive and communication tested through to the command post. This 'phone test is separate from the timed test. Credit a perfect performance 25 points. Deduct for:

- (1) Each 30 seconds overtime, 1 point.
  - (2) Failure of any telephone in the battery net to operate satisfactorily, 10 points.
  - (3) Failure of the command post—left battery line to test O. K., 2 points.
  - (4) Failure of any telephone to operate immediately when tested on the battery executive—switchboard line, 5 points.
  - (5) Each error of digit or letter in message received, 2 points.
- (b) Visual Signalling.—A test with signal lamps operated by enlisted men of the battery detail, to consist of sending the following message by signal lamp a distance of 600 yards:



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"Base point at 4257. Your sector 360 mils either side." Time will be taken from the sending of the first character to the delivery of the written message to a member of the board at the receiving end. Four minutes time will be allowed. Credit a perfect performance 25 points. Deduct for:

- (1) Each 15 seconds overtime, 1 point.
- (2) Each incorrect letter or digit recorded at the receiving end, 3 points.

(c) Range Finding.—The battery range finder will be operated by a member of the instrument section of the battery detail. Test to consist of measuring three ranges between 3000 and 5000 yards. These ranges will have been previously determined by the board, preferably by topographical methods. Ranges will be selected for this test that in all probability will not be previously known to the range-finder operator. Time will be taken by the board from identification of the target until announcement of the range, for each of the three measurements. Time allowed for each range, one minute. Credit a performance 25 points. Deduct for:

- (1) Each 1 per cent. error in range in excess of 5 per cent., 1 point.
- (2) Each 10 seconds overtime, 1 point.

(d) Computation of Firing Data.—This test will be taken by the instrument sergeant or some other enlisted man of the instrument section of the battery detail. The same man will not take both the range finding and firing data tests. Test to consist of the computation of the base angle and the angle of site for the base piece in two different assumed situations. The parallel or other rapid method of determining the base angle will be used. In each case the board will designate the position of the base piece and the position of the computer, the target and aiming point. In one problem the computer will be located on one flank of the battery, aiming point in rear; in the other the computer will be on the other flank, with aiming point in front. Computer in each case to be at least 200 yards from the base piece. The computer will not go to the position of the base piece. The ranges from computer to target and aiming point may be determined for the computer by the range-finder operator of the battery. No prior information will be given as to any details of the problems. The board will take time in each problem from identification of target, aiming point and base piece by the computer until announcement of the base angle and site. Data will be previously calculated by the board. The

## CURRENT FIELD ARTILLERY NOTES

time allowed for each of the two problems will be 3 minutes. Credit a perfect performance 25 points. Deduct for:

- (1) Each 15 seconds overtime, 1 point.
- (2) Each 10 mils in deflection beyond 10 mils either side of a point target, 2 points.
- (3) Each 2 mils in angle of site, beyond 2 mils allowed error, 1 point.

### IV. *Interior Economy—100 Points.*

The score will be determined on the following points:

- (a) Percentage of desertions in the battery during the past twelve months.
- (b) Percentage of G. C. M. convictions in the battery during the past twelve months.
- (c) Percentage of Special C. M. convictions in the battery during the past twelve months.
- (d) Percentage of Summary C. M. convictions in the battery during the past twelve months.

NOTE: In each of the above cases the percentage will be found by dividing the number of desertions, G. C. M. convictions, etc., by the average total strength of the battery for the past twelve months.

(e) Percentage of reënlistment in the battery during the past twelve months—to be found by dividing the number of reënlistments in the battery during the past twelve months by the number of discharges from the battery during same period.

- (f) Percentage of expert gunners carried during the past twelve months.
- (g) Percentage of first-class gunners carried during the past twelve months.

(h) Percentage of second-class gunners carried during the past twelve months—to be found by dividing the average number of experts, first-class and second-class gunners during the past twelve months by the average strength of the battery during the same period. Deduct from 100 points for:

- (1) Each one per cent. of desertions, 2 points.
- (2) Each one per cent. of general court-martial convictions, 1 point.
- (3) Each two per cent. of special court-martial convictions, 1 point.
- (4) Each five per cent. of summary court-martial convictions, 1 point.

Give credit for:

- (1) Each one per cent. of reënlistments, 1 point.
- (2) Each five per cent. of expert gunners, 1 point.

