Antiaircraft JOURNAL

SEPTEMBER-OCTOBER, 1953

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
OCT 1953		**00-09-1953 to 00-10-1953**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
The Antiaircraft Journal. Volume 94, Number 5, September-October 1953	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Coast Artillery Training Center,Coast Artillery Journal,Fort Monroe,VA,23651**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**Same as Report (SAR)**	**52**	

HONOR ROLL

Original Honor Roll

88th AAA Airborne Bn
Lt. Col. E. L. Cormier

228th AAA Group
Col. T. H. Pope

107th AAA AW Bn (M)
Lt. Col. E. R. McIver

305th AAA Group
Col. J. S. Mayer, N. Y.

Separate Commands

AAA Repl Training Center
Col. E. W. Heathcote

Hq AAA Command
Lt. Gen. J. T. Lewis

Central AAA Command
Col. D. J. Bailey

Hq Western AAA Command
Brig. Gen. E. J. McGaw

Hqs. Far East AAA Spec. Sch.
Col. F. E. Day

Dept. of Gen. Subs.
Lt. Col. R. M. Page, Jr.

Electronics Dept.
AAA & GM School
Col. Arthur Kramer

Non-Resident Ins. Dept.
AAA & GM School
Col. T. H. Watkins

Brigades

31st AAA Brigade
Brig. Gen. E. F. Cardwell

32nd AAA Brigade
Col. M. W. May

34th AAA Brigade
Brig. Gen. R. W. Chrichlow

35th AAA Brigade
Brig. Gen. T. V. Stayton

44th AAA Brigade
Col. C. G. Dunn

45th AAA Brigade
Col. F. F. Miter

47th AAA Brigade
Col. G. C. Gibbs

56th AAA Brigade
Brig. Gen. H. F. Meyers

105th AAA Brigade
Brig. Gen. A. H. Doud, N. Y.

107th AAA Brigade
Brig. Gen. J. W. Squire, Va

108th AAA Brigade
Brig. Gen. G. J. Hearn, Ga.

111th AAA Brigade
Brig. Gen. Chas. G. Sage, N. Mex.

112th AAA Brigade
Brig. Gen. J. W. Cook, Calif

261st AAA Brigade
Brig. Gen. J. B. Moore, Del

Groups

4th AAA Group
Col. L. A. Bonifay

5th AAA Group
Col. H. G. Haskell

6th AAA Group
Col. A. A. Adams

8th AAA Group
Col. O. H. Kyster, Jr.

10th AAA Group
Col. J. C. Bane

13th AAA Group
Col. W. C. Mahoney

18th AAA Group
Col. R. W. Rumph

19th AAA Group
Col. S. M. Alley

26th AAA Group
Col. E. R. Hempstead

29th AAA Group
Lt. Col. John M. Rossnagel

30th AAA Group
Col. W. H. Murray

65th AAA Group
Col. B. E. Cordell

68th AAA Group
Col. W. B. Hawthorne

142d AAA Group
Col. R. Hardy, Ala.

197th AAA Group
Col. A. S. Baker, N. H.

200th AAA Group
Col. C. M. Woodbury, N. Mex.

205th AAA Group
Lt. Col. J. H. Pindell, Wash.

211th AAA Group
Col. D. MacDuff, Mass.

214th AAA Group
Col. J. G. Johnson, Ga.

218th AAA Group
Col. V. P. Lupinacci, Pa.

220th AAA Group
Col. R. H. Hopkins, Mass.

224th AAA Group
Col. E. W. Thompson, Va.

233rd AAA Group
Col. W. T. Stone, Calif.

243rd AAA Group
Col. P. E. Donnelly, R. I.

250th AAA Group
Col. R. B. Williams, Calif.

260th AAA Group
Col. G. V. Selwyn, D. C.

302nd AAA Group
Col. J. M. Welch, Ohio

313th AAA Group
Col. A. F. Hoehle, Pa.

326th AAA Group
Col. M. D. Meyers, Pa.

328th AAA Group
Col. C. C. Parrish, Kans.

374th AAA Group
Col. T. F. Mullaney, Jr., Illinois

515th AAA Group
Col. F. G. Rowell, N. Mex.

Battalions

1st AAA Training Bn
Col. J. H. Doyle

2nd AAA AW Bn
Lt. Col. R. O. Van Horn

3rd AAA AW Bn
Lt. Col. A. E. Bigelow

4th AAA AW Bn
Lt. Col. E. O'Connor, Jr.

7th AAA AW Bn
Lt. Col. H. E. Michelet

8th AAA AW Bn
Lt. Col. W. A. Stricklen

10th AAA AW Bn
Lt. Col. Samuel May

12th AAA Gun Bn
Lt. Col. P. R. Cibotti, Jr.

14th AAA Gun Bn
Lt. Col. T. B. Strother

18th AAA Gun Bn
Maj. G. W. Seabrook, III

20th AAA Gun Bn
Lt. Col. C. F. Ottenger

21st AAA AW Bn (SP)
Lt. Col. R. E. Deems

32nd AAA AW Bn
Lt. Col. E. F. Moody

38th AAA Gun Bn
Maj. C. D. Arnold

39th AAA AW Bn (M)
Lt. Col. F. D. Pryor

41st AAA Gun Bn
Lt. Col. C. F. Chirico

48th AAA AW Bn
Lt. Col. D. W. Malone

49th AAA Gun Bn
Lt. Col. R. B. Bonasso

50th AAA AW Bn
Lt. Col. C. E. Dunlap, Jr.

56th AAA Gun Bn
Lt. Col. M. A. Selsor, Jr.

63rd AAA Gun Bn
Lt. Col. E. G. Schwartz

64th AAA Gun Bn.
Lt. Col. C. E. Berkeley

66th AAA Gun Bn
Lt. Col. J. C. Wilkerson

68th AAA Gun Bn
Lt. Col. R. C. Ball

70th AAA Gun Bn
Maj. C. F. England

71st AAA Gun Bn
Lt. Col. V. A. MacDonald

74th AAA Gun Bn
Lt. Col. R. S. Reilly

76th AAA AW Bn
Lt. Col. S. R. Kelley

77th AAA Gun Bn
Lt. Col. R. M. Nelson

78th AAA Gun Bn
Lt. Col. E. R. Gooding

79th AAA Gun Bn
Lt. Col. W. A. Brinkerhoff

83rd AAA Gun Bn
Maj. D. M. McCann

95th AAA Gun Bn
Maj. K. R. Nelson

96th AAA Gun Bn
Lt. Col. R. E. Hood

102nd AAA Gun Bn
Maj. E. R. Welte, N. Y.

120th AAA Gun Bn
Maj. F. G. Young, N. Mex

126th AAA AW Bn
Lt. Col. R. C. Carrera

129th AAA AW Bn
Lt. Col. G. D. Eastes, Va.

133rd AAA AW Bn
Lt. Col. E. J. Modjeske, Illinois

140th AAA AW Bn
Lt. Col. L. H. Ripley

145th AAA AW Bn
Maj. P. L. LaPlant

168th AAA Gun Bn
Lt. Col. M. C. Macy

243rd AAA AW Bn
Lt. Col. E. E. McMillan

245th AAA Gun Bn
Lt. Col. C. Davidson, N. Y.

271st AAA AW Bn
Lt. Col. V. S. Mathews, Calif.

340th AAA Gun Bn
Lt. Col. R. T. Bard, D. C.

387th AAA Gun Bn
Lt. Col. R. Wetherall

443rd AAA AW Bn (SP)
Lt. Col. T. F. Gordon

450th AAA AW Bn
Lt. Col. G. W. Shivers

464th AAA AW Bn
Maj. W. J. Munroe, Ala.

466:h AAA AW Bn
Lt. Col. S. M. Arnold

495th AAA AW Bn
Lt. Col. B. H. Backstrom

501st AAA Gun Bn
Maj. D. M. Green

502nd AAA Gun Bn
Lt. Col. P. J. Maline

505th AAA Gun Bn
Lt. Col. M. E. Chotas

506th AAA Gun Bn
Lt. Col. J. H. Valliere

507th AAA AW Bn
Lt. Col. J. A. Laing

513th AAA Gun Bn
Maj. C. W. McDonald, Jr.

518th AAA Gun Bn
Lt. Col. G. Kushner

519th AAA Gun Bn
Lt. Col. A. E. Holt

526th AAA Gun Bn
Lt. Col. W. T. Lind

531st AAA AW Bn
Col. P. J. Gundlach

550th AAA Gun Bn
Lt. Col. F. E. Terry

552d AAA Gun Bn
Lt. Col. Z. L. Strickland

554th AAA Gun Bn
Lt. Col. F. J. Lagasse

697th AAA AW Bn
Lt. Col. W. E. Thompson, N. Mex.

o98th AAA Gun Bn
Lt. Col. F. Monico, Illinois

701st AAA Gun Bn
Lt. Col. F. F. Quist

705th AAA Gun Bn
Lt. Col. F. O. Roever

716th AAA Gun Bn
Lt. Col. R. E. Howell, N. Mex.

717th AAA Gun Bn
Lt. Col. E. D. Pelzer, N. Mex.

719th AAA Gun Bn
Lt. Col. W. W. Morse, Calif.

720th AAA Gun Bn.
Lt. Col. G. A. Duke, Calif.

724th AAA Gun Bn
Lt. Col. E. H. Hahn

725th AAA AW Bn
Maj. J. C. Maultsby

726th AAA Gun Bn
Lt. Col. M. I. Tillery, N. Mex.

737th AAA Gun Bn
Lt. Col. B. W. Perry

739th AAA Gun
Lt. Col. C. Van Gundy

746th AAA Gun Bn
Col. K. S. Gray, Calif.

764th AAA Gun Bn
Lt. Col. E. D. Winstead

768th AAA Gun Bn.
Lt. Col. T. H. Kuyper

804th AAA AW Bn (M)
Maj. S. N. Caudill, N. Mex.

865th AAA AW Bn
Lt. Col. R. B. Rounds

(Continued on page 48)

The purpose of the Association shall be to promote the efficiency of the Antiaircraft Artillery by maintaining its standards and traditions by disseminating professional knowledge, by inspiring greater effort toward the improvement of matériel and methods of training and by fostering mutual understanding, respect and cooperation among all arms, branches and components of the Regular Army, National Guard, Organized Reserves, and Reserve Officers' Training Corps.

PUBLICATION DATE: OCTOBER 1, 1953

Antiaircraft JOURNAL

FOUNDED IN 1892
Published from 1892 until 1922 as
THE JOURNAL OF THE UNITED STATES ARTILLERY
Published from 1922 until 1948 as the
COAST ARTILLERY JOURNAL

VOL. LXXXXIV SEPTEMBER-OCTOBER, 1953 No. 5

CONTENTS

Published bimonthly by the United States Antiaircraft Association. Editorial and executive offices, 631 Pennsylvania Avenue, N.W., Washington 4, D. C. Terms: $3.00 per year. Foreign subscriptions, $4.00 per year. Single copies, 75c. Entered as second-class matter at Washington, D. C.; additional entry at Richmond, Va., under the Act of March 3, 1879.

MESSAGE FROM

General Ridgway's remarks at his first sta

IN analyzing my thoughts for expression at this meeting, I came to the conclusion that the most important point, I believe the one uppermost in my mind, was:

Recognition of the limitless opportunity for purposeful service.

I believe every one of you subscribes to the criterion that there is some purpose beyond the powers of humans to discern for which we were put on this earth. For my part, I subscribe to that fully, and I believe that the greatest purpose which we are permitted to see is to serve others. I believe it is no platitude to say that never have the objectives of higher purposes been in greater need of service from men and women of high-principled integrity than the purposes for which the founding fathers established this Nation. I believe that never has this Nation, and the cause of freedom of which it is today the preeminent leader, been in greater need of such service.

* * *

Now we join to share service together of the broadest scope and of the highest plane, and as I join you, I want you to know of my profound respect for the service you have been rendering and to express the earnest hope that together we can render still better service.

* * *

In the first approach to any job, regardless of magnitude, my mind follows a certain sequence of steps.

First, there is a *Mission*.

Second, this *Mission* breaks down into certain *Functions* to be performed, in order to accomplish the *Mission*.

Third, there must be a sound, simple, positive, workable *Organization* for the performance of these functions.

Fourth, *Men* of the proper caliber must be selected and assigned, each in his proper place, to this *Organization*.

Fifth, the *Organization* as a team must then *Perform* its *Functions* and *Accomplish* its assigned mission, and

Finally, the execution or *Performance* must have that vital essential at all times and at all stages of *Command Supervision*.

* * *

I shall not try, on this occasion, to state the Army's missions in detailed form, but I do wish to recall to your mind that however you word the Army's mission, there is but one final criterion by which to judge what the mission was and the manner of its performance. That criterion, gentlemen, is success in battle —success and all it contributes in battle to the Nation's military team.

THE modern state and its government, particularly our own, is about the most complex organization yet developed on earth. In the formation of its policies and in their execution, the main fields, such as the political, economic, financial, social, and military, are inseparably interdependent. No one field can any longer be isolated and major decisions in it made without regard to one or more of the others.

Yet, . . . the responsibility of the professional military man lies in the professional military field. His overriding responsibility is to give his honest, objective, professional military advice to those civilians who by our Constitution are his Commanders. It is not his responsibility to decide whether the military means which he determines are the minimum essential to accomplish the military task assigned him will cost more than the Nation can afford. He has not been trained for that. It is not, I submit, within his field of responsibility. He must, of course, as every senior commander is today, be aware of the major factors in these other major fields. He must recognize, as every senior commander does today, the imperative necessity of maximum economy and efficiency in the utilization of whatever military means his Government may make available to him. There is no question of this any more than there is any question of the loyalty of these senior officers in carrying out the decisions announced to them by proper civilian authority.

U.S. Army Photo

General Matthew B. Ridgway

The point I wish to make here, and I repeat it for emphasis, is that the professional military man has three primary responsibilities:

First, to give his honest, fearless, objective, professional military opinion of what he needs to do the job the Nation gives him.

CHIEF OF STAFF

nference, Washington, 17 August 1953.

Second, if what he is given is less than the minimum he regards as essential, to give his superiors an honest, fearless, objective opinion of the consequences, as he sees them from the military viewpoint, of this shortage, and

Third and finally, he has the duty, whatever be the final decision, to do the utmost with whatever he is furnished.

NOW let me return to what I was talking about a moment ago, namely, our overriding mission.

The Army's peacetime successes, however numerous, are secondary in importance to this one overriding, vital requirement—it must win in war.

Now there are certain simple essentials by which it can and will win in war.

In simplest terms, there are *Men*, *Money* and *Morale*, or, since we don't control the acquisition of money, these essentials are:

First—arms and equipment.
Second—training.
Third—leadership.

None of these needs much explanation to you, and the first doesn't need much explanation to the American people. I think they recognize pretty well that the days of club and sling, of spear and ax have passed, and that no Army or military force today can expect success in battle if insufficiently or inadequately armed, no matter how well trained or how well led.

The other two basic elements need a lot of continuing explanation to our people, and one of them at least, *Leadership*, needs a lot of continuing study by ourselves.

Now, developing the thought a little from these last two elements, *Training and Leadership*, two basic requirements stand out.

First, foremost, and always, we must have an Officer Corps, comprising a professional, long-term cadre adequate both in size and in quality. This is the heart and soul of any military organization. None will ever be better, or even quite as good, as its Officer Corps. This is the great reservoir of the character, of devotion to duty, of loyalty, of professional competence—the fountainhead by which tradition is planted and nourished.

If we are to have this, and without it we do not have an Army, we must have represented in our professional officer cadre a cross section of the Nation's life, a fair share of the best the Nation produces in character, in intellect, and in culture. If we do not, if it is not representative of a cross section of America, it will not, in the long run, have that support of the American people which it must have to accomplish its ultimate mission.

Next, and closely after the Officer Corps, is the requirement for the Noncommissioned Officer Corps, with its professional cadre of career personnel, inspired by the precepts of the Officer Corps whose standards it emulates.

These, gentlemen, are the essentials with which leadership can accomplish the seemingly impossible. These are the essentials without which ultimate success is impossible. These are the elements to which I invite your attention, and which I suggest we, all of us, keep before our eyes, however numerous the distractions of our day to day concerns.

With these two instruments with which to work, an Officer and a Noncommissioned Officer Corps of proper quality and adequate size, we can then be confident that the young men and women of America turned over to us to train will receive the best in professional, physical, and spiritual education that it is possible to provide.

This brings me to the last of the major generalizations which I wish to make in this talk this morning: that is, the Officer and Enlisted Man relationship.

WHEN we were young officers, we served a long apprenticeship, during which our primary concern was the care, training, and welfare—professionally, physically, and morally—of the men under our command. We had, on the average, between fifteen and twenty years to learn those lessons. They became ingrained. We recognized a responsibility twenty-four hours a day, seven days a week, for these men. We knew affection for them in our hearts, and we knew their unfailing response to real leadership. They were American soldiers, and there aren't any finer ones.

We must pass on to the younger officers the know-how of handling the American soldier. We have not taught the younger officers what to us became second nature—the responsibility of the officer for his men. We have that responsibility here in Washington equally with our brother officers in the field.

We exist here in the Pentagon for one primary purpose, and that is to ascertain, evaluate and, to the limit of our abilities, to meet the requirements of the commanders in the field who are charged with the execution of decisions made here. I shall expect that no matter how engrossed we become in the multitude of staff procedures here we remember

these basic elements for which we, individually and collectively are responsible.

* * *

One of these basic principles was just recently stated by President Eisenhower in transmitting to the Congress Re-organization Plan No. 6, since become law. In it he stressed several points, one of which was the necessity for the maintenance of democratic institutions. This point is illustrated by the reiteration of a principle to which America has been unfailingly dedicated: the principle of civilian control of the military.

The command channels by which that control is to be exercised have been made unmistakably clear. The channel goes from the Constitutional Commander-in-Chief to the Secretary of Defense and through him to the Service Secretaries. In my own case, my commander is Secretary Stevens. I had not known him until last April, when he first visited my command in Europe. I want to say to you gentlemen—without reservation—that the Army has as its civilian commander as high-principled a man as the Nation can produce.

In a short talk he made at the Quantico Conference he said, "No one ever had more respect for the Army or more humility in approaching my task than I. I shall defend its prestige and rightful privileges to the utmost."

I am proud to serve under Secretary Stevens as Chief of Staff, and I feel sure you share that feeling with me.

Now I confide to you senior, responsible members of this staff the responsibility for proper indoctrination of all the personnel in your respective divisions, to the end that our teamwork and the mutual respect and understanding essential to teamwork be steadily strengthened and broadened.

PLEASE remember, in this as in everything else I have presented today, there is a responsibility on each of us to educate others. Actually, everything in life can be translated into some form or other of educative process, or, if you like, of training; and the requirements for training, and for leadership, are just as active and just as necessary in this great staff as they are in any field command anywhere in the Army. It plays just as vital a part right here as in the Seventh Army, the Eighth Army, or anywhere in the Continental United States.

* * *

Loyalty

The necessity for this basic military essential is so clear that you scarcely ever hear it mentioned. Yet it is not automatic, and it is not always present—up, down, and laterally in equal degree—as it must be. This is not so much through design as through failure to cultivate it and to recognize its eternal importance. It either does or does not exist, and sometimes determination is difficult. It is particularly vital today in this period when we cannot see very far beyond the horizons, and when the utterances of senior officers, whether made publicly or in private groups, assume ever-increasing significance.

I shall expect the officers of this Staff to present their own honest views, fearlessly, forthrightly, but objectively in the light of their own conclusions as to what best serves the Army's over-all interests. The most dangerous adviser to have around is a "Yes Man," and the most useless is one who thinks of self instead of service. I shall also expect, at all levels, that having expressed his opinions and having heard the decisions, his entire support will then be put behind the execution of that decision, regardless of what his views had been.

Cliques

I have not the slightest knowledge of the existence of any cliques within this headquarters. I pray there are none, but I want to say in unequivocal terms that I will not tolerate such vicious elements if it is within my power to eliminate them.

Criticism

Indulgence in criticism is an ever-present temptation. If yielded to it can quickly become a vice difficult to break. In the civilian field it is of lesser importance. In military organizations it is of vital importance. It tends to corrode, and corrosion produces friction; and friction generates heat and eventually spoils any machine if uncorrected. I am not talking of honest differences of opinion, least of all at those times when issues are being debated. I am talking of the practice of vicious "crabbing" about the official actions of proper authority.

* * *

The Work Load

I think it is excessive. I think it must be and can be reduced. I shall seek the

General Ridgway's visits all over Korea inspired the Eighth Army drive.

full cooperation of Secretary Stevens and the Under and Assistant Secretaries. But within our own resources, I think we can do much, by better organization –more of the spoken than the written word, less attention to the written record for alibi purposes, and more efficient and adequate delegation of authority to subordinates.

* * *

I HAVE one note on which I want to close this first meeting. I am profoundly conscious of the privilege of sharing service with you and in seeking together to contribute our utmost in the discharge of the tremendous responsibilities with which the United States Army is charged. I have the deepest respect for what you have done, and what you are doing. I have no major changes to make at this time. I shall make none at any time without those most concerned having the fullest opportunity to discuss them with me and to participate in the process of reaching decisions. I shall have in these matters but one criterion: the over-all good of the United States Army in the light of the counsel which you and our field commanders give me and then of the best judgment I am capable of exercising.

I am convinced that whatever specters appear to some to lie ahead on close or distant horizons are the visionary imaginings of timid minds.

Decisions that will try the soul may well lie ahead. But the strength of a people is found in its energies, its capabilities, and above all in its character and moral principles. I think we have those in abundant measure.

I believe we were put on earth for a high purpose. I believe the American people have a reservoir of material and spiritual strength amply adequate to fulfill that purpose.

I am utterly confident in America's future, in the capacity of its leadership to meet the future, and in the ability of the Army to contribute to that leadership in fullest measure.

SEVAREID PRAISES AMERICAN FIGHTERS*

"There were many mysteries in the Korean War," says Eric Sevareid, CBS radio chief Washington correspondent. "The greatest is the human puzzle of what made American youngsters fight so hard, so long and so well in this kind of war.

"Loot? There was none of that in Korea. Glory and victory? Little of that. Their homeland invaded? No. National passion aroused, everyone involved? Not the case. Moral or religious crusade? Thousands of our troops had only the dimmest conception of the United Nations and collective security.

"But they fought, to the bitter end, a war they did not particularly believe in, to an armistice they have little faith in, and they will fight again automatically if the armistice should fail. They have done all this without the moral whippings of any political commissars. They have bled and died in the mud and stones of that bleak, incomprehensible land, in full knowledge that half their countrymen at home were too bored with it all to give the daily casualty lists a second glance. They saw the emaciated Korean children around them, and knowing their countrymen showed little interest in contributing, they gave millions from their own paltry paychecks. They knew it was too much effort for many of their countrymen to walk to the nearest blood donation center, so they gave their own blood to their wounded comrades. And they fought on in no particular bitterness that this was all so.

"They fought right ahead at the time military men of great authority were publicly arguing that they were being handled tragically wrong, while politicians divided their countrymen about the very purpose of their fight, telling them that their wounds were all in vain, and while knowing that although allied nations were cheering them on, allied soldiers were not coming to help them in any numbers.

"None among us can unravel all the threads of why these youths behaved so magnificently. It has to do with their parents, their teachers and their ministers, their 4-H clubs, their scout troops and neighborhood centers. It has to do with the sense of belonging to a team, with the honor of upholding it, the shame of letting it down. But it also has to do with their implicit, unreasoned belief in their country, and their natural belief in themselves as individual men upon the earth.

"Whatever is responsible, their behavior in this war outmatches, it seems to me, the behavior of those Americans who fought the definable wars of certainty and victory. For this is a new thing in the American story, and for those of us who write the story, as they live it, this is a thing to be put down with respect and some humility."

*Reprinted from *Army-Navy-Air Force Register*, Aug. 29, 1953.

Maintenance in the Self-Propelled AAA AW Battalion

By LIEUT. COL. OTHO A. MOOMAW,

Artillery

SUCCESSFUL employment of an AAA AW Battalion (Self-Propelled) in the dual role of AA and Ground Support in combat is dependent upon good unit maintenance and good maintenance support from the Ordnance.

The primary armament in the 3rd AAA AW Battalion (SP) consists of 32 M19A1, Twin 40mm Gun Motor Carriages and 32 M16 Quad .50 Cal. Gun Motor Carriages. There are 14 Armored Utility Vehicles (M39); five Half-track Personnel Carriers M3A1; 30 ¼-ton Trucks; 27 2½-ton Trucks; one 10-ton Wrecker, and one Vehicle Tank Recovery. Each Gun Motor Carriage has a power charger consisting of a gasoline engine and generator. There are a total of 315 storage batteries in constant use on these vehicles.

Assigned to the Battalion to perform the first and second echleon maintenance are:

1 Track Vehicle Maintenance Officer.
6 Motor Sergeants.
38 Track and Wheeled Vehicle Mechanics.
12 AAA Auto Weapons Mechanics.
1 Armorer.
2 Recovery Mechanics.
1 Welder.
1 Ordnance Parts Specialist.
136 Vehicle Drivers.
A total of 198 officers and men.

The following tool sets are authorized:

40 General Mechanics Tool Sets (SNL J-10).
12 Artillery Mechanics Tool Sets (SNL J-10).
1 Armorer's Tool Set (SNL J-10).
4 Tool Sets, Orgn. Maint. 2nd Echelon # 1 Common (SNL J-7).
1 Tool Set, Orgn. Maint. 2nd Echelon # 2 Common (SNL J-7).
1 Tool Set, Orgn. Maint. 2nd Echelon # 2 Supplemental (SNL J-7).
1 Tool Set, Welders (SNL J-10).

The following list of references are authorized and should be available for each Battalion and Battery Commander and Maintenance Officer for ready reference:

TM37-2810, Motor Vehicle Inspections and Preventative Maintenance Service.
TM9-2852 Welding, Theory and Application.
FM44-62 Service of the piece—Twin 40mm Gun Motor Carriage M19.
TM9-251 w/C 1—40mm Dual Automatic Gun M2 and Twin 40mm Gun Mount M4.
TM9-757 w/C 1—Gun Motor Carriage M19.
TM9-1718C—Wisconsin 2-cylinder Auxiliary Engine, Model T.F.T.
Ord 7 SNL-G-248 Gun Motor Carriage M19A1.
Ord 7 SNL-A50 Dual 40mm Gun M2.
FM44-57 Service of the Piece, Multiple Caliber .50 Machine Gun Motor Carriage M16.
TM9-710 Basic Half-Track Vehicles.
TM9-223 Multiple Cal .50 Machine Gun Mount M-45.
Ord 7 SNL G-102 Vol 14 Gun Motor Carriage M16.
Ord 7 SNL A-39, Gun, Machine Cal .50, Browning M-2, Heavy Barrel, Fixed and Flexible.
TM9-755 Armored Utility Vehicle M39.

There are a few facilities that can be built in the field that are a great help in performing maintenance.

THE most important is a grease rack at each battery and battalion shop. For the heavy vehicles a grease and inspection pit can be built by digging a rectangular hole in the ground and cribbing up the walls with timber or engineer pickets. The location selected should be high enough to permit drainage. The grease and inspection pit in use at this Battalion shop area has greatly improved the hull and engine maintenance.

One maintenance shelter is authorized by the T/O&E for the Battalion. At least one is needed at each Battery and three in the Battalion; two for Vehicle Maintenance and one for the Welding Shop. These shelters can be constructed by welding a frame together using pipe, angle iron or engineer pickets, the latter being more readily available in the combat zone. By building the shelter frame in sections and bolting it together, it can be made portable. That is recommended. Salvaged canvas can usually be procured from the Division Quartermaster.

The remaining big factor for successful maintenance is adequate supervision at each echelon of command to insure that the maintenance is performed as scheduled and that the schedule (mainte-

Members of Battery D, 3rd AAA AW Battalion, 3rd Infantry Division, check their weapons.

