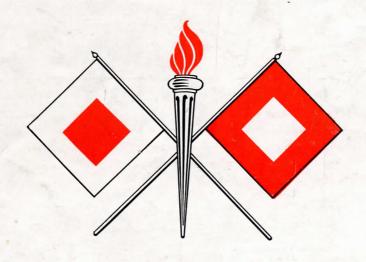
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AUGUST 1942



# INFORMATION LETTER

IVORIJ NO. 8

UNRESTRICTED

War Department • Office of the Chief Signal Officer
Washington, D. C.



COMMUNICATIONS are not only the eyes and ears of the Army; they are its very heart, a pulsating nerve center recording its hourly performance. Through its wide-flung network of communications, the Signal Corps conveys, with lightning speed, the information necessary for command. Without the Signal Corps our tremendous present-day military machine could not successfully operate.

With men and machines moving at almost unbelievable speed, the demand for even greater speed in sending and receiving messages on the battle fronts readily becomes apparent. Signal Corps units are assigned to all the fighting forces of our Army. They operate and maintain the most advanced and complicated communications equipment. It was Signal Corps soldiers who tapped out the stories of the glorious last-ditch stand of our gallant forces on Bataan Peninsula, and the poignant messages preceding the fall of Corregidor.

MAJ. GEN. DAWSON OLMSTEAD, Chief Signal Officer of the Army.

To Members of the Press at Fort Monmouth, N. J., June 24, 1942.

# Information Letter

OFFICE OF THE CHIEF SIGNAL OFFICER

SPECIAL ACTIVITIES BRANCH-SIGNAL CORPS, U. S. ARMY

Number 8 - Unrestricted

Washington D. C.

# FORMAL DEDICATION MARKS OPENING OF CAMP MURPHY

Ceremonies Dedicating Newest Post Heard By Nation

WELL IN ADVANCE of the schedule, Camp Murphy was dedicated with impressive ceremonies on Sunday, July 5, exactly 114 days after the first stake was driven into the ground of the Florida wilderness that was chosen as the camp site. And since the Signal Corps could not wait the incredibly short time it took to build a modern Army post on land previously untouched by human enterprise, a training school was set up in temporary quarters and the first class was graduated on dedication day.

The newest post of the Signal Corps is named in honor of the late Lt. Col. William Herbert Murphy, Signal Corps, who was killed in action on February 3 while serving as communications specialist for the United Nations High Command in the Far East. Colonel Murphy was a pioneer in the development of radio beams and radio equipment for military aircraft. The camp named in his honor will be devoted exclusively to training radio electricians.

The dedication ceremonies began shortly before 2 o'clock on Sunday afternoon in the Theatre Building at the camp. Col. Albert B. Cox, Commanding Officer of the 801st Signal Regiment now stationed at the camp, acted as master of ceremonies. After opening the program with an invocation by the chaplain, the

"Key" to the camp was turned over to Col. Hugh Mitchell, Commanding Officer, by Colonel Viney of the Corps of Engineers, who was in charge of camp construction.

#### DEDICATION BROADCAST

Promptly at 2 o'clock the ceremonies were picked up by the radio for a State-wide broadcast. After the scene in the Theatre Building was described by the announcer, Colonel Mitchell was called upon to make the initial address.

"Camp Murphy is the first training post of its kind to be completed under the recently adopted plans of the War Department for similar Theatre of War type of construction," he said. "The peculiar characteristics of this magnificent military undertaking, which embraces the most modern ideas in engineering and design, will be revealed to you during a tour of the post a little later today.

"Camp Murphy was established for the single purpose of giving specialized training to officers and enlisted men in a branch of the Signal Corps which renders a most vital service. Details of these operations are a military secret, but I can assure you gentlemen that you may well be proud of what the Signal Corps is accomplishing in that direction.

"Foreseeing the grim aspects of the present



Speakers at the dedication ceremonies. From the left are Colonel Viney, in charge of camp construction; Mr. J. Leo Gleason, representing the Attorney General of Florida; Col. Hugh Mitchell, Commanding Officer of Camp Murphy; Gen. Charles M. Milliken, representing General Olmstead; Col. David Sarnoff and Col. Albert B. Cox, Commanding Officer of the 801st Signal Service Regiment, who acted as master of ceremonies.

emergency," he continued, "Signal Corps started training courses at other Signal Corps Schools in this important activity long before the site was chosen for Camp Murphy. Even during the construction of this camp, classes were held in temporary quarters in a warehouse and students were graduated therefrom. Other officers and enlisted men who were trained there will receive diplomas here today. Like thousands who will follow them, they will be assigned to Signal Corps, Army Air Force, and Coast Artillery units.

"The Signal Corps is in urgent need of thousands of men for military training," Colonel Mitchell said. "Alert, intelligent young men, who are qualified for enlistment, and possessing a knowledge of radio communications, are encouraged to investigate the opportunities now being offered in the Signal Corps. The knowledge gained in this Signal Corps training

will prove of material advantage to those who enlist, and give high satisfaction through the knowledge that they served their country in its hour of need."

At the conclusion of his address Colonel Mitchell introduced Brig. Gen. Charles M. Milliken, who represented the Chief Signal Officer of the Army.

#### SPEAKS FOR GENERAL OLMSTEAD

"Maj. Gen. Dawson Olmstead, Chief Signal Officer of the Army, was scheduled to officiate at these ceremonies today, but pressing official business necessitated a last-minute change in his plans," General Milliken said. "I have been appointed to speak for General Olmstead, and in his name I welcome you. As representatives of the great State of Florida, known the world over as the Land of Sunshine and Flowers, it is fitting for you to share in the

dedication of Camp Murphy as an important contribution to our country's record-breaking war effort.

"To the officers, enlisted men and civilian employees of this most modern of Signal Corps posts, I offer my congratulations upon your having as commandant an accomplished soldier with a brilliant record of over 20 years service in our Army. I refer, of course, to my old friend and comrade, Col. Hugh Mitchell.

"The importance of Signal communication for an entire Army must not be underestimated," he continued. "Plans formulated, decisions reached and orders issued have never won a battle. It is the gathering of enemy information upon which is based the orders and it is the execution of those orders on the battle field which results in victory. Signal communications are the primary means by which this information is gathered, by which it reaches the point of execution, and by which the action of the battle itself is controlled and



Colonel Viney, in charge of construction at Camp Murphy, at right, presents "key of the camp" to Colonel Mitchell, Commanding Officer.



General Milliken is shown presenting a diploma to Pvt. William B. Hannum, Jr., a member of the graduating class.

coordinated. In other words, there are three C's—command, control, and communications. To exercise command there must be control; Signal communications give commanders that control.

#### LESSONS FROM WORLD WAR I

"This was amply demonstrated in World War 1," General Milliken said, "when the largest, most completely equipped and best trained army in the world took the field against France and Belgium. For a month everything pointed to success and the defeat of the French Army in that first month seemed certain. Yet by September 1914, that great army had bogged down. Control was lost; intercommunication failed. The result was a great gap between the First and Second German Armies and the loss of the first battle of the Marne, a setback by which Germany really lost the war. Germany learned her lesson, and today the

highest percentage of specialists for the entire German Army is found in its Signal Corps.

"The duties of communications specialists, both officers and enlisted men, are many and diverse. In our Signal Corps schools more than 25 different kinds of specialists must be trained in grades covering a wide range of activities. Every individual soldier must function perfectly, inasmuch as a signal system is only as strong as its weakest link. Every type of signal equipment from the front line to the supreme headquarters must be maintained. That is the enormous task of the Signal Corps in carrying out its duty to GET THE MESSAGE THROUGH."

In concluding General Milliken said, "In keeping with the spirit of today's ceremonies, I am happy to be able to share with you the presence of a prominent man of affairs, who is pre-eminent in the field of commercial communications. This gentleman, now a colonel in the Signal Corps, was a pioneer in radio, having started with it in 1906 and has been associated with all the major developments of radio which have taken place during the past 36 years. I esteem it a high privilege to introduce to you Col. David Sarnoff, President of the Radio Corporation of America, and Chairman of the Board of the National Broadcasting Company."



Soldiers who know how. These Signal Corps troops comprise the first class to graduate at the Camp Murphy school and are shown listening to the graduation address. This group started training shortly after construction work began, using a temporary warehouse for a classroom.

