

THE FIRST HISTORY



1948 - 1949

Published by AF ISR Agency History Office

Preface and Acknowledgements

For decades, the real history of the United States Air Force Security Service (USAFSS), Electronic Security Command, Air Force Intelligence Command, Air Intelligence Agency, and the Air Force Intelligence, Surveillance, and Reconnaissance Agency (AFISRA) has been hidden behind a necessary curtain of security. This publication represents a first and a breakthrough. The AFISRA History Office successfully declassified the first USAFSS History for public release.

This document details activities in 1948 and 1949. It explains how the early Security Service pioneers established and built their new command to execute a two-fold mission—to provide communications security and to be the cryptologic arm of the new Air Force. The reader will learn how the fledgling USAFSS overcame its many early challenges.



Harold P. Myers, GG-14 DAF
Chief Historian
AF ISR Agency History Office
Lackland, AFB, Texas

Special Thanks to the following individuals:
Retype, Editing and Formatting by SMSgt Benjamin Jones
Security Review by John Cohorn and Juan A. Salazar
Scanning by Teresa S. Gonzalez
Retype and Formatting by SMSgt Benjamin Jones
Graphics by Vincent Childress
Layout by Teresa S. Gonzalez
Printed by Martin Lopez and Michael Vidaurri

**HISTORY
of the
UNITED STATES**

AIR FORCE SECURITY SERVICE

for the period

20 OCTOBER 1948 to 31 DECEMBER 1949

Reports Control Symbol AF-DS-U2A

EDITED BY:



RALPH L. SIDENER
1st Lieutenant, USAF
Historical Officer

APPROVED BY:



TRAVIS M. HETHERINGTON
Colonel, USAF
Commanding

COMPILED BY:



RUPERT P. ROBERSON
T/Sgt., USAF
Historical Technician

FOREWORD

This history is, in a very true sense, a cooperative work. Without technical the assistance of each and every staff section, it would not have been possible for the historian to compile and interpret the mass of data which was collected for this history. The individual chapters are based, ultimately, upon periodic historical reports prepared by each staff section. A great deal of time and effort on the part of many staff members went into the writing of these reports and such credit as there may be due for the analytical portions of this account should fall to the respective sections. In large measure, the production of this history is a direct reflection of the personal interest and support tendered by the Commanding Officer and the members of his staff.

TABLE OF CONTENTS

I. THE ESTABLISHMENT AND DEVELOPMENT OF USAFSS	1
Establishment of USAFSS	2
Mission of the USAFSS in the Air Force	3
Transfer of Units and Responsibilities from the Department of the Army to the Department of the Air Force	3
Relations with Army Security Agency	4
Location of Permanent Site for USAFSS	5
Movement of USAFSS to Brooks AFB	7
Rehabilitation and Construction at Brooks AFB	8
II. PERSONNEL PLANNING AND UTILIZATION	11
Personnel Objectives	11
Participation in Move of Headquarters to Brooks AFB	11
Establishment at Brooks AFB	12
Coordination of Unit Personnel Practices	12
Initial Personnel Planning for USAFSS	12
Military Personnel Procurement	13
Utilization of Uncleared personnel	15
Problems of Promotion Policies	15
Movement of Personnel Overseas	16
Classification and Assignment	16
The Air Force Career Program	17
Utilization of School Eliminees	18
Personal Affairs	18
National Service Life Insurance	19
National Service Life Insurance Dividends	19
Civilian Personnel Procurement	19
Staff Planning and Operations Analysis	21
Personnel Space Utilization	22
Graphic Presentation Analysis	22
Training Analysis	23
Reserve Forces	23
Administration, USAF Security Service	24
Administrative Services	26
Historical Program	28
III. BUDGETING AND FUNDING, USAFSS	31
Mission	31
Funding of USAF Security Service, Fiscal Year 1949	31
Estimated Travel Funds	32

Funds Estimated for Pay Civilian Personnel	32
Civilian Funding Program 1950	33
Budget Estimate Fiscal Year 1951	34
Budget Construction Requirements 1951	36
Comptroller's Working Agreement with Brooks AFB	37
Cost Reporting	37
Printing and Binding Requirements Fiscal Year 1950	39
IV. OFFENSIVE MISSION – OPERATIONS	40
Directorate of Operations	40
Collection Division	40
Processing Division	41
Weather Division	41
Key Personnel	42
Activity and Development of the Directorate of Operations	42
Administrative Procedures	43
Inspection of 1st and 2nd Radio Squadrons, Mobile	43
Activation of Additional Radio Squadrons, Mobile	43
Processing Division	44
Collection Division	45
Development of Training Facilities	45
Difficulties of Training	47
Special Projects	48
Volume of Students and Instruction Presented	48
Views and Recommendations of Key Personnel	49
V. DEFENSIVE MISSION – COMMUNICATIONS SECURITY	50
Directorate of Security – USAF Security Service	51
Cryptographic Issue and Control	51
Special Projects	53
Classified Waste Incinerator	53
Security-of-Communications-Plan	53
Ciphony and Cifax Survey	53
Mobile Monitoring Unit	53
Code Vocabulary	53
Communications Information	53
Organizational Sub-plan	54
Cryptographic Checklist	54
Educational Sub-Plan	55
Cryptographic Maintenance	55
Traffic Analysis	55
Cryptographic Career Program	57
Planning	57
VI. STAFF BIOGRAPHIES	58

CHAPTER I: THE ESTABLISHMENT AND DEVELOPMENT OF THE UNITED STATES AIR FORCE SECURITY SERVICE

Once the need for a separate Air Force communications intelligence mechanism had been acknowledged in the War Council, the Air Force pressed forward toward establishment of a representative communications intelligence agency. It was imperative to “strike while the iron was hot.” Concurrence in the desirability of creating an independent Air Force communications intelligence organization had been secured in the face of considerable reluctance and doubt. In the urgency to obtain necessary concurrence, the Air Force had made commitments for assumption of certain communications intelligence responsibilities at an early date. Before these commitments could be met, machinery had to be designed and placed in operation to serve the needs of organization, planning, and training in all phases of communications intelligence. The Director of Intelligence, USAF, with the cognizance of the Deputy Chief of Staff for Operations, spearheaded Air Force action toward establishing a central communications intelligence agency to assume these responsibilities for the Air Force. The immediate need was primarily one for coordination of the planning and liaison between the Army and the Air Force as the two Departments negotiated for mutual agreement in matters of responsibility and control of communications intelligence facilities then available. With this need in mind, the Air Intelligence Requirements Division of the Directorate of Intelligence, USAF, early in June 1948, forwarded to the Chief of Staff, USAF, a proposal for the establishment of a unit to be known as the Air Force Security Group.

In justification of this proposal, it was stated that it was considered essential to the security and operational aspects that the control of policy and operations of the communications intelligence activities within the Air Force be centralized directly in the Air Force Headquarters. It was proposed the policy aspects of the activity be exercised by the air staff of the Headquarters, USAF, while the operational aspects would be discharged by the Air Force Security Group, under the operational control of Headquarters, USAF. The Air Force Security Group would parallel corresponding units in the Army and Navy and would facilitate and coordinate all matters of operation with the other military services.

The proposal submitted to the Chief of Staff, USAF, was approved in spirit and authority granted for establishment of the Air Force Security Group. This unit was established with a cadre of 11 officers and some clerical enlisted personnel, the latter on loan from the Army Security Agency. Major Idris J. Jones, an Air Force officer, was designated to head the Air Force Security Group on 24 May 1948. He had considerable experience in the field of communications and some experience in communications intelligence which gave him excellent qualifications for the job assigned him.

The Air Force Security Group had existed informally prior to the granting of this authority for formal establishment. Formal establishment was effected about 23 June 1948, in the Office of the Intelligence Requirements Division, Directorate of Intelligence, USAF, in the Pentagon. Major Jones, soon thereafter, held his first conference with his small group and, together, they drew up a list of immediate problems and requirements. It was decided at this time that work would be started immediately on drawing up Standard Operating Procedures for operation of Radio Squadrons, Mobile, Tables of Organization and Equipment for adequacy in view of Air Force Requirements, as distinguished from those of the Army under which Department the units had previously operated.

Meanwhile, letters were dispatched to all major air commands in the Zone of Interior and overseas, advising the commanders thereof of the establishment of the Air Force Security Group, delineating the purpose and mission of the unit within the Air Force, and presenting policies that would govern utilization of communications intelligence units by the various commands.

The embryo Air Force Security Group was faced with a staggering amount of work from the outset. The group of officers comprising the group quickly realized any attempt to solve all the problems facing them

would soon expend all their energies with little material return to be expected. Therefore, all efforts were directed wholly to those matters of greatest import and potential benefit to the ultimate communications intelligence mission within the Air Force. Foremost of these was the matter of reaching agreement with the Army on transfer of communications intelligence units and personnel from the Department of the Army to the Department of the Air Force. While a departmental transfer was contemplated, primary concern and effect lay directly between the Army Security Agency and the Air Force Security Group. Therefore, negotiations on this matter were carried on, to a major extent, between representatives of these two agencies. These representatives merely implemented the decisions and plans emanating from their respective parent Departments but this implementation required extensive and competent application of working principles and logic. The early and mutually satisfactory conclusion of the transfer agreements exemplified the energetic, sagacious, and congenial working relations established as a basis by these two groups of personnel in their mutual pursuit of a common objective.

As the problems and responsibilities of the Air Force Security Group grew more and more in scope and number, the small group became more and more inadequate in number and facilities to cope with them. Badly outnumbered and outranked on almost every occasion by its sister services of other Departments, the Air Force Security Group often could muster but a comparatively small voice in the many discussions on matters of policy and responsibility. It rapidly became acutely obvious that more than a mere representation of Air Force interests in matters of communications intelligence was mandatory if the Air Force was to realize its need for an adequate source of communications intelligence within the time limitations. Further, in anticipation of an increase of 1,000 personnel spaces, in addition to those received in transfer of functions from the Army to the Air Force, and the sizeable task of administering, training, and developing the potentialities of the many units and functions to be inherited with them, a machinery of greater scope and authority than that represented by the Air Force Security Group was required. Therefore, proponents for independent Air Force communications intelligence and communications security facilities intensified their drive for establishment of a command of greater scope and authority to assume Air Force responsibilities in this field.

ESTABLISHMENT OF THE UNITED STATES AIR FORCE SECURITY SERVICE

The United States Air Force Security Service (USAFSS) was established by authority of letter, Department of the Air Force, Headquarters, USAF, subject: "Establishment of the USAF Security Service," dated 20 October 1948, with the procedural functions and responsibilities of a major air command, to operate under the direct control of the Chief of Staff USAF.

The initial strength authorization of the new Command, exclusive of assigned units, was 34 officer, 6 airman, and 116 civilian spaces. Administrative and housekeeping equipment was authorized in accordance with Tables of Allowance 20-1, as amended.

Control by the Chief of Staff, USAF, was exercised through the Director of Intelligence, Deputy Chief of Staff/Operations, USAF. As will be explained in subsequent portions of this account, this had many advantages. Primarily, USAFSS was an intelligence function, so it was logical that its direction and control should be centralized in the Directorate of Intelligence to facilitate the maximum coordination and utilization of its activities and potentialities. Further, this simplified administrative procedures and funding provisions for the Command.

Initially, the new USAFSS was housed at Arlington Hall Station, Arlington, Virginia, an Army installation currently housing the Army Security Agency. Facilities at this installation were limited but adequate for the initial period. It was anticipated more expansive facilities would be provided for the Command at an early date.

MISSION OF USAFSS IN THE AIR FORCE

The classification of this history precludes too specific description of the mission of USAFSS within the Air Force. Generally, the mission of USAFSS is to provide the Air Force with operational communications intelligence and insure communications security within the Air Force. To this end, USAFSS is responsible for the operational command and direction of all communications intelligence and communication security units and personnel assigned to it.

Functions of USAFSS are: The interceptions and exploitation of communications traffic of interest to the Air Force; research and development of communications intelligence and communications security equipment; preparation, storage, distribution, and accounting of cryptographic materials within the Air Force; cryptographic and transmission security of Air Force communications; organization and training of units and personnel engaged in communications intelligence and communications security activities; preparation of Tables of Organization and Equipment, Military Occupational Specialties, and related items peculiar to the activities of USAFSS; and the budgeting for the Air Force cryptographic equipment and necessary expenditures in the discharge of the communications intelligence and communications security activities.

TRANSFER OF UNITS AND RESPONSIBILITIES FROM THE DEPARTMENT OF THE ARMY TO THE DEPARTMENT OF THE AIR FORCE

Concurrent with the establishment of USAFSS, negotiations of long duration between the Department of the Army and the Department of the Air Force relative to the transfer of certain communications intelligence units and responsibilities were drawing to conclusion.

As explained earlier in this history, a major portion of the efforts of the newly established Air Force Security Service was devoted to planning for and drawing up minimum, initial requirements of the Command to enable it to assume responsibility for Air Force communications intelligence and communications security requirements. It was realized that no large establishment could be contemplated in the near future but that the facilities would have to grow and develop in pace with the experience and capabilities of the Command. A great deal remained to be accomplished in the way of developing sources of personnel possessing the unique talents required in USAFSS to man the Command and setting up training facilities and procedures before the Command would be capable of achieving anything resembling full operational status.

For the initial phase, it was settled upon that the Department of the Army would transfer to the Department of the Air Force three Radio Squadrons, Mobile, and one Radio Security Detachment. With these units would go a total of 1,187 personnel spaces. Of these, 57 officer and 826 airman spaces would be for the three Radio Squadrons, Mobile. Twenty officer and 284 airman spaces would be for the Radio Security Detachment. In addition to these spaces, 40 officer troop basis bulk spaces were transferred to allow for Air Force participation in certain operational and training activities of the Army Security Agency. Seventeen civilian spaces were included in the transfer. The military spaces transferred corresponded to provisions of Tables of Organization and Equipment 32-1027, 19 January 1945, for the three Radio Squadrons, Mobile, and Tables of Organization and Equipment 32-952, 24 September 1945, for the Radio Security Detachment.

Those Army personnel assigned to the units transferred to the Department of the Air Force were to be attached for duty with the appropriate Air Force organizations until replaced by Air Force personnel.

Conversely, those Air Force personnel on duty with the Army Security Agency who were not readjusted in accordance with the provisions of the agreement would remain on duty with the Army Security

Agency until replaced by Department of the Army personnel; this is to be accomplished in both cases no later than 30 June 1949.

All accountable equipment authorized the three Radio Squadrons, Mobile, under the provisions of Tables of Organization and Equipment 32-1027 and Equipment Modification List for the 1st Radio Squadron, Mobile, was to be transferred with the units for use in the appropriate Air Force units. Additionally, the equipment authorized the 136th Radio Security Detachment under the provisions of Tables of Organization and Equipment 32-952, 24 September 1945, was to be transferred to the Air Force.

The Department of the Army inactivated the units affected by this transfer agreement, the 1st, 2nd, and 8th Radio Squadrons, Mobile, and the 136th Radio Security Detachment, between 1 January and 28 January 1949. On 28 January 1949, a letter was published jointly by the Department of the Army and the Department of the Air Force.

On 1 February 1949, USAFSS assumed command of the units and personnel transferred under provisions of the Joint Army and Air Force Adjustment Regulation 1-11-54, dated 31 December 1948.

Letters were dispatched by the Command to the units advising them of their new status and briefly prescribing pertinent policies which would apply in their new status within the Air Force. It was not contemplated that any drastic changes of policies or procedures would be imposed upon these units immediately. The new Command exhibited wisdom in leaving certain, time proven policies in effect in the units and utilizing their background of experience as a basis upon which to form conclusions and plans toward ultimate fulfillment of the Command's mission in the Air Force.

RELATIONS WITH ARMY SECURITY AGENCY

Throughout the planning for establishment of USAFSS within the Air Force, the Army Security Agency was utilized as a model and pattern. Most of the officer personnel initially assigned to USAFSS were officer who were, at the time, on detached service with the Army Security Agency for training in various phases of communications intelligence or communications security. These officers, in the course of their association with Army Security Agency, had made many acquaintances in the Army Security Agency organization. These personal contacts were to prove invaluable during the development stage of the new USAFSS.

The Army Security Agency was an old and established organization at the time of the birth of USAFSS. It dated from back in 1922 when a lowly paid civilian with two clerical assistants performed all the functions then assigned to it. Through the intervening years, the Army Security Agency developed into a large, well organized, and efficient machinery for production of communications intelligence material. With it, there were developed mechanisms and techniques for obtaining the most effective results in this field. As an indication of the amazing growth and increase in scope of operations of the Army Security Agency over this period of time, and as an index to the completeness of its facilities at the time of establishment of USAFSS, the Army Security Agency, in October 1948, was occupying over 700,000 square feet of floor space and had a budget running into hundreds of millions of dollars.

The purpose in giving this background sketch on the Army Security Agency is to assist the reader in realizing the immense potential benefit to USAFSS is locating its Headquarters so conveniently close to that of an organization which was established and experienced in the work USAFSS would be doing. Additionally, many of the officers received for assignment to key positions in USAFSS had a background of training and experience with the Army Security Agency.

Arlington Hall Station was already crowded with the facilities of the Army Security Agency when USAFSS was moved onto the station. The additional requirements for spaces imposed by the presence of Headquarters, USAFSS, rendered this condition acute. In the beginning, the Command occupied only one small office on the station. However, as it began to grow and expand, additional space rapidly became essential. The Army Security Agency allotted all available space and cooperated to the fullest extent in providing for USAFSS. Physical limitations prohibited adequate accommodations in time, however. Congestion became a major point of issue throughout the Command.

LOCATION OF PERMANENT SITE FOR USAFSS

Housing of Headquarters, USAFSS at Arlington Hall Station had never been intended as more than a temporary arrangement. It was realized, in the beginning, that larger and more complete facilities than were available on that station would be required for the Command eventually. Therefore, efforts toward obtaining new and larger accommodations were well advanced at this stage.

As early as 27 July 1948, the Air Intelligence Requirements Division, Directorate of Intelligence, USAF, Godfather and Patron Saint of the infant USAFSS, had forwarded a memorandum to the Director of Installations, DCS/M, USAF, setting forth certain initial requirements for space and facilities upon the activation of then to be USAFSS.

At the time, it was estimated approximately 160,000 square feet of floor space would be required initially for the Headquarters and Operating Branches of the Command. This estimate was predicated upon the assumption the Command would attain 100% operating capacity by 1 July 1949. As will be illustrated in subsequent chapters of this account, this was a highly optimistic assumption.

Originally, efforts were directed toward establishing the Headquarters, USAFSS, in or near the Washington D.C., area. The primary consideration affecting this plan was the proximity to Headquarters, USAF, and parallel Army and Navy communications intelligence agencies which would permit the maximum in liaison and efficiency of production by the new Command. On the other hand, there were some objections to location in the Washington, D.C., area due to the fact maximum dispersal of facilities was highly desirable in the event of an emergency. However, extensive investigation was made into the availability of space. A study was made by the Director of Installations, USAF, of all government-owned space within a 50 mile radius of Washington, D.C., without success. Further, the Public Buildings Administration, Federal Works Agency was contacted with respect to the possibility of leasing sufficient space in the Washington, D.C., area to meet requirements. It was learned there were numerous such requests for space already pending in that office and that space was not available to meet requirements. Therefore, the Director of Installations recommended a survey to be conducted by representatives of the Intelligence Requirements Division of government-owned facilities at the Cleveland Aircraft Assembly Plant No. 7, Cleveland, Ohio, and the Chicago-Orchard Airport, Park Ridge, Illinois, to determine whether space would be available at either of these installations which could be adapted to the requirements of USAFSS.

On investigation, it was found the sites at Cleveland, Ohio, and Park Ridge, Illinois, were unsuitable due to lack of housing facilities for enlisted personnel, poor security characteristics and the probability these facilities would be required for aircraft production in the event of an emergency. Other locations, such as Peterson AFB, Colorado Springs, Colorado; Orlando AFB, Orlando, Florida; Fort Benjamin Harrison, Indianapolis, Indiana; Sheppard AFB, Wichita Falls, Texas; Suitland Hall, adjacent to Andrews AFB, Maryland; and Brooks AFB, San Antonio, Texas, were inspected in the search for space. Most of these locations proved unsuitable for a variety of reasons, most predominant of which were insufficient space, unsatisfactory security characteristics and small civilian populations adjacent thereto which would be insufficient to support the needs of civilian personnel of the Command.

The last site inspected, Brooks AFB, San Antonio, Texas, was found to be highly satisfactory for the purposes intended. The Headquarters, Tenth Air Force, had but recently evacuated that base, leaving a large amount of space in excellent condition available for immediate occupancy. In addition, there was adjacent housing and mess facilities, located apart from the rest of the base, making necessary security measures feasible. The area was considered relatively secure from possible enemy action due to its geographic and strategic characteristics such as, adequate dispersal from similar installations of the Army and Navy which were located in Washington, D.C., and a high degree of internal security. Finally, the location near a large population center such as San Antonio, Texas, would more than adequately provide required civilian personnel to the Command.

On 21 October 1948, one day after the formal establishment of USAFSS, Colonel Roy H. Lynn, the Commanding Officer, forwarded findings of the extensive survey of all possible sites and his recommendations that Brooks AFB be considered for location of the Command, due to its favorable characteristics, to the Director of Intelligence, USAF in a letter. The Director of Intelligence, USAF, forwarded these recommendations to the Director of Training and Requirements for consideration. The recommendation that Brooks AFB be selected was rejected by the latter office on the grounds sufficient space did not exist at Brooks AFB to accommodate USAFSS in addition to activities already located there. Second, the time-worn argument was reiterated that USAFSS should be located in closer proximity to Washington, D.C. Apparently, convenience was considered more highly desirable than the safety factor of strategic dispersal of vital components in the event of an emergency. The Director of Training and Requirements recommended a survey be made of facilities at Jefferson Barracks, St. Louis, Missouri, for possible location at that site. In the event of failure in that direction, it was further recommended an effort be made to locate a site closer to Washington, D.C. This latter recommendation was apparently made without cognizance of the extensive efforts which had already been made in this respect.