Lieut. Col. Moomaw, V.P.I. graduate in 1934 and well known to our readers from his reports from the 3rd AAA AW Battalion (SP) in Korea, now commands the 601st AAA Gun Battalion, Washington area.

nance roster) is kept posted up to date. The Battalion Commander must take active interest in the maintenance and the problems of parts supply and personnel replacements.

Continuous inspections should be made to insure that the battery and platoon commanders are enforcing the performance of the daily, weekly and monthly inspections and preventative maintenance services.

Here are a few tips. Trailers are often neglected; therefore assign each trailer to a vehicle and include it on the maintenance roster for the vehicle or keep a separate jacket file for each trailer. Inspect the trailers just as frequently as the other vehicles.

Here in Korea the simple things cause the most trouble. By cleaning, tightening and lubricating, most of the breakdowns can be prevented.

For example, in June, 1952, shortly after I joined the unit, we had a large number of engine failures on the M19 Gun Motor Carriages. Pistons were seizing and connecting rods were being thrown through the crank cases, indicating overheated engines. Many of the men claimed it just happened. However a systematic inspection revealed that the causes were simple. The first thing we found out of order was loose radiator caps and worn-out cap gaskets. The water was boiling out due to the low pressure maintained in the radiator. This Cadillac Engine is designed to operate up to 240°F and 16-lbs. pressure per square inch in the cooling system. In addition to the faulty caps and gaskets we found 4# (¼ ton) and 7½# (half-track) radiator caps in use. These would permit the coolant to escape at low temperatures—220° to 230°F. Also many radiators were dirty inside and outside. In some cases the louvres (fins) on the radiators had been bent over, restricting the passage of air. After a strong program of 1st and 2nd echelon maintenance got under way on the cooling systems our engine failures were reduced to a very few.

Driving at too high an engine speed due to wrong gear selection, especially when going down hill, has damaged many engines by overheating bearings. So when operating a M19, watch your engine speed and check the condition of the cooling system frequently.

The Gun Motor Carriage M16 has given less maintenance difficulty than the M19; however there are several things that require special attention. The first is the vibration damper and fan-drive pulley on the crankshaft. These parts should be inspected frequently to insure that 1) the screws holding the vibration damper to the pulley are secure and 2) the large hexagonal screw holding the pulley onto the crankshaft is tight and securely locked by the locking device. Due to the close space between the pulley and the radiator a good inspection is difficult; however, it is well worth the trouble to remove the armor

Captain Jack Young, MTO, and M/Sgt. Winn start M39 by using "slave cable" and another M39.

shield and radiator and perform a thorough inspection if there is any indication that the pulley is loose.

If this large screw comes loose or the vibration damper comes off, the fan blades will be bent and a large hole will be torn in the radiator. I have seen five such failures in this battalion in the past 12 months.

The second most common failure is that the engine gets out of time. This is due to 1) the distributor locking bolt coming loose and allowing the distributor to slip on the distributor housing, or 2) the distributor shaft breaking on the end where the top section sets into the lower recess. An improved design with fluted flanges or tougher metal could correct the latter deficiency.

The third most common failure is that the teeth on the front differential ring gear may break when backing the vehicle up a steep hill or when going down a steep hill. This happens more frequently in very cold weather. Apparently the teeth on the ring gear are undercut in the manufacturing process and will not stand as much driving force in reverse as when pulling forward. Warning: back up gently when in front wheel drive or when going down a steep hill in front wheel drive.

NOW a few words about the Armored Utility Vehicle M39. Inspect frequently in order to insure that the rear idler support roller spindles are anchored tightly to the hull. The large cap screws holding this spindle take the entire load of propelling this vehicle and if one screw comes loose or breaks, the added strain will soon break the adjacent cap screws and soon the idler falls off or jams in between the hull and rear road wheel and you are stuck until a wrecking crew arrives or major maintenance can be accomplished. Also care must be exercised to keep the shock and suspension linkage tight and in good working order. Remove rocks from road wheels and tighten track link pin locking keys frequently. Keep screws in rear hull door in place and tight all the time vehicle is in operation. Very frequently the screws on the bottom portion of the door are not replaced after an inspection or service of the engine. The vehicle is then driven over a large stone or stump, the bottom of the hull pushed up and a large gap left between the bottom of the door and hull. Then as the vehicle is operated, mud and dirt is scooped up into the engine compartment, breaking gas and oil lines and damaging the carburetor and other parts. So, keep the nuts and bolts in place and tighten often and then this vehicle will roll many hours under severe road and weather conditions.

There is not much needed to make the present maintenance organization in a AAA AW Bn (SP) ideal. A fire-control electrician is needed in each lettered battery and one in the battalion maintenance section to inspect, maintain and service the power turrets on the M19A1 Gun Motor Carriages.

It is recommended that one of the three AAA auto weapons mechanics in each lettered battery be upgraded from a corporal to sergeant and trained to be a turret artillery mechanic. Further recommended that a turret artillery mechanic in the grade of sergeant first class be added to the battalion maintenance section of headquarters Battery to supervise the inspections and preventative maintenance services on all gun mounts in the Battalion.

15th AAA AW Battalion (SP) in Combat

By LIEUT. COL. JOHN Y. BRIGHTMAN

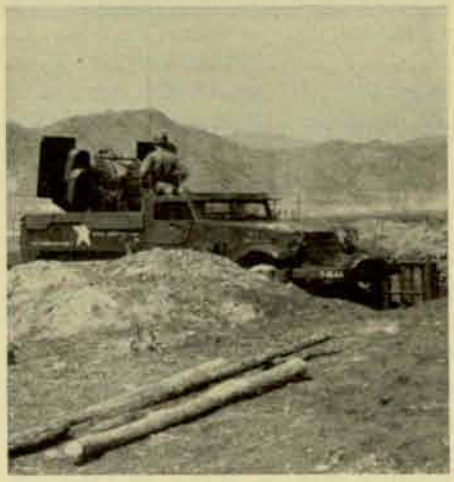
Commanding

THE 15th AAA AW BN (SP) after training at Fort Bliss and Fort Lewis arrived in Japan in August, 1950, under then Lieut. Col. Robert W. Hain, and was promptly attached to the 7th Infantry Division for the amphibious landing at Inchon. After that operation it moved to Pusan to ship out for the amphibious landing at Iwon, North Korea. In November, 1950, Battery A, while attached to the 17th RTC, was among the first UN troops to reach the Yalu. About the same time the first platoon of Battery D was cut off in the vicinity of the Chosin Reservoir and only eighteen men of the platoon were able to fight their way out and reach Hungnam.

After providing for the air defense of the Hamhung-Hungnam area during the withdrawal of the UN troops, the battalion embarked for Pusan, and closed at Yongchon on 28 December. Since then the battalion has fought its way through central Korea with the 7th Infantry Division, serving under Lieutenant Colonels Seth F. Hudgins, James M. Moore, and B. H. Johnson as battalion commanders. On 10 November 1951, the 15th became an organic part of the 7th Infantry Division having already proved its motto, "Fire Power And Mobility," in fourteen months of combat with the Division.

At the present time the battalion has one platoon attached to each of the three infantry regiments on the MLR. To provide for more effective control and coordination by the battery commander, each battery which furnishes a platoon to an infantry regiment, employs its other platoon in AA defense of that infantry regiment's close support field artillery battalion. The remaining battery furnishes the AA defense for the general support field artillery battalion and vital installations in the Corps and Division sectors.

Each platoon remains attached to the Infantry for a period of six weeks, at which time the battery commander rotates his platoons. The platoon with the Infantry is shifted to the Artillery, and vice versa. At the end of 12 weeks the battery is interchanged with the battery furnishing the AA defenses for the general support FA battalion and vital rear areas. In this way each battery is with an RCT for a period of three months and then serves with the general support FA Battalion for a period of one month.



Indirect fire position.

In the static situation prior to the truce, there were many advantages to this system. Each platoon in the battalion was attached to the infantry for six weeks during a 16-week period. Since the platoons with the Infantry were occupying positions on the MLR the personnel in these platoons received four points a month and rotated when they accumulated 36 points. This method provided that all gun crews and platoon personnel were given equal opportunities to accumulate points and to qualify for rotation at 36 points. In addition, since divisional AAA is never in reserve, it greatly lessens the probability of "combat fatigue" and affords an opportunity for training and maintenance when the tracks are in AAA positions. This method further insures that all personnel are trained in both close support of the infantry and AAA techniques.

The control exercised by the battalion differs somewhat in each regiment. In one regiment complete operational control is exercised by the regiment. The regiment selects the weapons sites and builds the positions for them without action on the battalion's part. However the battalion is notified of all impending moves and offers advice at times as to the location of the weapons. In the other two regiments, the regiment designates to the battalion the areas or targets upon which it is desired that this battalion place fire. The battalion then recommends sites for its weapons in the regimental area to enable it to accomplish these missions. Upon acceptance by the regiment of the recommendation, the battalion then constructs the position. The battalion supervises the training, maintenance and administration for all its platoons at all times.

Close support fire of the platoon attached to the infantry is controlled by the supported infantry's FSCC through the platoon CP. Because many of the battalion's weapons on the MLR can fire into areas not under the control of their assigned infantry regiment, this battalion can upon request mass the fires of all available weapons into a specified area. All positions are tied in by wire and radio to the battalion, and AAAIS information and AAA fire control is disseminated by the battalion.

THIS battalion has recommended that the platoons be placed in direct support of the infantry regiment rather than attacked, to provide greater fire power and flexibility. This has been approved by the Division CG, and will be put into effect in the near future.

Both direct and indirect fire methods are used in support of the infantry, and it is possible to provide additional weapons support for the infantry by utilizing many of our AA weapons in the rear of the MLR employing indirect fire

methods. The 707th Ordnance Battalion has, upon request by this unit, equipped one of our M16's with brakes to lock the turret in any position. The weapon has been tested and with minor modifications should prove extremely efficient in an indirect fire role, as minute adjustments can be made in azimuth and elevation and the turret will remain locked at these settings. An azimuth base ring and a gunner's quadrant are used to apply the settings.

Since it is important that all guns on the M16 be equal in barrel wear to insure as little dispersion as possible where employing indirect fire, the ordnance battalion has made a barrel gauge for each M16 to be used to check barrel wear.

Because of the lack of an early warning AAA system in the division area other than that organic to this battalion, direct communications have been provided between this battalion and the nearest Tactical Air Direction Center and to the Division's airstrip. In addition this battalion monitors the broadcasts of the Seoul-Inchon AAOR. All unidentified or hostile planes are plotted in the battalion AAOR. With this information the battalion is able to advise the Division as to the status of alerts the Division should order. Furthermore, information of planes in the Division area picked up by this battalion's CP's and gun crews are immediately relayed to the TADC and has proven to be a valuable addition to TAC's early warning system.

This battalion has had some interesting missions while in Korea which are not normal to an AAA battalion. Battery X was organized consisting of 23 M3A1's and 2 M39's to provide ammunition relay vehicles and to provide for the evacuation of casualties for the 24th Infantry Division. This battery is no longer in existence, but the M39's are still being used to clear the battleground of both friendly and enemy casualties. Many of the men participating in these operations have received distinguished awards for valor. The attachment of two 90mm antitank guns with crews furnished by this battalion to place direct fire on enemy bunkers was another unusual mission. During the 26 days these guns were attached, they fired 2,348 rounds into enemy bunkers and destroyed 160 of them.

Since April 1, 1952, this battalion has fired 77,638 rounds of 40mm and 15,870,329 rounds of cal. .50 in close support of the infantry. In view of the fact that the communist air has not been active in the division area with the resultant lack of use of our weapons in an antiaircraft role, extensive AAA training is in effect to insure an effective AAA defense. In addition to training at battalion level, all crews are sent to the Eighth Army AAA range for firing practice. Crews are sent to the range for a period of 4 days, and since the range is operating continuously each crew is afforded firing practice at least once every 3 months.

This battalion recently attached four M16's to the 1st ROKA Division to provided close support on the MLR during the recent Chinese attack against that division. Casualties, both in our equipment and personnel, were heavy, but the ROK's were unstinting in their praise of the support rendered by these weapons and credited these M16's with repulsing two ground attacks on outpost "Betty."

During the Chinese attack on outpost "Porkchop" in July, the battalion headquarters received several rounds of enemy artillery. The battalion executive officer and 8 men were seriously injured and 5 men were killed in this action.

As this article was being prepared, the truce was put into effect. A future article is planned describing this battalion's mission during the truce period.

78TH AAA GUN BATTALION

By LIEUT. COL. EARL R. GOODING, MAJOR C. F. O'DONNELL, and CAPT. LEONARD B. MAIN

THIS training maxim is well known and is the ultimate objective of all training. But how many units have conducted training under actual combat conditions?

The AAA Gun Battalions in Korea are being employed in their primary mission of air defense around priority targets and although this is a full-time job, it does not exploit their capabilities as to their assigned secondary mission. Their secondary role of field artillery, however, is not being neglected. The battalions rotate the assignment of providing reinforcing fire for a front line divisional unit, the Kimpo Provisional Regiment, 1st Marine Division. This assures that the units are at all times prepared to assume either of the dual missions, despite the tremendous turnover of personnel.

The role of field artillery is not a new one for the 78th AAA Gun Battalion. On arrival in Korea the battalion was initially committed in its secondary field artillery role. The battalion moved out firing its first rounds against the enemy on 19 September 1950, then participated in the great drive northward in support of the 1st and 6th ROK Infantry Divisions, the 24th U.S. Infantry Division, and the 1st U.S. Cavalry Division. The Battalion's primary surface mission was terminated 1 December 1950 at which time it was employed in a primary AAA role with Field Artillery as secondary.

THE following story is about the 78th AAA Gun Battalion and its activities, while engaged in a recent ground operation. We refer to it as operation *"HAM HOCK."*

Realizing the battalion couldn't jump into this mission completely cold, a train-

ing program to prepare the battalion for its field artillery role was instituted concurrently with preparations for the regular AAA record service practice. A permanent fire direction center was set up in the battalion AAOC with separate communication lines, with radio backup, to each battery. This facilitates preliminary training but more important it ties the fire power of the 90mm guns into the ground defense plan of the defended area. Concentration points along likely avenues of approach had been previously established and numbered. "Canned" problems using these concentrations were developed to give training to fire direction centers and gun crews. Observer procedures, fire commands, telephone discipline and crew performance were integrated. Forward observers were given maximum formal instruction and then sent forward in advance to observe procedures and study terrain in the OP's they were to occupy. Without stressing the fact, this interim training paid off a hundred fold as we shall see; so, let's get on the road to *"Ham Hock."*

The composite battery consisted of a gun crew from each battery; fire direction, supply, communications, and mess personnel from the entire battalion. The gun crews and key personnel were rotated every seven days. Thus in the thirty days that this battalion spent on the MLR in this role, it was possible to rotate every gun crew and all key personnel in the battalion. The gun crews in general consisted largely of newly arrived personnel. This was no handicap, however, for the men were highly enthused with the results of each mission fired and rapidly became proficient in their duties.

Upon issuance of the customary movement order personnel rendezvoused at Battalion Headquarters at 0500 hours 19 May 1953. At 0600 hours under command of the D Battery Commander a tactical convoy moved out arriving without incident at *"Ham Hock"* at 1200 hours. After the C ration lunch had been completed all personnel went about their assigned duties in taking over the battery. The battery range officer took charge of the FDC. The battery commander and executive officer went about dispersing and camouflaging vehicles, checking guns, ammunition, personnel bunkers, and working out a ground defense plan. The forward observers were sent out to man the OP's and the Battalion S3 then went back to discuss the general situation with the Marine Battalion S3 and establish operational procedures.

Registration had hardly been completed on the 19th when a fire mission was called in from OP 1. Results verified were 4 WIA, with two bunkers and two caves damaged extensively. Thus the training and fun began for the thirty-day period.

THE following day a guerrilla CO indicated a concrete bridge that he wanted destroyed but didn't have the artillery to reach it. A map perusal showed that it couldn't be reached from present position but by moving to the extreme left flank, it could be hit very easily. On the following afternoon one gun was march ordered and moved under cover of darkness to the alternate

Battery Area

position. It's tough enough moving over Korean roads in daylight and under black-out conditions there is somewhat of a problem. The move was accomplished without incident and the gun was ready to fire by daybreak. Meanwhile the observer had to be ferried out to an adjacent island, also during darkness, so that the target could be brought under observation. Actually the only problem was communications. Inasmuch as this was to be a one-time operation, it was solved by routing through five different switchboards and cross-patching during the low traffic period. This turned out to be between sunrise and 0700 hours. On the morning of 23 May the mission was fired. Because of the distance (16,000 yards) APC was difficult to observe, so a mixture of APC and PD was used, e.g., two APC and two PD. This proved successful and the bridge was destroyed. Two of the three pilings were completely knocked out.

From the 23rd of May through the 10th of June the flank positions were occupied intermittingly for training and deceptive purposes.

Since we had met great success by using this one gun from the left flank position by firing on long-range targets, the commanding officer of the Kimpo Provisional Regiment asked us to fire on a group of supply areas from this position. The gun was moved up under cover of darkness; however, this time the enemy was apparently waiting, because they threw four 76mm PD rounds in close to the road we were using. They weren't very accurate, but close enough so that the crew had to take cover. The gun was set down with no difficulty and the crew made themselves comfortable until morning.

THE next morning when the fog and mist had cleared away the observer from OP 1 called his mission into the FDC. The observers had great difficulty in observing the rounds as they landed because of the rough terrain. However, the OP could observe well enough to obtain two secondary explosions. Several successful missions were fired during the course of the day.

Around 1800 hours the gun crew was preparing to eat a hot meal that the mess crew had brought out to them. It was suddenly interrupted by incoming mail from an enemy gun position. Immediately the observer on OP 1 picked up the flashes from the enemy guns and phoned the grid coordinates down to the FDC. The gun crews who had been left in the original battery position were itching to fire counterbattery fire, and this was their chance. The FDC quickly computed the data and sent it out to the guns in the battery position, which in turn applied the data to the guns, and the outgoing mail was on the way in approximately a minute and a half from the time the original round had landed. Here the previous training of the observer, FDC, and gun crews paid big dividends, for after the first round landed the enemy guns were silent. A number of rounds were fired in counterbattery and the observer called for a cease fire. When the firing ceased the enemy guns were not completely knocked out, as they opened up again after a few minutes of silence.

It was a matter of seconds before the guns were booming again. This time the enemy position was thoroughly plastered and the battery was silenced.

The gun crew on the left flank was contacted as quickly as possible and the report was made that there were no casualties and no damage to any of the equipment. A total of thirty-three rounds of PD 76mm had landed in and around the position. One round had landed between the gun and ammunition pit.

It was only a matter of minutes before the Marines were calling the FDC to check whether we had suffered any casualties and upon finding the answer negative they immediately let out a war whoop. When asked what the war whoop was for they replied, "That was our sixth day of incoming rounds and we get combat pay this month." In fact the Marines proved to be very good friends. Throughout the period their cooperation was all that could be desired. Any facility they had was readily made available for our use. Their comments on the results of our firing were favorable as the staff followed each action in the daily summary crediting the destruction of enemy targets.

Over to our right flank OP 4 had reported a group of caves and a radio tower that were very tempting targets. A reconnaissance was made to the right flank and two gun positions were picked that were suitable.

Under the cover of darkness the gun crews moved out with gun and equipment and emplaced in one of the positions. The next morning a fire mission was called in from OP 4. The target was the group of caves that were mentioned before. The caves were effectively plastered and a great deal of damage was inflicted. Two large secondary explosions were observed. After the mission the radio tower was brought under fire. Although a direct hit was not obtained on the tower itself, a large amount of damage was done to the bunkers and trench lines surrounding the tower.

DUE to the number of hills to the front of the OP's, observation of rounds was very difficult and an AO was called in for targets of opportunity. It was known that there were AW and mortar positions behind the range of hills but they couldn't be located from the OP's.

The AO proved invaluable in locating targets such as this. Using the AO to observe for us during the course of one afternoon, one AW position was damaged, one mortar position destroyed and surprise fire was called in on several troop concentrations which was very effective. The success obtained in using the AO proved that this is the best method to use in difficult terrain. Using this means to observe fire, many targets can be covered with surprise fire that couldn't ordinarily be seen.

In view of the current ammunition situation, one of the objectives during this training was supply economy. Every effort was made to keep this objective a foremost thought of all personnel concerned. A target was not fired upon unless it was a target of worthwhile interest and the destruction of targets was done with the minimum number of rounds.

In battle when you know you have only so much ammunition, regardless of what course the battle may take, you can be very convincing about enforcing ammo economy.

At the present time the 78th is back in its air defense role and another gun battalion is engaged in operation *"Ham Hock."* As a result of this training both officer and enlisted personnel are qualified to accept a field artillery mission if the occasion arises. In fact we are looking forward to our next crack at *"Ham Hock."*

Results credited during the 28-day operation *"Ham Hock"* were:

16 KIA; 44 WIA; 21 Buildings destroyed; 17 Buildings damaged; 1 Bunker destroyed; 1 Bunker damaged; 1 Bridge destroyed; 1 Bridge damaged; 2 Caves damaged; 2 Mortar positions damaged; 1 AW Battery damaged; 1 Gun Battery damaged; 2 large secondary explosions.

[This battery has been deactivated since the truce.—Ed.]

After Action Report On The M16

By CAPTAIN B. B. SMALL

78th AAA Gun Battalion

THE M16 became an immediate success during the first year of Korea. In most of the divisions in Korea, each infantry regiment received a special issue of six M16's to supplement the SP battalion's equipment apportioned to them as part of the regimental combat team concept. These were assigned to the infantry regiment's tank company in the expectation that the proper maintenance would be available there. These infantry tracks were usually used to augment the AA front-line coverage rather than being assigned to separate original missions directly under the infantry. The AA officer commanding the SP battalion's tracks on that particular part of the line usually had these extra M16's, in effect, added to his own. Since the AA usually had a platoon on the regimental line, this meant that the lieutenant platoon leader often supervised nearly a battery-sized grouping of weapons.

It turned out that the infantry regiment had not the experience in either maintenance or tactical operation to adequately manage these 6 extra tracks. Usually, it devolved upon the SP battalion's maintenance section to make all of the second echelon checks and repairs. The

Captain Small, a frequent contributor last year from the 82nd AAA AW BN in the 2nd Division, in Korea, now serves as S4 on the 24th AAA Group staff in Swarthmore, Pa.

tank companies seemed to have more pressing interests and seldom had the necessary repair parts to keep the M16's going. Probably the basic reason was that suitably trained crewmen were never available; it was seldom that crews of infantry tracks were fully manned or adequately trained. If there were qualified M16 crewmen coming into the division replacement company, they properly went to the SP battalion directly (usually short itself) rather than to the infantry regiments.

A FREQUENT solution was to augment the infantry crew with a qualified AA squad leader for periods of instruction and training. The infantry grew to expect such training and support from the AA battalion rather than their own sources, and naturally so. These extra infantry tracks were sometimes a burden to the AA battalion, but their presence was helpful in allowing some disposition of AA tracks to duties more in connection with AA missions, and so there were some arguments for their retention.

As the front became static the M16's were in less demand. Most divisions released the M16's completely to the SP battalion for "floaters" or stand-by tracks, used to throw in where necessary or to replace damaged or destroyed AA carriages. Some of these tracks were also used to beef up the "castle guard" commitments at Corps or other places outside the division zone, but which invariably were levied from the divisional AA battalions. Corps air strip, corps headquarters, corps artillery headquarters, bridges and critical road junctions were likely places where the divisional AA tracks might be found.

Because of the division "castle guard" posts as well as these occasional corps assignments, there would seldom be a full battery of SP available to the infantry regimental commander. Out of this battery minus, the MLR got the most, and whatever were remaining went to the field artillery battalion, often a matter of three or four tracks. With no air activity this was not seriously objectionable.

As the static condition continued through 1952, the enemy built up their artillery strength. MLR commitments became more and more hazardous. Earlier the AW platoon leader would put his tracks right up on the infantry MLR, dug into big revetments just like the other infantry weapons, often within 800 to 1500 yards. After June, 1952, when the front erupted into a succession of hard local battles, it became undesirable for the M16's to remain in static positions exposed to the growing volume of enemy artillery and mortar fires. The construction of overhead cover bunkers became the rule, and eventually it was necessary to admit that the place for the AA halftracks was not on the very front during static conditions, but somewhere in the rear, where it was "discovered" that *indirect* fire at ranges of three, four, and even six thousand yards was not only possible but effective. SP AA platoons began to set up their own FDC's and master gunners began turning out graphical firing tables for them. Regular artillery methods began to be commonly accepted as routine rather than novel. Field artillery FDC's began to be connected by wire with the SP platoon's newly created FDC. It was possible for the field artillery FO up on the hill to add the massed fires of a platoon or so of quadruple .50's to his bag of tricks. His problem remained the same; his adjustments were made in the same manner as he adjusted his own 105's, or the eight-inchers.

THIS change in the principal use of the M16 from direct fire to indirect fire during the last year of the Korean War made it possible to place more of the M16's around and near the field artillery battalions and combine their missions. Although the real antiaircraft need had not increased since the air situation remained the same, more M16's were allotted to "AA defense" of the field artillery than during the days of 1951-1952. If the light field artillery battalion was within 3000 yards of the friendly MLR, as they usually were, the AW might use their AA positions around the 105mm batteries for their own indirect fire missions.

In some instances, field artillery battalions were left without AA support during the early static period, all the tracks being tied up either at the front or in the rear. Where large concentrations of artillery strength were assembled for special reasons, as for example (and beginning with) the Pia-ri Valley assembly for the support of the Bloody Ridge Campaign in the fall of 1951, and the subsequent objective operations of the "name" hills during 1952-1953, the AW protection was likely to receive greater priority and better coverage.

It seemed during the first phase of the Korean War—the year of movement—first priority went to the infantry support, with little time for anything else. During that period the M16 earned its reputation. During the next year of the static build-up, first priority went to the infantry MLR; the tracks being assigned "deadline" or more or less FPL type of mission. Whatever tracks were left over went back with the field artillery. During the last year, the enemy artillery build-up forced the tracks back off the MLR, either to the field artillery or somewhere in the space between the infantry and the field artillery positions.

One of the weaknesses of the early and middle periods of the Korean War was the looseness of the coordination between the field artillery and the antiaircraft. It was good that the developments of the later period forced the correction of this lack of cooperation. Coordination between the field artillery and the supporting SP fire units originally consisted of the senior AA section leader running a telephone wire from his track to the FA switchboard. When the indirect fire techniques began to be widely used, the connection became more detailed and on more levels.

Although every SP battery was equipped with eight M16's and eight M19's, according to the T/O&E, the M19 seldom held up as well as the M16. Many platoons were equipped completely with M16's in lieu of the delicate M19's. The old M16 carried its load through Korea while the newer M19 fell by the way. It was another case of the veteran versus the recruit. The recruit is more often the casualty, since the veteran profits from experience.

The M16 retained its veteran status through the three years of the Korean War, and came out at the end as probably the most notoriously effective weapon in use there. Unfortunately, it proved itself under conditions which may never exist again, and in such a way that the primary serviceability was completely ignored. Its use as an antiaircraft weapon was not tested.

Indianhead ACK ACK

By SGT. ED HERCER

PIO, 2nd Infantry Division

THE 82nd AAA AW Battalion (SP) came to Korea in 1950 as an organic part of the 2nd Infantry Division, and from the first battle worked its way in as an integral part of the ground fighting team.

Last year modern Indianhead Ack Ack experts introduced a new wrinkle. They felt that Ack Ack positions could be worked like regular howitzer batteries with a forward observer calling in missions and a fire direction center which computes data for the weapons.

Result was the Indianhead quad-fifty fire direction center system in which trained officers and men operate a platoon FDC located as centrally as possible in the area of the supported regiment just to the rear of the MLR. The system adopted is basically like a field artillery battalion's FDC on a reduced scale, with officers and the platoon sergeant performing the duties of horizontal control operator, vertical control operator and computer.

Here's how it works: An artillery FO spots a Red column, or some other enemy target.