## THE FIELD ARTILLERY JOURNAL

- (3) Each eight per cent. of first-class gunners, 1 point.
- (4) Each ten per cent. of second-class gunners, 1 point.

The foregoing gives the test in brief. Details of how the competing batteries are selected, instructions for the board and judges, etc., etc., are omitted, but the general plan and most of the details are given. The tests for pack batteries, heavy batteries, motorized batteries, etc., were varied in details, time allowances, etc., to make them appropriate and of the same degree of severity.

At first glance the devising of a workable test of this nature seems difficult. But here is a test that works. The number of batteries making a reasonable showing this year, and their relative marks, promises that in the following years, when the nature of the system is better known, a fair general estimate can be made.

It would be perhaps rash to say that the results of this test are an absolutely accurate criterion of the all-around merit of a battery or of any of the phases of training involved. But it may be interesting to inspect some of the figures resulting from this year's test. Of twelve batteries in the final contest, the average mark in firing efficiency was 68; in mobility 87; in communication 32; in interior economy 95. Does this mean we are weakest in communications? Perhaps the test in communications was at fault here; but many good field artillerymen think the figure 32 is approximately correct and that we must rise to the test—not lower the test. This is borne out somewhat by the fact that four of the twelve batteries this year made over 60 in the communications test as given. The question is an open one.

Some batteries got over 100 in interior economy by reason of their credits. Disregarding this and averaging firing efficiency at 68, mobility at 87, communications at 32 and interior economy at 95, we arrive at an average, all-around mark of 70. Does this mean these batteries average 70 per cent. perfect? If so, according to whose standard (we each have a standard of perfection in our own mind)? One year's trial of this system does not perhaps warrant sufficient confidence in our test to answer this question affirmatively. Of one thing, however, these figures do seem to assure us—the test itself is near to a correct one. We know from our own general knowledge that these figures revealed, are not too far, in general, from what they should be.

### **National Guard Convention**

The National Guard Association held its annual convention in Philadelphia, December 1st–3rd. Over 500 delegates were in attendance and a very successful meeting is reported. Among the distinguished speakers who addressed the convention were Secretary of War Weeks; Major-General John L. Hines, Chief of Staff; Major-General

## CURRENT FIELD ARTILLERY NOTES

James A. Drain, National Commander of the American Legion, and Brigadier-General John R. Delafield, President of the Reserve Officers' Association. Brigadier-General Milton A. Reckord, of Baltimore, was reelected to the presidency of the Association, and St. Augustine, Florida, was designated as the meeting place for the next annual convention.

### **National Guard Drill Attendance**

The National Guard Field Artillery has again made a creditable showing in drill attendance for the year 1923–1924. The Medical Detachment, First Battalion, 121st Field Artillery in Wisconsin registered 100 per cent. The highest percentage achieved for the year for any battery was that of Battery "F," 101st Field Artillery, Massachusetts National Guard, with 96.47 per cent. The best field artillery battalion was the Third Battalion, 189th Field Artillery, Oklahoma National Guard, with a rate of 78 per cent. The percentages of Battery "F," 101st Field Artillery, and the Third Battalion, 189th Field Artillery, were also the highest in their respective corps areas for company or battalion units of any branch.

The following batteries had the highest percentages of any company or battery units in their respective states: Service Battery, 116th Field Artillery, Florida; Battery "E," 110th Field Artillery, Maryland; Battery "F," 101st Field Artillery, Massachusetts; Battery "A," 119th Field Artillery, Michigan; Battery "C," 128th Field Artillery, Missouri; Battery "C," 103rd Field Artillery, Rhode Island; Battery "E," 147th Field Artillery, South Dakota; Service Battery, 115th Field Artillery, Tennessee; Battery "F," 145th Field Artillery, Utah; Headquarters Detachment and Combat Train, Second Battalion, 145th Field Artillery, Utah.

The Second Battalion, 112th Field Artillery, New Jersey; the Third Battalion, 189th Field Artillery, Oklahoma, and the Second Battalion, 145th Field Artillery, Utah, were the highest battalion units of any arm in their respective states.