The records are somewhat sketchy through this stage of the project of locating a site for USAFSS. However, indications are that further consideration was given to the recommendations favoring Brooks AFB at a later date. On 30 November 1948, a letter was forwarded from Headquarters, USAFSS, to the Commanding General, Air Defense Command, Mitchel AFB, New York, citing authority of a wire transfer from Headquarters, USAF, whereby a visit had been made to Headquarters, Air Defense Command, and the requirements of USAFSS, relative to space on Brooks AFB, explained to certain officers in that Headquarters. The letter was written at the request of General Turner, Headquarters, Air Defense Command, as a matter of record and confirmation of oral agreements. In closing, this letter requested authority for a representative of USAFSS to contact Headquarters, Twelfth Air Force, Brooks AFB, and be present during the survey of facilities at that base. **The Twelfth Air Force had moved into Brooks AFB on 1 December 1948 and occupied the space originally sought for the USAFSS.** However it was believed secondary space could be secured which would be suitable for the needs of USAFSS. This letter was in accord with action and planning directed toward this achievement.

A representative of USAFSS visited Brooks AFB on 29 December 1948 and discussed the needs of the Command with the Commanding Officer, Brooks AFB, who indicated the secondary area selected for USAFSS would not conflict with the needs of the Twelfth Air Force or other organizations on the base. He also volunteered to effect the necessary coordination on the matter with the representatives of the Twelfth Air Force, who had not been available for the discussion, and assist in any other way to expedite accommodation of Headquarters, USAFSS, on the base. This attitude was typical of the cooperation and support provided by the Brooks AFB Command at all times, before and after settlement of USAFSS at that base.

The secondary space selected and settled upon by USAFSS consisted of about 20 acres of ground containing some 40 temporary-type buildings, serviced by roads, concrete walks, an exterior sewer

system, and gas and water mains. The condition of the facilities, overall, was good but some rehabilitation was required before they were entirely suitable. Further, the requirements of the Command necessitated some major improvements, alterations, and new construction before the facilities were adequate for practical functioning of the Command. This is discussed more thoroughly in the section of this account titled "Rehabilitation and Construction at Brooks AFB."

MOVEMENT OF USAFSS TO BROOKS AFB

Planning for the move of Headquarters, USAFSS, to Brooks AFB began with consideration of the following problems:

- a. How to accomplish the physical move without disrupting existing Command functions.
- b. Necessity for determining the channels for administration which would continue to be available for utilization by the Command at Brooks AFB and the existing channels that would need to be discontinued.
- c. What office space would be available to the various sections of the Headquarters and how best to allocate such space with provision for future expansion.
- d. Necessity for arranging and coordinating administrative details of the movement, such as request for movement orders, publishing of General Orders, notifying interested Commands and Activities of the pending move, transfer of Morning Reports, et cetera.
- e. Arranging for liaison between Headquarters, USAFSS, at Brooks AFB and other elements of the Command which would remain in the Washington, D.C., area for varying periods of time after the move.

In prospect of the pending move of USAFSS to Brooks AFB, action was taken in February 1949 to affect the movement of the 8th Radio Squadron, Mobile, a unit of USAFSS, from Vint Hill Farms Station, Warrenton, Virginia, to Brooks AFB in advance of Headquarters, USAFSS, to serve as a holding squadron for the Command and prepare the area assigned to USAFSS for reception of the Headquarters. At approximately the same time, the 136th Radio Security Detachment was transferred from Fort Slocum, New York, to Brooks AFB for projected operational purposes of the Headquarters.

Late in March, authority was obtained from USAF to move the Headquarters and Headquarters Squadron of USAFSS to Brooks AFB from Arlington Hall Station. Concurrently, plans were drawn up with a view to executing the move with maximum efficiency. Members of the Command Staff visited Brooks AFB to inspect facilities and confer with Twelfth Air Force and Base Commanders regarding the pending move. When details were sufficiently settled, action was taken to establish an advanced echelon headquarters at Brooks AFB. This was done so that continuity of administration could be maintained when the main body of the Headquarters moved from Arlington Hall Station and to provide machinery to which administrative and personnel business could gradually be deflected prior to the move. This would cushion the closing of the Headquarters at Arlington Hall Station as it affected scattered units of the Command and pipeline personnel en route from schools and other sources. To further achieve the continuity desired, concurrent with the move, notice was dispatched via wire message and correspondence to all commands concerned, worldwide, apprising them of the pending move and indicating that all matter intended for Headquarters, USAFSS, should be directed to Brooks AFB as of a given date.

It was realized that a need would exist for liaison between Headquarters, USAFSS, and various agencies in the Washington D.C., area for some time after the move to Brooks AFB. Consequently, consideration

was given to the necessity of leaving a detachment at Arlington Hall Station to serve this purpose as long as needed. To this end, Detachment "A" of Headquarters and Headquarters Squadron, USAFSS, was designated with a complement of 5 officers and 2 civilians to be made available from Headquarters and Headquarters Squadron with no increase in authorization for the squadron being contemplated.

Meanwhile, work progressed rapidly at Brooks AFB in preparation for the move of the main body of the Headquarters to that location. The advanced echelon had effected the cleaning and limited rehabilitation of necessary buildings for initial establishment of the Headquarters and had set up a skeleton organization to facilitate resumption of full operational activity with a minimum of lost motion on arrival of the main body of the Headquarters. The advanced echelon commander kept the Commanding Officer, USAFSS, fully advised of developments by means of frequent activity reports and wire messages when required.

REHABILITATION AND CONSTRUCTION AT BROOKS AFB

Early inspections of the area selected for USAFSS at Brooks AFB had revealed there would be an immediate and vital need of major rehabilitation of facilities existing in the area and additional construction to augment them before adequate operational efficiency could be achieved by the Command. Discussions were held between Brooks AFB and USAFSS representatives in November and December of 1948 relative to the feasibility of effecting the required improvements. Only a general survey of the requirements was made at this time as it was thought best to avoid definite commitments until such time as Headquarters, USAF, had been acquainted with the problem and some indication received that approval would be forthcoming for allocation of necessary funds for the project. As an assist in this direction, the Commanding Officer, USAFSS, in early January 1949, forwarded a letter to the Commanding Officer, Brooks AFB, requesting a cost estimate be furnished on certain items of the rehabilitation program. This request was in accord with a prior agreement between the two Commands whereby Brooks AFB agreed to provide Air Installation services to USAFSS, in so far as drawings and cost estimates were concerned.

Early in February 1949, Headquarters, USAFSS, forwarded a letter to the Chief of Staff, USAF, outlining the requirements of USAFSS in the way of physical facilities. The estimated cost of these requirements aggregated some \$6,607,900. The main item of this estimate was 400,000 square feet of specially reinforced floor space for operations functions. This item was estimated at a cost of \$4,800,000. It included such related items as a fireproof storage vault, protected by modern security devices, for storage of cryptographic materials and equipment, encompassing approximately 15,000 square feet of floor space; air conditioning equipment for the vault and certain other areas of operations area, and a pneumatic tube system for rapid dispatch of materials within certain areas. Another major item in the estimate was power plant of 5,000 Kilo Volt Ampere (KVA) capacity intended to serve as an emergency power source. The estimated cost of the power plant was \$500,000. The last large item listed in this letter to the Chief of Staff, USAF, was a cafeteria and equipment to provide for feeding 2,000 civilians in a two-hour period. Two smaller but important items included in the estimate were a warehouse of 20,000 square feet area, at a cost of \$160,000 and an incinerator of 12-ton capacity at a cost of \$20,000. As will be seen in later portions of the history, only an infinitesimal part of the sums requested in this letter were ever approved.

The projected program of rehabilitation and construction for the construction for USAFSS at Brooks AFB was strongly supported by the Director of Intelligence and the Deputy Chief of Staff, Operations, USAF. Both of these offices pressed for quick and decisive action to provide the needed facilities for the new command at the earliest possible date. It was repeatedly and often emphasized that lack of suitable facilities was delaying USAFSS in achieving operating effectiveness. This condition represented a very hazardous situation; for it was a foregone conclusion:

The United States could not afford to enter a major conflict without an efficient communications intelligence organization in full operational condition.

However, much of the validity and urgency of this argument was lost on many top Air Force officers because of the extreme secrecy necessarily surrounding the mission and activities of USAFSS which prevented the uninitiated from realizing the potentialities of a communications intelligence organization in the Air Force.

Key Personnel of USAFSS began to realize very early in their negotiations with other Air Force agencies for funds that their original estimates were going to prove very optimistic. Therefore, in anticipation of enforced slashes, efforts were directed within USAFSS to cutting initial estimates to the bone to render them less vulnerable to attacks from other agencies. To this end, a letter was forwarded to the Commanding Officer, Brooks AFB, on 16 February 1949 modifying previously described rehabilitation requirements and requesting an adjusted cost estimate considering these changes. Further, in accord with instructions received from the Office of the Deputy Chief of Staff, Materiel, USAF, it was requested that an Individual Project Estimate, Engineering Form 5-25 be initiated through channels for the required rehabilitation and construction.

At about the same time as this Form 5-25 was initiated at Brooks AFB, Colonel Roy H. Lynn, Commanding Officer of USAFSS, attended a briefing for key air staff personnel in the Pentagon. During the briefing, Colonel Lynn presented the requirements of USAFSS for rehabilitation at Brooks AFB. The matter was discussed between Major General C. P. Cabell, Director of Intelligence, Office of DCS/O, USAF, and Lieutenant General H. A. Craig, Deputy Chief of Staff, Materiel, USAF. General Craig indicated he would present and support USAFSS requirements in pending budget hearings. General Cabell pressed action from his office on the matter of forwarding a memorandum to the Chief of Staff, USAF, for his approval and signature in which the Deputy Chief of Staff, Materiel, was urged to obtain the needed facilities for USAFSS. It is presumed this action was designated to obtain the sanction of the Chief of Staff, USAF, for the actions already described for obtaining funds for rehabilitation and construction at Brooks AFB.

The modified cost estimate furnished by Brooks AFB on rehabilitation required by USAFSS amounted to \$96,328. It was further estimated there would be a requirement of an additional \$20,000 for normal maintenance and upkeep during the balance of Fiscal Year 1949. This estimate was forwarded, through channels, to the Deputy Chief of Staff, Materiel. As stated before, the Deputy Chief of Staff, Materiel, had indicated he would support the needs of USAFSS in this matter. Further indication of support of the overall program of USAFSS in this matter was received when the Comptroller, USAFSS, visited Office of Cost and Budget, Air Installations, Office Deputy Chief of Staff, Materiel, in February 1949 and discussed this subject with representatives there. It was indicated at that time that tentative approval had been given for the overall requirements of USAFSS in the amount of \$6,407,900 to be included in Fiscal Year 1950 programming. Further, it was indicated that action was in process to obtain funds in the amount of \$100,000 for immediate USAFSS rehabilitation and construction requirements.

In May 1949, the surprising and discouraging news was received in Headquarters, USAFSS, that requests for funds for immediate rehabilitation at Brooks AFB had been disapproved by the Deputy Chief of Staff, Materiel.

The basis for the disapproval was the fact these funds had not been programmed for Fiscal Year 1949 expenditures, and a shortage of funds did not allow allocation for this purpose until funds for Fiscal Year 1950 became available. This was a disastrous blow to the USAFSS program. More than that, if the decision was allowed to stand, the Air Force would be deprived of communications intelligence

facilities and the development of a communications intelligence organization delayed by several years. The critical implications of this decision impelled the Commanding Officer, USAFSS, to appeal directly to the Chief of Staff, USAF, on 4 May 1949 by letter. In this letter, it was emphasized the funds in question (\$120,000) were vitally needed before USAFSS could begin production of material urgently needed by the Air Force. It was explained that establishment of the Command late in 1948 precluded programming for Fiscal Year 1949. Further, it was carefully pointed out that no lack of foresight or proper coordination on this matter could be charged to USAFSS. All phases of the matter concerning location, assignment of facilities, the necessity for rehabilitation, and the actual movement of the organization to the location were frequently discussed with representatives from the Office of the Deputy Chief of Staff, Materiel, and at no time prior to the disapproval of the request for funds had it been indicated that the necessary funds could not be obtained. The Commanding Officer, USAFSS, concluded this letter with the statement he considered that the security of the military establishment was being jeopardized to an unwarranted degree by denial or delay in furnishing the needed funds to place USAFSS in an operational status. He recommended the Air Force make funds available from Fiscal Year 1949 funds in the amount of \$75,000 for minimum, emergency rehabilitation and that the balance be provided from Fiscal Year 1950 funds.

The Commanding Officer, USAFSS, was fully supported in his appeal to the Chief of Staff, USAF, by the Director of Intelligence and the Director of Plans and Operations, USAF. They, too, emphasized the vital importance of getting USAFSS into full operational status at the earliest possible date.

Unfortunately, from the historian's point of view, most of the negotiations and exchanges concerning this matter were on such a high level and of such classification as to preclude this historian obtaining the complete story. However, investigation of such sources as were available reveals that funds were ultimately secured for the initial needs of USAFSS in the amount of \$76,000 for Fiscal Year 1949.

Major items of rehabilitation which were considered in this considerably curtailed program by USAFSS were the erection of an eight foot cyclone fence with three strands of barbed wire at the top, all mounted on metal posts embedded in concrete and completely enclosing the Headquarters and operational area to provide physical security; strengthening a limited number of buildings to withstand minimum floor loads of 300 pounds per square feet on all floors; and essential compartmentation of buildings for office and operational space to insure maximum security and facility of administration and operation.

Notice of the allocation of \$76,000 for the rehabilitation and construction program of USAFSS at Brooks AFB was not received by Headquarters, USAFSS, until 1 June 1949. This notice advised that these funds would have to be obligated prior to 30 June 1949. Intensified action was immediately launched to complete final plans, specifications, and estimates in the light of the reduced amount of allocation. On completion, the plans and specifications were approved by the Commanding Officer, Brooks AFB, and the Commanding General, Twelfth Air Force. The Air Installations Officer, Brooks AFB, flew with them to Headquarters, Continental Air Command, Mitchel AFB, New York, for coordination and approval. A representative of the Director of Materiel, USAFSS, met the Air Installations Officer of Brooks AFB there and, together, they hand carried the material through Headquarters, Continental Air Command, to expedite action on it. Once approval had been secured from that Command, immediate action was initiated by the Director of Materiel, USAFSS, to advertise for bids on the project. Contracts were awarded on 20 June 1949. This undoubtedly represents a record of some kind. At least, it proves once again that, under the stimulus of critical necessity, the Air Force can get the job done in spite of great obstacles.

CHAPTER II: PERSONNEL PLANNING AND UTILIZATION

The Directorate of Personnel and Administration, as it was known originally, was responsible for all personnel and administrative functions within Headquarters, USAFSS. The original plan of organization of USAFSS was patterned after that of Air Materiel Command, USAF, due to some of the features of that plan considered desirable at that time. Under this plan of organization, for instance, the Adjutant General functions fell within the purview of the Director of Personnel and Administration. This arrangement was adopted as a means of minimizing confusion and centralizing administrative control at a time when the organization and functioning of the Command were in a highly fluid state due to recent establishment of the Command.

In November 1949, the Directorate of Personnel and Administration was reorganized. As a result of this reorganization, the Directorate was relieved of control of the Adjutant General and the Plans and Organization functions. These two activities became special staff functions. Thereafter, the mission of the Directorate of Personnel was altered in that the Directorate would, subsequently, be concerned only with the administration of personnel, military and civilian. The lessening of the many responsibilities of the Directorate of Personnel was expected to reflect in improvement of administration and procurement of personnel for the Command.

During the early stages of organization and development of the Command, the Directorate of Personnel and Administration, like most of the other sections of the Headquarters, operated a great deal on the basis of "hip-pocket" brief case and filing systems. This may have facilitated the work of organizing and establishing the Command, but it inevitably reacted, later on, to the detriment of the Command as a whole in the lack of records of negotiations and actions during this period.

PERSONNEL OBJECTIVES

The Director of Personnel is charged with responsibility for the formulation of plans, policies, and procedures necessary to assure efficient utilization of personnel and economical, effective administrative practices within the Command in so far as it concerns personnel matters. To This end, he directs and supervises a program for the procurement and placement of personnel both military and civilian. He directs and supervises a program for the Reserve Forces, and makes field visits to subordinate units to observe effectiveness of command policies and to coordinate personnel practices and procedures. Prior to the reorganization of the Headquarters in November 1949, the Director of Personnel was also responsible for the functioning of administrative machinery represented by the Adjutant General Division.

PARTICIPATION IN MOVE OF HEADQUARTERS TO BROOKS AFB

The Office of the Directorate of Personnel and Administration was first located in the attic of the main building at Arlington Hall Station. These quarters, at best, were inadequate and inconvenient. It quickly became apparent that some adjustment in space and facilities would be necessary if the Directorate was to operate effectively. This was an early characteristic of the Command as a whole.

During March and April of 1949, in accord with pending plans to move the Command to Brooks AFB, Colonel Dabney H. Maury, Director of Personnel and Administration, and a party made several trips to Brooks AFB to examine facilities there and to acquaint himself with primary requisites for planning the move of his Directorate to that location.

Once plans were completed for the move, Colonel Maury and a party including Captain Clyde E. Allen and Technical Sergeant Hugh T. Smith departed Arlington Hall Station to proceed as the first echelon of the Headquarters, USAFSS, to Brooks AFB. This was on or about 5 April 1949. Colonel Maury was charged with establishing an advanced headquarters for the Command, pending arrival at Brooks AFB

of Colonel Roy H. Lynn, the Commanding Officer, USAFSS. Captain Allen and Technical Sergeant Smith were delegated the responsibility of setting up a minimum personnel function to furnish continuity in personnel matters during the move of the Directorate from Arlington Hall Station. Concurrently and in conjunction with this responsibility, Technical Sergeant Smith was to perform classification and other personnel services for personnel en route to the Command from schools of the Indoctrination and Technical Divisions of the Air Training Command and other sources during the time of the Headquarters' move from Arlington Hall Station to Brooks AFB.

ESTABLISHMENT AT BROOKS AFB

The first components of the Command at Brooks AFB were initially all housed in one building. Here, again, the cramped quarters and inconvenience caused by the congestion forced an early adjustment of space to permit expansion. The representative segments of the Directorate of Personnel and Administration moved into another building as soon as it became available. There, work was begun in preparation for accommodation of the main body of the Directorate on arrival at the base in the near future.

A floor plan was devised over a short period of time to facilitate maximum utilization of space within the building by various sections of the Directorate, and an equitable allocation was made of the available furnishings, such as desks, chairs, files, et cetera, to permit the representative sections to achieve some stability on which to base constructive organization upon arrival of the main body. This forethought and planning by the advance echelon proved highly facile and rewarding when the main body of the organization began arriving. There was a prepared skeleton organization awaiting them, ready and capable of expanding into full operation with a minimum of confusion and turmoil.

COORDINATION OF UNIT PERSONNEL PRACTICES

As problems of organization were solved and disposed of, functional problems became more demanding of attention. One problem of long standing and one which effectively hindered personnel administrative procedures throughout the Command was the lack of stable, efficient personnel administrative methods in the subordinate units of the Command. As will be remembered, these units had, but a short time before, been under Army jurisdiction. There, personnel practices differed greatly in many respects from those of the Air Force. Since the transfer of these units to the Air Force, the time and facilities had not permitted proper orientation of these units in Air Force procedures. So, as a means of correcting or improving these deficiencies, a series of visits to these units was planned and made by supervisory personnel of the Directorate of Personnel and Administration to observe and correct, where possible, the practices within the units. Also, it was believed further benefit would be realized from these visits by reason of the fact a better understanding and concept of problems of personnel and administrative nature within the units would be possible after the Headquarters key personnel had gained personal knowledge of local environments and conditions affecting the units.

INITIAL PERSONNEL PLANNING FOR USAFSS

Available records indicate that consideration was being accorded the personnel requirements of the yet to be USAFSS sometime prior to the establishment of the Command. During the period of July to December 1948, as a result of discussions between representatives of the Directorate of Intelligence, Directorate of Training and Requirements, and the Directorate of Military Personnel, Headquarters, USAF, estimates were prepared and forwarded to the Deputy Chief of Staff, Personnel, USAF, on the personnel requirements of USAFSS necessary to enable the Command to assume certain responsibilities and functions to be transferred from the Department of the Army to the Department of the Air Force in the near future.

Records available to this historian are incomplete on this aspect but it is presumed these estimates served as a basis upon which subsequent personnel allocations for USAFSS were predicated.

Despite the earlier planning on personnel requirements, procurement of personnel for making USAFSS after its establishment was greatly handicapped by the lack of an authorized Table of Allowances, a Table of Organization and Equipment, or a Table of Distribution. Apparently all the early planning was directed toward determining the spaces to be transferred from the Army to the Air Force on transfer of certain units and responsibilities and did not extend to formulating manning tables, et cetera. This was an extravagant omission.

Before an appreciable number of personnel could be allocated to USAFSS, a basis of authority for such personnel was necessary. In the absence of a Table of Allowances for the Command, the Director of Military Personnel, USAF, was unable to direct a flow of personnel into the Command. In an effort at solution of this vital problem, Colonel David Wade, Deputy Commander of USAFSS, discussed it with the Director of Operations, USAF. These discussions were instrumental in obtaining authority whereby the Director of Operations initiated a letter to the Director of Military Personnel, USAF, which constituted a temporal basis of authority for personnel requirements of USAFSS.

Even with the establishment of personnel quotes for the Command, the problem was not completely solved. Due to the unique character of the mission of USAFSS, considerable care had to be exercised in selecting personnel to man the Command. While this was necessary, it reacted in a detrimental manner for the Command. To put it simply, **USAFSS was faced with the problem of obtaining several hundred highly skilled specialists, trained in very limited fields, at a time when the whole Air Force was suffering an acute shortage of all kinds of personnel.**

Colonel Wade pressed his drive for personnel. He personally visited various schools of the Technical and Indoctrination Divisions of the Air Training Command and interviewed student personnel for possible assignment to USAFSS. This action was sanctioned by the Headquarters, USAF, and complete cooperation was furnished by the Commanding General, Air Training Command. Some personnel were obtained in this manner, but a more important result of Colonel Wade's efforts in this direction was the establishment of temporary quotas of personnel from these sources for USAFSS.

This represented the groundwork of a plan, later placed in effect, whereby permanent quotas, phased with the rapid development and changing requirements of USAFSS, were set up.

Shortages of certain specialists continued to exist through the first year of operation of the Command. Continuing efforts were devoted to alleviating these shortages with varying success. Frequent studies were made of the personnel situation within the Command and the results presented to various Air Force agencies as justification for proposed personnel requirements or increased personnel quotas.

Circumstances consistently indicated that no great improvement could be realized on personnel problems until the personnel assignment priority for USAFSS was raised. During the month of November 1949, the Director of Personnel, USAFSS, visited Headquarters, USAF, to confer with the Director of Military Personnel on personnel problems and with a view to raising the personnel assignment priority of USAFSS. As a result of this and other conferences and studies, USAFSS was allocated a personnel priority of Group I, Precedence I, which gave top priority to the Command for filling existing shortages.