He calls the FDC and passes on the necessary data. A rapid computation is made using the conventional range deflection fan and target grid, and somewhere on the MLR a quintet of antiaircraft warriors hop to their weapon, a quad-fifty, which is actually four .50 caliber machine guns on an M45 half-track turret, mounted on an M16 half-track. Ninety seconds after the FO calls, the guns answer . . . with fire.

TO lay the M45 turret accurately in both azimuth and elevation, the Indianhead Ack Ack battalion personnel devised an azimuth band from common banding steel cut to a predetermined length, and calibrated individually for each M16 by the master gunner using a template.

The band was clamped to the nonrotating portion of the turret; and a fixed index attached to the upper (rotating) portion of the turret.

The elevation problem was solved by the use of one heavy machine gun clinometer per track. Ack Ack crews set elevation by placing a clinometer on the top plate of the outboard right-hand gun and rotating the turret in elevation.

Did it work? Since July of 1952, the battalion has been credited with 215 enemy killed in action, 53 wounded in action, 31 mortars neutralized, a score of secondary explosions, and innumerable antitank and automatic weapons neutralized.

In the same period Indianhead "AA" fired 14,000,000 rounds of API (Armor Piercing Incendiary) ammunition. Last October alone, 4,000,000 rounds went out toward Communist lines to help support defenders of "Old Baldy," "White Horse Mountain," "Arrowhead Ridge," "Pork Chop," "T-Bone," and "The Alligators."

The Chinese have hung many names on the quads: "Whispering Death," "Death in the Dark," "Silent Death." Always death. The South Koreans, on the other hand, call it "ack-acky." Several times ROK patrols had "AA" support ahead of them when Chinese companies suddenly appeared—when the Indianhead's "Half-Inch Howitzers" finished drenching the area, the ROK's could have mopped up the Reds with wet blotters.

In all units, leaders make the difference. Lt. Col. Kirby D. Goldblum, commander of the 82nd AAA AW Battalion (SP), takes great pride in the way his batteries maintain, move and fight with their self-propelled weapons. The battalion holds citations from both the Netherlands Battalion and the ROK 11th Regiment.

Tall, good-humored Captain John L. Buckley, Washington, D. C., commander of A battery, a unit often commended for its effective infantry support, typifies the battery leader. The captain makes daily visits to both front line and rear quad-fifty positions. On call twenty-four hours a day, his men receive combat pay and spend an average of two months on

Capt. John L. Buckley, Btry A, 82nd AAA AW Bn and Sgt. Wymon Ladd's squad.

line. Then they move for two more months to rear areas, guarding bridges, protecting artillery units, scanning the skies.

During battle lulls, Ack Ack crews have been busy firing in pursuit and exploitation, on patrols, covering withdrawals and river crossings, providing blocking forces and reducing roadblocks. Sweeping an enemy area with Ack Ack has often kept Red-initiated contacts to a minimum.

On one mission when the first burst of rounds bowled over some prancing Chinese in a valley, the FO who called in the mission got so excited he screamed into the radio, "Keep it up, you're smack dab on 'em, keep it up!" The track kept it up; an estimated fifty Communists bit the Korean dust that night.

Brig. Gen. John P. Daley, commander of the 2d Division Artillery, under whom the battalion serves, is also an enthusiastic supporter of the battalion gunners and complimentary about their effective ground firing.

Supply—It Can Make or Break You

By LIEUTENANT COLONEL EDGAR H. THOMPSON, JR.

IT was a calm, bright, clear morning in Tunisia in March of '43. Suddenly a German Messerschmitt 109 fighter plane popped over the top of a hill and started a strafing run on a peaceful looking American bivouac area. Little did the pilot know that he was coming in almost down the gun barrels of a pair of Caliber 50 AAA pieces manned by ready gunners. As he opened fire, he was himself met by a hail of tracer that should have cut him to bits.

It should have, but it did not. Something went wrong, just as the guns closed the lead. One quit; the other began to spew its fire in hopelessly erratic dispersion. The lucky German scooted off "on the deck," untouched, leaving behind him a burning truck and a couple of young American AAA gunners crying in frustrated rage.

A green-as-grass brigade staff officer, I did not yet realize that in watching this action I had just had a rude introduction to the problems of antiaircraft supply. Unknowingly I had witnessed an antiaircraft supply failure, one that had suddenly negated months of training and days of vigilance.

These gunners were as good as any in North Africa. They were veterans and had not been caught napping. Their water-cooled guns, however, were in sad shape. Neither piece had a single bit of the heat-and-shock proof asbestos barrel packing that was needed to keep such machine guns watertight. One barrel was pitifully packed with string; the other with the crew's shoe laces. Both guns not only fairly squirted water but also seemed generally about ready to fall apart. The only cleaning materials on hand were some heavy grease and two discarded undershirts, all full of the omnipresent Tunisian sand, as were the weapons. The wonder was that the guns had been able to open fire at all!

Anyone might well have shrugged this off as part of the exigencies of extremely rugged combat conditions. A blind officer, however, would have noticed that in the bitter March cold of the mountains the gunners were clad only in ragged dungarees. A few questions soon disclosed to me that they had no underwear and only three socks apiece, one to wash and two to wear. They had, moreover, been on "C" rations for two months. As I continued checking the gun and remarked on shortages of tools, the lieutenant and gun commanders were loud in their complaints of trying to "keep gun sections together with baling wire." Mentally I was about ready to agree with them in cussing the QM and the Ordnance when purely by chance I happened to say to one section chief, "Sergeant, just what supplies are you supposed to have that you don't?"

The big burly N.C.O. started off rapidly, soon began to repeat himself, ran out of words, and looked helplessly to his lieutenant. This lad added a few more items, stammered, and finally said slowly, half to himself, as the though the idea were brand new to him, "By God, Major, we just don't really know at all! What's more, I'm not sure the captain knows either."

The captain, when I found him that night, did *not* know. His supply records consisted of a few dog-eared shortage lists from the Ordnance Supply Officer at Camp Stewart, Georgia. We agreed that said officer's legal and moral responsibility for supplying a battery in Tunisia was certainly at least open to doubt. Despite his own uncertainty, the battery commander felt that the Battalion Supply Office ought to have the answer, and was the proper outfit to push supplies to him. "Everything's tight though, Major," he reminded me. "Nothing has been coming to us." He did not have to argue to convince me. His headquarters had only two socks per man, compared to three at his gun crews. At least, he was not short-stopping supplies en route to the front!

THE next morning I visited the Battalion Command Post, a jumble of trucks and tents in a large grove of olive trees. There I hoped to get a better picture of the battalion situation as to equipment authorized, on hand, and short. The supply officer had a good list of what his batteries had on hand. He also had voluminous files of requisitions for items, from shoes to dungarees, and even for the celebrated barrel packing. His requisitions, however, were three months old. Moreover, they were addressed to the G4 of a division that had moved out of the area.

Lieutenant Colonel Thompson, USMA graduate, 1936, is also post graduate of George Washington University. He served as the 48th AAA Brigade S4 and CO 433rd AAA AW Battalion in ETO during the War. He is now on duty with Army G2 in Washington.

"Haven't you any requisitions to cover your current shortages?" I asked him. "Surely you've lost or worn out stuff in the last three months!"

He swallowed hard and began to grow red in the face.

"Aren't you attached to another division now?" I continued.

He nodded, unable to see any relevance in the question.

Carefully I explained that he ought to have up-to-date requisitions and that the filling of them was by no means an automatic process. I mentioned that the infantry division to which he was now attached had re-equipped its units three weeks before, and would therefore be on the bottom of the Corps supply priority list, with nothing but gas masks to give him. I added that his former parent division, now out of the line and issuing supplies to its units, was probably gleefully giving his share to someone else, and certainly wasn't going out to hunt for him to give him any.

We then hopped into a truck to go and see whether it was too late for me to put in a good word for the battalion with the G4 of the division that was refitting. We arrived in time for only an issue of socks and of a few wool clothes sized large enough for King Kong. All the other supplies ordered by the battalion, from shoes to cleaning materials, had gone to someone else.

Here was a battalion short on supplies of all kinds. Even so, those responsible did not know what the outfit was supposed or authorized to have, how much it was short of this amount, and when, where, by whom, or to what degree its shortages would be filled. Outstandingly at fault was the battalion commander, whose unawareness of his own formidable supply responsibility was particularly shown by his own words to me as I was leaving. Said he, "I appreciate your coming around to see what we need and help us out. We boys up here fighting the war don't have any time to worry about supply. The impetus on that has to come from the rear. No commander could have been more mistaken. *Supply is a command responsibility. It cannot be buckpassed, either down to the supply officer or back to the supply services.*

OF all those army orphan children known as separate battalions, none present their commanders with more complicated problems of supply than the antiaircraft. The technical equipment peculiar to the AAA cannot usually be obtained through the normal supply channels used by the infantry divisions, and requires special ordnance and signal supply and maintenance channels. The frequent long moves and wide dispersion of AAA units make not only the drawing but also the systematic distribution of supplies an extreme tax on the ingenuity and improvisation of antiaircraft personnel. Dislocation of supply channels by rapid reassignments and movements of AAA units is the rule rather than the exception. The 40mm battalion I later commanded, for example, in its progress from Casablanca through Sicily, Italy, and France to southern Germany, was assigned or attached to 12 different AAA groups, 5 AAA brigades, 4 infantry divisions, 5 army corps, and six armies. Obviously under such changing situations the major burden of responsibility for maintaining the necessary continuity of supply channels for an AAA battalion rests on the battalion commander. Any supply service endeavoring to exert "impetus from the rear" would probably find only cold trails and "Old Latrine" signs.

As a battalion commander, you will fortunately find that some problems have been simplified since the days when the Americans fought in Tunisia. Present Tables of Organization and Equipment, which specify how many rifles, field ranges, tents and similar items your outfit is authorized, are a big improvement over that master puzzle of World War II, the so-called Tables of Basic Allowances, which allotted items on such vague basis as: "1 ea. per squad." These tables had to be used with a similarly vague Table of Organization that left you guessing whether a gun section was a squad or two squads for supply purposes. Another improvement is that special AAA Ordnance maintenance companies are now fairly numerous, and radar technicians, formerly about as rare as atomic scientists, are now reasonably available.

Formidable AAA problems of supply nevertheless remain. They are not likely to decrease, especially in event of global war. Though the present Table of Organization and Equipment tells the battalion commander how many major items of equipment, such as guns or trucks, he is authorized, it does not tell him the breakdown of each item into its component parts, with proper catalogue numbers for each part. For example a gun is not just a gun for supply purposes. It includes not only the firing weapon itself but also spare rings, bolts, washers, and springs. There is authorized for it an issue of cleaning and preserving material of particular types and definite quantities. Most of this material has peculiar identifying catalogue numbers, and cannot be successfully ordered or even located in a dump without these. To cite a case, the machine gun barrel packing so badly needed in Tunisia was on hand, useless for weeks, back in the supply base at Oran, because it arrived labelled and identified only by an Ordnance Catalogue number. The Oran dump had no Ordnance Catalogue for AAA Matériel. Requisitions for "barrel packing" with no identifying number rang no bell with inexperienced Ordnance personnel and certainly not with their French and Arab assistants, who continued stacking great rolls of it, in the belief that it was kitchen twine.

THE catalogues of spare parts and components are extremely bulky, and therefore do not receive wide distribution. Any battalion commander who does not have pertinent catalogue extracts in his supply office files is courting disaster. There will be many times when an entire theater may lack a needed catalogue. Let me cite an actual example of what can happen under such conditions.

Catalogues originally destined for North Africa in 1942 were all lost at sea with one torpedoed ship. Urgent cables to the Pentagon received only the omniscient reply that ample copies had been sent. Shortages in AAA units became really serious. Quartermaster dumps, at the same time, were cancelling requisitions for "Sets, Carpenter and Wheelwright" as "not on hand." Actually these sets were made up of saws, hammers and like tools which were all on hand, but nobody in North Africa had a list describing such a set, so nobody could draw one. A saving break finally came, thanks to the foresight of the AAA's own Major General Sanderford Jarman, who had included in the SOP Pamphlet of his AAA Command complete equipment and spare parts

lists, with catalogue numbers, for all existing types of AAA organization. Major General Willard Irvine, on informal request from a desperate antiaircraft officer in Africa, sent enough copies overseas by air to supply all theater AAA outfits. The arrival of these lists permitted location and release of over 20 truckloads of tools and spare parts to AAA units in Tunisia alone. Copies and extracts of "Jarman" were highly prized by all veteran commanders of Tunisia for the rest of the war. Many battalion supply officers carefully carried their copies inside their shirts during the landings on the beaches of Sicily, Anzio and St. Tropez.

Even today, as a battalion commander, you will discover that the Ordnance, Quartermaster, Signal, and other supply services require constant information from you to keep abreast of your supply needs. Emergencies can set the best of supply service "automatic" calculations awry. Units operating in heavy mud, for example, have to use tire chains at all times. Loose flapping tire chains can so cut the brake hoses of trucks that a theater's planned normal two-year supply can vanish in six weeks. Likewise no automatic computations by ordnance ammunition supply personnel can anticipate the unusually heavy extra ammunition expenditures of a ground support mission by AAA. Time and again failure of the AAA personnel to warn the Ordnance of anticipated ground support missions has permitted stocks of ammo in forward dumps to be reduced dangerously low. There is a special purgatory reserved by higher commanders for the AAA battalion CO who ever runs out of ammunition!

THE Supply services, moreover, have their individual peculiarities in handling your requisitions. The Quartermaster, which does not like to "back order" clothing sizes not on hand for men who may be casualties any day, usually cancels all unfilled parts of a requisition, and these must be reordered by you. The Ordnance, on the other hand, will "back order" for you, as it knows you will have a lasting need to replace a lost item like a gun. These procedures may vary from place to place as you move around, but regardless, you have to watch out in general that you don't expect one QM clothing requisition to be good for months or on the other hand repeat an on-order requisition to the Ordnance and have them deliver you two guns instead of one.

There is a particular obligation on an AAA battalion commander to check constantly the supply discipline of his unit. First he wants his men to have what they need. Every gun battery, every automatic weapons section, should have a list of what it is authorized and what it has on hand. Small files of stock cards, one card for the tally of rifles, another for helmets, and so on, are excellent for this. Besides accurate records, an additional constant physical check has to be made by you for overages. Because of large numbers of vehicles allotted them, AAA units are habitually tempted to carry whatever they can for comfortable living. Those extra trucks are supposed to carry ammunition. And the day will come when you will need to load ammunition in a hurry without having to unload a lot of overstuffed chairs to make room for it. So, you need now to launch an austerity campaign. You will nveer really know what kleptomaniacs and packrats soldiers are until you have conducted a "shakedown" inspection of your AAA battalion!

A battalion commander needs men of real talent in his supply office. Many battalion commanders have found that an excellent incentive procedure is to place the best lieutenant in the battalion on the battalion S4 job with a view to promoting him if he does well. Once promoted, he then is given the next battery command available. Eventually all battery commanders by this means will have also been battalion S4. This is effective for putting pep into the battalion supply office and making a battalion supply conscious throughout.

Our battalions in future conflict will have to be far more supply conscious than may now seem necessary. The relative plenty of good equipment in World War II France and Germany, and in present-day Korea, places where most of AAA troops have seen their only combat, will not be the normal state of affairs if we join in a new major conflict. In any new war against a major power, desperate supply situations like the early days in Korea, or in Africa and Italy during World War II, will be likely to recur. Supply consciousness, the desire to conserve and save scarce items, will be a must.

To demand supply consciousness of your unit, you must first achieve it yourself. You should encourage your supply officer to consult you frequently. Frequent spot checks of supply papers will also reward your effort. You can tell much about the thoroughness of your battery commanders by watching their requisitions for a few months. You can spot as well any tendency of your supply personnel to develop the unhealthy attitude that the batteries exist to serve them rather than the reverse. Such state of mind demands immediate correction, usually by some transfers. You can and should observe personally the nature of your unit's relation with the supply dumps, and see that you are getting the service and priorities you deserve. You should insure that your S4 and motor transport officer work closely together and do not duplicate each other's efforts. The S4 has a vital interest in an accurate knowledge of numbers of battalion vehicles operational, yet many MTO's fail to keep him informed. You should have a supply annex in your SOP, to regularize to the maximum such battalion and battery procedures as requisition, issue, salvage, rationing, and stockpiling. For example, in the SOP it is well to specify that although motor and radar requisitions may be made outside the S4 channel, your S4 must get an information copy.

One of the most unfortunate concepts that gained credence among brigade and group commanders in World War II was that their commands were purely tactical units and that supply was not their responsibility. Such erroneous ideas seemed to be the approved doctrine of the Army, as T/O changes in 1944 combined the S1 (Personnel) and S4 (Supply) jobs at brigade and group level into a single combination S1-S4. In two years as a battalion commander, I never received a visit, much less an insepction, of my unit or records, from any S4 of all the brigades I served under, and only two of the groups.

By contrast, the G4 of every infantry or armored division I ever supported tactically visited my unit promptly and habitually. By further contrast, I was a brigade S4 myself for over a year before I was given a battalion. During that time I managed to visit and inspect every battery ever in the brigade, and

in emergencies even ran supply dumps for our battalions. I was no better S4 than the rest, but my brigade commander was an outstanding officer who knew how to use me properly.

The fact that even the best S1 is often tied to his desk, at times when a good S4 cannot afford to be, has apparently finally been recognized by the Army in its new tables of organization. The changes as of 1950 not only restore the pre-1944 separate supply sections for brigade and group headquarters, but also, in the case of the brigade, have added a captain as assistant S4.

Even so, brigade and group supply sections are none too large for carrying out the tough job that AAA supply imposes on a higher headquarters.

Correct equipment status reports are needed in Washington.

However, a correct report of the status of the major items of unit equipment in all battalions of a brigade or group can only be maintained by constant physical check against lists. When the battalions find that this is not done, they accumulate overages of useful items such as trucks, and promptly dispose of bulky and unhandy ones such as air-ground recognition panel sets.

The brigade or group S4 who visits and checks records frequently can save his battalions much paper work and voluminous reporting by obtaining his information first-hand.

Supply inspections will enable a group or brigade commander to be better informed on which of his battalions need his personal corrective action or rate his praise. All battalions are to a certain extent wise to the usual eyewash, the red painted signs and rapid execution of gun alerts, that higher headquarters will always look for. The really thorough and conscientious commanders can, however, almost invariably be separated from the sloppy ones by supply inspections.

Not merely the supply inventory of each battalion, but also its entire system of ordering and drawing supplies should be the subject of close scrutiny from higher headquarters. The brigade or group S4 must see to it not only that his battalions are drawing from the designated dumps, but also that these dumps are the best ones for the units, not unreasonably far from them, nor poorly stocked and run in comparison with other available dumps. Should he fail to keep close check on this, he may receive a letter from the Army commander, as many group S4's have, asking why a certain battalion is drawing duplicate sets of rations from two or even three dumps! On the other hand he must make sure that his units are not being cheated on amounts or priorities, especially when attached to another organization for supply. At times he must fight to keep his combat units given combat priorities, and not put on a par with some machine records unit.

Supply guidance is needed to prod the laggards and also to check the overzealous. There is a certain occupational kleptomania that makes many of the best supply officers habitually light-fingered. They see no moral difference between their raiding a fat ration dump and Robin Hood's robbing the rich to feed the poor. The best of them get itchy fingers with captured supplies. One battalion S4, for example, on the breakout from Anzio, drove up to his unit C.P. in a German tank, complete with captured crew, fully intending to run it along with the truck column! Such procedure would have wasted a tank; it almost wasted an S4.

YOUR supply story need not be one of failure. Here's a success story. One day during the Cassino Campaign an Army G4 looked out of his office after a heavy rain and was startled to see an officer climb out of a jeep, walk over to a half frozen ditch and step down into the mud, well above his knees. A few minutes later the same officer, dripping mud, appeared in the G4 office. It was an antiaircraft battalion commander from right up at the front. "Colonel," said he, "I've been around to see my guns and those boys in the gun pits need overshoes. Look what that mud's like."

"I could have pleaded priorities or just thrown him out," said the G4 later, "but do you think I could turn down the first CO around here who'd ever shown me a practical supply procedure? He got his overshoes! But that's not all. I heard that soaked as he was, he picked up a heavy cold on his way back to the front. His boss heard that story and was so pleased he sent him off, with a bottle of whisky, to recuperate in that lush hotel at Sorrento. He's not exactly in the doghouse with his gunners either!"

IT PAYS TO AIM!

By MAJOR THEODORE WYCKOFF

Did you know that it costs $5.70 to fire a single shell of the self-propelled AAA twin forty—the M19? That a thousand rounds of ammunition for the quadruple .50 cal machine gun—the M16—cost $343.00? That it costs a minimum of $37.90 for a round of 90mm AA ammunition?

Yes, at a maximum of 240 rounds per minute that M19 up front firing at enemy pillboxes or at enemy fighters could burn up $1,368.00 worth of ammunition in a minute of action. And that halftrack M16 covering our infantry as it advances up the hillside or that M55 covering that bridge along our main supply route have four .50 cal machine guns, each of which could fire a maximum of 550 rounds per minute. A possible 2200 rounds per minute would cost you and me and every taxpayer $754.00.

I think you can see why I say: "It Pays to Aim." The 90mm AA guns deployed around our major rear area installations or now and again reinforcing the fires of field artillery with the corps can fire up to twenty-two rounds per gun per minute. Using an ordinary mechanical time fuze those rounds cost $37.00 apiece, which to me could add up to $3,335.00 per battery per minute of firing. When the shell is fuzed with a $37.50 VT fuze the cost per round is up to $75.40 apiece and the cost per battery is up to over $6,635.00 per minute.

These are theoretical maximum costs. They are not realized in actual combat or training, but they do underscore the need for economy.

Here in Europe, AA troops of the 34th Brigade are fighting a "cold war," and that means keeping up to snuff in training. We've learned how to make our ammo count, so that every round fired helps to assure a "kill" in combat. There's no room for ammo wastage over here.

Ammunition is expensive—there is no denying that. But that is not my main point. My main point is that with ammo costing what it does, we cannot afford to fire any unaimed rounds—or pump out any ammunition which does not serve a real training or combat purpose. Putting it another way, every round we fire in training must serve to make our aim more deadly in combat or it must be classified as a wasted round. Many wise men have said the same thing in different ways: "In target practice the battery learns more from a few rounds fired carefully and analyzed than from many rounds fired hastily." This was written by a wise old Coast Artilleryman long ago. Back in 1894, Lt. George O. Squier wrote about a target practice which had been conducted at Fort Monroe shortly before:

"The few shots which were so carefully and intelligently utilized in a study of the 8-inch converted rifle at Ft Monroe gave us more real, tangible, valuable results as far as the treatment and behavior of this particular gun is concerned than all the irregular battery firing which had been done with it up to this time."

The same wisdom was expounded by the greatest Coast Artilleryman of all time—Napoleon—whose first claim to fame came, as a Captain at the age of 24, when he organized and trained the harbor defense of Toulon, and consequently forced the English fleet to leave the harbor and raise their siege of this southeastern French port. For this spectacular and bloodless victory, Napoleon was promoted to the rank of Brigadier General.

Now let's talk about you and me. What can we, as modern day AA artillerymen, do to improve our aim and make our shots count? Lt. Col. Charlie E. Meadows is CO of the 62d AAA AW Bn (SP) stationed in Mannheim. The 62d recently fired a service practice rated "excellent." An AAA AW Battalion like the 62d requires upwards of a fifth of a million dollars worth of ammunition a year to conduct minimum training. Col. Meadows, what is your advice to AW battery and battalion commanders who want to get the most out of their ammo?

"My advice?" says Col. Meadows. "My advice is to train your people in advance —prepare your firing—make sure every gunner and gun pointer knows all there is to know about gunnery, make sure every cannoneer knows his equipment and then *critique*—critique every course so that the gunner can see and correct his mistakes. Do this and you'll see real improvement from one course to the next."

Lt. Col. John P. Tawes is CO of the 67th AAA Gun Battalion stationed in Worms. "D" Battery of the 67th last year won the Annual Gun Firing Trophy awarded by the Commanding General, 34th AAA Brigade. A gun battalion like the 67th requires a fourth of a million dollars worth of ammo a year to conduct minimum training.

Col. Tawes, what is your advice to gun battery and battalion commanders who want to get the most out of their ammo?

"Preparation of fire is the answer," says Col. Tawes. "With accurate hairsplitting orientation and synchronization, with a good met message and skillful use of the data on non-standard conditions, you've got the battle two-thirds won. Add good trackers, *well-maintained equipment,* and smoothly operating gun sections and you can't help but do good shooting."

This is the advice that two experienced battalion commanders have to give towards promoting good shooting.

Before I bring this little study of facts and figures to a close, let us get back to fundamentals for just one minute. Before we jump to conclusions about what to do about the high cost of ammunition, let us refocus our sights on our objective. We are here in Europe—or Korea —or the U.S.A.—to accomplish one primary mission, and that is to shoot at Aggressors. If we can't do that, there's no reason for us to be here at all. Therefore, no one will contend that there is any training more vitally needed than firing. But at a quarter or a fifth of a million dollars a year, the shooting had better be good, don't you agree? That is why I say: *IT PAYS TO AIM!*

AAA SITE HOUSING

By LIEUTENANT COLONEL ROBERT R. COREY

A YEAR ago troop housing was one of the weighty questions facing the AAA Command. General Lewis and his Regional Commanders wanted suitable facilities with comfort for these AAA troops in the States who would man the defenses 24 hours a day. It was not easy. However, with characteristic AAA initiative and ingenuity the decision was quickly made to construct barracks, dayrooms and orderly rooms with troop labor. The goal was to create miniature posts at each battery area and attempt to provide the essential facilities of permanent army posts from whence most units departed to move into the field. This decision, a fortuitous one, was not without a multitude of problems requiring a lot of planning on the part of commanders and staffs at all echelons.

The broad backbone of the plan was developed by AA Command. In brief, money was obtained and obligated to provide prefabricated metal buildings to be erected by the troops at each site. Additional funds were made available for miscellaneous construction material needed to roundout and provide for the little extra details that would make the difference between a drab area and a desirable one. The two principal buildings required by all sites—the mess hall and latrine—were to be built by civilian contractors, as was grading and certain limited construction of gun rings, roads, etc.

The Chief of Engineers was brought into the picture; battery sites were procured either on government property or through leases from private persons. The district engineers throughout the country let contracts and supervised the work done by civilian construction crews. The engineers assisted further by providing small detachments to the various defenses to assist in supervising the work.

But the biggest job was the one the AA undertook to do itself—operation "Bootstrap." It consisted of erecting several thousand prefabricated metal buildings during the winter season with a very minimum number of men. These same men were responsible for maintenance and operation of all types of guns and radar as well as continuing a 24-hour vigil from their temporary or partially completed positions.

Lieutenant Colonel Corey, recently transferred from the Infantry and a late graduate of the Artillery School advanced course, served last winter as CO 602nd AAA Battalion and later as Executive, 17th AAA Group. He is now with G1 at Hq. AFFE.

THE best picture of the complexity of this project can be obtained by looking at one of the AAA Defenses. The Baltimore Defense, under Command of Colonel Frank J. Zeller, has done an outstanding job in development of the on-site positions. The battalions of this defense are based on two different army installations a considerable distance apart, and some miles from the actual gun positions. Early last December a flow of supplies began arriving at these supply points for use in this program.

Offhand, it would appear that there is nothing complicated in bolting together a metal building. However, it is not as simple as that. There is the problem of the site layout—where the gun ring is to be located, access roads, ammunition storage, the general location of the buildings—barracks, orderly room, dayroom, supply room, BOQ, mess hall, and latrine. After the general plan is provided, each building must be accurately surveyed to insure proper alignment, level and distance. Simultaneously, with troop construction, the civilian contractors began their work on the two contract buildings and the grading of roads and gun ring. Naturally, this work disrupted all previous accomplishments at the sites. The tactical mission could not be slighted; so the troops had to exist as best they could in temporary shelters of winterized tents.