The above percentages are based on percentages of the *actual* strength of the organizations. Last year's published reports showed the percentages computed on the *maintenance* strength of organizations:

### **361st Field Artillery Round Table**

The 361st Field Artillery Officers' Round Table is the name chosen by an association of officers of the 361st Field Artillery, 96th Division, recently formed at Portland, Oregon, for military instructional and social purposes. Regular weekly meetings are being held at noon, at which are given short talks on various military subjects. The plan of instruction is to provide in tabloid doses a certain

## THE FIELD ARTILLERY JOURNAL

amount of field artillery information and instruction which will assist the members of the Round Table in keeping in touch with their branch of the service as well as to prepare them better for the work at the regular summer camps. Special effort is to be made to have officers of the field artillery of the regular army attend the meetings of the Round Table and give talks on various pertinent topics.

To develop a better acquaintance among the officers of the regiment and to promote a regimental esprit are to be among the aims of the association meetings. Plans are already on foot to arrange for evening meetings to be held monthly in addition to the regular noon meetings and at which a longer and more comprehensive instruction program will be carried out.

So far as known this is the first regimental association of its kind to be formed on the coast and a large amount of enthusiasm is being shown by the officers concerned. The 65 officers assigned and attached to the regiment are scattered all over the large state of Oregon; of this number some thirty reside in Portland and environs.

Lieutenant-Colonel W. C. Webb, Field Artillery, is the regular army instructor assigned to the 361st Field Artillery. Lieutenant-Colonel Henry C. R. Akin, F.A., O.R.C., commanding the 361st Field Artillery, is president of the Round Table, and at the first meeting of the association after the adoption of a constitution, the following reserve officers were elected as officers of the Round Table: Captain Ren L. Holsclaw and Lieutenant John A. E. Dentler, vice-presidents; Lieutenant A. G. Barry, secretary-treasurer, and Major A. A. Brandenthaler, Major Thomas E. Griffith and Captain Gorham Lane Goodell, directors.

### **Reserve Activities**

There is a notable activity among reserve units and reserve officers along the line of the work of the Round Table mentioned above. In Philadelphia the officers of the 310th Field Artillery hold a weekly luncheon. The Berkshire Unit, Reserve Officers' Association in Massachusetts, of which Colonel William H. Eaton, F.A., O.R.C., is president, hold monthly meetings at which very interesting and instructive programs are carried out. The 103rd Division in Colorado is to be complimented on another line of activity—doubling its correspondence course enrolment this year over that of last year. The 302nd Field Artillery in Rhode Island, which has been mentioned in these columns before, is maintaining its reputation as an organization of real "field soldiers." Reports of their meetings this fall show that Colonel Barker has led his officers in sketching, reconnaissance, and such tactical work as facilities permitted, at each regular meeting of the unit.

## CURRENT FIELD ARTILLERY NOTES

### **Convention of the Reserve Officers' Association**

Brigadier-General John R. Delafield was reëlected president of the Reserve Officers' Association of the United States at the annual convention held in Columbus, Ohio, October 24th–26th. Brigadier-General Roy Hoffman, Colonel J. A. Hawkins and Lieutenant-Colonel Nobel B. Judah were reëlected vice-presidents. A notable program of work in the national defense was discussed and appropriate plans laid. The following telegram from President Coolidge was read to the convention:

"I wish to extend my personal greeting to the National Convention of the Reserve Officers' Association. Your association is interested in the defense of the United States, and you display that interest by giving your time, labor and attention in the manner deemed best by the national government.

"In so doing you furnish an example of the coöperation between the leaders of our professional Army and the citizen. The continuance of your labors along the lines upon which you are now engaged will do more than any other one thing to insure for our country that complete immunity from external aggression which is an indispensable prerequisite to the fulfillment of our national destiny."

### **R. O. T. C. at Leland Stanford, Jr. University**

Changes in the plan of organization and substantial increase in the number of students, marked the resumption of training in the field artillery battery at Stanford University on October 8th. Approximately 180 cadets took part in the first drills, as compared with 137 last year at this time. Military training at Stanford is not compulsory, it being a private institution, and thus increases in the enrolment of freshmen in that department represent fairly well the change in attitude toward such training since early post-war days. The Stanford Field Artillery unit is one of 20 allotted to universities and colleges throughout the nation and is under command of Major William D. Geary, F.A., D.O.L. It is now in its sixth year.

Training given the cadets, enlisted from undergraduates, includes recruit drill for the freshmen, gun drill for the sophomores, instruction as noncommissioned officers for juniors and training as commissioned officers for seniors. At the end of the fourth year, those completing the work receive commissions as second lieutenants.