"I cannot imagine a more interesting and useful branch of the service for those who wish to join the Armed forces of our country than the Signal Corps of the United States Army", Colonel Sarnoff began. "The Signal Corps offers many opportunities for distinctive and meritorious service, but there are vast responsibilities, too. The lightninglike speed of modern war demands dependable communications under all circumstances and conditions. The eyes and ears of the Army must always be on the alert and attuned to events which take place in every theater of action.

"Wherever fighting men go, Signal Corps soldiers must accompany them to keep open the lines of communications. The Signal Corps operates in every quarter of the globe. Its soldiers will be found in Alaska, Australia, India, China, England, Egypt—in whatever section of the world the United States Army happens to be.

"Their magnificent performance in maintaining excellent communications in the face of overwhelming odds on Bataan Peninsula was something to bring every American to his or her feet cheering; and their last tragic messages before the fall of Corregidor infused in all of us the grim determination that our foes shall be utterly crushed—that the sacrifices made by our men in the Phillippines shall not have been in vain.

#### CAREERS AFTER VICTORY

"But aside from the thrills provided by a vital service in the war, there is another reason why the Signal Corps should attract intelligent, ambitious young men," he said. "When the victory for which we now struggle is finally achieved, we must look forward to a world at peace—a world which will need to be reconstructed. New industries and new services will demand trained men who can meet civilian needs in the post-war period.

"The course of training at Camp Murphy, I am told, is designed so that each man may reach a level of skill measured by his own

ability and effort," Colonel Sarnoff pointed out. "A large proportion of the men graduated will be rated as noncommissioned officers and technicians. Depending upon his natural aptitude and determination, each soldier can improve himself with actual experience so that he will be well qualified for commercial radio pursuits when he returns to civilian life after the war."

Following Colonel Sarnoff's speech, Colonel Mitchell introduced Mr. J. Leo Gleason, prominent businessman of Florida, who represented the Attorney General of the State. He told how proud the people of Florida were to have the Signal Corps' newest post within the bounds of their State.

At 3:30 in the afternoon, the continuing ceremonies at the camp were picked up on the air by the Army Hour Program for a Nation-wide broadcast. It was during this period that the graduation exercises for the members of Camp Murphy's first class were held.

Addresses, carried over the radio hook-up, were made by General Milliken and by Colonel Sarnoff.

At the conclusion of the exercises, visitors who attended the ceremonies were given an opportunity to inspect the camp.



THE COLONEL AT THE KEY

Col. David Sarnoff, Signal Corps, President of the Radio Corporation of America and Chairman of the Board of the National Broadcasting Co., while on active duty at the Office of the Chief Signal Officer, tried his hand at the job that started him in the communications industry 36 years ago. This Signal Corps photo shows him handling traffic to the mid-Atlantic stations from the Message Center in the War Department.

# SIGNAL CORPS EXHIBIT DRAWS RECORD CROWDS

Army War Show Now On Tour Features Signal Corps Demonstration

MODERN communications equipment used by the United States Army Signal Corps in successfully fulfilling its vital assignment of "getting the message through" comprises one of the most interesting exhibits of the Army War Show that is now touring the United States.

Conceived and designed to show the American public its largest and greatest Army, the Army War Show opened June 12 in Baltimore, hopped to Philadelphia the following week, and is now continuing on its Nation-wide summer itinerary.

The Signal Corps exhibit, located in half of a huge 140- by 40-foot tent, is attracting thousands of Army-conscious spectators at every

stop. Some view every phase of the exhibit with equal admiration; others show particular interest in separate phases of Signal Corps work; but all are fully assured that Signal Corps communications in our new Army equal or surpass those of any army in the world.

#### EQUIPMENT ON DISPLAY

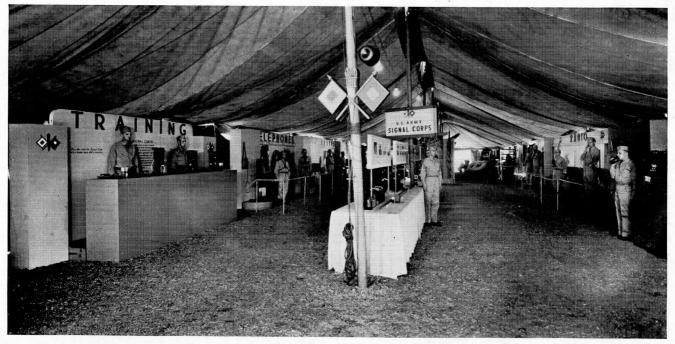
Signal Corps officers and men assigned to the show were assisted in designing and arranging the exhibit by experts from the Bell Telephone Co. of Pennsylvania. What the visitor at the exhibit sees is a pleasing and thoroughly informative display of the latest types of communication equipment—much of it in operation.



Maj. Gen. Dawson Olmstead, Chief Signal Officer of the Army, tries out the "handy-talkie" at the Signal Corps exhibit at the Army War Show.



General Olmstead was guest of honor at the Army War Show in Philadelphia on June 25. To the rear of the General are Maj. William B. Latta and Capt. Michael V. O'Shea. Continuing to the right are Maj. Gen. James B. Allison, U. S. A., Retired, former Chief Signal Officer. Maj. Eugene Rideout, O. I. C. Signal Corps Detachment Army War Show Task Forces, and Mr. Peter L. Schauble, Vice President of the Bell Telephone Co. and Special Assistant to the Chief Signal Officer. This photo was taken in the tent devoted to the Signal Corps Exhibit at the show.



The Signal Corps exhibit occupied one end of a big tent and attracted thousands of visitors before and after each performance.

Highlight of the display is a large original painting of a Signal Corps soldier operating the famous "walkie talkie." Planes are diving overhead, a tank is advancing in the background, bombs are bursting around the soldier. But the soldier's grim features as he mans his portable radio set leaves no doubt that communications lines will be kept open at all cost.

Mammoth pictures, upright on light blue panels, portray the multiple activities of the Signal Corps. The panels are arranged in sections, each devoted to a single activity. Across the top of each section, huge red letters identify the activity—Telephones, Teletype, Radio, Training, Photography.

#### SOLDIERS EXPLAIN ACTIVITIES

Equipment rests on counters in front of each section and on an extended display table in the center of the tent. Behind each counter a Signal Corps soldier attached to the exhibit explains in turn the activity his panel depicts.

Field telephones and switchboards, clacking teletypes, a movie camera and a speed graphic, hand-powered and motor-driven radio sets, training "bread" boards—all these are on view for the inquiring eye.

But that's not all. On the display table are a few of the hundreds of less familiar items of Signal Corps equipment. There's a theodolite and, standing at one end, a wind vane—illustrating the meteorological activity of the corps. The United States Weather Bureau was an outgrowth of early Signal Corps weather experimentation.

Outside the tent, large construction equipment is on display. There's an earth borer, which works just like a brace and bit; construction and maintenance trucks; a pole carrier; and a power-driven generator.

These, too, are used by the Signal Corps detachment for its portion of the War Show each night. A three-pole, four-line telephone circuit is set up and tied into switchboards in 10 minutes. Or, if pole digging is prohibited, the stunt is changed to a 4-minute "X" construction job.

The Signal Corps detachment of four officers and over a hundred enlisted men is commanded by Maj. Eugene W. Rideout, a former west coast telephone employe.

### MEMBERS OF THE PRESS VISIT FORT MONMOUTH

#### Newspaper Men See Signal Corps in Action

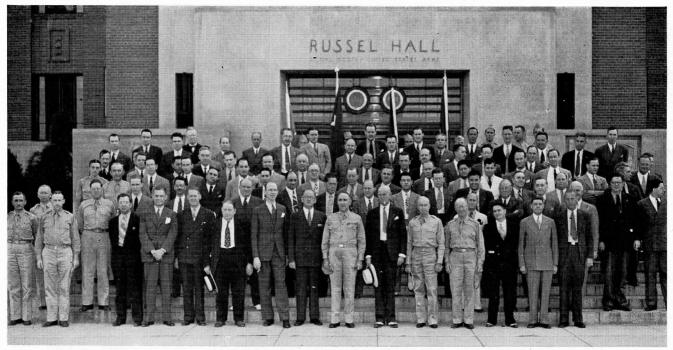
A SPEECH by Maj. Gen. Dawson Olmstead, Chief Signal Officer, a luncheon, a tour of the Post during which activities were demonstrated, and the presentation of a soldier's medal for heroism at a special review attended by four general officers highlighted the day on Wednesday, June 24, when 100 representatives of the press were the guests of Brigadier General G. L. Van Deusen, Commanding General at Fort Monmouth.