Each battery site was allocated eleven buildings, eight for barracks, one dayroom building, one Battery CP, and one maintenance building. To properly erect these prefabricated buildings it is necessary to pour at least 39 concrete piers (3 rows of 13 each). These piers must rest on a concrete footing and, of course, the top of all piers must be absolutely level. Considerable excavation of trenches for the piers is usually required before they can be set. And, then, an experienced mason is needed.

Once the foundations are laid, the task has just begun. Each "pre-fab" comes in 14 boxes of varying size and weight, and unless instructions are carefully followed, it is very easy to misplace a window panel or to put the stove vent in the wrong place.

While we shall not explain AAA construction in the ZI in detail, it may be helpful to other AAA units either in the ZI or overseas to discuss a few of the problems presented by such a construction program.

FIRST, a broad, general plan must be developed suited to the area and funds available. Generally speaking, consideration should be given to the following items:

1. The erection of the pre-fabs themselves.
2. The construction of both internal and external electrical wiring for all buildings.
3. The plan and materials required for partitioning, shelving, closets and doors in all buildings.
4. The special plans required for adaptation of standard pre-fabs to be used on shop buildings or motor pools.
5. Preparation of blueprints and material lists for gun tool lockers, oil and paint lockers, sentry houses, generator sheds and such miscellaneous buildings as may be required.
6. The design and planning of auxiliary sanitary features such as garbage-can racks, trash containers, etc.
7. Necessary provisions and plans for roadways, walks, steps, fencing and gates as appropriate to each battery position.
8. The design and construction of safe ammunition shelters for both ready and reserve ammunition supplies.
9. Finally, attention must be given to

the landscaping, seeding and sodding of each gun position. This not only is a site beautification measure, but has a very practical result in reducing dust and the increased maintenance it demands.

THE experience of the 17th AAA Group reveals many common mistakes that are made in erecting pre-fabs. Most common are:

1. Using nails instead of screws to hold wallboard on ceiling.
2. Failure to establish a uniform method of placing screws around windows.
3. Failure to trim insulation at floor pre-fabs.
4. Improper installation of asbestos stove protectors.
5. Windows not properly centered before final fastening.
6. Bending of roof and wall panels by improper handling and storage.
7. Line board ripped and broken by improper storage and handling.
8. Failure to provide sack protection for line board, insulation and other materials affected by moisture.
9. Missing parts caused by failure to ascertain that all fourteen of the proper boxes are available prior to constructing a building.
10. Cannibalization of parts to speed construction, resulting in lack of parts to complete all buildings.
11. Lack of proper supervision and utilization of an excessive number of personnel to erect pre-fabs. Small teams doing the same job in each pre-fab are recommended.

The greatest problem facing any officer who has been given the task of erecting pre-fabricated buildings is the training of personnel. The best system is to select a demonstration team of individuals who have had some background in construction, and after carefully studying the instructions which are available with each set of buildings, have this crew erect a few buildings at one of the first sites selected.

After the demonstration team has attained the desired proficiency and the common errors and difficulties have been eliminated, a larger group of personnel representing all the units required to construct "pre-fabs" should be brought in for a demonstration.

A SUITABLE number of officers and key noncommissioned officers from each unit should be assembled to watch the demonstration team erect one complete building in accordance with the outline below. After watching the demonstration team erect a building, the spectators should themselves be grouped into teams of appropriate size and erect a building themselves. The demonstration team can act as supervisors during this period. The suggested schedule is as follows:

First Period:

1. Arrangement of Battery Area.
2. Preparatory survey of building sites.
3. Utilization of Engineer personnel, materials, and equipment.

Second Period:

1. Excavation of trenches for footings, pouring and levelling of footings, setting concrete blocks, weather considerations.

Third Period:

1. Receipt and initial storage of boxed parts.
2. On-site storage and transportation of boxed parts.
3. Arrangement and proper handling of parts during construction.

Fourth Period:

1. Laying of floor girder.
2. Laying of floors and reflective insulation.
3. Erecting the framework.

Fifth Period:

1. Erecting side panels and end panels.
2. Installation of windows and doors.
3. Placing of interior liners and roof and wall insulations.

Sixth Period:

1. Installation of interior electrical connections.
2. Installation of oil stoves and roof jacks.
3. Trimming of insulation and general final clean-up of building.

Once the demonstration teams have completed the work, a nucleus of trained personnel is then available for every battery to begin their own instruction program. As previously mentioned, it is best to create a number of small teams, each with a specialized function, and work simultaneously on several buildings at one time. While this system does not produce the first building as quickly, it does give speed on the whole job, and also better construction.

Once the buildings are erected, the finer touches of walks, fences, gates, and landscaping can be accomplished. There are two schools of thought. One group advises letting each battery use its own initiative, and use its own personnel and materials to finish up the job in the manner they desire. Others maintain that uniformity at least on a battalion level is desirable and special teams are provided to move from battery to battery erecting a standard type of improvement at each site. Whichever way you choose, the ultimate result desired is a livable and attractive battery-sized military post.

BEING TRANSFERRED?

If so, send us your new address. If you do not yet know the new address, write us to suspend mailing your JOURNAL. Then we hold it here and forward when we do get your new address. That will give you better service. The Postmaster *will not* forward or return your JOURNAL.

ANTENNAS

By CAPTAIN WILLIAM F. BROWN

AAA&GM Branch, The Artillery School

FREQUENTLY, in combat, radio communication may be the only link between an individual in a forward position and his fire unit or headquarters to the rear. Any breakdown of communication in a critical situation such as this endangers not only the individual at the front, but all his supporting elements.

Many times communication can be restored, or improved, simply by insuring that standard issued antenna equipment is properly installed, located and oriented. Certainly, any time that issued antenna equipment can be used satisfactorily, it should be. Issued antennas have been designed to give us the most efficient overall operation. But in special situations, when breakdown of communication is caused by damage to, or loss of, the standard radio antenna equipment, or in those instances where the transmitting range is beyond the normal capabilities of the radio set in use, communication can often be re-established by improvising a non-standard antenna. Also, in many sections of the world, adverse atmospheric conditions or local interference necessitates the use of non-standard antennas to maintain radio communication.

Before attempting to construct any sort of antenna, it is helpful to understand first something about radio waves and how they travel when leaving an antenna. Even though most antennas tend to be somewhat directional, radio waves leaving any antenna travel in many directions. However, the strength of the waves may be greater in certain directions, and at certain angles above the ground.

That portion of the wave which travels along the surface of the earth is called the GROUND WAVE. The ground wave consists of two components, referred to as the surface wave and the direct wave.

The surface wave is most important at frequencies below 20 megacycles, used exclusively with amplitude modulated radios. These waves tend to follow along the surface of the earth. Range is greatly decreased when the wave encounters terrain barriers like high mountains or wet jungles, or man-made obstacles such as bridges or steel reinforced buildings. Consistent communication is reliable only up to a range of a few hundred miles when utilizing the surface wave.

The direct wave is most important above 20 megacycles, used with frequency modulated and amplitude modulated radios. These waves tend to travel in straight lines and do not follow the surface of the earth. Normally, line of sight operation must be employed with these higher frequency sets. In unusual locations where radio waves can be reflected from a barrier such as the sides of a narrow valley, it is sometimes possible to communicate by other than line of sight operation.

That portion of energy radiated from an antenna at an angle above the horizon is called the SKY WAVE. Some of this energy can be returned to the earth by the reflecting effect caused by layers of ionized gas which exists 70-250 miles above the earth. These ionized layers of gas are known as the ionosphere and can reflect or refract part of the sky wave back to the earth to make possible the reception of radio signals a great distance from the transmitting antenna. The sky wave is used in extreme long-range communication, generally at frequencies well below 20 megacycles, and is not particularly important in lower echelon military radio communication.

The efficiency of an antenna depends very much on its physical location in relation to obstacles which have a tendency to siphon off the radiated energy into the ground. Thus, antennas will be more efficient when located in the open away from trees, bridges, power lines and other natural or man-made barriers. The higher an antenna is erected above the ground, the greater will be its radiating range. Often it is desirable to erect antennas on the highest hill in the vicinity of a radio station. A radio operator should be permitted to locate his set in the most favorable position within a given area. He should then remove the set to the exact spot from which transmissions will be originated.

Vehicular antennas must be erected vertically to operate efficiently. A tied-down antenna has is radiating range cut approximately 40 to 50 per cent.

THE metal mass of a vehicle can also be used to increase the efficiency of a vehicular-mounted antenna. The metal mass is positioned to act as a counterpoise or reflector of radio waves in a particular direction. Experiments prove that if a vehicle is parked so that the radio antenna is between the greatest mass of the vehicle and the distant station, more efficient operation will result. At extreme ranges, utilizing this mass of vehicle principle will mean the difference between having or not having communication.

Most military radio sets are equipped with both a vertical whip-type antenna and a straight wire antenna. Straight wire antennas are usually employed only when whip antennas fail to give satisfactory results. Straight wire antenna must be oriented in azimuth with the antennas of other radio sets operating in a radio net to give best communication. This is true because radio waves are radiated a much greater distance at right angles to the axis of an antenna, except where the antenna is several wavelengths long. The responsibility for directing antenna orientation in azimuth should rest with the net control station in any radio net.

Some frequency modulated military radio sets have issued with them the special radio antenna equipment RC-292. The RC-292 is an elevated, wide band, modified ground plane antenna designed to operate with, and increase the distance range of frequency modulated

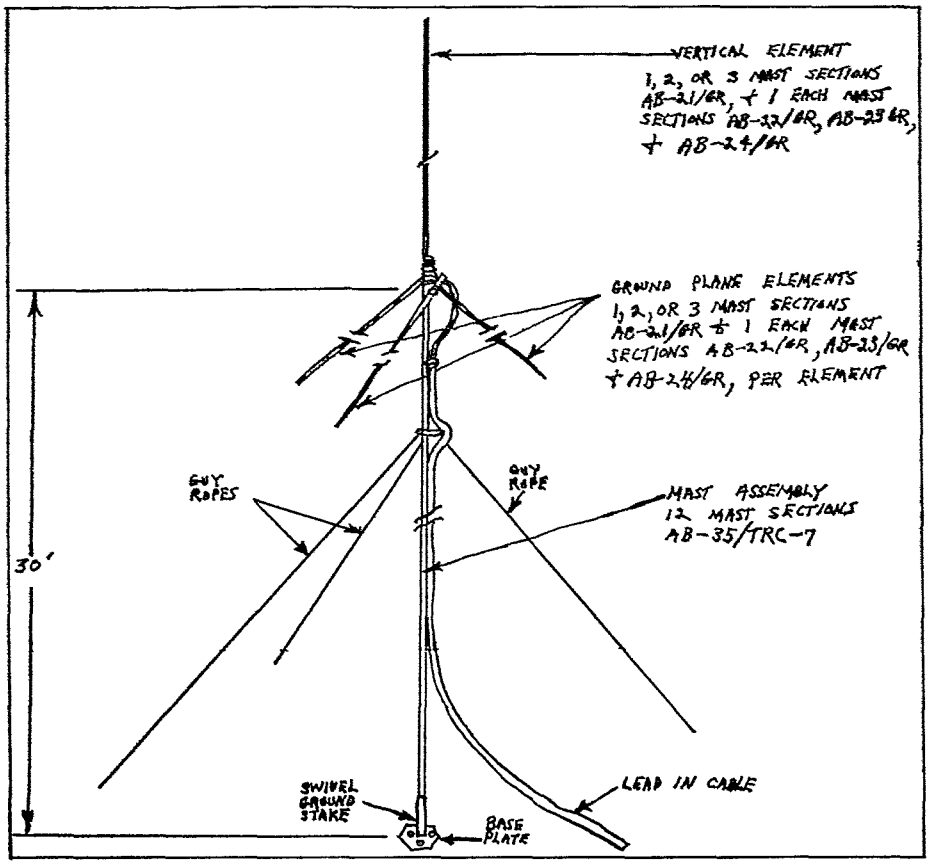


Figure 1. Antenna Equipment RC-292.

radios. The antenna consists of one vertical radiating element and three ground plane elements which make an angle of 142 degrees with the vertical element. The lengths of the elements can be preadjusted for best performance with each particular set. The antenna is elevated on a 30-foot sectional mast which, in turn, is held erect by guy ropes and ground stakes. The equipment is designed for hand or vehicular transportation, and when disassembled, it is packed in a canvas roll 35 inches long and 36 inches in circumference. (See Figure 1.)

THE antenna RC-292 requires no tuning in operation. However, the lengths of the antenna elements must be readjusted for the different frequency ranges of the radio sets with which it is used. This is accomplished by changing the number of mast sections which make up the antenna elements. (See Figure 2.) The swivel ground stake on which the mast is supported facilitates lowering the antenna to make such changes.

Almost everyone knows that an antenna is a wire or other conductor that radiates or receives radio waves. Few realize, however, that the length of a transmitting antenna is critical.

How to calculate this critical length must be understood before it is possible to improvise an antenna. To understand the method of calculation the following terms must be understood.

AC Cycle. An alternating current is one which periodically reverses its direction of flow and is continually changing in magnitude. That is, the current repeatedly builds up from zero to a peak value in one direction, then dies down to zero; it then builds up from zero to a peak value in the opposite direction, and again returns to zero. One complete fluctuation (zero to peak to zero to peak to zero) is called a cycle. Antenna currents are alternating currents made up of a series of alternating current cycles.

Wavelength. Wavelength is the distance traveled by a wave during the time interval of one complete cycle. Military radios usually have an antenna ½ or ¼ wavelength long.

Frequency. Frequency is the number of complete cycles per second existing in any form of wave motion. Frequencies above about 20,000 cycles per second are called radio frequencies.

It is now the universal practice to designate radio waves in terms of frequency, which is expressed in so many cycles, kilocycles or megacycles. Formerly, radio waves were designated in terms of wavelengths, the unit being the meter. Wavelength figures are convenient in discussions of antenna systems because the wavelengths give some indication of the actual physical dimensions of the wires. For example, a half-wave antenna for 50-meter transmission is 25 meters (about 27 yards) long.

THE velocity of radio waves through space is constant at the speed of light. This speed is 186,000 miles per second, or 300,000,000 meters per second. An important relationship between wavelength and frequency exists. The more waves that pass a point per second, the closer together the peaks of those waves must be. Therefore, the higher the frequency, the shorter the wavelength. Frequency describes the number of wave cycles or peaks passing a given point per second. Wavelength describes the distance the wave travels through space in one cycle, or oscillation, of the antenna current. Knowing the speed or distance a radio wave travels in one second, and given the frequency of the wave (cycles per second) it is possible by the following formula to determine the actual

Radio Set	Frequency range (mc)	Vertical antenna elements required	AB-21/GR	AB-22/GR	AB-23/GR	AB-24/GR	Ground plane elements required	AB-21/GR	AB-22/GR	AB-23/GR	AB-24/GR
AN/PRC- 8	20 to 27.9	6	3	1	1	1	18	3	1	1	1
AN/PRC- 9	27 to 38.9	4	1	1	1	1	15	2	1	1	1
AN/PRC-10	38 to 54.9	3	1	1	1	0	12	1	1	1	1

Figure 2.—Chart showing number of vertical and ground plane mast sections required in an RC-292 antenna operating with the AN/PRC-( ) or other series radio sets at frequencies indicated in column 2.

$$\text{Wave length (in meters)} = \frac{\text{velocity}}{\text{frequency in cycles}} = \frac{300{,}000{,}000 \text{ MPS}}{\text{frequency in cycles}}$$

$$\text{Simplified: WL in meters} = \frac{300}{\text{frequency in megacycles}}$$

wave length (critical length of an antenna) of the radio waves.

We usually make linear measurements in feet rather than meters. But by following the same procedure we can determine wave length in feet. As a general rule, the formula is worked out to determine one-half wavelength, since most military radios use an antenna of ½ wave length. The formula is:

$$\tfrac{1}{2} \text{ WL (in feet)} = \frac{492}{\text{frequency in megacycles}}$$

Because the physical length of an antenna is approximately 5 per cent shorter than its electrical length, due to end effect or capacitance, a more practical formula follows:

$$\tfrac{1}{2} \text{ WL (in feet)} = \frac{468}{\text{frequency in mc (megacycles)}}$$

This formula is sufficiently accurate for determining length of wire antennas operating at frequencies up to 30 megacycles. Antenna length as determined by this formula does not include length of lead-in or feed system.

The sole function of any antenna feed system is to transport power from the transmitter to the antenna with a minimum of loss. Most military radio sets have a built-in tuning device which enables an operator to tune his antenna and feed system to resonance providing the length of his antenna is approximately correct, and the feed system used is reasonably efficient. When tuned to resonance, there is a minimum power loss between the transmitter and antenna.

When an improvised wire antenna fails to load (tune to resonance) properly, it is often necessary to raise or lower the antenna a few feet. In the case of dual wire, center-fed antennas, a slight fanning of the lead-in wires at the junction of the antenna proper will probably enable an operator to tune to resonance. More accurate antenna tuning can be accomplished with metering equipment by following the procedures outlined in Section IV, TM 11-314.

About the most efficient and one of the easiest antennas that can be improvised for military radio sets is called the half-wave doublet, sometimes referred to as a half-wave dipole or Hertz antenna.

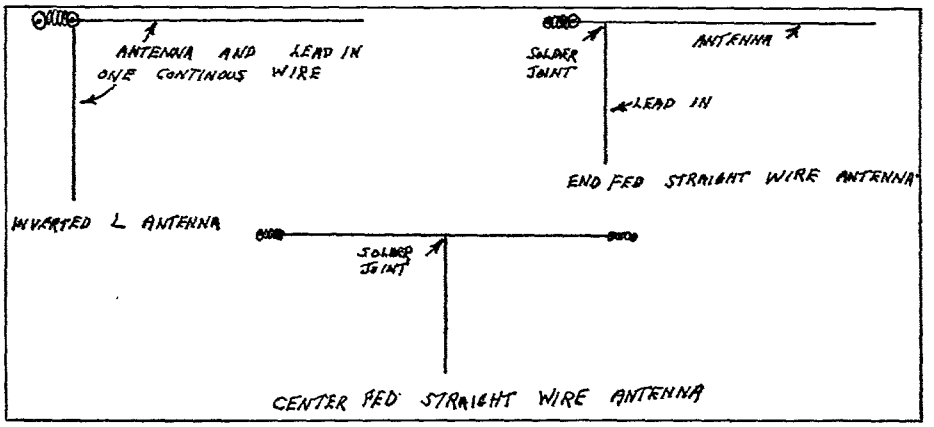


Figure 4.

Figure 3 illustrates the method of constructing a half-wave doublet antenna.

Other straight wire antennas easier to construct, but usually less efficient, are the inverted L and straight-wire antennas having a single conductor feed system, either center fed or end fed. Figure 4 below illustrates details of construction of these antennas.

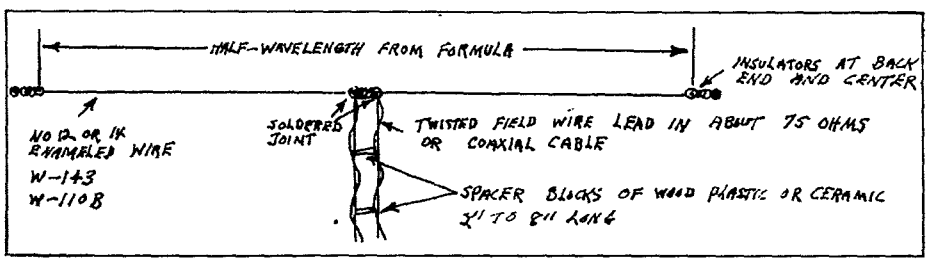


Figure 3.

IN conclusion, it should be understood that any time a non-standard antenna is used, care must be taken to insure that transmission ranges do not exceed operational boundaries of the using unit. This is necessary to avoid blocking some other friendly station off the air, which may be operating on, or near, the same frequency.

YOUR MILITARY SCHOOLING

By LIEUT. COL. NED E. ACKNER

Chief, Education Section, Career Management Division

THE program of military education for Army officers follows two general patterns, one designed on a progressive basis to develop the overall potentialities of an officer, and the other to provide specialist training in particular fields.

Specialist courses are conducted to qualify officers in such fields as communications, guided missiles, motors, administration, supply, and languages. The various courses are listed in the Army School Catalogue, Department of the Army Pamphlet 20-21, which is published annually. Attendance is by application or selection on a quota basis to meet the requirements of the Army in each particular field.

Of more general interest is the career-type of Army education which begins with the basic courses in the branch schools and extends on an increasingly selective basis to the Army War College which stands at the apex of the Army's military educational system for officers.

The new second lieutenant attends the basic course at his branch school where he receives instruction intended to qualify him for company grade officer duties. The basic courses are at present of approximately fifteen weeks' duration. Regular Army officers and selected EAD officers commissioned in the Artillery, after a year of troop duty and before reaching four years of service, will attend the battery officer course of approximately 28 weeks' duration. Upon graduation they will be assigned to a different type artillery unit from the one in which they served their initial tour of troop duty.

After several years of troop duty and before accumulating twelve years of service, every Regular Army officer, and an annual quota of Reserve officers will attend the regular advanced courses of their arm or service. All other Reserve officers on extended active duty, and a percentage of Reserve Component officers not on active duty, will attend the associate advanced courses. At the advanced courses officers receive instruction peculiar to their arm or service intended to fit them for duties above the company or battery level. In addition, they receive generalized instruction to prepare them for staff assignments on higher levels.

Following the advanced courses of the branch schools, career education becomes competitive. The first school where attendance is on a selective basis is the Command and General Staff College, which conducts a Regular Course annually for Regular Army officers and two Associate Courses each year for Reserve Component officers. Each branch of the Army receives an annual quota based on mobilization requirements, in proportion to its authorized strength and prescribed mission. Approximately 50 per cent of all Regular Army officers will, at the appropriate time in their careers, be selected to attend the Command and General Staff College.

Above that college and at the top of the Army's education ladder is the Army War College. Since the authorized enrollment for the 1953-54 course is only 200 officers, it can be readily seen that attendance is on a highly selective basis. Graduation from the Army War College represents completion of the Army's formal education requirement for the assumption of high-level positions in the Army and the Department of Defense, and those which the Army might be called upon to fill with other governmental agencies.

PARALLELING the Army's educational system are the joint colleges: the Armed Forces College, Industrial College of the Armed Forces, and the National War College. These colleges are under the supervision of the Joint Chiefs of Staff and are attended by officers of all services. Due to the limited quotas available to the Army, attendance has been confined to Regular Army officers.

In addition to the colleges previously mentioned, the Department of the Army accepts invitations annually for its officers to attend colleges of the Navy, Marine Corps, and Air Force as well as colleges of foreign nations. Quotas are limited and attendance is by competitive selection. Each of the foreign colleges is considered as being on a comparable level with one of our own colleges, and graduates are given the same consideration in selection for further schooling as graduates from the corresponding United States college. The foreign colleges presently extending invitations are listed below together with the comparable level United States college.

National War College or Army War College Level

British Imperial Defense College
Canadian National Defense College
French Ecole Superieure de Guerre

Armed Forces Staff College Level

United Kingdom Joint Services Staff College

Command and General Staff College Level

Australian Staff College
British Staff College
Canadian Staff College
French Ecole Major d'Etat
Indian Defense Services Staff College
Italian Army War College
Pakistan Staff College

OTHER schooling above the branch level of increasing importance is graduate level schooling in the physical and social sciences under the Army civil schooling program. A subsequent article will cover this program in detail.

In view of the number of inquiries received by the Career Management Division, it might be well to discuss what is meant by competitive selection. All officers of a branch, in the zone of consideration established by the prerequisites for attendance at a college, are considered competitively within each

branch. In order to select, from the large number of officers in the zone of consideration, a limited number to fill the quota of a particular college, it is necessary that all officers in the zone of consideration be arranged in order of merit according to their existing records. Many factors are employed in developing such a list. These include command and staff experience; combat duty; experience on school staff and faculties; previous military education, civilian components and assignments; duty with military missions, as military attaché, and duty with joint staffs or other services; promotions, demotions, and disciplinary actions; efficiency ratings; and age and years of service.

It is recognized that the question uppermost in the minds of those who aspire to attending various schools concerns the methods of actual selection. Detailed explanations would be extremely difficult. The records of all officers in the eligible groups are scrutinized by mature and unbiased officers. The qualifications of each are checked off on work sheets. Great weight is given to command experience and demonstrated leadership. The broad pattern of an officer's experience is considered and the degree to which officers have met demands that would seem to index this future potential is evaluated with care. And of course the officer's overall efficiency index for the past five years of service, as determined from efficiency reports, carries great weight—but this is not the sole deciding factor. The method can be summed up as careful, unbiased selection based upon best available information, weighing carefully the qualifications and interests of the individual officer and the requirements of the Army. All officers can take comfort from the fact that political pressure has no weight whatsoever. The Career Management Division is always interested in receiving information as to the merits of different officers and when recommendations are submitted by senior officers they are of course evaluated with care. However, the final decision is based upon the officer's overall qualifications and his future value to the service.

It is not necessary that an officer submit an application for attendance at one of the service colleges. Officers are considered by their arm or service automatically from the time they become eligible until they pass out of the zone of consideration. Moreover, selection is without regard to geographical location or assignment. However, officers desiring to attend Air, Navy or Foreign college in preference to an Army college, should indicate such a desire on their annual preference cards.

ELIGIBILITY prerequisites for the Army and Joint colleges may be found in SR 350-20-1, SR 350-195-1, and DA Pamphlet 20-21. Prerequisites for the Air, Navy, and Foreign colleges are similar to Army colleges of comparable level. Outstanding officers may be considered for selection for a service college although they do not meet all the prerequisites for that college. Whenever, in the opinion of the Career Management Branches, an officer is outstanding and places high competitively in all other respects, a waiver is considered for the prerequisite in which he is lacking. Thus, every effort is made to select those officers most qualified who possess the greatest potential value to the service.

Due to the limited quotas, a relatively few officers will attend the high level service colleges. However, schooling is only one means of developing potential leaders. As in the past, a number of outstanding leaders will be developed from those who may not attend a service college but who, through on-the-job training and a diversity of career broadening assignments subsequent to school eligibility, indicate by actual performance of duty a potentiality for high level command and staff positions.

This last facet of career development deserves great emphasis. It is an obvious fact that all officers cannot expect to attend our top military schools and it is equally evident that some of those selected will not necessarily prove to be our ablest officers in time of emergency. Human qualifications are not susceptible of such accurate evaluation and as a result the next emergency will find many officers who were not selected for higher schooling, who may make their way into the select group of general officers who guide our Armies in time of war. The relatively recent past is complete proof of this statement. Not all of the large number of officers who had distinguished records and the advantage of high military schooling during World War II met the requirements for wartime general officer rank, while others without such training rose to some of the very highest positions of responsibility. One of these officers who were not selected for higher schooling is General James A. Van Fleet, and his distinguished record of battle leadership and civil administration should be a comfort and guiding influence for many who now feel a sense of frustration for not having been selected to receive more advanced schooling.

Is the MiG-15 Superior to the F-86?*

By CAPTAIN ALLAN F. BONNALIE, USNR

ACCORDING to an article in the April issue of *Look*, our fighter pilots, veterans of the Korean War, have been telling the higher Air Force brass that the Red jets can rule the skies of Korea within a month if they get better pilots. It is the contention of these veterans in thousands of reports, both personal and otherwise, and also in a meeting with the top officers of the Air Force, that the MiG-15 is so superior to the F-86 that the Reds can take over any time they want to. The article in question is signed by Fletcher Kuebel of the *Look* Washington Bureau.

We have no intention of disputing the contention. We think we understand how it is. We will, however, attempt to explain in these pages something of the problem. Some people would have us believe that our airplanes suffer from excessive jewelry and gold plating. It is possible that there is something like that in the picture, at times, but that is not the real reason for their being deficient in performance. It is of course true that Americans like gadgets and comfort. We take them for granted. A few items are bound to be in this category.

That these things are true is not to the discredit of the Air Force. They can do no better, for be it understood that so long as we let the aggressor people call the tune, we must dance to the tune they call. As long as this is the American policy, just so long will we have to provide our fighting forces with equipment that is designed to do many jobs —too many jobs. The many-purpose weapon always will be inferior, as a specific tactical application, to equipment designed for that definite mission.