The departure of the old scheme of separate class-room and practical training for each class, enables all men in the unit to do the same work; they are brought together as a battery at least once a week. The seniors act as assistants to the regular army officers

## THE FIELD ARTILLERY JOURNAL

assigned to train the students and thus accustom themselves to commanding men.

Plans are under way to provide a firing range for the famous old French 75's. There are 8000 acres of ground on the Stanford Campus, and the firing will be done during winter and spring, west and south of the university buildings. At present the students have to content themselves with smoke-bomb practice, getting their actual firing at R.O.T.C. summer camps.

### **Activities of the Field Artillery Board**

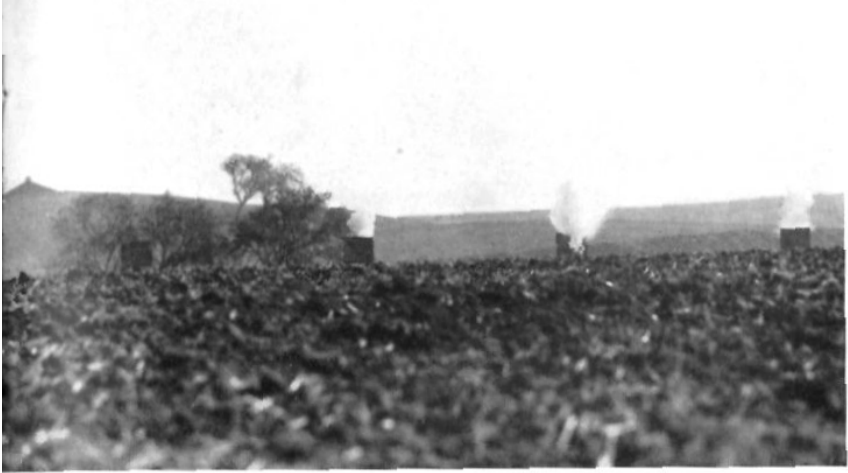
The tests which have been completed or on which partial reports have been submitted are:

- Plotting Scales.
- Black Powder Charges for Smoke Bomb Outfits.
- Correction of the Moment Computers.
- Telephone, Type EE-8.
- Monocord Switchboard, 4-line.
- Dodge on Chase Tracks.
- Ford Reconnaissance Car.

*Plotting Scales.*—Metal and boxwood triangular scales were tested out. The boxwood scales had pyralin edges. The tests were principally endurance tests, though the ease of reading under various conditions of light were considered. After very severe tests (for instance, one boxwood scale was left on the roof of a house in rain and sun for over a month) the boxwood scales were recommended as better, being much easier to read and sufficiently durable. It was recommended that the following scales be placed on the edges: 1/62,500; 1/21,120; 1/20,000; 1/10,000; 1/5000; graduated in the usual manner.

*Black Powder Charges for Smoke Bomb Outfits.*—The charges for test consisted of cardboard containers filled with black powder. To use them, it is only necessary to open one end and place the container upside down in the smoke pot. It was found that the resulting ball of smoke was smaller but more compact, giving a better reproduction of an actual shrapnel burst. As furnished, the containers were filled with powder of a coarse grain, causing some misfires. It was recommended that they be adopted, but that the next smaller size of grain be used for the powder to be placed in the charges.

*Correction of the Moment Computers.*—This was an apparatus for the mechanical computation of corrections of the moment. In the temporary form in which it was submitted, it could not be tested for durability nor accuracy. In addition, since it did not contain all range table data, it did not replace the range tables, but was an



