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OPERATION CROSSROADS was in every respect a joint operation, the first such major operation in peacetime in which all services participated. No service forced itself into the operation, and the most cordial relations existed throughout between Army, Navy, and scientific personnel. Conducted with efficiency, the tests have produced information which I am sure will prove invaluable in planning the future security of our country.

There was considerable sensational and inaccurate reporting about the Bikini tests, both before and after they were made, concerning which newspapermen themselves have been very critical. Prior to the first test, prognostications ran the full scale of the imagination, and newspapers discussed seriously whether or not the bursts would cause earthquakes and tidal waves. After the first test, one Honolulu paper carried banner headlines—"Error in A-Bomb"—the article stating that the bomb had burst one and one-half miles too high. On the other hand, the commentator in one of our national newsreels stated repeatedly that the bomb had burst too low. Actually the bomb burst at the correct height. One writer, aboard a ship eighteen miles from the burst, stated that he was "knocked to the deck by the force of the blast." At that distance there was practically no blast effect at all.

As a spectacle, the first test, the air burst, was unquestionably disappointing to many. To me, it is interesting to recall that prior to the test one of the phenomenologists told me that he believed that the intense light which had characterized previous bursts would be missing in this one. He thought that the high humidity in the area would cause the formation of a cloud that would obscure the bright light from observers on surface ships. This was exactly what happened, as recorded in both the still and the moving pictures.

The bomb burst with full power, but not precisely over the target. The cause of this error has not been determined and was really not important to the test itself.

The second burst, the underwater one, made up in spectacular effects for what the first one lacked. A cylinder of water about 700 yards in diameter shot up in the air to an altitude of 5,500 feet, a Niagara Falls going up instead of coming down. You will recall that the battleship Arkansas disappeared immediately, the grand old carrier Saratoga sank in less than eight hours, and the Jap battleship Nagato after several days. The target ships and the waters of the lagoon were heavily contaminated by deadly radioactive materials.

In the opinion of most qualified witnesses, the bomb measured up to all the claims that had been made for it by scientists and others. Those who comment "not much" or "just another bomb" are simply talking through their hats.

In the light of the atomic bomb, it appears to me time for us to re-examine and re-evaluate the principles of warfare which have been accepted in the past. The German Clausewitz, on the ground, and our own Admiral Mahan, on the sea, exerted a profound influence by their writings on military organization, strategy, and tactics—particularly in this country and in England, Germany, and France. Their theories have been proved in war. Among other things, Clausewitz taught that victory in war was to be obtained through breaking the enemy's will to resist by destroying his armed forces. Admiral Mahan, the great exponent of sea power, stressed the decisive effect of control over the sea lanes. In his time, control of the sea insured complete security for nations like the United States and Britain. Yet back in 1907, he wrote "Unless we succeed in exploiting the air, water remains and must always remain the great medium of transportation."

During World War II air, land and sea forces were mutually supporting, and, in their strategic importance, on a fairly equal basis. I think most will agree that the Army didn't win the war; neither did the Navy nor the Air Forces. The combined teamwork of all three did the job. The war was total in its impact—striking soldier and civilian alike—but manpower concentrated in mass armies, navies, and air forces decided the outcome.

In the new atomic age, the primary avenue of attack against any nation will
be the air. To me that fact is inescapable despite my sentimental attachment to the ground forces in which I have served for 28 years. This view of war is very different from the conceptions of Clausewitz and Mahan and more in keeping with the views of the Italian, Douhet, and our own General Mitchell. Although the past war disproved their teachings that victory could be attained by air power alone, the advent of the atomic bomb gives promise of bearing out their theories that air attack alone can be decisive.

Modern war is becoming more and more a conflict of new weapons and of new techniques for employing them. World War II, more than any other, produced important contributions by science such as the atomic bomb, radar, proximity fuzes, and—on the German side—the jet propelled missiles, V-1 and V-2. However, until the morning of August 6, 1945, the weapons of World War II merely had more power, more range, and more speed than their predecessors. Against every one of them, with the exception of the German V-2 (an extremely inaccurate weapon, used in desperation) there was some sort of defense, some sort of possibility of protection or interception. In the rubble of Iwo Jima, in the ruins of Berlin and Munich—smashed and battered by hundreds of bomber sorties—the Germans and Japs continued fighting until they were routed out with hand grenades and Tommy guns.

A major plank of our strategy during World War II was to destroy by bombing highly important industrial centers, synthetic oil plants, and isolated factories engaged in the production of munitions. Our weapons, the demolition and incendiary bombs, powerful as they were, were so restricted in penetration and area of damage that even repeated raids could not make areas uninhabitable or utterly unproductive. The Luftwaffe learned that in England; and although our own Air Forces bled German productive power white by years of relentless day and night bombing in all weathers, the German industrial machine and civilian structure remained a going concern that had to be seized by the Ground Forces.

By their resistance to heavy bombings from the air, first the British, and later the Germans, disproved the theories of Douhet and Mitchell that an enemy’s morale can be broken with conventional bombs. There is somewhere, however, a limit of human endurance to bombing, and I suggest that it has been reached with the arrival of the atomic bomb. Where the atomic bomb strikes, there is immediate and total paralysis of all effort, civilian and military. Both flight from the area and retaliation by defenders appear virtually impossible. Those not killed in the first blast seem helpless to make any effort until outside aid arrives. Utilities cease to exist. Means for defense are obliterated. Those are statements of cold, terrible fact made more terrible because after the first experiment in New Mexico it has required only four atomic bombs—two in war, two in peace—to produce the proof.

It is true that the effects of the bomb upon a modern city have not been determined. I think it is also true that Japan was thoroughly licked by the Army-Navy-Air team before the bombings of Hiroshima and Nagasaki. But the evidence from those two Japanese cities and from Bikini gives every indication that atomic bomb attack upon modern cities and industrial plants will be extremely devastating.

It follows that in any future war one single surprise attack with atomic bombs dropped in mass with reasonable accuracy may well be decisive. I sincerely believe that a comparatively few atomic bombs dropped on key points would have left Germany helpless for the prosecution of war.

Such a method of waging war could not have been foreseen by Clausewitz and Mahan. It never occurred to Clausewitz that a weapon could be produced that might destroy the economic structure of a country and break its morale without destroying its armed forces, nor could Admiral Mahan foresee that we would in fact succeed in exploiting the air and in making it too a great medium of transportation.

If one believes, as I do, that the primary avenue of attack will be the air then the modern military establishment we developed during two wars is out of balance. Changes must be made in it but they must be made in harmony by all the Services working together to perfect a new military establishment which can offer some hope of security against atomic aggression. No one at this moment can clearly outline what these changes should be. Statements that the atomic bomb has obsoleted sea power and foot soldiers or that the Air Forces should be relegated to the role of an aerial passenger and freight service because guided missiles will be the bomb-carriers of the future . . . such statements as these should be outlawed for the good of the nation. We require a military establishment adjusted to the Atomic Age, not maimed and crippled by atomic propaganda.

There remains the possibility of outlawing the bomb. We know that our statesmen have presented a plan which seemed fair and reasonable to most of us but which has proven unacceptable to Russia. As a soldier and a realist I can only hope and pray that public opinion will always outrace those in this country who propose that we destroy existing bombs and cease their manufacture. Our security demands that we maintain our present advantage in the field of atomic bombs and in the development of new weapons, and that we stockpile atomic bombs and airplanes to carry them until we are satisfied beyond question that world peace is firmly established.
MOONLIGHT JEEPERY

By Leonard J. Grassman

MOONLIGHT DANCED along the length of his scabbard and his stride was prideful as the officer led a lovable companion beneath the heavily laden boughs of the park's trees. Soft words rolled from his lips, but his brow knitted at the same time in puzzlement. He couldn't understand this woman, couldn't quite figure out just why his amorous techniques, time-proven by considerable experience, brought no response. Annoying, to say the least, but apparently something was lacking—she wanted something more in her man. What could it be?

It all came to him suddenly as they strode before the bronze statue of an American officer of an earlier day . . . and she was saying, "This is a beautiful work," waving her glove toward the statue; "it was done by . . ."

Although he didn't catch the foreign name, he was already scheming a tactical move to soften this elusive heart. Agreeing to the beauty of the work, he added, "It is almost a living portrayal of what an officer lives for!"

She laughed, "If that is the case, then, Sir, one day will they cast your likeness in bronze?"

"Perhaps they will and I can feel almost certain that the bronze charger beneath me will also have both forehooves in the air — as the one in yon statue — thereby conveying the same glorious message that I, too, kept the soldier's faith."

As we leave them, the officer is reassuring his lady, manfully . . . and has slid his strong arm, also reassuringly, about her shapely waist.

Regrettably, research has failed to reveal to what extent the young officer was successful in his amorous objectives or whether a statute was ever cast in his honor. But when he impressed the young lady with his knowledge, he started a legend which has been passed down through the decades.

The plausibility of the legend is strengthened by the coincidence that it does fit many specific cases, and the natural interest that it provokes caused the editors of the New Yorker to narrate it in their issue of May 6, 1944. Naturally enough, that article prompted many queries to the War Department's Bureau of Public Relations.

A project was made of it and research began. Letters crossed and recrossed the nation, but no substantiating data could be found, the nearest being the Library of Congress' disclaimer: "We have heard that the guides at the Gettysburg battlegrounds attach significance to the pose of the horses' feet, but suspect that they have constructed a formula on the basis of certain statues and we feel sure that any significance so attributed is ex post facto."

Incidentally, some two years after they published the story The New Yorker felt constrained to admit: "The writer of our brief paragraph was told the statue theory by an anonymous caretaker in a Washington park. It's all poppycock, of course."

All of which is very disappointing and disillusioning indeed. The generals of World War II rode jeeps instead of horses and this writer had worked himself into a fine dither, along with the editors of The New Yorker, trying to figure out "how these bronze jeeps are to deport themselves in the long bronze noons and the long bronze nights—how many wheels are to be off the ground?"
FIELD CALIBRATION

By Capt. Charles M. Thatcher, Ord-Res.

Breathlessly, a worried-looking artillery commander rushes up to the commanding officer of a Ballistic and Technical Service Team, crying: "Something's wrong! I've got a gun over there that's supposed to fire 19,000 yards, and it's firing only 13,000."

The team goes into action. Truckloads of complicated electronic equipment arrive on the scene, are unloaded and positioned around the gun. Several hundred rounds are fired. Computing machines grind out endless columns of figures and formulae. And finally, from the reams of computations, the team commander selects a single sheet and struts proudly over to the artillery commander.

"Sir, you are right! Your gun is firing only 13,000 yards!"

Such is the frequent misconception of the role of an Ordnance Ballistic and Technical Service Team in the field calibration of artillery. Fortunately, the account is correct in only one respect: there are such teams in the field, and they do calibrate artillery pieces—not to get superfluous information, but to report muzzle velocities to an accuracy on one foot per second!

FIELD CALIBRATION IS NEW

Accomplished at proving grounds for many years, it is only within the past few years that any concerted effort has been made to develop an accurate and satisfactory method for measuring muzzle velocities in the field. Such determinations would obviously be of great value both to the artillery and to ordnance, giving greater accuracy of fire to the former and enabling a closer check on gun wear and tube endurance for the latter. They might also be used for the calibration of ammunition lots.

Though hypothetical, the imaginary artillery commander's worries are representative of the need for such calibration in the field. When a gun's muzzle velocity is known, the artilleryman can make firing table corrections without difficulty; but as the bore wears the velocity changes, with the result that elevation settings to obtain desired ranges cannot be determined accurately.

Particularly acute is the problem of the artillery battery commander whose guns have all worn somewhat—and at different rates. Only by ranging in individually with each weapon can he be sure that his guns will be fully effective against a battery target. To an artillery unit faced with such a problem, the Ballistic and Technical Service Team is a Godsend. Determining muzzle velocities for each piece, the team's calibration enables the commander to make his corrections from firing table data, and then to bring all pieces to bear after ranging in with only one.

Such absolute calibration, however, requires the use of a pre-calibrated reference ammunition lot as well as precise measurement of atmospheric conditions and other considerations affecting the firing. Consequently the team more generally makes a "relative" calibration among the guns of a battalion, thus enabling the battalion commander to group his guns by batteries so as to give each battery four guns which fire at approximately the same velocity.

CALIBRATION METHODS VARY

Basically, the calibration problem is simply one of devising a method for measuring the time it takes a projectile to cover a measured distance. One of the earliest methods was to put up two wire screens a known distance apart. As the projectile strikes the first screen, it makes (or breaks) an electrical circuit to start a timing device, which is stopped when the projectile reaches the second screen. A second method was to fire the projectile through a solenoid coil, the change in magnetic flux sending an impulse to start the timing device.

When the need for calibration in the field became evident, however, serious disadvantages to both of these methods became apparent. The first required replacement of the screens after each round (although the method can be used economically for small arms work), and the second meant the construction of large, unwieldy towers for the solenoid coils.

The answer was the T6 Chronograph (see cuts), which is now used by the field teams. The "screen" principle was retained, but the screens of wire were replaced by screens of light, produced by shielding a photo-electric cell except...
for a narrow slit. The unit is mounted in a metal tube beneath a lens which focuses incoming light on the slit, and as the projectile passes over the tube the light intensity is changed and an impulse is sent to the counter.

**EQUIPMENT PLACED BY BORESIGHTING**

It is not quite as simple as all that, of course. The orientation of the slit with respect to the trajectory is of great importance, and the final version of the "telephoto pickup" included a sighting telescope and leveling vials, all mounted on a standard .30 caliber machine gun mount to permit tilting and traverse.

When the team goes into action, the mounts are firmly emplaced to reduce the danger of movement from ground shock, their position being along the line of fire (established by boresighting) and approximately 100 feet apart, the nearest one about 50 feet from the gun muzzle. The telescope, mounted at perpendicularity to the slit, is sighted back on the gun muzzle, and thus insures that the light screen will be at a right angle to the trajectory. The leveling vials in turn are used to insure that the screen is vertical.

Using a surveyor's level and steel tape which are part of their equipment, the team accurately determines the horizontal distance between the two pickups, as well as the distance from the first pickup to the muzzle of the gun. If the pickups are tilted, the angle of tilt is also measured with a gunner's quadrant. Then, knowing the angle of elevation of the gun, a computer can convert trigonometrically from horizontal distance to distance along the trajectory. A correction factor for the drop due to gravity is employed, but curvature may be neglected as insignificant, as it is assumed that the projectile travels a straight line over the distance being measured. Other corrections allow for windage and any slight changes made in firing azimuth after the pickups have been placed.

It should be evident that there are actually two changes of light intensity as the projectile passes over—one relatively gradual as the nose enters the screen, the second abrupt as the tail leaves. Because of the sharpness of this second pulse, it is the one used as the triggering signal. Beside each pickup is placed an amplifier unit which strengthens the signal sufficiently for transmission back to the counters, located behind the firing position and connected to the pickups and amplifiers by five-conductor cables.

The degree of amplification must be determined very carefully, as too little will result in no pulse at all, while too much will cause "nose-triggering." The size of the projectile, its height over the pickup, and the sky brightness, or general light intensity, are all factors in determining the proper amplification setting. Indeed, fast-moving clouds sometimes change the sky brightness unexpectedly, and the setting must be changed to allow for the difference.

**SIMPLE TEST IS USED**

Once the equipment is in place and the cables connected, it can be tested by the "whip test" — rapidly whipping a small switch over the pickup to simulate the change in light intensity caused by the projectile. A well-trained team can emplace all the equipment and make the necessary advance measurements, computations and tests in less than a half an hour.

The counters used to time the flight of the projectile over the now known distance are rather complicated electronic devices, but may be explained briefly. A crystal oscillator sends impulses into the circuit at a rate of 100,000 per second. When the triggering signal is received from the first pickup, an electronic "gate" is opened, permitting these impulses to enter the counter. The second signal closes the gate, and lighted bulbs indicate how many pulses were received by the counter in the interim, giving the time to the nearest one hundred thousandth
of a second.

Knowing both the distance and the time, a computer can calculate the velocity by simple division. It will be observed, however, that this is not the muzzle velocity, but a velocity at some distance from the muzzle. Further, it is a velocity subject to correction for atmospheric conditions, powder temperature, and projectile weight. To convert the measured velocity to the velocity at the muzzle, the computer makes use of a chart giving the velocity drop as a function of distance from the muzzle. The other corrections are made as indicated by the firing table, periodic readings being taken of air temperature, air density, humidity and powder temperature for this purpose.

**VELOCITY KNOWN IMMEDIATELY**

The entire procedure of set-up, survey, recording of data and computation of corrected muzzle velocity can be effectively accomplished by one officer and six men, with the answer supplied within minutes after the last round is fired. Usually the velocities of five or six rounds are averaged to arrive at the velocity of the piece. The data is checked for statistical conformity, the standard deviation and probable error are computed and the battery commander is given the resultant average muzzle velocity plus the figures for statistical variation for his use in making corrections when laying his piece. Once this calibration is accomplished, it is felt that gun-wear tables will give a satisfactory basis for estimating the rate of change of muzzle velocity, and that ballistic team calibration is only necessary two or three times during the firing life of the weapon.

Where a number of guns are to be calibrated at one location, it has been found simpler to leave the pickups in position and place the guns one after another in the same spade holes, thus making it unnecessary for the team to remeasure the distances. In this manner.

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**COMBAT EXPERIENCE WITH GUN TUBES**

*Of interest in connection with Captain Thatcher's article is the following, which reflects the experience of the First Army Artillery Officer in the matter of gun tube replacement in combat.—Editor*

**THE ERRONEOUS IDEA** seems to persist in the minds of some artillerymen that the life of a gun tube comes to a positive end when a specific number of rounds have been fired.

Although the total number of equivalent service rounds fired is indicative of the approach of the end of the accurate life, there are so many other factors that influence the wear in a tube that it cannot be stated that all should be replaced at any definite figure. Each individual tube wears differently, and any published life expectancy figures are estimates only.

An accurate record of the number of rounds fired from each tube is kept by this Office through the medium of the gun tube reports submitted by artillery units. These reports are most useful to the Army Ordnance Officer, and as soon as possible after the number of rounds fired by a particular tube has approached the estimated life expectancy figure, the Calibration Team is made available to the unit. By determining technically the loss in muzzle velocity and "wobble" in flight, the Army Ordnance Officer has a more accurate figure as to the remaining life expectancy of the tube in question.

Gun tubes in First Army are fired until performance indicates that they have been worn appreciably. This condition will be indicated by extreme loss of range and stripping of rotating bands. Normally, these symptoms develop gradually.

Our greatest experience in gun tube replacement has been with the 155mm gun M1, M1A1, and M2. Of the 88 tubes of this caliber replaced by First Army Ordnance, 11 had fired less than 1,400 service rounds, 41 between 1,400 and 2,000 rounds, and 36 between 2,000 and 2,600 rounds. The maximum number of full service rounds fired by any one tube was 2,574. Of the 88 tubes replaced, 77 exceeded their so-called life expectancy. Moreover, 24 of these 88 tubes were replaced because of the anticipated tactical situation at the time, even though an estimated 200-300 rounds of life were left in them.

The average number of service rounds fired by all 155mm gun tubes replaced was 1,982.

The 4.5" gun M1 presented a different problem than the 155mm gun in that it was found necessary to replace these tubes because of loss in range rather than loss of accuracy. This Office is of the opinion that these tubes should be replaced when the loss in range is as much as 3,000 yards, since the 155mm howitzer will reach almost that far with a much more effective projectile. Experience has shown that the loss in range indicated above precedes any appreciable loss in accuracy by a considerable amount. No 4.5" gun tubes were worn out by First Army Units, but 24 were replaced because of loss of range.
an entire 105mm howitzer battalion can be calibrated in less than a day's work.

In addition to the personnel doing field calibration, the team also has four men grouped to form a base calibration team, and one officer and one man working on maintenance, bringing the total strength of a team up to two officers and eleven men. The base calibration group works primarily with weapons coming out of repair shops, determining absolute velocities, and also does some calibration of powder lots, as a reference lot of known characteristics must be used in all firing for absolute calibration.

The equipment normally carried by the team consists of five telephoto pickups and their mounts, five amplifiers, three counters, surveying equipment, a complete unit of Aberdeen chronograph equipment (revolving drum type counter) for testing small arms, a set of pressure gages for chamber pressure studies of weapons using semi-fixed or separate loading ammunition, and a set of spare parts and testing equipment for maintenance.

**COMPLETE UNIT IS COMPACT**

All this equipment can be stowed in a 2½-ton 6×6 shop truck, a 1½-ton 6×6 personnel carrier, and a 1-ton two-wheel cargo trailer. Electric power is provided by two 10-kw generators, one mounted in the shop truck and the other in the 1-ton trailer. A portable 2½-kw generator is also carried for advance field operation. In general, the shop truck constitutes a mobile base repair shop for maintenance of the equipment, while the 1½-ton truck is in the field on calibration missions. Should it be desired to transport the team and calibration equipment by air, only 1,200 pounds of equipment need be taken.

Have the teams proven their worth? Quite definitely. During the war Army teams calibrated hundreds of thousands of rounds of ammunition at depots both in Europe and in the Pacific Area. It was such a team's performance in the South Pacific that aroused the interest of the Marine Corps and resulted in the formation and training of a Marine team, at the request of field commanders who had seen the Army units at work.

Personnel for the teams are trained at the Ballistics Research Laboratories, Aberdeen Proving Ground, Maryland, by experts in ballistics, electronics and statistical procedure. The members of the first teams actually built most of the equipment, and so became thoroughly familiar with its peculiarities and maintenance.

Velocity calibration does not constitute a cure for all the artilleryman's troubles by any means, segregation of ammunition lots, proper storage and handling of ammunition, and proper maintenance of the piece still being allimportant. But it is also true that the accuracy of a piece can be greatly increased if its muzzle velocity is known, and by its determination of this figure, the Ballistic and Technical Service Team makes a substantial contribution to the effectiveness of artillery fire. End.

"NEVER PERFORMED MORE BRILLIANTLY"

Our rich artillery tradition stretches back more than 171 years into the military history of the United States. In fact, it may be said to have been born when the "First Artillery Company" was bequeathed two heifers in the will of Captain Robert Keayne, first commander of the "Ancient and Honorable Artillery Company of Boston." The two heifers were to be "kept as stock constantly and the increase of profit of the cows yearly to be laid out in powder or bullets."

Artillery was established as a separate branch of the Continental Army on November 17, 1775, and the following year the New York Provisional Congress passed a resolution raising an artillery company for the defense of the colony. The company's first commander was a young student who won the esteem of his leaders and followers alike, by the splendid conduct of his guns and his appreciation of the efforts of his men. His name was Alexander Hamilton, and his battery — redesignated later as Battery D, 5th Field Artillery, and now organic to the 1st Infantry Division—is considered the oldest organization of our Regular Army.

Modest in origin, Artillery has performed a progressively more vital role in every war in which this Nation has engaged.

Artillerymen will note well the challenge, as well as the high praise, in our Ground Force Commander's words on 17 November 1946, the 171st Anniversary of the Field Artillery: "Our artillery never performed more brilliantly than it did during the recent war and we of the AGF face the future confident that our gunners are keeping themselves, their technique and their equipment abreast of all developments."
A MAP IS A TEXT BOOK OF terrain information printed on a single sheet of paper. Using the language of signs, symbols, and colors, it tells the modern soldier where he is and where he is going. It also tells him where the enemy should be and the best and safest way to get to him. In modern war, it is the basis of all tactical planning and, as such, holds the margin between ultimate victory and defeat.

The above concept of the modern military map keynotes the work of the Army Map Service, which functions in its modern, especially designed plant in Washington, under the Office of the Chief of Engineers, U. S. Army.

Charged specifically with the mission of providing all military maps required by the War Department, from the large, brightly colored, pin-lined maps on the walls of the Chief of Staff's office to the small, wrinkle-proof sheets used by company and battery commanders, the Army Map Service emerged from World War II as one of the world's most efficient military mapping organizations. It has been said with justice that AMS had the most intricate, careful, painstaking, and yet speediest, job in the war. In an incredibly short length of time, with inexperienced personnel, it had to produce the best maps in the largest quantities any Army in history ever had. That it did this job with a dispatch and efficiency that amazed military men everywhere is a tribute to the leadership, talents, and ingenuity of AMS's entire personnel.

Some knowledge of both AMS's wartime job and global war's insatiable hunger for military maps can be gleaned in a comparison of the maps needed for all the maneuvers of World War I with the requirements of a single campaign in World War II. The first World War, fought in a more or less limited area, on relatively well-known terrain, and employing the rather static strategy of trench warfare, required but 9 million sheets. In World War II, the North African invasion alone demanded 10 million sheets of 1,000 different types of maps. And even this precedent-setting demand, like the invasion itself, was but a prelude of demands to come. The invasion of Normandy required 70 million sheets of 3 thousand maps, while the Battle for France often consumed 30 tons of maps daily—or a total, in round numbers, of 210 million sheets. These maps, incidentally, were the first military maps to be made of coastal France since the campaigns of Napoleon.

With its unceasing movements on a world-wide scale, World War II required a total of almost 500 million sheets of some 40 thousand different maps. Conservatively estimating each map in four colors only, this would
mean 2 billion impressions or press runs. A man with a mind for such statistics has stated that the maps of World War II overbalance the weight of two prewar cruisers—24,550 tons. If stacked, the pile of maps would rise 297 times the height of the Washington Monument—or approximately 165,945 feet—higher even than a post-war rocket has, as yet, ascended.