Even special purpose airplanes will be deficient under certain conditions. An escort fighter escorting bombers over the enemy country many miles from home will suffer in comparison to the defensive interceptor fighters operating from nearby bases. The escort must accept the handicap and interpose between the bombers and the interceptors to the end that the bombing of the target is successful.

At the moment the fighter airplane is the one in question. This simplifies the explanation, but if it were bombers or reconnaissance airplanes the same general criticism would apply. The primary tactical mission of a fighter airplane is to destroy enemy airplanes that threaten our aircraft or our surface installations and activities of military importance.

The secondary mission is to attack surface targets such as airfields, aircraft on the ground, troop concentrations, supply dumps, vehicles and many other targets, including shipping, which must be attacked from low level for reasonable success to be assured.

These primary and secondary missions actually call for specific tactical types, and, accordingly, as many as seven types of airplane, if the design of the fighter is to be dictated by one purpose only. Others might break the requirements down differently and get a different answer, but as we see it there are seven different missions that will require seven different designs in order that a reasonable approach to perfection is possible. The only way to get the most effective type for the purpose, in our opinion, is to design to fit the purpose. That is what the British did with the *Spitfire* in this last war. It was designed to destroy hostile airplanes as they approached or were over Britain. Aided by the then new radar they did an admirable job and defeated Germany's bombing offensive.

THAT is what the Reds have done with the MiG-15. It has one purpose, one type of mission. We have designed the F-86 to be able to do a reasonably good job on a high percentage of the seven types of missions. It is, therefore, a compromise, and not superlatively good at any *one* thing. It is like the combination can opener, screw driver, tack hammer, pocket knife, hair comb, mirror, shoehorn tool that is sometimes advertised. It will do each job in a fashion, but none well.

Don't make any mistake about it. The F-86 is a fine airplane, a credit to the designers and builders and to the whole industry. That it is a small percentage inferior is not surprising; but remember that an also-ran, ten-second hundred yards is only 7½ percent slower than a nine-point-three world's record.

This complaint on the deficiencies of our combat aircraft isn't new. We heard it about the inferiority of our airplanes to the *Zero*, the *Messerschmidt*, the FW-190, and other planes, in this last war, and we also heard it relative to the *Fokker* and other German aircraft in the 1917-1918 fracas. When you don't know your enemy's intention and are not in position to force him to play your game, it is necessary to have multi-purpose weapons. It is impracticable to equip with special-purpose ones when there are so many determining factors and when the enemy can decide what to do, and how and when to do it, and make you like it.

THE seven missions, or purposes, of fighter aircraft, mentioned above, are:

1. *The Interceptor Fighter*—To destroy enemy aircraft that have eluded early warning equipment and the defensive patrols and are approaching position to attack important surface positions, installations, or fleets. This calls for extraordinary climb and speed, high-fire power, short duration (in fact it can be a "one-shot" type) front armor, and electronic gear sufficient to insure interception and fire control only. This type could probably best use rocket propulsion and should climb straight up with supersonic level speed. The Russian Frontier Fighters come closest to this type of anything now in existence, but the Germans in this last war had some rocket-propelled types that were the true prototypes for it. Some day

*Reprinted from *U. S. Air Services*, June, 1953.

LATEST SABREJET, FIFTH IN SERIES OF SWEPT-WING FIGHTERS, ON ITS FIRST FLIGHT
North American's F-86H. The Manufacturer States it is a Completely New Airplane Designed to Carry Out Dual Missions as a Fighter-Bomber and a Day Fighter. The Air Force Announces This Airplane Has a Clam Shell Type Canopy, a Sturdier Landing Gear, and Improved Suspension and Release Mechanisms for Carrying Droppable Wing Tanks in Conjunction with Bombs and Rockets for its Fighter-Bomber Role. The Plane Also Carries Six .50-Caliber Machine Guns. It is in the 650 mph Class, Has a Combat Radius of More Than 600 Miles and a Service Ceiling of More Than 45,000 Feet.

ground-to-air guided missiles may be well enough developed to take on this chore.

2. *Defensive Fighter*—To intercept finally by visual means, but at some distance from the target, enemy aircraft threatening important surface facilities. While termed a defensive fighter, the means to carry out the mission are truly offensive. This type needs good fire power, high-climbing speed, good maneuverability, and some armor forward and back. It needs electronic equipment sufficient for visual interception and gun-sight purposes only. It must be able to continue attacks for a considerable period, and accordingly needs a fair amount of ammunition, high speed and moderate endurance. This is the basic purpose to which the British *Spitfire* of this last war was so admirably suited and for which purpose the MiG is designed.

3. *Defensive Fighter (All Weather)*—To intercept during darkness and obscuring weather enemy aircraft threatening surface facilities. These types are usually called *All Weather*. The purpose is similar to the type under No. 2 above, but the much more complicated electronic installation not only adds greatly to the weight of the whole airplane but in most cases calls for a second man. Greater endurance is also necessary, still further adding weight.

4. *Escort Fighter*—For conditions of good visibility. This calls for long range, the ability to stay with a bomber or attack formation and to engage the enemy fighters that seek to destroy it. As this type will combat types Nos. 1 and 2 close to their own bases it will be at a considerable disadvantage, due to its greater weight and the resulting restrictions on performance.

5. *Escort Fighter (All Weather)*—This type could very well be a large airplane with heavy fire power and very complete electronic gear. During the last war some attempts were made to modify the B-17 to enable some of them to act as escorts. It was not too practicable then, but the A-bomb and improvements in electronic gear and computing sights may have changed the picture.

Numbers 6 and 7 are fighter bombers, visual and all-weather, respectively. These types must be heavily armored, carry large ammunition loads as well as a substantial bomb load. They must, when the bombs have been dropped, be sufficiently fast and maneuverable to fight off enemy fighters.

Obviously the first three types are very important when the enemy is in position to mount a bombing attack. Together with early warning ground systems and a widespread communication network they are essential for defense. The fighters alone are not enough. The last four types are essential to our own offensive. Defense alone can not win a war. Sooner or later offensive action must be taken.

THE trouble with the USAF fighters, and those of the Navy as well, is not enough specialization. Can we afford to build seven types of fighter, train crews for them, and have them on a standby basis in case of need?

Under existing circumstances the answer has been No.

When we take the initiative with sufficient strength to dictate the choice of tactics, then and only then can the types of fighter be specialized. As it takes from five to seven years to put a fighter, from conception of the design, into reasonable production, the problem is acute. The types of fighter we are now using were on the drawing board before the end of the last war.

E. H. Heinemann, chief engineer of the El Segundo Division of Douglass Aircraft Company, had something to say about fighter design before The National Society of Professional Engineers and the Tulsa (Oklahoma) Chamber of Commerce, last year. What he said was reported in the July, 1952, number of U. S. Air Services and it is well worth re-reading, as are any of Mr. Heinemann's works. A few of his words are quite specific and will bear quoting here.

He says, "Now let us consider complexity. A lot has been said about this

subject lately . . . There was a time a few years ago when a fighting machine consisted of an engine, guns or bombs, pilot, wing, tail, fuselage, and a few instruments and the necessary fuel to carry out a mission.

"The modern fighting machine, however, is an entirely different story. It must have communicating equipment, navigational equipment, compensated sights, provisions for guns, rockets and a wide variety of bombs, cockpit pressurization and cooling equipment, for night operations, power boost for the control surfaces, ejectable seats, in many cases heat de-icing and many other refinements.

"The complexity and scope of these developments can best be described by the following examples.

"To cool the Douglass F4D interceptor cockpit and electronic equipment at high speed at low altitude the air conditioning systems must handle 5 tons of air per hour. This however, won't even do the complete job. In addition, a refrigeration system is installed with a capacity equivalent to that required to freeze 176,000 one-inch ice cubes from 70-degree water in one day.

"The heating system to heat the pilot and equipment in this airplane at high altitudes is capable of heating 30 six-room average dwellings on a zero degree Fahrenheit day.

"The aerodynamic forces on this same airplane are so great at high speed that a power control system is required approximately 100 times greater than the normal pilot's efforts. In other words, the control system requires approximately 22 horsepower or about twice as much power as was used to propel the Wright brothers' first airplane.

"In the F4D night fighter [all-weather Ed.] airplane the radar equipment alone weighs over 1,100 pounds and contains approximately 400 vacuum tubes . . ."

HEINEMANN goes on further, in a most interesting discussion, to say that the addition of a hundred-pound item will increase the gross weight of an airplane, not by that amount, but ten times that much if the performance is to be maintained. As the cost of a pound of modern fighter airplane is now about $40, such an item would add $40,000 to the cost of each airplane built.

There is, of course, much of what Heinemann talks of in the Red fighters as well. It is probable, however, that the Reds design closer to margins, use smaller factors in allowing for comfort, and so on. Don't forget that factor of ten on weight. When a design is made for a specific tactical mission, weight is saved. When a design is made for two tactical missions in the same airplane, weight is added, and it takes ten times that much weight to keep up the performance for wing area, power, fuel, and more structure to keep it all together is involved in any addition of weight. Stripping an existing design is not the answer. You can take out the unneeded equipment, but you can't remove the provisions for it, the extra structure, fuel, and power needed to carry it.

THAT our airplanes are a reflection of our national character is indicated by the report that at the conference of fighter pilot veterans from Korea they could agree on only a few things that could be left off the *Sabre*. In other words, all of them wanted some complications in the airplane that added to their convenience, but reduced its performance. They ought to be the ones to say, for they are the ones who actually fight the enemy machine.

This brings up another question. Both in the USAF Matériel Command and the Bureau of Aeronautics of the Navy, officers with operational experience on airplane types are brought in to handle the design projects for future airplanes having the same design objective, or for improvements in the current model. The requirement for recent experience means that their rank is relatively low.

Officers, on the other hand, who head up the organizations that handle power plants, electronics, armament, armor, electrical systems, hydraulic systems, aerodynamics, structures, and so on, are by necessity older, higher-ranking specialists.

Furthermore, it is the first round for the combat pilot in this type of duty; probably his first duty at a higher command center; and the specialist may have had many tours of this type of duty. The specialist, accordingly, knows his way around as well as being of dominant rank. The result is inevitable. Even with the finest purpose and the best intentions in the world, the specialist is bound to dominate the design. Sometimes, if only because the boys on the combat line can't agree on what they want.

Honoring General Bradley and General Collins

General of the Army Omar Bradley and General J. Lawton Collins were honored at a parade and garden party at Fort Lesley J. McNair, Thursday afternoon, August 13th. Secretary of the Army, Robert T. Stevens was their host.

Two marching battalions of the crack Third Infantry turned out in their smartest fashion. Accompanying them Major Ralph M. Powers led the 601st AAA Battalion as it paraded its powerful 90mm guns in an impressive mounted formation.

As Generals Bradley and Collins and their host, Mr. Stevens, arrived at the reviewing stand, the 17-gun salute was fired in their honor.

The ceremony marked the passage of a new milestone in the careers of two of America's most distinguished "fighting generals." General Bradley, after completing two terms as Chairman of the Joint Chiefs of Staff, doffed his uniform to take a position in private industry as Chairman of the Board of Bulova Research and Development Laboratories, Inc. However, as a five-star general he will remain on call as his military services are required. General Collins, retiring Army Chief of Staff, now serves as the United States representative on the Military Committee of the North Atlantic Treaty Organization.

General Bradley's career has been marked by unusual disinction. His sound battle leadership in Europe brought him not only victories but also the high respect of his military colleagues and the confident admiration of his troops. Following the War as Veterans Administrator he breathed a new vigor and discipline into an agency where forthright honesty, discipline, and a heavy brake on political and bureaucratic abuses were needed. As Army Chief of Staff and later as Chairman of the Joint Chiefs he has been an able administrator and a sound policymaker. In all capacities his earnest and sound voice of common sense and vigor has had a reassuring influence on our nation.

General and Mrs. Bradley, Mr. Stevens, General and Mrs. Collins

There has been a close personal association in this past decade between General Bradley and General Collins. It was appropriate that they should take the review together.

It is also fortunate and fitting that among the troops who proudly paraded for their departing chiefs, there was a mounted antiaircraft battalion from the defenses of this area.

When General Bradley became Chief of Staff in 1948, our AAA strength in the States consisted of one group of two battalions at Fort Bliss, Texas. Our progress since then has been remarkable.

Since World War II no one man has contributed more to the build-up of our antiaircraft force than has General Collins as Chief of Staff.

Again and again he emphasized the importance of AAA as a part of our air defenses. He pointed out that during World War II our air forces lost many more planes to enemy AAA fire than they did to enemy planes, and that in Korea approximately 87 per cent of the United Nations planes lost in combat were lost because of enemy ground fire. Only recently, General Collins stated before the Senate Appropriations Committee:

"I cannot talk to you of the Army's progress of the past three years without telling you of our great steps forward to fulfill the important role in the defense of our homeland against air attack which we jointly share with he Air Force.

"In July, 1950, we activated the Army Antiaircraft Command which controls the AAA units of the Army-Air Force defense team. Great strides have been made since in the strengthening of our air defenses and in the development of revolutionary new weapons, though we are still far short of our goals.

"Three years ago the word 'NIKE' was only a word borrowed from Greek mythology. Today I am proud to report to you that the word NIKE means a weapon with the capability of destroying enemy aircraft at altitudes and ranges heretofore unknown. Up until now it has been said that a determined enemy could bomb our cities if he was willing to pay the price. When we have a sufficient number of NIKE guided missile battalions combined with our other new antiaircraft weapons and with Air Force interceptor planes, we hope to be able to say that few, if any, enemy planes will get through at any price."

CITIZENSHIP CEREMONY IN THE 96th AAA GUN BATTALION

By CAPTAIN ROBERT L. HOGAN

THE 96th AAA Gun Battalion introduced a new ceremony on the 19th of August 1953 at Ft. Richardson, Alaska.

In an effort to bring home to the men of his battalion the priceless heritage represented by their citizenship in the United States of America, Lt. Col. Ralph E. Hood initiated the performance of a colorful ceremony combining the military pageantry of a battalion parade with the dignified and moving civil ceremony of citizenship.

Lt. Col. Hood as reviewing officer joined with the Honorable George W. Folta, of Juneau, Alaska in having the 3rd Judicial District Court of the Territory of Alaska convened on the battalion parade field during a battalion ceremonial parade formation. The purpose of this double ceremony being to confer citizenship on Sergeant First Class Hans-Rolf Werner Bauer, one of the original cadremen of the 96th AAA Gun Battalion when it was activated in 1949.

Sergeant Bauer, a former German soldier, arrived in the United States in 1948 to join his mother, from whom he had been separated for many years. Shortly after his arrival in this country, he enlisted in the Regular Army and after a period of normal basic training, joined the 96th AAA Gun Battalion.

During his time with the battalion, Sergeant Bauer worked hard both to make a successful career in the ranks of the Army and to achieve his cherished goal of citizenship in his adopted country. To gain the former, Sergeant Bauer attended the Radar Electronics course at Fort Bliss during 1949-1950 and upon returning to Alaska rapidly rose to the rank of SFC, Radar Mechanic. After accomplishing the requisite number of years of residency in the United States and undergoing exhaustive investigation, Sergeant Bauer achieved all the basic requirements for citizenship when his petition was submitted to the 3rd Judicial District Court at Anchorage, Alaska. All that was left to do was to appear in court and take the oath of allegiance before a Federal Judge.

It was at this time that Col. Hood addressed a request to Judge George W. Folta, noted Alaskan Juror of Juneau, Alaska to come to Fort Richardson and convene this special court on the battalion parade field. Upon acceptance by Judge Folta, Col. Hood arranged the joining of this civil ceremony with the military ceremony of a formal battalion presentation and review.

Col. Hood's purpose for this double ceremony was twofold. Foremost, he felt that the moving and dignified ceremony of citizenship would bring home to the men of his battalion the very essence of patriotism and high sense of duty which is represented by the existence and fact of their present service in the armed forces of their country. Secondly, he felt that Sergeant Bauer's faithful and efficient service to the nation deserved this recognition.

THE double ceremony itself was unique. Major Melvin W. Johnson, battalion S3, put together the military portion of the ceremony. Major Calvin M. Pentecost was designated commander of troops with Col. Hood acting as reviewing officer. Following the usual march on the field by the five batteries and "Sound Off" by the 43rd Army Band, Major Pentecost brought Sergeant Bauer forward to the reviewing stand. The command was then presented to the reviewing party consisting of Col. Hood and Judge Folta.

As the final strains of the National Anthem died away and the troops were given "At Ease," three strokes of the gavel brought the 3rd Judicial District

Lt. Col. Ralph E. Hood, Judge George W. Folta, SFC Bauer, Court Steno Mrs. Louise Strahorn standing before the judges' bench as the 96th AAA Gun Bn. passes in review.

Court of the Territory of Alaska into official session. Judge Folta received the petition of citizenship presented by the District Immigration Officer and then directed Sergeant Bauer to receive the oath. Major Pentecost brought his troops to attention during this highlight of the ceremony while Sergeant Bauer repeated the moving and eloquent Oath of Allegiance to the United States of America. At the conclusion of this, Judge Folta addressed Sergeant Bauer briefly:

"Sergeant Bauer, it is indeed an honor to confer the privilege of citizenship upon you. I think that one who has not been born in this country will perhaps be more keenly appreciative of our system of government and what it means.

* * *

"Now upon your shoulders, in common with those of all citizens of this country, the burden lies to preserve that government against encroachment and aggression. You cannot be a good citizen unless you assume those responsibilities. I congratulate you."

THE court then adjourned as Sergeant Bauer, Judge Folta and Col. Hood moved again to the reviewing stand. At this time the writer, Battery Commander of Sergeant Bauer, read to the massed troops and guests a brief statement on the significance of the ceremony, concluding:

"Therefore, men of the 96th Antiaircraft Artillery Gun Battalion, when you pass in review, you will be paying your military respects not only to Sergeant Bauer, but with him as a symbol, to all freedom loving men, women and children who have come to the United States of America seeking a haven of hope, a land of opportunity, a respite from oppression and tyranny, a land of the free and brave!"

With the reading completed, the battalion passed in review and brought to a stirring finale probably the first ceremony of its kind to be held in the military service.

UNIT ACTIVITIES

HEADQUARTERS ARMY ANTI-AIRCRAFT COMMAND

Lt. Gen. John T. Lewis, Commanding

Completing its long-planned move to bring about closer coordination with its teammate in the air defense system, the Air Defense Command, headquarters of the Army Antiaircraft Command, physically moved from rented office space in the city to Ent Air Force Base, Colorado Springs, Colorado, on 28 August.

As the Command passed its third birthday, it was inevitable that there would be a sharp turnover in officer personnel. General Lewis' key personnel now are: Colonel John T. Snodgrass, Chief of Staff, and Colonel Perry H. Eubank, Deputy Chief of Staff, with the general staff composed of Colonel Robert S. Dingle, Jr., G-1; Colonel Leslie J. Staub, G-2; Colonel Walter F. Ellis, G-3; and Lieut. Col. Ford E. Pratt, G-4.

Staff officers who have recently departed include: Lieut. Col. Robert S. Ballagh, to AFFE; Lieut. Col. Guy L. Campbell, to the Office of G-4 in Washington; Lieut. Col. Edward A. Galt, Engrs. to Command and General Staff College; Lieut. Col. Richard H. Irvine, AGC to the Advanced Course at Fort Benjamin Harrison; Major George A. DeMarcay, Jr., to The Artillery School at Fort Sill.

Major Lon R. Dickson has departed for the Command and General Staff College; 1st Lieut. Earl S. Cummings, SigC for SHAPE; CWO Carl M. Fry for Red River Arsenal. CWO Michael N. Krilla is on orders for AFFE.

As replacements, the headquarters of the Army Antiaircraft Command has been augmented by the assignment of officers including Colonel Edward T. Ashworth, who heads the Plans, Program, and Organization Division of G-3, Lt. Col. Raymond M. Clock, Engineer Officer; Lt. Col. Jack E. Barton, Lt. Col. Gerald A. Lake, Lt. Col. Lavon P. Linn, Lt. Col. Marcus L. Parsons, Major George A. Chapman, Major Joseph S. Rovansek, and 1st Lieut. John R. Glouner, Jr., SigC.

Brig. Gen. Eugene F. Cardwell

31st AAA BRIGADE

The 31st AAA Brigade located at McChord Air Force Base, Tacoma, Washington, is commanded by Brigadier General Eugene F. Cardwell.

The Brigade staff is currently composed of Lieutenant Colonel Charles W. Stewart, on DS from Western Army Antiaircraft Command, as Executive Officer; Major Floyd H. Bjorklund, S3; Major Martin A. Small, Jr., Communications Officer; Captain William E. Hewes, S2; Captain Joseph E. Markee, S4; 1st Lt. Troy D. Hopson, S1; CWO-3 Virgil B. Hearon, Personnel Officer, and CWO-2 Paul Foster, MTO.

Losses to the Brigade during the summer have been Colonel Robert L. Williams, Jr., formerly Executive Officer, transferred to Third Army for duty with the National Guard; Lt. Colonel Walter Killilae, formerly S3 and Executive Officer, transferred to Vanderbilt University, Nashville, Tenn. and Major Craig W. MacDonald, transferred to 513th AAA Battalion.

Currently on orders to join the Brigade from Europe are Colonel Robert A. Claffee, Inspector General, Seventh Army, and Lt. Colonel Charles F. Coffey, Jr., CO 63rd AAA Gun Battalion.

5th AAA GROUP

Colonel Harold G. Haskell relieved Colonel John C. Steele as Group Com-

mander upon the transfer of the latter to the National War College, Washington, D. C. The Group is presently staffed by Lt. Colonel John C. Parker, Executive Officer; Captain Lester B. Leigh, S1; Captain Dean C. Fellows, S2 and S3; Captain Gus E. Williams, Communications Officer; Captain Robert E. DeWeese, Radar Officer, and CWO-2 Claude V. Allen, Personnel Officer.

Major Donn M. McCann commands the 83d AAA Battalion; Major Daniel M. Green, the 501st; Lt. Colonel Gersan L. Kushner, the 518th; Lt. Colonel Arthur E. Holt, the 519th; and 1st Lt. William K. Merrill, the 501st AAA Detachment (Operations) (Static).

Major Charles L. Allen formerly Group S4 has transferred to the 936th AAA Battalion, Camp Stewart, Georgia.

26th AAA GROUP

Fort Lawton, Washington

The 26th AAA Group, Fort Lawton, Washington, was activated in July, 1952 to succeed the 226th AAA Group, an Alabama National Guard unit, which then completed its period of Federal Service. Colonel Henry D. Lind assumed command in August 1952 and was succeeded by Colonel Edward B. Hempstead in July 1953.

Principal staff officers of the Group are Lieutenant Colonel Lemuel B. Redd, Executive, Captain Thomas E. Amlong, S1, Major Willie S. Beckham, S2, Major William R. Bullard, S3, Captain Francis I. Johnston, S4.

Among the Battalions comprising the Group, Lieut. Col. Charles F. Ottinger commands the 20th AAA Gun Battalion, Lieut. Col. Karl W. Dittrich, the 28th AAA Gun Battalion, and Lieut. Col. Henry H. McLauchlin, Jr., the 513th AAA Gun Battalion. Lieutenant Colonel McLauchlin departs in September for the Far East. Also assigned to the Group is the 512th AAA Operations Detachment under the command of Major Edward F. de Leon, the 302d SRMU commanded by CWO Gustav H. Belot, and the 393d SRMU commanded by 2d Lt. Richard I. Murphy.

During the past month all units have completed the construction of permanent type prefabricated buildings. The completion of this program provides more adequate housing for personnel and adds materially to the attractiveness of positions.

All units of the Group have conducted spring firing at the Yakima Firing Center. Plans are now being formulated for the conduct of the yearly Army Training Tests in the early fall.

The Group has effected and has in operation a consolidated personnel, supply and motor pool set up. To conserve manpower and facilitate operations the above named sections of all assigned and attached units have been consolidatd at Group level.

All assignments, transfers, and other personnel matters are handled by this consolidated section under the supervision of the Group Personnel Officer assisted by the personnel officers of the various units. This helps the Group at all times to maintain an equal distribution of personnel in the units, particularly in critical MOS's.

The consolidated supply section under the Group S4 draws and issues all supplies to the units and in addition delivers the supplies to the units. This effects a great saving in transportation. The Group also operates a ration breakdown for all the units.

The consolidated motor section under the Group motor officer performs 2d Echelon maintenance for all Group vehicles. This has increased the quality of vehicular performance and raised the standards of preventive maintenance.

10th AAA BATTALION

Having been redesignated, the 10th AAA Battalion (Lt(75mm)Mbl) is commanded by Lt. Colonel Samuel May. Chaplain (Major) Stuart V. Goude has been transferred from this unit to Headquarters, 5th AAA Group, Camp Hanford, Washington.

35th AAA BRIGADE

Brigadier General Tom V. Stayton, Commanding

Colonel Burton R. Brown has recently been reassigned as Executive Officer of the 35th AAA Brigade, replacing Colonel F. A. Liwski. Corregidor veteran, Colonel Brown had previously commanded the 71st AAA Battalion, and later the 19th AAA Group.

Lieutenant Colonel Arthur J. Gallow is now the Brigade S-3.

Lt. Colonel Arthur H. Marsh, wearer of the Silver Star and Bronze Star "V," arrived from Korea to serve as Chaplain

Sgt. John Woytkowicz, Hq. Btry. 35th AAA Brigade, wearer of Purple Heart and Bronze Star, is awarded a Commendation Ribbon for service in Korea. Presentation by General Stayton, Brigade Commander.

to the 35th AAA Brigade and the 35th AAA Gun Battalion.

A composite battery composed of AAA units stationed at Fort Meade, Maryland, participated in a parade honoring Major General Leslie D. Carter, former CG Second Army. The battery was commanded by 2nd Lt. Fred L. Preyer, Hqs. & Hqs. Battery Commander, 35th AAA Brigade.

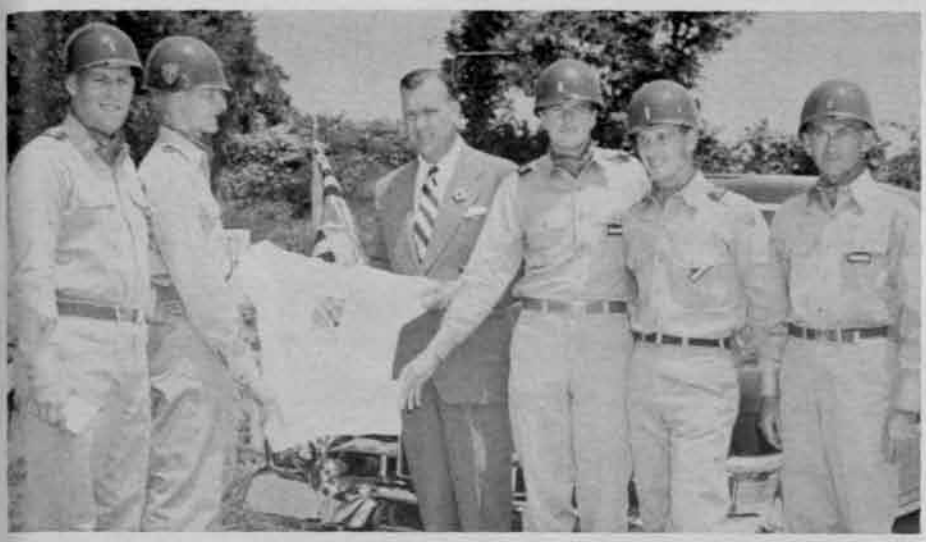
107th AAA BRIGADE

During the period 26 July to 9 August the 107th AAA National Guard Brigade, Richmond, Va., commanded by Colonel John W. Squire, underwent their annual summer training with the 35th AAA Brigade. During this period the Guard members sat in on all the operations at this Brigade and participated in a two-day problem on the air defense of a key city. A highlight of the training period was a day spent at the Aberdeen Proving Grounds during which members of the brigade witnessed the firing of the Skysweeper and the Army's new 280mm cannon.