MILITARY PERSONNEL PROCUREMENT

Initial procurement of officer personnel for assignment to units transferred to the Air Force from the Army was a problem of some magnitude. Under the provisions of the Joint Army Air Force Adjustment Regulations 1-11-54, the Army personnel on duty with these units would revert back to the Army not later

than 30 June 1949. It was mandatory that personnel be obtained from within the Air Force to fill the spaces left by these departed Army personnel. Initially, the Headquarters and Headquarters Squadron of the Command required primary consideration since other units were, at that time, partially manned by Army personnel assigned to them at the time of transfer. The Headquarters and Headquarters Squadron had only a token force for the organization and operation of the Command functions, however. Here the time proven axiom, "Improvement Begins at Home," applied with particular emphasis.

At the time of establishment of the Command, a few officers were on detached service from the Air Force to Army Security Agency for training purposes. These officers were subsequently assigned to USAFSS and constituted the nucleus around which the Headquarters was later organized. This was a very small force, however, consisting of only 22 officers. As late as 25 March 1949, only 46 officers were assigned to the Headquarters. In view of the rapidly approaching deadline of 30 June 1949 when USAFSS would be required to assume the responsibilities outline in Joint Army Air Force Adjustment Regulation 1-11-54, it was imperative additional, qualified officer personnel be secured for the Command. Some emphasis is attached to that term "qualified." As already explained earlier in this account, the unique nature of the mission of USAFSS in the Air Force required talents which were more uncommon in the Air Force than most. Therefore, the choice of available officer personnel was considerably limited.

In the quest for officer personnel, arrangements were made whereby a detail of clerical personnel from USAFSS screened officers' records in the office of the Adjutant General, Department of the Air Force, and made a list of all officers who had any of the qualifications required by USAFSS. The resulting list was presented to Headquarters, USAF, with a request for consideration of transfer of the officer to USAFSS. This proposal was met with disapproval, however.

The next step in an effort to procure officer personnel was interview of Air Force officers enrolled as students in the Army Security Agency School. Most of these officers expressed their desire for assignment to USAFSS and subsequently applied for transfer under the provisions of AF Letter 35-144. Results from this source were slow and limited, but welcome. A few other personnel were obtained from the Air Training Command Communication Officers Course at Scott AFB, Illinois.

With the exhaustion of all these sources, the only recourse to which USAFSS could resort for obtaining additional officer personnel was submission of requisitions to Headquarters, USAF, for personnel to fill authorized spaces not occupied. This procedure was, for a long time, the principal source of supply. All requisitions submitted in 1949 were emergency requisitions, which are valid for a 60-day period. Any portion not filled in this period must be resubmitted on a new requisition. This problem was a continuing one and, as of the close of the period which this account covers, one which had not been fully solved.

The problems of obtaining enlisted personnel to man the units and Headquarters of the Command were very similar to those affecting officer personnel. Initial steps toward solution of these problems were conferences held between personnel representatives of USAFSS, Army Security Agency, and other departments of the Army and Air Force agencies. The objective of these conferences was a settlement on policies to apply to transfer of Department of the Army personnel to the Department of the Air Force, in so far as units concerned in the transfer were concerned. No clear cut policy was ever established on this question. However, some personnel did obtain transfers to the Air Force and remained with the units to which they were assigned. This did little toward improving the situation in Headquarters, USAFSS, however.

Arrangements made through Headquarters, USAF, for drawing upon other established commands of the Air Force for specialists of certain categories assisted the personnel procurement project to some extent. This source was very limited, however. Other commands were understandably reluctant to

release skilled personnel for reassignment to another command. It required great tact and diplomacy to coax any benefits from this method of procurement.

Another and greater source of enlisted personnel was the Air Training Command, Technical and Indoctrination Divisions. Through the personal efforts of the Deputy Commander, USAFSS, who visited these divisions and interviewed many prospective personnel for assignment with USAFSS, procedures were established whereby a monthly quota was allotted USAFSS from the graduates of these schools. Personnel for these quotas were selected by classification specialists of the Indoctrination Division on the basis of test results and indicated aptitude for training in specialties needed by USAFSS. Some of the personnel thus selected were directed to technical schools, earmarked for assignment to USAFSS upon graduation. For the most part, however, personnel from this source were of basic qualifications.

As a consequence of the inequitable inflow of trained and basic personnel, by the end of May 1949, basic personnel comprised 75% of the Command strength. This condition was an immediate and recurring hindrance to the functions of the Command.

UTILIZATION OF UNCLEARED PERSONNEL

Considerable difficulties were experienced in utilization of personnel assigned to USAFSS. Even in the case of school graduates who were received, their qualifications could not be utilized in some instances for lack of a cryptographic clearance. Since the majority of material handled by USAFSS is of a classified nature, this represented a universal problem in the Command.

The Directorates of Operations and Security were affected more than most other agencies of the Command, mainly because their work was of a more immediate and operational nature than that of the other agencies. Limited utilization of such personnel was achieved by assigning them to jobs not requiring clearance while they awaited completion of the required investigation. This, however, contributed little toward accomplishment of the primary mission of the Command.

PROBLEMS OF PROMOTION POLICIES

A problem which embodied serious potential effect on morale within the Command became apparent toward the latter part of 1949. This problem was one concerning promotion policies. There were more personnel qualified and deserving of promotion than there were ratings provided by the current Table of Distribution. Basic airmen who had spent much time in school training when assigned to USAFSS, were being denied promotion until such time they proved their ability to perform the duties for which they were trained. Due to the delay usually incurred in obtaining a clearance for these airmen, it was not possible to allow them opportunity to practice their skills for some time after assignment to the Command. Consequently, the school period and the time spent awaiting clearance, combined, constituted an unduly long, stagnant period during which an airman in this category could not expect any advancement.

This condition affecting promotion of enlisted men was rendered particularly acute by several factors. First, personnel completing the language and other school courses were necessarily of high caliber and ambitious to advance. Second, the time spent in school was time lost for promotion purposes, in a practical sense. In the case of the language course, this time amounted to a year. And finally, as a contributing element to the low morale and dissatisfaction of airmen affected, the personnel attending the language and other schools had as classmates during the school training personnel of the Department of the Army who, upon graduation, were promoted to grades as high as Staff Sergeant. This practice, compared to the Air Force policy, naturally appeared to the Air Force personnel as a gross disparity, and there was some justification in that view.

This problem eventually assumed such proportions as to demand some mitigation. The Director of Personnel discussed the problem with other staff members and brought it up in staff conferences to get the Commanding Officer's view on it. The sum total of all the suggestions, opinions, and decisions was the publication, in September 1949, of a memorandum authorizing and prescribing a procedure for the promotion of deserving personnel. As an example of the procedure prescribed in this memorandum, suppose one section had several personnel assigned to it who were in excess of the authorized allowance. These excess personnel, in nearly all cases, were personnel who were awaiting clearance to work in the respective skills. In this section, all ratings would be up to the maximum allowed under the Table of Distribution in effect. However, another section, one handling classified work usually, is short a number of personnel due to the delay incurred in obtaining clearance for qualified personnel. In this latter section, there are grade vacancies because there are no personnel to fill them. Therefore, the Director of Personnel, in the memorandum, brought the two elements together. The excess personnel in one section who could not be promoted because they were excess to that section were promoted to fill the grade vacancies existing in the other section which were open for lack of personnel. This solution worked out to the satisfaction of everyone concerned. The excess personnel were gradually absorbed into the depleted sections as clearance status was attained, taking with them the ratings previously drawn from those sections, and thereby eventually eliminating the disproportions which had existed.

MOVEMENT OF PERSONNEL OVERSEAS

Another problem which was a source of some concern to the Command during 1949 was the loss of personnel en route to overseas units through misrouting or reassignment by Overseas Replacement Depots. Considerable time and effort were expended on each individual directed overseas in obtaining a cryptographic clearance and training him for a specific job in a unit of the Command. As explained in other sections of this account, most of the job skills utilized by the Command, especially in overseas units, were highly specialized. Loss of a man trained for one of these jobs was not a matter to be taken lightly. Repeated letters to the Overseas Replacement Depots failed to eliminate this problem so the Command set into motion a plan to maintain constant observation of the movement of personnel to overseas units.

A procedure was set up whereby a suspense date for arrival of personnel en route overseas was recorded upon departure from the Command of the individual concerned. This suspense date allowed for a 30-day lapse after Effective Date of Change in Strength Accountability (EDCSA) to an Overseas Replacement Depot. This time was allowed for processing at the Overseas Replacement Depot and travel to the overseas unit destination. An additional period of 15 days was allowed for unit morning report lag caused by the time required for the unit morning report to arrive in the Command from the units overseas. In the event the arrival of an individual in the unit was not reported by the suspense date, a tracer was initiated by wire to the Overseas Replacement Depot which processed the individual requesting information as to the probable location and assignment status of the man. Upon location of the individual, action was initiated by the Command to effect proper assignment of the individual and his movement to the unit for which he was intended. This procedure was frequently assisted by letters from the individuals themselves, telling of re-routing or reassignment by the Overseas Replacement Depot. The problem was never completely eliminated but it was greatly minimized.

CLASSIFICATION AND ASSIGNMENT

The classification and assignment of personnel was a confused and neglected issue in the Command during the early part of 1949. This was due, primarily, to the lack of qualified personnel to operate this function and also because of the pressure of higher priority tasks which absorbed the energies of the Command during this period. This was due, primarily, to the lack of qualified personnel to operate this function and also because of the pressure of higher priority tasks which absorbed the energies

of the Command during this period. It was fortunate for the Command therefore, late in February 1949, to have a Personnel expert, Technical Sergeant Hugh T. Smith, step into the picture to set up a classification system. Late, in July 1949, Warrant Officer (Junior Grade) Raymond D. Holliday assumed direction of this activity and he and Technical Sergeant Smith set up classification procedures and screened personnel records of the Command for correction and completion. This was a task of formidable proportions.

The first problem was to determine the qualifications of all the personnel assigned within the Command. Next, it was necessary to know all the quotas allocated from the various sources of personnel for the Command and the requisitions that had previously been submitted to Headquarters, USAF, to fill shortages. These things were all rendered more difficult by the lack of personnel statistical reports for the Command. In order to rectify to some extent the deficiency, a personnel informational roster form was instituted and distributed throughout the Command on 4 April 1949. [This was in accordance with the provisions of AF Manual 35-1.] This roster soon became, and remained, a factor of prime importance in keeping Headquarters, USAFSS, informed of personnel shortages, surpluses, malassignments, and classification actions required in the Command.

One of the major contributing factors to the difficulties of the classification activities of the Command was the unfamiliarity of the personnel in subordinate units with Air Force classification procedures. It will be remembered these units were formerly of the Department of the Army. Considerable difference existed between Department of the Army and the Department of the Air Force procedures. Orientation of these personnel in Air Force procedures upon transfer to the Air Force of these units was precluded by lack of personnel and unsettled conditions inevitably attendant to organizing a major command. Further, until July 1949, many of the personnel on duty with these units were Army personnel. This circumstance necessitated the units maintaining records in accordance with both the Air Force and Army policies and procedures, particularly in the case of men holding Military Occupational Specialties unauthorized for the Air Force. The return to the Army of most of these personnel and the transfer to the Air Force of those remaining in July and August 1949 minimized this problem considerably.

A program of indoctrination in Air Force classification methods and procedures was initiated in June 1949 with the publication of USAFSS Manual 35-1 as a supplement to Air Force Manual 35-1. Lack of an up-to-date Air Force Manual 35-1 had long been a source of aggravation to classification within USAFSS. This USAFSS Manual 35-1 served two purposes within the Command in that it indicated the specific application of Air Force classification principles to this Command and, for practical purposes within this Command, brought the Air Force Manual 35-1 up to date.

As a means of keeping the units of the Command informed on classification and other personnel policies, procedures, and practices, a Personnel and Classification Digest was initiated in October 1949. This was a monthly publication wherein were summarized the results and effects of developments within this field. Command personnel policies were explained, and peculiar personnel and classification problems were discussed for the purpose of educating and orienting unit personnel.

As a method of follow-up and check on the application of prescribed principles of personnel utilization and management, a Classification Audit Team was established within the Command in November 1949. This Classification Audit Team would conduct regular, periodic audits of the departments and units of the Command, both in the Zone of Interior and overseas. The functions of this audit team will be of vital importance to the implementation of the Air Force Career Program in the Command.

THE AIR FORCE CAREER PROGRAM

With the implementation of the Career Program within the Air Force impending, the classification specialists of the Command conducted a careful and comprehensive study of the directives published by Headquarters, USAF, pertaining to the program.

In November 1949, Warrant Officer (Junior Grade) Raymond D. Holliday departed to attend a Classification Officers Retraining Course at Lowry AFB, Colorado, where he was indoctrinated in the principles and purposes of the forthcoming Career Program. He returned from this school in December 1949 and immediately began formulating plans for implementation of this program within USAFSS. These plans included, among other things, a schedule of orientation lectures for airmen and officers of the Command to acquaint them with the concept and machinery for implementation of the Career Program. They also included a school for classification specialists of the Command in Career Program procedures and objectives. This school was to be conducted by means of lectures and discussions on the following subjects: Theory of Functional Grouping, Career Field Development, Air Force Job Evaluation Scale, Air Force Specialty Construction, Coding, Conversion Procedures, and Career Program Entries on Forms 20 and 66.

Texts, coding charts, and examinations for the school were assembled locally from materials furnished by the Air Training Command and the Career Development and Classification Division, Headquarters, USAF.

It was foreseen that conversion to the Career Program would necessitate some revamping of Command Classification Board procedures. Each unit of the Command, had, heretofore, been authorized to act independently upon Classification Board cases. With the introduction of procedures as prescribed in AF Letter 35-391, a change had to be made to this practice. A memorandum was devised and published in August 1949 disseminating and describing new procedures to be followed. This memorandum dissolved all existing Classification Boards in the Command and established one Command Classification Board to be located at Headquarters, USAFSS.

Conversion by the Command Classification Board to the Career Program for units of USAFSS not based on Brooks AFB was obviously impractical. Therefore, each overseas unit of the Command was notified they should take action with the base to which they were attached to have a representative on the Classification Board of that base who would sit on the Board in any case involving personnel of USAFSS. This proposal was given favorable reception by all the bases concerned.

UTILIZATION OF SCHOOL ELIMINEES

One of the problems confronting the Classification Section was the utilization of eliminees from the technical and language schools. The very fact that an airman qualified for attendance at one of the various schools indicated potential ability to perform more than simple tasks, and having been exposed to training curriculum for varying periods of time prior to elimination for some reason, these airmen inevitably absorbed some knowledge. It behooved the Command to utilize this knowledge gained wherever possible.

As an example, language school eliminees were personnel of the highest caliber. Most of them possessed Aptitude Indexes of eight or higher in all Aptitude Clusters. Most of these eliminees were eliminated for deficiency in grammar or inability to write the foreign language in the native hand. Nevertheless, enough knowledge of the language was absorbed by the airman eliminated that, with a little additional training, they proved apt candidates for training as voice interceptors, of which there was a critical shortage in the Command.

PERSONAL AFFAIRS

The Personal Affairs Section of the Directorate of Personnel was established on 25 March 1949, pursuant to authority contained in AF Regulation 34-15, 18 March 1949. The section was manned by Technical Sergeant Frank E. Brown.

The function of Personal Affairs Section is to advise and aid personnel of the Command in the personal affairs when this assistance is desired or needed. This applies particularly to the following: Government

Life Insurance, Absentee Voting, Allotments of Pay, Public Records and Official Papers, Family Allowances, Casualty Benefits, Soldiers' Deposits, Soldiers' and Sailors' Civil Relief Act, U.S. Savings Bonds, State Bonuses, Six Months Gratuity, and Dependents' Compensation.

In May 1949, a personal affairs program was initiated throughout the Command. Units were directed to set up a personal affairs file on each individual as part of this program. The personnel themselves were asked to aid this program by securing copies of all pertinent records to be retained in the individual personal affairs file to insure facile and prompt settlement of personal affairs in the event of emergency. The records primarily desired in this file were as follows: Marriage Certificate, Divorce Certificate, Birth Certificate, Death Certificate, Adoption Certificate, and other personal papers that might aid dependents in securing benefits due them.

Further efforts were directed to designing and establishing a procedure throughout the command whereby checks could be maintained on each airman's allotments, insurance, et cetera, in the even he was absent without leave, missing, et cetera. The procedure set up was designed so as to be flexible and adaptable to each unit's particular needs.

Finally, a list of all benefits for which dependents of an airman might qualify and the condition of qualifications therefore was drawn up and distributed to each unit for information and guidance. This list included information on: Dependents' Compensation, Commercial Life Insurance, Six Months Gratuity, Wills, Arrears of Pay, Suggestions for keeping personnel records, Addresses of various government agencies where application should be made for various benefits, Burial Rights, and Government Life Insurance.

NATIONAL SERVICE LIFE INSURANCE

In order to determine the extent to which National Service Life Insurance was held by officers and airmen of the Command, a survey was conducted in November 1949 of all personnel to find answers to the following questions:

- How many personnel possessed \$10,000 coverage?
- How many personnel possessed coverage between \$1,000 and \$9,000?
- How many personnel possessed no insurance coverage?

The final results, tabulated, indicated USAFSS would compare favorably with other commands in this respect. Almost all officers and 50% of the airmen had the full \$10,000 coverage.

NATIONAL SERVICE LIFE INSURANCE DIVIDENDS

Notification was received in the Command in August 1949 from Headquarters, USAF, that distribution of application cards for payment of National Service Life Insurance dividends for the years 1940-1948 would be made in the near future. This dividend, the average of which would be \$175.00, was to be paid out at the rate of 55 cents per thousand dollars of insurance held for every month the insurance was in force during the specific period. Payment of this dividend was to begin on or about 16 January 1950. This matter was of vital concern to many personnel of the Command and the Personal Affairs Section expended every possible effort to publicize all information relative to it and aid personnel in computing the dividend due them and forwarding application for same.

CIVILIAN PERSONNEL PROCUREMENT

The initial strength authorizations for USAFSS included 116 civilian spaces. Projected plans included provision for considerable increase in this number within the first year and progressively more in the

two years following. It was immediately apparent the Command would require a civilian personnel servicing agency and this need was incorporated in the initial planning for the organization. A letter was dispatched to the Commanding General, Headquarters Command, USAF, Bolling AFB, Washington, D.C., citing authority contained in AF Letter 40-35, and requesting that Headquarters provide civilian personnel services for USAFSS. This request was approved.

Subsequent to move Headquarters, USAFSS, from Arlington Hall Station, Arlington, Virginia, to Brooks AFB, Texas, in April 1949, a letter was forwarded to the Deputy Chief of Staff, Personnel, Headquarters, USAF, requesting authority to establish a civilian personnel office at Brooks AFB. At this time, Brooks AFB did not have a civilian personnel office. The activities located on the base were serviced by the Civilian Personnel Office at Kelly AFB. However, in view of certain circumstances, it was not believed this arrangement would suffice for USAFSS. These circumstances were the necessity of high security classification assigned to the majority of job descriptions within the Command due to the nature of the mission: the peculiarity of job skills required by the Command which would render it difficult for personnel not familiar with the mission to appreciate the requirements of the Command; the security risk involved in having highly classified job descriptions processed by a civilian personnel office not indoctrinated in security principles; and the great increase in civilian personnel scheduled for Fiscal Year 1950 which totaled 575. It was suggested, in the interest of economy and efficiency, that the proposed civilian personnel office at Brooks AFB could also service the Twelfth Air Force, relieving the Civilian Personnel Office at Kelly AFB of this responsibility. The civilian personnel strength of USAFSS and the Twelfth Air Force, combined, totaled 838 civilians. For this and other reasons cited above, it was thought advisable a departure should be made from the provisions of AF Regulation 40-5 which stated the civilian personnel office would be under the command of the commanding officer of the base concerned. The Commanding General, Twelfth Air Force, concurred in this proposal.

Approval of the proposal described above was granted in letter, Headquarters, USAF, dated 4 April 1949, to the Commanding Officer, USAFSS.

On establishment of USAFSS, an immediate need arose for civilian personnel experienced in the type of work which the Command would be doing. This problem was solved initially through the courtesy of the Army Security Agency which agreed to lend a number of personnel to the Command. It was understood these personnel would be transferred from the Army Security Agency to USAFSS upon move of the Command from that location to Brooks AFB.

Following the move of the Command to Brooks AFB and establishment of the Civilian Personnel Office there, action was initiated for setting up a procurement program for civilian personnel. The program relied in large measure upon personal contacts of key personnel within the Civilian Personnel Office. Letters were forwarded to people who it was known were qualified in various jobs which were open, inquiring as to their availability. This method proved effective to a very limited extent. However, it did serve to bridge the gap while the Civilian Personnel Office was traversing the phase of organizing and establishing itself. This effort was later supplemented by visits made to various schools and institutions across the country by the Vice Commander, USAFSS, and other key personnel of the Command to interview prospective personnel. These methods eventually formed the basis of the established civilian personnel procurement procedures.

Other methods of procurement supplemented the program later in 1949 as facilities became more equitable with the objectives of the Civilian Personnel Office. Mr. Edward A. Feille, Chief of the Utilization Section in the Civilian Personnel Office visited the Director of the 14th U.S. Civil Service Region in Dallas, Texas, in November 1949 and arranged for screening records in that office. The names, addresses, ages, and education of potential employees were secured from the Forms 57 on file. On Mr. Feille's return to Brooks AFB, form letters were dispatched to these applicants, enclosing a

blank Form 57, with the request they complete the form and return it for consideration. In this way, a large number of applications were secured and screened for all qualified personnel.

A similar action was taken on Reserve Officers having certain Service Serial Numbers. With the approval of Headquarters, Continental Air Command, letters were forwarded to all the Headquarters' of the numbered Air Forces under the jurisdiction of Continental Air Command requesting a list of the names and addresses of Reserve Officers on record in those Headquarters who possessed certain Service Serial Numbers be furnished to USAFSS. Upon receipt of these names, letters were dispatched to the individuals inquiring as to their availability for employment providing they were qualified. Limited success was experienced in this direction.

STAFF PLANNING AND OPERATIONS ANALYSIS

The Plans and Organization Division was conceived as an embryonic operations and training function within the Directorate of Personnel and Administration on establishment of the Command. Later, the title was changed and some changes effected in responsibilities also.

