12 Dec 41 - Sep 43

INFORMATION CENTER DEPARTMENT
588th Signal AW Battalion
Drew Field, Tampa, Florida

1 November, 1943

The information contained in the attached history of the Information Center Department was compiled, and written by member of the instructional staff.

The following named enlisted men wrote this narrative from their personal observations while members of the department's staff.

1st Sgt.	John A. [illegible]	32136069
M/Sgt.	Robert O. Leese	39167737
T/Sgt.	William [illegible]	32172611
S/Sgt.	Henry V. Brunelle	31090280
S/Sgt.	Charles H. Darby	32031515
S/Sgt.	Roy L. Prager	33103058
S/Sgt.	Orville W. Yingling	16180244
Sgt.	Edward L. [illegible]	39270188
T/4.	William S. [illegible]	36022569
T/4.	Francis P. [illegible]	31140814
T/4.	George C. [illegible]	35039914
Cpl.	Julius H. [illegible]	31096694
Cpl.	Earl H. [illegible]	36823341
Cpl.	Leo J. Plante	31038744

ROBERT O. LEESE
M/Sgt., 39167737
Chief Instructor

5-2576-6

INFORMATION CENTER DEPARTMENT, PRELIMINARY OPERATIONS TRAINING

HISTORICAL DATA

12 December 1941 — 30 September 1943

SECTION I

(Personnel and Administrative)

1. Original Unit.

a. Designation

Information Center Department

b. Date of organization.

January 9, 1943

c. Place of organization

Drew Field, Tampa, Florida

d. Authority for organization

Army Air Forces, Washington, D. C.

T/D 11-163-2 January 9, 1943. Two officers, thirty enlisted men. T/D placed in operation May 1943.

e. Sources of personnel.

Signal AW units assigned to Drew Field. Students who demonstrated potentialities as future instructors were requested for special duty with the department and later assigned.

2. Changes in organization.

The department had operated as a garrison school for more than a year before it was authorized a T/D from Washington, D. C. As Headquarters, Aircraft Warning

Service Training Center, Third Interceptor Command evolved into Headquarters, Aircraft Warning Unit Training Center, Drew Field, Florida, so the Aircraft Warning Service Department evolved into Information Center Department.

3. Strength, commissioned and enlisted.

Quarterly		Ass'd Atch'd	Ass'd Atch'd
December	1941	0 Officers	7 enlisted men
March	1942	1 Officers	10 enlisted men
June	1942	1 0 fficers	16 enlisted men
September	1942	2 Officers	25 enlisted men
December	1942	6 Officers	40 enlisted men
March	1943	13 Officers	64 enlisted men
June	1943	2 - 11 Officers	30 - 50 enlisted men
September	1943	2 - 9 Officers	30 - 61 enlisted men

4. Stations (permanent or temporary) of unit or parts thereof.

The Information Center Department has always been stationed at Drew Field, Tampa, Florida.

5. Missions.

Originally the department was organized as a troop school to train the personnel of the Signal AW Battalions and Regiments which pooled their equipment for such training.

Soon after the school was set up, however, plans called for the training of Signal Plotting Companies, AW Frontier, to man fixed information centers along the coastline of the United States aided by Civilian Volunteers.

As home defense became a secondary factor and with the offensive phase of military operations taking first place,

plans called for a mobile type of Signal AW Unit, thus with T/O 11-400 more flexible types of units were organized to meet the ever changing tactical situation. The department likewise had to modify its training to meet these new demand.

6. Campaigns.

None.

7. Battles.

None.

8. Commanding Officers.

Capt.	Swann	Lt. Bull	January	1942
Lt.	Milton Gould		February	1942
Lt.	Earl Morley		March	1942
Lt.	Blackstock	Lt. Rollins	April	1942
Lt.	Frank E. Horrelko		May	1942
Capt.	J. W. (I,O.) Godfrey		August	1942
Lt.	Henry C. Rechtein		December	1942
Lt.	Paul MMI Smitkowski		June	1943
Capt.	Frank B. Morgan		June	1943

9. Former and present members who have distinguished themselves in action.

None.