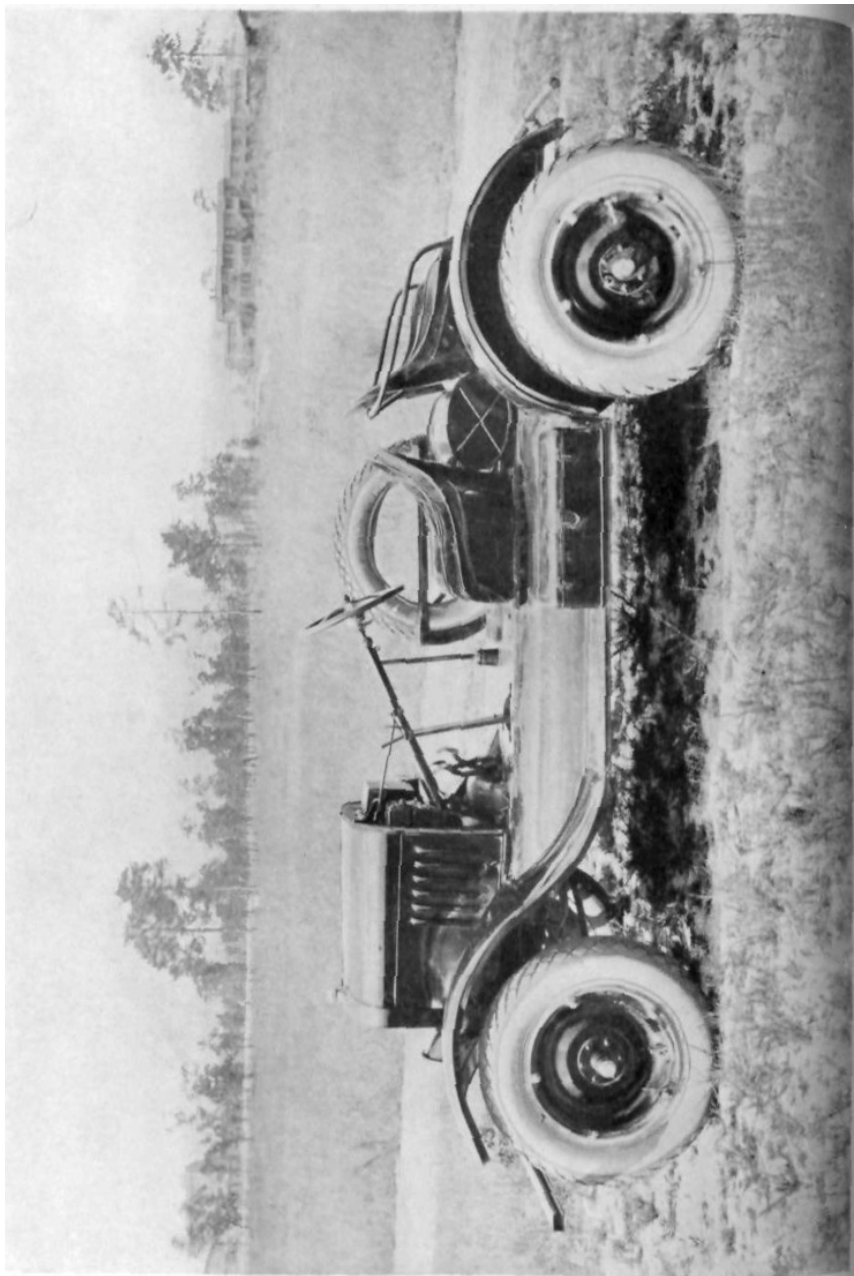
ON THE STANFORD UNIVERSITY SMOKE BOMB RANGE



R.O.T.C. GUN CREW AT STANFORD UNIVERSITY

The Advanced Course students wear the tailored uniform, while the Basic students wear the regular issue uniform.





THE FORD RECONNAISSANCE CAR WITH BALLOON TIRES

## CURRENT FIELD ARTILLERY NOTES

additional piece of equipment. It was recommended that no mechanical device of this sort be adopted unless it could compete with the range tables in accuracy, durability, and ease of carrying and, especially, unless it contains all the data which the range tables contain. It is believed no additional equipment should be added in the organizations unless it is absolutely necessary.

*Telephone, Type EE-8.*—This telephone is the new Signal Corps 'phone for all branches. It is put up in a compact leather case very much like the old field buzzer. The receiver and transmitter are in a separate case and can be furnished in the form of head, breast, or hand sets. The board was only allowed ten days to test the 'phone. In view of this short time, the only recommendations made were that the 'phone for artillery purposes should have all parts in one case and that it be returned for further test with no time restrictions.

*Monocord Switchboard, Four-line.*—The switchboard furnished had various modifications over the present board, resulting in increasing its weight. Some of these modifications were undesirable. It was recommended that those switchboards now in stock be used without modifying, and that when new ones are designed they contain the following features: Cable, terminal strips, screw binding posts, operator's cord; and that the weight should not exceed ten pounds.