The Plans and Organization Division was responsible for coordination and direction of various functions under its cognizance, as they pertained to staff planning and operations analysis; the correlation of capabilities of elements in the field to execute established plans; and the maintenance of administrative control over organization of the Command. The control of planning and training applied to the civilian components of the Air Force, i.e., Air Force Reserve, Air National Guard, and Air Reserve Officer Training Corps (ROTC) units.

During the early phase of development of the Command, the Plans and Organization Division was mainly concerned with drawing up organizational charts and laying the foundation for a personnel procurement program for the Command. First efforts in this direction were devoted to making a survey for the purpose of establishing basic requisites of all occupational specialties for Radio Squadrons, Mobile, in the Air Force. Once these requirements had been clarified, efforts were directed to conveying the needs of USAFSS to agencies concerned, based upon the results of the survey, and obtaining action toward their fulfillment.

Many meetings were held in the Pentagon and other locations in Washington, D.C., between representatives of USAFSS and other services. One of the results of these meetings was the offer from the representative of the Naval Communication School in Washington, D.C., (CSAW), Commander J. Q. Adams, of the facilities of this school for use by USAFSS in training of basic airmen received by the Command from the Technical and Indoctrination Divisions of the Air Training Command. Quick acceptance of this offer was voiced and the first graduates of this program of training were received by the Command in November 1948. Training of the first group (MOS 709 and MOS 808) was greatly handicapped for lack of clearance of the personnel prior to training which precluded their receiving training in such subjects as Traffic Analysis and other classified communications phases. This problem was eliminated to a certain extent in later classes by an arrangement whereby clearance action was initiated on the individual while still in basic training, after certain examinations and aptitude tests had been applied to determine the individual's qualifications for the proposed training.

As implied in the title of the division, the Plans and Organization Division comprised two principle functions. The Organization Section consisted of the Organization and Equipment Branch, Manpower, Utilization Branch, and the Illustrations Branch. The Plans Section was divided into two branches: the Training Analysis Branch and the Reserve Forces Branch. Later in the year, about November 1949, reorganization within the Headquarters removed some of these functions from the purview of the Plans and Organization Division. The division itself was removed from the Directorate of Personnel and Administration and elevated to the status of a special staff office where it became the Plans and Projects

Office. The training function, as pertained to training within the Command, was separated and became the Training Division of the Directorate of Operations. The Illustrations Branch was made a part of the newly created Command Statistical Section, which came under the Comptroller.

PERSONNEL SPACE UTILIZATION

Prior to September 1949, the quarterly increases in personnel authorization for Headquarters and Headquarters Squadron, USAFSS, were inadequate for the Headquarters' needs. It became necessary to utilize spaces intended for activation of new units to bring the Headquarters strength up to operating requirements. The activation of the new units was thus delayed. Further improvement of the Headquarters' personnel situation was realized when plans for activation of five detachments of the 136th Radio Security Squadron [formerly, 136th Radio Security Division] were cancelled. The space authorization for these detachments was transferred to the authorization for Headquarters and Headquarters Squadron. The spaces totaled 10 officers and 180 airmen. A further increase of 31 officer spaces anticipated in the third fiscal quarter of 1950 would bring the total officer authorization to 137 spaces. It was considered this figure would be adequate for the period concerned.

The personnel authorization for USAFSS in 1949 included 11 officer, 6 airman, and 20 civilian spaces which were to be utilized by the Armed Forces Security Agency*. This was a temporary arrangement pending establishment of personnel authorization for the Armed Forces Security Agency. When that materialized, the military spaces were to revert to USAFSS, and the civilian spaces to Headquarters, USAF.

*Editor's Note: The Armed Forces Security Agency later became the National Security Agency (NSA) in 1952

GRAPHIC PRESENTATION ANALYSIS

This office performed layout, composition and preparation of presentations of Command statistical information in the form of charts, graphs, maps, and posters; and prepared perspective, isometric, and orthographic scale drawings for use in personnel space planning. These services were of great value to the various agencies of the Headquarters. For example: A member of the Command might be delegated to make an oral presentation to a high-level group in Headquarters, USAF, with accompanying illustrative material, for such a purpose as justifying a prepared USAFSS budget estimate for a given period or purpose. The mass of facts and the technical nature of the material to be presented might be so complex and voluminous as to confuse an audience. To simplify and support the presentation of such material, in such cases, the Illustration Branch developed a unique method of preparing graphic analysis, using basic statistics of the factors concerned, translating the subject matter into visual, comparative factors which could be readily understood.

These means of presentation were developed through intensive study of the problems involved and development of efficient methods of reducing subject matter to basic factors. A program of research was conducted into the field of photographic reproduction of varying intensities of blacks and grays for use in preparing charts and graphs. Through the introduction of colors to the prototypes and photographs and projection slides, a scale of black and shades of grey was developed. A guide was then devised which would indicate all necessary technical information for a desired reproduction, such as colors used, type of film camera lens aperture, and shutter speed to obtain various shades and textures. Using this guide, it was possible to emphasize the parts of illustrations or charts as desired, subduing other details which might distract from the main feature. This proved of inestimable value and facility in preparation of overlay charts and graphs for presentations.

Another outstanding development in this field by the Illustrations Branch was a "desk-top" presentation rack which could be carried under a person's arm. The rack was constructed of heavy, white art board, the backs of the rack being larger than the inner sections which contained the charts and graphs. This gave the effect of a border to each chart, when shown, thus eliminating unnecessary weight and area,

which would have resulted if each section had its own border. The rack ranged in size up to 25 inches by 30 inches which was the largest size practicable for portable use. This size permitted a clear, visual presentation at distances up to 25 feet. The rack was easily collapsed when the presentation was completed and folded into a compact, handy unit ready to be carried away. The development of this rack made possible presentations which, heretofore, had been impracticable due to the bulk of material and the time element involved.

In the reorganization of the Headquarters, USAFSS, in November 1949, Illustrations Branch was moved to the Office of the Comptroller to function within the Statistical Services Section of that office.

TRAINING ANALYSIS

The Training Analysis function was not established until late in September 1949. Prior to that time the major effort of the Directorate of Personnel, like all the rest of the Headquarters, had been devoted primarily to basic organization and manning of the Command. Any form of analysis of activity or condition was a luxury which could ill be afforded during that period for lack of personnel and the overwhelming work load confronting all sections.

The first task of this office was drawing up a Training Memorandum for Command-wide use. This memorandum, which later became a regulation, was planned to outline methods and procedures of training by which units could most effectively raise or improve the proficiency of its personnel. Modeled after an Army Air Corps Service Training Memorandum, it covered all fields of training, such as, On-the-Job Training, In-Station Training, Continuation Training and Cross-Training, Upgrade Training, Indoctrination and Missionary Training. In view of the critically low experience level of a major portion of USAFSS personnel, the potential effectiveness and value of this memorandum was considerable. As of the writing of this history, this memorandum was awaiting final approval.

To augment the Training Memorandum, individual Training Records were devised for use in all units of the Command. This Training Record was a means of maintaining a current history of every airman's training and the level of his proficiency in his occupational specialty. The Training Record was a great aid in classification and assignment of airmen and also served as an index in selection of airmen for further or more advanced training.

As a means of maintaining close supervision over the status of the Command in matters of training, a quarterly Training Activity Report form was devised and put into use throughout the Command. This report served to keep the Headquarters advised of training progress and effectiveness in the units. It also served to indicate whether the procedures described in the Training Memorandum were being adhered to in the units and if personnel were being utilized to the maximum extent. For example: If a unit reported operational difficulties due to a shortage of radio operator personnel, the Personnel Officer of the Headquarters would refer to the unit's Training Activity Report. Should the reports indicate no cross-training or upgrade training were being conducted in the unit, the unit would be advised to inaugurate such a program. Eventually, the personnel shortage could be partially or wholly rectified by this method, making it unnecessary to assign additional personnel to the unit.

RESERVE FORCES

Only limited efforts were devoted to Reserve Forces matters during the period of this report. Efforts to establish a Reserve Program within the Command were initiated in May 1949 with a letter to the Commanding General, USAFSS, from the Chief of Plans and Organization, outlining and recommending a reserve program for the Command. The recommendations contained in the letter were in accord with the provisions of AF Letter 45-12, dated 9 May 1949 and secret directives from the Office of Director of Intelligence, Headquarters, USAF, which prescribed methods of procuring and training reserve officers for communication intelligence.

The recommendations contained in this letter were reviewed and considered in staff conferences. On 16 September 1949, a letter was forwarded to Headquarters, USAF, attention of the Special Assistant for the Reserve Forces, explaining the views of the Command and recommending allocation of Mobilization Assignments to the Command as the most effective and appropriate means of establishing a reserve program within USAFSS.

These recommendations were approved with slight modifications and this Command so advised. The modification consisted of an increase of officer allocation and elimination of airman allocation from the mobilization assignment of USAFSS.

Concurrently with the efforts to secure mobilization assignments for the Command, work was in progress to develop a continuing series of Training Guidance Folders. These folders were prepared for use in supplementary training to be sponsored by USAFSS in ROTC programs of certain universities. They were planned as an aid to ROTC instructors in devising a program of instruction which would serve to indoctrinate students in principles of communications intelligence and communications security, thereby developing a potential source of officer personnel to fill the mobilization assignments of the Command at a future date.

The Training Guidance Folders consisted principally of prepared lectures and prescribed class procedures and practices. They were so designed that when a substitution of instructors in a class was necessitated for any reason, the substitute instructor could take over after only brief familiarization with the subject material and conduct a class without any loss in effectiveness of instruction. A secondary effect expected of these folders and their use was a uniformity in the curriculum of instruction which would greatly facilitate centralized monitoring and control of the program of training in ROTC units by the Command.

Subsequent to completion of this project on Training Guidance Folders, the plan for supplementary training in ROTC units, in so far as this Command was concerned, was discarded. The Headquarters, Continental Air Command dissented on the proposal plan, contending that such a program came more properly within the purview of that Headquarters. Therefore, the decision was established whereby Continental Air Command would furnish training paraphernalia and instructors for the program of training in ROTC units. This decision rendered preparations by this Command for that program superfluous and they were consequently discarded.

ADMINISTRATION, USAFSS

The primary mission of the Office of the Adjutant General, USAFSS, is to provide administrative machinery to promulgate and administer the policies and decisions of the Commanding Officer so as to obtain the maximum efficiency in the operations of the Command. Consequently, the mission varies constantly with changes in the size and plans of the Command.

Initially, the mission of the Adjutant General Division, this Command, was principally one of planning for the future when commensurate personnel quotas would be allocated to the Command and to maintain as creditable system of administration as possible during the interim period. As results were to prove, the latter part of this mission consumed the major portion of time and effort and the first part, that of planning for the future, suffered some neglect. This was due, primarily, to the fact that USAFSS was a tenant on an already crowded Army installation and other difficulties already explained in other portions of this account.

No specific personnel allocation was made to the Adjutant General Division from the overall authorization for the Directorate of Personnel and Administration in the beginning. It was necessary, however, that the Division have a basis of personnel spaces upon which to predicate plans for organization and distribution

of work load. Therefore, the Division, on its own initiative, set up personnel requirements within the Division, pending proper allocation of spaces. These requirements provided for the following:

1	Major	2110	Adjutant General
1	Captain	2110	Assistant Adjutant General
1	Lieutenant	2110	Assistant Adjutant General
1	Master Sergeant	502	Sergeant Major
1	Technical Sergeant	502	Chief Clerk
1	Technical Sergeant	502	Publications
1	Staff Sergeant	667	Message Center Clerk
1	Private First Class	667	Message Center Clerk
1	Private	521	Messenger
1	Civilian	405	Secretary
1	Civilian	405	Mail and Records Clerk

These figures proved to be highly optimistic in the light of subsequent authorization contained in Table of Distribution No. 1, dated 11 November 1948, for the Command. In this Table of Distribution No. 1, there were authorized only one Lieutenant Colonel as Adjutant General, one Master Sergeant as Sergeant Major, and three civilians for clerical duties. The authorization for the Division increased rapidly, however until in October 1949, the Division was authorized 4 officers, 14 airmen, and 4 civilians.

On arrival of the Headquarters at Brooks AFB, the Adjutant General augmented the personnel in the Division with a number of personnel drawn from the holding squadron established at that base prior to the move [the 8th Radio Squadron, Mobile]. These personnel were qualified Military Occupational Specialty (MOS) 405 and eased the personnel problem within the Division so that more effort could be devoted to improving methods of operation and resolving organizational problems. This condition was short lived, however. As other Directorates of the Command achieved operation status in the new location, their priority for cryptographically cleared personnel was exercised in all quarters. Very shortly, the Adjutant General Division was again operating with a skeleton crew and the work load was increasing all the while.

This critical situation prompted the Adjutant General to reconsider original plans for manning the Division, in the majority, with enlisted personnel. Instead, a proposal was advanced to the Director of Personnel and Administration to utilize civilian employees in the Division to a greater extent to assure more stability of operation. The proposal provided for approximately 50% of the Division's strength to be civilian personnel. However, this proposal was out of consonance with the civilian space authorization for the period concerned and the budgetary limitations of the Command. For these reasons, consideration of the proposed plan had to be suspended pending more favorable circumstances.

On establishment at Brooks AFB, a generous allocation of office space was made to the Adjutant General Division. For the first time since the inception of the Command, the Adjutant General functions had room in which to operate conveniently. The effect was immediate and universal. Where, normally, it would have required days and perhaps weeks for sections to stabilize and advance from initial stages of setting up, organizing and delegating responsibilities to the stage of material productivity, this sudden wealth of space precipitated a surge of energetic effort throughout the Division with the result a well organized force was operating at a high level of efficiency within a few days or even hours in some instances. Shortly, however, the inevitable period of shifting and rearranging and moving of facilities began to manifest itself. The Adjutant General Division emerged from this period a somewhat compressed function. The offices of the Commanding Officer, Vice Commander, Chief of Staff, Top Secret Control Officer, secretary, and all the sections of the Adjutant General Division were all housed

in one small building 110 feet long by 25 feet wide and containing 2,727 square feet of space. Many of the old problems of congestion were revived and remained as obstacles to efficiency and convenience throughout the period of this account.

ADMINISTRATIVE SERVICES

Many of the services furnished by the Adjutant General Division are so routine and constant that an attitude of careless indifference for procedures on the part of those agencies utilizing the services frequently robs the services of much of their effectiveness and efficiency. A good illustration of this can be found in the system set up by the Adjutant General for receiving, routing, and dispatching of correspondence and other material in the Headquarters and for maintaining an office of record of all official files and references.

To be effective and economical, a system of this type must be maintained at a medium between the standard of the "efficiency expert" who scribbles a communication on a scrap of paper and hand carries it directly to the transmitting agency, and the other extremist who religiously prepares voluminous copies of everything for everybody's files.

The system devised by the Adjutant General to most effectively accomplish preparation and routing of material within the Headquarters was established with the publication of Headquarters Office Instructions 10-0 and 10-6. Briefly, these directives prescribed that coordination of outgoing correspondence and messages would be the responsibility of the originator. All such matter would be routed through the Adjutant General for authentication. Sufficient copies would be prepared by the originator to allow the original copy of all messages and an onionskin copy of all correspondence to be retained in the Central Files. This would permit maintenance of an accurate record system and a suitable ready reference system of information available to all offices of the Command. The latter was in the form of a "Reading File." The reading file was circulated throughout the Headquarters each day for informational purposes and then was filed as a chronological information file of the Command's activities. It proved highly useful and facilitated to a considerable extent the Central File Clerk's responsibilities. This reading file system was later discarded by the Headquarters, as a trial measure, to effect economy in use of paper and reduce the work load on the Central File Clerk. The loss of the reading file proved to be a detriment which greatly overshadowed the slight saving of paper affected, however, and the difference in the work load for the Central File Clerk was negligible. At the close of the period covered by this account, the reading file was reinstated in a modified form.

As the Command developed and additional personnel became available for assignment to the various functions, various services for the Command were enlarged and expanded. In later February 1949, Lieutenant Ralph L. Sidener was delegated the responsibilities of Publications Officer in the Headquarters. He immediately attacked the problem of establishing a uniform system of preparation and maintenance of USAFSS publications. The first step was through study of the policies of Headquarters, USAF, regarding publications. Following the precepts of these policies, a Headquarters Office Instruction was published wherein were outlined the procedures and policies of USAFSS pertaining to this subject.

One exception to the policies of Headquarters, USAF, was the adoption of Numbered Memorandums in the place of regulations. This was a temporal practice, pending the time when the Command would become more stabilized. At that time, late in 1949, the Numbered Memorandums were discarded and replaced by regulations.

Concurrent with the development of a publications system, a survey was conducted to determine the projected needs of all sections of the Command for certain publications. Once this was known, action was initiated to fulfill the needs of the Command while the Headquarters was located so conveniently near the Pentagon. Naturally, this project was a continuing one. It was considerably facilitated and

developed through the efforts of Technical Sergeant Frank O. Layton, Chief Clerk of the Publications Section, who had personal contacts within the Air Adjutant General Publication's Division in the Pentagon.

With the publication of USAFSS Form No. 1 in March 1949, a new responsibility was added to the rapidly growing Publications Section in the Headquarters. This was the responsibility for the operation of a Printing and Forms Control Branch, the objectives of which were: (1) Prevention of duplication of forms within the Command, (2) Standardization of Forms, (3) Development of policies based on precepts and practices of Headquarters, USAF, relative to forms control, (4) Review of USAFSS forms developed for incorporation into present or proposed USAF forms, (5) Control of all printing matters, except classified material for the Command.

Requests for production or reproduction of forms within the Command were routed to the Publications Officer for review and approval prior to action. The review of requests was conducted in the light of the following policies: (1) No new form would be approved or published for which an existing Air Force (AF), War Department Adjutant General Order (WDAGO), Department of the Army General Orders (DAGO), National Military Establishment* (NME), or USAFSS Form would suffice, (2) Final format would be prescribed by the Publications Officer, (3) Need for the forms must be justified and number of copies requested consistent with known or foreseeable future use, (4) USAFSS form numbers were to be assigned those forms determined by the Publications Officer to be of a permanent nature and which were to be used by two or more offices of the Headquarters, (5) Revision or disposition of obsolete forms in the interest of economy.

*[Editor's Note: National Military Establishment later became known as the Department of Defense.]

Efforts were initiated early in 1949 to obtain authorization for establishment of a Class B printing plant at Brooks AFB for use of the Command. Some opposition to this proposal was encountered at higher Air Force levels due to the existence at Kelly AFB of a printing plant and the pending establishment of a similar plant at Brooks AFB by Headquarters, Twelfth Air Force. It was presumed one or both of these facilities should be able to service USAFSS. However, as it was pointed out by representatives of the Command, the high classification of material used by the Command presented a problem in security aspects of the matter. Also, it was considered impracticable to utilize these facilities in view of the large amount of printing which would be required by the Command.

Estimates of the requirements of the Command for printing and the justification therefore were furnished to Headquarters, USAF, for presentation before the Joint Congressional Committee on Printing. After consideration by this body and some revisions in the original requirements submitted, authorization for establishment of a Class B printing plant for the use of USAFSS was received. It was not until very late in 1949, however, that conclusive results were achieved in setting up this plant.

It was planned that, with the beginning of Fiscal Year 1951, a Printing and Forms Control Board consisting of one member from each Directorate and Special Staff Office of the Command would be established to exercise control over Printing and Forms Control previously exercised by the Publications Officer.

The Central Files of a Headquarters is potentially an important service to the Command. Therein are contained the complete history of every act and accomplishment of the Command, presumably. Properly supported and utilized, the Central Files can be an invaluable source of information to the Command and an efficient, central repository of all record material of the Command.

The Central Files of Headquarters, USAFSS, consistently suffered from two major deficiencies; lack of space and lack of sufficient qualified personnel to operate them. Like most other functions of the Headquarters during the period of formation of the Command, the Central Files operated, more or less, as a "hip pocket" function. That is to say, most of the material which normally should have found its

way into a central file too often terminated in some individual's hip pocket or desk drawer. Whether the operations of the Command have suffered materially from this early practice, it is not possible for this historian to say. However, it is possible to conclude that records of the Command are incomplete to some degree because of this practice. This is particularly true as it pertains to material of interest to the historian.

The volume of material handled by the Central Files increased rapidly through the first year of operation by the Command. Records indicate that in May 1949, a daily average of 81 pieces of file material were received in the Central Files for processing and filing. In September, this average rose to 256 pieces per day. And, again in November, the figure increased to a daily average of 269 pieces. These figures may have little significance in themselves but when used as a representative barometer of the volume of business conducted by the Headquarters, they serve as an excellent index to the growth and development of the Command as a whole.

During the early stages of organization of the Command, the Message Center functions were performed sketchily and without benefit of established procedures. There were not enough qualified personnel available to assign to this work, and the pressure of higher priority duties, plus the ever present obstacle of a proper clearance of personnel handling classified matter, precluded proper establishment of a working message center. However, despite the sound reasons advanced for not having an efficiently operating message center during this period, lack of one resulted then and for some time after to the detriment of the administration of the Command. Numerous faults were born and nurtured which created and sustained confusion in matters of routing and recording material within the Headquarters.

It was not until May 1949 that definite, effective effort was directed to organizing a message center which could operate effectively. Two well qualified airmen were selected and assigned as Incoming Mail Clerk and Outgoing Mail Clerk, respectively. Through the method of trial and error, over a period of time, forms were devised and procedures established which would best suit the needs of the USAFSS Form No. 12, Outgoing Register. USAFSS Forms 11 and 12 were designed to serve as Incoming and Outgoing Register, respectively. As a control to assure receipt by the action office on correspondence, wire transfer, et cetera, USAFSS Form 13, titled "Delivery Sheet," was designed and put into use. Another form was introduced as a Mail Control Record. This was War Department Adjutant General Order Form 734 which served as a control on action correspondence, wire transfer and classified material within the USAFSS Headquarters. This form proved an important factor in maintaining a permanent log, suspense system, and assisted in effecting the return of original correspondence to Central Files on completion of action.

HISTORICAL PROGRAM

The basic purpose of a historical program in any command is to provide a record of events, methods, and developments within the Air Force, both in war and in peace, which may serve as a useful, dependable guide to the Air Force of the future, both as individuals and as an important element in the overall effort for maintenance of world peace and American security. To accomplish these objectives, the history program requires the willing cooperation coupled with a thorough appreciation of the program's purposes and potential value to the Air Force on the part of all key personnel. The historian cannot write what he does not know and cannot determine.