With AMS acting as "home base," much of the actual compilation and press work was done in the field by topographical units, such as the 660th Base Topographical Battalion, which operated first from England, then from the L'Illustration building in Paris; and the 648th Engineer Battalion, which arrived in Australia in March 1942. The 64th Engineer Topographical Battalion, established in Hawaii in June 1942, engaged in the preparation of hasty maps and the compilation of terrain intelligence material incidental to the amphibious operations of the Pacific atolls. In Portland, Oregon, the 29th Engineers (though primarily a training unit) made maps for the Kuriles operations and for our forces in the North Pacific.

As the text books of the infantry, artillery, air corps, and other branches of the Army differ in content and scope, so do maps produced for the various branches, and for various purposes, differ in text. An aviator intent upon bombing an industrial area requires a map (or series of maps) that renders the earth recognizable from high altitudes at great speeds. He needs a guide to and from his target, with little attention to details such as road conditions, or a clump of trees where a machine-gun may wait in ambush, or even a swift-currented river that has but one bridge in a radius of fifty miles. So the pilot is provided with a small scale flight chart on which details are greatly generalized, and a larger scale target chart with the primary object emphasized.

More than likely, a pilot's maps would be of the Rescue or Cloth Map type. These maps were designed especially to aid airmen forced down at sea or in unfamiliar territory and are printed on high grade rayon acetate—a texture impervious to rough handling, crumpling, and exposure to weather and water. Or the maps may be of the Fluorescent or "Light-up" type, designed for night flying over enemy territory and utilizing a paper impregnated with a fluorescent pigment. This pigment, when activated under invisible ultra-violet or "black" light, illuminates the map sufficiently to be read without disclosing the plane's position to enemy fire with a tell-tale gleam of light.

To a tank driver terrain is important. He has either to circle the clump of trees or penetrate it and wipe out the machine-gun nest. He has to know that the stream is bridged and whether or not the bridge will support the great weight of his tank. So he uses a medium scale (1:250,000) map which covers a fairly large area and combines the characteristics of a road map and a topographic map. For special purposes, and on certain occasions, a field topographical unit overprints his map with patterns that show trafficability at its best and worst.

The infantryman, like members of other earth-bound units, enjoys less mobility than the aviator, the tankman, and the armored troops. He is keenly interested in every road, by-path, and stream, in every house, barn, and fence. He needs a large scale (1:50,000 or 1:25,000) map. With his life, and the success of his mission, dependent upon his knowledge of the character and location of every detail, a fine tactical distinction is made on his map, so that he can tell such things as whether the clump of trees is a woods or an orchard.

It is also essential to the infantryman that his map contain an accurate delineation of terrain. Consequently, the pleasant contrasts of gradient tints which tell the aviator the highest and lowest elevations aren't for him. A hill's crest may hold enemy opposition, and he must know the exact configuration of every foot of ascent and descent, and the level places between. Consequently, the large scale military map contains every item of military importance that can be shown without inviting confusion. It is truly the "battle Baedeker" of the combat soldier.

There is a different type of military map for every possible purpose. In general, however, small scale (1:1,000,000 and smaller) maps are used by the commanders of large units for general planning. These maps carry a minimum of detail but give emphasis to road and railway networks, drainage patterns, political boundaries, and coastline configuration. Terrain is but broadly shown with a series of distinctly colored elevation levels.

Because the movement, concentration, and supply of troops are more quickly and better plotted on medium scale (1:250,000) maps, they are used for strategical and tactical studies, as well as by tank corpsmen. The large amount of detail in cultural and terrain features makes this type of map an ideal road map, and in fact, an almost ideal all-purpose instrument. This detail includes a finer classification of roads, railroads, and population areas than is shown on the smaller scale maps, while relief is expressed with relatively accurate contouring, supplemented by hill shading.

No military map, however, is suitable for combined field operations without a standard grid. Minus the network of horizontal and vertical lines which divide the map into exact squares—identified by numbers—unit commanders could not coordinate their activities. When artillery fire is requested at a specific point, the point is identified exactly by the numbered grid reference, and the answering barrage comes quickly after computation of distance and direction. For this reason all tactical maps carry a standard grid, with the distance between the regularly spaced lines representing an arbitrary number of yards or meters.

From the above it may appear that the military map is an intricate and complete tool of war. It is. Even with equipment that ranges from the latest type of electric airbrush and air-eraser to especially designed buildings, from almost magical multiplex machines to color presses and a battery of cameras so large they use 40 × 48 negatives and small electric motors for focusing, it often requires AMS's staff of artists and technicians more than six hundred man-hours to process a new military map. Each new map must be processed through the departments of Planning,
The home of the Army Map Service on MacArthur Boulevard in Washington, D. C.

Design, Research, Compilation, Drafting, Photography, and Printing.

Yet, in light of cartographic history, one of the "miracles" of the war was the amazing speed in which AMS, its field units, and contractors, produced maps of areas over the entire world. Often starting from scratch—especially in the unmapped, or badly mapped, areas of the Pacific—weeks were cut to hours, months were cut to days. Our initial offensive in the Pacific is an example.

In July 1942, a Marine task force was assembling on the palm-shrouded island of New Caledonia, preparing to take the first offensive step on our famous "road back" campaign. The objective was in the Solomons—Guadalcanal, to be exact. Every article and instrument of modern war was on hand, save one. No adequate map of the island to be attacked was to be had. A search of New Caledonia produced only sketch maps, drawn by missionaries and Australian planters, and of the type marked "Location not accurate within several miles." Desperate, the Marines radioed Army Headquarters at Port Moresby, New Guinea, asking that Guadalcanal be mapped, and in a hurry.

Immediately, a B-17 equipped with new automatic cameras took off from Port Moresby's new air strip. It flew almost a thousand miles to Guadalcanal and, disregarding heavy ack-ack fire, began to cruise up and down the little brown and green, Japanese-infested oval, the camera clicking incessantly. Then, with its urgent mission completed, it returned home.

At Port Moresby, the film was transferred to another plane and flown to Australia. There a battalion of Topographical Engineers went to work. The hundreds of tiny pictures were matched and measured. The maps were compiled and printed. In less than a week, the first reliable maps ever made of Guadalcanal were in the hands of the Marines on New Caledonia—the Marines now knew where they were going and what they would find there. On August 7, 1942, they established their beachhead, and made history.

The Army Map Service, as such, is a relatively recent organization. Only during the war and after a long series of rather complicated reorganizations of separate units did it evolve into its present status. In accordance with Army Regulations, the Assistant Chief of Staff, G-2, War Department General Staff, is charged with the development of plans and policies for military mapping. Responsibilities for the completion of outlined methods and procedures specified in subsequent directives infiltrate through the chain of command, first through the Military Intelligence Division, Office, Chief of Engineers, then to its principal cartographic echelon, the Army Map Service, which, through a number of departments, turns out the end product—modern military maps. The Service's commanding officer and his military staff are selected from Engineers with proved aptitude and talent for topographic pursuits. Its civilian personnel consists of specialists in the fields of Cartography and Photolithography.

Prior to World War II, AMS was known as the Engineer Reproduction Plant, which in turn had absorbed the Central Map Reproduction Plant and other agencies created in anticipation of a World War I mapping crisis. Due to the tactics of trench warfare, the crisis did not materialize, but soon after the war, the Engineer Reproduction Plant began mapping certain strategic areas within the United States. It also produced maps covering military posts and camps. Many of the maps which the Mississippi River Commission prepared as plans or records of flood control and river navigation were worked upon by the Engineer Reproduction Plant.

Peace-time studies involving the methods and techniques of Cartography and Photolithography were undertaken. These studies led to such developments as the blue line board method of color separations, the selection of mapping type best suited to photolithography, the use of transparent adhesives for the application of place names and symbols on drafted copy. Intensive research into the graphic arts conceded that the best medium for map reproduction is Photolithography.

The basic pattern which the Army Map Service eventually would follow in wartime was set in 1938, when the
Engineer Reproduction Plant began compilation of a Strategic Map of the United States. This program also gave a hint of the expansion and of the problems which would accompany such an expansion, to come. Using WPA funds and personnel, most of whom were totally unfamiliar with mapmaking, the ERP published a map series of 87 creditable sheets. More important, however, was the lesson learned. The use of untrained personnel required radical changes in map-preparation methods. As an expert compiler or draftsman cannot be made overnight, the varied operations were divided into short, simple tasks which could be quickly mastered. This method was the beginning of the now famous "assembly-line" technique — a technique which paid handsome dividends during the war. The project proved that untrained personnel could be used in any expanded mapping program after minimum instruction on some specific task.

If any specific year can be singled out as the pivot year upon which the development of AMS wheeled into the organization which made its amazing wartime function possible, then that year is 1939. In 1939, the War Department transferred its map collection from G-2, War Department General Staff (a policy making agency) to the Chief of Engineers (a working organization). The responsibility for the maintenance of the map collection was delegated to the Engineer Reproduction Plant, whose commanding officer was designated as its director. Coincident with the very day on which war broke out in Europe, September 1, the War Department activated the 30th Engineers. From these initial actions the development of the mapping organization for World War II proceeded rapidly.

The passage of selective service legislation in September 1940 made additional engineer topographic battalions possible. Many of these units were trained as mobile units under the direction of the Commanding General, Army Ground Forces, with the advice and aid of the Chief of Engineers. Additional base battalions, equipped with the new multiplex stereo mechanical equipment, were established under the more direct control of the Chief of Engineers. Still others were trained by the Army Air Forces.

Later, within each theater of operations, a mapping organization was developed, headed by the Chief Engineer.

Immediately prior to Pearl Harbor, requests for maps of strange countries became daily routine. Unfamiliar names and unusual scales appeared on work reports. By June 1941, the demands for maps had increased 765 per cent, and personnel had increased 531 per cent.

Also before Pearl Harbor construction of a new building to house the greatly expanding organization began. This building was the first of two erected for war purposes. Early in 1942, the Engineer Reproduction Plant moved from its old, remodeled warehouse at the Army War College to the new site at 6101 MacArthur Boulevard, Washington, D. C., and was renamed the Army Map Service. The mapping of foreign areas was undertaken on a large scale for the first time.

This world mapping assignment is being continued to a limited degree today. For though AMS is not merely a wartime organization, the peaceful years are being utilized to provide the United States with the military maps and map intelligence which were tragically lacking prior to World War II. Today also, AMS is being geared to purposes other than the tremendous production of battle maps on improbable schedules. It is improving channels of information as a means of avoiding the chaotic scramble of wartime immediacy. And it is developing personnel and methods in a program encompassing the post-war techniques of cartography and photolithography.

The talented assistance and complete cooperation of such agencies as the United States Geological Survey, the Cartographic Division of the Tennessee Valley Authority, the Soil Conservation Service, the United States Coast and Geodetic Survey, and several non-governmental photogrammetric and lithographic firms were essential to the Army Map Service in wartime. They continue essential in the achievement of its peacetime program.

**Civilian Schooling for Officers**

Recently announced by the Commanding General, Army Ground Forces, is a program whereby approximately 400 younger officers of the ground arms will attend a score or more of the nation's leading schools and universities for advanced study.

With courses designed to cover a period of two years, Army Ground Forces will prescribe only the general scope of study, with specific curricula and the content thereof to be designated by the educational institution concerned. In general, each course will entail the number of hours of graduate work normally required for a master's degree, and will cover the following fields:

**Technical and physical sciences:**
- Automotive engineering, acoustics, communications engineering, atomic energy, electronics, nuclear physics, aerodynamics (as related to propulsion and guidance of guided missiles), optics and light, meteorology.

**Non-technical:**
- Business administration, journalism, personnel psychology, political science and foreign service, and public administration.

To insure maximum return to the Army for this schooling investment, officers selected must be under 30 years of age on June 1st or the year in which they begin their courses. Waivers of this age ceiling for a limited number of officers under 35 who possess exceptional qualifications for a particular field of study are authorized. Additional qualifications are as follows:

1. Be an officer of the Regular Army, or an officer in one of the civilian components of the Army of the United States who has submitted application for commissioning in the Regular Army, or an officer of the civilian components who is serving for an indefinite period and indicates his readiness to continue on active duty for at least four years subsequent to completion of his course of study.
2. Have had a minimum of one year of commissioned service, and be commissioned in one of the four basic ground arms: Infantry, Cavalry, Field Artillery, or Coast Artillery.
3. Have a general efficiency rating of excellent or higher.
4. Hold a degree of Bachelor of Science or Bachelor of Arts or equivalent in an appropriate field.
By 1st Lt. Milton M. Meisels, FA-Res.

Observing artillery fire from a bucking and jolting tank is no picnic—
but the call, "Hello, Fox Oboe, come up here right away, will you?" is always
a tribute and a challenge to armored artillerymen.

Fires still burn in the German town just captured by American armor, and a rather decrepit looking tank bearing the task force's artillery observer section groans to a halt next to a large and very comforting brick wall. The reconnaissance sergeant lifts his tank helmet wearily.

"Lieutenant, do you suppose we'll ever get back to observing for a good old infantry outfit?"

"I don't know, Sergeant; perhaps never. After this deal we may find we've made a reputation as tankers, and I'm not too sure I'm happy about it if we have."

Spoken from the heart, the officer's remark emphasizes that observing fire from a moving tank virtually requires two sets of ears which can operate independently of each other, four eyes with built-in stabilizers, and a neck with 6400 mils of traverse.

From a bucking and jolting tank, the control of the fire becomes uncertain, the fire itself is less effective, and the observer loses sight of the "big picture." There are situations, however, where the FO has to stick his tank out there with the leading platoon and do his job, despite the difficulties. It is impossible to read a map. The target keeps jumping around in the binoculars, and often blurs out entirely. The noise of the motor, the chattering of the other tankers on the radio, the racket of the bowgunner's machine gun, and the roar of friendly artillery bursting up ahead would make bedlam itself seem like a health sanatorium. A further distraction is the constant search that must be made for targets for the observer's tank. He has a 75-mm gun and two machine guns aboard and the task force commander expects them to shoot!

For some reason, no matter how well the radio may be adjusted, communications invariably become difficult and uncertain while the tank is on the move. Messages become unintelligible . . . the tanker on the right shouts that something peculiar is sticking out of that haystack . . . the FDC wants a repeat on the last sensing . . . the tanks are near the objectives and the commander is screaming to lift that artillery. By this time the observer is really sweating—then, by the grace of God, communication is re-established, fire lifts, and another objective is won.

If it can be avoided, the artillery observer should not make the initial onslaught with the tanks. The more efficient technique is to select a position well behind the leading elements, preferably on high terrain, from which it is possible to observe both the movement of the tanks and the objectives. Thus situated, the efficient conduct of fire and continuous knowledge of the general situation are both far easier and better achieved. If the objective is far off, study the terrain and place the tank from time to time, always being certain that the location of all units is known.

For the artillery observer to achieve this freedom of movement requires that he earn and maintain the complete trust and confidence of the task force commander. Their relationship should be similar to that of a lawyer and his client. Such a relationship isn't issued automatically with the T/O. In fact, at the start of a campaign, many tank officers are rather naive about artillery matters. Some believe that Mr. Redlegs is just along for the ride, and consider his tank as just one more tank for their outfit — one more gun and two more machine guns — and perhaps a good tank to put up at the head of the column because it can be lost without reducing the organic strength of the company.

Fortunately, such an attitude doesn't last beyond the first successful mission. When the tankers see how artillery can soften up an objective and note the protection artillery fire affords attacking forces when laid down in front of them, the observer becomes the fair-haired boy. Thereafter, his counsel is regarded as gospel, and he is permitted to operate in a manner which insures the maximum control of artillery fire.

But being the fair-haired boy isn't as simple as it may sound. When the tankers turn to artillery, they turn in a big way. They're apt to become so artillery-conscious that they don't like to turn over their motors unless a few rounds are falling out there to drown out the noise. They delay attacking any town until it is first softened up by a heavy artillery preparation. Yes, the FO has become their Houdini, who, presto, can make artillery fire appear in three places at once.

"Hello, Fox Oboe. I want a smoke screen about 400 yards to the right of the road, and I want you to keep pounding the town up ahead until the tanks get there. Try to get that fire out there in about three minutes." Such sweeping demands flow easily from the lips of "artillery-minded" tankers. Of course, at such times the FO must deliver a fluent and convincing discourse

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*The author had extended combat experience in Europe as a forward observer with armored artillery. JOURNAL readers will recall his article, "Night Ride Through Knautland," in the May, 1946, issue.—Ed.*
on the limitations of artillery, enumerating the ammunition problem, the time it takes to properly adjust fire, and the difficulties of displacing a battery. He may even find it necessary to overdo it a bit now and then in order to dampen somewhat the tanker's ardor and enthusiasm for artillery and its capabilities. However, when a tank column is halted temporarily during a fast breakthrough, it is an eloquent tribute to artillery to know that the next call on the radio is more than apt to be "Come up here right away, will you?"

Because of the mobile nature of armored action, the conduct of artillery fire is difficult, particularly since the location on the ground of battery position becomes increasingly uncertain with each turn in the road. If gains of ten to fifteen miles are made before a fire mission is sent down, all the observer can hope is that his guns are back there some place along the axis of advance, and he is usually more than satisfied if one battery is in position to answer his call for fire. His constant prayer is to be able to see the first round. And incidentally, one must be extremely careful in observing those initial rounds as the GT line will probably be quite different than what is expected. Disconcerting, too, is to have the artillery battalion in direct support of several tank units elect to follow the advance of another outfit, in which case it will often drift so far away that a call for fire will be unheard and unheeded. Since this can easily occur within the short space of fifteen minutes, it is wise to have radio facilities and frequencies available to the observer in the tank for contacting other field artillery battalions in the area which may be able to lend support.

Forward observation methods are used exclusively for adjusting fire. A novel method of fire which often results from the pincer tactics employed by tank units is called "shooting 'em backwards"—that is, when the target lies between the observer and the guns. Obviously, this makes a "short" an over and a "left" a right.

Because of the large area covered, the tank FO must be equipped with a veritable library of maps, detailing every section where there is a remote possibility that action may take place. Often the tankers don't know until ten minutes before crossing the I.P. what their mission is or what route is to be followed. As a result it is necessary to study the maps carefully, fold them neatly, and have them arranged in such an order that the proper one can be selected quickly. Yes, maps flow quickly during an armored breakthrough. Outfits may run unchallenged over many maps, but the right one must be on top at the right time—many lives may depend upon it, particularly since supported units so often place much faith on the artilleryman. Frequent was the radio query, "Hello Fox Oboe, where in hell are we?" Many higher commanders leaned heavily upon the artillery observer for their leading elements' reports.

The physical handling of maps inside of a moving tank is a technique in itself. To maintain the good-will of the gunner corporal don't lay the map-board itself. To maintain the good-will of the gunner corporal don't lay the map-board on the breech-block. It will soon slip off and hit him on the head!

FO tanks should be amply equipped with radio communications capable of listening in on the tank channel as well as the artillery net. It is well to carry as many different artillery channels as can be had and to check in frequently on these other battalions so they will get to know who you are. If possible a heavy rubber cable extension about 50 yards in length should be secured so that if the situation arises, the tank can be parked next to a house and the cable carried to the room where the OP is located. An SCR 510 radio can easily be carried on the rear deck of the tank and will come in handy if it is necessary to move out on foot. At least four SCR 536 radios should be on hand as the situation may require several observation posts. A good set-up is to park the tank in a safe place and leave one man in it with an SCR 536. Then it is possible to establish several OPs equipped with SCR 536 radios and use the tank as a relay station. This is an effective system in fighting around urban districts where it is slow and cumbersome to have to drive the tank to every house or barn which is contemplated as an OP.
A LIVING MONUMENT TO ARTILLERYMEN OF THE PAST and present, the Field Artillery School Museum has enjoyed a healthy growth since its inception in 1934. The Museum is housed in one of the oldest structures at Fort Sill, a building that served first as a guard house and at one time as a prison for Geronimo, last chief of the Apaches. The history of artillery and artillerymen from the earliest brass cannon to the deadly weapons of the present day is recorded within the Museum's walls and along the bordering walks.

Deeply appreciative as they are for past contributions, the staff of the Museum is aware that an institution of this nature must continue to expand if it is to measure up to its potentialities. Artillerymen should pass by no opportunity to help further this worthy project—a matter of pride for us all.
A Creed For Army Public Relations

By Maj. Gen. Floyd L. Parks

Chief, Public Relations Division, War Department

Republished from the Army Information Digest.

The basic approach of the public relations officer to his job should be the same as that of any officer — indeed, of any man in the U. S. Army. The same high standards apply, whether the job is in artillery, in the air, in mechanized operations, or in public relations.

The first quality that an officer must have for any duty is character. First, character; second, good, common, horse sense, coupled with a sense of responsibility; third, health and energy; fourth, an agreeable personality; and fifth, knowledge of the profession. If he has the first four, he can readily gain the fifth, knowledge of the profession. If he has the first four, he can readily gain and effectively employ knowledge of the profession.

The presence, or lack, of these qualities becomes especially evident in public relations. The positive—or negative—results assume greater than normal proportions of success or failure. This is because we are dealing with media which reach far and wide throughout the nation. Thus, the effect of an intelligent, well-considered act may be multiplied a thousandfold. So can the effect of a thoughtless and faulty performance be multiplied. During the war, a good man overseas was usually twice as good; an inadequate man was always twice as inadequate.

I have mentioned the general qualities that an officer must bring with him to this profession of public relations. On the other side of the picture, let us examine certain qualities held by the public — our people — which we must consider in all our activities.

First, let us never forget the human readiness to believe the worst of anything, or anyone, in preference to the best. Falsehood and half-truth travel fast; a truthful explanation can almost never catch up with false accusation in the public mind. For the most part, only in the courts is a man considered innocent until he is proved guilty.

The impact of a statement in the public press by some self-constituted authority to the effect that the Army is hoarding lumber, or the Army is hoarding doctors, or the Army is hoarding food will always be stronger than any following explanations, unless the charges are anticipated by alert public relations activity.

Second, the public relations officer should never overlook the common tendency to form opinions in terms of black-and-white, with few shades of gray in between — sweeping generalizations of approbation or indictment arrived at on the basis of insufficient facts. People with this tendency mistakenly endow an entire group with the faults, but rarely the virtues, of an individual belonging to that group. To such people, a drunken serviceman on the street means that all servicemen are drunks; and an unjust serviceman on the street means that all servicemen are unjust.

One publicized case of undue privilege can indict the entire Army.

This is one of the chief difficulties with which public relations officers must contend. It presents a situation aggravated by the post-war change in public feeling from over-glamerization down to a debunking psychology that inclines to believe only the worst. This, too, is something that the alert public relations officer must expect — and anticipate.

An intelligent and objective approach to the public, therefore, will consider these two foibles of public opinion: (1) the superior power of criticism over praise, and (2) the tendency to generalize. Facing the problem realistically, we may frankly recognize that the mistakes of a comparative handful of individuals, coupled with half-truths or complete misstatement of facts, have given us the job of counteracting a number of broad misconceptions. These misconceptions, if they are allowed to prevail, will end by doing great harm to the Army as an instrument of national security, and, as a result, to national security itself.

Therefore, our public relations program must intelligently meet misconception with truth, and thereby seek to reach certain long-range objectives, in order to strengthen the position of the Army in its function of serving the nation. This applies both to our personal and our professional lives. It also applies to the behavior of every uniformed soldier. In terms of public relations, we must promote the idea of military courtesy, to displace the misconception of military arrogance.

We must advance the idea of equality, as delineated by the needs of military discipline, to displace the misconception of undue privilege — the so-called "officer caste" system. We must inspire confidence in Army justice, as opposed to the misconception of an unjust system of courts-martial. We must provide a basis for belief in Army ability and initiative, as against the misconception of the so-called "GI mentality."

We must strengthen and maintain the idea of military dignity and capability, and seek to drive out the old, outmoded misconception of the Army as a refuge for misfits and incompetents. Above all, during a most difficult period — the time of peace — we must increase respect and public consideration for the vital function of the nation’s peacetime Army.

I do not mean to suggest that there is no basis for the common misconceptions,
such as those I have mentioned. Many individual mistakes have been made in the past, and will be made in the future; but we must not permit the whole Army institution to suffer in the public mind as a result of sweeping generalizations inspired by the mistakes of a few. What I do want to emphasize, therefore, is that we must recognize the existence of such generalizations, and do our job accordingly, to the best of our ability.

Our job will be made no easier by continuance of little or big mistakes within the military establishment. We must contend with the frequent tendency in certain sections of the press to magnify such mistakes out of all proportion, and often, to misinterpret the calculated remarks of Army officials. Here are a couple of examples.

The first example concerns misinterpretation, and illustrates the results of inaccuracy in reporting. Recently, in connection with the Lichfield trials, the Under Secretary of War was asked by a reporter at a press conference what the "hollering" by defense counsel was all about. Mr. Royall answered, in effect: that it was the duty of the defense to call attention to their side of the case—a straight answer to the reporter's question. He did not at any time use the word "hollering." He emphasized that both the defense and the prosecution had duties to perform and that the War Department's desire was to obtain justice for all, under due process of law. The article which appeared, however, quoted the Under Secretary himself as having referred to the trial as "just a lot of hollering of lawyers." It was inaccurate, to say the least, and the result was unfortunate. It was picked up by reputable editors and radio commentators, and quoted as a fact. It was repeated for days; but we were able to refute it and get local retraction by the newspaper and radio commentators whose quotations from the erroneous article came to our notice.