*Dodge on Chase Tracks.*—This car had an added set of rear wheels with track of belting running over both sets of rear wheels. It was found that in mud the wheels slipped around inside the belting, resulting in no traction at all; in sand it was efficient. The load on the engine was excessive, damaging it considerably. In view of the much greater success obtained with vehicles equipped with balloon tires, further tests were abandoned and the vehicle reported as unsatisfactory.

*Ford Reconnaissance Car.*—This car is a Ford chassis equipped with a racing body, containing four bucket seats. Its general appearance can be seen from the accompanying photograph. An additional gear-set is placed back of the Ford transmission, and balloon tires with appropriate wheels were added. In general, it has been found very satisfactory. It has been found almost impossible to "stick" and when "stuck," it is so light, weighing only 1200 pounds, that its passengers can readily push it out. Its main defect is its inability to run at speeds lower than seven or eight miles an hour. In other words, it could not stay in a marching column. There are also several other minor defects. A first preliminary report has been forwarded and the test is continuing with a view to remedying these defects.

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### *Incomplete Tests:*

Training Regulations.

Reel Carts.

Sound and Flash Ranging.

240-mm. Howitzer (Re-rifled and Unre-rifled, comparison of accuracy of).

Pavesi Tractors.

Machine Gun Brackets.

Best Tractor.

Raincoats.

Indian Motorcycle.

Cargo Carts.

155-mm. Howitzer, 1920.

Helmets.

Modifications of 75-mm. Matériel.

Signal Equipment Allowances.

Efficiency of Shell Bursts.

Firing by Means of Aerial Photographs.

Wire Pikes.

Gas Mask Carrier.

Modifications of Harness.

In Training Regulations, the 155 G.P.F., Service of the Piece, and Dismounted Drills and Ceremonies are undergoing revision; Field Artillery Instruction and Training is about 40 per cent. completed, but going slowly; and others are under study.

The tests of the 240-mm. and 155-mm. howitzers have been delayed due to lack of fuzes and ammunition.

# THE UNITED STATES FIELD ARTILLERY ASSOCIATION

## Annual Meeting

THE regular annual meeting of the Association was held at the Army and Navy Club in Washington on the evening of December 4, 1924. The business meeting was preceded by a dinner, at which 58 members were present.

Major Richard C. Burleson acted as toastmaster. Short addresses were made by Major-General William J. Snow, Chief of Field Artillery and President of the Association, Brigadier-General Paul B. Malone, Commanding the Second Field Artillery Brigade, Colonel Leroy W. Herron, 313th Field Artillery (Reserve), Colonel James E. Austin, 104th Field Artillery, New York National Guard, Major Benjamin F. Miller, F. A. and Major Robert M. Danford, F. A. The speeches were interspersed with songs by the members and with music by the Army Band orchestra. A notably spontaneous spirit in the members present made such an enjoyable evening that there is an insistent demand that the dinner be retained as a continuing custom.

After the dinner the President took the chair and announced the convening of the 14th annual meeting of the Association.

The Secretary read the call for the meeting, stated that notice of the meeting had been given to all members as required by the constitution, and announced that a quorum for the transaction of business was present in person or by written proxy.

On motion the reading of the minutes of the last annual meeting was dispensed with and they were approved as published in THE FIELD ARTILLERY JOURNAL.

The Secretary presented his annual report and the financial statements of the Treasurer. The President announced that he had appointed Major J. A. Crane and Captain E. C. W. Davis a committee to audit the Treasurer's financial statements, as required by Section 2 of Article VII of the constitution. The committee reported that the duty had been performed and that the accounts had been found to be correct. A motion was adopted approving the report of the committee.

A vote was taken for Member of the Executive Council to fill the vacancy in the representation from the Regular Army caused by the expiration of the term of office of Major Maxwell Murray. Of the votes cast Major Maxwell Murray received two, Major Charles

## THE FIELD ARTILLERY JOURNAL

S. Blakely two, Captain E. C. W. Davis one, and Brigadier-General Fox Conner twelve hundred and ninety-four. General Conner was declared elected.

The business meeting then adjourned, and was followed by an interesting exhibition of motion pictures of scenes in the Army during the late war.