The historical program of USAFSS was somewhat tardy in getting started. Though the Command was established in October 1948, no coordinated effort was devoted to compiling a historical record until March 1949. At that time, the Assistant Adjutant General of the Command, First Lieutenant Ralph L. Sidener, was delegated the responsibilities of Command Historical Officer, in addition to his other duties. With his appointment, Lieutenant Sidener inherited a policy file and a few other miscellaneous

files of material pertaining to some of the functions of the Command. These were of questionable value to the history, however.

It was truly regrettable that the worth of an active and progressive historical program was not recognized and included in the plans of the Command from its inception. A great amount of valuable and useful material was lost, beyond recovery, through this oversight.

In an effort to determine what was required in the way of a historical program for the Command, Lieutenant Sidener arranged for an interview with Lieutenant Colonel Larsen of the USAF Air Historical Division. Lieutenant Colonel Larsen made available to Lieutenant Sidener, for study, several approved Historical Data Reports that had been received from other Commands. From these and personal discussions with this officer, Lieutenant Sidener learned Headquarters, USAF, desired an active and progressive program within each Major Air Command. It was also learned an AF Manual was in the process of being compiled by the Air Historical Group of the USAF to aid in the conduct of an Air Force-wide historical program. Until such time as the manual was completed, however, the Air Force would be dependent upon the resourcefulness, initiative, and cooperation of all commanders and other key personnel for the production of historical records worthy of the money and effort devoted to the project.

In their discussions, Lieutenant Colonel Larsen emphasized to Lieutenant Sidener that to effectively fulfill the requirements of a creditable historical program, professionally trained personnel should be obtained to conduct the program. To this end, the two officers drafted a job description and qualification list to use in determining the particular requirements for USAFSS when hiring civilian personnel for this position. This job description was referred to the Civilian Personnel Officer, USAFSS, but obtained no results due to the fact that the entrance salary grade assigned this position, P-2, P-3, or P-4, was considered prohibitive in the light of fund allocations to the Command for such purposes.

Efforts were next directed to locating military personnel with the necessary qualification. No success was experienced in this direction, however, as no officer with Military Occupational Specialty (MOS) 2421 (Historical Officer) was found to be available for the assignment. Further, indications were that no such qualified personnel would be available in the foreseeable future.

Having determined what was required and what was available in the way of personnel to comply with the requirements of AF Regulation 210-3, efforts were next directed toward designing and implementing operation of a historical program, with consideration for the limitations imposed by the lack of properly qualified personnel, but which would still adequately satisfy the requirements. It was readily apparent that any program put into effect under these conditions must be designed to embrace only the minimum in the way of format and scope for reports to permit accomplishment as an additional duty by personnel mainly occupied with other duties. To this end, a draft of a memorandum was drawn up for dissemination throughout the Command. At this time, action toward implementing the historical program was temporarily suspended due to the impending move of the Command to another base.

Efforts were resumed in May 1949 to implement the historical program. The aforementioned memorandum, titled "Historical Program and Procedure" was forwarded to all Directorates and Special Staff Offices of the Headquarters for coordination and comment. This action was not particularly enlightening or helpful as many of the comments and suggestions received were negative in nature and discouraging as a whole. The consensus of opinion was that the program would be an unjustified imposition on time and personnel occupied with more important duties, which was true to a certain extent. However, greatest reluctance to support the program was evident on all sides. It was obvious that, before an effective program could be conducted, an educational program would be required

whereby well meaning but overworked people could be shown the true value of a historical program in the Command and their support won for the progress.

The proposed memorandum, after some revision, was finally published in July 1949 and given wide distribution. This memorandum later was redesignated USAFSS Regulation 210-3. Briefly, it required a historical report from each Directorate, Special Staff Office, and unit of the Command by 31 August 1949 covering the period dating from the time the unit or activity became part of USAFSS up to and including 31 July 1949. Monthly reports thereafter were to be submitted to record current history. It was believed by the Command Historian that this method would allow all concerned sufficient time to prepare the initial reports and that by 31 August 1949, the program would be on a current basis. This proved to be a highly optimistic view in view of subsequent developments.

Of the reports received in compliance with the aforementioned memorandum, only a few were satisfactory and some reports were not received at all. This was obviously the result of the disinterested attitude previously encountered in launching the program. In an effort to improve this condition, a monitoring program was initiated. It was hoped that by closely monitoring reports as they were received and rendering detailed, instructive comments on each one for use in writing subsequent reports, the quality of the reports might be improved. Further, it was hoped that by keeping the historical program frequently before the people in the Command and making them constantly conscious of the objectives and spirit of the program, some improvement could be effected in the general attitude which would result in improvement in the program in many ways. For a short time, this monitoring program gave very encouraging promise of accomplishing some of the things for which it was intended. Then, the rapidly mounting work load and the limited facilities in the historical section, plus lack of adequate personnel, combined to force discontinuance of the monitoring program. Despite its brief duration, however, definite improvement had been achieved for the program by monitoring. Historical Officers were better acquainted with the requirements for the reports and were beginning to demonstrate pride and interest in the quality of their reports. With one or two exceptions, the reports and the program as a whole could be said to be progressing in a satisfactory manner, in view of the unavoidable limitations imposed upon it by shortage of personnel and the rapidly fluctuating conditions inevitably attendant to the organization and development of a major command headquarters.

CHAPTER III: BUDGETING AND FUNDING

Air Force Regulation 20-34, dated 7 October 1948, prescribes that each major air command and numbered air force will establish and maintain a major staff section to perform the functions of Comptroller. Upon the establishment of the USAFSS, Captain Arthur J. Guertin assumed the duties of Comptroller for the Command. Captain Guertin had formerly been on detached service with the Army Security Agency from the Air Force and had gleaned considerable experience with that Headquarters in the requirements of such an organization. In view of the similarity of the missions of the two Commands, this experience was a valuable asset to the new Command.

MISSION

The Comptroller, USAFSS, is responsible for the assembling, evaluating, and presenting to the Commanding Officer information of all operations, programs, and projected plans of the Command. In this respect, the Comptroller:

- a. Provides the Commander and the major staff sections with the necessary data to support the accomplishment of Command objectives, recommending such actions as are appropriate.
- b. Evaluates the relationship of accomplishment to Command objectives, recommending such actions as are appropriate.
- c. Performs technical reporting, budgeting and finance functions for the Command.
- d. Generally, performs the functions of a Comptroller as listed in AF Regulation 20-34, dated 7 October 1948.

FUNDING OF USAFSS, FISCAL YEAR 1949

Due to the fact that USAFSS was established too late in Fiscal Year 1949 (20 October 1948) to permit normal budgeting for the Command, there were no funds available through normal channels for the needs of the Command during the period 20 October 1948 to 30 June 1949. Such funds as were made available to the Command were initially channeled through the Headquarters Command, USAF, with funds for other extension activities of the Air Force. Methods of obtaining funds for establishment of the Command at Brooks AFB have been discussed in a preceding portion of this account. (See Chapter I, "Rehabilitation and Construction at Brooks AFB.")

In May 1949, the Commander, USAFSS, requested clarification of the funding procedure affecting the Command. A request had been made for assignment of an operating agency number but was subsequently disapproved. The suggestion was offered that it might prove more practicable to fund the Command through the office of the Director of Air Intelligence, USAF, rather than other commands, such as Air Materiel Command, for security reasons. It was believed the Director of Air Intelligence, USAF, would be more readily cognizant of the character and needs of USAFSS in such matters. Further, the Command would operate directly under the control of this office and it would affect facility and economy of effort if normal fiscal reporting and bookkeeping responsibilities were centralized in this agency. This would not mean the Director of Air Intelligence would exercise control over the funds budgeted for USAFSS, but only that the office would serve as a disbursing agency for such funds, to release them to USAFSS as required.

In July 1949, the Command was notified the suggested procedure had been adopted and the Directorate of Intelligence, USAF, had been designated the operating agency for USAFSS. Though the arrangement had been suggested by USAFSS some dissatisfaction was experienced initially. However, it is believed

this dissatisfaction was caused, primarily by the delays and misunderstanding which inevitably arose in establishing initial procedures and policies.

Disbursement of funds for USAFSS was accomplished by the Budget and Fiscal Office, Headquarters Command, USAF, at Bolling AFB, Washington, D.C., and on 10 February 1949 the following listed funds were available at this office for USAFSS:

- a. Received from Air Materiel Command 21 January 1949, \$609 to cover procurement of supplies, materials, and other contractual services in connection therewith.
- b. For salaries, operation of Base Installations, et cetera, \$150,000.
- c. Received from the Finance Service, US Army to cover TDY, \$2,000.

In addition to the funds listed above, a request for travel and civilian personnel funds for the remainder of the Fiscal Year 1949 was made to the Budget and Fiscal Officer, Bolling AFB, on 9 November 1948 as follows:

ESTIMATED TRAVEL FUNDS

<u>No. of Trips</u>	<u>Duration</u>	<u>No. Persons</u>	<u>Per Diem</u>	<u>Type Travel</u>	<u>Amount</u>
2 trips to Europe	14 days ea	3	\$7.00	MATS	\$588.00
2 trips to Pacific	30 days ea	3	\$7.00	MATS	\$1,260.00
12 trips San Antonio, Texas (x2) Washington, D.C. (x2)	7 days ea	4	\$4.00	B-25	\$1,344.00
2 trips to N.Y. Ft. Slocum	4 days ea	2	.04/mile	Rail	\$56.00
2 trips to N.Y.	4 days ea	3	\$4.00	B-25	\$96.00
2 trips to Orlando, Florida	4 days ea	3	\$4.00	B-25	\$96.00

FUNDS ESTIMATED FOR PAY (CIVILIAN PERSONNEL)

<u>Service Grade</u>	<u>No. Months Pay Required</u>	<u>Approximate Date of Employment</u>	<u>No. of Personnel</u>	<u>Amount</u>
CAF 4	7	1 Nov 48 - 1 Jan 49	15	\$ 25,810.05
CAF 5	7	1 Nov 48 - 1 Jan 49	10	\$ 19,547.50
CAF 6	7	1 Nov 48 - 1 Jan 49	4	\$ 8,696.80
CAF 9	7	1 Nov 48 - 1 Jan 49	1	\$ 2,832.55
CAF 11	7	1 Nov 48 - 1 Jan 49	2	\$ 6,689.20
P 4	7	1 Nov 48 - 1 Jan 49	15	\$ 50,169.00
P 5	7	1 Nov 48 - 1 Jan 49	7	\$ 27,415.50
P 6	7	1 Nov 48 - 1 Jan 49	5	\$ 23,073.75
SP 6	7	1 Nov 48 - 1 Jan 49	1	\$ 1,954.75
CAF 4	5	1 Jan 49 - 1 Feb 49	10	\$ 12,290.50
CAF 4	4	1 Feb 49 - 1 Mar 49	10	\$ 9,832.40
CAF 4	3	1 Mar 49 - 1 Apr 49	9	\$ 6,636.87

CAF 5	3	1 Mar 49 - 1 Apr 49	1	\$ 37.75
CAF 5	2	1 Apr 49 - 1 May 49	10	\$ 5,585.00
P 4	1	1 May 49 - 1 Jun 49	8	\$ 3,822.40
P 5	1	1 May 49 - 1 Jun 49	4	\$ 2,238.00
CPC 4	1	1 May 49 - 1 Jun 49	4	\$ 857.84

Total Civilian Personnel: 116

Total Amount: **\$208,289.86**

It was foreseen by the Command that the full strength of 116 civilian employees could not be utilized during the remaining portion of the Fiscal Year 1949. This was due to delays in development of the Command for varied reasons. Therefore, the \$150,000 allocated for salaries, et cetera, could not be obligated prior to the end of the fiscal year. A letter was forwarded to the Director of the Budget, USAF, by the Command in February 1949 requesting the civilian personnel funding program be reduced from \$150,000 for employment of 116 civilians to \$53,550 to allow for employment of a cumulative total of 66 civilians in the Command during the period 1 January 1949 to 30 June 1949. It was further requested the Command be permitted to reserve the prerogative of increasing this decreased civilian funding program, as well as the number to be employed, in the event a change in projected planning materialized. These requests apparently received the approval of the Director of the Budget, USAF. The following information was submitted in support of the statements and requests made in the above cited letter:

Month	Est. No. Cumulative Strength	Est. No. Strength Increase	Est. Av. Mo. Salary per Employee	Est. No. of Mos. on Payroll	Est. Total Fund Requirement
Jan	1	1 x	\$350	(\$ 350) x 6 =	\$ 2,100
Feb	6	5 x	\$350	(\$ 1,750) x 5 =	\$ 8,750
Mar	15	9 x	\$350	(\$ 3,150) x 4 =	\$ 12,600
Apr	25	10 x	\$350	(\$ 3,500) x 3 =	\$ 10,500
May	40	15 x	\$350	(\$ 5,250) x 2 =	\$ 10,500
Jun	66	26 x	\$350	(\$ 9,100) x 1 =	\$ 9,100
Total Requirements:					\$ 53,550

CIVILAIN FUNDING PROGRAM 1950

Meetings between representatives of USAFSS, Comptroller, Manpower, USAF, late in 1949, resulted in some modification of USAFSS' original estimate for civilian personnel funding program for Fiscal Year 1950. In May 1949, it was resolved in a meeting of the above representatives that funds in the amount of \$300,000 would be established as a tentative annual program for civilian personnel requirements of USAFSS in Fiscal Year 1950. However, the provision was made that the Command would be provided \$1,043,770 (for a weighted average of 346 man-years) as a revised funding program if the capacity of the Command for employing and utilizing the additional personnel warranted same. It was deduced the \$300,000.00 was purely an administrative figure, based upon nothing factual but merely a figure intended to afford the Command an opportunity to continue its program until such time as an employment trend could be established. Shortly after the meeting in which these decisions were made,

the Command received advice that, due to drastic curtailment of personnel funds for the Air Force, the figure of \$1,043,770.00 discussed earlier could not be considered. The funding program of the Command was to be limited to the smaller figure of \$300,000.00 throughout Fiscal Year 1950. This would provide for only a limited total 97 man-years for the Command. This was obviously inadequate to the needs of the Command for Fiscal Year 1950. Therefore, in view of this and the fact experience had shown a marked reluctance on the part of higher authority to revise a USAF program to provide for one organization once the program was established, it was strongly recommended USAFSS interpose the objections to this program at the earliest practicable time. In this, the assistance and support of the Deputy Chief of Staff, Operations, and the Director of Intelligence, USAF, were solicited and obtained. Success was realized to some extent in this direction which resulted in the figure of \$300,000.00 being raised to 674,274.00 to provide for a total of 210 man-years for the annual civilian personnel program of USAFSS. Concurrently, advice was received by the Command that a reappraisal of the requirements of all commands would be conducted after 1 January 1950 and consideration given at that time to upward revision in the annual budget authorization where needed. It was anticipated that, at this time, justification would be advanced for additional increase in the budget program for civilian personnel for USAFSS.

BUDGET ESTIMATE FISCAL YEAR 1951

Notice was received in March 1949 from the Comptroller, USAF, of the date for submission of Fiscal Year 1951 budget estimates from this Command. Upon receipt of this notice, a memorandum was initiated and circulated throughout the Command advising all staff sections of the necessity to begin work toward compiling a realistic over-all budget for the Command for Fiscal Year 1951. It was realized that, at that time, in view of the highly fluid state of the Command and the uncertainty clouding many major issues pertaining to logistics, mission, and operation of the Command, it would be especially difficult to convert a practical program for USAFSS into monetary requirements. Absence of past trend data, transition in budget structure, and the nature of the mission of the Command also served to aggravate this difficulty. Therefore, it was stressed that every effort was to be made in preparing realistic estimates since it was highly probable a firm justification would be required for the estimate rendered.

As a means of facilitating and insuring preparation of an adequate, realistic estimate, a series of meetings were planned wherein key personnel discussed the aspects of various phases of the estimate. In addition to this, personnel of the Comptroller's Office visited the various staff sections and advised, supervised, and assisted in the formulation of budget estimates within each office. Lack of familiarity with preparation of budget estimates by many of the personnel concerned represented a major difficulty, and an acute personnel shortage in the Comptroller's Office contributed to this. There were only two officers and, most of the time, no typist at all in the Comptroller's office to handle the work load. Despite all of these obstacles, however, a budget estimate was completed in April 1949 and prepared for submission to the Comptroller, USAF.

A general statement was included in the estimate, outlining the establishment, location, and mission of the Command. This statement also described the status of the Headquarters, USAFSS, as a tenant on Brooks AFB and brought out the fact of responsibility of Brooks AFB for providing and budgeting for normal housekeeping services for USAFSS in the light of this status. The over-all estimated requirements for operation of the Command in execution of its assigned mission for Fiscal Year 1951 totaled an aggregate of \$14,415,420.00. This figure may serve as an index to the magnitude and scope of the operations of USAFSS and illustrate, to some small extent, the necessity for sufficient funds to assure accomplishment of the assigned missions.

Security restrictions and other extenuating circumstances precluded detailed justification of the budget estimate submitted. In lieu of this detailed justification in such instances, the request was advanced

that special consideration be accorded the Command in view of the aforementioned recent activation, nature of mission, and absence of past obligation and cost trends which would normally influence projected requirements and transition in budget procedure and structure.

Here follows an explanation and breakdown of the above quoted budget estimate submitted by the Command for Fiscal Year 1951:

- a. Deputy Chief of Staff, Operations, USAF, Attention: Director of Communications, Communications Systems Division (AFOAP), 19 April 1949, for inclusion in Appropriation: Construction of Aircraft and Related Procurement, Budget Program 170 – Electronics Equipment, Project 176 – Communication Security Systems.....\$ 4,366,791
 - b. Deputy Chief of Staff, Materiel, USAF, Attention: Director of Maintenance, Supply and Services, Supply Division (AFMSP-1), 15 June 1949, for inclusion in Fiscal Year 1951 Budget Estimates.....\$ 222,700
 - c. Deputy Chief of Staff, Materiel, USAF, Attention: Director of Installations, Cost and Budget Office (AFMAI-2), 8 February 1949, for inclusion in Fiscal Year 1950. However the estimate was submitted too late for consideration and was of necessity delayed until Fiscal Year 1951 for inclusion in Appropriation: Acquisition and Construction of Real Property, Budget Program 320 – Construction – ZI Project 321 – Construction ZI.....\$ 5,802,900
 - d. Commanding General, AMC, Wright-Patterson AFB, Attention: MCMSXE, 21 April 1949, for inclusion in Appropriation: Maintenance and Operations, Budget Program 430 – Maintenance and Operation of Installations, Project 436 – Field Printing.....\$ 73,283
 - e. Deputy Chief of Staff, Operations, USAF, Attention: Director of Communications, Budget Division, 28 April 1949, for inclusion in Appropriation: Maintenance and Operations, Budget Program 460 – Commercial Communications System, Project 465 – USAF Command Communications Network.....\$ 190,000
 - f. Deputy Chief of Staff, Personnel, USAF, Attention: Personnel Services Division, Chief of Library Section (AFPMP-12-A), 21 April 1949, for inclusion in Appropriation: Maintenance and Operations, Budget Program 480 – Training Project 481 – Procurement of Technical Literature.\$ 14,572
 - g. Deputy Chief of Staff, Materiel, USAF, Attention: Director of Research and Development (AFMPD), 12 April 1949, for inclusion in Appropriation: Research and Development, Air Force Budget Program 670 – Special Projects, Project 671 – Special Project.....\$ 1,500,000
 - h. Deputy Chief of Staff, Materiel, USAF, Attention: Director of Maintenance, Supply and Services, Supply Division (AFMSP), 20 April 1949, for inclusion in Appropriation: Salaries and Expenses, Administration, Budget Program 830 – Printing and Binding, Project 831 – Printing and Binding, GPO or Waiver.....\$ 59,293
 - i. Comptroller, USAF, Attention: Director of Statistical Services (AFASO-2), 6 April 1949, for inclusion in Appropriation: Salaries and Expenses, Administration, Budget Program 840 – Other Administration Expenses, Project 841 - Other Administration Expenses.....\$ 51,532
- Total of Estimates Submitted to Designated Estimating Agencies.....\$ 12,281,071
- Total to Comptroller USAF\$ 2,134,349
- Grand Total\$ 14,415,420**

Records are incomplete on negotiations concerning the Fiscal Year 1951 budget estimate and modification thereof. However, indications are that the above quoted estimates were revised downward in varying amounts when the estimate for Fiscal Year 1951 was considered in Headquarters, USAF. In November 1949, the Comptroller, USAFSS, advised the Commander, USAFSS, of this in a memorandum, remarking on the fact these changes were not being conveyed to USAFSS when made by Headquarters, USAF. The greatest changes in the estimate were those affecting a, d, e, and g listed above. These changes reduced the budget estimate for Fiscal Year 1951 to an aggregate total of \$ 13,656,050

Several meetings were to be held in the Pentagon the latter part of May and early part of June 1949 between representatives of USAFSS and the Director of Budget, USAF, for the purpose of reviewing the submitted budget estimate of USAFSS for Fiscal Year 1951. When these meetings had drawn to a close and the budget estimate was considered reduced to a firm requirement, Colonel Roy H. Lynn, then Commander of USAFSS, appeared before the Budget Advisory Committee of USAF to justify and defend the budget estimate as submitted. This was on 13 June 1949.

Colonel Lynn addressed the Committee briefly, sketching the background, functions, and composition of USAFSS. He discussed projected plans for expansion, increase in personnel strength and operational and logistical requirements in Fiscal Year 1951. He summed up the monetary requirements of the Command, necessary to fulfillment of the projected plans, in the aggregate of \$ 15 million dollars for the Fiscal Year 1951.

Due to the nature of the mission of the Command, it was extremely difficult to measure and convert into monetary requirements certain parts of the Command's requirements. Colonel Lynn explained this and then went on to emphasize that while it was realized the need for economy measures in the military establishment was imperative, it was felt the end product of the mission of USAFSS and its potential value to the Air Force warranted the most careful consideration of its monetary requirements.

BUDGET CONSTRUCTION REQUIREMENTS 1951

On 8 May 1949, a letter was forwarded to the Deputy Chief of Staff, Materiel, Director of Air Installations, USAF, describing new construction requirements of USAFSS in the Zone of Interior for Fiscal Year 1951. In this letter, it was requested the construction program for USAFSS be included in the "New Construction Program, ZI, for the USAF for Fiscal Year 1951."