Members of the press arrived at the Fort Monmouth Club and were greeted by Brigadier General Van Deusen who presented them to the Chief Signal Officer. In a stirring speech made after luncheon was finished, Major General Olmstead spoke about the functions of the Signal Corps and emphasized the necessity for enlisting men capable of mastering the intricate mechanics involved in the communications branch of the United States Army, the Signal Corps.

Col. William O. Reeder, Assistant Commandant of the Signal Corps School then addressed the assemblage describing the vocational training installations of the Enlisted Men's department.

Following the address the newsmen and guests were divided into small groups and under officer escort were taken through the schools showing these activities. Described and shown to the press were the training being given in

(Continued on page 22)



This photo was taken on the steps to Russel Hall prior to the start of the official tour of the Post. The guests represented newspapers, periodicals, broadcasting companies, newsreels, and photographic services located in and around New York and northern New Jersey.

#### **MEMORANDUM**

#### For All Officers

#### Office of the Chief Signal Officer

- 1. "Completed Staff Work" is a precept of this office.
- 2. "Completed Staff Work" is the presentation by a staff officer of *completed action*, leaving nothing to be done by his chief but to approve or disapprove it. As a staff officer it is your duty to collect, condense, correlate all details of each problem assigned you, and to present to your chief only completed action for his signature or disapproval.
- 3. "Completed Staff Work" deliberately increases the burden on each staff officer in order to give more freedom to the chief, and to protect him against hasty conclusions, incomplete solutions. Before presenting any solution, you are expected to exhaust all available sources of information; to write, restudy, rewrite; to consider all alternatives, until you evolve the best advice, *in terms of action*, of which you are capable. Then, and only then, should you ask your chief for suggestions, and if you have made every effort to arrive at a completed action, you will find him only too glad to help you.
- 4. Writing a memorandum to your chief does not constitute completed staff work, but writing a memorandum for your chief to send to someone else does. Your views should be in *final* form so he can make them his own views simply by signing his name. Normally, completed staff work produces, for the chief's signature, a single document without comment. If he wants comment, he will ask for it. Remember that the more difficult the problem, the stronger the tendency is to present an incomplete document.
- 5. The precept of completed staff work does not preclude a "rough draft," but it must be just as final as a "completed action" save for the requisite number of copies and neatness. "Rough draft" must not be a device for shifting to your chief the burden of completing the action.

James A. Code, Jr., Brigadier General, U. S. Army, Deputy Chief Signal Officer.

August, 1942 Page 9

# LEGAL BRANCH INJECTS SPEED AND ECONOMY INTO WAR EFFORT

Patent Entanglements Eliminated Through Cooperation Between Signal Corps and Manufacturers

During the past few months the newspapers have carried stories of Senate hearings on numerous patent bills, designed to meet difficulties supposed to have arisen by reason of our patent laws, and the action of patent owners thereunder, interfering with the war effort. The Signal Corps has not met with the difficulties thus publicized. The communications industry in general has proved very cooperative.

The patent situation affecting Signal Corps activities is, however, very complicated. Between 20 and 30 thousand patents relating to communication are now outstanding. The greater proportion of these patents are held by a relatively small number of licensing companies, but it is nearly impossible to make any piece of Signal Corps equipment without employing inventions controlled by several different licensors. This situation, together with restrictions imposed during peace conditions by the Government for the protection of patent owners and of Government contracting officers, have given rise to expense and delay which were believed to be avoidable.

#### COMMITTEE RECOMMENDED PRO-CEDURES

Late last summer the Signal Corps initiated active efforts to overcome these difficulties. With the approval of the Under Secretary of War and in collaboration with his office and Navy representatives, meetings of the radio industry were held at which the Signal Corps problems were presented. A committee was appointed which recommended procedures for handling such matters, and these recommendations were unanimously adopted at a general meeting of the radio industry. The recommendations were approved by the Under

Secretary of War and are now being put into effect.

Two major results of this program are now becoming evident. The first of these is a freer interchange of research and manufacturing information. The members of the industry unanimously undertook to disclose all technical information relating to any Signal Corps research or manufacture to any party designated by the Government. As a result of this undertaking, manufacturers and researchers are receiving their competitors into their laboratories and factories and are disclosing research techniques and results and manufacturing "know-how" wherever such disclosures are necessary or desirable to speed the war effort.

#### PATENT LICENSES

The second aspect of the program relates directly to patent licenses. Up to June 18, between 50 and 60 radio patent holders have offered licenses directly to the Government, and 21 executed license agreements have been received. Under these licenses the Government may have equipment made by whomsoever is best fitted to make it without danger of patent suits against either the manufacturer or the Government.

In the case of most of the patent owners, who are also manufacturers, the licenses to the Government are free; where the patents are held by individuals without manufacturing facilities or by organizations primarily devoted to research, who cannot otherwise realize upon their inventions, suitable royalty arrangements have been made. A few more licenses remain to be negotiated for the Government. Under the licenses already negotiated, the Government is free to use more patents than any one

in the radio field has ever been able to do in the past.

With the Government substantially completely licensed, the necessity for placing the responsibility for patent infringement upon the manufacturer is past. This relieves manufacturers of the necessity of making patent searches before undertaking a contract, or insuring themselves against liability for infringement. In addition, it speeds up negotiation and acceptance of contracts by an estimated average of two weeks, and in complicated cases the time saved may run into months.

#### SPEED AND ECONOMY

It is difficult to estimate the actual saving in money to the Signal Corps through this program. Much more important gains, however, are speeding up the initial stages of manufacturing necessary equipment, the greater cooperation between the manufacturers of related equipment, and the freedom from friction between manufacturers and the Government which would otherwise arise from the fear of future litigation.

It is to be noted that this program is one formulated by the radio industry. It not only solves the difficulties actually experienced by the Signal Corps, but will prevent any future delay or blocking of production through so-called monopolies.

It is an outstanding case where members of an industry get together to solve their own problems, within the law and without restraint of competition, to the benefit of both the industry and the Government.

#### THE APPLICATION SUBSECTION

The Application Subsection of the Legal Branch has the duty of filing and prosecuting applications for patents on inventions of primary interest to the Signal Corps made by War Department personnel. It acts, in other words, as the Signal Corps' patent attorney.

Signal Corps inventions made by military or civilian War Department personnel may be

forwarded directly to the Chief Signal Officer for action. If these inventions arise within any of the Signal Corps laboratories, they are first submitted to the laboratory Patent Board, which considers the technical and military facts, makes recommendations thereon, and then forwards the inventions to this section for action.

A monthly meeting of the Signal Corps Patent Board is held under the auspices of this section. The Board comprises members from each of the technical divisions, and it considers both military and technical value of the inventions submitted. Before submission to the Board, the Application Subsection ordinarily conducts a search in the Patent Office to determine whether or not the invention is novel. The results of this search are submitted to the Board together with the description of the invention, the results to be accomplished thereby, and any recommendations theretofore made by a laboratory Board or by any other interested Arm or Service. If the decision of the Board is favorable, the Application Subsection prepares the application for the inventor and files it under the Fee Exempt Act of 1883.

#### INCENTIVE TO INVENTORS

The Government is, in general, entitled to all rights in any patent granted to an employee whose duties are directly related to development of Signal Corps equipment; in practice, however, it is customary for the Government to require merely that the inventor give it a free license under any patent that may be granted, reserving any commercial rights for himself. Only in special cases, usually on devices involving matters of the highest secrecy, does the Government require from the inventor the complete assignment to which it is legally entitled.

This policy has been adopted because it is thought to give the Government all that it requires and at the same time to give inventors an incentive to make new inventions and to file patent applications upon them. If an invention is held secret it is necessary to obtain a special permit to disclose it to anyone except Government employees having a direct official interest in the subject matter of the patent.

It is frequently necessary or desirable that disclosures be made to others, either to permit manufacture by some concern other than that in which the invention was developed, to file foreign patent applications, or for some other particular reason.

It is the duty of the Application Subsection to consider such application for permit to disclose whenever these inventions relate to Signal Corps activities. In some cases general permits are issued; that is, a laboratory is given general permission to disclose secret inventions to a manufacturing affiliate. More often the permit is of a very specific nature, for example a permit to disclose to a specific subcontractor by a manufacturer of the device covered.