19th AAA GROUP

By Captain Murray L. Richman, PIO

Colonel Stuart M. Alley, Arty, USA, became the new Washington AAA Defense Commander when he took command of the 19th AAA Group, succeeding Col. Darwin D. Martin who is now



Governor Theodore R. McKeldin of Maryland visits Battery C, 89th AAA Battalion in Pikesville, Maryland, for inspection and luncheon. Here Lieut. Eugene P. Flanagan, BC, presents the Governor with athletic shirt with Battery emblem. *Left to right:* Lieutenants Silverman and Flanagan, Governor McKeldin, Lieutenants Cecil and Fluevog and CWO Gallagher.

Chief of the Artillery Branch, Army Career Management Division. Col. Alley comes to the 19th AAA Group as a recent graduate of the Army War College.

Lt. Col. Mark C. B. Klunk came to the 19th AAA Group recently as the new Executive Officer, replacing Lt. Col. Kenneth R. Philbrick who went to FECOM. Lt. Col. Klunk came from TUSAG, JAMAT, Turkey where he was Assistant Chief of the AAA Section.

Maj. Godfrey Gaborsky is the new Commanding Officer of the 36th AAA Battalion, Fort George G. Meade, Md., replacing Maj. Laurent D. Pavy who is on convalescent leave. Maj. Gaborsky came from FECOM where he was Adjutant for the 29th AAA Group.

Lt. Col. Vincent A. Mac Donald recently took command of the 71st AAA Battalion, Fort Belvoir, Va., replacing Lt. Col. Burton R. Brown who was promoted to Colonel and went to the 35th AAA Brigade, Fort George G. Meade, Md., as Executive Officer. Lt. Col. Mac Donald came to the 71st AAA Battalion after completing the AA Refresher Training Course, Antiaircraft and Guided Missile Branch, The Artillery School, Fort Bliss, Texas.

Lt. Col. Otho A. Moomaw is the new Commanding Officer of the 601st AAA Battalion, Andrews Air Force Base, Md., replacing Maj. Ralph M. Powers who went, TDY, to Fort Leavenworth, Kan. Lt. Col. Moomaw came from Korea where he was the Commanding Officer of the 3rd AAA AW Battalion, in the 3rd Division.

Lt. Col. Tom B. Strothers is the Commanding Officer of the 14th AAA Battalion, Fort Meyer, Va.

Lt. Col. Charles F. England is the Commanding Officer of the 70th AAA Battalion, Fort George G. Meade, Md.

Maj. James E. Gentle is the Commanding Officer of the 75th AAA Battalion, Andrews Air Force Base, Md.

Capt. Charles B. Mathews is the Commanding Officer of the 503rd Operations Detachment, Washington, D. C.

56th AAA BRIGADE (STATIC)

Brigadier General Harry F. Meyers Commanding

Arrangements have been made through the Commanding General, First Army, to have the Camp Kilmer Band one day each month at Forts Totten, Wadsworth and Tilden for ceremonies. The parade at Fort Totten on 31 July was in honor of Colonel Alonzo B. Holmes, Arty., Deputy Post Commander, retiring after more than 37 years service. The parade on 24 August was in honor of Major Ross F. Snider, Post Signal Officer, retiring with 30 years service. Two composite battalions in each parade were composed of troops from Hq Btry 56th AAA Brigade, 34th AAA Battalion (Gun) (90mm) (Static), 41st AAA Battalion (Gun) (90mm) (Static), 526th AAA Battalion (Gun) (120mm) (Static) and the 1362d ASU.

Colonel Adam S. Buynoski, Commanding Officer of the 2d AAA Group (Static) and Fort Niagara, departed on 4 August to AFFE. Colonel Maurice T. Shaver, formerly with Army G2 in Washington, replaced him in both positions.

The enlisted men of Hq Btry 56th AAA Brigade (Static) battled their way to first place at the windup of the first half of the Fort Totten intrapost softball league with a total of 7 games won and 1 lost. Team manager is WOJG Francis C. Klahn (Personnel Officer) and the coach is M/Sgt. George M. Wilson (Personnel Sgt. Major).

Congressman Louis B. Heller visited Fort Totten on 22 August. He was escorted by Brig. Gen. Harry F. Meyers and the tour included the sites of Btry B 34th AAA Bn (Gun) (90mm) (Static), Btry C 526th AAA Bn (Gun) (120mm) (Static) and a briefing of the Brigade mission. Congressman Heller was impressed by the youthfulness of the battery officers and the responsibilities shouldered by them.

Officers and key NCO's of this unit have completed an 8-hour course on guided missiles conducted by Capt. Adam C. Hart, Brigade Guided Missiles Officer. The object of the course was not to make experts, but to acquaint personnel with terms, general facts and problems involved with these new units.

Capt. Daniel G. Kane, Brigade S4, is now on leave prior to reporting for PCS to AFFE. Maj. Albert V. Cito has assumed the S4 duties with his previous duty of Radar becoming an additional duty.

The 71st AAA Battalion (Gun) held a special parade on July 30th honoring Sfc Thomas R. Jordan *(right)*, on his well-earned retirement, and Sfc Homer H. Caldwell on the award of the Bronze Star Medal (OLC). Lieut. Col. Burton R. Brown, commanding, presents the awards.

15th AAA GROUP

Col. Seneca W. Foote, Group Commander, in a brief ceremony at post headquarters recently accepted for the Fort Banks library a twenty-volume set of the new edition of *American People's Encyclopedia* from Mr. Geo. Ingraham, Sears area manager in Boston.

Lt. Col. Francis J. Roddy, CO 605th AAA Gun Battalion, also accepted the complete encyclopedia for the Fort Dawes library.

The climax of the busy activity in the 514th AAA Gun Battalion during the last week in August was the command inspection of the batteries in their positions about Boston by Colonel Foote, Group Commander, and his staff. Major James E. Clark, Battalion CO, accompanied Colonel Foote.

Major Joseph A. Tringali, CO of the 16th AAA Gun Battalion, has his batteries taking turn on the Wellfleet firing range for service target practices. Major Leo J. Hock is in charge of the firing. Alongside the 16th the 2nd AAA Group had batteries of the 44th AAA Battalion on the range. Major Kenneth J. Knapp was the Group representative. Major Eddie R. Lowell was in charge of the 44th Battalion firing.

A parade was held at Fort Banks on 19 September, at which trophies were awarded for Service Practice Firings at Camp Wellfleet.

The 605th AAA Gun Battalion received the battalion trophy with a first round average of 87.3.

Battery A, 514th and Battery B, 605th tied for the battery trophy with a high score of 90.6.

Lt. Col. Arthur G. May, Group Executive, commanded the troops with Captains Edward S. Young and Milton Wolfman on his staff.

Colonel Foote took the review with Lt. Col. Roddy, Majors Tringali, Clark and Harry A. Smith on his staff. The Fort Devens Band furnished the music.

Lieut. Gen. Lewis, Army Antiaircraft Commander, inspects 505th AAA Gun Battalion, accompanied by Generals Meyers and Tarrant, Col. Sanford and Lieut. Col. Chotas not shown.

52d AAA BRIGADE

By Major W. P. Schmader, PIO

Colonel Richard S. Spangler has assumed command of the 52d AAA Brigade, replacing Brigadier General Legare K. Tarrant, who has been reassigned to an important post in Washington. The 52d AAA Brigade has the responsibility for AAA defense of the largest target in the United States, that of metropolitan New York City, with headquarters located at Fort Wadsworth, on Staten Island.

Colonel Henry M. Spengler, recently assigned to the 52d Brigade, is now commanding the 80th AAA Group, with headquarters at Fort Wadsworth.

Lt. Col. Robert W. Molloy, formerly Commanding Officer of the 526th AAA Battalion (120mm), is now Executive Officer of the 52d Brigade and Lt. Col. Willis T. Lind has assumed command of the battalion, with headquarters at Englewood, New Jersey.

Lt. Col. Charles A. O'Reilly, a recent arrival from the Antiaircraft and Guided Missiles Branch of the Artillery School, has assumed command of the 34th AAA Battalion, replacing Lt. Col. Harry B. Reubel, who has been assigned as PMS & T at Hampton Institute, Virginia.

Major Gerard J. Burke has assumed the duties of Executive Officer of the 80th AAA Group, and the 511th Operations Detachment which he commanded has been taken over by Capt. M. J. Healy.

Lt. Col. Philip R. Cibotti, Jr. has departed for the Command and General Staff College and Major Harry Landsman, formerly S3 of the Brigade and 80th AAA Group, has succeeded him in command of the 12th AAA Gun Battalion.

Colonel Frank H. Shepardson has departed on a permanent change of station to attend the next course at the Air War College. Colonel Arthur L. Sanford, Jr. has departed to attend the Regular Course at The Army War College.

Lt. Col. William A. DePalo has taken over the duties of Brigade S3. His former S4 slot is at present being filled by Capt. Joseph Pilkington, until expected arrival of Major LeMonier.

Major Francis M. Connelly is now S3, 80th AAA Group, replacing Major Landsman. Major William Matthews is Commo Officer of the 80th AAA Group and his duties as 52d Brigade Commo Officer have been assumed by Capt. Angelo M. Monti. Capt. James B. Bacon has assumed the duties of Brigade Radar Officer, replacing 1st Lt. William Sheaves, who is now Radar Officer for 80th AAA Group.

Major Richard L. McEwan has arrived from Fort Bliss and has been assigned duties of Guided Missiles Officer for the Brigade.

Major Frank A. Nicholson has been temporarily assigned the duty of Officer-in-charge of the range detachment at Montauk Firing Point; all units are again firing service practices at the Long Island Montauk Firing Point at Camp Hero. Capt. Edward Malek will take over this position on or about 1 September.

Lt. Col. Maynard G. Moyer's 69th AAA Battalion has done it again. Twice in a row, his battalion has stood at the top of the ten battalions and has been awarded the Best Battalion of the Month Trophy.

The 52d AAA Brigade Baseball Team proved what we all knew it could do,

by winning the Small Post Championship Trophy for the First Army Area at Camp Kilmer. Next season the "Giant" 52d Baseball Team will break into the Big League (Big Post). Watch!!

Lt. Col. Ben W. Perry of the 737th Battalion enjoyed reading your reprint in the July-August issue of the article on a battery of his battalion, entitled, "The Long Watch." We have heard that Department of Army is thinking of making a movie based on this for "The Big Picture" series, showing AA on combat duty, USA, 24 hours a day, 7 days a week, 365 days a year. Looks like we have a steady job.

Lt. Col. Robert W. Harnett received the good news. FECOM orders with leave first.

For three consecutive Mondays in August, Colonel Spangler briefed the West Point Class of '56 on the role of AAA in the Air Defense network of the ZI. After his briefing, the cadets were conducted on a guided tour of two of our many sites. The tour covered the sites located at Fort Lee, New Jersey, near the George Washington Bridge and another at Englewood, New Jersey. The cadets were shown the operation of a Battalion AAOR, the AN/TPS-1D, 120mm and 90mm AAA Guns, 75mm Skysweeper, FCS M33, motor vehicles and generators, quad M55 machine gun, and on-site living quarters and mess. The orientation ended with the 52d Brigade units performing an unannounced "Battle Station" alert drill for the yearlings.

The 80th AAA Group and the 12th Battalion conducted an AFF field exercise at the Brookhaven maneuver area during the latter part of July for four days. The exercise was a success but will be improved greatly during the next two, planned for September and October. The biggest enemy was the ticks.

The 749th AA Battalion broke into the movies in August. Their Battery C, commanded by Capt William F. Britton, late of Korea and the Field Artillery, was featured on a TV program featuring First Army's 35th Anniversary program. This battery was also one of the batteries that acted as host to the cadets on their Cooks Tour—did a bang-up job, too. Both sites actually glistened, but it took a lot of time and hard work, which paid off and was appreciated by all, especially the cadets of '56.

53d AAA BRIGADE AAA SITE CONSTRUCTION

By Capt. B. B. Small, 24th AAA Group

In an effort to make the antiaircraft site appearance a credit to the Army and harmonious with the occupied community, the time and effort of many thousand antiaircraftman-hours have been applied to site construction during the past winter, spring, and summer. Using the expert advice of civilian and military engineers, agronomists, and other erudite technical agencies, antiaircraftmen all over the United States have been creating their own military posts within their defended cities. Erecting buildings, making roads, laying walks, installing electric service, correcting soil deficiencies in order to landscape barren areas—all these have been the *additional* duties of ZI antiaircraftmen.

As in other cities, the Philadelphia AAA units occupied many sites before even rudimentary facilities were provided, and it has been a lot of long, hard work to do this construction mission as well as carry on a primary defense duty taking twenty-four hours per day, seven days per week all its own. In spite of the difficulties and shortages the front and back yards, school grounds, parks, golf courses, and even city dumps, which were, are now becoming proper blends of green grass and olive drab buildings, comfortable to the troops and satisfying the community in their neatness.

In Philadelphia, the program is rapidly being completed. Civilian contractors were hired by the District Engineer to build mess halls and latrines, and to install utilities, but otherwise the sites have been created and developed by AAA troop labor. Metal prefabricated buildings were issued for barracks and administrative uses. These metal, insulated structures are twenty by forty-eight feet in dimensions and when used for barracks, sleep sixteen men.

53rd AAA BRIGADE

Brigadier General Louis T. Heath, former Commander of 25th Division Artillery in Korea, assumed command of the 53d AAA Brigade in September. He replaced Colonel Kenneth I. Curtis who became Executive Officer.

New Commander of the 18th AAA Group in Pittsburgh is Colonel Ray-

Left—Battery B, 738th AAA Battalion during construction. *Right*—After completion.

mond W. Rumph. New battalion commanders in the 18th AAA Group are Lt. Colonel Robert S. Reilly, 74th AAA Gun Battalion, and Lt. Colonel John H. Benner, 509th AAA Gun Battalion.

The 24th AAA Group in the Philadelphia-Camden area is commanded by Col. Joseph C. Conell. New battalion commanders are Lieut. Colonel Peyton R. Lucas, 19th AAA Gun Battalion, and Lieut. Colonel William F. Horton, 738th AAA Gun Battalion.

NEW HOMES AT CAMP STEWART

A 258-unit Public Housing Administration project for personnel assigned to the Third Army AAA Training Center will be opened in the near future.

In addition to the 258 PHA units on post, there is Oakdale, an older 100-unit PHA project adjacent to the post. These quarters are available to enlisted men whose combined annual family income is less than $3,800. Apartments are available in Oakdale for as little as $33 per month, and in nearby Hinesville, a few private homes and apartments are available.

The on-post PHA project consists of two-bedroom houses at $63 per month, and three-bedroom houses at $69 per month. It is estimated that an additional $15 per month will cover utilities. Complete kitchen, electric refrigerator, stove and water heater, central heating equipment, water and sewerage are included in the rent.

Lieutenant Colonel John W. Thames has been named Executive Officer of the 13th Antiaircraft Artillery Group, replacing Lieutenant Colonel R. T. Shugart, who is now commanding officer of the 38th Antiaircraft Artillery Battalion.

Major Carl D. Arnold, who was Commanding Officer of the 38th, is now assigned to the 13th AAA Group.

Lieutenant Colonel Curtis M. Banks has been named Commanding Officer of Special Troops, replacing Major John W. Stetzer, who left Camp Stewart for an assignment in the Far East.

Lieutenant Colonel Henry J. Willis is Camp Stewart's new Chief of Administration and Personnel. He replaces Major Bernard D. Reams, who was transferred to the Adjutant General's Office at Third Army Headquarters in Atlanta.

Lieutenant Colonel Frank E. Terry, former Chief of Logistics and Supply, is now Commanding Officer of the 550th Antiaircraft Artillery Battalion, replacing Lieutenant Colonel Norman E. Cole, who has left to attend the Command and General Staff College at Fort Leavenworth.

The new supply and logistics chief is Major Harry L. Dickey. Also in the supply sections, Major Richard M. McConnell, former assistant Chief of Logistics and Supply, left Camp Stewart for the Far East.

Maj. Caryl L. Brown has been named Secretary to the General Staff. He replaces Major James A. Ray, who is now Executive Officer of the 554th Antiaircraft Artillery Battalion.

Lieutenant Colonel Adrian L. Bregnard is Acting Chief of Staff, replacing Colonel William A. Cauthen, who has departed for the Far East.

Major John C. Zook, Adjutant General here for over two years, has been transferred to Camp Rucker, Ala., and has been replaced by Lieutenant Colonel Godfrey B. Nemec.

Major Albert A. Baray, former Officer in Charge of the Officers' Mess, has returned from transition school at Fort Sill, Okla., and is assigned as 38th Battalion Executive Officer.

Major Clifford A. Brown, former Adjutant General, has departed for the European Command. Major Jack H. Post, who was with the 550th Battalion. has gone to Fort Sill and will proceed overseas after finishing the transition school there.

44th AAA BRIGADE
(Provisional)

Colonel Charles G. Dunn, Commanding

The cease-fire here in Korea has caused no change of pace in this command. The groups and battalions still maintain the same status of alert as before, but they have been able to enjoy unbroken sleep at night.

The Armistice terms required that we move two of our batteries. The provisional 90mm battery which had been located on the MLR since last fall was withdrawn and deactivated. This battery furnished direct fire support to the marines, and served as a site for training AAA personnel in the ground fire role.

Battery A, 933rd AAA AW Battalion (Mbl), which was located 125 miles north of the MLR on Cho-do Island, just off the west coast of North Korea, was evacuated within seventy-two (72) hours following the cease fire. Commanded most recently by Captain Harry D. Latimer, Able Battery spent sixteen (16) months on Cho-do Island providing AAA defense for an Air Force Early Warning and GCI Station. During this period they were subjected to repeated night raids by enemy aircraft (with up to fourteen raids in a single night), and enemy shore-based artillery harassed them by day. They performed their mission in an outstanding manner and at no time was the enemy able to inflict any major damage from the air.

While strong attention during this post-hostilities period is being placed upon the troop information and education program and special service activities, the focus of attention necessarily remains upon combat readiness. Colonel Charles G. Dunn, Commanding Officer, 44th AAA Brigade (Prov), has scheduled command inspections of two battalions each month. In addition, Lieutenant Colonel Gerhard E. Brown has completed a combat readiness check of the entire brigade. Since the completion of this inspection trip Lieutenant Colonel Brown has been assigned as Brigade Executive Officer, relieving Lieutenant Colonel C. E. Dunlap, Jr., who has assumed command of the 50th AAA Battalion (AW)(SP).

On 1 September the battalions resumed their long motor marches to the Inchon Firing Ranges to conduct Record Service Practices. The AAA units in the northwestern and central sectors all conduct their firing at Inchon, while those units in the southern sector fire near Pusan and Kunsan.

During the last firing phase, which ended in July, the 78th AAA Gun Battalion (90mm), commanded by Lieut. Col. Earl R. Gooding, was high with an average score of 96.5, and the 30th AAA AW Battalion (Smbl), commanded by Maj. William E. Barkman, turned in an average score of 78.1. All battalions are out to shoot these scores to bits and to down these two leading battalions.

Newly assigned officers arriving in the past month have included Lieut. Col. Gerhard E. Brown; Lieut. Col. Clinton Feeney, Commanding 30th AAA AW Battalion; Lieut. Col. Raymond C. Ball, Commanding 68th AAA Gun Battalion

(90mm); Lieut. Col. Daniel J. Van Gundy, Commanding 739th AAA Gun Battalion; Lieut. Col. Thos. N. Chavis, Commanding 398th AAA AW Battalion; Major Clarence E. Burnett, Brigade S4; Major Joseph T. Koshoffer, Executive Officer, 78th AAA Gun Battalion; Major Wesley C. Sager, Commanding 933rd AAA AW Battalion; Major Edgar S. Waugh, S3, 68th AAA Gun Battalion; Major Francis M. Vaughn, Executive Officer, 865th AAA Battalion (AW) (SP); Major Robert W. Clark, Executive Officer, 50th AAA Battalion (AW) (SP).

Departing for the Continental United States were Major William J. Harvey; Major Gale A. Watson; Major Malcolm W. Flickinger; Lieut. Col. Robert G. Meguiar; Major James T. Baker and Major George W. Erdman.

Far East transfers included Lieut. Col. John F. Marshall; Lieut. Col. John A. Hodgson; Major Donald G. Seward and Major James M. Bushnell.

21st AAA AW BN (SP)

Lt. Colonel Ralph E. Deems

I took command of the 21st AAA AW Bn (SP) on 29 May 1953 and wish to keep up Colonel Williams' custom of keeping you posted on what is happening in the Organization.

My Executive Officer is Major Freeman M. Gause, formerly the Battalion Liaison Officer, who has for the past nine months been responsible for the very good firing we have been able to accomplish at the Inchon Firing Range. Major Gause was promoted in April to his present grade. The Battalion S3 is Captain Francis G. Quigley, formerly Commander of A Battery. The Battalion S4 is Captain Richard G. Hazen, who replaces 1st Lt. Donald H. Bartlett, who is returning to the ZI on rotation this month. Captain Hazen arrived in Korea during the month of June. Lt. William G. Carter recently took over as Battalion S1. He replaced Captain Eugene E. Powers who recently rotated to the ZI.

Battery Commanders have all changed within the Battalion during the last two months. A Battery Commander is Captain Samuel A. Basile, who arrived from the States in June and replaced Captain Quigley. B Battery is commanded by 1st Lt. Robert C. Mayne, who relieved Lt. Julius P. Johnson, Jr., now the Battalion Liaison Officer. 1st Lt. John E. Preston is Commanding Officer of C Battery and 1st Lt. John R. Mathews commands D Battery. Both of these officers have been with the Battalion for some time.

This Battalion was engaged in some fairly heavy enemy action during the last month of combat and I hope to be able to forward you some more detailed information on this in the near future.

78th AAA BN

Lieutenant Colonel Earl R. Gooding

It gives me pleasure to forward herewith eleven subscriptions to the ANTI-AIRCRAFT JOURNAL. These new subscriptions along with others already in effect put us on your Honor Roll.

The battalion continues in the air defense in Korea. Although the ceasefire has been concluded, the 78th AAA is conducting an intensive training program in addition to its regular mission.

Major Joseph T. Koshoffer has recently arrived and assumed duties as Battalion Executive Officer. Captain Francis P. Manniello has been assigned as S-3 after commanding Battery A for six months. Battery commanders are as follows:

Hqs.—1st Lt. Richard L. Reid.
A —Capt. George R. Schroeder.
B —Capt. Tom M. Kelley.
C —Capt. Dale C. Squires.
D —1st Lt. Johnnie T. Smith.

Other assignments of key personnel include Captain Lawrence A. Cole as Maintenance Officer, Captain Harvey L. Wilcox as S-4, Captain Richard T. Yunck as Communications Officer and Radar Officer, 1st Lt. Buford T. Bolton as S-1, and 2nd Lt. Gene C. Hazel as S-2.

The following awards have recently been received in the 78th:

Bronze Star—Major William T. Harvey, Captain Milton E. Holt, and Captain Leonard B. Main.

Commendation Ribbon with Metal Pendant—Captain William E. Collins, Captain Ernest H. Trussell, 1st Lt. Kenneth A. Chatto, 1st Lt. Mack Patterson, 1st Lt. Jerrold D. Hydovitz, 1st Lt. James F. Perley, Jr., WOJG William M. Hill, Sfc. Faber L. Hood, and Sfc. Joseph E. Kirby.

145th AAA AW BATTALION

Major Palmer L. LaPlant, Commanding
By Lieutenant Philip J. Gildart, PIO

July 27, 1953, the cessation of hostilities in Korea marked the completion of 19 months combat for the 145th AAA AW Bn. Nicknamed "Running Water" battalion in an intercepted radio message from a panicky Chinese commander who ordered that the "running water" of .50 cal. bullets be "shut off" at all costs, the battalion had expended some eight and one-half million rounds of .50 caliber ammunition in direct and indirect fire support of American and ROKA Infantry.

Operating for the most part in the mountainous East Central sector of the 155-mile Korean Front, the battalion in June and July participated in the severe action to check the final Communist drive towards the Hwachon Reservoir. During these dark days that saw the Chinese penetrate units of the II ROK Corps and endanger the X Corps flank, Battery "B," 145th AAA AW Bn, Capt. Gilbert K. Andersen, CO, alone fired one and a half million rounds in one ten-day period of continual fire missions. Baker was occupying positions in support of the 7th and 20th Infantry Divisions ROKA in the vicinity of the infamous Christmas and M-1 Hills.

The positions themselves were rather unique and comparable to few others in Korea. The non-English speaking ROKs had dubbed them SP-1, SP-2, and SP-3. They had been constructed of reinforced material to specifically accommodate proposed self-propelled howitzers of a much larger caliber than the quad-fifties that occupied them. Because of their size, excellent overhead protection, and tremendous field of fire, two sections were housed in each position providing fire power enough for an infantryman's dream.

Following indirect and direct fire procedure that was being highly exploited and improved by this battalion and other LAA units in Korea, Baker soon earned the respect and praise of the ROKA units. Letters of commendation and awards were received by Battery "B" from both the 7th and 20th ROKA commanders. Needless to say the quads also earned a negative type of respect from the enemy in the form of counter mortar and artillery fire. Nevertheless, the excel-

lently constructed positions withstood the test, and the balance of the ledger read —enemy casualties evaluated in the thousands—Battery "B," several men wounded in action plus various awards and commendations presently pending, and a Purple Heart with Cluster for the oft-visiting battery commander, Capt. Gilbert K. Andersen.

While Battery "B" was giving its all-out fire support to the ROKA, the other three firing batteries were equally active, supporting the infantry units of the 45th "Thunderbird" Division. Located in positions running from Heartbreak Ridge to Sandbag Castle, prior to that in the vicinity of the Punch Bowl laterally to Hill 812, Luke the Gook's Castle, and initially in the Chorwon area of Old Baldy and T-Bone fame, the 145th AAA attained recognition as an important member of the 45th Division Artillery.

Outstanding in support of the Division and holding the distinction of being on line continually for the last straight 300 days of the Korean War, Battery "C," 145th AAA AW Bn, Capt. Wallace H. Currey, CO, and Captain Charles J. McDonough, former CO, worked hand-in-glove with the 171st FA Bn. in coordinated fire support, both indirect and direct, of the 180th "Warrior" Infantry regiment. It was "Charging Charlie" that was responsible for the Battalion motto, "Running Water." The intercepted radio message referred to the 300,000 withering rounds that Battery "C" fired in one day's continual fire missions on the 14 June 1952 in the struggle for historic T-Bone Hill. Battery C's contribution in terms of ammunition expenditure fell just short of the three million mark.

Battery "A," 145th AAA AW Bn, Capt. Harold S. Whitlock, CO of Tuscumbia, Alabama, was equally outstanding in its major role of supporting and reinforcing the 179th Infantry Regiment in conjunction with the 158th FA Bn. Firing nearly one and a half million rounds, Able also held the distinction of being committed on line for the last 270 days of the Korean conflict.

Although assigned the less colorful mission of antiaircraft protection of X Corps Headquarters and adjacent installations the majority of its time in Korea, Battery "D," 145th AAA AW Bn, Capt. Vincent E. Cahill, CO, nevertheless fired over one-half million rounds in the month of March during the action in vicinity of the Punch Bowl. During this period Dog Battery was also responsible for several new innovations in FDC procedure which proved very successful and were adopted and subsequently further improved by the battalion as a whole.

Lt. Gen. Lyman L. Lemnitzer visits the 552d AAA Gun Bn. Shown here talking to Lt. Col. Zebulon L. Strickland, Battalion CO.

At the present time the "half-inch howitzers" of the Thunderbird Division's "Running Water" Battalion are ominously quiet, but the 145th AAA AW Bn stands ready.

552nd AAA GUN BATTALION

The 552nd AAA Gun Battalion is currently engaged in training to maintain its readiness for duty as a part of NATO forces in Europe. The Battalion is temporarily in the British Zone of Germany for a service practice and Army Training Test. On the shores of the Baltic Sea the powerful 90mm M2 guns are firing seaward at towed aerial sleeve-type targets. In addition the 552nd gunners have tested their weapons and sharpened their skill against stationary and moving ground targets.