An example of needless difficulty placed in the path of the public relations officer can be any one of several mistakes committed by Army personnel. It may be as simple as lack of courtesy by Army hospital attendants in replying to inquiries of relatives and friends of patients. It may be the thoughtless action that permitted nylon stockings to go on sale "to officers only." Or it may be the indiscretion that permits an officer to announce publicly that he has been sent to Germany to "expedite" the Lichfield trials and "get the case out of the newspapers." The effects of all these actions are misleading and harmful. They could have been avoided, with a little thought about results in terms of public relations.

To sum up, our individual and collective purpose, as public relations officers, is two-fold:

First, wherever possible to forestall, and in any case to see to it, that any indiscretions on the part of Army personnel are placed in their proper perspective in the public press; that they are not magnified out of all proportion to their real importance; and that, therefore, they are not permitted to color the popular conception of the Army. Nor should any honest and unobjectionable act or statement be laid open to distortion or misconstruction, as a result of inadequate thinking or careless phrasing. The wise PRO will write his official letters and orders as though reporters were looking over his shoulder and taking down every word. How will this look in print? Commanders should write with the same thought in mind.

Our second purpose, in our relations with representatives of the press and other media of public relations, is to act so as to inspire their confidence in ourselves and in our Army as a source of the truth, even when the truth may hurt.

Specifically, this calls for prompt release of the facts, favorable or unfavorable. During the war, the Psychological Warfare Branch issued a propaganda leaflet which was regularly dropped to German troops holding out in Italy. The paper would be effective only by telling the truth. Its reputation for veracity was enhanced when it freely admitted American reverses during the Battle of the Bulge. As a result, when American victories were described in later issues, these stories were believed by the enemy, with a drop in his will to resist. Telling the truth is not only sound, morally; it is also profitable, tactically. We will get the truth by telling the truth.

If we are to expect fairness and impartiality in the press, we must be equally fair and impartial in our dealings with the press. Favoritism—that is, passing out hot news to some, while excluding others—is a short cut to failure in public relations.

Equally important is establishing a reputation for initiative in dealings with press and publications. It is not enough to provide news in answer to requests for news. It is far better to call proper attention to news which may fittingly and usefully be given out.

Here let me underline the importance of keeping an eye on the long range objectives and the larger issues. Every action dealing in the media of public relations should be calculated to advance the purpose of the Army as a whole toward the larger objectives.

Here is the Creed of Army Public Relations—brief, and to the point!

"The United States Army is a public utility, serving the people of the United States who live with people of the United States. The relations of Army people to the people with whom they live, are the relations between neighbors. The relations can be good, for reason; or bad, for cause.

"The United States Army is also a public utility, serving the people of the United States in a vital way. As a public utility it has a character and a reputation that parallel the character and reputation of the individual people who make up the Army.

"The reputation and character of neither the Army as a utility not the people who make up the Army, can be bad without reflecting on the other. The relations between Army personnel and their neighbor people are in the hands of each member of the Army. The relations between the Army as a utility and the people of the United States are a command concern of the Army.

"It is the responsibility of each Army individual to build his own character and reputation in his community. It is the responsibility of Army commander to build the Army's character and reputation in the Nation. The discharge of these responsibilities in the best possible manner constitutes Army public relations."
YEAR-END REFLECTIONS

Y
ear's end is the appropriate time, by custom, for casting a prideful eye backward over twelve months' accomplishments and looking forward confidently to the new year ahead.

This isn't that sort of editorial, because 1946 wasn't that sort of year. It lacked the stupendous punches of 1945—one of history's greatest doing years—when victory and the atom bomb thrilled and rocked and sobered the world. By contrast, 1946 was a how to do year for America and the rest of the world, a year that saw the political process properly reassert itself after years of war making, a year that worried through recurring crises both at home and abroad, a year that provided few conclusive answers to many major problems.

The failure of 1946 to provide conclusive answers should be neither surprising nor discouraging. "How to do" is almost invariably more difficult than "doing." Yet the fact remains that our Nation, our Army—yes, and our Association too—were still sweating out major "how to do" problems as 1947 approached.

OUR NATION

At home, the relentless evolution of the political process was the most significant reality of 1946. Created, for better or worse, by the mid-term elections was a complete division of governmental responsibility—this, at a time when the resiliency of our democratic way was being strained, perhaps as never before. How could a Democratic Administration do a big job with a Republican Congress; or vice versa, if one's political convictions might so prefer?

Most urgent requirement of the world's richest and most powerful and most productive but still goods-and-home-hungry people at year's end: a political common denominator for resolving the merry-go-round riddle of democratic government vs. organized labor vs. corporate management. This riddle would be 1947's inheritance from 1946, with our domestic (and perhaps world) economic stability balanced on the solution.

In world affairs, 1946 followed a pattern that was reasonably clear when it began. Editorially, this JOURNAL then recorded that "the United States is now completely involved in world affairs . . . this is one of the outstanding realities of the century." No less involved at year's end, the American people had been sobered by the complex "how to do" difficulties that go hand in hand with world leadership. Be it noted in passing that such a sobering was progress, in itself. Actually, the events of the year themselves were not too discouraging, in the overall. More important, with faith in the rightness of her world purposes and a maturing capacity emerging inexorably from a broadening experience, there was scant evidence that the United States would repeat her error of the 1920's and again shy back from the responsibilities of greatness. Our people sensed that to do so, in this atomic age, would be to invite something worse than chaos.
However, despite some progress in man's continuing quest for a more ordered world, 1946 bequeathed to 1947 the same urgent requirement it had inherited from 1945: the political equivalent of the atomic bomb.

**OUR ARMY**

As expected, 1946 was a "morning after" year for the Army, a year that posed a vast array of readjustment problems incident to the "leveling off" of a great wartime Army.

Public administration is a difficult and relatively undeveloped science, if such it can be called. Of all aspects of the administrative process, retrenchment is probably the most difficult. Psychologically, it is not easy for public officials—be they soldiers or otherwise—to readjust and gear down their thinking and their organizations and their operating procedures to a new "normalcy," after years of unprecedentedly great expansion and activity.

Our Army struggled with this problem in 1946. It was neither an easy year nor a particularly satisfying year. Regardless of cause, the year seemed characterized by a feverish administrative activity that appeared to be quite out of proportion, in this writer's view, to the actualities. The circumstance left many soldiers in a "hangover" mood of frustrated disquietude. Time would, of course, provide the remedial cure.

The War Department was hampered throughout the entire year by the lack of any guiding legislative directive for the post-war period, which was not written by the 79th Congress. Necessarily, this left much policy planning on an unsteady "if and when" foundation. What of Universal Military Training? What sort of unification of the Services, if any, would be forthcoming? These great questions, among others, were not answerable in 1946.

The year was not without important accomplishments on the positive side. Occupation commitments and other responsibilities beyond the seas were fulfilled in a generally creditable manner. Internally, the War Department reorganized itself and the area commands, set up a more logically integrated school system, made appreciable progress in revitalizing the civilian components of the Army, digested battle lessons at several great conferences and conducted important experiments and tests, integrated thousands of new Regular officers, and—perhaps most significant of all—evidenced a full awakening to the vital need henceforth for a more sympathetic "meeting of the minds" between our Army and our people. The framework for such an understanding was marked out in 1946, although the gears ground and grated raucously on numerous occasions.

Most urgent need of the Army as 1947 came in sights a reasoned legislative pronouncement by the 80th Congress defining the post-war pattern of our Military Establishment.

**OUR ASSOCIATION**

The year 1946 was critical in the life of the United States Field Artillery Association and its JOURNAL.

Underway by 1945, the damaging impact on our Association's welfare of the Army's demobilization was snowballing by the time 1946 arrived. Financially, the Association was sustaining a serious loss each month and membership was plunging downward.

Confident that our Association does, in fact, "contribute to the good of our country" and aware that the accumulation of dollars has no part in our purposes, the Executive Council authorized continued spending in excess of income. It was hoped that a recovery might be achieved and that the JOURNAL could be maintained on a monthly publication basis. Meanwhile the staff introduced major changes in the face, format and tone of our JOURNAL, which changes were designed to stimulate reader interest. Aggressive promotional efforts to increase membership and to expand book sales were also initiated.

For whatever the reasons, the trend of the Association's financial circumstances and membership improved steadily during the second half of the year. In sum, it is clear that our Association achieved an appreciable degree of recovery during 1946, despite the fact that we were still operating at a monthly loss at year's end.

The year 1946 also yielded several major disappointments: the goal of a solid financial operating basis for a monthly JOURNAL was not achieved; the 79th Congress renewed the prohibition against the acceptance of paid advertising; the hoped-for merger of the Field and Coast Artillery Associations did not come about; an essential augmentation of the editorial staff could not be arranged; and the inflow of suitable manuscripts remained sluggish. These "how to do" problems would carry over to 1947.

Weighing all factors, it appeared doubtful as 1946 ran out that our Association either could, or should try to, continue to publish a monthly JOURNAL in 1946. The staff takes this opportunity, however, again to pledge themselves, come what may, to bring to Association members in 1947 the best possible JOURNAL they are capable of producing within the limitations imposed.
The United Nations –

The Organization and Methods of Operation

By Thomas J. Hamilton

Fifty - One Member Nations have banded together in the United Nations Organization for the purpose of keeping the peace. They have been struggling for months to perfect machinery that will preserve international harmony and avert the catastrophe of another world war. At Flushing Meadows that effort is now continuing.

The United Nations Organization (see charts) can be considered as consisting of these six major divisions:

- The General Assembly.
- The Security Council.
- The Economic and Social Council.
- The Trusteeship Council.
- The International Court of Justice.
- The Secretariat.

These six divisions of the United Nations constitute a very complicated structure, which relies on the system of checks and balances that characterizes the American Constitution. However, there is no Supreme Court to settle jurisdictional disputes within the organization, and dominating all its activities is the power residing in the Big Five.

Outside the Assembly the three most important organs of the United Nations are the Security Council, the Economic and Social Council, and the Trusteeship Council.

These three Councils and the General Assembly are related in their functions. The Assembly elects nonpermanent members of the Security Council and of the Trusteeship Council and all members of the Economic and Social Council. The three Councils are obliged to make periodic reports to the Assembly. In the case of the Security Council the Assembly has no power to alter its decisions, but it has the right to discuss and criticize them and exert moral pressure by making recommendations about them.

GENERAL ASSEMBLY

The General Assembly is the parliament, and meets once every year. Special sessions may be called at the request of the Security Council or a majority of the United Nations. Each of the fifty-one member nations holds one vote in the Assembly.

At the present session, the Assembly will have to determine its budget for the coming year and the contributions to be made to it by each nation. It also must approve the constitutions and budgets of various specialized agencies before they can actually be established.

The Assembly has final authority over the reports of the Social and Economic Council. The agreements between the United Nations and the specialized agencies under the jurisdiction of the Economic and Social Council must also be approved by the Assembly, and where it has been authorized the Assembly provide contributions to the budgets of these agencies. Like the Economic and Social Council, the Trusteeship Council is under the authority of the Assembly.

SECURITY COUNCIL

The Security Council consists of the Big Five—the United States, the Soviet Union, the United Kingdom, China and France—all of which are permanent members, and six nonpermanent members. These latter, elected by the Assembly in London last winter, are Australia, Brazil and Poland—to serve two years; and the Netherlands, Egypt and Mexico—to serve one year.

The Security Council’s duty is to investigate all international disputes, to propose peaceful methods of settling such disputes, to call on United Nations members to invoke diplomatic and economic sanctions against the offending nation, in the event of a continued threat to world peace, and, as a final recourse, to take military action.

Big Five power comes to the surface in the Security Council, where, in all matters that do not concern questions of procedure, a decision cannot be made without the affirmative vote of each of the Big Five. Thus, a veto by any one of these powers can prevent the Security Council from taking any action whatsoever. Even any attempt to amend the Charter is subject to the veto. The Charter provides that amendments to it shall come into force after they have been adopted by a two-thirds majority of the Governments of the member nations, including the Big Five.

Two important agencies, the Atomic Energy Commission and the Military Staff Committee, are immediately responsible to the Security Council. Both are advisory bodies.

Atomic Commission. By adopting the atomic-energy resolution agreed on by the Big Three in Moscow in December, 1945, the General Assembly set up the Atomic Energy Commission in London last January. Composed of representatives of the eleven members of
the Security Council and Canada, the Commission is responsible to the Council and is authorized to investigate all matters relating to atomic energy and to make specific proposals for (1) exchanging basic scientific information for peaceful uses, (2) controlling atomic energy to the extent necessary to insure its peaceful use, (3) eliminating atomic weapons as instruments of war, and (4) effectively protecting complying states against violations and evasions by inspection and other means.

Military Committee. On the assumption that the Security Council might one day be compelled to threaten or take military action against a nation endangering world peace, the United Nations Charter established the Military Staff Committee to advise the Council on all military questions, including the regulation of armaments and disarmament, and to assume direction of the armed forces placed at the Council’s disposal. Regular members of this committee are the Chiefs of Staff of the Big Five.

The committee began its deliberations in London last February, resumed sessions in New York late in March, and has been functioning continuously since then. By April, all of the Big Five but Russia had submitted recommendations for the basic principles to govern formation of the United Nations military force. Russia’s proposals were not submitted until September.

Although committee discussions are kept secret, it is believed that, while awaiting Russia’s views, the other four powers reached general agreement that the United Nations could command an effective military force only if the Big Five pledged specific contingents that would be available should the Security Council require them.

ECONOMIC AND SOCIAL COUNCIL

In the Economic and Social Council is placed responsibility for carrying out the broad social and economic objectives stated in the United Nations Charter. These include improvement of health and living standards throughout the world, full employment, international cooperation in educational and cultural fields and similar activities.

The Council is empowered to call international meetings on all social and economic matters; in addition to creating agencies, it can ally itself with agencies already in existence. The Council may also make direct recommendations to the Assembly or to individual countries among the United Nations. It is the one body in the United Nations that is authorized to cooperate with nongovernmental organizations.

The specialized agencies, working as autonomous bodies with the Social and Economic Council, are as follows:

UNESCO. The United National Educational, Scientific and Cultural Organization, designed to foster international intellectual cooperation, was established at a conference held in London in November, 1945, in which forty-one nations took part. A detailed program was drawn up and permanent headquarters were recently set up in Paris.

Among its aims are the promotion of international agreements for the free exchange of information and ideas throughout the world; assisting members,
at their request, in developing educational activities; the institution of collaboration among nations to advance equality of educational opportunity, and the assuring of the conservation and production of the world's inheritance of books, works of art and the monuments of history and science.

FAO. The established aims of the Food and Agriculture Organization, which was organized at Hot Springs, Virginia, in May, 1943, as a permanent agency, are to raise the levels of nutrition in the world, improve the efficiency of production and distribution and better the condition of rural populations.

FAO must attempt to set up a long-range program for sharing the food of the world's productive nations with countries that suffer periodically from droughts, floods or economic dislocations. At its annual conference in Copenhagen in September of this year, delegates of thirty-three of the FAO's forty-two member nations discussed formation of a World Food Board to maintain a world food reserve.

ILO. Created at the Paris Peace Conference in 1919 and inherited from the League of Nations, the International Labor Organization has negotiated a draft agreement with the United Nations for integrating its work with that of the Economic and Social Council. This now awaits the Assembly's approval.

Though government-sponsored, the national delegations to the ILO include representatives not only of government but of management and organized labor. Its purpose is to promote social justice in the world, and this is implemented by the drafting of international conventions. While not all the ILO agreements have been ratified by national governments and while still fewer have been scrupulously observed, the ILO is generally conceded to have had considerable influence in improving working conditions.

PICAO. Representatives of fifty-four nations met in Chicago in November, 1944, at the invitation of the United States, formed the Provisional International Civil Aviation Organization, and drafted a program designed to unify the different and confusing aviation procedures maintained by the various countries.

An agreement defining the United Nations relationship with PICAO has been drawn up and awaits the approval of the Assembly.

World Bank. Established at the Bretton Woods Conference of the United Nations in July, 1944, the International Bank for Reconstruction and Development is the biggest lending agency in the world.

The bank was created to make loans to nations for war reconstruction and for development of member countries. It is not designed to compete with private bankers; it was created to make loans only where private bankers could not take the risk. Of the Big Five, the Soviet Union alone is not a member.

Health Organization. Plans for the World Health Organization were drafted by the Economic and Social Council last June, and it will be created after twenty-six nations have ratified its constitution. It is not expected to negotiate an agreement with the United Nations defining the terms of its relationship as a specialized agency until next year.

In its work of eradicating disease and improving physical and mental health throughout the world, the organization will absorb or direct all existing intergovernmental health agencies and will constitute the world's first single authoritative health group.

IRO. Appointed last spring by the Economic and Social Council, a committee met in London to consider the world refugee problem. After many disagreements the committee recommended establishment of an International Refugee Organization as a specialized agency of the United Nations.

TRUSTEESHIP COUNCIL

Although the Trusteeship Council has not as yet been created, it will play an important role. It is intended to provide international supervision for the territories taken from the enemy states in the first and second World Wars and any other territories voluntarily placed under its authority. The governments administering such territories are to be required to submit reports on economic, social and educational conditions in the areas, which are to be inspected periodically by Council officials.

WORLD COURT

The International Court of Justice is devoted to the arbitration of all international disputes submitted to it and acts as adviser to the United Nations on legal matters. It is successor to the League of Nations' Permanent Court of International Justice, and was formally opened on April 18, 1946. Its fifteen judges, elected in concurrent voting by the General Assembly and the Security Council, were assigned by lot to three-, six- and nine-year terms.

The Court has its seat at The Hague and is headed by Dr. Jose Gustavo Guerrero of El Salvador.

The statute of the Court is given strength by a clause under which nations may voluntarily declare that they accept the tribunal's compulsory jurisdiction in specified cases, such as interpretation of treaties, questions of international law and breaches of international obligations. So far the United Kingdom, the United States and The Netherlands have accepted compulsory jurisdiction.

SECRETARIAT

The United Nations Secretary-General is the executive head of the permanent officials who administer the work of the entire organization. He acts as Secretary-General of all the meetings of the General Assembly and the three Councils and makes an annual report to the Assembly.

In January, upon the recommendation of the Security Council, the Assembly elected to the post Trygve Lie, who had the support of Russia. Under the Charter the Secretary-General holds extraordinary powers, but Mr. Lie has asserted them warily, and mainly in behalf of the Secretariat, resisting efforts to keep the Security Council from sitting far into the night. However, the Charter gives him the right to bring any question before the Security Council that in his opinion is a threat to peace.

At present there are about 2,000 persons on the United Nations payroll; apart from the Secretary-General's own staff, these are divided into eight departments, under eight assistant secretaries general.
"ANSWER" MACHINES

By William M. Hines, Jr.

WHEN THE ARMY wants answers in a hurry—when it needs to know how many field artillerymen are in Europe or how many Negro truck drivers are available for overseas duty—it puts the question to its Machine Records Units.

Large orders on short notice are a commonplace for the MRUs, but of all the jobs it has been called on to perform the recent compilation of Honor Lists of Dead and Missing for World War II was probably the biggest test of recent times.

The essence of the job went beyond the mere fact of size, although 310,000 punch-cards make a formidable stack. The specifications of the task called for an alphabetical arrangement by counties, inclusion in their proper place of all honorable and exclusion of all dishonorable deaths, and the translation of the casualty code into a reasonably few recognizable symbols. As it was, the cards were filed numerically by serial number, the late General Malin Craig's O-86 heading the list.

Another obstacle was that GIs who had suffered execution or who had died in desertion were in with the rest, and the number of cards was too great to permit visual inspection to remove these cards from the file. Also—and a big "also"—there were more than fifty casualty codings, descriptive of various types of deaths; obviously, such a number was far too great for use in a list to be studied by the press and public.

In that room, in addition to people, there are machines. And the question is moot as to which have the more brains—the machines or the people. Perhaps the answer is the people, for they get the machines to do their work for them. But these machines seem to do almost anything. They can punch holes in cards, correct miscoded cards, duplicate cards, count cards, translate holes in cards into letters and numerals, and most wonderful of all, the listing-tabulating-computing-whathaveyou machines. All were used in compiling the casualty lists.

May 27, 1941, the date of President Roosevelt's declaration of unlimited national emergency, was selected as the opening date and January 31, 1946, was taken as the closing date for the compilation. First step was a "sort" run at the rate of about 17,000 cards an hour, to reject all cards bearing a date earlier than May 27, 1941.

The 310,000 cards in the file were taken to the "gang-punch" or duplicating machines. A stack of punched cards were placed in one hopper on top of the machine, a stack of blanks was placed in another hopper, and the current was turned on. With a whirr, the job of punching a duplicate set of cards was begun—a myriad of tiny electrically-charged fingers raced over each original card, seeing and finding holes in the non-conductive paper, and translating the impulses shot through these holes into energy which would actuate dies to punch holes in exactly the same places on the blank card. Quite a process, at the rate of eighty a minute.

So, in a few days, the original set had been duplicated and returned to its filing

Typical of the millions of Machine Records Cards of all conceivable types is this sample of a Casualty Card. With the aid of prepared codes, the ninety-three holes punched in the card yield the following information: George P. Redlegs, Army Serial Number O-3000000, was a captain in command of a truck-drawn 105 Howitzer Battery in the 1000th Field Artillery Battalion. He was wounded in Germany on January 20, 1945, and was evacuated to the United Kingdom, where he died of these wounds on February 18, 1945. This information was entered in the central files of the Adjutant General's Office in the second week of March, 1945. Captain Redlegs, a white man whose component was Army of the United States, was a resident of Manhattan Borough in New York City.
cabinets for further work. From then on, the duplicate set—frozen as of January 31—was used.

The next step was to feed these cards into a machine which would "read" the punches and translate them into a line of printing at the top of the card. This was necessary in the interest of speed in future consultation of the cards because, while an experienced operator can read punch-holes almost as easily as you can read this page, it is more convenient to read a line of printing than to take the card out of the file for study. Interpretation by machine was a simple job: a card was translated every second.

Now to get the cards into the order in which they would be used. The sorting machine, blitz-artist of them all, was used for this job. The speed—or what a small-arms man would call the "cyclic rate" of the sorter—is 400 cards a minute; that is, it can examine any one phase of 400 cards and shoot these cards into the proper "pockets" in one minute. Of course, machine stoppages to add or take away cards cuts down the rate, just as changing clips on a tommy gun cuts down its rate, so 17,000 cards an hour is about right.

You remember General Malin Craig's serial number—the lowest in the "deck" of 310,000 cards. To the machine, which considers every serial number as an eight-digit figure, it was 00000086.

From top to bottom, the "answer machines" shown are: electric card punching machine, electric punched card sorting machine, and electric punched card accounting machine. Photos by courtesy of the International Business Machines Corporation.

It was the first card in the deck, and the first to be sorted. Let's see how the sorting was done:

It was determined that alphabetical sequence would be accurate to the tenth position in a name. Counting spaces, and remembering that last name comes first, the tenth position would be "I" in CRAIG MALI. So when the current was turned on, General Craig's card went into the ninth pocket—the one reserved for the letter "I." Alphabetizing, in other words, was done backward. The next time the General's card went through, the ninth position was sensitized, and the "L" in CRAIG MAL caused it to drop into the twelfth hopper. And so the card was scanned: CRAIG MA, CRAIG M, CRAIG (space), CRAIG, CRAI, CR and finally C. Because there are twenty-six letters in the alphabet, two sorts are necessary for each of the ten alphabetical positions. What this boiled down to was examination of 6,200,000 cards in a total of twenty sorts. With five machines running simultaneously on a three-shift basis, the job was done in three days. The sort was accurate enough for all practical purposes: JONES HERBERT would certainly fall before JONES HERMAN, and it was even-up (but not too important) whether ROGERS HERBERT would come before or after ROGERS HERMAN; the pragmatic outlook on this point was that anyone looking for ROGERS HERMAN would be able to find him without any difficulty.

After alphabetizing, the cards were sorted by state and county according to "Code 72," devised by Machine Records for this purpose. Code 72 broke the United States up by the old Service Commands and assigned numbers to states on a two-digit, alphabetical basis. Connecticut, being the first state alphabetically in the First Service Command, is number 11—the first "1" for Service Command and the second "1" for the state's alphabetical position.

After state sorting, each state group (alphabetically arranged within itself) was re-fed into the sorter for county breakdown. This follows a second section of Code 72 which consists of a three-digit figure as follows: the counties are arranged alphabetically and assigned...
numbers starting with 001. Since the originator of the code foresaw a possibility that new counties might be legislated into existence, this second section of Code 72 was designed as an "expansion" code — only odd numbers were assigned originally: 001, 003, 005, etc., leaving a place in alphabetical order (as an even number, i.e., 002) for any "new" county. Through an oversight, historic old Charles City County Virginia, was left out of the original code and was inserted later as 33 (for Virginia) — 036. This is the only even-numbered county of some 3,000 in the United States.

The county sort and state sort added only ninety machine-hours' work (about two shifts for five machines) to the job and required only single examination of each card on five different runs (or a total of 1,550,000 cards). So the job of transforming a serially-numbered deck into an alphabetical deck arranged by state and county (a job involving examination of 7,750,000 cards) was done in something less than four days. Is there a statistician in the house who could figure how long the job would have taken how many humans?

With the sorting job complete, the task of printing was ready to begin. And this was done by the brainiest machine of them all.

Each casualty card bears much more information than was desired in the honor list. Some to be retained and some to be rejected. Some was to be printed as it appeared on the card and some was to be interpreted into something entirely different; in other words, in addition to printing what it did say on the card, the machine in some instances had to print what it didn't say. Then too, the machine had to keep track of figures while it was doing the other job.