PRODUCTION CONFERENCE IN SESSION

This photo was made just before the Signal Corps production conference got under way in Washington on June 18. Seated at the table on the extreme right is the Honorable Robert P. Patterson, Under Secretary of War. To his right are Brigadier General W. D. Styer, Headquarters, S. O. S.; Lieutenant General William S. Knudsen, Director of Production, Office of Under Secretary of War; and Mr. William H. Harrison, Assistant to Donald Nelson. At the opposite side of the table, third from the bottom, is Major General Dawson Olmstead, Chief Signal Officer. Since the photograph was made, Mr. Harrison, vice president of the American Telephone and Telegraph Company, was appointed a brigadier general.

# Highlights of the organization

#### Civilian Personnel

During the past several months it has been observed that there is a definite need for uniform interpretation of policies and procedures which must be applied through the various operating services of the Services of Supply. At the same time it is highly desirable to eliminate delays and unnecessary paper work due to centralized control in Washington. In order to have a common background and to enable the responsible officers in the field to take advantage of all flexibility possible, the Senior Personnel Officers or their representatives from all Corps Areas and the larger exempted posts were called into Washington for a personnel conference on June 16 and 17. The following subjects covered by the conference were selected in order to provide the widest possible exchange of views with the objective of getting results more quickly and uniformly.

- 1. Procurement and Retention of Civilian Personnel.
- 2. Employee or Applicant Investigations Prior to Assignment.
- 3. Transfers within and Outside Continental Limits.
  - 4. Change of Employee Status.
- 5. Allowances for Employees on Travel or Temporary Duty Status.
  - 6. Civilian Morale.
- 7. Personnel Related to Matériel Branch.
- 8. Personnel Related to Radar Branch.
  - 9. Army Specialist Corps.
  - 10. New York Survey.

At the conclusion there was a brief expression that the conference was intended to meet some of the highlights and not to cover the entire ground. It was a concensus of opinion that there was achieved:

- a. A better understanding of the fundamental actions.
- b. Uniformity in action and procedure.
- c. Knowledge of the help which may be secured from the Civilian Personnel Division.
- d. An appreciation that we are in the growing stage and that necessary changes will have to occur to meet conditions as they develop and that we invite constructive criticism as well as suggestions.

Upon return to home stations it was planned that the Senior Personnel Officer in Corps Area Head-quarters would call in a similar conference as soon as practicable of the Senior Personnel Officers of posts, camps and stations under their control, including exempted stations within geographical limits of the Corps Area.

## Installation and Maintenance

The Installation and Maintenance Branch is now organized into six sections, namely: Administrative, Plans and Training, Information Center, Radar, VHF and Shop.

The activities of the Airborne School Unit of the Plans and Training Section have been transferred to Wright Field, Dayton, Ohio.

All Basic Training Schools formerly supervised by the Plans and Training Section, have been transferred to Civilian Training Division.

#### Army Pictorial

Effective June 17, 1942, the Photographic Division was abolished, and its duties and functions, personnel, and equipment transferred to the Army Pictorial Service of this office which is now being activated.

On June 20, 1942, the Army Pictorial Service moved its head-quarters to the new Army Pentagon Building in Arlington, Va.

Two New Branches Established

Two new branches have been set up in the Army Pictorial Service known as the V-Mail and Microfilm Branches headed by Maj. Earle D. Synder, Lieutenant Sigvardson, respectively.

The V-Mail Branch is concerned with the transportation of soldier and diplomatic mail to and from points overseas. Essentially it consists of photographing documents on 16-mm film and sending the processed film to receiving points by air transportation, thereby effecting a major saving in transmittal time and of sea and air cargo space. At the receiving stations enlargements 4 by 5¼ inches in size are made and sent to the addressee.

V-Mail service was inaugurated by a White House release and the first public announcement was made in a news item in the New York Times on June 13, 1942. On June 15 V-Mail forms were made available to the public at 20 post offices in the United States. Ultimately, these forms will be available everywhere. Official sending of V-Mail began June 16 from New York and letters from London and Cairo have already reached this country.

# New Training Films Released

#### PRODUCED BY THE ARMY PICTORIAL SERVICE

TF 7-2	46 Airplane Propellers,	TF 1–433 Identification of Aircraft—Halifax Bomber.	TF 5-573 Explosives and Demolitions—Demolition of Reinforced Concrete Deck
TF 11-2	alties.	TF 1–453 Airplane Propellers— Hamilton Hydroma- tic Propeller—Servic- ing.	Girder Bridge.  TF 5-574 Explosives and Demolitions—Catering by Explosives.
TF 11-3	21 Combat Counter Intelligence.	TF 1–459 Curtiss Electric Propel-	TF 5-575 Explosives and Demoli-
TF 1-3	27 Aerial Navigation— Radio Aids.	ler—Reassembling the Power Unit.	tions—Dynamite.
TF 17-3	75 Tank Driving—Basic.	TF 1-460 Curtiss Electric Propel- ler the Hub and	TF11–590 Climbing and Working on Poles.
TF 10-3	77 Trouble Shooting, Mo- tor Maintenance—	Blades.	NEW FILM STRIPS RELEASED
	Part III—The Fuel System—The Engine Will Not Start.	TF 1-461 Curtiss Electric Propeller—Reassembling the Governor.	FS 7–50 Browning Machine Gun, Caliber .30, M1917, Part VI.
TF 5-3	<ul><li>78 Construction of the Timber Trestle.</li><li>92 Floor System of Timber</li></ul>	TF 1–482 Aircraft Machine Guns and Cannon—20 mm Aircraft Gun—Strip-	FS 7–51 Browning Machine Gun, Caliber .30 M1917, Part VII.
TF 7-3	Trestle Bridge—Guard Rails and Flooring and Hand Rails.	ping and Assembling.  TF 1-479 Incendiary Bombs— Thermite and Magnesium.	FS 7–70 Browning Machine Gun, Caliber .50 HB (Flexible) M2 Gd-Part II—Mech. Trng. (continued).
TF 4-3	98 The Antiaircraft Searchight Battery, the Searchlight Section Equipped with MI Trailers—Preparation for Action.	TF 1-500 Airplane—Hydraulic Brakes—Disassembly and Reassembly—The Hayes Shoe Brake. TF 1-502 Airplane Hydraulic Brakes—Disassembly	FS 7–71 Browning Machine Gun, Caliber .50 HB (Flex) M2 Gd-Part III, Care and Cleaning, Spare Parts, Accessories and Ammuni- tion.
TF 1-4	17 Identification of Air- craft—Italian Bom- bers Cantiere Z-1007.	and Reassembly—The Goodyear Disc Brakes.	FS 7–72 37-mm Gun Antitank M3, Part two, Disassembling.
TF 1-4	21 Identification of Air- craft—Japanese—	TF 1-522 Identification of Air- craft—Two Engine Fighter Quiz.	FS 8–40 The Medical Squadron. FS 9–9 Gun, Automatic, 20-mm,
TF 1	Navy Scouting Sea- plane 95.	TF 1–566 Servicing and Aviation Spark Plug.	FS 9–9 Gun, Automatic, 20-mm, M2-Disassembly and Assembly of Weapon.
TF 1-4	22 Identification of Air- craft—Japanese— Navy Patrol Bomber 97.	TF 5-571 Air Compressor and Air Tools—The Pneumatic Rock Drill, Model 75.	FS 9–10 Gun .75-mm M1897A4 and Carriage Gun .75- mm M2A3, Part I.

The Microfilm Branch was authorized by A. G. O. Memorandum 164 and will microfilm all documents of the A. G. O. on 35-mm film.

#### FOREIGN FILM BRANCH

The Foreign Liaison Branch has set up the United Nations Central Film Committee as a section within its Administrative scope. Among the functions of this committee is the task of providing adequate storage and projection facilities for a library of training films drawn from all over the world. Regardless of the nation of origin, (1) films will be available for study by (2) all the military and naval representatives of the United Nations in Washington, D. C.

#### STILL PICTURE ACTIVITIES

Maj. Lloyd D. LeMan has been designated as a member of the War Department Photonews Board.

\* \* \*

The equipment and supply section has standardized equipment designated as Darkroom PH–392. This is a complete unit consisting of a tent and all necessary equipment and packs into two metal chests 14 by 14 by 32 inches in size.