### ANNUAL REPORT OF THE SECRETARY-TREASURER

The financial affairs of the Association for the past year have been conducted at the profit shown by the following:

Assets December 1, 1923		
Cash on hand .....	\$2,994.61	
Securities on hand .....	15,000.00	\$17,994.61
Assets November 30, 1924		
Cash on hand .....	\$2,463.12	
Securities on hand .....	16,500.00	\$18,963.12
Net gain .....		\$968.51

A detailed statement of the receipts and expenditures for our past fiscal year follows:

#### *RECEIPTS*

Cash on hand December 1, 1923 .....	\$2,994.61	
Membership dues .....	6,392.16	
Advertisements .....	3,534.81	
Interest .....	1,440.95	
Sales of books .....	493.97	
Matured securities .....	14,000.00	
Miscellaneous receipts .....	14.00	\$28,870.50

#### *EXPENDITURES*

Publishing THE FIELD ARTILLERY JOURNAL .....	\$8,176.63	
Miscellaneous printing .....	176.40	
Postage .....	229.80	
Personal services .....	520.00	
Office supplies, stationery, etc. ....	99.66	
Books .....	425.63	
Telephone and telegrams .....	76.40	
Authors, translators, draftsmen and photographers .....	563.45	
Rent .....	285.00	
Miscellaneous .....	127.75	
Securities purchased .....	15,720.16	
Cash on hand November 30, 1924 .....	2,463.12	\$28,870.50

While our greatest interest lies perhaps in the conduct of future business, a short review of the past will give us an understanding

## THE UNITED STATES FIELD ARTILLERY ASSOCIATION

of the factors involved. The total actual expenses in 1922 were \$9326 as against \$10687 in this year, an increase of \$1361. Last year was abnormal as we published seven JOURNALS and so it is not considered in this brief report. This increase in expenses was due to an increase in two items mainly: The publication of the JOURNAL in 1922 averaged \$954 per issue; this year \$1363 per issue. Seventy-nine dollars were paid to authors, translations, etc., in 1922; this year this item was \$563.

Referring to the greatest item of increased expense, the cost of publishing the JOURNAL, this increase is not due so much to increased rates for printing; it is due mainly to what we print. Printing desirable pictures, maps and drawings is what has increased the printer's charge. Procuring original articles and the maps and drawings to go with them represents another outlay. I believe the result of this added expense has met the approval of the members of the Association and no economy in this line seems to be desired so long as we do not incur a deficit.

Looking to the future the quality of the JOURNAL depends on our income as I have pointed out. Beside this more money for personal services would be desirable. It would not only enhance the value of the JOURNAL; it would enable us to give better service to members and broaden the work of the Association. The income to cover any added expense for such purposes must evidently come from two sources: advertising and membership dues.

In the matter of advertising members can assist to a greater extent than seems generally to be realized. Our circulation in the National Guard and Reserves goes to men who are much above the average in influence and importance. This is a desirable field. In the Regular Army the JOURNAL goes not only to army users but to practically every one of the men who are responsible for our buying. In the matter of post exchanges alone this buying runs into millions of dollars per year. Business firms recognize advertising as a legitimate part of their budget. Our per cent. of this is at present spent largely with outside mediums. The question is how can it be diverted to us. In the first place our members who come in contact with firms doing a nation-wide business with the army, can do much by suggesting these facts to them. Personal contact means everything in the matter. In the second place, exchange officers or others so situated, can write to firms who advertise in the JOURNAL or when placing orders, mention the fact that they have seen the firm's ad in the FIELD ARTILLERY JOURNAL. The exchange or other activity may already be a user of the article advertised, but a letter will assure the firm that the advertising is doing all that is expected of advertising. I believe our JOURNAL does render this service.

## THE FIELD ARTILLERY JOURNAL

Referring now to the matter of membership—I need not here dwell upon the desirability of every field artilleryman belonging to the Association. That is of course fundamental. But I wish to again point out, as I did last year, the fact that every new member reduces our overhead. With our present enrolment this is a very appreciable consideration from a financial point of view. In interesting prospective members the help of our present members is of the very greatest importance. A personal word will do more than pages of letters. Most of us find our mail so cluttered with soliciting circulars now that we can only throw them in the waste basket. The Association must note with satisfaction the interest shown by members this year. The membership has grown from fifty per cent. of our regular field artillery officers two years ago to sixty-six per cent. last year and seventy-six per cent. now. A lesser growth, but still a healthy one, has taken place in the National Guard and Reserve. This has been due to the work of our members. Their interest has been sustained and willing. Its continuance is the greatest assurance of the success of the Association.