For inclusion and exclusion of information, the operators relied on the brains of the machine—a board with 2,000 holes in one bakelite face and a like number of electrical connections on the other face. This board, incidentally, is not much bigger than the page on which this is printed. The "brain" was wired in a complicated fashion to produce the desired information, and a final check for accuracy was achieved by wiring the machine so that the state and county code would be printed at the extreme right of the page after each name. Thus, the proof-readers could immediately locate a misplaced entry.

Another matter which relied on the selectivity of the machine was that of translating casualty code numbers — more than fifty different kinds—into six broad classifications: KIA for killed in action; DOW for died of wounds; DOI for died of injuries; DNB for died, non-battle; FOD for finding of death, and M for missing. If one of several codes designating different type of non-battle deaths came up on a card, the machine would instantly translate this to DNB and print DNB instead of the code number. It would also automatically reject all "line of duty no" entries.

The machines which do this work are less than ten feet long, under four feet high and about three feet thick. They are popularly reputed to contain thirty-five miles of wire of all sizes. Somewhere in the innards of the machine, in addition to all this wire, the manufacturers have managed to jam 120 little adding machines. The wiring included a provision to strike an automatic total at the end of each county listing and to break this county total down into its component casualty types. An example of a county with 100 deaths would be:

00-000 57 8 1 27 6 1 100

The completed job was released by the War Department earlier this summer. A massive stack of fifty books, it ran to 1,700 pages of names. How accurate? Somewhere between 99.8 and 99.9 per cent.

And what caused these errors—perhaps five hundred of them? Human beings, naturally. Humans who punched cards wrong, humans who lost cards, humans who put cards back in the wrong place after taking them out to look at them, and humans who failed to catch errors in proof reading.

Humans made the errors that the machines couldn't catch. And until they invent machines that really think, the way humans think, or until they start making humans of as stern and reliable material as machines, the output from MRUs will necessarily include a certain minimum of errors.
ONE OF THE MOST INCONgruous sights of the war was the appearance of a pretty girl behind the wheel of a huge, van-like truck making its way over muddy, debris-strewn roads near a battle-front. The truck was familiar to every GI. It was a Red Cross Clubmobile and the petite young driver was one of hundreds who rolled 7,000,000 doughnuts a month to soldiers all over the world.

Clubmobiles of all types, sizes and shapes were operated throughout the world wherever American troops were stationed. At the peak of operation, June 30, 1945, 294 Clubmobiles were operated in overseas theaters. Europe had 170; Great Britain, 31; Mediterranean Theater, 22; C.B.I., 8; Pacific Ocean area, 6; Southwest Pacific 6; Canada-Alaska, 5.

But by May 31, 1946, there were only 17 Clubmobiles in operation. The curtailment of Clubmobile operation marks the passing of a unique morale booster and the closing of a chapter of World War II that packed glamour, laughter, heroism, tears, and just plain fun into the bloody business that was total war.

The Clubmobile program started in the United Kingdom back in October of 1942. The American Red Cross was operating permanent clubs in cities and at large military installations — but many small units of American troops were stationed in villages in isolated areas.

To bring a Red Cross club to these lonely men the Red Cross constructed the first club on wheels and named it a "Clubmobile." The first Clubmobiles were converted British "Green Line" buses. Originally requisitioned by the British government from commercial bus lines and then requisitioned from the British by the Americans, these buses were excellent over the good roads and short distances of England. They contained a kitchen, an electric doughnut machine, a lounge, and two bunks. With the approach of D-Day, Red Cross officials sounded out the Army on the question of whether Clubmobiles would be permitted on the continent. The Army agreed with the proviso that the vehicles be designed so that they could be converted quickly into ambulances if needed.

Eighty GMC 2½-ton 6 × 6 trucks were allotted the Red Cross by the Army. These vehicles, which became standard on the continent, contained a 220-volt doughnut machine, five 35-gallon water tanks, a sink, and storage space for cooking materials and for doughnuts. They were organized in units known as "Clubmobile Groups." Each group consisted of eight clubmobiles, one cinemobile (for showing movies), two supply trucks, two GMC generators which were pulled behind trucks, and one 110-gallon water trailer. Three girls were assigned to each truck and two soldiers and 30 girls were assigned to a group. The soldiers, limited service ex-combat men, drove the supply trucks and helped in maintenance work.

Since the Army could not spare men to drive the Clubmobiles, the Red Cross took on the job of training its girls for the job. The Army loaned GI's as instructors, and the girls soon learned that "double-clutching" is not something done on a dance floor. After preliminary heats around the Wilmington race track where the motor pool was located, the girls took more intensive training at a British tank course complete with hills, craters, and mud wallows. Then for a final exam they drove their ungainly vehicles through London's Oxford St. As one Clubmobile girl put it, "The sight of an American girl driving an Army truck at breakneck..."
speed along the wrong side of Oxford St.
conditioned Londoners for the V-bombs."

With the approach of D-Day, the Red Cross amassed in the UK 4,000,000 pounds of doughnut flour in barrels, 30,000,000 cigarettes in boxes, plus towels, toothbrushes, toothpaste, shaving cream, candy, gum, playing cards, and matches. The Clubmobiles were waterproofed in England, carried across the channel in Liberty ships, transferred to landing craft and then rolled up to the beaches under their own power. On shore they were de-waterproofed before being driven inland. The first Clubmobile, the DANIEL BOONE, drove off an LST onto the Normandy beachhead on July 15, 1944.

Two special Clubmobiles serviced the beaches while combat GIs poured over them and into France. Also there was a "Duckmobile" to service ships on which troops were waiting to debark. This was one of many such improvisations.

During the Allied drive across France army supply lines were not fast enough for the Clubmobiles so the Red Cross organized its own system which operated as a part of the famed "Red Ball Express." Two supply trucks with Red Cross girls as drivers higballed the rough route from Cherbourg to Paris, day and night, seven days a week.

Transportation of all sorts brought "coffee and" to GI's around the world. The Clubmobile became a "Jeepmobile" in New Guinea; a cub-courier-carrier in Sicily; and a "Fleetmobile" at secret naval bases in Great Britain.

In the Mediterranean Theater Clubmobiles were improvised from whatever type of vehicle was available—usually Allied or captured trucks. In areas where motor transportation could not be used because of great distances and lack of roads, "Trainmobiles" were operated. A Trainmobile in eastern India operated a 20-day round trip along the Bengal-Assam railroad to take movies, books, games and canteen service to men in jungle outposts. After September, 1942, when American troops were sent into Persia to establish supply lines to Russia, a Trainmobile consisting of two cars and an engine operated up and down the barren Persian Gulf territory. The trip took three weeks in temperatures that frequently reached 160 degrees.

Many Clubmobiles and their drivers frequently were within range of enemy air action. They were seldom within range of ground fire. But there were several exceptions to this, especially during the "Battle of the Bulge." The only clubmobile fatality occurred at that time when Red Cross Driver Kay Cullen was killed by shell fire at Verviers, Belgium.

To offset the danger and tragedy of their work these slim, trim young drivers often were involved in pleasant and sometimes ludicrous situations. One young Red Cross girl whose previous driving experience had been limited mostly to piloting a snappy station wagon out to the country club was doing her best to start her cumbersome "six by six" when an Army Ordnance crew stopped and offered to help her. In answer to their first question of whether there was any gasoline in the tank, she replied she had put 35 gallons into the tank only a few miles back. After trying everything else with no success, they finally checked the gasoline tank. It was empty. She had laboriously put 35 gallons of gasoline into the tank designed to hold water for making doughnuts!

To those who like to study figures, the Red Cross Clubmobiles offered some interesting ones. For example, in one month, December, 1944, throughout the world, clubmobiles distributed 7,154,000 doughnuts and 2,855,000 cups of coffee. And on no fewer than 8,437,863 occasions the girls answered the question, "Where's your home town, honey?"
Displacement of Field Artillery

By Brig. Gen. W. A. Beiderlinden, U.S.A.*

There is nothing in front of the infantry (armor) but the enemy. The artillery mission is to assist this infantry in getting the objective and when on the objective to prevent its dislodgement by enemy action. This mission requires artillery to "keep up the fire." Among other critical essentials in keeping the fire up is the proper location of firing units (battalions).

Artillery battalions are properly located when there exists an area of 1500 or more yards in front of the infantry that is covered by "time fire" of these battalions. To maintain the proper location of firing units requires the displacement of field artillery battalions.

Displacement is not an operation but is a continuous process which is controlled by a general plan. The plan will vary with the amount of artillery available to a division commander, the condition of roads, the availability of position areas, the extent of visibility, and ammunition allocations.

The division artillery commander plans the displacement for all artillery supporting the division; these plans are coordinated with the corps artillery commander and must include having the decided minimum of artillery supporting the infantry at all times. The mechanics of the plan are to establish displacement phase lines in each regimental zone; these phase lines are established to permit maximum use and time fire and normally conform to lines of observation or other terrain feature. Displacement is then controlled by (1) the arrival at these phase lines by the infantry, and (2) the priority of displacement assigned to artillery battalions advancing in the zone of the infantry regiment (see diagram).

The mobility possessed by the United States Army Field Artillery is such that a plan based upon the above two factors can generally be effected regardless of road or terrain conditions.

The operation called displacement must be enlarged upon—it is too often confused with the movement of firing echelons. It is a continuous operation during the entire time of combat. It is broken down for convenience into the following phases:

1. Map reconnaissance of possible position areas.
2. Liaison aircraft observers report concerning map reconnoitered areas.
3. Ground reconnaissance as soon as possible after a position is under friendly control.
4. Survey of position area.
5. Installation of wire communications.
6. Initial improvement of position area including de-mining or taping of mined areas.
7. The registering of a single piece coincident with the establishment of the forward echelon of the FDC.
8. The movement of the firing echelons into the new positions.
9. Firing echelons displace normally by infiltration, by battery or battalion, dependent on road conditions and the number of battalions in the zone of action of an infantry regiment.
10. Extra ammunition and kitchens follow into the new position at a convenient time. A registered piece permits accurate fire from the battalion as soon as firing echelons arrive in the new positions. The displacement of all battalions having similar missions in the zone of action of an infantry regiment is on the order of the direct support battalion commander providing it conforms to a pre-arranged plan.

The details of displacement listed above are those necessary when operating under the most difficult conditions and in which continuous fire support of considerable volume is required.

Displacement in a pursuit varies slightly from the above principles. A minimum of two battalions are desirable in the zone of action of each infantry regiment, and when using the division artillery alone the medium battalion takes over a direct support mission. Two light battalions are grouped and the one medium and one light battalion are grouped; each group supports an infantry regiment. During a pursuit one battalion as a minimum should be in position to support leading elements. When the leading elements are motorized (quite often "Piggy Back" on an artillery battalion) the field artillery is prepared for a "Crash RSOP."

Displacement in the defense is controlled directly by the division artillery commander coordinated with the division commander and corps artillery commander.

In the defense at least two positions are completely prepared for each battalion, including "digging in" and the installation of all telephone lines. Other rearward positions are reconnoitered and surveyed in. Priorities for movement to rear positions must be coordinated carefully between division and corps artillery commanders, with due

*General Beiderlinden commanded the 44th Infantry Division Artillery in Europe during the late war.—Ed.
consideration for the effective ranges of weapons and time required to get super-heavy weapons out of position. In addition each battery has "dug in" an alternate position in case it receives counter-battery. Pieces for each battery are registered in the alternative positions and displacement positions if time permits.

The plan of displacement of corps artillery in the zone of action of a division is a decision of the corps artillery commander. Brigadier General E. S. Ott, Artillery Officer of the XV Corps under which my division fought for five consecutive months, made an artillery plan for each action. His plans varied from one in which all artillery supporting the division was under an appropriate division artillery commander's control for displacement to the other extreme of the division artillery as a group supporting another division.

Displacement in a limited objective attack is a special operation and requires separate consideration. The definition of a "limited objective" is a variable. However, it is safe to say that it normally
is an attack planned as a one-day operation in the attack of an organized position, and will not exceed a 6000-yard advance. All displacement operations are completed as rapidly as possible after the attack starts except the movement of firing echelons. No firing echelons should displace in this type action until the infantry is dug in on the objective and the enemy's counterattacks have ceased. Artillery should, if possible, be initially located during the attack so as to permit the checking of all defensive barrages for the new defensive line. The volume of artillery fire will be greater in front of a given part of the new position than it is on any part of the original position because of the fanning out of fire possibilities. The depth of searching in the new enemy rear areas only will be lessened.

Displacement across a mined area or a terrain barrier presents an opportunity and a challenge—an opportunity for the artillerist to demonstrate finesse in preparing a workable plan which overlooks none of the above factors, and a challenge to his leadership during the execution phase since small failures must be corrected immediately to prevent cumulation into a situation which would cause disaster to the support of the infantry.

Artillery supports the infantry wherever or whatever it may be; division boundaries are only a lateral demarkation to limit the infantry responsibilities. The call of any forward observer "in trouble" must give him all the artillery that can help him regardless of boundaries. Artillery so operated constitutes a powerful corps reserve which on record has materially assisted in clearing many critical situations.

In conclusion, it is emphasized that the displacing of artillery is a continuous process which is integrated into an overall plan, that the artillery within the zone of action of a division must be given the same consideration as the artillery of the division. Operating on the above outlined principle will give maximum artillery support with a minimum of confusion.

Current training literature leaves much unsaid concerning the displacement of artillery.

**Fuze Wrench**

By Lt. Col. John S. Benson, FA

THE FUZE WRENCH PICTured will cut fuze setting time for any caliber and in the case of the 105 howitzer will speed up considerably the delivery of time fire. Its advantages over the present standard issue fuze wrench M-14 are ease of operation and stability.

The round recess at the top of the new wrench permits the seating of the fuze nose, thereby absolutely preventing the wrench from slipping once the lug has engaged the slot on the time scale, such slipping being the chief fault of the present fuze wrench. It also permits the fuze to be set by turning from directly above, enabling a single cannoner to perform this operation when gun squads are short.

The wrench can be made easily and quickly in any shop, using commonly available materials.

It is not certain to whom the credit belongs for the origination of this wrench. The 18th FA Bn fell heir to it when a gun squad from the 664th FA Bn (250mm How) joined the Battalion. However, the tool is now standard equipment in the Battalion, and the drawing and description are furnished for the convenience of any unit desiring more rapid fuze setting in the firing battery.
Task Force Frost

—A brief report from the winter equipment testing operations now taking place at Camp McCoy, Wisconsin

Task Force Frost, consisting of some 1,400 officers and men, is participating in a seven months' maneuver which has as its objectives the determination of the modifications necessary to present clothing, weapons, and heavy equipment for cold weather operations and the development of new equipment in cases where this is found necessary. The Force is commanded by Colonel Rudolph W. Broedlow, Inf., who commanded the 361st Infantry in the 91st Infantry Division in Italy during the war.

In mid-November, the Force staged a demonstration of its activities which was attended by representatives of the nation's press.

Clothing being put to rigid test includes a string vest worn under the undershirt for ventilation (Byrne vest), Air Corps parkas, wind face masks (see cut), white over garments for camouflage, pile jackets, mukluks, shoe pacs, ski boots, arctic mittens, and wet weather parkas. A front line sleeping bag has been designed to permit the soldier to get into action without having to fight his way out of the conventional type sleeping bag. This is to overcome the claustrophobia so common among soldiers in combat equipped with the standard sleeping bag.

Another recent development is the Arctic sleeping bag, designed for very cold weather. It consists of two down and feather filled cases, an outside water repellent cover, and an inside liner. Also shown were artillery sleds which will be tested, as soon as there is snow, as to the suitability of using sleds for towed weapons.

Some recent artillery developments exhibited were radar and meteorological equipment now being used and tested. Radar Set SCR-584, which tracks enemy mortar and artillery shells, was formerly used only in the location of airplanes. The metro section obtains important weather data by sending aloft a tiny radio sending set attached to a balloon and using a radio direction finder to pick up and interpolate the signals.

Recent mess equipment innovations are the new stainless steel combination knife, fork, and spoon which eliminates noise and may be carried by the soldier at all times and the plastic meal tray which is being tested with a stainless one.

Packboards and rucksacks, used to help carry loads on the back more comfortably, were exhibited along with a convertible sled-toboggan used for hauling up to 350 lbs. of supplies. Mountain climbing equipment included nylon and manila climbing ropes, snap links, pitons, crampons, and ice creepers.

Task Force Frost has a medical platoon, the main purpose of which is to test the "human element" in cold weather operations and evaluate the efficiency of standardized medical equipment and supplies. They also evaluate the adequacy of Army rations on a caloric basis for this type of climate.

The new 57mm and 75mm recoilless weapons were fired and also a new M1 rifle, which can be fired either full shot or full automatic.

On display was a new type of shelter half, a modification of the pup tent, which may be closed at both ends and ventilated by opening one or both ends. Other infantry tentage shown was a new two-man reversible mountain tent which may be pitched white or O.D. according to the camouflage desired; a 16-man squad tent; a six-man pyramidal tent for use in high winds; and the Jamesway Shelter, which is used as a mess hall where sixty men may be served cafeteria style.

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Metro section of an observation battalion prepares to send aloft a balloon carrying a delicate radiosonde set, signals from which are received by the instrument in rear and thereafter converted into weather data for use by artillremen.

GI's, these—believe it or not! Shown are five different types of special winter clothing undergoing test. Particularly ferocious and "comfy" looking, respectively, are the masked figure in white and the ready-for-bed soldier on the right.
Reorganized AGF School System

Effective 1 November 1946, the activities at Forts Knox, Sill, Benning and Riley were reorganized and consolidated respectively into The Armored, Artillery, Infantry and Ground General School Centers. Whereas the troops and stations remain under the commanding generals of the army areas in which they are located, the several Schools and Boards concerned are directly under the Commanding General, Army Ground Forces.

CONSOLIDATION AND ELIMINATION

The following Schools were eliminated, as such, by this reorganization:

**Effective 1 Nov. 1946:**

- The Airborne School—to be replaced by an Airborne Department or Section in The Infantry School at The Infantry Center at Fort Benning, to conduct Airborne instruction.
- The Air Training School—to be replaced by an Air Training Department or Section in The Artillery School at The Artillery Center at Fort Sill, to handle the Army Ground Forces Pilots' Course and the Air Mechanics' Course.
- The Antiaircraft Artillery School—to be replaced by the Antiaircraft and Guided Missile Branch of the Artillery School at Fort Bliss, Texas.
- The Cavalry School—to be replaced by the Ground General School at Fort Riley, Kansas.
- The Coast Artillery School — to be replaced by the Seacoast Branch of the Artillery School at Fort Scott, California.
- The Intelligence School—to be replaced by the Intelligence Department or Section in the Ground General School, to conduct those activities performed by the Intelligence School.

**Effective 1 June 1947:**

- The Mountain and Winter Warfare School, with the responsibility for this type of training assumed thereafter by the Fifth and Sixth Armies.

The reorganization included the transfer of numerous courses among the several schools of the integrated system, and the elimination of the following courses at the School indicated:

- **a.** PMS&T—all schools.
- **b.** National Guard Instructor—all schools.
- **c.** Radio Operators—all schools.
- **d.** Airborne Officers Signal Communication—The Airborne School.
- **e.** Officers Parachute Riggers—The Airborne School.
- **f.** Enlisted Airborne Communication—The Airborne School.
- **g.** Basic Branch — The AAA and S/CA Schools.
- **h.** Advanced Branch — The AAA and S/CA Schools.
- **i.** Enlisted Track Vehicles — The Armored School.
- **j.** AGF Clerks — the Armored School.
- **k.** Officers Animal Management — The Cavalry School.
- **l.** Officers Reconnaissance and Security—the Intelligence School.
- **m.** Enlisted Reconnaissance and Security—the Intelligence School.

GROUND GENERAL SCHOOL CENTER

The Ground General School at the Ground General School Center, Fort Riley, Kansas, will conduct the following courses:

**Officers Courses:**

- Basic (17),
- Intelligence (18½),
- Intermediate Horsemanship (37),
- Advanced Horsemanship (37).

**Enlisted Courses:**

- Horseshoer-Packer (18½), Saddler-Packer (18½), Photo Interpreter (7),
- Order of Battle and Interrogator (7),
- CCS (24), CIC (To be announced), CID (To be announced), NCO (18½),
- Communications Chiefs (18½), Radio Repairman (18½), Motor and Track Vehicles (25).

ARMORED CENTER

The Armored School at the Armored Center, Fort Knox, Kentucky, will conduct the following courses:

**Officers Courses:**

- Basic (22), Associate Basic (13),
- Advanced (37), Associate Advanced (13), Communications (18½), Motor and Track Vehicles (18½),
- Refresher Courses for Senior Officer (As announced).

INFANTRY CENTER

The Infantry School at the Infantry Center, Fort Benning, Georgia, will conduct the following courses:

- *Figures in parenthesis, in this and subsequent sections, show the length of the course in weeks.*
1948 Olympic Games

Subject to the availability of personnel and funds, the United States Army will participate in the 1948 Olympic games.

Last held in Berlin in 1936, the Olympics will be revived in 1948 with winter events tentatively scheduled for March and summer events for July of that year. Site of the winter games has not been determined but the games suitable for the summer will be in London, England.

The Committee headed by Brig. Gen. Russell B. Reynolds, Chief of Special Services Division, War Department, will include qualified officer representatives named by Commanding Generals of the Army Air Forces and Army Air Force Commands, Army Ground Forces and Army Areas, United States Forces European Theater, United States Forces Mediterranean Theater, Alaskan Department, Caribbean Defense Command, Military District of Washington and the United States Military Academy. Army officers with previous experience in Olympic participation have been invited to sit with this Committee.

The Army expects to participate in the equestrian and modern pentathlon events, as it did in past Olympic contests, as well as in other sports from the 1948 Olympic lists. Sports listed for the cancelled 1940 Olympics and which are expected to be among the 1948 games include track and field, swimming, boxing, wrestling, gymnastics, basketball, ice hockey, weight lifting, bobsled, rowing, skiing, fencing, cycling, soccer, football, rifle shooting, pistol shooting, yachting, figure skating, speed skating, canoeing and field hockey.

The War Department will encourage participation of military personnel in preliminary Army training and in tryouts of the various United States Olympic games committees, leading to final selection as members of United States Olympic teams. Those who qualify in the final United States tryouts will be authorized to take part in the Olympic games. All must maintain their amateur standing in their own sports and in other sports as well.

Selection of qualified participants to represent the Army in the tryouts will be based primarily on competition in sports to be selected from the Olympic list. Preliminary competition will be held within the Army areas, Air Forces commands, overseas theaters, departments and commands and in the Military District of Washington.

NOTICE OF ANNUAL MEETING

In compliance with Section 1, Article VII, of the Constitution, notice is given that the annual meeting of the U. S. Field Artillery Association will take place at 5:30 P. M., Monday, December 16, 1946, at the Army and Navy Club, 1627 Eye St., N. W., Washington, D. C.
Soviet Artillery Goes To Town


RED ARMY SOLDIERS base their claim that Soviet artillery is the best in the world on three arguments: (1) there is more of it, (2) materiel is excellent, and (3) tactical use of field artillery is more aggressive in the Soviet Army. Use of artillery in cities is typical of unconventional Soviet tactics.

First the Soviets analyzed the difficulties of observing for artillery in cities.

Fighting in a densely populated area is not like fighting in the field; it is almost impossible to select observation posts which command the enemy’s defenses. Observers must occupy vantage points with a limited field of view, and shift them constantly as the infantry moves forward. It is almost impossible to run surveys to tie these vantage points together, as the Soviets normally do; bilateral observation is the basic observed-fire procedure of their Army.

Work with the regimental “reconnaissance” (sound and flash) battery in cities is a nightmare of frustration. In cities, sound waves from a gun or bursting shell echo off the walls of buildings, are compressed in narrow streets, and are changed beyond all recognition. Sound posts sometimes find themselves in a “sound shadow,” and even when they do hear, deciphering the sound track is extremely difficult.

Sound outposts have a particularly hard time distinguishing between enemy artillery fire and that of their own guns. Front lines are rarely straight, and guns are firing from various directions. Direct-fire pieces may be emplaced ahead of the sound outpost, making it all the harder to distinguish friend from foe. Under field conditions, the “visual reconnaissance platoon” (flash ranging) is usually able to locate enemy strongpoints, heavy weapons, and artillery batteries by intersection. This requires a base line at least one quarter as long as the observer-target distance. Under city conditions this system will work only at night. The enemy will be firing both infantry weapons and artillery from basements, garages, and the like. After dark a rough intersection can be obtained on sky glow from a flash base if it is sufficiently close to the hostile battery and nearly perpendicular to the enemy’s line of fire.

The Soviets found solutions to these and other difficulties during the fighting for Breslau.

Forward observers accompanied infantry artillery detachments. Because each observer had such a small field of view, extra forward observer parties were organized. Flash bases overlapped so that intersections could be superimposed, and so double-checked.

At Breslau the Reds introduced an entirely new method of artillery observation. Observers had to be extremely close to the enemy—sometimes only 40 or 50 yards. Instead of being able to see everything at such short distances, observers were shot the minute they showed their heads; they could see very little. They collected large mirrors and would set one up by the wall of a room opposite a breach or window; then they would sit against the front wall and look at the mirror. This was better than using periscopes, as it gave a much larger field of view. The first mirror set up enabled its users to spot two guns emplaced in the ruins of a house, three machine guns, and several grenade launchers. The use of mirrors spread fast.