\* \* \*

The section is completing the development of two processing units, namely for (1) identification equipment PH–385 and (2) for use in conjunction with Darkroom PH–392. These developments are being completed in order to reduce the amount of equipment required by assignment units to the minimum, thereby eliminating the necessity for heavy motor transportation.

#### VISUAL AID BRANCH

Attempt is being made to decentralize the distribution of training films so that sufficient prints are available to training units for maximum use of training films. A model divisional training library has been

established by the 76th Division, Camp Meade. This library was selected by training officers of the component regiments and detachments of the Division. Personnel of the Visual Aid Section met with all training officers of the Division, demonstrated techniques of effective use of films in the training program, and discussed various other problems related to the maximum utilization of visual aids. Careful records of the use and value of the 76th Division films library will be maintained so that similar libraries may be established in all newly-activated divisions.

Use of training films and film strips in training and combat units of Coast Artillery Corps was demonstrated at Coast Artillery School, Fort Monroe, Va., and at the Antiaircraft Command, Eastern Defense Command, Fort Totten, N. Y. A system of rotating libraries for Coast Artillery combat units has been developed at Fort Monroe. A similar system, involving the establishment of regional libraries is under advisement in the antiaircraft command.

A new index has been prepared for films and film strips listed in FM 21–6, arranged by subject. Films will also be indexed according to 1) military training, 2) civilian defense, and 3) industrial training and morale.

\* \* \*

A series of training film instructional guides is in preparation. These guides are intended to assist the training officer in using training films with maximum effectiveness. The guide will contain a description of contents of the film, its place in the training cycle, suggested remarks by the instructor, a list of questions and answers on the film and a list of related films, film strips, and field manuals.

A film training plan employing films and film strips has been specified for the Quartermaster Schools. The details of this plan have been worked out to the point that even the daily schedule has been determined. Also distribution lists of films and film strips have been worked out for all Quartermaster Training Corps.

#### Statistics and Reference

Charts showing military and technical characteristics of radio sets have been revised. Distribution will be limited to those units authorized to use them.

Charts covering trucks and trailers and their characteristics have been prepared for use by the Divisions of the Office of the Chief Signal Officer.

Charts showing military and technical characteristics of German transmitters and receivers have been prepared.

#### New Books Added

The Signal Corps Reference Library has received many new technical volumes. Interest in these new textbooks is not limited to the Divisions within the Office of the Chief Signal Officer but extends outside the Office of the Chief Signal Officer.

Among the Studies on Information Requests, Jamming, Speech Secrecy Systems, and Signal Corps Personnel in the German Army, are of interest to all Signal Corps officers.

The Enemy Equipment Identification Section has been partly organized and although no enemy equipment has as yet been made available, two officers have already been instructed in German Signal Methods and in the indentification of their equipment.

#### Equipment Coordination

#### TELEPHONE AND TELEGRAPH

"Signal Corps Telephone Switchboard Chart," showing the comparative features for the various telephone switchboards available, has been prepared and copies distributed to the interested personnel of the Signal Corps.

\* \* \*

Studies are under way in connection with the preparation of military characteristics for a "telephone central" that will be more suitable for Army Headquarters than the present standard "TC–1."

#### Wood Replaces Steel

Due to the steel shortage, studies were made to determine the advisability of employing wooden crossarm braces. As a result of this study, their adoption for the present has not been recommended. A directive, however, has been issued to specify the use of one steel cross-arm brace instead of two steel braces wherever line construction will permit.

\* \* \*

Studies are under way to devise new and rapid means for the temporary construction of open wire lines and for laying and burying communication cables.

#### Ranges and Routines

A coordinated effort has been made in connection with the service testing of telephone and telegraph repeaters in order to establish practical operating ranges and service routines when these repeaters are associated with field wire lines. This study also included a comparison of neutral and polar telegraph systems for transmission over field wires from 80 to 100 miles in length.

A study has been made to determine a range of the frequencies and voltages which transformers must meet in order to associate Signal Corps equipment with the commercial power supply available in foreign countries.

#### MISCELLANEOUS EQUIP-MENT

Pigeon Loft PG-45 (Mobile) has been reclassified from standard to limited standard to be replaced by Loft PG-46-A (which is portable and can be knocked down and transported in any available transportation).

The Theodolite ML-47 has been replaced by Theodolite ML-247 which consists of a standard ML-47 with the addition of a wide angle, finder telescope ML-146 for use in tracking balloons. Parts lists for Meteorological Observation Sets SCM-8, SCM-12 and Meteorological Kits SCM-14 have been amended to include the ML-247.

The Quartermaster General has been requested to standardize a Portable Sewing Machine for Issue to Signal Companies, Depot, for use in the repair of Signal Corps equipments.

#### Instructions Issued

Service test instructions have been issued for service test of Plotting Equipment ME-8 for use by Aircraft Warning Units.

\* \* \*

Recommendation has been made to The Quartermaster General requesting standardization of 55-gallon drums for use by Aircraft Warning Units in transporting gasoline long distances and storing gasoline for considerable length of time. Plotting Board MC–229 has been recommended to be included in the parts list for Radio Direction Finder Equipment TC–8 and use by Signal Intelligence Companies.

\* \* \*

War Department Circular No. 166 recently published announces the responsibility of the Chief Signal Officer for all sound recording equipment.

\* \* \*

The Signal Corps Board has been requested to determine if several commercial items of sound recording equipment have sufficient military application to warrant standardization.

#### MILITARY TRAINING

Signal Corps Schools have been renamed as follows: Eastern Signal Corps School, Fort Monmouth, Red Bank, N. J.; Midwestern Signal Corps School, Camp Crowder, Mo.; Signal Corps School, Camp Murphy, Hobe Sound, Fla.

Signal Corps Circular No. 9, The Signal Corps School Course for Enlisted Personnel, Entrance Requirements and Detail of Students, has been suspended for the duration of the war. The information it contained is to be included in the next revision of AR 350–800, Military Education, Signal Corps School.

\* \* \*

Inasmuch as repeated requests have been received in the Office of the Chief Signal Officer for Signal Corps Circular No. 8–14, April 15, 1936, attention is invited to the fact that this publication has been superseded by TM 11–420, Tables of Vertical and Horizontal Components of Distances of Pilot Balloons, dated August 7, 1941, copies of which may be obtained through Adjutant General channels.

A Tentative Joint Teletypewriter Procedure, FM 24–8, was distributed by the Chief Signal Officer during the week of June 1–8, 1942. This procedure supersedes all existing instructions governing teletypewriter communication within the Army and between the Army and Navy or Civil Aeronautics Administration when in joint communication.

Any comments or recommendations on this procedure are to be submitted to the Chief Signal Officer prior to September 10, 1942. Additional copies of the procedure may be obtained from the Chief Signal Officer upon request.

\* \* \*

Division Field Code, Training Edition No. 1, Air-Ground Liaison Code, Training Edition No. 1, and Fire Control Code, Training Edition No. 1, have been removed from the Signal Corps Tables of Basic Allowances and should no longer be requisitioned through Signal Supply

channels. These editions have been superseded by the following technical manuals which may be obtained from The Adjutant General:

TM 11-460, Division Field Code, Training Edition No. 2

TM 11-461, Air-Ground Liaison Code, Training Edition No. 2 TM 6-230, Fire Control Code, Training Edition No. 2

New Technical Manuals

The following Signal Corps technical manuals have been released by The Adjutant General and will be available through regular channels of distribution:

TM 11–272, Radio Sets SCR–210–A, B, C, D, E, F, G, H, & J and Radio Sets SCR–245–A, B, C, D, E, F, G, H, I, J, K, L, M, N, & P TM 11–335, Telephone Central Office Set TC–1

TM 11-452, Signal Supply (Formerly issued as Signal Corps School Pamphlet No. 15)

TM 11-710, Interphone Equipments RC-48 and RC-60

TM 11-715, Interphone Equipment RC-38

TM 11-1000 Contactor BC-608-A

#### SIGNAL CORPS BOOSTS THE WAR SHOW

A new promotion stunt to engender interest in the War Show, now on tour, was tried out by the Signal Corps detachment in Pittsburgh recently.

Signal Corps troops equipped with Handi-Talkies circulated among the crowd close to the exhibit area. An operator was located at the top of a high tower festooned with semaphore flags to attract attention. Individuals in the crowd were invited to talk with the man in the tower.

After each trial, the individual was invited to attend the show and to see the Signal Corps Exhibit and special demonstrations in the exhibition tent before the show started.