This letter modified an earlier request for inclusion of construction requirements of the Command which had been made in February 1949 in that it deleted two major items, a cafeteria at \$ 200,000 and a stand-by power plant at \$ 500,000 and a 15% contingency allowance, thus reducing the original estimate by \$ 805,000 to a new total figure of \$ 5,802,900. The original estimated construction requirement forwarded for inclusion in the 1950 budget was set at \$ 6,607,900. This figure was viewed with considerable dubiousness at higher levels and later returned for revision downward in view of the limited funds anticipated for Fiscal Year 1950 budget for the Air Force.

Due to delays incurred in processing the construction requirements of the Command through higher headquarters and revising them to conform with imposed limitations, the original plan for construction for the Command to begin in Fiscal Year 1950 was altered to provide for obligation of the funds allocated for the purpose during Fiscal Year 1951. This delay required the Command to revise its proposed plans for assumption of responsibilities outlined in the mission letter.

Adequate space and facilities did not exist which would render feasible assumption of these responsibilities until such time as the proposed construction was completed. This fact lent urgency to the request for expediting of USAFSS construction program requirements.

Concurrently with this action to obtain approval of the proposed construction program of USAFSS from the Director of Air Installations, USAF, efforts were directed to obtaining approval for programming of \$ 200,000 in Fiscal Year 1950 to provide for advanced planning in anticipation of approval of the construction program as presented to the Director of Air Installations, USAF. However, notice was received from the Director of Air Installations, USAF, that it was too late to include a specific item in the 1950 construction program for advanced planning of additional facilities for USAFSS. The encouraging advice was offered, however, that certain funds probably would be available in Fiscal Year 1950 for advanced planning. As later events proved, this figure of \$200,000 was highly optimistic in view of the funds which eventually were made available. These totaled only \$ 76,000. A full account of the efforts toward obtaining the \$ 76,000 in funds for Fiscal Year 1950 construction for USAFSS is contained in the preceding section of this history on Rehabilitation and Construction for USAFSS at Brooks AFB. The reader is referred to that section for further information rather than repeat it here.

COMPTROLLER'S WORKING AGREEMENT WITH BROOKS AFB

In July 1949, a meeting was arranged between Comptroller representatives of the Twelfth Air Force, Brooks AFB, and USAFSS, with the objective of arriving at a mutually satisfactory division of Comptroller responsibilities as pertained to operation of USAFSS at Brooks AFB. It was obviously uneconomical to require all the organizations based on Brooks AFB to be both administratively and logistically self-supporting. Therefore, efforts were directed to sharing of these responsibilities to the mutual benefit of all with a resultant reduction of required facilities and elimination of duplication of effort. These efforts were supported by AF Regulation 11-4 and 11-4A, the subject of which is "Administrative Practices, Responsibilities with Respect to Special Activities." These regulations assigned uniform support responsibilities to base functions for certain tenants.

The administration and control of all aspects of the Comptroller responsibilities within USAFSS were to be retained by the Command. However, certain operating functions were to be assumed by Brooks AFB, thereby reducing the work load of USAFSS and eliminating necessity for maintenance of certain functions which could duplicate functions already operated by Brooks AFB.

It was agreed that Brooks AFB would maintain the basic fiscal records for USAFSS and submit reports required to Director of Intelligence, USAF, on fiscal matters. However, for purposes of control, these fiscal reports would be routed through Headquarters, USAFSS for information and coordination. This was in consonance with contents of a wire transfer from Headquarters, USAF, to USAFSS, dated 11 July 1949, which directed this arrangement be adopted.

It was further agreed that the Finance Officer of Brooks AFB would perform the functions of disbursing agent for USAFSS.

COST REPORTING

The primary responsibility of the Cost Reporting Section at major command level, as set forth in AF Manual 170-5, "Manual of USAF Cost Reporting," is to review and evaluate all reports within their command areas. Within USAFSS, accomplishment of this "prime responsibility" was considered impeded by certain obstacles which presented themselves from the outset. Chief among these were the following:

- a. Shortage of personnel, both trained and untrained.
- b. Organizational irregularities of a type which normally arise in the activation of a new command.
- c. Difficulty in achieving a coherence of account coding on a command-wide basis.
- d. Difficulty of establishing and instructing personnel in cost procedures at basic sources.
- e. Necessity for determining cost codes that would be appropriate to the peculiar needs of USAFSS.

f. Difficulty in affecting coordination of cost data throughout USAFSS.

The preceding list represents those problems which demanded solution prior to or simultaneous with affective operation of the cost reporting system within the Command. Other problems presented themselves but did not prove of major consequence.

The problem of personnel shortage was solved, prior to movement of the Headquarters to Brooks AFB in April 1949, by the expedient of arrangement with the Cost Control Section of Brooks AFB for that section to prepare Cost Control Reports of USAFSS components located at Brooks AFB pending adequate staff of the Command's Cost Control Section. To implement this arrangement, a system of recurring audit of all basic cost sources prior to their conversion to report information was inaugurated. This served to focus all cost data through the USAFSS Cost Control Section and assisted in the following:

- a. Enabled USAFSS to retain control of account coding within the Command.
- b. Facilitated basic cost changes as they became necessary.
- c. Permitted screening of all cost data prior to report integration.
- d. Expedited report preparation by Brooks AFB Cost Control Section by relieving them of considerable detail.

Organizational irregularities that arose were eliminated by conducting a thorough and comprehensive audit of all basic cost sources. Possible recurrence of these irregularities was minimized by organizing a system of continuing audit of all basic cost sources and establishing an effective liaison with all subordinate units and components of USAFSS.

The problem of achieving a clear account coding system on a command-wide basis was considerably reduced by personal liaison with personnel having direct, supervisory, or command responsibility in connection with account coding. The Cost Control Section analyzed all cost reports submitted by USAFSS units not located on Brooks AFB and instituted corrective action wherever disparities in account coding or account selection were discovered.

Cost procedures were established at basic sources, in conformance with AF Manual 170-5, by a system which provided for a cost card for each individual of the Command upon which was to be recorded and computed, for compilation and transfer to the cost report, all cost data pertaining to pay and allowances, et cetera. All supply vouchers, et cetera, which represented a cost to USAFSS were forwarded for audit and conversion the cost report.

Determination of cost codes appropriate to USAFSS entailed careful consideration of the mission and functions of the Command. Due to the great state of flux of the Command as a whole during this period, it was impracticable to quickly establish fixed and effective procedures for cost reporting. Rather, it was necessary to improvise with such systems and methods as would present a clear and realistic picture of operating costs of the Command at the time. This picture altered rapidly with the fluctuating requirements of the Command for equipment and services requiring extensive substitution and/or improvisation of account codes or basic addition or alteration to existing codes. It was deemed very prudent to exercise caution in submitting recommendations to the Comptroller, USAF, until such time as the Command had assumed its full military posture in strength as well as mission accomplishment.

At this stage of development, the coordination of costs throughout the Command was a matter embracing almost every phase and/or aspect of Cost Reporting principles, requiring the establishment of initial standards, policies, and procedures with little or no experience factor with which to gauge requirements.

It was not until September 1949 that Cost Control Reports were received in the Headquarters from all components of the Command. The time prior to this had been occupied with establishing the Command, moving to the new location at Brooks AFB, and designing a cost structure to serve the Command. Studies were prepared on the basis of information received in these cost reports and submitted to the Comptroller, USAFSS. These studies indicated satisfactory accomplishment in the Command from the standpoint of utilization and integration of the Cost Control Program on a Command-wide basis.

Receipt of the first Cost Control Reports from components of the Command permitted the Comptroller to review, for the first time operating costs of the Command on a Command-wide scale. They contributed to improving the Comptroller's perspective as applied to assessing the operating costs of the various components and functions. Further, they furnished reliable data upon which to predicate cost studies and cost analysis within the Command. And the reports represented progress in harmonizing the cost reporting of the Command and the establishment of an effective cost control liaison with all components.

The several cost studies furnished the Comptroller, USAFSS, was representative assurance of increasing volume of media with which to interpret cost factors and trends within the Command in the future. While much of the progress of the cost control program was intangible in nature, the results became increasingly apparent in the increased flow of cost data from the program.

PRINTING AND BINDING REQUIREMENTS FISCAL YEAR 1950

As early as July 1948, effort was directed to appraising requirements of USAFSS for Printing and Binding in Fiscal Year 1950 and acquainting Headquarters, USAF, with these requirements so that they might be included in the Fiscal Year 1950 budget.

In July 1948, requirements for Printing and Binding for Fiscal Year 1950 of USAFSS were submitted to the Deputy Chief of Staff, Materiel, USAF, with the request they be included in the Fiscal Year 1950 budget. Concurrently, requirements were submitted to the Air Comptroller, Machine Accounting Division, USAF, for rental and purchase of International Business Machines (IBM) equipment and supplies in Fiscal Year 1950 with the request that they also be included in the Fiscal Year 1950 budget. Estimates submitted did not receive immediate or full approval.

Higher Headquarters did not concur in the need of USAFSS for a separate printing establishment in view of the proximity of the Kelly AFB facilities and the Class "B" printing plant located on Brooks AFB, the projected location of USAFSS. Proper consideration was not given to the security aspects of the requirements, however. It was true that these other facilities might well be utilized by USAFSS under normal circumstances but nearly all of the requirements of the Command in this respect were of a classified nature and could not be handled by facilities operated by personnel not cleared for cryptographic duties. And a great portion of the requirements of the Command were of a unique and peculiar nature dissimilar to those of the Commands operating these facilities, all of which would render it impracticable to combine the needs of USAFSS with those of these other commands to be fulfilled by common facilities.

The decision was subsequently rendered that all printing and binding requirements for USAFSS, excepting the classified and peculiar requirements which it was not deemed feasible to handle in such a manner, would be fulfilled by the Air Adjutant General in common with other Air Force printing and binding requirements. Such portions of the requirements of USAFSS which classification precluded handling in this manner would be fulfilled by utilization of the facilities already mentioned at Kelly AFB and Brooks AFB until such time as a Class "B" printing plant could be provided for the exclusive use of USAFSS. Therefore, all budget estimates for printing and binding would be submitted to the Air Adjutant General, USAF, in the future. No funds were budgeted for USAFSS for Fiscal Year 1950,

except for \$ 2,000 which was allocated to pay the salaries of civilian employees operating the printing plant for the remaining portion of Fiscal Year 1950. Due to the fact the printing plant did not begin operation until very late in Fiscal Year 1950, this small sum sufficed for the purpose.

CHAPTER IV: OPERATIONS

DIRECTORATE OF OPERATIONS

- Represents and advises the Commanding General in all matters concerning the collection, processing and dissemination of Communications Intelligence.
- Formulates broad Communication Intelligence policies and plans and initiates directives for their execution.
- Establishes and maintains liaison with other agencies, boards, and committees concerned with Communication Intelligence plans, policies and production.
- Coordinates and supervises the administrative activities within the Directorate.
- Responsible for communication and teletype facilities for USAFSS.
- Conducts inspections of field units in order to insure maintenance of high standards of operational efficiency.

Collection Division:

- Determines type and quantity of facilities necessary to implement intercept and Direction Finding requirements provided by the Director of Operations and Processing Division.
- Locates facilities, within limits of budgetary, logistic and security consideration, at points throughout the world which will make possible the achievement of maximum intercept coverage and Direction Finding bearing of specified foreign communications.
- Studies all aspects pertaining to the location of intercept and Direction Finding units to arrive at a decision as to whether the installations should be fixed, semi-fixed, mobile or airborne in nature, and prepares complete engineering specifications for the construction and installation at the site.
- Calculates type and quantity of secure communications facilities necessary to provide the means of rapid receipt of raw material and Direction Finding bearing as well as expeditions handling of administrative and technical dispatches.
- Develops intercept control and Direction Finding techniques which will insure maximum results at the source of intercept.
- Establishes proficiency standard for all types of intercept and Direction Finding installations within USAFSS and advises the Commanding General on matters concerning assignment, rotation, and utilization of highly specialized officer and airmen technicians necessary to maintain such standards.
- Prepares technical training literature peculiar to the activities of intercept and Direction Finding units under the operational control of USAFSS.
- Supervises and prepares budget and personnel estimates for intercept, Direction Finding communications operations.

Processing Division:

- Responsible for planning, conducting, and coordinating all activities connected with the processing of Communications Intelligence. This includes cryptanalysis, traffic analysis, collation, machine procedure, and the synthesis and publication of Communications Intelligence data, and the dissemination of this data to those recipients authorized by the Commanding General, USAFSS.
- Formulates policies, plans, and methods for the division. Advises the Director of Operations in all matters concerning the processing of Communications Intelligence.
- Coordinates and expedites the activities of the Division. Insures compliance with pertinent directives and polices.
- Assists, advises, and makes recommendations to the Director of Operations on matters pertaining to the Processing Division.
- Recommends assignment of highly experienced analysis personnel to the Director of Personnel in order to affect maximum operating efficiency in the processing of Communications Intelligence.

Weather Division:

- Maintain complete and current lists of foreign weather transmitting stations, characteristics and details of their transmissions and their importance as a weather intelligence source.
- Maintains current index of international weather codes in use by foreign nations and determines any changes or deviations from standard usage.
- Conducts cryptanalysis on foreign weather codes as a means of providing a weather intelligence service capable of furnishing usable weather intelligence service capable of covering areas controlled by actual or potential enemies, insures the provision of such data in volume with sufficient dispatch to meet requirements of the USAF.
- Provides by-products of weather intelligence activities to Operations Directorate for use in related Communications Intelligence activities.
- Determines periodic and systematic weather reporting and broadcast procedures employed by foreign nations, maintenance of adequate files of such information and provides necessary data to intercept and direction finding control personnel.
- Implements policies agreed to between USAFSS and Air Weather Service services interested in weather intelligence concerning requirements for such data, means of establishing proper security standards and determination of facilities necessary to provide same.
- Determines space, personnel, and equipment requirements of the Weather Division.

It will readily be perceived, in the comparison of the organization in June 1949 and October 1949, that the Directorate was undergoing rapid and drastic changes in organization. It is true, also, that the responsibilities of the Directorate fluctuated to a great extent at the same frequency and in as great a scope as the organizational characteristics. Due to these fluctuations in operational and organizational characteristics, it was not until late in September 1949 that the Directorate began actually producing useful intelligence material.

KEY PERSONNEL

In October 1949, key personnel assignments within the Directorate of Operations were as follows:

Lieutenant Colonel Barton S. Pulling	Director of Operations
Major Emil W. Polivka	Deputy Director of Operations
Captain Wharton L. McGreer	Chief, Collection Division
Captain William R. Bowers	Deputy Chief, Collection Division
Captain John P. Shean	Chief, Processing Division
Captain Charles S. Willis	Deputy Chief, Processing Division
Captain Robert H. Dean	OIC, Control Section
Captain Clyde E. Allen	OIC, Communications Section
Captain Henry D. Steele	OIC, Engineering Requirements Section
Captain George I. Mason, Jr.	OIC, Cryptanalysis Section
Captain Bert H. Lynn	OIC, Collation Section
Captain James W. Brady	OIC, Traffic Analysis Section
1st Lieutenant Lester R. Allen	OIC, IBM Section

NOTE: Information presented in the foregoing portion of this account pertaining to Offensive Operations of USAFSS has been derived from such files and Directorate of Operations historical reports as have been made available to the writer. This information has been conscientiously evaluated and confirmed. In the following portions of this account pertaining to Activity and Development of the Directorate of Operations, the information is extracted almost verbatim and solely from the historical reports from that Directorate and much of it has not been adequately evaluated or authenticated by supporting documentary material due to the classification of subject material or unavailability of such documentary material to the writer.

ACTIVITY AND DEVELOPMENT OF THE DIRECTORATE OF OPERATIONS

As explained earlier, the function of the Directorate of Operations is the offensive portion of the mission of USAFSS. To carry out this mission, all facilities and techniques of direction finding, traffic analysis, and cryptanalysis ... are used. [Editor's Note: Portions omitted due to classification] In light of the foregoing, the activities of the Directorate of Operations may be summarized as follows:

- a. It furnished the training facilities and assembly point for all outlying units.
- b. It did all research and planning on subjects within its field that was not done by a higher agency.
- c. It received intercepts from its units and performed traffic and cryptanalytic work of a strategic nature. (All possible tactical analysis was done in the field in order that it might be utilized with a minimum of delay)

The Traffic Analysis Section of the Processing Division was, during this period, undertaking the training of the enlisted and officer personnel assigned the Division.

A shortage of personnel throughout the period of this report handicapped to a considerable degree the development and operations of the Directorate of Operations but was gradually alleviated by the continued arrival of newly assigned personnel until about September 1949 when the problem was reduced to minor proportions.

ADMINISTRATIVE PROCEDURES

One of the major objectives of the Directorate of Operations during the period of development which extended up to August 1949 was the development and establishment of administrative procedures within the Directorate and between the Command and USAF which would facilitate administration of the Directorate. Within the Directorate, a basic system of controlled filing was under consideration and, after a discussion of the various machine record systems currently in use, a demonstration was made of the McBee Record System by a company representative. It was decided that, in all probability, this system would not meet the need of providing a rapid and accurate means of indexing the voluminous and diversified files of the Directorate of Operations. The system was, however, considered worthy of further consideration in regard to the specialized files of the Processing Division, such as the Air Order of Battle, Personality File, and the Geographical File. Since the McBee System was relatively inexpensive, when compared to other machine record systems, it was decided to give it a trial, for which purpose the necessary equipment was requisitioned.

In accordance with plans for streamlining the administrative procedures of the Command, a conference was held in August 1949 regarding the correspondence and liaison channels involved in communication between USAFSS and USAF. The possibility of eliminating Detachment "A", the Command liaison detachment maintained at Arlington Hall Station, Arlington, Virginia, from channels between USAFSS and USAF was considered. It was believed this would reduce, by several days, the time required for dispatch and receipt of communications between these two Headquarters. No conclusive decision was formed by the conference on this question, however, and it was again considered at a later conference attended by the Commanding Officer, USAFSS. The Commanding Officer, after considering the views advanced on the subject, directed that a staff study be prepared for his information. Detachment "A" was subsequently eliminated from channels between USAFSS and the USAF.

INSPECTION OF 1ST AND 2ND SQUADRONS, MOBILE

Lieutenant Colonel Pulling and a party conducted an inspection tour of the 1st Radio Squadron, Mobile, in August 1949 for the purpose of surveying the engineering and equipment situation within this organization with a view to possible enlargement of the scope of operations of the unit and a resulting increase in volume and quality of production by that unit.

Immediately after return from this inspection, the Director of Operations proceeded to Germany in the company of the Commanding Officer, USAFSS, with the objective of establishing closer liaison with the intelligence representative of Headquarters USAF in Europe (USAFE) and the secondary purposes of inspecting the 2nd Radio Squadron, Mobile, then stationed at Darmstadt, Germany. En route, the party made a stop at the United States Embassy in London for conferences with the Air Attaché.

ACTIVATIONS OF ADDITIONAL RADIO SQUADRONS, MOBILE

A staff study was prepared by the Directorate of Operations in September 1949 recommending the activation of two additional Radio Squadrons, Mobile. The completed staff study was presented to the Commanding Officer, USAFSS, for consideration and approval. It contained the following recommendations:

- a. That the 3rd Radio Squadron, Mobile, be activated at Brooks AFB on or about 1 October 1949 and readied for overseas shipment to Alaska.
- b. That the 10th Radio Squadron, Mobile, be activated at Brooks AFB on or about 1 October 1949 and readied for overseas shipment to the 3rd Air Division in England.

- c. That the mission of the 8th Radio Squadron, Mobile, currently stationed at Brooks AFB, be changed and the organization rendered operational. This Radio Squadron, Mobile, to be permanently based at Brooks AFB for the purpose of providing USAFSS with facilities for intercept and a means of training personnel for replacement in overseas units.
- d. That all MOS 709s and MOS 808s newly assigned to USAFSS be reassigned within the Command to the Processing Division to undergo on-the-job training prior to further assignment within USAFSS.

**The 3rd Radio Squadron, Mobile, and the 10th Radio Squadron, Mobile,
were subsequently activated on 23 November 1949.**

PROCESSING DIVISION

In the Processing Division, considerable gains were being made. By July 1949, this division had advanced its organizational planning considerably and moved into the operations test stages with personnel working on current operational problems in the positions to which they would ultimately be permanently assigned.

Further effort was devoted, during July and August 1949, to the development of an adequate and suitable system of indexing and filing material within the division. This pertained specifically to intelligence material, such as, Air Order of Battle, Personality File, and the Geographical File. Previously, an index formerly used by the A-2, USAF, was adopted and tried out. This system proved inadequate for the requirements of USAFSS, however, in that it did not provide for indefinite expansion and application to the specialized uses for which it was required. Therefore, a complete index was devised and compiled to replace this system. This index was completed and published in October 1949 in the form of a Standard Operating Procedure. This Standard Operating Procedure also served to explain, in detail, the type, form and short title of all types of reports emanating from the Processing Division.

A Technical Library was established in the Processing Division in July 1949 and developed through successive months until in November 1949 it contained 1,492 volumes, with additional material arriving daily. It was planned that the library be as comprehensive as possible in order that research material might be provided on all subjects that might arise in the production and analysis of intelligence materials, and to provide technical data for engineering purposes. A \$10,000 budget allocation had been obtained for Fiscal Year 1941 to cover expansion and development of this library. During 1949, however, shortage of funds was a handicap that greatly hindered development of the library.

Prior to August 1949, consideration had been accorded the McBee Machine Record System for adaptation by the Directorate of Operations to provide a system of controlled filing of the homogeneous material handled by the Directorate. However, factors which subsequently arose deflected favorable consideration to the International Business Machine (IBM) equipment for this purpose. This equipment was adopted and acquired in September 1949. Installation of this equipment was completed during October 1949 and a training program instituted for training personnel to operate it. Here, again, was encountered the old problem of personnel shortage and the recurring one of lack of cryptographically cleared personnel which were required for the operation of the equipment. However, these problems were steadily, if slowly, overcome by constant and energetic application of effort.

COLLECTION DIVISION

Like other components of the Directorate of Operations, the Collection Division did not achieve effective operational status until late in August 1949. At that time, the major portion of the efforts of the division was directed to engineering for requirements of the division and overseas units in equipment and operating practices.

A special engineering team made a visit to the 1st Radio Squadron, Mobile, during September 1949 for the purpose of surveying the site and facilities of that unit. New antenna arrays were built and installed and existing facilities rehabilitated and redesigned wherever possible and practicable to obtain greater efficiency of operation. New installations were planned and detailed information for their construction left with the unit for future utilization. It was found that much of the unit's equipment was in need of extensive repair and a program was mapped out to accomplish this repair. The team estimated that the changes and improvements made and proposed would result in an increase of about 40% in the productivity of the Radio Squadron, Mobile, and even further improvement with time and availability of new installations planned.