10. Photographs of personnel, important scenes, or events.

Attached herewith

11. List of records or files regularly maintained within the reporting organization as immediately pertinent to itself.

Mimeographed Instructional Material
Student Weekly Grades
Student Final Grades
Active and Inactive Tests
List of Training Files
Incoming and Outgoing Correspondence
Memorandums—Hq., 588th Signal AW Battalion
Memorandums—Hq., AWUTC
Memorandums—Hq., Drew Field Air Base

Memorandums—Hq., 3rd AF
Daily Enrollment
Weekly Enrollment
Dept. Personnel Status Report
Dept. Journal
Record of Classified literature I. C. Dept. Library
Record of all charts in I. C. Library
Record of all Classified letters from Hq. and Higher Hq's.
Filter Course Schedule, Subject Matter Outlines
I.C. Operators Course Schedule, Subject Matter Outlines
Military G.O. Course Schedule, Subject Matter Outlines
Draftsman (AW) Course Schedule, Subject Matter Outlines
Catalogue of literature on hand in I.C. Department Library
Company Property Book
Supply Memo Receipt Debit
Supply Memo Receipt Credit
Supply Requisition
Supply Property Loaned Out
Supply Certificates of Fair Wear and Tear
Supply Tally In
Supply Tally Out
Supply Film Debits
Supply Film Credits
Information on I.C. Equipment (Shipping Tickets)
File on new Plotting Equipment
File one all Plotting Equipment
Supply A.R.
Status Reports

SECTION II
(Intelligence)

Today secure within the safe of the Information Center Department placed within its library, are manuals, notebooks, films, letter and a multitude of informative articles, which bear the classification of secret, confidential and restricted.

The cryptographic security of these sources of information within their proper class is entrusted to an officer of the Information Center Department.

Important changes in the classification of military information and the subsequent handling of this material, have as a necessity, changed our library system.

Prior to April 1943, student plotter notebooks were regarded as confidential books, however by the removal of certain lectures, and the removal of notebooks from classrooms during lectures on radar, these notebooks acquired a restricted classification.

Standing Orders for the Wing and Fighter Control Area Operation Room for many months was treated as restricted information. The newest edition of these orders is classified as confidential.

Ground Observer reporting procedures at the time of organization were placed in a restricted class. In March 1943 a new reporting code edited and approved by Washington came into being and for a short time carried a SECRET classification. Subsequent changes in this code carried the respective titles of confidential and restricted.

Many of the manuals, notebooks, letters and other articles have maintained the same classification throughout the course. Among these are the confidential Filterer's outline, school manuals, instructors note-

books, weather codes and SOI's, letters from higher headquarters, alert plans and films.

To aid the security officer in his task, every course outline contains some type of lecture or film on the safeguarding of military information. In addition to this, bulletins reminding both the instructor and student personnel of their duty concerning the security of classified materials, are issued both by Headquarters and the Information Center Department.

Proper maintenance of notebooks in their respective groups is materially aided by the removal of the notebooks from lectures during which notes are not be taken.

In short the Information Center by employment of caution, and strict security discipline, have solved a problem in which all types of classified materials are handled.

SECTION III
(Operations and Training)

A. Routine Operations

Period: December 1941 - April 1942 Inclusive

During the third week of December 1941, four or five of the newly arrived Infantry men from Camp Wheeler, Georgia, who had been teachers in civilian life, were ordered to report to the S-3 section at the Headquarters which was located at an old road house at the corner of Tampa Boulevard (J Street) and tenth street. The S-3 officer explained to the men that garrison schools had to be organized, and training started in the Aircraft Warning Service, about which the men knew nothing. One of the men was selected to act temporarily as department head.

School was scheduled to start just before Christmas, 1941. On the companies' bulletin boards appeared a list of specialist classifications and who was to be trained in each. In the list for the AW Department appeared such specialist classifications as: Maid Clerks, Status Clerks, Chief Plotter-Tellers, and Civilian Instructors. This last item caught all eyes.

The first day of school, about 280 men arrived in the first group to start school. Before the morning was over, some 400 men had arrived all wanting to go to the AWS school to be instructors of civilian defense volunteers. The other schools that first day had allowed men to enroll in the AWS Department if they showed a preference. Headquarters was compelled to delay the opening of school until the enrollment snag was untangled. School opening was set for December 29, 1941. The school was located, at that time, west of what is now Tenth Street and south "F" Avenue.