#### FOR VICTORY

Buy War Bonds and Stamps

#### Facilities and Materials

#### SPREADING SIGNAL CORPS PRODUCTIVE CAPACITY

The Facilities Section of the Facilities and Materials Division is currently expediting the work of revising its records of industrial capacity for the purpose of completing a clear, up-to-date picture of subcontractor as well as prime-contractor resources available for the Signal Corps production program.

The maintenance of subcontractor records is by no means a new project but it is continually becoming of added importance in the light of the vast quantities of communications matériel to be procured. Due to the restrictive provisions recently applied to the construction of new manufacturing plants, it has become imperative to search out and employ all existing available productive capacity pertinent to the prosecution of the procurement effort.

#### The Subcontracting Factor of Production

The spread of war contracts by means of subcontracting has been a major objective of the Signal Corps as well as of other war procurement agencies, especially, since it became apparent early in 1941 that the need for utilizing the small businessman was twofold: First, the war production program itself had need of all existing and potential manufacturing skill in order to become a completely effective mechanism for the accomplishment of the war procurement mission; and second, in order to preserve a balanced national economy there was immediate need to eliminate the various forms of "unemployment" caused by the impact of the war production program.

The Signal Corps, through the ANMB, participated actively in the

purposes and aims of the Defense Contract Service as it was established under the Office of Production Management in February 1941. The purpose of that Service was to bring the skills of small business into the war procurement picture, and to spread the production activities more effectively throughout the industrial areas of the country. When this agency was reorganized to be an independent bureau, known as the Contract Distribution Division, cooperation was continued upon an increasingly widening scale. For example, data obtained during the tour of Defense Trains through the country last fall have been recorded, and follow-up made to obtain a complete picture of all potential capacity, possessed by the firms in question, that might be of value to the Signal Corps program. A further reorganization under the War Production Board placed the subcontractor interests in the Contract Distribution Branch of its Production Division. At present liaison is maintained with the WPB at all points both in Washington and in the field where information concerning capacity can be obtained and recorded for use by the Signal Corps procurement components.

In a study prepared in the Office of The Assistant Secretary of War a few years ago, the statement was made that "Planning (for Procurement) must also include the coordination of subcontractor facilities," but that, "In time of war when a prime-contractor may have to step up production to meet an emergency schedule, the subcontractor will be called upon for a similar increase and he may have difficulty in filling his orders."

#### Mobilizing Industrial Capacity

While the timely meeting of scheduled deliveries is the end point of productive effort, the problems inherent in accomplishing the procurement objective involve many interrelated factors which must be brought together in order to achieve the necessary goal. Among these factors the principal ones are:

- a. The effective utilization of all existing skilled capacity;
- b. The maintenance of continuous production and the elimination of lag or waste incident to "Lot" types of contract awards;
- c. The conversion and education of nonessential commercial peace-time industries, capable of fabricating items of Signal Corps matériel, to war production activity, and
- d. The relief of "distressed" manufacturers of commercial items; in so far as compatible with the war effort.

#### Recording Productive Capacity

The basic records of industrial capacity are the facility surveys and the formal statement of interest reported on the Army and Navy Munitions Board Forms 100. These basic records are continually kept current through regularly conducted resurveys of the facilities in which the Signal Corps has a recorded interest, and by surveys of new capacity as it is created by new construction, or by the utilization of existing idle buildings or plant components through conversion of nonessential commercial industries to war production.

A Monthly Report of Productive Capacity, which is regularly submitted to the division by approximately 75 prime Signal Corps contractors, has recently been revised to show the amount of subcontracting in each instance and for what particular components. It is proposed ultimately to show specific components produced by each subcontractor, sub-subcontractor, and by any further sources of direct supply.

#### Continuous Production Plans

In the long-range planning for continuous production, a coordina-

tive procedure has been set up with the Purchase Plans Section whereby, in the preparation of plans for the purchase of Signal Corps items, the capacity available at the termination of a particular contract (either prime or subcontract) may be immediately utilized in the manufacture of the items of equipment for which plans are being set up. Unless this is done a serious hiatus in production occurs which results in far-reaching disruption to the procurement program.

Recently the representative of a Signal Corps facility visiting the Section presented a graphic chart showing the distribution of production loads represented by present order backlogs with that company. This chart showed a sharp decrease in the company's schedules at a certain period. Records to show similar data on all terminating schedules, for facilities now in active production, are being organized in the section in order to obviate any stoppage in continuous output of communications matériel. For example: From data obtained either by letter from the facility or by personal conferences in the Division, as well as from the records on file, complete procurement status on a given item is reviewed. First a visual illustration is prepared of the production lines of those facilities manufacturing the item. That study, together with recommendations for the continuance of production lines is submitted through the Purchase Plans Section to the Scheduling Division, requesting procurement authorization on future requirements in order that these lines may be continued. Continuous production studies at present being carried out include: Telephone EE-8-A, Wire W-110-B, Receiver BC-348, and Transmitter BC-375. Close coordination is maintained at all times with General Development, Scheduling and Procurement Divisions in furtherance of the continuous production program.

A concurrent study necessary to the successful establishment of the Continuous Production Program is that of investigating sources of raw material supplies and of the procedures governing their procurement. Since open-market purchase of critical materials is no longer possible, the question of obtaining adequate supplies of these materials must be analyzed from the standpoint of the operation of the priorities and allocation regulations controlling their distribution. However, the active application of the Continuous Production Program will greatly facilitate definite plans and schedules, thus permitting logical allocations as well as timely and efficient productions.

#### Conversion of Production

The conversion of strictly nonessential production to war manufacture is one which embraces a variety of considerations. For instance, study must be made to determine the type of product which a facility is best adapted to make. This includes investigation as to geographic location in relation to raw material sources, factors of transportation, and methods to be employed for training in the "know how" of fabricating military items for which there are no commercial counterparts.

Recent proposals made by facility representatives for converted production include that of an auto accessories company to shift its equipment and manufacturing skill to the production of dynamotors; that of an auto sales and service concern to engage in assembly work on generators; and the inquiry by a farm implement firm relative to the feasibility of converting to the manufacturing of auxiliary power equipment. These are merely examples and are only partially representative of the scope of similar proposals constantly being reviewed in the Division.

Distressed Manufacturers

The relief of "distressed manufacturers" of commercial communications items can be regarded as a measure preliminary to more complete conversion to, and education in, the manufacture of military equipment. Here, due to certain skills already in existence, aided by instruction and training by personnel informed in the techniques peculiar to military production, a relatively rapid form of industrial conversion is to be expected.

Within the category of "distressed" manufacturers are the so-called War Production Associations. These Associations are made up of a number of small businessmen who pool their facilities, equipment, skills, and the like for war production purposes-In order that they may be permitted to operate as a corporate group it is necessary that formal clearance be authorized, by properly constituted authority, in order to avoid violation of the antitrust laws. This clearance is processed through the War Production Board. The Supply Services are notified through the Facilities Clearance Committee of the ANMB that these associations may be listed as eligible for contract awards. Records of qualified War Production Associations are filed in the section as representing skilled sources of productive capacity which can be considered for subcontract work and, in many instances, for the manufacture of primary Signal Corps items.

#### Prime Contractor as Subcontractor

Incident to the full utilization of subcontracting possibilities it is possible that an individual facility may be a prime contractor for certain items of equipment, and at the same time be a subcontractor for component parts of equipment being fabricated or assembled by other prime holders of contract awards. This has been shown graphically in a set

of drawings recently prepared to demonstrate the ramifications of a single contract for the EE-8-A Field Telephone. The tabulation shows the number of parts fabricated by prime contractors and parts suppliers, the number of suppliers for fabricated parts and raw materials, and the number of parts made from each of the 26 raw materials involved in this single item of communications equipment. The tabulation shows the following figures:

Number of prime contractors Number of suppliers for parts fabri-	1
cated by prime contractors	44
Number of parts suppliers	
Number of raw materials suppliers	29
Total number of companies involved	175
Number of parts fabricated by prime contractors.	175
Number of parts fabricated by parts suppliers.	454

Total number of parts used in EE-8-A...... 629

The present intensive study, directed toward the spreading of production, and maintaining continuous operation of production lines, will establish the Facilities and Materials Division as a source of complete, accurate, and adequate information concerning manufacturing sources of communications equipments, both for the Army of the United States and for the fulfillment of commitments to be carried out under lend-lease arrangements.