Battery and battalion commanders had to stick close to the commanders of supported infantry units, as there is no substitute for command liaison in street fighting.

A system of flank observation was devised, with not less than one flank OP per battery. These were not used to conduct fire as much as to study the enemy’s system of defenses from an additional angle. These OP’s were particularly useful in preparing an assault.

Each battery and battalion also had “mobile OP’s” with which to attack targets invisible to, or barely seen from, fixed OP’s. Mobile OP’s consisted of two experienced observers with a periscope, who moved up and down the front, observing specific targets, and collecting all observation data they could from infantry observers. They were supplied with panoramic sketches of their zones. During a battle the mobile OP’s were stationed behind or on the flank of an assault unit. The officer who sent out the observers assigned definite targets, so that their attention was not distracted. When they saw anything else worthwhile, they reported it directly to their own commander, who may have ordered them to point out a target of opportunity to roving guns sent forward during the battle to deliver direct fire.

Overwatching OP’s were established on the upper stories of tall buildings, in an effort to obtain general observation of streets occupied by the enemy. These OP’s also checked the camouflage discipline of friendly troops.

The Red Army contends that observation around the clock should always be stressed in city fighting, where the enemy is so well hidden that he only betrays himself by movement or the flash of his weapons. Enemy gun flashes and the bursts of an observer’s own shells can be picked up most readily at night.

In positions very close to the enemy, every effort was made to tie into the enemy telephone wire net to intercept German messages and commands.

Large numbers of Soviet guns were brought forward for direct fire during the street fighting. Considerable stress was laid on training their crews to observe the enemy constantly. Battalion staffs maintained contact with roving guns and obtained frequent reports. These reports were studied with those of regular observers.

The basic technique of Soviet observation, the bilateral method, was modified in city fighting. Instead of trying to plot intersections, pairs of OP’s reported a target as being in or near a certain building. The specific window or breach from which an enemy weapon was firing was reported if possible. The building was then identified on a firing chart. This system facilitated the designation of targets for direct-fire missions.
November 1945.

McGINLEY, Field Artillery, U. S. Army, for exceptionally meritorious and distinguished services in the performance of duties of great responsibility during the period June 1944 to 15 August 1944 and 27 January to 8 May 1945.

Colonel (then brigadier general) FRANK DORN, FA, U. S. Army, for exceptionally meritorious and distinguished services in the performance of duties of great responsibility during the period April to October 1944.

Colonel (then brigadier general) EUGENE McGINLEY, Field Artillery, U. S. Army, for exceptionally meritorious and distinguished services in the performance of duties of great responsibility during the period June 1944 to November 1945.

LEGION OF MERIT
Brig. Gen. THOMAS F. HICKEY
Col. LAWRENCE B. BIXBY
Col. PAUL C. BOYLAN
Col. CLAUDE F. BURBACH
Col. WILLIAM W. DIXON
Col. JAMES C. HUGHES
Col. RICHARD PARK, JR.
Col. CHARLES L. STEPHENSON
Lt. Col. DONALD C. BEERE
Lt. Col. WILLIAM CALFEE
Lt. Col. RODERICK L. CARMICHAEL
Lt. Col. O. S. HULLEY
Lt. Col. WINFIELD W. SCOTT
Maj. STANLEY B. BONNER
Maj. DOUGLAS GORMAN, JR.
Capt. LANDIS GORES

OAK LEAF CLUSTER TO LEGION OF MERIT
Col. EUGENE B. ELY
Col. HENRY E. ROBISON

SECOND OAK LEAF CLUSTER TO LEGION OF MERIT
Brig. Gen. HUGH CORT
Brig. Gen. LEMUEL MATHEWSON

SILVER STAR
Lt. Col. ALVA R. FITCH

BRONZE STAR MEDAL
Col. LAWRENCE B. BIXBY
Maj. MAX K. GILSTRAP
Capt. PAUL E. MOORE

1st Lt. PATRICK M. NEILOND

OAK LEAF CLUSTER TO BRONZE STAR MEDAL
Col. PERCY H. LASH
Maj. HARRY B. PACKARD
(posthumously)
Capt. JOSEPH G. K. MILLER
T/Sgt. (then S/Sgt) JOSEPH OFFNER

BATTLE HONORS

THE 44TH FIELD ARTILLERY BATTALION is cited for outstanding performance of duty in action from 26 July to 2 August 1944. As the artillery component of the 22d Regimental Combat Team which was attached to Combat Command A, 2d Armored Division, the 44th Field Artillery Battalion aided materially in effecting the breakthrough in the German line west of St. Lo, France. The resulting St. Gillis-Marigny gap, which the 44th Field Artillery Battalion helped to establish by penetration and thereafter held open, permitted the break-out of Allied armor, which played a major part in the complete collapse of the German western positions. Without previous experience and only the briefest indoctrination, the 44th Field Artillery Battalion entered the St. Lo breakthrough operation on 26 July as armored artillery in a highly mobile warfare at St. Gillis, Canisy, Le Mesnil Herman, Villerbaudon, Mayen, Percy, and Tessy-Sur-Vire. Throughout the operation, forward observers rode atop tanks and directed fire in close support of attacking infantry. Continuously displacing forward, the battalion was subjected to murderous enemy aircraft bombing and strafing. At Villebaudon, cannoniers were forced to attack enemy infantry in order to secure firing positions for their guns. Despite unusual difficulties encountered and the extreme fatigue produced by 24 hours a day mobile combat, the esprit of the battalion remained superior throughout. Consistently and invariably, the 44th Field Artillery Battalion performed its mission as an intricate part of the command, delivering close supporting fire speedily and accurately with devastating effect upon the enemy. The superb courage, combat efficiency, and tenacity of purpose manifested by each officer and man of the 44th Field Artillery Battalion reflect the highest credit on themselves and the armed forces of the United States. (General Orders 69, Headquarters First Army, 26 July 1946.)

THE 306TH FIELD ARTILLERY BATTALION is cited for its magnificent courage, heroism, and skillful performance of duty in action against the enemy on the Island of Leyte, Philippine Islands, during the period 24 to 31 December 1944. The 306th Field Artillery Battalion was given the vital mission of supporting the 305th Infantry Regiment in its attack on the last enemy escape route to the seaport of Palompon. This operation consisted of a pincer movement of one force driving over the mountain and another from the sea. On the night of 24 December, the 306th Field Artillery Battalion began its march from the Palompon Road Junction along the only road to Matagob, a distance of 10 miles over a single, narrow causeway, under persistent enemy sniper fire. Immediately upon arrival at Matagob, the 306th Field Artillery Battalion came under observed enemy artillery fire and promptly opened counterbattery fire while shells were falling in battery positions. The enemy fire was silenced and enemy field pieces destroyed within a few minutes of the initiation of the artillery fire. The battalion's position was, of necessity, 2,000 yards in rear of the front lines and without defilade from the commanding terrain held by the enemy demolition parties, which were killed at close quarters by members of the battalion. On 25 December, the infantry advance in the mountains encountered strong enemy resistance and was held up temporarily. The enemy was concealed skilfully in numerous mutually supporting strong points. Massed artillery fire was placed on the enemy. These concentrations were so dense and effective that they stripped the terrain of all vegetation, caught the enemy in his well-concealed and dug-in positions, and inflicted severe casualties. After these fire missions were completed, the infantry was then able to continue its advance. This vital artillery support was accomplished despite the fact that the 306th Field Artillery Battalion was hemmed in by enemy groups in the surrounding hills, without infantry protection, continually fired upon by enemy artillery and mortar units, and subjected to persistent night attacks made by the demolition parties of a fanatical foe. About 0300 on 26 December, an enemy force, with estimated strength of a platoon, attacked the service battery, but was driven back after a sharp and decisive fight, leaving three dead. Substantial evidence was discovered later that the enemy had suffered heavy casualties in this short action. Later, an artillery patrol engaged the enemy about 1,000 yards from the battalion's position. After receiving several casualties, the patrol was withdrawn and the enemy taken under direct artillery fire. More than 50 Japanese...
were killed in this action. Another artillery security patrol, composed of 20 men from a firing battery, encountered an enemy infiltration party of approximately 50. The patrol, with grim determination, charged the enemy, killing 33 and routing others. Only six members of the patrol were wounded. Lacking infantry protection, the 306th Field Artillery Battalion maintained its position for 144 hours in this infested area, displacing only when its immediate tactical mission had been completed. Though subjected to attack day and night, this organization contributed materially to crushing the enemy between two friendly forces, enabling the latter to effect a junction and wrest from the enemy his last port, thus terminating all organized resistance on the Island of Leyte, Philippine Islands. The extraordinary determination, tenacity, aggressiveness, and esprit de corps displayed by the 306th Field Artillery Battalion in its isolated mountain position and fight against a fanatical enemy reflect the highest credit on this organization and the United States Army.

HEADQUARTERS and HEADQUARTERS BATTERY, 9th INFANTRY DIVISION ARTILLERY, is cited for conspicuous gallantry and heroism in battle on 21, 22, and 23 February 1943, in repelling an attack by vastly superior forces, which were attempting to break through the Allied lines in the vicinity of Thala, Tunisia. Headquarters and Headquarters Battery, 9th Infantry Division Artillery, completed a 100-hour forced march from Tlemcen, Algeria, covering a distance of 735 miles in bitter weather over tortuous and almost impassable mountain roads on the night of 21 February 1943. Without prior reconnaissance or adequate maps, harassed by enemy fire, and forced to maneuver through a congested narrow road, nevertheless, the battery occupied battle positions, set up communications, established observation posts, and was ready to deliver fire by daylight. Although enemy forces were entrenched only 2,500 yards distant and there were only three platoons of friendly infantry in front of the artillery, the unit maintained constant and steady fire with much deadly effect and enemy tank units were dispersed and driven back. The cool and determined manner in which Headquarters and Headquarters Battery, 9th Infantry Division Artillery, entered into battle, after an almost incredible forced march, contributed in great measure to the defeat of the enemy's attempt to break through the Thala defile. The gallant entry into battle and the heroism with which the volume of fire was maintained, despite terrific enemy fire, are in keeping with the highest traditions of the American military service.

The 126th FIELD ARTILLERY BATTALION is cited for extraordinary heroism and outstanding performance of duty in action against the enemy on Luzon, Philippine Islands, from 30 January to 3 June 1945. For the entire 125 days necessary to complete this operation, the 126th Field Artillery Battalion was in continuous direct support successively of the 127th, 126th, and, finally, the 128th Infantry Regiments of the 32d Infantry Division. To do so, it was forced to position itself and its guns amidst treacherous terrain and precipitous cliffs, carving its final position by hand and by bulldozer from a hillside 4,000 yards west of Mt. Imugan, in order that it might support decisive infantry operations toward Mt. Imugan and Santa Fe in the ensuing 10 weeks. Only from this position and no other could fire support be effectively maintained against a fanatical and well-dug-in enemy, who subjected the unit to all kinds of harassment, registering continually upon its position with small-arms and artillery fire of all calibers and ceaselessly practicing well-developed infiltration tactics. Regardless of the extreme hazard and danger of necessity placed upon it and with a grim tenacity of purpose and even greater heroism, the 126th Field Artillery Battalion, with magnificent esprit de corps, maintained both its position and its fires until the completion of the 32d Division's operations, covering its relief and withdrawal and being the last unit to leave the scene of the action. In this period, it fired more than 69,200 rounds of ammunition for a rate of better than 1 every 2 minutes. Despite this heavy rate of fire, it was successfully delivered without inflicting a single casualty upon the supported infantry, a support action rendered under all but impossible conditions. Wire communications and supply were maintained at a great cost to the battalion, which, in addition, being denied flank support because of a shortage of troops within the division itself, was forced to maintain its own security by constant patrolling action. Because of the extreme hazard of the position, casualties were heavy, both at the position and in forward areas, where forward observers and liaison parties consistently operated, the battalion suffering more than all other artillery units of the division concerned. This brought about a critical shortage of personnel, resulting in officers and men maintaining themselves for periods as long as 37 days in the forward areas without relief and despite the need in many cases for hospitalization. Throughout this time, many acts of individual heroism and gallantry were performed by officers and men of the battalion, who so successfully completed their mission as to play a paramount role in the opening of the Villa Verde Trail, an action in which Japanese troops (commanded by General Yamashita) suffered more than 9,000 casualties. The skill in battle, accuracy of their fires, and selfless devotion to duty displayed by the officers and men of the 126th Field Artillery Battalion during this critical phase of the Luzon campaign, not only reflect great credit on the members of the battalion but on the battalion itself, the 32d Division, and military service as well.

The 466th PARACHUTE FIELD ARTILLERY BATTALION is cited for extraordinary heroism, efficiency, and achievement in action against the enemy near Wesel, Germany, on 24 March 1945. Jumping by parachute, north of Wesel, the 466th Parachute Field Artillery Battalion encountered some of the bitterest fighting in the accomplishment of the objectives assigned to the 17th Airborne Division. Landing in a drop zone completely covered by accurate fire from enemy artillery emplacements, this parachute field artillery battalion, after gathering ammunition and howitzer bundles off the fire-swept field, went into action to fire their first round within 30 minutes after getting to the ground. Although 1 battery of this parachute field artillery battalion had lost all of its officers, the battalion's fire control was established within 1 ½ hours and firing in direct support of a parachute infantry regiment. The 466th Parachute Field Artillery Battalion, in addition to accomplishing its assigned mission, succeeded in capturing or destroying 18 field pieces and approximately 18 enemy machine guns. The proficiency and aggressiveness of the 466th Parachute Field Artillery Battalion, in the face of great odds and a defensively prepared enemy, resulted in the provision of adequate artillery support, which assisted materially in the ultimate exploitation of the gains achieved.

The 189th FIELD ARTILLERY BATTALION is cited for outstanding performance of duty in action against the enemy on 13 September 1943 at Salerno, Italy. During the first bitter 4-day battle on 9-12 September 1943, for establishment of the Salerno beachhead, success of the venture had not as yet been assured. The most critical day of the entire operation came on 13 September 1943, when the enemy launched its heaviest counterattacks. Success was within the enemy's grasp when he annihilated infantry elements holding the vital Sele-Calore Rivers corridor. The 189th Field Artillery Battalion, in position near the junction of the two rivers, stood alone between the strong enemy force and the beaches. As the enemy moved to the attack, the 189th Field Artillery Battalion formed a defensive line manned by the antitank platoon, machine gunners, cooks, truck drivers, ammunition handlers, clerks, and spare cannoners. The Germans reached the river line and attacked in force with rifles, machine guns, mortars, tank fire, and artillery, but the 189th Field Artillery Battalion held fast. From 1800 hours until dark (2200 hours), the enemy attacked continuously in an attempt to overrun the battalion's position, but by grim determination and indomitable fighting spirit, the battalion repulsed all enemy assaults. The howitzer crews delivered almost continuous fire, mostly by
of the United States. are a credit and inspiration to the armed forces members of the 53d Field Artillery Battalion and made possible the ultimate success of the Salerno Campaign.

THE 53d FIELD ARTILLERY BATTALION is cited for outstanding performance of duty against the enemy at Luzon, Philippine Islands, on 3.7 February 1945. During this period, the 53d Field Artillery Battalion supported the 63d Infantry Regiment in a flanking movement to by-pass Munoz and attack San Jose. The battalion built a road to follow the advancing infantry across soggy swamps, rice paddies, and deep irrigation ditches in order to carry out the mission. This movement was under enemy observation and machine-gun, mortar and artillery fire. After reaching its position, the battalion was attacked for 3 days and 4 nights by enemy infantry raiding parties. On the morning of 7 February 1945, at 0330, the remnants of the Japanese 2d Armored Division broke through a road block to the rear of the battalion and reached the battalion position area. Although it was too dark to see but a short distance, the tanks were taken under fire by .50 caliber machine gun located in the battalion perimeter. The leading tank was set on fire. The remaining tanks and armored personnel carriers deployed in the dark and accompanying personnel dismounted and attacked the 53d Field Artillery Battalion position. The battalion fought off this night attack with carbines, machine guns, and hand grenades and then took the initiative by sending bazooka teams in among the tanks and disposed their 105-mm howitzers to positions more advantageous for direct fire. When dawn broke, a vicious tank-artillery duel commenced. Firing at point-blank ranges of from 50 to 300 yards, the 105-mm howitzers of the 53d Field Artillery Battalion fought the turret-mounted guns of the Japanese tanks. When the last enemy gun was silenced, it was found that the enemy had lost 6 medium tanks, 5 light tanks, 10 personnel carriers, 2 105-mm howitzers, and 249 men. The 53d Field Artillery Battalion lost one howitzer by direct hit, plus additional casualties among vehicles and personnel. This action by the battalion and adjacent troops eliminated the Japanese 2d Armored Division as an effective fighting force. The 53d Field Artillery Battalion distinguished itself in action by extraordinary heroism and exhibited such gallantry, determination, and esprit de corps as to make it outstanding in this engagement. The magnificent courage and devotion to duty of all members of the 53d Field Artillery Battalion are a credit and inspiration to the armed forces of the United States.

FIFTY-ONE ROADS on the Post of Fort Sill are to be dedicated to the memory of artillerymen, the great majority of whom lost their lives during World War II. New sign posts bearing the names of these honored dead, replacing letter designations for streets which until now have been left unnamed, will be raised in the near future to keep alive the memories of those who have gone before and left their mark in the history book of Fort Sill.

Irwin Circle, for Major General George LeR. Irwin, Commandant of the Field Artillery School from July 1, 1923, to April 1, 1928; died Feb. 19, 1931, while on route to the United States from Europe.

Treat Road, for Major General Charles G. Treat, who rendered invaluable assistance to the first Commandant of the School of Fire when it was being organized in 1911. General Treat died on Oct. 11, 1941, in Washington, D. C.

Cruikshank Circle, for Brigadier General William M. Cruikshank, Commandant of the Field Artillery School from Feb. 8, 1930, to April 26, 1934; died Feb. 23, 1943, in Washington, D. C.

Hand Road, for Brigadier General Daniel W. Hand, formerly Assistant Commandant of the Field Artillery School and Director of the Department of Gunnery; died Sept. 28, 1945, at Letterman General Hospital, Presidio of San Francisco, California.

McBride Avenue, for Brigadier General Allen C. McBride, formerly an instructor in the Department of Tactics of the Army Ground Forces Air Training School; died May 9, 1944, while a prisoner of war at Camp Tainwan-Formosa, Philippine Islands.

Searby Circle, for Brigadier General Edmund W. Searby, formerly an instructor in the Department of Animal Transport of the Field Artillery School; killed in action in France, Sept. 14, 1944, while commanding the artillery of the 80th Infantry Division.

Clarke Road, for Colonel William Clarke, formerly director of Department of Tactics of the Air Training School at Fort Sill; died Jan. 1, 1945, while commanding a field artillery group in the European Theater of Operations.

Hirsch Road, for Colonel Ralph Hirsch; died April 13, 1942, in the Philippine Islands.

Hoskins Road, for Colonel John O. Hoskins; died Jan. 22, 1942, while serving in the Asiatic-Pacific Theater.

Hudnutt Avenue, for Colonel Dean Hudnutt, formerly an instructor in the Department of Tactics of the Army Ground Forces Air Training School, and also one-time editor of THE FIELD ARTILLERY JOURNAL; died Oct. 11, 1943, while serving at the Army Air Forces Technical School, Yale Univ.
Matthews Road, for Colonel Church M. Matthews; killed in action Dec. 17, 1944, while serving as chief of staff of the 7th Armored Division in the European Theater of Operations.

McNair Avenue, for Colonel Douglas C. McNair, son of Lt. Gen. Lesley J. McNair, and formerly an instructor in the Department of Gunnery of the Field Artillery School, killed in action on Guam.

Roberts Avenue, for Colonel Thomas A. Roberts, Jr., formerly an instructor in the Department of Tactics of the Air Training School; killed in action on March 8, 1943, during a Japanese air raid.

Atkinson Road, for Lt. Col. John J. Atkinson; died Feb. 24, 1945, while serving in the Asiatic-Pacific Theater.

Babcock Road, for Lt. Col. David S. Babcock; died Dec. 15, 1944, while serving in the Asiatic-Pacific Theater.


Bryan Street, for Lt. Col. John K. Bryan; died July 5, 1944, while serving in New Guinea.

Cook Street, for Lt. Col. John G. Cook; died Jan. 27, 1945, while serving in the Asiatic-Pacific Theater of Operations.

Coyle Road, for Lt. Col. Harold J. Coyle; died April 17, 1942, in the Asiatic-Pacific Theater.

Cureton Avenue, for Lt. Col. Nathaniel C. Cureton, Jr.; killed in action June 20, 1945, in the China-Burma-India area.

Ganahl Avenue, for Lt. Col. Joseph Ganahl; died Feb. 11, 1945, while serving in the Asiatic-Pacific area.


Leever Avenue, for Lt. Col. Edward B. Leever; died March 28, 1945, while serving in the Asiatic-Pacific area.


Lindsay Avenue, for Lt. Col. James R. Lindsay, Jr.; died Dec. 15, 1945, in the Asiatic-Pacific Theater of Operations.

O’Connor Street, for Lt. Col. Richard E. O’Connor; died July 18, 1943, in North Africa.


Shade Avenue, for Lt. Col. William L. Shade; died Nov. 13, 1944, while serving in France.

Stout Avenue, for Lt. Col. Warren C. Stout; who died Nov. 29, 1943, in North Africa.

Tacy Street, for Lt. Col. Lester J. Tacy; died Feb. 9, 1945, while serving in the Southwest Pacific.

Vepsala Avenue, for Lt. Col. George D. Vepsala; who died Dec. 15, 1944, while serving in the Asiatic-Pacific Theater of Operations.

Walker Street, for Lt. Col. Henry C. Walker, the 3rd; died Feb. 24, 1944, while serving in the European Theater of Operations.

Wilson Street, for Lt. Col. John N. Wilson; died July 11, 1944, in the European Theater.

Woodbridge Road, for Lt. Col. John P. Woodbridge; died Dec. 15, 1944, while serving in the Asiatic-Pacific Theater of Operations.

Baehr Road, for Major Carl Baehr, Jr.; killed in action on Dec. 14, 1944, while being transported from the Philippines to Japan.

Barbour Road, for Major Samuel L. Barbour, Jr.; died Feb. 13, 1945, while serving in the Asiatic-Pacific area.

Baton Avenue, for Major Howard M. Batson, Jr.; died Jan. 30, 1945, while serving in the Asiatic-Pacific Theater of Operations.

Hatch Road, for Major Steve E. Hatch; killed in action in Dec. 1944, while flying a combat mission in the European Theater of Operations.

Lauman Avenue, for Major Phillip G. Lauman; died Dec. 15, 1944, while being transported as a prisoner of war from the Philippine Islands to Japan.

McKee Street, for Major John L. McKee, Jr.; died April 12, 1945, while serving in Germany.

Packard Street, for Major Harry B. Packard; killed in action Dec. 14, 1944, while being transported from the Philippines to Japan.

Scott Street, for Major Stanley C. Scott; died Aug. 3, 1944, while serving in France.

Thomas Street, for Major William R. Thomas; died Feb. 13, 1945, while serving in the Southwest Pacific.

Webster Street, for Major Thomas J. Webster; died Oct. 27, 1943, while serving in North Africa.

Coune Road, for Capt. Felix H. Coune; killed in action on the Baurauan, Leyte, air strip on December 8, 1944, during a Japanese air raid.

Murphy Street, for Capt. John J. Murphy, Jr.; died Sept. 7, 1944, off Mindanao, in the Philippine Islands.

Skelly Road, for Capt. Thomas M. Skelly; killed in action in the spring of 1945, while flying a combat mission as Air Officer of the 252nd Field Artillery Group.

Swartz Street, for Capt. Benjamin A. Swartz; died Dec. 3, 1944, while serving in the European Theater of Operations.

Phillips Road, for 1st Lt. Hicks R. Phillips; killed in an airplane accident near Fort Sill, April 19, 1943, while giving dual instruction to a student pilot.

Stalling Road, for 1st Lt. Robert P. Stalling, one of the early instructors of the Department of Air Training; killed on March 8, 1943, during a routine training flight.
A NEW OFFICER CANDIDATE selection system has been instituted. Effective 1 February 1947, it is expected that the new plan will guarantee a sound and uniform method and procedure for the selection of officer candidates on an Army-wide competitive basis. For the first time in history, an enlisted man will evaluate the qualifications of another enlisted man to attend Officer Candidate School. The program also provides that selection for attendance at OCS will be based more on intelligence and officer-like qualities than on a formal educational background.

The OCS program has been reorganized to provide that all enlisted men, flight officers or warrant officers desiring commissions in any of the ground arms or the technical and administrative services must attend a school of six months’ duration at Fort Benning, Georgia. Upon graduation, each individual will be commissioned and assigned for three months to a basic associate course conducted by the arm or service for which the individual has been selected. Thereafter, officers will be assigned to duty within the arm or service conducting that particular course.

In order to qualify for selection, an applicant must have attained his 19th birthday and must not have passed his 31st on the date of enrollment in the course for which selected. No waiver of age will be granted. He must be a citizen of the United States and must have had at least six weeks’ continuous service immediately preceding the date of application, and must have completed the Military Training Program prior to the date of enrollment. This provides that a man entering the Army can qualify for OCS upon completion of his basic training. However, only those individuals receiving the highest composite scores will be permitted to attend OCS from training centers. Army experience during the war proved that although a good percentage of eligible men brought into OCS from training centers proved excellent officer material, the man completely familiar with the Army for a period of time was better equipped for his duties later in his career as an officer. Consequently, it is anticipated that the greater proportion of officer candidates will be made up of men who have served in the ranks for a time.