The 552nd has long since been dubbed the "Nickle, Nickle, Deuce" or simply "The Deuce." It has the distinction of being the oldest 90mm unit in Europe. At one time it was attached to the "Big Red One," the famous "Fighting First" Division, as the only unit of its type in Europe. Its gunners soon demonstrated the versatility, mobility and effectiveness of the dual purpose 90mm gun.

Now part of the 34th AAA Brigade, commanded by Brig. Gen. R. W. Critchlow, the "Deuce" is further attached to the 12th AAA Group, commanded by Colonel E. E. Lockhart. These units are all a part of Seventh Army Artillery commanded by Brig. Gen. R. R. Hendrix.

The 552nd is also widely known for its activities designed to better relations with NATO allies and with the West Germans. To this end, personnel, equipment, training facilities, services and ideas are exchanged with neighboring allied units. Through the local German press, acknowledgement is made of a new status, that of prospective ally, and of our desire to do our part to relegate the past to history.

At the Todendorf firing range, US and UK Battalions fire side by side. There is never the slightest difficulty. Often both units fire on a single course. When visits of "brass" occur, everyone turns out to provide a proper demonstration. RAF men fired for a distinguished US General. The 552nd, in turn, instantly arranged to shoot for the Commandant General, RAF Regiment, Air Vice Marshal Sir Francis J. W. Mellersh, K.B.E., AFC.

In a recent demonstration for distinguished visitors Battery "C," 1st Lieut. Marvin C. Deyo commanding, fired a magnificent course scored at 93. The target was destroyed. Then on the next target every gun in the Battalion fired a salvo. Spectators were awed by the tremendous spectacle of firepower, as volley after volley streaked across the

sky. Then, as the barely visible 300 MPH target arrived at the predicted point, it was obliterated almost instantly. The pattern of accurate and deadly fire continued across the sky.

The Deputy Chief of Staff for Plans and Research, US Army, Lt. Gen. L. L. Lemnitzer was recently a visitor of the "Deuce," where he visited his son, the Executive Officer of Btry "A," 1st Lieut. William L. Lemnitzer.

51st AAA BRIGADE

Col. Harry A. Markle, Jr., Commanding

The Pennsylvania National Guard AAA units headed up by Col. Harry A. Markle, Jr., commanding 51st AAA Brigade, Allentown, Pa., held their summer camp at Fort Miles and Bethany Beach, Delaware, during the last two weeks in August.

Governor John S. Fine, accompanied by Major General Charles C. Curtis, World War II 51st commander, and the Governors staff, visited the camp for Governors Day on August 27th.

Major units attending were: 118th AAA Group, Philadelphia, Colonel Arthur D. Bertolett, Commanding; 416th AAA Gun Battalion, Lt. Colonel Thomas B. Redfern, Commanding; 707th AAA Gun Battalion, Lt. Colonel Francis Fulton, Jr., Commanding; 709th AAA Gun Battalion, Major Edward Simmler, Jr., Commanding; 211th AAA Detachment (RCAT), Lieutenant Frank H. Benner, Commanding.

213th AAA Group, Allentown, Colonel Chester S. Wagner, Commanding; 213th AAA Gun Battalion, Major James W. Heslop, Commanding; 337th AAA Gun Battalion, Lt. Colonel Justin D. Harris, Commanding; 688th AAA Gun Battalion, Major Sterling N. Bowen, Commanding; 690th AAA AW Battalion, Lt. Colonel Daniel Rogers, Commanding; 151st AAA Operations Detachment, Capt. Frank J. Slivka, Commanding.

218th AAA Group, Pittsburgh, Colonel Vincent P. Lupinacci, Commanding; 689th AAA Gun Battalion, Lt. Colonel George H. Rumbaugh, Commanding; 708th AAA Gun Battalion, Lt. Colonel Jess L. Butler, Commanding; 724th AAA Gun Battalion, Lt. Colonel Edward H. Hahn, Commanding; 149th AAA Operations Detachment, Major William H. Headling, Commanding; 212th AAA Detachment (RCAT), Lieutenant Ralph C. Evans, Commanding.

Colonel Lupinacci served as Camp Commander at Bethany Beach and in charge of the South Range.

104th AAA BRIGADE "OPERATION UNDERSTUDY"

By Lieut. Frederick T. Van Veen

Take your youngster to see George Kell if you want him to play a good third base when he's older; or, if you're raising a potential pitcher, have him watch Robin Roberts. If he's tennis minded, a long look at Jack Kramer will help; and, if he happens to be a specialist in the National Guard, have him "shadow" his Army counterpart to learn the techniques of his job.

On the basis of such simple logic, members of Massachusetts' 104th AAA Brigade Hq and Hq Battery enjoyed their Annual Field Training period recently, peering over the shoulders of Army AAA personnel in the greater New York City area. The idea took shape, appropriately enough, through the combined efforts of two Brigade Commanders: Brigadier General Vincent P. Coyne, Commanding the Bay State Unit, and Brigadier General Harry F. Meyers, Commanding the 56th AAA Brigade. The plan was for the Guardsmen to understudy, man for man, Army personnel with the same MOS. Major General William H. Harrison, Massachusetts AG, approved highly, and on June 27 personnel of the 104th were Greyhounding their way from their Boston Armory to Fort Wadsworth, Staten Island, New York.

At Fort Wadsworth, through the cooperation of Colonel Richard S. Spangler, Commanding the 52d AAA Brigade, many Bostonians were integrated with their Army counterparts; others, because of certain T/O dissimilarities, were "assigned" to the 80th AAA Group and the 12th AAA Gun Bn (90mm) at Miller Field. Before the two weeks were over, the Massachusetts Guardsmen had been treated to a "Cook's tour" of AAA installations, had operated equipment which, to them, had only existed in "Space Cadet," and had seen, first hand, the vital role played by Antiaircraft Artillery in the National Defense Mission.

Staff members of the 104th were riveted to their Army namesakes, too. No halfway proposition was this: during the Middleton, N. Y. visit with the Eastern Army Antiaircraft Command, each Staff Officer was seated next to his counterpart at lunch! At Fort Wadsworth, the 104th had a "Standby Tactical Duty Officer" always available, lest, in the event of an alert, the Army Deputy Defense Commander perform his duties unobserved. (It was all for naught; the Bay Staters returned to Boston, slightly disgruntled, without a single alert.)

Not even the far flung sands of Montauk Point were permitted privacy; staff and key enlisted personnel journeyed there to visit the 772d A/C & W Squadron. In addition, the Brigade sent delegations to: the 56th AAA Brigade, Fort Totten, the 26th Air Division, Roslyn, the 511th AA Operations Detachment, Fort Wadsworth, and the 526th AAA Gun Bn (120mm), Fort Totten. In most cases, informal discussions were held on operational functions of Antiaircraft; in every case, warm friendship and sincere co-operation were accorded the Guardsmen.

Army Antiaircraft Brigade Headquarters will hear "I'm Walking Behind You," sung with a Boston accent. The 104th AAA Brigade, Mass. NG, is sold on "Operation Understudy."

[The Delaware Guard AAA Groups also trained this year with like RA units. The 160th (Colonel Ralph S. Baker) trained with the 19th Group in Washington and the 198th (Colonel J. J. Ashton) trained with the 17th Group in Catonsville, Md.—Ed.]

Giving credit where credit is due, the 104th does not claim authorship of this super-efficient method of summer field training. Last year, Delaware's 261st AAA Brigade underwent a comparable period of instruction with the 35th AAA Brigade in Washington, D. C. area; the Massachusetts unit gleaned valuable information from this in their pre-planning. And now, the 104th AAA Brigade is knocking at the door of the National Guard Bureau with evidence in favor of reviewing the training requirements for Special Security Force AAA Brigade and Group Hq and Hq Batteries. As understudies, they previewed the latest equipment, watched the "first-stringers" solve problems they will encounter, and had, for a brief moment, their feet on the big stage.

One thing is sure; somewhere, sometime next summer, some unsuspecting

Battery C, 129th AAA AW Battalion, Virginia N.G. in target practice, North Range, Bethany Beach, Delaware.

VIRGINIA AAA CAMP

Colonel Edwin W. Thompson, CO 224th AAA Group, headed up the Virginia AAA Guard units at Bethany Beach, Delaware, where they were getting in splendid 90mm antiaircraft firing, from 25 July to 8 August.

Lieut. Col. J. J. Buntin, of Alexandria, commanded the 125th AAA Gun Battalion.

Major John G. Roberts, of Danville, commanded the 418th AAA Gun Battalion.

Major George C. Wiatt, of Newport News, commanded the 710th AAA Gun Battalion.

Lieut. Col. G. D. Estes, of Portsmouth, had the 129th AAA AW Battalion in camp at Fort Miles, using the Dewey Beach AW range.

DELAWARE AAA CAMP

The Delaware AAA units took their active training at Fort Miles and Bethany Beach from July 25th to August 8th.

Brigadier General Joseph J. Scannel, Adjutant General, and the Military personnel of his office were also in camp.

Brigadier General John B. Moore, commanding 261st AAA Brigade, was in command of the troops which included:

156th AAA Gun Battalion, Lt. Col. Daniel Lee, CO.

736th AAA AW Battalion, Major L. F. Hayes, CO.

193rd AAA AW Battalion, Lt. Col. Joshua T. West, CO.

945th AAA AW Battalion, Lt. Col. Albert N. Adams, CO.

Governor's Day was celebrated on July 29th, during which the troops fired target practices, conducted a parade, and other military demonstrations in honor of Governor J. Caleb Boggs.

During the ceremony the Governor presented the awards, outstanding of which were:

The Conspicuous Service Cross, posthumous, presented to the widow of Lieutenant William S. Tawes for bravery in action.

The Conspicuous Service Cross, to Lt. Col. William B. Bogue, artillery, for outstanding service as the National Guard instructor.

Medal of Military Merit, to Brig. Gen. John B. Moore for thirty years of service in the National Guard of Delaware.

During this same period the 198th AAA Group, Colonel J. J. Ashton, CO, took its active training with the 19th AAA Group in Washington.

The 160th AAA Group, Col. Ralph S. Baker, CO, trained with the 17th AAA Group in Catonsville, Md.

300th AAA BRIGADE

Brig. Gen. Russell Drowne, Jr., Comdg.

Army Reserve AAA units of Manhattan, Brooklyn and up-state New York held their summer camp at Camp Wellfleet, Cape Cod firing point, from August 23rd to September 6th.

Veterans of Korea joined World War II veterans and younger reservists for the two weeks of intensive field training. More than 700 officers and enlisted men participated under the control of Manhattan's 300th AAA Brigade, commanded by Brigadier General H. Russell Drowne, Jr.

The major units at camp included: 364th AAA Gun Battalion of Brooklyn, commanded by Lieut. Col. Justin J. Yates; 365th AAA Gun Battalion of Brooklyn, Mineola and Poughkeepsie, commanded by Lieut. Col. Cornelius H. Borman, Jr.; 397th AAA AW Battalion of Manhattan, commanded by Lieut. Col. William F. Nelson; 458th AAA Gun Battalion of Manhattan, Buffalo and Rochester, commanded by Major Edward P. Bradley; 470th AAA Gun Battalion of Manhattan, commanded by Lieut. Col. Weir Adamson.

Also attached to Brigade for the training period were: 313th AAA Gun Battalion of Watertown, commanded by Major Richard J. Lindo; 469th AAA AW Battalion of Manhattan's 77th Infantry Division and commanded by Lieut. Col. Edward T. Campbell; 337th Medical Dispensary of Binghamton.

The 313th, 364th and 458th, ran their own messes and were completely self-sufficient in every way.

305th AAA GROUP

The 305th AAA Group, Reserve, from the heart of New York City, took their active training from 23 August to 6 September at Fort Banks, Mass.

Colonel John S. Mayer, CO, and Major Levan R. Fleck are both veterans of the European campaign, World War II.

During camp the 305th understudied the 15th AAA Group in their normal operations in the Boston Air Defense. Colonel Mayer declared the training to be realistic and highly satisfactory. The three Reserve AAA battalions attached to the Group were in active training on the firing range at Wellfleet.

AAA ROTC CAMP

By COLONEL EVANS R. CROWELL

Deputy Camp Commander

THE 1953 ROTC Camp held at Fort Bliss from 20 June to 31 July was most successful, due to the specific steps taken in advance to make it so.

On 20 March a conference, attended by representatives of the G3 and G4 Sections, Hq Fourth Army, principal staff officers at Fort Bliss, and the designated Deputy Camp Commander, was held. Major problems pertaining to the training program and support were discussed and definite plans were made to eliminate some of the mistakes noted in previous camps.

A few days later an order from Headquarters, Antiaircraft Artillery and Guided Missile Center announced the formation of a pre-camp planning staff composed of representatives of all general and appropriate special staff sections. This group, working under the supervision of their respective chiefs, made all preliminary arrangements pertaining to facilities, training and logistical support for the Camp.

On 1 June, the ROTC Summer Training Camp Headquarters was established and key members of the pre-camp planning staff were placed on full-time duty with that headquarters. This provided an assistant Camp adjutant, an executive for the director of training, a Camp S4, a supply officer, a mess officer, a PIO, and the necessary assistants.

Ten days prior to the opening of Camp, the 6th AAA Group Headquarters under Col. Arthur A. Adams, a 90-mm gun battalion, an automatic weapons battalion and a transportation truck company were relieved of their primary training assignments and made responsible for administrative, tactical and logistical support of the Camp. A Field Artillery battery joined this group later and provided assistance in Field Artillery training. Colonel Adams was designated commander of these support troops and executive to the Deputy Camp Commander.

THE early planning, the establishment of the camp headquarters, and provision of support on a full-time basis enabled the ROTC personnel to start functioning in their principal role of instructors upon arrival. Approximately 60 officers and 135 noncommissioned officers arrived on 10 June. The personnel selected for the instruction committees were enrolled in a short refresher course in the Antiaircraft Artillery and Guided Missile Branch, The Artillery School,

Artillery Drill Field

40mm AW Drill.

prior to preparing lesson plans and rehearsing presentations. The administrators and battery officers organized their offices and barracks and prepared to receive the cadets.

Sixty-four educational institutions sent 1,460 students; 237 were from General Military Science Units; 264 had been tentatively designated as Distinguished Military Students; and 86 were to receive commissions at the end of Camp.

The students were assigned alphabetically to eight batteries. Each battery had four platoons, and an administrative and tactical overhead of two officers and eight NCOs. Although considered two battalions for training purposes, they were under Lt. Col. Ronald Watson in a single troop commander's office with one NCO assistant for supervision of discipline and housekeeping. Each battery had a mess-supply officer, a supply sergeant, two latrine orderlies, and eighteen mess personnel from station support.

Physical facilities for the Camp, considering comfort and convenience, were ideal. The cadets, as well as the ROTC overhead, were housed in new, concrete, three-story buildings, with the most modern appointments and air-conditioning throughout. Day-rooms were well equipped, to include a pool table, ping-pong tables, a television set, radio, writing desks, magazines and home-town newspapers. On one side of the group of barracks was an enclosed gun park, sufficiently large for the emplacement of the material of a gun battalion and an automatic weapons battalion. This enabled the entire camp personnel to undergo AAA instruction simultaneously. On the opposite side of the barracks was a large parade ground, with a baseball diamond in each corner and eight volleyball courts on the perimeter. An exchange and library were in the barracks area. After duty hours shuttle buses ran to the swimming pools, theaters, and service clubs.

Service firing and field exercises were held at the desert ranges, well suited for practical instruction, but requiring a one-hour bus ride to and from the barracks.

THE organization of the Camp was made as simple as possible. This was due in part to a shortage of ROTC personnel; and the readiness of all Center activities to support the Camp made an elaborate organization unnecessary. Conferences and discussions were reduced to a minimum.

CAMP STAFF

Executive—Colonel Melton A. Hatch
Adjutant—Major Howard L. Karnes
S4—Major Richard T. Copeland
Dir of Training—Col S. P. Myers, Jr.
Executive—Major Edward O. Crouch
Gun Asst—Lt Col Robert F. Moore
AW Asst—Major Sabatine R. Marconi
FA Asst—Lt Col Norval M. Locke
and Major Vaughn R. Moss
Inf Asst—Major W. V. Church
Sr Instr, Guns—Lt Col James P. Clark.
Chiefs Gun Committees—
Major Joseph P. Guinn
Major Donald E. Kjeldsen
Major P. R. Melchor
Major L. C. Miller
Sr Instr, AWS—Lt Col Jas. W. Bowman.
Chiefs AW Committees—
Lt Col Bernard J. Greenberg
Major James W. Davis
Major George U. Ford
Major J. N. Lichty
Major Hugh M. Wendle

THE Training Section consisted of a Director and specialists in AAA guns, AAA automatic weapons, Field Artillery, and Infantry. Immediately under these specialists were instruction committees of appropriate size and composition.

Each of the four gun and four automatic weapons committees included approximately four officers and eight noncommissioned officers, all from ROTC duty. Each committee took over the training on the organic equipment of one battery of the support units. Personnel from this battery assisted in the instruction, maintenance and operation of the matériel. For artillery instruction, each cadet battery was divided into fourteen sections of approximately twelve men, and each man was rotated through all manning-table positions on the crew-served weapons.

The instruction on individual weapons, drills and ceremonies, and general subjects was conducted by part-time committees composed of battery officers and specialists from other sources, all under the supervision of the Infantry officer in the Training Section.

Of equal importance with artillery training was the training in leadership. This was generally under the supervision of the battery officers, and involved rotating the cadets through key positions within the battery on a semi-weekly basis. Battalion and group commanders and staffs for ceremonies were also included in the rotation plan. While in any key position and at all other times when a cadet might make a favorable or unfavorable impression, an observa-

tion report was prepared by the instructor, officer, or noncommissioned officer observer. This report included ratings on such characteristics as attitude, attention to duty, command presence, cooperation, intelligence, judgment, instructional and command ability. To give the cadets training in evaluation, at the end of the third and fifth weeks of camp, each cadet rated all other cadets in his platoon on officer potential. At the end of Camp, a Cadet Performance Record, incorporating all known or demonstrated characteristics, was prepared by the battery commander and forwarded through Camp headquarters to the cadet's PMS&T.

Despite the long training day, and the attractions of nearby Juarez, a comprehensive athletic program was successfully completed after retreat. In addition, each battery organized a volunteer drill platoon for off-duty exercise. Individual awards were made to the members of the winning teams in softball, volleyball and basketball, and the champions in ping-pong and horseshoes, as well as to the members of the best drill team. The outstanding cadet in camp, and the best in each battalion, battery and platoon were also rewarded.

THE over-all results of the Camp were very gratifying. The conduct of the cadets was exemplary and they maintained a high morale throughout. They appreciated the superior accommodations and food service, and the intensive practical training received. Three conditions, all beyond the control of the Camp Commander, were subject to criticism; there were insufficient instructors furnished from the ROTC units sending students; the key personnel of the support gun battalion was not prepared to maintain a high standard of instruction; and the delays incident to the unsatisfactory condition of the limited standard guns of this battalion handicapped training.

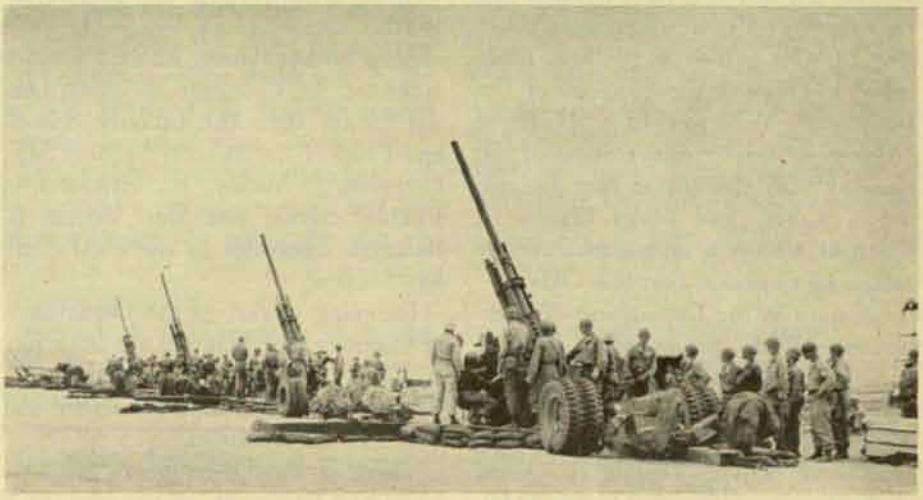
The author, having served as deputy camp commander at both the 1952 and 1953 Summer Camps at Fort Bliss, has some firm convictions on the conduct of this important contribution to the Defense effort. The success or failure of a Camp is governed by three factors—one controlled by the Commander of the station where the camp is held, and the other two by higher headquarters.

First, it is necessary for the Station Commander, as Major General S. R. Mickelsen did so well at Fort Bliss this year, to impress upon all members of his command the necessity for year-round planning and thorough preparation for Camp; also wholehearted cooperation with the ROTC personnel sent in to assist in the operation of the Camp. The ROTC Camp is not a self-supporting, transient organization, and must be supported by an expansion of existing facilities. The 1953 Camp at Fort Bliss was an excellent illustration of the effects of a Station Commander's guidance in this respect.

Second, the practical instruction given to the ROTC cadets during the summer months is just as much a responsibility of the PMS&Ts and instructors as are the classroom sessions during the academic school year. Only 27 per cent of the officers who attended the 1952 Camp returned for the 1953 Camp. This did not provide the necessary continuity, nor a sufficient number of instructors.

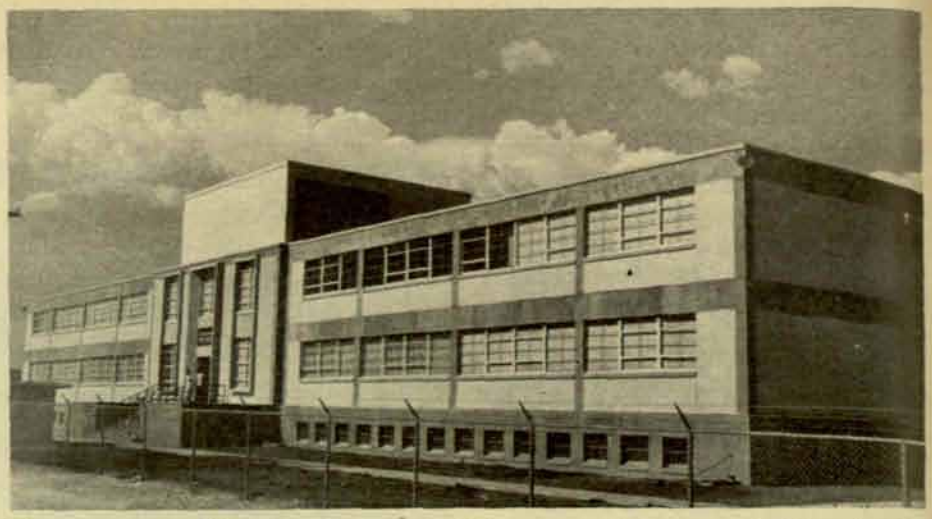
Third, the antiaircraft artillery support units furnished for the 1953 Camp had only recently finished individual basic training. The gun battalion arrived at Fort Bliss ten days prior to the opening date of Camp. The provision of well-trained support units, with modern equipment, requires long-range planning by higher headquarters.

If the Army ROTC Program is to maintain its position as a major source of officers, the Department of The Army must devote more thought and effort to placing the Summer Camp on a higher level, a level commensurate with the high quality of men being selected for this training.



Cadets Fire Heavy AAA Guns.

Fort Bliss News



The new air-conditioned guided missile laboratory and classroom building for the School has been in use since Open House was held on July 4th.

AA & GM Branch, TAS

Assignment of new directors in two departments and numerous other personnel changes marked the closing weeks of summer in the Antiaircraft and Guided Missiles Branch of The Artillery School.

Colonel Jabus W. Rawls, Jr., was assigned as new director of the Guided Missiles Department, succeeding Colonel Francis M. McGoldrick who was transferred to the Army War College, Carlisle Barracks, Penna.

New director in the Department of Electronics is Colonel Arthur Kramer. He succeeds Colonel Peter W. Shunk, now transferred to Washington, D. C.

The assistant director of the Guided Missiles Department, Lt. Col. Roy A. Tate, was promoted to Colonel on August 25.

The department has a new instructor in the tactics section—Lt. Col. Mark W. Niemann.

Three other officers, in addition to Colonel McGoldrick, have left the GM Department on new assignments. They are: Lt. Col. Albert F. Rollins, transferred to Office of the Secretary of Defense in the Pentagon; Lt. Col. Harold D. Higgins, transferred to Command and General Staff College at Fort Leavenworth, Kansas; and Major Francis C. Kajencki, who is to attend the Artillery Advanced Course at Fort Sill, Okla.

Changes in the Department of Electronics include: Assignment of Lt. Col. James G. Healy as senior instructor in Fire Control Electronics; promotion of Maj. William F. Roton to Lt. Colonel; assignment of Maj. Donald R. Queen to the Associate Advanced Course, Maj. Donald R. Eiler as group leader, TPS-ID Section, Maj. James W. Stigers as group leader, Nike Section, and Maj. Steren Korecke as instructor.

Maj. James T. Sheehan has been transferred to the Far East Command and Maj. Harold C. DeArment to the Artillery Advanced Course. Maj. Donald L. Ness and Maj. Albert J. De Beasi have been separated from the service.

The Tactics and Combined Arms Department of the AA & GM Branch has lost four field grade officers by transfer. Colonel Jesse F. Thomas has been assigned to Office, Special Weapons Developments, Director, Office Chief of Army Field Forces, at Fort Bliss; Lt. Col. Edward R. Wainhouse is now attending Psychological Warfare School, Georgetown University, at Washington; Lt. Col. Wayne G. Springer has been assigned to the Student Detachment, Army War College, Carlisle Barracks; and Lt. Col. Elmer P. Curtis to the Student Detachment, Command and General Staff College, at Fort Leavenworth.

New officers coming into the Department are: Lt. Col. John B. Clark, Liaison Officer from the Infantry School, and Chief of the Infantry Section; Maj. Cornelius J. Molloy, Jr., instructor in Infantry tactics; and Maj. Vernon R. Rottstedt, instructor in the Field Artillery Section.

Incoming officers in the Department of Gunnery and Matériel are Maj. Ray A. Clardy, instructor in the Light AAA Section, and Maj. Ralph J. Leonard and Maj. Harold W. Keller.

Three of the Department's officers—Lt. Col. James M. Edmunds, Maj. Thomas E. Campbell and Maj. Ramon D. Fobes—have received orders for duty in the Far East Command. In addition, Maj. Frank P. Breitenbach has been assigned to Camp Stewart, Ga., Maj. Harry R. Jackson will attend the Advanced Officer Artillery Course at Fort Sill, and Maj. Harold R. Kressin is to be a student in the Command and General Staff College at Fort Leavenworth.

The Department of the Coordinator of Instruction has a trio of new officers. They are Maj. John L. Butterfield, radar officer with the combat developments section, Maj. Hugh Mease, Jr., guided missiles officer with the combat developments section, and Maj. William C. Williams, Jr., assistant plans officer for the C of I. Lt. Col. William W. Watson, formerly the Assistant Coordinator of Instruction, is now attending the Command and General Staff College at Fort Leavenworth.

In the office of the Coordinator of Administration, Lt. Col. Louis Miccio has been assigned as Assistant Coordinator. Maj. Harry L. Darden, formerly executive officer for the Coordinator, has been reassigned to the European Command.

Lt. Col. W. Craig Boyce, Jr., executive of the Department of Nonresident Instruction, and Maj. George H. Garnhart, chief of the extension course section, have been assigned to duty in the Far East. Lt. Col. Edison E. Yates, chief of the training literature section, will attend Command and General Staff College this winter.