Benefits of the engineering team's visit to the 1st Radio Squadron, Mobile, were threefold. It enabled personnel of the unit to receive much valuable training in good engineering practices, as well as to become more familiar with the aims and requirements of USAFSS. It enabled USAFSS to become familiar with aspects of post-war field operation. And, third, besides increasing the efficiency of the facilities of the 1st Radio Squadron, Mobile, the team instituted a program for the complete rehabilitation of the unit.

DEVELOPMENT OF TRAINING FACILITIES

In April 1949, when most of the personnel of USAFSS were still located at Arlington Hall, Virginia, discussions were held among the Command staff concerning the interim utilization of personnel assigned to the Command from training schools pending the completion of their cryptographic clearances. As already explained in earlier portions of this account, the classified nature of the bulk of the work of the Command required such a clearance for personnel before they were permitted to handle sensitive material. As a result of the aforementioned discussions, it was decided the best solution to the problem would be to assign the uncleared personnel to the 8th Radio Squadron, Mobile, located at Brooks AFB, for additional training within their respective fields designed to develop their skills to a higher degree and broaden their experience, pending their clearance.

Major Idris J. Jones, who was at that time Commanding Officer of the 8th Radio Squadron, Mobile, was informed of the problem and its contemplated solution in a personal letter from the Director of Operations and requested to initiate action toward instituting a program of training. Major Jones set about organizing courses, procuring equipment and taking all other steps necessary to establish such a program. In this he was considerably aided by Captain Russell A. Verploegh and Lieutenant Lloyd S. Gray, recent graduates of the Officers' Communications Course at Scott AFB, Illinois, who had arrived in the 8th Radio Squadron, Mobile, in early April 1949.

A barracks building was made available to the squadron in which to locate the proposed school. The next primary problem was to obtain the necessary training equipment. None was available from the 8th Radio Squadron, Mobile, supply at that time and no authority existed for normal requisition of such equipment. The squadron was authorized equipment as prescribed in Tables of Organization & Equipment (T/O&E) 1-1027. Column 9 of this T/O&E, under which fall the type of equipment required for the proposed program of training, had been deleted at some previous time since it was not then contemplated that the squadron would have need for such equipment. A limited amount of code training equipment such as TG-10's (Code Practice Keyers), portable typewriters, headsets, telegraph keys, volume controls, et cetera, was borrowed from the 136th Radio Security Squadron.

A request was placed with the Director of Materiel by the Director of Operations for initiation of action to reinstate Column 9 of T/O&E 1-1027 so that the equipment listed therein could be procured through normal requisitioning channels. This was accomplished at a later date.

It was perceived at a very early stage of operation of the training school that several categories of uncleared personnel would need to receive interim training while awaiting clearance. It was also foreseen that additional facilities would be required. Therefore, steps were taken to acquire another building. Success was achieved in this matter, and the training school moved from the building originally assigned to another building on the base which provided greater space and facility for the purpose. The latter building had formerly been used as a school building and was well suited for the purpose due to the fact it was large and was divided into classroom and office spaces. On the debit side, it was old and dirty, inadequately lighted, and insufficiently supplied with electrical outlets and plumbing. The deficiencies were gradually eliminated by means of repair and rehabilitation work by the base installation section, assisted by the efforts of the student personnel.

Sometime after the move into the new building assigned, a hangar building on the base was allotted for use by the school. All intercept training equipment and facilities of the training school were immediately moved into this hangar building. A short time later, the entire training school was moved into this location. This move was accomplished in October 1949 and worked out nicely, in spite of a limitation of space imposed. The hangar was well lighted with fluorescent lights and there were eight rooms which were utilized as classrooms, office spaces, and storage space. These eight rooms were contained in a structure built right against the side of the hangar building, the whole comprising one large structure.

In late May 1949, the title of the school was changed from the 8th Radio Squadron, Mobile, Code Training Detachment to the 8th Radio Squadron, Mobile, Proficiency Maintenance Detachment. Student strength had gradually increased until in June 1949, there were a total of 67 student personnel. The number of instructor and supervisory personnel had reached 16 by that time.

In May 1949, a Routing and Record Sheet was sent to the Director of Personnel and Administration and the Director of Operations, respectively, by the Commanding Officer, USAFSS, directing the establishment of the Training School in accordance with suggestions and plans already discussed between the staff members. It was prescribed that the responsibility for planning, personnel movement, and general supervision would be exercised by the Director of Personnel and Administration, while preparation and conduct of the courses of instruction and the school itself were to be the responsibilities of the Director of Operations. The 8th Radio Squadron, Mobile, would furnish necessary services and facilities. It was proposed the first course of training, under the new setup, would begin 1 June 1949. Planning for the courses to follow envisaged an enrollment of approximately 120 airmen.

Responsibilities of the Director of Personnel and Administration in matters of training were exercised by the Organization and Training Division within the Directorate. Responsibility for the training function, as a whole, fluctuated between the Directorate of Personnel and Administration and the Directorate of Operations for some time. However, in October 1949, the training function was designated a Division of the Directorate of Operations and remained thus for the remainder of the period of this account. This arrangement was welcomed by the Training Division supervisory personnel. It was felt that since the operational units were most affected by the success or failure of the Training Division, a much greater degree of coordination and cooperation would be achieved by having the Training function unified with the other operational functions under one Directorate. Numerous instances arose confirming this belief, but most convincing was the fact it had previously been difficult for the personnel of the Training Division to know where to go for help and advice, and to know who would be most receptive to suggestions for improvement of the Training functions. As a Division of the Directorate of Operations, the Training Division's problems in this sphere were solved. It was quickly noted that the personnel of

the Directorate of Operations exhibited much more interest of the Directorate of Operations exhibited much more interest in the success of the Training Program. This was evidenced by numerous visits of Operations personnel to the Training School.

Another benefit of the change in organization affecting the Training Division was realized in that, from the very first days of operation, the personnel of the Training Division experienced difficulty in obtaining information of a specific nature as to the type of instruction assigned student personnel should receive, based on the requirements of the operational units. With the reorganization, a Directorate of Operations staff meeting was held at which a comprehensive and informative discussion was carried on, covering the techniques and procedures involved in unit operations, together with a familiarization of equipment being used at that time. Needless to say, this resulted in considerable help to the instructor personnel, as well as the supervisory personnel of the Training Division. It was planned that similar discussions would be arranged in the future.

DIFFICULTIES OF TRAINING

A great fluctuation of student personnel made it very difficult for the Training Division to carry on an effective training program. The first group of students assigned for training were retained in the school for approximately 3 months at a time when there was an extremely small amount of training equipment available. The instruction, at that time, consisted mainly of maintaining and increasing the radio operators' code speed and lecturing on technical aspects from a few available technical manuals and from the personal experiences of the instructors. A point was finally reached, through no fault of the instructors, where the instruction began to wear a little thin for lack of teaching aids and equipment. The morale factor became a problem at this point. Then, just at the time when equipment and manuals did begin to arrive and the courses were well organized and sufficient instructor personnel assigned, practically all of the student personnel were withdrawn from the course of training for assignment to the units. Also, the prospective student personnel flowing in from the schools of the Air Force were reassigned to units almost as soon as they arrived in the Command. Due to this, at one time, there were almost as many instructors in the Training Division as there were students. Obviously, this condition could not continue if the Training Division was to fulfill its function.

Finally a policy was proposed and agreed upon whereby the personnel assigned the Command who were uncleared and eligible for further training would remain in the school in the Training Division until they were sufficiently proficient to go on the job with little or no additional training, at the discretion of the Training Division supervisors. This policy served to stabilize, to a considerable extent, the Training Division plans and program for training.

Throughout training, close supervision was maintained on traffic interception with a view to the interception of material as closely allied to material of strategic and tactical importance as was possible within limitations imposed by geographical characteristics and equipment factors. This material was copied on regular log sheets and turned over to traffic analysts who attempted to perform actual analysis, study, and evaluation of the material as a means of extending their experience and improving their proficiency in preparation for such work in the field. Much valuable training was accomplished by this means. Therefore, adequacy of equipment was of some importance.

This intercept training was constantly hindered and limited by inadequacy of equipment. Primarily, the inadequacy existed in the antenna systems employed in the training. These antennas were installed under the rafters within the hangar building utilized by the training school as a temporary expedient. They were not very efficient, as had been anticipated. This was intended only as a temporary arrangement but proved more permanent. Work orders were initiated through channels for installation of antenna systems on the roof of the hangar building over a period of time with little success.

The difficulty represented by the inadequate antenna system was further aggravated by the other shortages of equipment. This was especially applicable to such equipment as typewriters which were essential to such courses as code training, intercept training, and tape reading and was highly desirable in traffic analysis training also. A number of typewriters (MC-88 type) had been located in storage at Kelly AFB in June 1949 and efforts made to obtain them for use in training. However, as typewriters were controlled items, permission to obtain them had to be secured from the Chief Signal Officer for their release. A request was forwarded through channels for this release. Lack of typewriters continued to be a large detriment to training within the Command.

SPECIAL PROJECTS

In September 1949, an experimental project was inaugurated to determine how quickly basic airmen could become proficient in code tape reading. This project involved instruction in tuning radio receivers to assigned frequencies, operation of the BC-1016 tape recorder to record Continuous Wave (CW) traffic on inked tape, and the transcription of this traffic to hard copy message logs. The basic purpose of this project was to determine if it would be practicable to utilize airmen with this type of training in operational units, supplemented by regularly trained intercept operators.

The Personnel Section selected 3 basic airmen with relatively high Army General Classification Test (AGCT) scores and they were interviewed. Two of the three were finally selected for the project. On 26 September 1949 they began the training. Only one of the two airmen selected had previous typing instruction.

Considerable thought was given to the proper method of instruction for these students. Since only a month to six weeks had been allotted for this project, orthodox methods would consume too much time. Basic typing instruction alone would take two weeks and a minimum of two more would have been necessary to bring the students' code training up to a point where they could begin reading tape with any degree of proficiency. Therefore, after some experimentation, a shortcut method was devised. The two students were started out almost immediately reading and copying beginners tapes on which were seven code characters. They were given a short time to study the appearance of these characters and to familiarize themselves with the operation of the tape reading equipment. They were then instructed to associate the characters on the tape with positions on the typewriter keyboard instead of the usual method of associating them with letters and numerals and then, in turn, associating the letters and numerals with keyboard positions. As they mastered each group of characters and were able to make nearly perfect copy, they progressed to the next tape with an additional set of code characters. In this way they were soon reading all code characters, including those for both letters and numerals. In short, these students would not be able to read Continuous Wave code but they would be able to transcribe code characters on tape into hard copy message logs. This project proved highly successful throughout. The two airmen subjected to the experimental training were soon reading tape at a speed beyond all expectations with very few errors. At the end of five weeks, one was able to transcribe tape into hard copy at the rate of 25 words per minute. This student had previous typing experience. The other airman, with no previous typing training, was able to copy at about 15 words per minute. As the end of the period of account consideration was being given to further utilization of this method of training within the Command.

VOLUME OF STUDENTS AND INSTRUCTION PRESENTED

During the period 1 April 1949 to 31 December 1949, the Training Division presented instruction to a total of 310 students for varying lengths of time. This number includes 207 Radio Operators (MOS 756), 22 Radio Mechanics (MOS 754), 20 Traffic Analysts (MOS 709), 22 Crypto-Analysts (MOS 808), 26 Translators (MOS 267), 7 Intelligence Specialists (MOS 631), and 6 Basics (MOS 521). Efforts were

made to effect upgrading these personnel in MOS, based on the training they received in the Training Division. Some success was achieved in this but for the most part the time element involved precluded upgrading in every case.

Some of the instructions presented in training, especially in the early phase of the school, were of a necessity sketchy and inconsistent because of a lack of material and equipment, the rapid fluctuation of student personnel and instructors and other difficulties already mentioned. However, for the most part, the courses of instruction were well organized and it is believed considerable benefit was imparted to the students and the Command as a whole through this training program. As the end of the period of this account approached, it was confidently felt the Training Division had satisfactorily fulfilled its primary mission.

VIEWS AND RECOMMENDATIONS OF KEY PERSONNEL

One of the greatest factors which rendered course planning unduly difficult in the Training Division was the lack of certainty on the part of the Training Division supervisors and instructors as to exactly what subject matter should and could be presented in the training, based on the requirements of the operational units to which the student personnel in training would ultimately be assigned. In an effort to eliminate or at least minimize the detrimental effect of this factor, recommendations were advanced by the Training Division that a system be devised whereby the Directorates of Security and Operations determine from the unit commanders what additional personnel training would be most appropriate to the needs of the units. Then the information obtained from the unit commanders would be screened and evaluated by the Director of Operations and the Director of Security and presented to the Training Division in concrete form to facilitate intelligent course planning. Also, it was considered highly desirable that a definite, clear cut policy be defined on the question of the degree to which the curriculum should invade classified material.\

Since it was generally agreed that there would be a need for a continuous, permanent training program within the Command, it was further recommended action be taken to place the Training Division under a Table of Distribution and a Table of Allowances. Under the arrangement the Training Division operated during the period of this account, none of the personnel or equipment utilized for training purposes could have been adequately justified if required. In fact, there were very few pieces of equipment in use within the Training Division that could have been retained at all if other organizations, from which the equipment was borrowed on hand receipts, had requested its return. This did happen in one instance concerning a number of typewriters. The sudden loss of these machines represented a considerable detriment to the training program and upset the entire schedule for a period of time.

CHAPTER V: DEFENSIVE MISSION -- COMMUNICATIONS SECURITY

The sole justification for the maintenance of a National Defense Establishment is to insure National Security. Many uninformed persons visualize National Defense as a steel and concrete battle line bristling with heavy armament and profusely manned by great numbers of well trained and equipped personnel. The debacle of the Maginot Line in the early part of World War II should have dispelled this illusion but arguments are still heard from seemingly well informed quarters defending the theory of defense based upon great, static, heavily armed emplacements or large masses of troops moving to a predetermined plan of action. The true implications of the term "security" are rarely fully understood by the layman.

The primary mission of every National Defense Agency is to contribute to the national security, whether it be an infantry company in the field or an administrative office in the Pentagon. Too frequently, this fact is forgotten by those people who conduct the business of the various agencies, however. Procurement of supplies or shortage of personnel to operate equipment, or any one of the other of many problems encountered in routine operation by an agency often overshadows and obscures the true, essential purpose of that agency in the national defense establishment, to contribute to national security.

Every agency in the national defense establishment relies to varying extent upon communications in fulfilling its mission. Communications flow up and down in command channels and laterally in liaison channels, carrying commands, requisitions, information, and even personal communications between agencies, commands, and individuals. And here is where the otherwise alert and conscientious guard of the agency or individual against clandestine elements hostile to the objectives of the national defense establishment is lowered. Too much confidence is placed in the sealed envelope, or the coded message, and the personal conversation behind closed doors. Envelopes can be opened, codes broken, and listening devices installed in otherwise secure rooms. These are also many other ways information may be gleaned from communications transmitted from one point to another by one means or another. The mission of the USAFSS is chiefly concerned with communications transmitted by mechanical means between two points.

First, the reader should understand the word "communications." Most of us view communications as a source of information of one kind or another. In our eagerness to get the job done and keep things running properly, we often overlook the fact that communications, especially within the national defense establishment, has another aspect and that from another viewpoint the "information" which is conveyed by communications is also "intelligence" to an interested outsider or potential enemy. This "intelligence," for the purpose of this account, may be more specifically referred to as "communications intelligence," or COMINT.

It is not, as is commonly believed, necessary to penetrate a cryptographic code and decipher a message to realize valuable information from "enemy" communications. It is possible to get a vast amount of COMINT out of communications activities without actually understanding a single message. The techniques involved in gleaning this COMINT are highly technical and specialized and are also closely guarded military secrets. They have been discussed in some detail in the preceding portions of this account.

By now, the reader may have realized that a special significance is attached to the term "security" as it applies to USAFSS and its mission within the Air Force. The function of USAFSS may be separated into two distinct phases, one of which is defensive and another which is offensive in spirit. These two, together, constitute the whole mission of USAFSS.

It is not possible to state arbitrarily that either the offensive or the defensive phase of communications security is the more important one; or at least it isn't possible to present arguments which would convince everybody that the choice of the more important one was correct. However, it may be said that the offensive phase is usually accorded more respect and interest because it is far more romantic due to the fact its successes are usually more prominent than its failures; it is like medical work where failures are buried and forgotten and successes are highly publicized. On the other hand, **there is a natural tendency to take for granted any success in the defensive work of preserving the integrity of our own communications. Here it is the failures which receive the publicity.**

DIRECTORATE OF SECURITY, USAFSS

Shortly after the establishment of USAFSS as a major air command in October 1948, Lieutenant Harry T. Danielson, one of the officers who had formerly been on detached service with the Army Security Agency and transferred to USAFSS, was delegated the duties and responsibilities of acting Director of Security within the new command. Lieutenant Danielson served, primarily, as a coordinator and liaison representative in matters concerning security at the many conferences, discussions and meetings attendant to the organizing and development of USAFSS during the early stages. In March 1949, Lieutenant Colonel James L. Weeks reported to the Command and was assigned as Director of Security.

The Directorate grew slowly through the first few months. By August 1949 its strength had grown to 12 officers, 5 airmen, and 14 civilians for a total of 31 persons. This was only 31% of the authorized strength of 90 persons; 55 military and 31 civilians.

The mission of the Directorate of Security is principally concerned with the defensive portion of the over-all mission of the Command; that is, the cryptographic and transmission security of USAF communications. This part of the Command mission involves research and development of communications security equipment, preparation, storage, distribution, and accounting of cryptographic materials within the Air Force; command and direction of communications security units assigned to USAFSS; and current and projected planning on crypto-matters for the Air Force. In execution of its assigned mission, the Directorate of Security maintains close liaison with the Directorate of Intelligence, Headquarters, USAF, and coordinates all its activities with agencies of the other services which have similar responsibilities.

Like all other components of the Command, the initial and essential problems of the Directorate of Security were those of personnel and equipment for adequate operation. Due to fluctuating conditions affecting location, supply, manning, and administration of the Command, it was not until in July 1949 that the Directorate of Security could begin directing effective effort toward accomplishment of the primary mission; the monitoring of Air Force communications for security purposes and assuming responsibility for cryptographic materials within the Air Force.

CRYPTOGRAPHIC ISSUE AND CONTROL

In July 1949, an accounting system was established for the purpose of maintaining a complete record of the issue and distribution of all cryptographic items in within the Air Force. In planning for the establishment of this accounting facility, it was believed there were certain worthwhile advantages of machine accounting over manual methods. Frequency of error, speed and ease of operation, storage and handling of records, ability to cope with work load fluctuations, and over-all economy were studied and machine methods were found to be more suitable.

An inspection was made of accounting machines and Remington Rand equipment was found highly suitable due to its simplicity of operations, high capacity for intelligence recording, and its availability on an annual rental basis, with the option of purchase at the end of the year. This latter circumstance

would provide ample opportunity to determine if the equipment would be fully satisfactory for the purpose it was intended before any large amount was invested. Due to the rapidly expanding and changing needs of the Command in this and other respects, this was a highly desirable condition. Therefore, Remington Rand equipment was rented.

The general objective of cryptographic accounting is to be able to quickly determine, at any time, the status of all crypto-items. This status includes: who is custodian of the item; his unit; location of the item; has the item been destroyed or transferred and, if equipment, when it is due for rehabilitation. Several different operations take place in the supply of crypto-items. These are inventory, issue, receipt, transfer, and destruction. These operations are recorded and reported by transfer, destruction, and possession reports. Intelligence included in these reports provides the basis for machine accounting. A machine card is prepared for each crypto-item when it becomes the property of the Air Force. This card (or a revision of it) is kept indefinitely, even after destruction of the item has been made. Intelligence is punched on this card including nomenclature of the item; registry number; date issued; edition number; date destroyed (if applicable); procurement date and holder number of custodian. This punched card is then processed through an interpreter machine which transposes the punched information into printed readable intelligence. Desired information can then be extracted by literally reading a card or, in the case of a multiple requirement, by machine sorting.

When distribution of an item is made to a custodian, a suspense date is punched on the card for that item. This date is selected so as to cover the time normally necessary for distribution of the item and return of the receipt. Suspense periods differ with different geographical locations. If return of the receipt is not made prior to the suspense date, a tracer is started immediately to the appropriate Air Command Headquarters, with an information copy going to the custodian. In addition to the cards for items accounting, an additional card is made for each custodian and alternate custodian showing name, rank, organization, date of clearance, service number, and headquarters and Special Order designating him as custodian.

A great advantage of machine accounting is realized in checking inventories made by custodians. This check can be made quickly upon receipt of inventory reports. Consequently, if there is a discrepancy between that reported and that charged, an immediate investigation can be made.

In addition to the cards for items accounting, an additional card is made for each custodian and alternate custodian showing name, rank, organization, date of clearance, service number, and headquarters and Special Order designating him as custodian.

A great advantage of machine accounting is realized in checking inventories made by custodians. This check can be made quickly upon receipt of inventory reports. Consequently, if there is a discrepancy between that reported and that charged, an immediate investigation can be made. Another advantage is that the knowledge of the quantity of an item held by a particular command or in a geographical area can be quickly obtained. Additionally, crypto-holders charts for all Air Force holders can be prepared more quickly, economically, and correctly than if prepared by holders.

In August 1949, a staff study was prepared pertaining to the dispersion and storage of crypto-material within the Air Force. This study included information relative to number and location of cryptographic Command Issuing Offices within the Zone of Interior. Designation of these Command Issuing Offices was based on tactical missions assigned, geographical distances involved, number of cryptographic holders within an area, and other equally pertinent factors. Letters were dispatched to all major air commands within the Zone of Interior and overseas in an effort to obtain information to assist in equitable distribution of Command Issuing Offices. Maps were prepared showing the location of the commands and cards prepared showing the number of crypto-items held by each command, and the weight of the items.

SPECIAL PROJECTS

Classified Waste Incinerator

A need for an adequate classified waste incinerator, combined with a lack of funds for new construction, prompted the initiation of a project in July 1949 to construct an incinerator from material at hand. An ingenious idea was advanced for using a salvaged water tank of suitable proportions, obtained from Randolph AFB, Texas, at a cost of only \$ 178.00 for this purpose. A gas burner, with pilot light, was installed, and the whole thing set up on a concrete and brick base. Surprisingly effective results were realized in the use of this makeshift incinerator.