Selection for OCS training will be made on the basis of Army-wide competition with each applicant executing certain scored testing devices from which will be derived "composite scores." The composite score will determine the standing of each applicant in relation to all other applicants being considered for selection for a specific class at a particular time. The quotas for a specific officer candidate class will be filled from the number of men having the highest composite score, starting at the top.

The process for qualification and selection starts with a physical examination. If qualified physically, the candidate for selection takes an intelligence test, which, if passed satisfactorily, is followed by a "self rating" test, a written examination in which the answers to the questions establish the man's caliber as possible officer material.

If the candidate has qualified through these steps, he is submitted to an evaluation by another enlisted man, a noncommissioned officer who in the opinion of the immediate superior commissioned officer is best qualified to make such an evaluation based upon the frequency of daily contact and the supervisory relationship between such non-commissioned officer and the applicant. In the case of applications from non-commissioned officers of the higher grades the evaluation report will be secured from a qualified commissioned officer.

After the evaluation rating by a fellow enlisted man has been compiled the applicant will be ordered to the nearest officer interview board, where he will be evaluated again for selection. Although elaborate for the number of candidates selected during peacetime, in the event of an emergency the officer training plan should not only greatly reduce the officer attrition rate but also provide the Army with an efficient, easily administered, and practiced system of selection of officer candidate material from civilian manpower pools.
THE GENERAL SITUATION

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

SUBSTANTIALLY, THE GENERAL situation remains unchanged, with the existing differences between Russia and the Western Powers the focal center of interest. Harsh statements have appeared in the Russian press against the Western Powers, and the United States in particular. Frequent objections have been voiced by Russia's representatives both at the Paris Peace Conference and at the Security Council Meetings.

Besides these manifestations, Russian diplomacy has been active against the interests of the Western Powers in various places throughout the world, some of which have been backed up by military force. Elsewhere, military force is threatened but has not been applied. All this is curious, in view of an internal condition within Russia which is certainly unfavorable to hazard armed conflict on a major scale. In fact, the evidence indicates that Russia strongly wishes to avoid any such conflict. Nevertheless, her announced policy of last February (which has neither been withdrawn nor amended) is that a war with the capitalist countries is inevitable, and that Russia must prepare for it. Russia's diplomatic moves and her risking of minor wars should be interpreted as part of that preparation. To prepare Russia industrially, three successive 5-Year Plans are considered as essential preliminaries. The first of these Plans was started this year and, if all goes as planned, the final year will be 1960.

The general character of Russia's moves during this, the first year of preparation, is worthy of review.

Beginning of 1946. Russia was occupying Manchuria with large military forces, in violation of a treaty which required evacuation by 2 December 1945. Similarly, Azerbaijan was occupied under treaty obligations to withdraw by 2 March 1946. These forces were not withdrawn by that date.

In connection with the occupation of Azerbaijan, a claim was set forth on 20 December 1945 for the cession by Turkey of a substantial slice of territory adjacent to the Russian frontier near Batum. Claims were also made for the right to garrison the Istanbul Straits by establishment of Russian naval and air bases thereon. Large forces were assembled in the Batum area and in Bulgaria by the end of March. In view of these concentrations, some commentators predicted a Russian attack on Turkey during April.

At the same time there was a strenuous Russian diplomatic and propaganda campaign against Spain. This induced France to break diplomatic relations with Spain and to close their common boundary. A Russian CP was established outside Vienna to prepare plans to rush troops to France, upon call, should they be needed on the Spanish frontier.

Policy Changes. Although the exact date of the change in policy cannot be established, late in March the foregoing projects in Manchuria, Azerbaijan, opposite Turkey and against Spain were abandoned. This was undoubtedly on orders from the Polit Bureau, the executive body that rules Russia.

The reasons for this sudden change of policy can only be conjectured. There are some good guides. Both Western Powers had become very stern with Russia about the unlawful occupation of Azerbaijan. Less sternly, but nonetheless firmly, they insisted that Russia evacuate Manchuria. In response to this pressure, Azerbaijan was evacuated by 8 May and Manchuria by 30 April. No call having come from either the French Government or the French Communists for Russian troops to protect France against Spain, that project was also discontinued at about the same time.

In lieu of the abandoned—or possibly merely temporarily discontinued—projects, new ones were initiated which appeared to involve less risk. These were against Greece and Trieste. Initiated in May, they are still being pursued.

A reorientation of the policy against Turkey was undertaken. The loss of occupation of Azerbaijan reduced the eastern frontier with Turkey by over 50%, and correspondingly reduced the number of divisions which could be usefully employed at one time. The new GHQ established at Odessa under Marshal Zhukov, an able general whose command includes two army groups—one each on the eastern and western frontiers of Turkey. Marshal Zhukov assumed command in July, and at once...
started to organize his forces. Having made considerable progress in this line, Russia made renewed demands on Turkey.

The current Russian diplomatic offensive embraces three areas — Trieste (the gateway to Italy), Greece, and Turkey. All three point towards the eastern Mediterranean. In Russian hands, any one of the three would afford excellent bases—a military reality that would materially alter the strategic situation within the Mediterranean to the advantage of Russia and the disadvantage of the Western Powers. Considering Marshal Stalin's candid statements of 9 February last, it would be to the disinterest of the Western Powers to agree to such a Russian expansion.

**Battle Order.** According to advice dating from August and September, Marshal Zhukov apparently has some 12 divisions divided, more or less equally between the eastern and western frontiers of Turkey. This is exclusive of Bulgar divisions, whose number has not been recently reported, but are estimated as 12 to 14 divisions. The GHQ Reserve is in Romania and is reported to total at least 15 divisions, plus about 12 Romanian divisions and an Air Force of 3,000 combat planes.

Russia has transferred a number of ships obtained as reparations to the Black Sea. It would be possible to organize an amphibious expedition to cross the Black Sea (200 to 400 miles wide) to land on the north coast of Turkey.

Opposite Greece are 3 recently organized Albanian divisions said to be partly officered by Russians. It is reported but not confirmed that 3 additional divisions are being raised. Besides the foregoing, Yugoslavia was reported early in September to have had 4 infantry and 1 armored divisions on the Greek frontier, with 4 Russian divisions in support. In all, this amounts to at least 12 divisions facing Greece.

Opposite Trieste there are reported to be a weak Yugoslav Army of 6 divisions, with 1 or 2 Russian divisions in support. There is also a Russian Air Force present.

The GHQ Reserve in Romania is centrally located and could be moved rapidly to any one of three possible fronts — Trieste, Greece, or western Turkey. The general distribution of the Russian forces points toward Turkey, with land attacks possible both from the east and from the west by troops already in position. As already stated, amphibious expeditions against Turkey via the Black Sea are also possible.

The Russian force on the east front of Turkey is available for Azerbaijan should it be there needed. Azerbaijan has 2 divisions, which are Russian equipped, but their combat value is uncertain.

Opposite Manchukuo the Russian strength in northern Korea is reported as 9 divisions, with 4 or 5 additional divisions near the Manchurian border. This is exclusive of the Russian controlled Mongolian divisions, estimated as 3 in number, and some 25 Russian divisions east of Lake Baikal which seem to be the Far East GHQ Reserve.

Clearly, Russian troop dispositions are such as to facilitate taking prompt advantage, if desired, of favorable opportunities for expansion or the seizure of areas suitable for military bases.

### RUSSIA (Internal Conditions)

#### FOOD

The food situation is bad in the Ukraine. As previously reported, this was a dry year in the Ukraine, the crop was below normal, and the government requisitioned a material part of the crop. This deficiency was made up in part by UNRRA shipments from the United States, but actual starvation was reported early in September.

A similar, but less acute, situation is reported from White Russia. Elsewhere, crops appear to have been about normal. However, should the UNRRA shipments cease at the end of this year, there will be a serious situation. Russia needs this food and is not likely to disagree too much with the American Government as long as the hand-out continues. In fact, the billeting of an estimated 1¼ million troops in occupied countries of Western Europe and of nearly another million in the Far East may be due, at least in part, to the food situation.

**THE 5-YEAR PLAN**

This Plan does not seem to be going well, and the government is applying harsh methods in dealing with those it considers as the responsible and guilty officials.

According to their own reports, by the end of August from 83% to 91% of the officials had been replaced in the Ukraine. It is well known that during the war many Ukrainians welcomed the Germans as liberators from the Communists, and it is interesting to reflect upon the German stupidity in applying an iron hand to a nation which was largely ready to help them. They lost a great opportunity. When the iron hand became one of atrocities, including concentration camps for the wholesale extermination of individuals, respect for Germany turned to hate. Be it noted, however, that this did not make the Ukrainians favorable to Russia.

To aid in the 5-Year Plan, many Ukrainians have been taken from their homes on short notice and shipped 1,000 to 2,000 miles to the Ural and West Siberia regions for work in the new industrial plants. According to reports, the transplanted workers have been rioting on account of lack of housing, bad and insufficient food, and no comforts or entertainment.

The shortage of housing in the United States is nothing compared to Russia. The officials in charge of the Russian housing program lay the blame on the lack of materials; the material industries lay the blame on the lack of adequate labor and transportation; and the transportation department claims a lack of locomotives and cars. And so it goes. Every industry has an alibi—but the plain fact is that the Plan isn't working out according to plan.
It is evident that the Communist regime is not as efficient as that of the democratic nations. At the beginning, Communism seized all industrial establishments, farms and services without compensating the former owners. The immediate result was the cessation of payments for dividends and interest on borrowed capital. This permitted higher wages and sometimes lower prices initially, but as the seized plants wore out it became necessary for the Government to replace them. The Russian Government had to find the capital and it has now become the greatest capitalist in the world, owning all capital within its territory.

The relative inefficiency of the Communists is not surprising. It is generally agreed that government directed industries and services are usually less efficient than privately owned ones. What belongs to everybody belongs to nobody. Government supervision requires an excessive overhead. Such figures as are available indicate that the Russian overhead in industrial establishments and mines is 3 to 5 times as great as in the United States. Russia is up against the proposition of having to replace an enormous amount of worn out plants as well as the plants destroyed during the war. For this reason, she desires all the plants and machinery she can obtain from occupied countries, and if possible without payment. If true, the alleged looting of other countries may well be an organized and premeditated effort to keep the inefficient Communist economy rolling.

Dissatisfaction

This is reported as general throughout Russia. Although under control, such dissatisfaction is a constant worry to a dictatorial form of government. An extensive counter-propaganda campaign is under way, charging that the Western Powers — and particularly the United States — threaten Russia. It is rare that a good word appears in the Russian press as to what America has done or is doing. Credit is never given to American troops for their part in World War II. Russia assumes credit for having won the war with only minor help from Allies. The "iron curtain" functions to keep news out of Russia which might lead Russians to believe that life elsewhere is even bearable. Strikes in the United States are reported with the comment that they are due to insufferable working conditions. News about American bases is interpreted to the effect that they constitute a direct threat to Russia.

It will take time for this propaganda to have the desired effect — if it ever does. Too many Russians have been in contact with the Western world and have observed with their own eyes that, in a material sense, life is superior to that in their own country.

Displacements

According to reports, an extensive displacement of population from the Baltic States to Siberia is well under way. These people are required to abandon their property, less hand baggage. The circumstances of their resettlement is unknown, as there are no reports out of distant Siberia. Great numbers of Russians are being moved into the Baltic States and are being assigned the homes and properties of the displaced persons — it being reported that the population of Riga is now more than 50% Russian, with Russian the predominant language.

This displacement will serve to eliminate the Baltic State problem, since there will soon be few Balts left; they will have been completely scattered, and their places taken by Russians. (A similar policy was followed in the Crimea and in certain areas along the Volga.) Of course not all the Balts have been displaced. The Russian occupation is apparently limited in general to the cities and larger towns, and population centers along the railroads and main highways. The villages remain in possession of the Balts, and the intervening forests are occupied by armed members of the Underground. Russian troops seldom move through the country in bodies of less than a battalion and, according to the Underground, these troops are engaged on favorable occasions with casualties averaging 10 Russians to 1 Balt. Underground forces are fed by the peasants who hide their surplus food from the Russian collecting agencies.

Propaganda

Active though it be, Russian propaganda does not appear as yet to have had any considerable success with the people. The Russian people are informed from returning soldiers who have been in contact with Western civilization that the Western Powers are not a set of savages, and that their soldiers are well dressed and well fed, are efficient and satisfied, and show no signs of wishing to desert to Russia. The UNRRA is having a strong effect in the areas where it operates. Most of the food distributed is packaged by Americans, and it is increasingly clear to the Russians who receive it that if the United States can send immense quantities of food to Russia she cannot herself be seriously short of food. UNRRA also distributes American motor vehicles and other articles. The simplest Russian peasant can see that a nation that can afford to do all this cannot possibly be such an undesirable country as their home propaganda charges.

Stalin Pronouncements

On 24 September, Marshal Stalin made written replies to questions submitted by the correspondent of the London "Sunday Times." In judging Marshal Stalin's pronouncement (and he doesn't make them often) it is well to keep in mind that Russian policy changes with extreme suddenness, whenever such a course is deemed advantageous by the Polit Bureau. Stalin charged that:

"The noise is being raised about a new war mainly by military-political scouts and their few supporters from the ranks of civilian officials. They need this noise if only,

a. to frighten with the specter of war some naive politicians ... and thereby aid their government to extract more concessions;

b. to make difficult for some time the reduction of military budgets;

c. to check demobilization of troops, and thereby prevent quick growth of unemployment."

This reply is obscure. The "noise about a new war" does not come from military-political scouts and a few civilian officials. Who are they? And who are "the naive politicians" who are to be frightened? Does this refer to American or Russian politicians? It is not correct to charge that an effort is being made to prevent reduction of military
ARMY AND NAVY

By a recent General Order the designation of Red Army and Red Navy, which has been the official title, is changed to Soviet Army and Soviet Navy. The Red flag and name were originally intended to apply to Communists throughout the world, all of whom were invited to fight under that banner. The new title stresses the Soviet Union of Russia rather than the Communists of the world.

As previously explained in this column, the Polit Bureau reoriented its efforts some time ago to spreading the Soviet flag to other countries rather than to stirring up revolutionary movements elsewhere, which was the Communist theory 20 years ago. In other words, current Russian claims are motivated in the interest of the Soviet Union and not in the interest of World Communism. On the other hand, whereas the spread of Communism is now subordinated to national purposes, it is still useful, since it furnishes 5th Column opportunities in other lands. But it is no longer the main issue—and Russia's Army and Navy are no longer representative of anything but their own country.

FAR EASTERN NOTE

GERMANY

The Russian proposal of last July for a united Germany without loss of territory in the west but possibly some gains in the present east border was disapproved by Poland. That government represented that there was much opposition to Russia within the country which was hard to overcome. This would become impossible if substantial concessions would have to be made to Germany. In view of this reply Russia withdrew advances privately made to German leaders.

Early in September, our Secretary of State Byrnes, in a speech at Stuttgart, expressed his approval of revision of the present frontier between Germany and Poland in favor of Germany. He disapproved of any other cessions of German territory except of the Saar area to France. He pled for organizing a central German Government at an early date to govern a demilitarized state, whose industries would be curtailed by Allied supervision.

Later, the Russian Foreign Minister, in a speech at Paris, refuted previous ideas that Russia might change Germany's border with Poland, by declaring that the existing border must be ratified at a forthcoming peace conference. Several millions of Germans had already been expelled from the territory taken over, and Poles had been moved in. To undo all this would be impossible.

In a speech at Paris early in October, Mr. Byrnes explained that Allied control of Germany was proposed by him to continue for 25 to 40 years. It was to be based largely upon engineer inspections to seek for military industries. If any were ever found they would be destroyed forthwith, if necessary by Allied bombers based upon airfields in Great Britain, France, America or Russia.

The discussion as to Germany's future is still open, with nothing decided.

This column in the past has reported that German officers had been leaving the British for the Russian occupied zone, without giving the reason which at the time was unknown.

It now seems that in the American and British zones, German officers who have at any time served on the General Staff or in an important position under the Nazi regime have had their retired pay stopped — the idea being to teach the Germans that war does not pay. It is reported, however, that upon arriving within the Russian zone, such German officers, many of them very competent men, have been placed on active duty,
with rank increased two grades above that held in the German army.

Russia needs all kinds of qualified industrial and military men to complete its announced program of having the best and strongest military force in the world.

Russia is making a strong bid for German support. In its zone, there is no unemployment. This contrasts unfavorably with the zones of the Western Powers where there is extensive unemployment. Russia pays good wages and does not discriminate against Germans, some of whom receive high salaries. Russia has no refugee problem. These went to the American zone by millions.

Undoubtedly Russia would like to see Germany united into a single country, dominated by herself. This is blocked by the Western Powers. In view of this situation present indications are that Germany will be treated for some time to come as a partitioned country, with little probability of a real central government.

GREECE

Insofar as the Western Powers are concerned, Greece presents a situation that is similar to China. In both cases, one of the Western Powers has substantial military forces present in the country supporting a recognized central government. Both countries have an opposition party in arms, and in each case this is the Communist Party. In both countries, the hostile Communists maintain liaison with Russia.

In China, the central government recognized and supported by the United States never has an election and can only claim to represent a majority of the people. But Greece had an election this past September, which was observed by American and British observers who reported the election as having been fairly conducted. Of the total votes cast about 70% were in favor of restoration of the monarchy. In compliance with the vote the monarchy was duly reinstated by the return of King George on 27 September.

Just as in China, the hostile Communists control a substantial section of northern Greece — this being the area closest to Russia and from where liaison can easily be maintained. Also as in China, the Communists are well armed with infantry weapons, including automatic arms, and appear to have unlimited supplies of ammunition. They operate in bands varying in size from a company to a battalion, and conduct sabotage and harassing operations. These bands were originally formed late in 1944, upon the German withdrawal, and by this time have had considerable experience.

According to Greek Intelligence reports, partly confirmed by reports of American correspondents, there are 2 Yugoslav divisions, the 42nd and 22nd, just across from the Greek frontier, with 2 more infantry divisions and 1 armored division in support. Various reports, not confirmed, state that each of the Yugoslav divisions is seconded by a Russian division. There are 4 Independent Brigades of Partisans on the frontier, and it is charged by Greece that these troops supply the Communists within Greece with funds, arms, and direction.

According to British reports, Albania has 6 divisions of which only 2 are active and part of the I Corps, based on Argirocastro. The II and III Corps on 6 September were reported as being mobilized in the Corizza area. It is not known how long it will take to raise and equip these troops. Presumably they could not be ready for the field before next spring, which would seem to preclude hostilities with Greece before that period.

The order of battle of the Russian puppet states appears to favor offensive action along the line Bitolj-Mt. Olympus. To reach Olympus involves an advance of under 100 miles; and if successful, such an advance would cut Greece in two, separating Macedonia (which is desired by Yugoslav expansionists) from the Greek peninsula.

Greece is reported to have 6 divisions, all of which are equipped with British weapons. The British 1st, 4th and 13th Infantry Divisions, less 1 brigade, are in support. The detached brigade could be recalled at any time. The British are taking no part in the civil war.

Present indications are that there will be no attack on Greece as long as the British divisions are present. To do so might easily start another great war. There will, however, be a concerted effort to cause the British to withdraw. Should this happen, it appears logical that the Communists would seek to overthrow the monarchy and establish a Soviet Government.

Russia has withdrawn previous demands made at International Conferences for a base in the Dodecanese Islands, and has agreed to the cession of these islands to Greece. The explanation is that Russia feels it would be easier to establish a Communist Government, which would then voluntarily concede the desired base in Greece, than to fight for a base within the Mediterranean area.

The Greek situation is an element of danger and needs to be watched. It is closely connected with the Istanbul and Trieste problems. The United States has made it known that it supports the British in Greece, just as the British support us in China.

TRIESTE AND YUGOSLAVIA

The city of Trieste and vicinity, known as Venezia Giulia and claimed by both Italy and Yugoslavia, is occupied by the XIII British Corps, which includes the U. S. 88th Infantry Division and the British 1st Armored Division.

Whereas the shore area, which includes Trieste, is occupied by Italians, the interior mountainous country is inhabited mostly by Slavs. Yugoslavia demands all the territory (coast and mountains) on the ground that it is indivisible. Venezia Giulia has never belonged to Yugoslavia, and never belonged to Italy prior to the conclusion of World War I. For four hundred years prior to that war it was held by Austria Hungary and was the major commercial port for that empire.

Contrary to numerous statements, Trieste has not been a vital port for Italy. There are other ports more convenient to production centers. Neither has Trieste been an important port for Yugoslavia for the same reasons. During the Italian occupation the port received goods for maritime shipment from south Germany, Austria and Hungary. However, it was not self supporting, and its insufficient local revenues were balanced by the Italian Treasury.
The proposition has been made to make Venezia Giulia an independent state, probably under the jurisdiction of the United Nations. If this is done the United Nations will have to finance it, for there is no more trade from south of Germany in sight. Moreover, with Hungary within the Russian economic circle, and Austria partly so, it is improbable that either of those countries will be able to furnish much trade for Trieste, unless Trieste falls to Russia or a Russian puppet state. This is what would happen if Venezia Giulia is given to Yugoslavia. It would be valuable to Russia by giving her a Mediterranean port very suitable for that part of west Europe occupied by Russia. The port of Pola (included within Venezia Giulia) would then again become a major naval base.

Yugoslavia. This country has engaged in a series of "incidents" directed against the United States. Two transport planes were shot down, and several border altercations have occurred. Yugoslavia has officially charged the United States with willful and frequent violation of the air zone over its frontier areas. In one letter it charged 172 such incidents. In reply, our State Department pointed out that thorough investigation of the movements of every American plane in Europe for the period charged showed that only 10 had been anywhere near Yugoslavia, and that there was no evidence other than the Yugoslav charges that these 10 planes had in fact crossed the frontier. Marshal Tito, the dictator of Yugoslavia, has charged that "certain imperialistic great Powers" wished "to set the people of their own countries against those peoples who want justice and peace." He added that they (presumably Russia and Yugoslavia) did want peace, but not peace at any price, and would not cede to the aforementioned imperialistic great Powers. Whereas a warlike interpretation might be put on this speech and related incidents, a more probable explanation is that the intent was to impress the home front by showing firmness and an ability to talk back to the Western Powers. Best evidence, perhaps, is the strong internal opposition to Tito, which he is seeking to overcome.

The Yugoslav Fourth Army, with about 6 divisions, is opposite the XIII British Corps. This army is being re-equipped with Russian materiel, with the old materiel reported to be going to Greek Communists.

Croatia. This is the northern province of Yugoslavia and contains approximately one-third of the total population. The southern two-thirds is Serb. Croatia was never united with the Serbs prior to the completion of World War I, having previously long been united to Hungary. Croats and Hungarians have the same religion — Roman Catholic. They got along well together, and the Croats had full representation in governing bodies. The Serbs belong to the Orthodox Church, now placed under Russian rule. The Croats never got along well with the Serbs, and always tried to secure local autonomy. Croats claimed that the Serb majority discriminated against them. They did.

When war came, many Croats willingly joined the Germans. There were 2 Croat Divisions serving with the German armies in Russia. Now Croatia is again unwillingly joined to the Serbs, who appear to be in the process of liquidating Croat opposition throughout that country.

It is well to remember the precedent of Danzig—namely, that the forceful unification of nationalistic groups against the will of the people is one of the breeders of war.

THE SITUATION IN THE MIDDLE EAST

TURKEY

Russia has two claims against Turkey. The first and most important is a demand submitted last August for the right to establish joint Russian and Turkish bases along the Istanbul Straits. The second, which has not been pushed recently, was for the cession to Russia of a considerable area at the northeast corner of Turkey where it adjoins the Russian border. The area involved amounts to about 50,000 square miles.

Russia's claim to control of the Istanbul Straits is based on the principle that the Straits must be open at all times for passage of warships of the Black Sea Powers, and always closed to warships of non-Black Sea Powers. The bases are desired to ensure execution of that principle. If this is acknowledged and granted, Russian ships can issue into the Mediterranean at will, but warships of Mediterranean and other Powers cannot enter the Black Sea. Istanbul would become a powerful advanced Russian air and naval base, thereby greatly increasing the military security of Russia. Obviously, however, this would decrease the military security of Mediterranean Powers. It is a problem of first class strategical importance.

Approval of Russia's claim would also establish a precedent. If the entrance of the Black Sea is to be confined to Russia, the principal nation bordering that sea, by analogy the entrances to the Mediterranean should be confined to the care of the principal Mediterranean nations and the warships of outside nations excluded from that sea. This would mean surrender by the British of their bases at Gibraltar, Malta, Cyprus and Egypt, and withdrawal of the American fleet from the Mediterranean Sea.

On 22 August Turkey declined to accept Russian participation in the defense of the Istanbul Straits, which she stated lay entirely within her territory; and furthermore Turkey contended that she was fully capable of defending them under the provisions of the existing Montreux Convention which at present regulates traffic through the Straits. The United States and Great Britain by appropriate notes concurred in Turkey's stand and expressed their belief that Turkey could defend the Straits.