#### Military Personnel

Machine Records System to be Installed

The Classification Section of the Military Personnel Division is setting up an International Business Machines system as a means of speeding up the functions of the Division.

I. B. M. cards will be used to record such data as occupation, education, military experience, special skills, present status, etc., of all Signal Corps officers and officers assigned to the Signal Corps. This will result in expediting correct assignment and transfer of officers into positions best fitting their qualifications.

Other plans for using I. B. M. records include a similar classification of enlisted personnel, special technicians, warrant officers and noncommissioned officers in the first three grades. The system will also be used in connection with the publication of a relative rank list of Signal Corps officers, the computation of overages and shortages in strength tables and in statistical studies based on information obtained from such sources as Radio Manufacturers Service Association regarding radio specialists.

#### Signal Corps R. O. T. C. Units

A conference was held with Major Chamberlain of Fort Monmouth, pertaining to the assignment of officers from the Signal Crops Replacement Pool to colleges which are installing Signal Corps R. O. T. C. Units beginning in June 1942. Out of a total of 17 additional colleges which are accepting Signal Corps R. O. T. C. Units, 5 colleges are to begin instruction in June.

An officer has already been assigned to the University of Kentucky and four other officers are to be assigned, one to each of the following: University of Maryland, North Carolina State College, Michigan State College, and Oklahoma A. & M.

#### AUXILIARY CORPS SECTION

Maj. Ward K. St. Clair has taken over the supervision of the Auxiliary Corps Section which is planning Signal Corps requirements for Army Specialist Corps and Women's Army Auxiliary Corps personnel. Army Specialist Corps requirements are being received from the field and studies are being made regarding allotments to field units, Corps Areas and other installments.

#### Procedures Coordination

The preliminary draft of the revision of TM 11-454, the Radio Operator, has been completed.

The new manual, rewritten to conform to joint Army and Navy Radio Procedure, differs from the existing publication in a number of important respects. A conference recently was held with representatives of the Army Ground Forces and the Army Air Forces for the purpose of examining and discussing the manuscript in detail.

#### Teletypewriter Procedure

The manual entitled "Tentative Joint Teletypewriter Procedure" was distributed on June 1, 1942, to the Army, the Navy, the Civil Aeronautics Administration and the Canadian Army. This procedure will be used on all teletypewriter circuits within the Army and the Navy, and in joint communication, among both services, the Civil Aeronautics Administration and the CanadianArmy.

After a trial period of 3 months, comments and recommendations will be submitted to the Chief Signal Officer, on the basis of which the manual will be revised. It will then be distributed as Basic Field Manual, FM 24–8, Joint Teletypewriter Procedure, in the Army.

At the request of the AC & EC Board this Division has started a study of the possibilities of proposing the Tentative Joint Teletypewriter Procedure, as the standard teletypewriter operating procedure for use throughout the United Nations. Preliminary work has been done in determining whether or not the teletypewriter equipment of the various countries are capable of being interconnected.

This matter has been referred to the Signal Corps laboratories, Fort

Monmouth, N. J., and a report is anticipated in the near future.

\* \* \*

Lt. V. L. Clapp, formerly on temporary duty, has been assigned to permanent duty in this Division.

#### Procurement

#### INSPECTION SECTION

A new Office of the Chief Signal Officer Circular entitled "Signal Corps Inspection" is in process of preparation and is expected to be issued during July, 1942. This will supersede WD OCSigO Circular 1–14, entitled "Inspection," which covered the procedure under normal peacetime procurement.

The new circular will cover the organization and procedure employed for Signal Corps inspection as part of a procurement program involving large quantities of matériel needed in time of national emergency such as in time of war or in a period in which the national situation requires a rapid building up of the nation's means of defense. In such periods the following principles apply, and accordingly govern the provisions of the new circular as indicated:

- a. The most effective means of inspection is that which will eliminate unsatisfactory matériel at the source, and therefore prevent it from causing wastage of the nation's transportation and storage facilities. Accordingly, the new Circular is being prepared primarily to cover Signal Corps inspection performed at manufacturing plants or other supply sources.
- b. Rapidly changing conditions necessitate frequent changes in method and organization to meet new situations. Accordingly, the new circular, insofar as practicable, will be confined to basic principles of organization method and procedure,

permitting flexibility in organizational detail, lines of authority or command, and details of method, which may have to be altered in accordance with changes in procurement quantities, locations of sources, availability of qualified personnel, and related subjects.

c. The quantity of matériel being procured necessitates maintaining Signal Corps inspection organizations at each of a large number of manufacturing plants, operating without close supervision by centralized head-quarters. Therefore, the Signal Corps inspection unit at the plant necessarily assumes the major portion of the responsibility for assuring satisfactory quality of matériel under the terms of the contract.

#### PRODUCTION EXPEDITING SECTION

The Production Expediting System is being reorganized under a directive from the Chief Signal Officer with Col. George P. Bush as the Officer in Charge, Production Expediting Section, and with six expediting regions covering various territories in the field. The operations are being decentralized regionally throughout the country with centralized control in the Office of the Chief Signal Officer. This expediting service is being established in the interest of all the contracting officers in the Signal Corps. Its sole mission is to serve the contracting officers in obtaining satisfactory deliveries from the prime contractors, subcontractors, and material suppliers.

#### Efficiency Stressed

The Washington office is to take care of policy, administration, and discipline under the direct control of the officer in charge, Production Expediting Section, acting through the various officers assigned to his office.

The basis of the new organization is to give each contracting officer the.

most effective means possible of exercising his responsibility for delivery on his contracts and at the same time insure both uniformity of such means and avoidance of conflicts between orders placed by two or more contracting officers.

#### PURCHASE SECTION

Functions of the Purchase Section have recently been expanded to include the Bid Analysis Subsection, the Priorities Subsection, and the Renegotiation Committee.

The Bid Analysis Subsection was created for the purpose of analyzing bids submitted by contractors to check the validity and fairness of the figures submitted. All bids of over \$1,000,000.00 were being processed by this subsection and in many instances, the savings that accrued to the Signal Corps more than offset the slight delay occasioned by this additional step. This subsection has also given valuable aid to the procurement districts in effecting the acceptance of awards by the contractor.

#### Priorities Subsection

The former Priorities Compliance Section has been made a part of the Purchase Section, and is now known as the Priorities Subsection. This change was made to expedite the assignment of priority ratings to the various procurements.

In a move similar to that of Priorities Compliance Section, the Renegotiation Committee was assigned to the Purchase Section. To its established functions have been added the responsibility of checking the dates of substitution of noncritical materials for critical materials, as authorized by the laboratories. In conjunction with this, the committee also reviews specifications for the various procurements as they are written or amended. It is expected that this close acquaintance with the subject of materials and specifica-

tions will materially assist in expediting Signal Corps Procurements.

#### STATISTICAL SECTION

For the past several months, considerable thought has been given to the possibilities of keeping the statistical records, in the Procurement Division of the Office of the Chief Signal Officer, by machine operation in place of the present manual system. After extensive study, it was found that keeping the records by the International Business Machine punch-card system, many of the difficult problems now encountered, would be solved. It is also a fact that a very substantial reduction could be made in the man hours now required to keep the records and make reports. By this method the elimination of human errors can also be accomplished. So great are the factors in favor of machine operation that the transfer from the manual to a machine basis has been approved and is now in process.

#### Up-to-date Records

This method is particularly adapted to the Statistical Section of the Procurement Division due to the enormous amount of detailed records required. It is necessary to keep these detailed records in order to be able, on short notice, to report on any data required or for which a request may be received. On the present manual basis approximately 300 persons are required to do this work. It is the opinion of those who have made this study that at least 30 percent of the personnel can be released for other work when this transfer is made.

To thoroughly explain the punch card system and procedures, considerable space and time would be required; therefore, only a brief outline of the more important features will be given.

From the original documents in the Office of the Chief Signal Officer, cards will be punched for all pertinent and required information. This will cover the first steps in procurement. Those district offices having IBM equipment will punch cards for the subsequent steps; such as awards, deliveries, etc. This information will be transmitted to the Office of the Chief Signal Officer immediately by means of teletype punch. As all cards are verified after being punched (a machine operation), this means information will be available in the Office of the Chief Signal Officer immediately and will be correct. It also means the records of the Office of the Chief Signal Officer and the district offices will be in accord, and time lag in mailing reports covering the information is eliminated.