On the first official school day the students were divided into groups of 40 men each and marched to some dry spot for instruction. With the ever

present sound of Diesels plowing up the mud, groups of sea-gulls overhead, students seated on a pile of tent sidings, the instructors started to impart what they had learned about the AWS. A section of the old runway proved to be a dry place for holding class. There, with groups seated about them the instructors taught their first classes in the open air. Even the first Otis tests to be given to the students, were administered outside on some mess tables. Crude as the facilities were the men acquired considerable information and skill. The first cycle lasted eight weeks.

The number of students in school continued to increase as each week went by, but the number of instructors decreased. No sooner had the original men gained sufficient knowledge to be useful, when orders came assiging six of them to study AWS in England. Also some of the others were chosen to fill cadre positions in other Interceptor Commands.

Thus in the last week in February it became necessary to organize a new staff. Luckily, some men from the 504th Signal AW Regiment, Camp Haan, California, who had had work in AW were shipped in February to Drew Field, and were enrolled in school. Also, the 5?1st. Signal AW Regiment, Fort Dix, New Jersey, later arrived at Drew Field. Both Haan and Dix AW schools had started so from these men who were enrolled in school, a new staff was formed. With the inclusion of instructors from Camp Haan, and Fort Dix, and later from McChord Field, (4th, 1st, and 2nd Interceptor Commands respectively) to the department's staff, each representing their former command's viewpoint, operational training evolved into senatorial debates.

More ideas the better, for out of it came a system satisfactory to all concerned. This voluntary standardization was greatly appreciated by the

students. Official standard operating procedures from Washington did not materialize for several months.

Period: May 1942 - Septeaber 1942 Inclusive

In May 1942 the A.A.S. Department was moved to its new location at Fifth and H Avenue. Building 11-C-10 was immediately used for training Operation in the then called American System of Air Defense. The Signal Corps SCS-5 a portable information set, was set up, for which the tables were painted by the Drafting Section of the school.

Operation, and instruction with the SCS-5 began in this area. For basic plotting building 11-C-26 was used, here overlay celluloid sheets were devised for plotting practice with grease pencil. The systems of plotting; the "System for the A.A.S." on the master grid, an the "New British System" using basic grid squares were taught.

In practice operation with the SCS-5 the "American System" was used exclusively. It would be well here to discuss briefly the system of Air Defense taught at that time. Reports of aircraft were relayed by observation posts distributed throughout a region. These reports were sent to a filter center assigned to that area, where the information relative to approaching aircraft by plotted, evaluated, and in turn transmitted to what was known as an Information Center. At this center was a group of men representing the different interests concerned with the approcah of hostile aircraft.

Enlisted students were taught the duties, and practiced operations of the specialists in that system of Air Defense. Such specialists in that system of air defense included the Plotter-Teller, the Intercept Teller, Overlap Teller, Filterer, and Interocpt Plotters Raid Clerk,

and Assistant Raid Clerk. To simulate as nearly as possible operation in the fild, the Intercept Tellers chairs, and communication equipment of the SCS-5 were used to take the place of ground observer posts. Intercept tables of the SCS-5 were used to display "flights", information regarding these "flights" was also told to the plotters in the Filter Center. Indentification of flights took place at the operations room, of the Information Center, and were then relayed to the Filter Center.

Period: October 1942 - November 1942 Inclusive

The Old American System was in effect until approximately October (7) seventh. The plotting course still consisted of three weeks of the Old American System plus a week of the English system.

The United Nations System was adopted and taught exclusively in the Information Center Department. The plotting course was of a 4 weeks duration, and a Filtering course was being introduced. The cannery still was in effect and was proving to be satisfactory; however, plans were made to improve it, to make the calls to the plotters more realistic, and further duplicate actual calls from radars. Lectures were given entirely by enlisted personnel up to this time, and every instructor had to be a thoroughly trained filterer. At this time, the school began to receive officers, who had attended the Fighter Command School, and were assigned on special duty to this department.

Period: December 1942

At this time, enrollment was increased considerably due to a greater demand for trained plotters and filterers. The old American System was now eliminated, and men going out in AW work had to be trained in as short

a time as possible. A normal class consisted of from sixty to seventy men. It was in this month that the military Ground Observer section was organized in the I. C. Department under direct order of "B" Stage.

Following the aim, and scope of the Ground Observers system a lesson outline was drawn up for approval of "B" Stage. This program was immediately put into effect, and applied to the training of the first G.O. class which entered this department.

The training of this first class proved very successful, and the entire program was accepted as the lesson outlines for instruction of all Military Ground Observers.