Russia replied to Turkey late in September, reiterating her demand for joint bases on the Straits, and warning that
Sargint, of the questionnaire submitted by Mr. H. J. J. Husseini, has established his CP in Egypt. He is functioning as the real ruler of Arab Palestine, and is generally recognized as the Arab leader. At the end of Arab Palestine, and is generally recognized as the Arab leader. At the beginning of October he replied to a questionnaire submitted by Mr. H. J. J. Sargint, of the New York Times, in which he expressed himself as unshakably opposed to any partition of Palestine between Jews or Arabs, or any further immigration into Palestine of foreign Jews.

About 3% of the Arabs are Jews, and another 10% are Christians. There is no Arab opposition to non-Moslem Arabs. The opposition is against foreign Jews entering with the avowed purpose of becoming a majority of the population and ousting the Arabs from Palestine. All Arabs and Arab states agree that this would be an intolerable injustice.

The United States, by a letter of President Truman of 4 October, approved the policy of admission of foreign Jews into Palestine, and the possible division of Palestine into Jew, Arab and British zones. Great Britain, which has the mandate for Palestine, has postponed a decision until December, pending further investigation.

The Arab states lack the military strength to overcome a British decision whatever it may be. Nevertheless it cannot be overlooked that, although war between Russia and the Western Powers remains unlikely, it is always possible that "incidents" may arise somewhere and precipitate an unwanted war. Should this occur the Arab states would have a major strategical value, since they lie astride the Suez Canal. They are particularly incensed against the United States for favoring Jewish immigration into Palestine—the reason therefor being that, notwithstanding President Truman's recommendation that 100,000 Jews be admitted to the United States, existing law does not permit Jewish immigration. They are not so much incensed as yet against the British, who are making an earnest effort not to antagonize the Arab states.

The significance to the British (and the United States) of an unwanted war, with the Arab states aligned with Russia, are tremendous: it would permit the Russians to reach the Levant area, would stop the oil supply from Iraq, and probably from Saudi Arabia, would interrupt the Suez Canal, and might cause Moslem insurrections in French North Africa, Libya, and possibly elsewhere.

Russia's appreciation of these possibilities may be shown by the large increase in staffs of Russian consulates throughout the Arab states and throughout French North Africa. In one of its sudden changes of policy last June, the Polit Bureau issued orders to these consulates to see to it that the local Communist parties displace without delay all Jews in key positions and replace them with Arabs. According to British reports, Communist cells in French North Africa have considerable quantities of arms, including a number of batteries, hidden in the desert. Of course the Jews are not a military factor as a combat organization, but the Arabs are. This indicates that Russia is preparing to support the Arabs if the Western Powers miss their chance. Should this occur it would lead to a partial encirclement of Turkey, and the disablement of France for military operations elsewhere if disorders should arise in North Africa. Turkey might then jump into Russian arms held out to welcome them as a new Soviet state.

For the above reasons and despite the limited military strength of the Arab states, their location and connections with other Moslem countries are such that the Arabs cannot safely be disregarded. The British understand this.

To quiet the Arabs it might be possible to organize a new Arab state out of Libya. The Arabs hate the Italians and do not want them back. If left to the Western Powers this might be arranged. However, the Arabs have made an issue on Palestine and are holding firm for the right to govern their own countries in their own way.

THE FAR EAST

China

The General Situation. The Kuomintang (Nationalist) and Communist Parties are at war with each other. Except for minor detachments, all Communist forces are now north of the Yangtze River, and all fighting is in the northern half of China.

Since mid-July the Kuomintang has been engaged in a series of operations designed to reopen the railroad net, the main lines of which had been interrupted.
by the Communists prior to that period. The Kuomintang has succeeded in reoccupying the railroads and now holds most, but not all, of the key positions. The one remaining exception is the north and south railroad through Shansi, which has not been reoccupied except for the south segment.

This Kuomintang campaign has followed the pattern of the Japanese plan of occupation. From 1939 to 1945 Japan held all China in a vise by occupying the main cities, railroad junctions, and main coast and river ports. Although the Japanese made no attempt to hold the interior, the Chinese had to receive food and other necessary supplies through the key Jap-held cities and the lines of communication in order to live. This resulted in minimum losses (about 5,000 per annum) to Japan.

The Kuomintang has not been able to duplicate the Japanese success despite the use of four times as many troops. Key positions have been occupied, but lines of communication have not been maintained. They are just as much closed as at any time since the Japanese were withdrawn. For example, a Communist force estimated as 150,000 men is in the general area where Shantung, Anwei and Kiangsu come together. From that area they raid the railroads in all directions and none are operating.

The Communists have avoided major battles. When pressed, they withdraw from key positions and then close in behind Kuomintang forces and cut the railroads.

The result has two major consequences. From a military point of view the Communists have avoided severe losses and have maintained their armies in the field, pending raising of new troops, reported to include substantial air units. From an economic point of view China is being strangled by the impossibility of moving food and other supplies (including vast quantities of UNRRA goods) from one point to another. Famine has resulted in some provinces, mine products cannot be distributed, and manufactured goods cannot be delivered. It is probable that economic distress in China has never been as bad as it is right now.

The Kuomintang is maintained by the United States through loans, "sale" of war goods (to be paid for at a distant date), military and naval advice, and instruction of military forces. American Marines guard the coal mines north of Tientsin. This coal is shipped to the Yangtze valley, although that area has its own coal mines. However, no U. S. Marines are watching over them, and the Kuomintang cannot distribute that coal.

**The Military Situation.** The Kuomintang has occupied "key" positions in Jehol and elsewhere. It has sent two armies—the 6th and 52nd—from Mukden toward Antung, with the mission of interrupting this liaison line between Russian held northern Korea and the Communists in Manchuria. The Communists are uniformly avoiding major engagements, but are raiding over wide areas.

**Japan—U. S. Ally?** Communist General Chou En-lai expressed the opinion, in an interview with the Associated Press representative in mid-September, that the United States apparently assumed that war with Russia was inevitable, adding that the United States would rely on Japanese troops rather than Kuomintang troops to wage war in Manchuria and north China.

A few days later, a British estimate of the situation widely circulated in London reported that General MacArthur's policy was making a friend of Japan—that the iron hand which issued orders had been succeeded by an unseen hand which writes advice. The estimate concluded that it would be but a question of time before Japan would appear as an ally of the United States.

Regardless of the truth or falsity of the foregoing statements, their circulation materially affects the current military situation. The Chinese Communists have noted them, and it must be assumed that Russia certainly has. The Chinese Communists do not like this. Their natural reaction is increased hostility to the United States and a drift toward Russian support. Whether or not this will be forthcoming and, if so, to what extent, is unknown.

**NETHERLANDS INDIES**

Java and Sumatra, less several large coast cities, are held by native troops under a native government which is functioning. Native forces on Java are estimated as about 10 divisions, including a small air force. A large quantity of Japanese arms are in their hands. This includes artillery and a few armored vehicles.

The local population is hostile to a restoration of Dutch rule. It is showing much sympathy for Japan, and apparently regrets the departure of the Japanese troops; at the showing of films, for example, pictures of Japanese troops are loudly applauded. There is considerable dislike of the United States as a temporary oppressor of Japan, and for not insisting on the provisions of the Atlantic Charter that all peoples should govern themselves.

Late in August, Lord Killearn, British Special Commissioner, arrived at Batavia as an intermediary to arrange for peace between the Dutch and the Javanese. He was not able to bring the two parties together until 7 October. They refused to declare an armistice. The Dutch claim that if the negotiations fail they will have insufficient troops to go on with the war after the British withdrawal, which is now under way and is scheduled to be completed by 20 November. The Dutch are bringing one infantry and one armored division from Holland. For their part, the Javanese refuse to stop fighting unless the military situation is frozen and no more troops are brought in. They also want 13,000 Japanese troops, now present at Batavia, sent home. The Dutch claim these are slave labor troops and essential for non-combat duty. In the meantime the Javanese hold 15,000 or more European prisoners.

Fighting has been limited to patrol activities. The British hold Batavia, Semarang, Soerabaja, Buitenzorg and Bandoeng. The latter two places are supplied by armed convoys.

In Sumatra, latest information indicates that the Japanese are still partly in control, with the British occupying Palembang, Medan and Padang.
Worm's Eye View

Dear Editor:

I have followed with interest the JOURNAL's editorial campaign for a "more suitably integrated artillery guidance," and wish to add my bit.

Every infantry rifle company in battle has its own artillery forward observer. He is the "company artillery officer," and advises the commander on artillery matters. Every infantry battalion has a supporting artillery battalion, whose commander functions as "regimental artillery officer." And the tougher the going, the more the regimental commander looks to him for help. Every division, corps and army has an artillery officer. Is there a division, corps or army commander who would go willingly into battle without a capable artillery officer? Army groups and theaters had artillery officers. I understand that ETOUSA tried initially to get along without one, but found that one was necessary.

Mine is only the worm's eye view, but it does seem strange to me that Headquarters, Army Ground Forces, which must be the best combat headquarters in the world, does not follow this battle-tested rule.

COL. R. F. HALLOCK, FA
Fort Sill, Okla.

99th Inf Div Ass'n.

Dear Editor:

Steps have been taken to initiate the 99th Infantry Division Association, but considerable difficulty has been encountered in obtaining names and addresses of former members. I have been designated Secretary of the Association and will appreciate it if former members of the 99th Infantry Division will communicate with me at the following address: ROTC Unit, University of Utah, Salt Lake City 1, Utah.

COL. FREDERICK H. BLACK, FA

Flame-killer

Dear Editor:

In regard to Major Solf's letter in your October issue concerning German use of a "Salz vorlage" to reduce muzzle flash, he quotes from a novel published by Viking in 1936, which contained a clue to the use of the powder.

The following quotation is from page 61 of a book with the deceptive title How Germany Makes War, George H. Doran Co., copyright 1914:

"Nor is another new invention likely to affect tactics. It is the so-called "flame-killer," a material manufactured in the form of powder, which, added to the charge, does away with the flash at the muzzle without impairing accuracy of fire."

The author, Friedrich von Bernhardi, general of cavalry (retired), also wrote Germany and the Next War.

Hat man so "was schon erlebt"!

J. ELSTON
Houghton, La.

→Not - too - literal, but appropriate, translation of the German colloquialism: "Can you top this?" — Ed.

Never-ending Interest

Dear Editor:

As a former Marine artillery battalion operations officer, it is a never-ending source of interest to me to note that a great many of the "short-cuts" in fire direction and conduct of fire discovered by Army artillery during the war and recorded in THE FIELD ARTILLERY JOURNAL occurred to us in the Pacific at about the same time.

I believe that one of the outstanding contributions that the JOURNAL is making towards a more efficient field artillery is the forceful, if implied, examples of the efficiency to be derived from centralized control. Many die-hard officers of my acquaintance never came to admit that "the battery has had its day" and that, during the war and for the foreseeable future, the battalion must be the basic technical as well as tactical unit.

WILLIAM N. LARSON, JR.
Lenox, Mass.

Request for Information

Dear Editor:

I am seeking information concerning the circumstances of the reported death of Captain William Louis Dixon, Jr. O-325656, Inf., U.S.A. Captain Dixon left this country on the S.S. President Coolidge in the fall of 1941 and reported to Fort McKinley, P. I., November 26, 1941. He was officially reported as killed at Corregidor, April 6, 1942. Later he was reported as missing, and still later as a prisoner of war interned in Tokio.

If one of the JOURNAL's readers was either a member of Captain Dixon's unit during the above mentioned periods or has any information concerning his reported death, it will be appreciated if he will communicate with: C. C. Bennett, Box 794, Trenton, N. J. CAPT. CLIFFORD R. MOORE, FA Res. United States District Court Trenton, N. J.
Welles on Foreign Affairs

**WHERE ARE WE HEADING?** By Sumner Welles. 397 pp. Harper & Bros. $3.00.

By Col. Conrad H. Lanza. Rtd.

 Having set aside isolationism, the American people are everywhere talking foreign relations and are demanding clarifying information on this very complicated subject. *Where Are We Heading?* is intended to satisfy this popular demand.

Mr. Welles covers foreign relations from the Atlantic Charter of August, 1941, to July, 1946. That was a period full of national, international and human events. During about half of those years Mr. Welles was excellently placed to know what was going on, as either Assistant Secretary or Acting Secretary of our State Department.

This book is a partial history. Some incidents are described in great detail; others are omitted. There is considerable criticism, mostly derogatory, of both American and British statesmen who succeeded Roosevelt and Churchill. Roosevelt is the hero, and only one mistake is admitted to have been made by him during his long tenure in the White House. That was the policy of neutrality toward Spain during her civil war.

Mr. Welles attended the Atlantic Conference and had a major role in drawing up its famous Charter. He relates that the predominant idea was that after World War II, the United States and the British Empire would provide the essential world leadership, since they would be the only Powers having the military forces needed to do so. There was to be an organization, subsequently designated as the United Nations, wherein small states would submit grievances and offer suggestions. But decisions were to rest with the two English speaking nations.

Later China was admitted to the council of Big Powers—just why is not explained, as China in no way fills the definition of a major Power. Still later Russia was added. Reason for not doing this in the first instance was that, at the time of the Atlantic Charter, Roosevelt and Churchill had been advised by their military staffs that Russia would be eliminated as a Power as a result of the attack upon her by Germany.

There is no explanation as to how it was expected to win World War II under an assumption that Russia would disappear as a Power. Nor is a word said as to what was decided at the Atlantic Conference with regard to Japan. Other sources and subsequent events make it clear that Japan was discussed and momentous decisions regarding her were taken. Why the secrecy about this?

Mr. Welles claims—and very correctly in this writer’s view—that the confusion which has arisen since World War II ended is due to failure to decide in advance what was to be done with Germany, Korea and other occupied and defeated states. Had that been done, the proper military authorities would have proceeded at once to establish law and order based upon some plan agreed to by the Big Powers. But there wasn’t any Plan. The Powers had conflicting interests then, as they do now. While the war lasted these differences were necessarily laid aside in order to concentrate on winning the war, and this reviewer feels that this was right and proper even though it was necessary, or advisable, to postpone solutions to certain burning problems.

The author gives a history of postwar events coupled with criticisms, usually adverse, of American policies. There is a discussion of the trouble between Russia and the United States, which is stated to very likely lead to World War III unless the United Nations organization can stop all war. Mr. Welles believes that a better solution is for the United States and Russia to harmonize their policies—he does not state how.

Many will not agree with Mr. Welles’ ideas of present day international problems. Still his views are clearly expressed, are interestingly set forth, and are entitled to serious consideration.

**Foxhole Psychiatry**

**ALL BUT ME AND THEE.** By Brigadier General Elliot D. Cooke. 215 pages. Infantry Journal Press. $2.75.

By Colonel Lamar Tooze, SAR*

In this volume, General Cooke offers some interesting evidence and pointed observations upon the highly technical, often abstract, and always elusive subject of psychiatry. It is an easy-reading account, in layman’s language, of an investigation made in 1943 by the author, assisted by Colonel Ralph Bing, both doughboys turned inspectors general. The inquiry was initiated when the War Department became acutely aware of the high incidence of psychoneurosis in the Army. Thousands of men had been released from the service upon medical discharges because of this

*Colonel Tooze served throughout the European campaign as executive officer to the Inspector General, Headquarters First Army. In this capacity he had occasion to interview approximately 500 officers who were afflicted with psychiatric diseases, most of them front line doughboys and artillerymen suffering from psychoneurosis, anxiety state, acute. Colonel Tooze’s investigations led him to the conviction that no one is immune from this disease, although the breaking point varies from time to time. As one lieutenant from the 18th Infantry, who had served long and creditably in North Africa, Sicily, Normandy and through France and Belgium to the Siegfried Line, expressed it: “It was just a case of too many, too close, too long.”—Ed.
Informative Account

THE ROOSEVELT I KNEW. By Frances Perkins. 396 pp. Indexed. The Viking Press. $3.75.

Though few people have ever taken the trouble to discover it, Frances Perkins — Secretary of Labor during the entire Presidency of Franklin Roosevelt—was remarkably well trained in the field of labor relations. She first met Roosevelt in 1910 when she was starting her career as a social worker and he was an obscure young man in New York State politics. Their careers progressed together and while he was Governor of New York he appointed her Industrial Commissioner for the State. The first woman to hold a Cabinet position, her appointment in 1933 and long tenure as Secretary of Labor bear high tribute to Mr. Roosevelt's continued confidence in her ability.

In the preamble to this book the author states plainly that it cannot justly be termed a biography as it is biased in favor of the late President. It is to Miss Perkins' credit that this bias is kept in check and does not noticeably interfere with the objectivity of her recital. She confines herself to the facts she knew first-hand and as a result has greatly enhanced the importance of this book. There are no major political revelations, no war-planning secrets and a marked absence of the open adulation that has weakened previous efforts.

Fascinating to all are Miss Perkins' intimate sketches of many of the important personalities of the turbulent New Deal era and their relationships thereto. One of the most striking of these sketches concerns Hugh Johnson, who headed the NRA. The author points out that while his energy and drive proved invaluable, he was a temperamental and emotionally unstable man with a great desire for power. He intensely disliked the curbs that were put on him from time to time and proved in general to be a large-sized headache for the Administration.

Miss Perkins is to be congratulated on the intellectual honesty of her contribution to the understanding of Roosevelt, the man. The Roosevelt I Knew is a splendid and useful book. It will be an important source of information for any extensive biographical work that may be written about Mr. Roosevelt in the future and will be of real value to the historian and student of American labor relations. The reading public will find it an informative account of a spectacular President and his Administration. R. F. C.

Mostly Indistinguishable

OUR SHARE OF NIGHT: A Personal Narrative of the War Years. By Drew Middleton. 380 pp. The Viking Press. $3.75.

By Allen Otten

Perhaps good reporters shouldn't write books. Drew Middleton is a good reporter, one of the best. Much of his coverage of the early phases of the European war, of the North African campaign, and of the later European fighting was among the finest printed in American newspapers. But his book is for the most part flat, dull, run-of-the-mill.

Our Share of Night is at its best when Mr. Middleton sticks closest to his original news dispatches to AP and the New York Times. His accounts of the convoy run to Iceland, the battles for Longstop Hill and Hill 609, the taking of Medjez-el-Bab, the fighting around Aachen, the Dieppe raid—these remain stirring, blood-tingling reading. When he strays from his first-hand stuff, when he relies on memory or notes to fill out what he wrote to meet his nightly deadline, when he pulls in anecdotes of other correspondents, politics, observations on censorship, then his book becomes just another correspondent's bid for extra cash, indistinguishable from any one of a hundred others.

Just for the record, Mr. Middleton's deeper thoughts include: respect for the honesty and completeness with which the English fought the war, a high opinion of Eisenhower and Bradley, unhappiness that few Americans knew or knew what the war was all about, approval of our initial decision to compromise with Darlan but distaste for our later support of French fascism in North Africa, a belief that we must provide Germans with economic security before we can expect them to be good democrats, and a generally pretty
dim view of the future.

Mr. Middleton is at present the Times’ correspondent in the Soviet Union. It is to be hoped that his book on his experiences there will make more unusual and rewarding reading.

Report from Inside Russia
BEHIND THE IRON CURTAIN. By George Moorad. 307 pp. Fireside Press, Inc. $3.00.
By Col. John E. Coleman, FA-Res.

Up to a year or so ago there was quite a Russian fetish in this country. The Soviets could do no wrong; all their critics must be Fascists at heart; New Russia held the (only) hope for the world. In accordance with the fashions of the time, W. L. White was mightily belabored for trying to tell straight facts straight, in his Report on the Russians. He was not one-sided at all, but merely tried to show honestly that no nation, not even the Soviet Union, is solely an unsullied white.

Since that time there has been, I trust, an increasingly sober appraisal of the ultimate aims and ambitions of all nations. None is all white or all black—varying shades of gray permeate the social, economic, and political aspects of all peoples. The chief difference is that some are lighter in spots, others darker.

Many prophecies and predictions, once hooted as the words of communistic-baiters, have been seen fulfilled. Russia has penetrated Finland, Bulgaria, Rumania. She has taken part of Iran and Turkey. Her puppets control Yugoslavia. And everywhere hers is a government of power and terror; of the NKVD (now the MVD) instead of the Gestapo; of suppression of free speech and individual liberties just as thorough as are found in her homeland or were ever conceived by Hitler and Mussolini and their cohorts. She has excluded Red Cross and UNRRA workers on the grounds of military "security." And the same things are found in the East, in Korea and Manchuria, as are encountered in the West.

This is indeed a time for sober appraisal. Facts and figures, trends and tendencies, methods and tactics must be correlated and evaluated. These things are to be found in Behind the Iron Curtain. That is not to say that this is a book of dry figures or pointings-of-morals. It isn’t. But in Mr. Moorad’s accounts of what he saw and did in Russia and her satellite countries are the materials from which the reader can form conclusions of his own. These will not all be unfavorable to the Russians, either. Mr. Moorad is a careful reporter as well as an able observer, he carefully distinguishes hearsay from the things he knows for himself, and whenever possible gives the basis for both.

As an able diplomat whom he quotes says, "... relations with Russia are not bad. There simply are no relations. ... Tell Americans that you cannot bank good will with the Soviets. Each deal is complete in itself; there is no credit carry-over. ... If Americans ... can mix generosity with good stiff resistance on vital issues all along the line, then we can gradually arrive at tolerable relations. Without drastic changes in the Soviet outlook, relations cannot be harmonious but they can be tolerable. I believe all our people deserve to know this. If they know the truth and are prepared to maintain their rights before the Soviets advance too far, then I think there is no need for anxiety. People may as well get the truth. God knows they’ve had everything else."

Strong words, perhaps—but mighty sound advice.

Global War Diary
THE BRERETON DIARIES. By Lewis H. Brereton. 450 pages; index. William Morrow and Company. $4.00.
By John R. Cuneo

The career of Lieutenant General Brereton during World War II began in the Philippines. In October 1941 he was sent to command our Far East Air Forces. After the Japanese won aerial supremacy in the Philippines, he was ordered on 24 December to Australia and Java. Here he tried to organize effective air assistance for the various forces seeking to halt the southward march of the Japanese. When these efforts became obviously futile, he left for India, where he was to command the U. S. Tenth Air Force. Before his plans for the employment of this unit

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U. S. FIELD ARTILLERY ASSOCIATION
1218 Connecticut Ave., N. W. Washington 6, D. C.
could be put into effect, the retreat of the British Eighth Army before Rommel's Afrika Korps compelled his transfer to the Middle East (June 1942).

Here he headed the Middle East Air Force which prior to the emergency was not a combat organization. Lieutenant General Brereton continued in this position during the ensuing campaign and for the first time in his war career he saw Allied air forces gaining aerial supremacy. Following the Allied landings in North Africa, he was given command of the new Ninth Air Force. The climax to this period was the famous raid on Ploesti on 1 August 1943.

He was then transferred to England, from where the Ninth Air Force operated, preparing the way for the invasion by the ground forces. After this event and the St. Lo breakthrough, he became commander of the First Allied Airborne Army. He held this position during the famous battle at Arnhem. Only the surrender of Germany cut short this remarkable career.

Obviously any notes describing such events contain interesting and important information. At times the entries in these diaries are very rewarding and their value is enhanced by documents and statistics. Scholars will find that the book contains a good index. While the information will not surprise anyone familiar with the general history of the air war, the book is worth reading.

However, the book is not faultless; indeed at times it seems an unworthy memento of such a famous career. A great deal of trivial matters tax the reader's patience. Extended quotations of enthusiastic reports or broadcasts by war correspondents may be fine in their place but they hardly enhance the value of a general's diary. The same may be said of the constant description of individual exploits. Aside from the publicity aspects, aerial warfare in World War II can hardly be depicted as an affair of individuals.

Now and then the author seems about to tell something of interest but he always stops short. For example, he states that the operation OVERLORD was changed in January 1944 to make it more acceptable to the airmen. No further details are given. Perhaps this is the result of censorship. If so, much of the diary's potential value has been destroyed.

Occasionally the diaries contain entries which may cause a reader's eyebrows to raise a trifle. For instance, the entry of 9 November 1941 quotes what a Japanese envoy told his son in Tokyo on 6 November 1941. The surprise of the Pearl Harbor attack seems to rule out the acceptance of this as an example of the efficiency of our prewar intelligence service in Japan. What the remark seems to prove is that bits (at least) have been added to the original entries.

It is impossible to tell to what extent the printed version represents the original diaries. The preface states that Lieutenant Colonel George Kirksey, a former newspaperman, aided the author in "gathering, documenting, and editing the material for this book." The fact that this man is mentioned in the advertisements of the book (although not on the title page) seems to indicate that he had a great deal to do with the book. But where Lieutenant General Brereton leaves off and Lieutenant Colonel Kirksey begins cannot be ascertained from the book.

At times it seems as though the entries are presented as historical judgments rather than simply on-the-spot records. Occasional footnotes add to this impression. If so, many of the entries are misleading. For example, the Ploesti raid of 1 August 1943 is presented as putting a "serious dent in Germany's oil supply." While this probably seemed to be the fact at the time, it is now known that the raid had only a temporary effect and a short time later Rumanian oil deliveries to Germany actually increased. Regardless of intention, it certainly is known that many people will accept all the entries as the absolute truth. Conscientious editing would have increased the value of the book by noting the modification of the diaries' entries caused by postwar disclosures.

The publication of the book was accompanied by a great deal of publicity about a proposed air raid from the Philippines on Formosa at the beginning of the war. The alleged denial of permission was given widespread attention in the daily press. The background
cannot be given in a book review but no particular knowledge is needed for the critical reader to note that the dairy entries on the topic leave much to be desired.