The information which will be punched on cards, included in part, data on program, DP's, contractor's name and address, contract date and number, item name and stock catalog number, order number, unit of measure, quantities, and money value. A working set of cards will be kept in the IBM unit and a duplicate set of interpreted cards in the Item Status Unit for ready reference.

Any information on any phase of procurement can be obtained in a very short time. This is accomplished by running the working set of cards through a sorting machine, which will sort out all cards containing the information that is desired. These sorted cards are then placed in a tabulating machine, which will give in printed form the detailed and/or total figures which are required. As stated above, cards are verified as punched and it is therefore known that the information coming off the tabulating machine is correct.

It can readily be seen that when this transfer is finally completed; the records of the Statistical Section will be complete and correct and the information will be readily available.

#### Legal

In accordance with the authority granted by War Department Procurement Regulation No. 11T, dated April 30, 1942, the limitations on the authority of certain Signal Contracting Officers to make awards or changes therein without approval of higher authority has been raised from \$1,000,000 to \$5,000,000. These officers are: all contracting officers at all Signal Corps Procurement Districts, at the Signal Corps Laboratory, and at the Signal Corps General Development Laboratory.

This was an extension, to the above designated officers, of the authority delegated by them on January 6, 1941, to make contracts under the First War Powers Act, 1941.

Cost-plus-a-fixed-fee contracts will not be made without prior approval of the Chief Signal Officer. Except for a construction contract now under negotiation, no cost-plus-a-fixed-fee contracts have been made by the Signal Corps.

#### NEWSPAPER MEN VISIT FORT MONMOUTH

(Continued from page 8)

radio, telephone installation, cable splicing, teletypewriters and teletypewriter maintenance.

At the completion of the tour of the school the guests gathered at 4 p. m. to witness a review of the officer candidate battalion on the parade ground, and the presentation of the soldier's medal for heroism to Corp. Michael Heick of the officer candidate department. Participating in the ceremony were four general officers: Maj. Gen. James B. Allison, former Chief Signal Officer, and Brig. Gen. Charles M. Milliken, in addition to Major General Olmstead and Brigadier General Van Deusen.

At the conclusion of the review and ceremonies the newsmen and officers gathered at the Fort Monmouth Club for a brief, informal gettogether.

### WAR DEPARTMENT HEADQUARTERS ARMY AIR FORCES WASHINGTON

A. A. F. Memorandum No. 132–1 June 4, 1942.

#### OTHER SERVICES, SIGNAL CORPS

#### PROCUREMENT OF COMMUNICATION FACILITIES

- 1. a. Under Army Regulations the Signal Corps is charged with the provision of all fixed signal communication systems and facilities used by the Army, except airways and airdrome control systems and aids to navigation, and systems required by nonmilitary activities of the War Department. Corps area signal officers are charged with supervision and technical control over administrative signal communication services and facilities in their respective corps areas. (See W. D. Circular 136, May 7, 1942.)
- b. A directive dated March 16, 1942, from the Chief Signal Officer, empowers corps area signal officers to initiate prompt action on all urgent requests for tactical and administrative communication facilities, the purpose being the elimination of delays and decentralization of authority.
- c. A directive dated April 9, 1942, from the Commanding General, Services of Supply, charges the Chief Signal Officer with the final determination of the military necessity of additions to existing communications systems or installation of new systems.
- 2. In accordance with the foregoing, it is directed that all requests for wire and administrative radio communication facilities be transmitted to the appropriate corps area signal officer. Urgent requests may be made by telephone with confirmation by letter.
- 3. Each request will embody an explanation of the necessity for the facilities, and will be in detail sufficient to permit development of plans based on all pertinent facts.
- 4. a. When the construction of a new establishment or a considerable addition to an existing establishment is authorized, the corps area signal officer will be furnished with a tentative statement of the communications requirements, accompanied by a chart showing the location of all buildings to be constructed, and the approximate number of telephones required for each building. This information will be furnished at the earliest practicable date, as it is essential to proper coordination in planning communication and power cable routes.
- b. Funds for communication facilities will be incorporated in the allotment for construction projects.
- 5. Arrangements for employment and payment of civilian operators at Army telephone switchboard installations will be made through the Corps Area Signal Officer.
- 6. Should difficulty be encountered in obtaining necessary facilities after proper request to the Corps Area Signal Officer, this Headquarters will be advised of the circumstances.

By command of Lieutenant General Arnold:

MILLARD F. HARMON,

Major General, U. S. Army, Chief of the Air Staff.

OFFICIAL

WILLIAM W. DICK, Colonel, A. G. D., Air Adjutant General.

#### WHERE IS SHANGRI-LA?

By C. H. (Chi) GAMBLE

al

Where is this place called Shangri-La
From which our heroes flew
To hurl down bombs on Tokyo
And other Jap towns too?
Where is this mythic airplane base
That's not on any maps,
Where Yankee fliers started off
To take war to the Japs?

This Shangri-La's a coral isle, Hid in the far-out sea, It is a factory in Detroit, A camp in Tennessee; It is a motor shop in Flint, It is the workman's chant As Caterpillars grow from steel In East Peoria's plant; It is the Corpus Christi base, A shell plant in Mobile, A shop where old men help to make War items out of steel; It is the lonely night-watch there In Sitka, and in Nome, It is a soldier's mother's heart Lonely, but brave, at home; It is a Tazewell county farm, A ranch in Idaho, A victory garden in your yard, A branch of the U.S.O.; It is the Coast Guards and Marines, Infantry, welders, cooks, Cavalry units riding jeeps, Students studying books; It is the privates in the ranks, Men who would learn to fly, Corporal Karl Polarshi, too, Sergeants Schmidt and Bligh;

It is the management in plants

Where the war stuffs are made,

It is the man in overalls, Skilled at an expert's trade; It is the schools both here and there, Churches, Y. M. C. A.'s, Men at machines in tiny shops, Girls who are running lathes; It is a spot behind the lines, A seaman 'board his craft, The leaders up in Washington, A lost man on his raft; It is the man from Tuskegee, And he who went to Yale, The man brought up across the tracks, The man who reads in Braille; The man who lives in Bigtown, and The one from Homeburg town. The folks who're dark, or white, or red, Or yellow, black or brown; It is the giant warship as It plows the waters deep, The parents carrying on at home, They, too, long vigils keep; It is the lad who saves his dimes, To buy more Victory Stamps, The man who wheels big loads of shells Up on the loading ramps.

Yes, Shangri-La, that mythic place,
Where airmen started out
To bomb Japan with all their might
Is not a place of doubt:
For it is here quite close to home,
And it is way off far—
It's every place in the wide, wide world
Where U. S. Patriots are!

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An informative, illustrated booklet about the signal Corps entitled "MEN WANTED TO 'GET THE MESSAGE THROUGH" is now available for distribution to interested applicants. Copies may be obtained by writing to the Special Activities Branch, Office of the Chief Signal Officer, Washington, D. C.

#### TO ALL OFFICERS AND CIVILIAN EMPLOYEES OF THE SIGNAL CORPS

# Know Your Job

- 1. Knowing your job requires two things:
  - a. First, know what the job is.
  - b. Second, know how to do it.
- 2. Your job is defined by its scope, duties, and responsibilities.
  - a. The "scope" delineates the boundaries of responsibility. Its consideration insures that the field is covered without duplication, and without a "no-man's land" of undefined responsibility.
  - b. Responsibility defines those things for which you are held accountable or answerable.
  - c. Duties are those acts which must be performed in order to discharge the responsibilities of the office.
- 3. To know how to do your job requires not only that you have the ability to perform the operations required, but that you have a knowledge of why it should be done, and know something of how it relates to the "other fellow's" job.
- 4. These same requirements apply not only to every individual with reference to his own work, but to the head of each unit regarding the work of that unit.
- 5. It will be helpful to you if you will draw up a brief statement of the scope and responsibilities of your job. Unit leaders will also find these useful to determine how well their organization is covering its responsibilities.
- 6. To know your job in all its angles requires constant effort. It is neither necessary nor desirable to pretend to knowledge you do not have. When a question arises that you can't answer, don't be satisfied by saying "I don't know." Say "I will find out," and then *find out* all that you can about it.

Major General

June 23, 1942. WAR DEPARTMENT, Headquarters, Services of Supply, Office of the Chief Signal Officer, WASHINGTON, D. C.

Major General, Chief Signal Officer of the Army.