In this first outline were included the following subjects:
Aircraft Recognition - The method of instruction followed the pattern of recognition known as the Weft System. In this system "Flash Card" were presented all students, and with the aid of a Bell Optican Projector all of the classes received additional view sand shots of the aircraft. The fundamentals of aircraft recognition were presented the students with the use of nomenclature charts and diagrams.
Theory - Thil outline followed a course which included the following subjects: Army and Ground Observers Organization, Phonetic Alphabet, Reporting Procedures, Map Reading and Orientation, Aerial Photo, G.O. Plotting Pip Method, Basic Camouflage and Observation Post Organization.
Radio Operation and Procedure - The radio department, "B" stage, conducted all classes in radio operation, and correct radio procedure. These classes were for the greater part, out-door lectures in setting up the SCR 178, and in tuning each individual set. Correct radio discipline, and the use of

correct radio procedure (the then accepted American procedure) followed a classroom lecture pattern. All field activities were coordinated in a field trip conducted by the radio department.

Field Problems and Practices - Class in Map Sketching and Orientation was carried out in a field problem arranged by the instructors. This problem proved satisfactory, and was written in the course as permanent, synthetic training.

Third Air Force proveded I. C. with a controlled flight of a B-26 to familiarize Ground Observers with a means of determining altitude, and the range at which the aircraft was flying.

Period: January 1943

Plotting, Filtering, Drafting and Military Ground Observers were being taught. Plotting groups were run day and night; days from 0730 until 1630, and nights from 1800 to 0130. The classes were large, and a crowded condition in the rooms existed. The average class had about 50 men. Filtering was still a secondary course, and they consisted of about 15 men. A portion of the instructor's room was donated to take care of both the classroom, and practical work on one small table. Equipment for the course was made by the Drafting Department out of cardboard. Filterers were chosen carefully from top members of the plotting groups.

Drafting had just moved to its new building where it could accomodate twenty students, and then started to teach a four-week course.

Flights were called in to the plotters by cannery men who were defiltering the flights on individual overlays. At the same time flights were being made up so all the canner had to do was read the plots off a

sheet of paper. New buildings were being built to take care of our increase in enrollment.

The indecision of organization, and the subsequent changes which were due to follow decided the program, which the Ground Observers course followed in the first few weeks of 1943. The course outline followed the setup used at the beginning of the course.

The radio department conducted the classes in radio procedure, and operation. There was no material changes in the course on Aircraft Recognition.

Period: February 1943

We had a slight let-down in the enrollment of students giving the instructors a chance to go to Radar School, T & T School and to an instructors school that had just been started on the field. Until this time Sgt. Hammel, our chief instructor, had been giving all new instructors a week's course in the proper methods of teaching.

One of the smallest groups in the history of the school, six enlisted men made up the filterer's class this month. In spite of the fewness of members, the class was taught the regular subject matter in the usual manner.

The Drafting Department was being rushed to complete new filter tables, all of which were alike. Two filter rooms which represented the completion of our first effort to get a practice room set up so we could train new men more efficiently.

Radio Operation followed an ever increasingly interesting, and educational program with the addition of four SCR 178's to our supply. A basis for instruction on the tuning, "Zero beating", and interpolation

was provided by construction of charts, and diagrams.

The value of weather reports in Aircraft Warning was proven and the Ground Observer students were given the basis of weather observation and reporting. Ground Observer students were also given charts in which to make up their weather codes.

Period: March 1943

Our plotting schedule continued on with an increased enrollment, and we for the first time, had two filtering groups in operations.

The Instructor's Handbook was first tried by the men, and all agreed it was the training aid they all needed.

There was a three day orientation course started for the Officers in AWS operation which lasted for about one month. Also a six-week filterer's course for officers was started.

The newest method of training aircraft recognition known as the Ranshaw system was adopted. This system received a warm reception.

A new Ground Observer Reporting Procedure was added, dropping the Army Flash, and special flash. These two codes were replaced by a numbered code approved by Headquarters AAF. Ground Observer instructors preparing new lesson outlines submitted a program for approval with new items added to the course.

To supplement the instruction in compass work, a field problem on field operation and use of compass was added to the program. The field trip brought out many rough spots on the course.

Synthetic training in reporting procedure was aided by addition of four Sadowsky spotters.