These are some of the faults of the volume which dampen enthusiasm for it. Moreover, it does not seem to give much of an impression of the forceful character of its author. Yet it bears his personal indorsement and no matter how weakened it may be by censorship, occasional inaccuracies, inadequate writing and poor editing, it is required reading for anyone interested in the aerial aspects of World War II.

**Inside Roosevelt—Elliott, That Is**

*AS HE SAW IT*. By Elliott Roosevelt. 259 pp. Index. Duell, Sloan and Pearce. $3.00.

The recent uproar in the press concerning this book is somewhat baffling. The fact that his father played such a prominent part in no way qualifies Elliott Roosevelt as an expert on world affairs. The quotes from his father that are listed in this book could scarcely be termed complete enough to give a clear picture of FDR's thoughts on world problems or personalities. So, why all the fuss?

*As He Saw It* is another of the many "inside" stories that have recently glutted the market. Its real interest lies in the great personality whose intimate life the reader invades. Naturally, Elliott was in a position to pass on interesting tid-bits that would otherwise be unavailable to the outside observer. However, to attach international importance to this gossipy work is to belittle the intelligence of the reader. Not only that, it is an effort to belittle the intelligence of the author as the late President's own version. The dangers of partial quotes as a misinterpretation of fact have long been recognized. Certainly, the scope of discussion in *As He Saw It* is on matters of such importance that these dangers cannot be overlooked.

The book is not without its redeeming features. The big conferences, the famous people, and events mentioned have played a tremendous part in the current history of the world and every intelligent human being is interested in reading about them. Having been present on most of these historic occasions, Elliott Roosevelt is certainly qualified to note his observations and reactions. As such, the book is interesting. It presents an intimate view of a great man from an unexploited angle.

Much of the material could have been deleted without damage to the book. Seeing Mr. Churchill clad only in a cigar is not only uninteresting to read about but less interesting to reflect upon.

But because of the Roosevelt name and attendant publicity the book will undoubtedly be widely read. It will be a disappointment to many. It is regrettable that Franklin Roosevelt apparently did not keep current memoirs. It is much more regrettable, in this writer's view, to have his son Elliott attempt to write them for him. R. F. C.

**Gallico Omnibus**

*CONFESSIONS OF A STORYWRITER.* By Paul Gallico. 576 pp. Alfred A. Knopf. $3.75.

Anyone who has ever had a yen to write (and that includes practically all of us) will enjoy Paul Gallico's *Conclusions of a Story-Writer.* In it Mr. Gallico presents twenty-four of his favorite short stories, together with a revealing addenda of candid biographical material that lay bare the writer's mind.

There is no need to mention here the caliber of Mr. Gallico's writing. Through the pages of practically every major magazine he has gained considerable renown. In this collection all of his most famous stories are gathered. "The Snow Goose," "Hiram Holliday," "Joe Smith, American," "The Roman Kid," and others are all there. Many of them have been read before but fortunately writing by Gallico does not lose its appeal with a single reading.

The real appeal of this book to the would-be author lies in the material which prefaces each of the various stories. Through this medium, Mr. Gallico explains the circumstances and situations that brought about the writing of the particular story. He flavors this with an added portion of biographical material concerning his actions at the time of writing.

The final chapter of the book is a "vermiform appendix" which is a potpourri of good advice, random notes and an evidence of Mr. Gallico's own reluctance to see the book end. R.F.C.

**24th Div. Story**

*CHILDREN OF YESTERDAY.* By Jan Valtin. 429 pp. Reader's Press. $3.00.

By Major James V. Shea

*Children of Yesterday,* the story of the heroic exploits of the 24th Infantry (Victory) Division, recounts Pacific warfare as seen from the front sight of the infantryman's rifle. The view as presented by Jan Valtin while not including in any respect the operations of a division, clearly details the every hour activity of the combat ground soldier. The book encompasses the many areas in which the 24th wrote history—Hollandia, Biak, Leyte, Mindoro, Luzon, and Mindanao. The combat soldiers platoon, squad or section in action is the view the reader receives of the Pacific's major campaigns. The history has been personalized to the extent that page after page recounts the exploits of hundreds of individuals who performed selflessly, often giving their lives, so their buddies might live and triumph.

Jan Valtin, nom de plume of Richard Krebs, famed author of *Out of the Night,* has written of the 24th from the record and from personal observation. It is good history and high adventure, giving us the record full of passages about men and deeds that seem like fiction only because it is the rifleman's view. The story of the Conquest of Manila, the Battle of the Ormac Valley in Leyte, the Storming of Corregidor are recorded and also the blood bath of Breakneck Ridge, the Kilay Ridge, the "mopping up" of countless areas where Japs were only stopped by cornering them, one by one, and killing them.

*Children of Yesterday* glorifies neither war nor soldiering. It is an infantryman's account of events and battles interwoven with human sacrifices that went on hour by hour, day by day, until either the medics ordered him back or he was out-guessed by the enemy.
Ghosts from the Past
LOST MEN OF AMERICAN HISTORY. By Stewart H. Holbrook. The Macmillan Company. Illustrated, index. 370 pages. $3.50.
By Richard Cordon McCloskey
If you have an ounce of curiosity you will be interested in knowing how Captain John Smith cured his loggers of swearing, who wrote the first book on contraception, how Lee, Arnold and Church tried to sell the Revolution down the river, who put ice selling and tomato raising on a commercial basis and how they did it, which Confederate officer led a raid into Vermont during the Civil War (that'll stop most Civil War experts), and the truth about dozens of other incidents in American history. If all this appeals to you, dip into Holbrook's book. It is prime beef, trimmed of all fat, and rich with nourishment. It will probably knock holes into your ideas of American history, but the holes will let in a lot of truthful light. Holbrook writes well, and he spins a fine yarn. And, incidentally, the yarn is all wool and a yard wide.

Nice Gift Book
HAIL TO THE JEEP. By A. Wade Wells. 120 pp. Harper Bros. $2.00.
"This book is the story of the Jeep—that gallant four-wheeled vehicle that meant so much to us in war and promises to mean so much to us in peace."

Those are the words with which Mr. Wells opens the preface to Hail to the Jeep—and those words convey the warm enthusiasm that he and millions of others feel for this vehicle that literally exudes personality.

Unusually attractive in format, Hail to the Jeep consists of some forty double-columned pages of printed material tracing in detail the background and development (including its name) of the Jeep, its combat record, and potential peacetime utility. This is followed by 70 odd pages of splendid pictures—for, as the author observes, the Jeep is as "photogenic in its own way as a Powers model! . . . and "the story of Jeep in action is actually a vivid pictorial history of modern warfare."

A nice gift book, this, for anyone who wore the uniform in World War II.

RAF vs. U-boats
COMMAND PERFORMANCE. By Hector Bolitho. 262 pages; illustrated. Howell, Soskin. $3.00.
By John R Cuneo
Here the author has set down in diary form the record of the successful effort of the Coastal Command, RAF, from June 1, 1944, to September 1944, to keep the U-Boats from the invasion fleet. Although principally devoted to individual exploits, the book contains some interesting details on this rather obscure phase of aerial warfare, particularly as the German submarines began at this point to employ the schnorkel breathing tube to evade detection. The author's background as a historian and biographer is shown by the fact that the account is simply but well told with occasional mature reflections of a quality not common to such books. Although it is an account of the RAF, the reader is constantly reminded that even this work was accomplished by Allied effort—U. S. naval squadrons as well as the mixed membership of the Coastal Command. An overall map and an index would have added to the value of the book.

War with Fire
By Richard Gordon McCloskey
The incendiary was one of the most effective and spectacular weapons of World War II. Starting from scratch (we had no standard fire missile at the beginning of the war), the incendiary soon proved wrong Air Forces' belief that demolitions were sufficient, and could, in fact, create bigger fires than purely incendiary bombs. Once accepted by the armed forces, the incendiary, from the flame thrower to the chemical mortar to the fire bombs, did a magnificent job on all fronts.

Colonel Fisher has written a field manual rather than a technical manual on incendiary warfare (I hasten to say that his book is better designed and presented than a field manual). He surveys in broad terms incendiary agents, the theory of incendiary attack, fire defenses and the effectiveness of incendiary...
warfare. His short book is by no means as large or complete as General Waitt's on chemical warfare, but until something better comes along it is the basic general book on the subject. It should become a standard reference in any intelligent officer's library.

Lost Soul

THE FALL OF VALOR. By Charles Jackson. 310 pages. Rinehart and Co. $2.75.

By Allen L Otten

In The Fall of Valor the author of The Lost Weekend turns his attention to another social problem. His method is the same: a detached, clinical analysis; leisurely development; full-blooded characters rather than empty types; sympathetic treatment of an illness rather than an abnormality. Only the theme is different. Don Birnam's alcoholism has been replaced by John Grandin's homosexualism.

John Grandin is a middle-aged Columbia professor whose marriage is on the rocks. He and his wife, Ethel, hope to revitalize the love they still have for each other by a second honeymoon on Nantucket. On the boat to the island, they meet Cliff Hauman and his wife—Cliff is a young marine captain on sick leave after Guadalcanal. As the Grandins' marriage inexplicably breaks wider and wider open, John's hitherto latent weakness channelizes into physical love of Cliff. It is not until the book is almost two-thirds over that John (and the reader) knows he is homosexual inclined. The last third chronicles the consequences of the fall of valor in John Grandin's soul as—propelled by the unhappy state of his marital relations—he gives in to his weakness.

Some of the writing in The Fall of Valor is slipshod; one or two people float in and out of the story without much excuse for existence; often the main characters act implausibly, as though they were living out an author's plot, rather than their own lives. But however easy it is to find criticisms, praises come even more easily. For Charles Jackson has done it again, and written another book which is both a compelling and absorbing novel and an honest and intelligent dramatization of a not too-uncommon problem rarely dealt with in popular works.

Lilliput Tale

MISTRESS MASHAM'S REPOSE. By T. H. White. 255 pp. G. P. Putnam's Sons. $2.75.

By Dan J. Herr

This fantasy is supposedly in the tradition of Alice in Wonderland and Stuart Little — children's books really intended for adults. But that sort of thing must be well done and T. H. White isn't quite up to it. Mistress Masham's Repose turns out to be just a better than average children's book, of little interest to adults, or to sophisticated children for that matter.

Mr. White has borrowed his fantasy from Jonathan Swift, dusted it off, and brought it up to date. He tells of a tiny colony of Lilliputians, descendants of a group brought back to England by the unscrupulous sea captain who rescued Gulliver. Luckily the captain liked his liquor and one night when he was enjoying a particularly uproarious drunk they escaped. For years they were safe on a little island in a large country estate — safe, that is, until 10-year-old Maria, the orphaned heiress of the estate, stumbles into their retreat. After fairly obvious misunderstandings on both sides they become true friends and the Lilliputians help Maria save her fortune from the plotting of her scheming guardian.

There is probably a moral buried in this book somewhere, but it was either too subtle or I was too indifferent, for I can't tell you what it is. If you must have your fantasy dished up on a child's plate, I recommend Stuart Little by E. B. White. There is a book to treasure. As for Mistress Masham's Repose, leave that to our cavalry brethren. There is a Lilliputian rat-cavalry charge in it that they will find irresistible.

First and Last Novel

THE DEVIL IS A LONELY MAN. By Morrison Wood. 477 pp. Crowell. $3.00.

By Capt Benjamin Arkin, FA-Res.

Morrison Wood has written an arresting novel. It endeavors to cover a period of eighty years from the ruined post Civil War Alabama to the present time. Like the little girl with the little curl, when it is good it is very good and when it is bad it is horrid.

Anthony Wayne, its central character, is as evil as they come. His chief interests are power and women and he doesn't mind using any devious method to attain his ends. When the author writes about things he knows such as high school days in Los Angeles his characters are living. When he lets his imagination wander far afield they don't always come off. The style of the author is a lurid one. He lays it on real thick and suggests Thomas Wolfe in his wordiness.

Morrison Wood was as preoccupied with sex and evil as an adolescent. The physiological aspects of sex are explicitly gone into. This novel will undoubtedly become a best seller because of the erotic contents but there is considerable valuable writing in it.

There will be no chance for the author to prove himself as this is both his first and last novel. The author died in a Jap prison camp while the manuscript was returned to the states with some of his belongings.

Nehru on India

THE DISCOVERY OF INDIA. By Jawaharlal Nehru. 595 pages. Index. The John Day Company. $5.00.

By Richard Cordon McCloskey

A man has plenty of time to reflect in jail, and Nehru has done a lot of reflecting. Now leader of India, he has been jailed numerous times by the British. This book (written in jail) is his story of India. It is an intensely personal story, colored throughout by his philosophy and his ideas of what he wants for India. It is by no means a formal history, and professional historians will probably find plenty to carp at.

He divides his book approximately in half. The first half deals with pre-British India (to the middle of the 18th century), and the second with British India. Of British India he is extremely critical, and lays blame for practically all of India's woes on British imperialism. His arguments are weak in some spots, but by and large he draws convincing proof.

Nehru's book, read with a somewhat more formal history of India as a reference, is an extremely valuable source on Indian affairs and possibly, considering Nehru's position, an excellent guide to India's future.
New Yorker Short Stories

THE IRON CHAIN. By Edward Newhouse. 228 pp. Harcourt, Brace and Co. $2.50.

By Capt Benjamin Arkin, FA-Res.

This book is a rewarding collection of short stories, most of them having previously appeared in the New Yorker. They were written in the period of 1941 to 1946 and all concern themselves with the impact of those times on various people. Unlike most stories with a war background this collection still stands up. The author's understanding of character is seen in the wide range of subjects and background, Newhouse being equally at home with musicians in New York, offensive C.O.'s in Okinawa and farmers in Maine.

The stories are representative of the best of the New Yorker school of writing. They appeal as much to the head as to the heart. Most of the drama is implied rather than stated. The author has a good ear for dialogue and an appreciation of humorous situations. His writing packs a wallop because it has earnestness and a direct approach. The author while not preaching puts a lot of social implications in his writing.

The title is from General Grant's writing, "Tethered as we are by the iron chain of circumstance ..." The people in these stories are caught in a web of their own making and the solutions to their problems are the basis of the action that takes place. While all of the 21 pieces are good, "Irving" and "I Hope You Will Understand" are outstanding.

Jap View of War

THE LOST WAR. By Masuo Kato. 264 pp. Alfred A. Knopf. $2.75.

By Col John E. Coleman, FA-Res.

A great deal of The Lost War applies to any country at war. Until March 9, 1945, when the first great fire raid was made on Tokyo, Japan and the United States were internally not too different. Japan's government had long been highly centralized, and we had given sweeping powers to our President. In neither country was industrial capacity sufficient to satisfy the wants of army, navy, and civilians; in both there had to be an apportionment of what was to be had. Despite outward appearances our Army and Navy were actually in competition for material things, power, and prestige; Japan's went much further in their bitter animosity each toward the other. The Japanese people received only such information as their government would permit; bad news was also withheld at times from our public, and it is now evident that much other news was considerably "slanted." Both had black markets, neighborhood organizations, and other concomitants of modern warfare.

Much of the book, however, gives a great insight into Japanese processes. It tells too of the effectiveness, and the relative worth, of our many modes of attack upon the Japanese islands and minds. Excellently organized and written, it is an outstanding contribution to an understanding of our late enemy, Japan.

Doodler's Delight

LAUGH AND DRAW WITH JEFFERSON MACHAMER. By Jefferson Machamer. 130 pp., illustrated. Greenberg. $3.00.

I MEET SUCH PEOPLE. By Gurney Williams. 128 pp., illustrated. Farrar, Straus and Company. $2.50.

By Cas Cocklin

Even doodle? Of course you have! But have you ever thought of turning this ersatz talent into something profitable? Perhaps not, but if we are to believe Mr. Jefferson Machamer in his book Laugh and Draw with Jefferson Machamer, all that are needed to achieve success as a cartoonist are a stout heart, incessant labor, and a $2.50 supply of drawing equipment. The author, a frequent contributor of cartoons to Collier's, Saturday Evening Post and other magazines, lures you with a sly humor pointing up his realistic advice, all illustrated in his inimitable style. Halfway through the book, your fingers will itch to begin cartooning and you will be tempted (even as we) by visions of an enlarged bank account, thanks only to your own efforts and Mr. Machamer's advice.

But lest you become too confident, Gurney Williams, cartoon editor of Collier's since 1936, endeavors to suppress your wild hopes in I Meet Such People. He reminds you that in the past two years, in five leading magazines, 70% of all cartoons were drawn by less than 45 cartoonists. Furthermore, steals from old cartoons, switches of used gags, and a general inability to point up the punch line to the drawing in an effective manner lead to the greatest number of rejections for would-be comic artists. His interesting comments concerning the business of a cartoon editor are enhanced by a selection of some 200 cartoons, illustrative of what is best in comic art.

These two books provide much of interest to the general reader and the aspiring cartoonist and all will enjoy the wealth of cartoons contained therein.

Oxford Movement

IDEAS HAVE LEGS. By Peter Howard. 184 pp. Coward - McCann. $2.50.

By Capt. Benjamin Arkin, FA-Res.

This book is an exposition of the aims of the Oxford Movement. The author describes his interesting background as a captain of England's international football team, bobsled champion and as a father of three children. His thesis is that moral revival is necessary for the world's salvation—that we must change man first and material conditions will be changed thereby. The writer goes into his reasons for his conversion to the tenets of Frank Buchman, the founder of the movement. He is against materialism and for sound virtues. He feels that the moral rearmament plan of the Oxford Movement is the solution to most of the world's ills. Having worked for Lord Beaverbrook as a political columnist, Howard discusses him and such varied characters as Lenin and Hitler. Written in a simple style, it puts the case of the Oxford Movement in a most favorable light.
John Hersey is one of the finest young authors to develop during the late war. *Men on Bataan, Into the Valley* and *A Bell for Adano* all received critical acclaim, and his latest—*Hiroshima*—is regarded by most authorities as a "classic." Published serially in many newspapers and magazines, in addition to being dramatized on the radio, it is now available in book form and should become one of the most widely read books of our time.

* * * * *

Mister Roberts* by Thomas Heggen continues to enjoy considerable popularity, and justly so, for it is a thoroughly enjoyable book—this, despite the too-liberal inclusion of profanity which may offend ultra-sensitive readers.

* * * * *

A book by John P. Marquand is never a risk to any publisher. His consistent string of successes remains unbroken with the publishing of his latest—*B. F.'s Daughter*, a book club selection for November.

* * * * *

Racial discrimination in our country is disgusting to right-thinking Americans. It will be even more so when they read *Boy from Nebraska*. This is the story of a young Nebraska farm boy who fought long and valorously for his country, only to find on his return that because of his Japanese-American ancestry he received treatment that should make white men cringe with shame. An excellent book worthy of a wide audience.

* * * * *

Some day a comprehensive and truly adequate biography of Franklin D. Roosevelt will be written. When that is done, the biographer will find *The Roosevelt I Knew* an invaluable source of material. Longtime Secretary of Labor, Miss Frances Perkins has done an excellent job in this book which is both objective in outlook and restrained in tone, without sacrifice to the many-sided character of Franklin D. Roosevelt and the kaleidoscopic personalities that helped him build his New Deal.

* * * * *

The publication of *The Wild Flag* by E. B. White was nicely timed to coincide with the UNO meetings now being held. Facile in style, Mr. White presents his studied arguments for a world government in a manner that is both eloquent and convincing.

* * * * *

Something new has been added: at long last, an historical novel without a boudoir scene! *Holdfast Gaines* by Odell and Willard Shepard is a picturesque novel about an Indian fighting for his race against many of the more famous early Americans. A swiftly-paced, dramatic novel with plenty of excitement for young and old.

* * * * *

Being ignorant of the underlying realities, the internal politics of China defy understanding by most of us. Theodore White and Annalene Jacoby spent the war years in China as members of the *Time* and *Life* Bureau in Chungking, and have combined their efforts to write *Thunder Out of China*, a book that answers many questions on the Chinese situation. The Chinese civil war and war against Japan receive attention, as well as the late General Stilwell. A book club selection for November, *Thunder Out of China* will interest many.

* * * * *

For still another slant on the late President Roosevelt's private life, read *Vice Admiral Ross McIntire's White House Physician*. Nothing new and nothing startling, but one more link in the lengthening chain of Roosevelt lore.

* * * * *

Jan Westcott has chosen the Scotland of 1590 as the setting for her new historical novel *The Border Lord*. The Border Lord is Frances Hepburn, Earl of Bothwell and uncrowned King of Scotland, and as dashing a hero as ever mounted a stallion. Starting off with an escape from unjust imprisonment, the Earl sets off on a series of battles, duels, love affairs and drinking bouts that will exhaust the strongest reader. After 594 pages of this, we find the impetuous Bothwell, fresh from clearing his name, riding top speed to join his wife and son. If Bothwell had lived in our day he most certainly would have graduated from the ranks of the Eagle Scouts to a hero of Errol Flynn proportions.

* * * * *

Without benefit of fanfare, General George C. Marshall established himself as one of the great military leaders of our history. And his wife, Katherine Tupper Marshall, has written an interesting story of their life—aptly titled *Together*. It is doubtful if any other soldier could have commanded the professional respect and unanimous confidence of the country that was Marshall's during his term as Chief of Staff. *Together* provides an interesting insight into the life of this essentially quiet man, who shunned publicity while directing the world's greatest fighting army in a global war.

* * * * *

Kenneth Roberts' fans will welcome the news that his latest novel, *Lydia Bailey*, will go on sale January 2. For his background, Mr. Roberts has chosen two minor wars in which this country played inglorious parts—L'Ouverture's and Dessalines' struggle to establish Negro supremacy in the West Indies against the attack of the forces of Napoleon and the effort to reestablish Hamet in Tripoli and oust the pretender Joseph Karamanli. Though the adventures of the young American lawyer, Albion Hamlin, may stray from historical fact, this interweaving of fact and fiction has characterized much of Roberts' writing and has proved very effective. As with all Roberts' books, *Lydia Bailey* will enjoy a wide audience and to start it off on the right foot it will be distributed in December by one of the big book clubs.

* * * * *

The publisher has announced that the new book *Secret Missions* written by Rear Adm. Ellis M. Zacharias, USN, will be published on schedule after much-publicized clearance difficulties with the Navy Department. A veteran of 38 years' service with the Navy, Adm. Zacharias received considerable notice for his testimony in the Pearl Harbor investigations. During the war, he commanded the heavy cruiser *Salt Lake City* and the battleship *New Mexico* but the bulk of his service has been in the Naval Intelligence. *Secret Missions* is the record of his 23 years of work against the Japanese Secret Service.

"It's out of stock right now, but we have something just as dirty."

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THE GOLDEN ENCYCLOPEDIA. By Dorothy A. Bennett; illustrations by Cornelius DeWitt. Simon and Schuster. (7 up) $2.50.

Our younger scholars of limited vocabulary and uncertain spelling are finally rewarded with an understandable and interesting encyclopedia. Easily handled, it's for pleasure too, being generously sprinkled with vivid illustrations—1,500 in full color and 500 in black and white. Like all Golden Books, it offers tops in quality and is amazingly low priced.

THE HEAVENLY TENANTS. By William Maxwell; pictures by Illonka Karasz. Harper. (8 up) $2.00.

Star-dust fantasy puts its best foot forward to lead the book parade for originality, charm and humor. When the Marvells leave their farm on vacation the hired hand doesn't appear but neighbors notice strange tenants busily doing the chores. That a puzzling blank in the Zodiac might have some connection occurs to no one but dreamy Mr. Marvell. Appropriate pink and blue colors set off a beautiful book.

THE FLying HOUSE. Story and pictures by Ruth and Latrobe Carroll. Macmillan. (8-12) $2.00.

Air and animal-minded children will demand more of these "it can't happen but isn't it fun" adventures. A helicopter house crammed with animals, family, and lively Mr. Bing, who doesn't let selling soap interfere with pleasure, provides up-to-date entertainment.


A new Freddy book (this with a good circus theme) becomes a lending library with all the gang on the waiting list. Succumbing to pressure and swallowing a distaste for too-human animals, I've read three of the dozen for pleasure, provides up-to-date entertainment.

JESUS' STORY. Illustrated by Maud and Miska Petersham. Macmillan (all ages) $1.50.

This great Bible story will stimulate the awakening of a literacy as well as religious intellect; the youngest child absorbs the cadence of beautiful language long before the message is clear. Recognizing that the stirring words of the New Testament need no improvement, the Petersham's merely added glowing pictures to emphasize their carefully arranged text of the King James version. It will meet with unqualified approval. (See center cut.)

THE HORSE THAT TAKES THE MILK AROUND. By Helen Sterling; full color pictures by Marjorie Hartwell. Watts. (3-6) $1.50.

Prize plum for Jack and Jill's Christmas, and chock-full of fine pictures and verses, is the excellent story of a milkman's horse on his early morning rounds.

YOUR MANNERS ARE SHOWING. By Betty Betz. Grosset & Dunlap. (13 up) $2.00.

Fresh, giddy and gay as the 'teen-age itself, here's the solution to that "difficult" gift. Jovely illustrated and covering the etiquette field completely and smoothly, this book is "strictly on the beam."

ANIMALS OF THE BIBLE. Picture book by Dorothy P. Lathrop, text selected by Kate Seredy. Viking. (7-11) $2.00.

Who was in the Hungarian farm house baking Christmas cakes? Was Anna's mother in the kitchen—or was it the Anna Angel? Kate Seredy complements a “sugar and spice” story with lovely full color pictures (see cut).
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