Security-of-Communications Plan

During the period of September to December 1949, a survey was conducted and a master Security-of-Communications Plan drawn up and reproduced photographically. Visits were made to Headquarters, Strategic Air Command, Continental Air Command, Armed Forces Security Agency, Army Security Agency, the Air Materiel Command, and several commercial firms during this period to study new and proposed equipment and networks. Communications planning and budgeting were also discussed.

Ciphony and Cifax Survey

A survey was completed on 30 December 1949 of the ciphony and cifax field. This study included detailed explanations of the various problems associated with the encipherment of speech and facsimile, a review of past solutions and early equipments, a tabulation of current equipment and equipment under development, giving production diagrams, physical descriptions, and systems comparison, and a discussion of the present state of the art and the probable form of future developments within the field. At the end of the year, consideration was being given to the preparation of a standard test on ciphony and cifax for both reference and training of maintenance personnel. Some coverage was obtained from existing publications but much original information had been prepared.

Mobile Monitoring Unit

About this same time, efforts were being directed to designing and developing a 2-position mobile monitoring unit for use by the Radio Security Detachments of the Command. These monitoring units would permit monitoring of VHF and low power nets that could not be monitored from fixed stations. An inspection of the K-53 Signal Corps truck revealed that it was highly adaptable for use as a mobile monitoring vehicle. Cost estimates and equipment diagrams were prepared for one such mobile unit. Inasmuch as this type of vehicle was available to the Command from Kelly AFB, it was anticipated that, if the unit proved satisfactory, one such unit would be assigned to each detachment within the Command.

Code Vocabulary

A study in evaluation of proposed joint aircraft, air-ground code vocabulary was undertaken on a word for word basis in November 1949. The purpose of this study was to insure complete coverage from the standpoint of brevity, deletion of surplus terms or words, and the addition of terms or words common to all commands. This project was completed on 27 November 1949 and recommendations and comments were forwarded to the Director of Communications, Headquarters, USAF.

Communications Information

A collection of information on all Air Force communications facilities was begun late in November 1949. A proposed Air Force Regulation was circulated within the Directorate of Security for comment. This regulation was intended to provide a continuous flow of communications directives from all

commands. Letters were dispatched to all commands requesting information relative to future planning for communication and crypto-systems. It was believed that this information would be essential in the proper analysis of the existing status and future trends in Air Force security.

Organizational Sub-plan

Work was begun on an organizational sub-plan in September 1949. The objective of this plan was to produce in graphic and statistical form a group of charts which would show in detail the current and proposed organizational structure of the USAF and, in a general manner, the relation of the Air Force to other elements of the National Defense Establishment. These graphic and statistical presentations would provide basic data for preparing other plans, such as crypto-net plans, field unit plans, educational, communications facilities and crypto-communications plans.

Cryptographic Check List

As early as July 1949, efforts were directed to compiling a crypto-center inspection check list. The purpose of this check list was to have available adequate material for use when inspecting Air Force crypto-centers. Such a list was considered necessary for the efficient inspection of these crypto-centers and the drafting of the inspection reports. The check list was compiled with the view that its use should be informal in nature and its contents consistent with the developments of crypto-center inspections conducted under the provisions of AF Regulation 205-7, subject: "Communications Security," dated 29 September 1949. It was planned to submit recommendations to Headquarters, USAF, concerning the items of the completed check list which seemed appropriate for inclusion in the check list published by the Headquarters. Cryptographic documents were screened for material to be included in the check list: its applicability and effectiveness were determined by inspections of various crypto-centers. Pending acquisition of joint publications, and the establishment of a complete cryptographic account for the Directorate of Security, some publications required for reference purposes had to be secured from outside sources. Detailed study of cryptographic documents was required in the compilation of accurate data for the check list.

The format of the check list needed to be concise as possible, consistent with operational requirements. A questionnaire form of approach was considered the simplest to effect but it was realized that means would not present complete information. The listing of questions requiring simple yes or no answers would suffice for use solely by inspectors, since the inspectors would insure local confirmation of affirmative answers and would amplify negative answers. For possible administrative uses by operating crypto-center personnel, however, more detailed explanation would be required in order that adjusting action might be taken. In order that inspectors might justify report of certain failures, each item of the check list needed to be accompanied by specific reference to the directive governing the practice of procedure reported upon.

The problem of source material for the check list was overcome by the detailed review of instructional documents pertaining to the operations of the crypto-systems involved. Check lists published by Army Security Agency and USAF were studied for inclusion in the USAFSS check list of pertinent portions found therein. In order to afford concise arrangement of the matter to be included in the check list, and at the same time provide adequate information where necessary, the check list was published in a form combining both questionnaire procedure and narrative qualifications. By comparing the provisions of the various documents, the most specific reference governing each entry on the check list was affixed opposite the appropriate entry.

The check list was completed on 25 November 1949. It was felt the completed check list reflected the best parts of the lists which were reviewed and eliminated duplication of coverage.

Educational Sub-plan

The education sub-plan was designed to indoctrinate all personnel of the Air Force of both high and low echelons who were associated with communications in the principles of communications security and the application of such principles in operations.

This sub-plan was coordinated with representatives of the Senior Communications and Electronics School, Gunter AFB, Alabama, and the Air Training Command, Lackland AFB, Texas, by visits of representatives of USAFSS to these locations. Discussions were held concerning the security material currently being presented to basic airmen, Women in the Air Force (WAF), Officer Candidate School candidates, and re-enlistees in training at schools of the Air Training Command and officers in the Senior Communications and Electronics School, the introduction of deception and cover in the curriculum of the Senior Communications and Electronics School, and the formulation of plans and policies for the inclusion of security in its various phases in the curriculum of schools of the Air Training Command. In furtherance of making the USAF security minded, a list of all schools that should teach communications security material to students was compiled and a review conducted of all Air Force Regulations and Air Force Letters dealing with training or announcement of special educational courses. This project was only about 50% complete as of the end of the period of this account.

Cryptographic Maintenance

It was not until 1 December 1949 that a cryptographic maintenance function was established in Headquarters, USAFSS. The mission of this section included the following:

- a. Provision of the echelon maintenance on all crypto-mechanisms issued by USAFSS in the Zone of Interior.
- b. Review of all maintenance practices, doctrines, techniques, instruction, and indoctrinational material for all crypto-mechanisms issued within the Department of the Air Force.
- c. Establishment of stock levels of replacement parts for all echelons of maintenance for all cryptographic equipment utilized by the Department of the AF and responsibility for depot stock of all replacement parts for cryptographic equipment controlled by the AF

First efforts of the maintenance section were devoted to formulation of plans for establishment of a maintenance shop and a replacement parts depot. All tools, test equipment, and shop supplies, such as work benches, chairs, lights, et cetera, were requisitioned for the section. Temporary storage facilities and partitioning for security purposes were constructed by the maintenance section and an indoctrination course on major types of cryptographic devices conducted for purposes of familiarization. A special training course in basic principles of maintenance on certain special equipment was conducted also. Finally, a complete parts list for certain cryptographic equipment was compiled to facilitate requisitioning of parts.

Traffic Analysis

In October 1949, the Directorate of Security received an operational assignment for the study of certain Strategic Air Command, Eighth Air Force, and Fifteenth Air Force air/ground and point-to-point manual radio circuits to determine the security of these circuits in normal operation.

A preliminary report was compiled on information obtained in the first 15 days of surveillance of the circuits in questions. This report was for the purpose of justifying continuance of the project. It was very favorably received. Subsequently, it was planned to compile every 30 days, a general intelligence summary of the circuits of these commands, based on information obtained from the monitor logs

furnished the Directorate of Security by the Command's security detachments. In furtherance of these plans, monitoring missions were assigned to the security detachments. The purpose of this intelligence summary was intended as a means of acquainting higher headquarters with the type and amount of information being made available to unauthorized agencies through the medium of clear text transmissions on these circuits. It was further planned that a program of recommendations aimed at minimizing such insecure practices would be offered.

Cryptographic Career Program

A study of the Airman Career Program as established by the Air Force revealed there was no appropriate provision for personnel possessing the military occupational specialties utilized in communications security and communications intelligence operations, i.e., cryptographic operators and maintenance personnel. In October 1949, a project was initiated by the Directorate of Security to determine what this career field should comprise, what would be the applicable job descriptions, what schools and training should be provided for, and what action would be required to establish such a field within the Airman Career Program.

It was learned that, throughout the entire Air Force, there were 109 crypto-repairmen authorized, of which only 20 were currently assigned. All Air Force commands were contacted and requested to furnish information concerning number of crypto-repairmen (MOS 801) authorized each command, the number assigned, number of teletypewriter repairmen assigned who were currently holding a secondary MOS as crypto-repairmen and performing the latter duty, the availability of these personnel for training as crypto-repairmen, and the effect of shortage of crypto-repairmen on the command missions.

Headquarters, USAF, furnished information which indicated that authorized strength of commands for the MOS 801 was 18% filled. This was generally attributed to the method and procedures used in the selection and follow-up of students for MOS 801 schools, as practiced by the Army and Navy. The method of initiating clearances, required prior to attendance at these schools, was a great drawback. It appeared feasible to select students during basic training and initiate clearance at the time of selection. A conference was held between representatives of USAFSS and the Assignment and Classification and Human Resources Branches of the Indoctrination Division, Air Training Command, in October 1949 to consider this matter. A system was proposed at this conference whereby basic airmen would be selected very soon after arrival at the basic training center for training in specialties utilized by USAFSS and action initiated at that time to obtain required clearance on the individuals selected. In this way, it was believed the airmen concerned would be cleared by the time they had completed their basic training and could be assigned to one of the training schools for training in one of the specialties in which there existed a shortage of qualified personnel.

PLANNING

The Transmission Security Section and Technical Staff of the Directorate of Security and the Operations Section of the 136th Radio Security Squadron conferred on 15 September 1949 relative to working out recommendations and priorities for the following:

- a. Activation and location of Radio Security Detachments world-wide.
- b. Establishment of minimum standards for operative monitoring positions for each detachment.
- c. Order of precedence for distribution of specialized equipment to all detachments.
- d. Establishment of standards for number of technical operations personnel for all detachments and a minimum standard for Advance Party complement on projected moves or activations of detachments.

Study was continued to determine the most efficient utilization of Detachment "B", 136th Radio Security Squadron. This detachment was delegated a dual mission in that it had to train field personnel and provide acceptable traffic logs for analysis. Fluctuating status of personnel and the burden imposed by the aforesaid dual mission resulted in production of logs which were below the standard desired. This rendered analysis difficult. Recommendations were made that Detachment "B" should be relieved of all responsibilities of training in the field so that it might fulfill its operational mission adequately. For fulfillment of the training mission in the field, it was recommended another Detachment be activated and delegated this responsibility as a primary mission.

STAFF BIOGRAPHIES



**Col Travis M. Hetherington
Commander, USAFSS**

Colonel Travis M. Hetherington was born in Reagan, Texas, on 20 February 1908. In 1929, Col Hetherington received an appointment to the United States Military Academy and graduated as a 2d Lieutenant in 1933. Upon graduation, Colonel Hetherington attended Army Air Corps Flying School where he received a pilot rating on 13 October 1954. Since that time, Colonel Hetherington has served continuously in the Air Corps, Army Air Force and United States Air Force.

Colonel Hetherington was promoted to 1st Lieutenant on 16 February 1946; to Captain on 10 October 1940; Major on 22 July 1941; Lieutenant Colonel on 23 January 1942; and to the rank of Colonel 5 August 1943.

During the early part of World War II, Colonel Hetherington served in Flying Training Command at various bases throughout the United States. From 21 May 1942 to 6 April 1948, he was the Director of Pilot Training at Sioux Falls, South Dakota. He was Assistant to the Assistant Chief of Staff, A-3, at Army Air Force Training Command, Fort Worth, Texas from 31 July 1945 to 13 May 1944. Colonel Hetherington served in the European Theater of Operations on temporary duty from 20 February 1944 to 30 April 1944, during which time he participated in two combat missions. He returned to the United States and held important staff assignments at Boca Raton, Florida, until departure for the Pacific on 29 August 1945, where he served at Headquarters, 5th Air Force as Assistant Chief of Staff, A-3, and as Wing Commander of 315th Composite Wing until return to the United States 9 August 1948.

On 16 July 1949, Colonel Hetherington was assigned as the Commanding Officer, United States Air Force Security Service (USAFSS).

Colonel Dabney H. Maury served with distinction in both World War I and World War II. After a year of enlisted combat duty in France, he was commissioned 2d Lieutenant, Field Artillery October 1918. Between wars, Colonel Maury graduated from Massachusetts Institute of Technology and then pursued a successful career in engineering. In October of 1940, Colonel Maury enlisted as a private in the New York National Guard. He was commissioned Captain in May 1942. He rose to Colonel by June of 1945 and in 1946 was integrated a permanent officer, Regular Air Force.



**Col Dabney H. Maury
Chief of Staff, USAFSS**

During World War II, Colonel Maury served overseas as Deputy A-5 with the Eighth Air Force; Commanding Officer of a service group with the Ninth Air Force; returning in 1945 to general staff duty in the Pentagon. Subsequently, he was a member of the original faculty of the Armed Forces Staff College, serving with the Intelligence Division there.

Colonel Maury was assigned as the Director of Personnel and Administration, USAFSS, on 3 February 1949 and served in this capacity until 16 November 1949. On 17 November 1949, he assumed duties as Chief of Staff, USAFSS.



Col Culpepper Exum Jr.
Director of Materiel, USAFSS

Colonel Culpepper Exum Jr. Graduated Staunton Military Academy, 1925, attended Alabama Polytechnic Institute, Auburn, Alabama, and Washington & Lee University, Lexington, Virginia 1926-27 and 1928-29 respectively.

Commissioned Second Lieutenant in Field Artillery Reserve in 1932 and promoted successively to grade of Captain in 1939. Ordered to extended duty with the Air Corps (non-flying) at McDill Field, Florida in 1940.

Service overseas as assistant A-4, 12th Air Force and, later, as Chief of Staff, 12th Air Force in the Mediterranean Theater.

Separated from service 16 May 1946 and returned to active duty in November 1948 to receive subsequent assignment to USAFSS where he assumed duties as Director of Materiel.

Lieutenant Colonel Willis B. Sawyer. Graduate United States Military Academy, West Point, New York 1941 and commissioned Second Lieutenant Coast Guard Artillery Corps. Graduated Air Force Flying School and rated pilot 16 March 1942. Graduate Bombardment Tactical School, Orlando, Florida 1945. Commanded 343rd Bombardment Squadron, Heavy, 98th Bomb Group, 15th Air Force in Italy from February to November 1944. Promoted to Lieutenant Colonel 14 July 1944.

Chief of Staff, 60th Troop Carrier Group, Pope Field, January to November 1945. Graduate Command and General Staff School August 1945. Special Staff Civil Affairs Officer, Japan and Korea, December to April 1945-46. Chinese Language and Area student, Peiping, China, January 1947 to November 1949. Assigned USAFSS December 1949.



Lt Col Willis B. Sawyer
Plans & Projects Officer, USAFSS

Colonel Sawyer possesses the Silver Star, D. F. C., Air Medal, with four oak leaf clusters, Purple Heart, the French Croix de Guerre with Palm, and wears nine battle stars as evidence of his achievements in



Lt Col Charles K. Milroy
Comptroller, USAFSS

Lieutenant Colonel Charles K. Milroy. Graduate of Oklahoma A&M College 1934, with B.S. Degree in Banking and Finance. Attended Columbus and American Universities, Washington, D.C. for special advanced financial studies.

Commissioned Second Lieutenant in Organized Reserves in September 1939. Called to active duty with OQMQ, Washington, D.C. on 6 December 1940. Assigned to Chief of Engineers July 1941 to May 1943 and then transferred to Headquarters, USAF, where he remained from May 1943 to February 1949 when assignment was received to United States Air Force Security Service where he assumed duties as Comptroller.

Major John B. McClellan. Graduate of University of Florida 1941, with B.S. Degree in Mathematics. Graduate of Air Force Statistical Control School, Harvard University, 1945.

Commissioned Second Lieutenant, Infantry Reserve, 1941, as a result of participation in ROTC program. Called to active duty with 758 Tank Battalion (L) (GHQ) 20 August 1941. Appointed Aviation Student December 1941 and graduated Kelly Field 1942. Assigned USAFSS November 1949.

Major McClellan completed 59 missions as a B-25 pilot in the Mediterranean Theater of Operations, serving in the Naples-Foggia and Rome-Arno campaigns. He received the Distinguished Flying Cross, the Air Medal, and several battle stars for his achievements in these campaigns.



Major John B. McClellan
Statistical Control Officer, USAFSS



Captain Arthur J. Guertin
Budget Officer, USAFSS

Captain Arthur J. Guertin. Enlisted in Army Air Force August 1940. Appointed Officer Candidate School, Miami Beach, Florida where he graduated 19 January 1943 and was commissioned Second Lieutenant AUS.

Assigned to duty with USAFSS June 1948 to assume duties as Budget Officer.

Captain Guertin was on detached service with the Army Security Agency at the time of activation of USAFSS and was one of the small group of officers initially transferred under the provisions of Joint Army and Air Force Adjustment Regulation 1-11-54, dated 31 December 1948. He was a key figure in the establishment of funding and budgeting channels and procedures for USAFSS and his intimate knowledge of the working processes and relationships of the Army Security Agency constituted an asset which proved valuable to USAFSS during the period of establishment

Captain Walter L. McCreary. Graduate of Tuskegee Institute, Alabama, 1940 with a major in Business Administration. Graduate Army Finance School 1945.

Appointed Aviation Cadet 12 August 1942 and graduate Tuskegee Army Air Field 25 March 1943 when commission as Second Lieutenant Air Corps Reserve was received.

Received overseas training at Selfridge Field and departed for overseas 3 January 1944 with 332 Fighter Group. Completed 35 missions with 12th Air Force, performing coastal patrol. Then transferred to 15th Air Force before being shot down over Kaspovar, Hungary. Captured by Germans and held as prisoner of war for six months. Returned to Tuskegee AFB at end of war as assistant Budget & Fiscal Officer for the base. Assigned USAFSS November 1949.



Captain Walter L. McCreary
Program Analysis Officer, USAFSS

Captain McCreary holds the Air Medal with two clusters and is entitled to wear three battle stars on his MTO ribbon.



Lieutenant Colonel Barton S. Pulling
Director of Operations, USAFSS

No biographical information provided.



Captain John P. Shean
Directorate of Operations,
USAFSS

Captain John P. Shean. Enlisted in Regular Army in 1938. Attended Signal Corps officer candidate school, graduated and was commissioned Second Lieutenant in 1942.

Captain Shean's experience in the communications field is considerable and varied, dating from the time he was 15 years of age when he obtained his first license as an amateur radio and station operator. He has operated fixed plant radio receiving stations, worked as a traffic analysis officer, been chief of intercept units, and Commanding Officer in several communications units.

In December 1947, Captain Shean was assigned to the Army Security Agency. Then, upon establishment of USAFSS, he was transferred to the Air Force and represented Air Force interested in negotiations between the Department of Defense which resulted in the agreements set forth in JAAFAR 1-11-65, relative to transfer of equipment and personnel from the Army to the Air Force. His judgment and experience served USAFSS

Captain Wharton L. McGreer attended Angola, Indiana, Tri-State College in pursuit of a B.S. Degree in radio engineering but was forced to withdraw before completion due to illness. However, he secured an excellent background in electrical and radio engineering principles and practice. This training, combined with his training as a radio mechanic and Signal Corps officer candidate in 1942 equipped him with an excellent background for the type of work he entered after being commissioned in 1942. He subsequently accumulated experience in direction finding, operations control and technical inspection techniques of the communications field.



Captain Wharton L. McGreer
Chief, Collection Division,
Directorate of Operations,
USAFSS

Captain McGreer was one of the small group of officers initially assigned to USAFSS under the provisions of JAAFAR 1-11-54, dated 31 December 1948. He was a key figure in the work of establishing engineering and operating principles and practices for the units assigned to USAFSS upon establishment. And he presently holds a key position within the Command as Chief of the Collection Division, Directorate of Operations.

USAFSS Organizational Chart 1948-49



1st Radio Squadron, Mobile

- Transferred from the Department of the Army to the Department of the Department of the Air Force on 1 Feb 1949;
- Located at Irumagawa, Japan (later known as Johnson Army Air Base)

2nd Radio Squadron, Mobile

- Transferred from the Department of the Army to the Department of the Department of the Air Force on 1 Feb 1949;
- Located at Herzo Base, Herzogenaurach, Germany
- Relocated to Darmstadt Military Post, Darmstadt, Germany on 26 Feb 1949

8th Radio Squadron, Mobile

- Transferred from the Department of the Army to the Department of the Department of the Air Force on 1 Feb 1949;
- Located at Vint Hill Farms Station in Warrenton, Virginia
- Relocated to Brooks AFB, Texas on 23 Feb 1949

1 RSM remains active as the 301st Intelligence Squadron at Misawa AB in Misawa, Japan

2 RSM remains active as the 402nd Intelligence Squadron at Bad Aibling, Germany

8 RSM remains active as the 68 Network Warfare Squadron (24th AF) at Lackland AFB, Texas

☐ **Headquarters Squadron**
Arlington Hall Station, Virginia

☐ **Detachment "A"**
Established on 15 Apr 1949 at
Arlington Hall Station, Virginia

Designated as liaison Detachment
in the Washington, D.C., area during
HQs USAFSS' move to Brooks AFB

136th Radio Security Detachment

- Transferred from the Department of the Army to the Department of the Department of the Air Force on 1 Feb 1949;
- Located at Fort Slocum on Davids' Island, near New Rochelle, New York
- Redesignated 136th Radio Security Squadron on 15 Mar 1949
- Relocated to Brooks AFB, Texas on 3 Apr 1949

3rd Radio Squadron, Mobile

- Constituted on 2 Nov 1949
- Activated on 23 Nov 1949
- Located at Brooks AFB, Texas

10th Radio Squadron, Mobile

- Constituted on 9 Nov 1949
- Activated on 23 Nov 1949
- Located at Brooks AFB, Texas

136 RSD remains active as the
39 Information Operations Squadron
(24th AF), at Hurlburt Field, Florida

3 RSM remains active
as the **381st Intelligence Squadron**
at Joint Base Elmendorf-Richardson
(formerly Elmendorf AFB)
near Anchorage, Alaska

10 RSM remains active
as the **451st Intelligence Squadron**
at RAF Menwith Hill,
United Kingdom

AF ISR Agency History Office
Tel: 210-977-2303; DSN: 969-2303

afisraho.wf@us.af.mil