Antiaircraft Artillery Replacement Training Center

Four new commanding officers have been named for RTC units. They are: Lt. Col. Stanley L. Harding, for the 1st Training Group; Lt. Col. William H. Hancammon for the 9th Training Battalion; Lt. Col. Charles E. Hogan for the 2nd Training Battalion; and Maj. Smith L. Elder for the 7th Training Battalion. Lt. Col. Eben R. Wyles has been assigned as S2 for the RTC and Lt. Col. Albert O. Chittenden as executive officer of the 1st Training Group.

Leaving the RTC are Lt. Col. Lee J. Rutz, who is new commanding officer

for the 33rd AAA Battalion, and Maj. R. L. Cordes, new executive for the 33rd. Maj. James R. Benner is now assigned to the 1st Guided Missile Brigade. Maj. Paul E. Hagemeier, formerly of the inspector section, has also left the Replacement Training Center.

1st Composite Group

The 1st Composite Group has three newly-assigned officers. They are: Maj. Melvin C. Robinson, Group S3; Maj. Thomas M. Branigan, executive officer of the 41st Signal Battalion; and Lt. Col. William A. Higgins, now commanding officer of the 41st.

Lt. Col. Gay E. Miller has been transferred to Headquarters, 4052nd ASU, and Maj. Richard A. Greenlee to Armed Forces, Far East.

6th AAA Group

Lt. Col. Stanley V. Lesneski, formerly executive of the 6th AAA Group, has departed for the Command and General Staff College, Fort Leavenworth. New executive is Lt. Col. Gordon G. Walters.

Awards For Korean Service

First and Second Oak Leaf Clusters to Air Medal—1st Lt. Thomas J. Sexton; Air Medal—1st Lt. Robert R. Judson.

Commendation Ribbon with Metal Pendant—Capt. Walter L. Baker, Jr.; Lt. Harvey J. Scott, Jr.; M/Sgt. Archie B. Johnson; Sgt. Aliston E. McAtee, and Corporal J. C. Whaley.

Purple Heart—SFC Vernon E. Hayter.

Troops Train On Skysweeper

A selected group of soldiers in the Antiaircraft Artillery Replacement Training Center at Fort Bliss is now learning the operation and functioning of the Army's newest Antiaircraft weapon, the "Skysweeper." When their training is completed, the men will be assigned as replacements in "Skysweeper" units.

Heretofore, training on the "Skysweeper" has been confined to troops in tactical units armed with the weapon.

The 75-millimeter "Skysweeper" is the Army's largest caliber automatic antiaircraft artillery weapon and its first weapon with radar, computer and gun on one carriage. The three-in-one unit is designed to spot and track with radar, and aim and fire the gun automatically at any enemy aircraft flying near-sonic speeds at low and medium altitudes. It can also be used against moving ground targets such as tanks.

Capable of finding and tracking aircraft as far away as 15 miles and of firing on craft at a distance of four miles, the "Skysweeper" can operate day or night—even when aircraft are invisible in a blanketing fog. It fires a 12½-pound shell at the rate of 45 rounds a minute.

A unit of the Automatic Weapons Battalion in the AAA RTC has been converted to instruct troops on the "Skysweeper." A special gun park of the new automatic cannon has been provided in which the troops study and practice.

Guided Missiles Course

The Guided Missiles Course at Fort Bliss, Texas has openings for company or battery grade officers in the terms starting 4 January and 17 May. The 32-week course is in the career pattern of Artillery officers and may be taken without interference with normal branch training. Following completion, officers will be assigned either to a GM unit or to R&D work. Volunteers should apply thru channels to the AG without delay.

Civil Defense Refresher Course

Fort Bliss was the scene of a three-hour refresher course, held July 7, for members of the Civil Defense special weapons unit of El Paso, Texas.

The eighty members attending, all graduates of a special course given Civil Defense leaders last fall at the post, received the latest information on atomic defensive measures.

Major L. E. V. Stenstrom of the 1st G.M. Brigade spoke on measures and means necessary for survival of the civilian populace in an atomic attack.

Instruction in radiological instrumentation and decontamination was presented to the group by Lt. R. H. Sharp, Fort Bliss Civil Defense Chemical Officer.

Col. W. A. Weddell, Deputy Post Commander and Fort Bliss liaison officer for Civil Defense, greeted the students at the opening of the session, and Mayor Fred Hervey, of El Paso, spoke to the group, stressing the importance of Civil Defense.

Honored At Review

Colonel Oren Swain, commander of the Second Guided Missile Group, was honored at a parade and review, July 18, on the eve of his departure from Fort Bliss for a new assignment with the Army War College at Carlisle Barracks, Penna.

Lt. Col. Charles P. Finegan, Assistant Adjutant General at Fort Bliss since September, 1949, was honored at a retirement parade on Noel Field at the post, on August 29.

Lt. Col. Jose E. Olivares, President of the Officer Candidate Board, was honored July 25, by a retirement review on Noel Field at Fort Bliss.

ROTC Cadets End Six Weeks Training

(PIO)—Closing exercises for the 1953 Reserve Officers Training Corps summer camp at Fort Bliss were held on Noel Field July the 30th. The commissioning of 85 senior ROTC cadets as second lieutenants in the Army Reserve, presentation of awards and a cadet parade highlighted the program.

Cadets who were commissioned completed the required ROTC work in college and the mandatory six weeks of summer camp training.

The outstanding cadet of the summer camp and the outstanding cadet of each cadet battalion were presented with engraved desk sets. An inscribed plaque was awarded the college or university with the largest number of outstanding cadets among the camp personnel.

A total of 116 other awards were made to winning athletes, members of the winning drill squad and the outstanding cadets in platoons and batteries. They received engraved cigarette lighters.

Maj. Gen. S. R. Mickelsen, commanding general of Fort Bliss, presented the awards, assisted by Col. E. R. Crowell, deputy camp commander.

A parade by the cadets closed the program.

National Guard Summer Camp

More than 4,500 National Guardsmen from Texas, Louisiana, and New Mexico completed two weeks of summer training at Fort Bliss on August 30.

The training was conducted under the 111th Antiaircraft Artillery Brigade of New Mexico, commanded by Brig. Gen. C. G. Sage, New Mexico Adjutant General.

Guardsmen included personnel of the 200th AAA Group, Colonel C. M.

Woodbury commanding, and the 515th AAA Group under Colonel F. G. Rowell of the New Mexico National Guard; the 204th AAA Group of the Louisiana National Guard under Colonel F. C. Gravenberg; and the 136th and 649th AAA Battalions of the Texas National Guard.

The New Mexico units and one Texas unit—the 136th AAA Battalion from El Paso, Texas, adjacent to the post—trained on their own equipment and matériel. Fort Bliss furnished guns, transportation and similar equipment for the other Texas units and the Louisiana Guardsmen.

The 716th AAA Gun Battalion, NMNG, under Lieut. Col. Raymond E. Howell and the 726th AAA Gun Battalion, NMNG, under Lieut. Col. Marvin I. Tillery, took the high honors. All batteries fired their AAA target practices under the strict conditions for Army Field Forces Test, and passed it.

The two weeks' training consisted almost entirely of range work. Firing problems were continuous throughout most of the encampment period, with the exception of the first weekend, when the Guardsmen staged a review and Governor's Day exercises on the post proper. Governor Edwin L. Mechem of New Mexico reviewed the troops which were commanded by General Sage.

The Governor, officers of the three National Guards, and visiting New Mexico newspapermen were entertained at luncheon by Maj. Gen. S. R. Mickelsen, Commanding General of Fort Bliss, following the Governor's Day review.

Reserve Units Train

Army Reservists from New Mexico, Louisiana, Oklahoma and Texas conducted summer training at Fort Bliss this year.

The encampment for the 4052nd Army Reserve Area Service Unit of New Mexico and the 4151st Army Reserve Area Service Unit, Houston (Texas) USAR School with attached units from Dallas, New Orleans and Albuquerque, was held in July.

Training at Fort Bliss for two weeks in August were the 537th and 440th AAA AW Battalions from Texas, the 35th AAA Operations Detachment from Texas, and the 391st AAA AW Battalion from Oklahoma.

News and Comment

ANNUAL ANTIAIRCRAFT PARTY

The officers and ladies of the Antiaircraft Artillery will hold their annual dinner and dance this year at the Fort Lesley J. McNair Officers' Club at 7:00 p.m., Saturday, November the 21st.

This carries on the Coast Artillery tradition. Those who can arrange to be in Washington on that date should notify the Editor.

GUARD UNITS IN AAA DEFENSE

A small group of leading AAA commanders in the National Guard met on September the 9th in Washington in connection with the Army plan to integrate National Guard AAA units into the Army Antiaircraft Command in a master plan for the defense of the country's large industrial and population centers against sneak aerial attacks.

Brigadier General Charles G. Sage, 111th AAA Brigade, Santa Fe, New Mexico, served as Chairman. Other representatives included Brigadier General William H. Hamilton, 102nd AAA Brigade, N.Y.N.G.; Brigadier General James W. Cook, 112th AAA Brigade, Calif. N.G.; and Brigadier General George J. Hearn, 108th AAA Brigade, Ga. N.G.

It is contemplated that the National Guard will furnish a big portion of the antiaircraft defenses of the United States. None are yet "on site," but it is anticipated that the program will be implemented when Regular Army gun battalions are converted to guided missile units.

The objective is to have National Guard units trained, equipped, and oriented in their mission, with their equipment located "on site," so that in an emergency, individual members of the unit could report directly to battle stations. It is contemplated that a small party of caretakers on permanent duty would be maintained at each site to guard the equipment and maintain it in readiness.

Before the battalions are assigned "on site" positions they will be required to pass tests and fulfill criteria as established by Chief of Army Field Forces.

Some of the battalions already meet the strength criteria; others do not. Many units are particularly in need of personnel with previous military experience and specialists with training or experience in radar, electronics, motors and fire control. Age requirements have been raised so that veterans with previous AAA experience or specialists may be enlisted up to 45 years of age, or reenlisted up to 55. Every possible effort is being made to obtain qualified personnel and to bring these units to the point where they can fulfill their mission.

LEGION OF MERIT AWARD

Lieut. Col. Minot B. Dodson, Artillery, serving with Hq, FEC, was recently awarded the Legion of Merit for meritorious service in 1952 and 1953 as assistant G3, X Corps, in Korea.

EXECUTIVE COUNCIL ELECTIONS

Major General William F. Marquat, Chief of Civil Affairs and Military Government, was recently elected as a member of the Association Executive Council to fill the vacancy created by the resignation of Lieut. Col. George W. Best, Jr. Colonel Best resigned incident to his assignment overseas.

The Nominating Committee appointed by the Association President has submitted the list of officers nominated to serve on the Executive Council for the 1954-1955 term. This list is printed on the Ballot on page 48. Members are urged to note this ballot and to mail in their vote.

Major General Marquat served as chairman of the Nominating Committee. Other members were Colonel Norman E. Hartman, Lieut. Col. F. X. Bradley, and the Editor.

Recent Assignments

COLONELS:

Bayer, Erwin P. to USA Forces, FEC
Browning, Harold W. to USA Forces, FEC
Donohue, James M. to USA Forces, FEC
Ferris, John W. to Stu Det, Army Language Sch, Monterey, California
Grinder, Richard H. to 6016th ASU, Yuma Test Sta, Yuma, Arizona
Harrelson, Elmer H. to 5001st ASU, Hq Fifth Army, Chicago, Illinois
Henry, Charles W. to USA Forces, FEC
Joseph, Henry R. to USA Forces, FEC
Lewis, David C. to OCINFO, 8529th AAU, Washington, D C
Mitchell, George F. to USA Forces, FEC
Porter, Gwinn U. to USA Forces, EUCOM
Steele, Preston to USA Forces, FEC
Walker, William A. to TAGO, Washington, D C
Winn, James, Jr. to USA Forces, FEC

LIEUTENANT COLONELS:

Bennett, Verde W. to USA Caribbean, Fort Amador, CZ
Clark, Cuyler L., Jr. to Hq Fourth Army, Ft Sam Houston, Texas
Cline, James D. to 3310th ASU Tenn A Res Instr Gp, Memphis, Tenn
Courtney, Ralph H. to Stu Det Hq Second Army, Marine Corps School, Quantico, Virginia
Curtin, George P. to OACofS G3 8534th AAU, Washington, D C
Difusco, Manrico P. to OACFF, 8575th AAU, Fort Monroe, Virginia
Dows, Samuel R. to 6513th ASU, Calif Mil Dist Hq, San Francisco
Egan, John B. to OACofS G3, 8534th AAU, Washington, D C
Evans, Jack C., Jr. to USA Forces, FEC
Gaines, Larry to Hq Third Army, Ft McPherson, Georgia
Hand, Robert E. to OCAFF 8575th AAU, Ft Monroe, Virginia
Harnett, Robert W. to USA Forces, FEC
Ingalls, Robert C. to TAGO, Washington, D. C.
Irvin, Richard, Jr. to USA Alaska, Ft. Richardson
Knowles, Wendell P. to OACofS G3, 8534th AAU, Washington, D C
Lewis, Donald L. to USAF, Saltzburg, Austria
Lewis, James N. to 80th AAA Group, Ft Totten, N Y
Lindquist, Bert L. to Hq, Second Army, Ft Meade, Maryland
Lucas, Peyton R. to 19th AAA Gun Bn, Mt Ephriam, New Jersey
Mathewson, David A., Jr. to 2332nd ASU, Pa NG Instr Gp, Harrisburg, Pa
Nash, Bertram I. to Hq 6th Army, San Francisco
Schreiber, William L. to USA Europe, Bremerhaven
Shumate, Ervin H. to Hq EAAC, 8577th AAU, Middletown, New York
Surdyk, Eugene E. to OACofS G3 8534th AAU, Washington, D C
Treneman, Robert A. to OCAFF 8575th AAU, Fort Monroe, Virginia
Wainhouse, Edward H. to 3420th ASU, Psy War Cen, Ft Bragg, N C
Whitehouse, Hayden B. to OACofS G3 8531st AAU, Washington, D. C.

MAJORS:

Adderley, Joseph C., Jr. to USA Forces, FEC
Angel, Fred O. to 5104th ASU, Iowa NG Instr Gp. Des Moines
Atkinson, Aaron G. to 57th FA Group, Ft Lewis, Washington
Butler, Robert J. to 5103rd ASU Ind ROTC Instr Gp, Purdue Univ, Lafayette, Indiana
Dippolito, Joseph H. to 1127th ASU Vt NG Instr Gp, Ethen Allen AFB, Winooski, Vermont
Elcano, Michael P. to 5150th ASU Kans NG Advisor Gp, Ft Scott, Kansas
Feindel, Howard W. to Hq WAAC, 7577th AAU, Ft Baker, California
Heimer, Gerard to USA Forces, FEC
Henson, Ira C., Jr. to USA Forces, FEC
Hopkins, Henry S. to 6515th ASU, Utah NG Instr Gp, Logan, Utah
Hudson, Everett B. to 37th Inf Div, Camp Polk, La
Idabel, Alfred L. to San Leandro, California
James, Granville W. to 3440th ASU, The Inf Cen, Ft Benning, Georgia
Johnston, Archie B. to 504th AAA Gun Bn, Dearborn, Michigan
Knighton, Harry A. to 5113th ASU, Wyoming NG Instr Gp, Laramie, Wyoming
Lemonier, Donald J. to 52nd AAA Brigade, Fort Wadsworth, New York
McDaniel, Cecil A. to USA Forces, FEC
McFadden, John J. to Hq ASA, 8600th AAU, Washington, D C
Mahoney, Howard E. to 2114th ASU, Sta Com, Cp Pickett, Virginia
Mitchell, Robert C. to USA Forces, Alaska, Fort Richardson
Moore, Harry H. to 5108th ASU Mo Army Instr Gp, St. Louis, Missouri
Owens, James C. to USA Forces, FEC
Podworny, Edward C. to Hq Second Army, Fort Meade, Maryland
Russell, Ezekial R. to Stu Det ASA TC 8622nd AAU, Fort Devens, Massachusetts
Scarborough, Leland D. to 3360th NG Instr Gp, Andalusia, Alabama
Shawhan, Joseph M. to USA Forces, FEC
Snyder, Frank J. to USA Forces, FEC
Stewart, John C. to Stu Det ASA TC 8622nd AAU, Fort Devens, Massachusetts
Sturzl, Budd F. to 31st Inf Div, Camp Atterbury, Indiana
Tillman, John G. to 1st Armd Div, Fort Hood, Texas
Tollerson, Charles L. to 5106th ASU Mich NG Instr Gp, Detroit, Michigan
Towne, Verl E. to 44th Inf Div, Fort Lewis, Washington
Urtes, John N. to USA EUROPE, Bremerhaven
Whitehead, Fred R. to USA Forces, FEC
Woolf, Harold E. to 31st Ind Div, Camp Atterbury, Indiana
Wynne, Henry E. to Army Security Center, 8589th AAU, Fort Meade, Maryland

BOOK REVIEWS

THE CHALLENGE TO AMERICAN FOREIGN POLICY. By John J. McCloy, Former United States High Commissioner for Germany. Harvard University Press. 81 pages. $2.00.

Mr. McCloy's Godkin Lectures at Harvard provided the basis for this short, incisive, controversial book.

During the war Mr. McCloy, serving with Mr. Stimson in the War Department, noted the influence and power achieved by our military men in political and economic fields, as well as the military. He notes pointedly the deference and respect paid by the President, Congress, and the public to the military, and thence goes on to his conclusion that we now need above all a better developed State Department with abler and better informed membership.

He comments upon the school systems in the services and the splendid results. While he would have military leaders given better political training, too, his plea is primarily for developing in our State Department a career group well steeped in international politics, and in economics and military matters.

Along this line he sheds a clear slant on some of his experience. "American representatives in the field must be vigorous, self-reliant, well informed, active. . . . They must not be confined to reading stacks of cables signed by the Secretary of State who could not possibly have written or seen one hundredth of them."

He comments that informal discussions with farmer or labor groups, with editors, university leaders, or other like groups were far more useful than attendance at diplomatic receptions.

You can read it in one evening, but the enterprising Army officer will do well to study it over and over.

OUR NEIGHBOR WORLDS. By V. A. Firsoff, M.A. Philosophical Library. 336 pages. $6.00.

Astronomer Firsoff is convinced that interplanetary travel may become practicable within a few decades, and that thought spurs him on to breathe a spark of life and imagination into his study of astronomy.

"The book is not a fanciful account of what the exploring Earthlings will find on other planets, nor is it a strait-laced scientific treatise. I have striven in it to marry our present astronomical information to the rapidly expanding science of space-flight and give a few glimpses of its future prospects on a scientific basis. Space-flight is treated only as an adjunct to astronomy. . . ."

The author applies the picturesque touch to make the work readable and popular, but not elementary.

The book can be divided into three parts. The first gives sound astronomical information about the Solar System. The second deals with the theory of space-flight and allied subjects. The last and most important part gives an astronomical description of Our Neighbor Worlds, the planets and their satellites in the light of our present information.

You will find the book instructive and entertaining whether you may or may not hope to fly to the moon in this life.

★ ★ ★ ★ ★ ★ ★

BALLOT

UNITED STATES ANTIAIRCRAFT ASSOCIATION

The Vice President and four members of the Executive Council are to be elected on this ballot to replace officers whose terms of office expire December 31, 1953.

Please record your vote by making an "X" in the appropriate square or indicate your choice by writing the name of your candidate.

Each candidate was considered in connection with the geographic location of his residence. The Constitution of the Association requires that at least five members of the Council reside in the Washington area, and that at least three of them be on active duty, in order to facilitate the transaction of business.

Balloting closes December 31, 1953.

Use the ballot below or prepare one to indicate clearly your vote. Mail to the ANTIAIRCRAFT JOURNAL, 631 Pennsylvania Avenue, N.W., Washington 4, D. C.

FOR VICE PRESIDENT (1954-1955)

☐ Lieut. Gen. Lyman L. Lemnitzer, Deputy Chief of Staff for Plans and Research.

☐ _____

FOR MEMBERS OF EXECUTIVE COUNCIL
(Vote for Four)

☐ Colonel Darwin D. Martin, Career Management Division.

☐ Colonel George V. Selwyn, 260th AAA Group, D.C.N.G.

☐ Lieut. Col. John E. Connor, Jr. Research & Development Div., G4

☐ Lieut. Col. Otho A. Moomaw, 601st AAA Gun Battalion.

☐ _____

☐ _____

☐ _____

☐ _____

_____
(SIGNATURE)

_____
(RANK & ORGANIZATION)

_____
(ADDRESS)
(PLEASE PRINT OR TYPE)

★ ★ ★ ★ ★ ★ ★

WRITE FOR YOUR JOURNAL

One of the finest purposes of this JOURNAL is to encourage our officers to write articles for the JOURNAL. This is true because the preparation of a good article requires a lot of work which contributes definitely to the development of an abler officer. It requires keen observation and study in connection with the subject at hand. It may require research in the library. It will often require experiment and practical research on the firing range, in the shops, or on the battlefield. Thus the officer acquires greater knowledge.

The writer also gets practice in organizing his thoughts and expressing his ideas and conclusions. This is one good way to develop leadership. An officer in the Army has to give a lot of instruction. He has to issue orders. When he learns to do both clearly and with convincing appeal he has leadership.

In small units the Army officer can exercise leadership by speech. In battalions or larger units the commander needs to exert leadership through the written word. We can think of no better example than that offered in the writings of our own General of the Army, Omar Bradley.

And on this fine note we urge you to write for your JOURNAL and encourage the enterprising officers in your command to do so, too.

HONOR ROLL

(Continued from Cover 2)

867th AAA AW Bn
Lt. Col. W. R. Parr
903rd AAA AW Bn
Lt. Col. F. J. Petrilli
933rd AAA AW Bn
Maj. W. C. Sager
950th AAA AW Bn
Lt. Col. J. P. Wallis, Ga.
951st AAA Gun Bn
Lt. Col. W. G. Babbitt
30th AAA Lt. Btry
Lt. R. A. Headland

Operations Detachments

34th AAA Opns. Det.
Maj. J. Swerdya
114th AAA Opns. Det.
Maj. G. F. Kelley, Jr., Del.
131st AAA Opns. Det.
Maj. W. C. Fore, S. C.
177th AAA Opns. Det.
Capt. J. J. Niehoff
181st AAA Opns. Det.
Lt. E. Brantley, Jr., N. Mex.
184th AAA Opns. Det.
Capt. M. C. Tieschendorf, Calif.
286th AAA Opns. Det.
Capt. H. J. Tarves
302nd AAA Opns. Det.
Maj. N. L. Funke
327th AAA Opns. Det.
Maj. P. Lanasa
500th AAA Opns. Det.
Maj. C. O. May, Jr.
501st AAA Opns. Det.
Lt. W. K. Merrill
502nd AAA Opns. Det.
Capt. J. R. Myers
508th AAA Opns. Det.
Capt. G. J. Lahey
509th AAA Opns. Det.
Maj. J. P. Bodkin
514th AAA Opns. Det.
Capt. H. A. Metzger
515th AAA Opns. Det.
Capt. C. R. Northop
517th AAA Opns. Det.
Lt. A. R. Omps
525th AAA Opns. Det.
Lt. George McGee, Jr.

JOURNAL HONOR ROLL CRITERIA

1. Brigades, groups, battalions and other units of comparable size with 80% subscribers among the officers assigned (exclude Medicos, Chaplains, and those on DS) are eligible for listing.

2. To qualify or to requalify for a listing on the JOURNAL Honor Roll, units submit the names of subscribers and a roster of officers assigned to the unit on date of application.

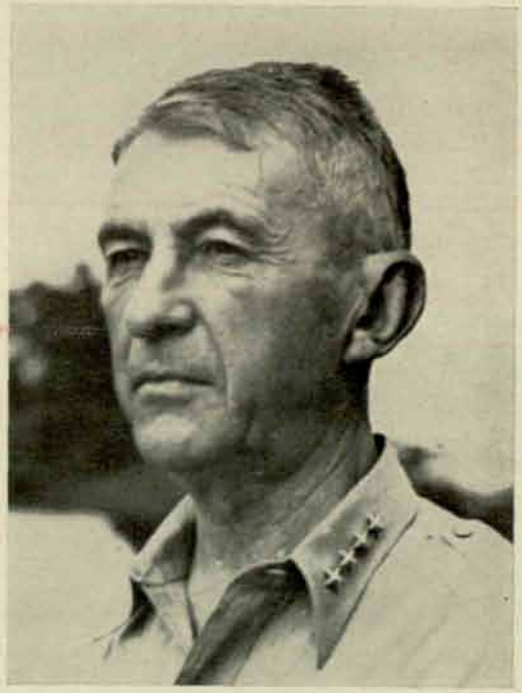
3. Units remain on the Honor Roll for one year after qualification or requalification.

FROM DOWN UNDER TO NIPPON

The Story of Sixth Army In World War II

by
General Walter Krueger

$6.50



No United States army in World War II had a more difficult mission than Sixth Army, and none performed its mission with more distinction and less publicity. *From Down Under to Nippon* is the history of Sixth Army's operations, written by its commander. The book, like the army, reflects the personality of its commander—it is sound, accurate and professional. It is not General Krueger's autobiography; it is his tribute to the men who served with him.

Here, then, is the history of an army as professional as any we had in World War II, an army at the thin end of the supply line, an army that performed miracles on order and did so without fanfare. If you served in the Pacific you'll certainly want this book. If you did not, you'll *still* want it for what it can show you about joint operations.

Handbook and Manual for the NONCOMMISSIONED OFFICER

For the man in this picture, and for those who intend to be noncoms, here is a new kind of book, written *for* the key men of the Army.

Handbook and Manual for the NONCOMMISSIONED OFFICER covers such vital topics as Leadership, Orders, How to Teach, How to Study, Social Conduct, Spit and Polish, Military Justice, Relationship with Your Men, How to Train Your Men, Promotions and Reductions, Things Your Men Will Ask You, Personal Affairs, and much more.

Order your copy today to be sure of the latest and best information.

Cloth, $3.50 Paper, $2.50

"LITTLE BULL"

Power Megaphone

Patent Applied for

Successfully in use by:—The Pennsylvania Railroad—The Metropolitan Police, District of Columbia—and U. S. Military installations—

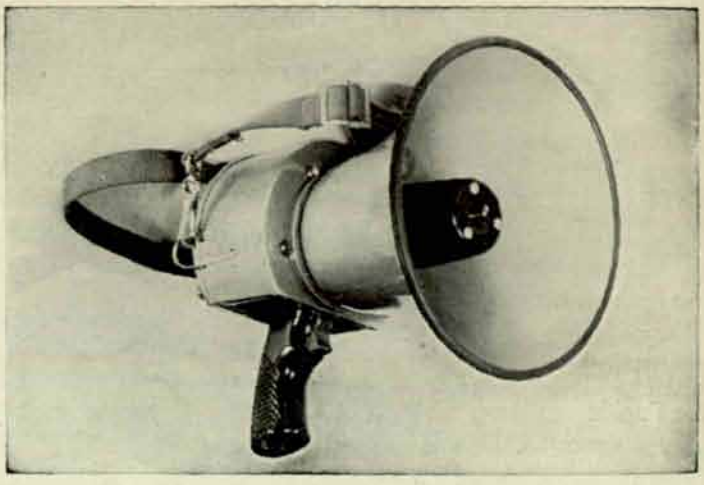
***Ideal For The Range Officer**

***Command Control in Garrison or Field**

***An Aid to the Instructor**

***Voice Control at Formations**

***Useful at Athletic Events**



- **INSTANT TRIGGER ACTION**
  Press the Switch and Talk No Warm-Up Required
- **RANGE**
  Effective Up to ¼ Mile
- **WEIGHT**
  Only 5½ lbs. Complete
- **POWER SUPPLY**
  6 Standard Flashlight "D" Batteries Only—Inexpensive —Available Everywhere
- **DIMENSIONS**
  Horn — 9½ in. diameter
  Unit Complete — 11 in. high
- **BATTERY LIFE**
  Intermittent Operation . . . 8 hrs. per day for (3) Three Weeks. Approximately 120 to 150 Hrs.
- **LIST PRICE — $124.00**

ORDER FROM

Antiaircraft Journal

631 Pennsylvania Avenue, N. W. WASHINGTON 4, D. C.