The new improved weather course was introduced. More detailed lectures

were given on the types, heights and the characteristics of the various clouds. Time was allotted to have classes outside immediately after a lecture. This was done to enable the student to become familiar with the subject by actual experience. Balloon tests were made by the instructor for the students to observe. A very simple, but effective system was introduced for the reporting of winds, and wind strength by using natural vegetation as wind indicators. Rain, and snow was determined heavy or light by the number of miles of visibility.

Period: April 1943

Classes were still large in both plotting and filtering, and school was still being run days and nights to take care of all the classes. Camp Crowder's school closed, and we got quite a number of their staff here as students with the thought that after they were trained in accordance with our methods they would become members of the staff. With them came a large supply of equipment to be used here at the school The V.H.F. School here at the field also closed down and because the work was inter-locking we added some of their enlisted instructors to the I.C. Staff.

Two more filter rooms were completed bringing the total number of filter rooms to four. Another group of four filter rooms were being prepared for future use.

A new calibre of men more suited to Ground Observer duties were classified as potential G.O's.

Aircraft Recognition added a field trip to McDill Field, This trip gave a wider scope to the instructions on the different classes of aircraft in use by the army.

Lesson outline in G.O. Theory included several problems in Map Reading. A problem in locating of G.O. posts on a terrain map using prepared bearing and azimuth readings combined with given distance was drawn up.

An officers class was organised to acquaint them with their duties as officers for G.O. Companies.

A special Ground Observers group entered school for a consolidated course. A special lesson outline was prepared for this class, the group remaining in school for eight days.

To familiarize all students with the complete operation of a filter center a trip through the Information Center was drawn up, and proved very educational.

An improved radio, and telephone net has added fine synthetic training in the use of radio procedure and G.O. reporting procedure.

Period: May 1943

We were still very crowded, and realized that we were short of instructors so we started to recommend students that headed their group to be kept on the staff. They were taken from the plotters course, and were not used as lecture instructors; but rather to check the plotting of students. Classes were still being held at night as well as during the day.

For one week, no students were rated as raid orderlies. This was later changed, and students who were slow, were given this rating.

Experiments on a new map problem for Ground Observers were conducted. Each officer was provided with four large maps on which he was required to

establish an Aircraft Warning System using G.O.'s only. The problem proved interesting and educational.

The type of students now being sent to G.O. classes have made it necessary to broaden the scope of theory classes. Therefore all plans have been written and the G.O. course now contained the following topics: Organization of Army, Breakdown of Defense Command, Phonetic Alphabet, A.B. Grid System, Establishment of G.O. System, Establishment of Individual OP, Map Reading, Camouflage, Aerial Photography, Demolition, G.O. Reporting Procedure, Weather, Radio Procedure, Radio Operation, Aircraft Recognition, Field Trips and Field Problems.

Period: June 1943

Up to this a student's final grade as it was submitted to his Commanding Officer, was the over-all grade in performance, and theory Since the practical work is more important than the theory, it became apparent that both grades should be placed on the final report. The plotting performance test was standardized so all instructors would be giving the same test, and the student's grade on his practical work, and on his theory work both appear on his final report. This new form was to help the Commanding Officer decide just what the man could do in the field.

The school felt a need for close liason with Operational Training Stage in their teaching of Ground Observers, and mobile A.W.S. with the SCR 602. Instructors were sent to Operational Training Stage to bring back the desired information. Their system of Ground Observation was soon put into schedule, but their system of Mobile A.W.S. was never taught here as it was better adapted to team training. We also sent two

instructors over to Radar as they had the SCR 602 and SCR 527 in operation and as we had very little information on these Radars. The information brought back was very useful, and was putinto our lesson plans.

The G.O. course for June followed the pattern as set forth in the previous month. During this month the experiments of the previous month were proven very successful by the manner in which the men conducted themselves in their field problems.

In the radio procedure class a reference manual on the SCR 178 was prepared. This manual was a great help to the course. It was used in lectures and demonstrations, and proved to be very good. A consolidated lesson plan on radio operation, and procedure was drawn up, and proved very successful.

The G.O. students for this month were few, consequently the instructors were assigned to attend special classes, such as rifle, and carbine lectures plotting classes, and other special lectures given by officers. These were of vital importance to the instructor personnel. Also during the month several instructors went on detached service to Third Air Force Camouflage School, Walterboro, S. C.

Period: July 1943 - September 1943 Inclusive

During these months more emphasis throughout the various courses has been placed on mobile, and highly mobile Aircraft Warning Systems. Various types of new filtering problems have been made, more attention was given to single station filtering. The filtering and plotting courses were changed to include the lastest developments in Radar Equipment, Ground Observer teams, and reporting procedure. Lectures on the characteristics, and performance of SCR 527, SCR 602, and Mark III IFF were included in the revised course to enable the students to be familiar with filtering reports from these various types of units.

Various steps were taken to standardize all courses. To accomplish this

subject matter, conferences were held, instructors received special methods courses and were required to attend lectures given by officers who recently studied at Orlando. Students written comments were taken at the end of each course, and were used as an aid to standardize the subject matter.

To acquaint the students with the actual operations of Radar, a number of visits to radar sites were arranged whereby the student received first hand information on the operations, and characteristics of the various units.

Twelve additional insturctor's were added to our staff who were formerly connected with Aircraft Warning School at Camp Crowder.

B. Experimental Devices and Practices

Period: December 1941 - April 1942, Inclusive.

The AWS during this early period of development, was still in its infancy, thus the entire department, its policies, procedures and practices were entirely experimental.

Period: May 1942 - September 1942, Inclusive.

At Orlando, Florida the Fig ter Command School Begun a six week course teaching the system of Air Defense used in England during the "Battle of Britian" and the "Blitz".

The Aircraft Warning School at Drew Field, in July 1942 offered a three week course instructing inthe system of Air Defense as used in the Continental United States; the fourth week was used in the explanation of the British System of Air Defense. Plotting as used in this type of system was also practiced during the last week of the four week course. Instructors of the Aircraft Warning School were made acquainted with the "British System" by a series of orientations presented after regular class hours, by a new instructor, that had recently returned from the Fighter Command School at Orlando, Florida.

A plan was put into effect where by students were held for extended enrollment of one week. This provided a period for completion of the students specialist trainir g. The additional week proved quite effective, as it tended to "polish off" the student in his specialty.

To further improve the quality of instruction, classes after regular school hours were held for instructors. The need for Lesson Planning was greatly emphasized during these semi-weekly night classes.

Facts concerning Radar were slowly allowed to pass among those in the Aircraft Warning Service. Ideas were focused on the best possible location of Radar units on the plotting boards of the SCS-5. This became successful, as at that time a procedure for reporting information from Radar had been received from Orlando, Florida. Range lines, colored to correspond with the radar units were their applied to the plotting boards in the Filter Center.

To bring about actual flight conditions a novel experiment was devised. Miniature aircraft were attached to a rod which was made to be lowered or raised on the card stand. Height cards in thousands of feet were attached vertically on the card stand. In this way a plain view of the Operations Board gave a good idea of the height of the Aircraft.

About July 15 a filter table displaying Basic Grids, duplicating those of the British System was set up in the supply room of the Department. Radar sites, and range lines were also included on this filter table. This provided actual operation, and established a basis to introduce the British System which was taught later in the school. The equipment used was made up by instructors; wiring by the wire department of the school. Although the equipment was of a crude nature, it served the purpose for the short time the experiment was used in the supply room.

A method of reporting was devised, celluloid sheets, showing grids, and range lines of the radar units were placed over "flights" on paper. Flights were then defiltered by enlisted personnel, referred to as Canners. In addition to overlay sheets, flights were defiltered, and the information typed on paper. This method proved more valuable than the overlay sheets, as any room for error was entirely eliminated.

An Officer's Orientation course originated in the first week of August 1942. Various teaching aids of devices to orient the Officers in the American System, and British System of Air Defense to provide a complete orientation of the two systems in a one week course-enlarged equipment such as the flash pip; card stand, and new plotting equipment were devised. A metal board, one side showing the Grid System as used in the American System, the other side showing the Grid System as used in the British System. In this way the student in this orientation course received a maximum of instruction in both systems. These experimental devices were improved, and were a great aid in instruction in the courses which came later on.

Under the capable direction of the Department Head a change from the Old American System to the new United Nations System was undertaken. Building 11-D-10 was converted from the old system to the new system, using the SCS-5 equipment as much as was possible. A typical setup was constructed in this building, by dividing it into a Filter Room, Wing Operations Room, and Fighter Control Area Operations Room. Equipment for the new system was improvised by the Drafting Section. Plotting equipment was modeled from cardboard to correspond to the equipment used by the Fighter Command School in Orlando.

Training aids, such as charts, were drawn up by the Drafting Section, from ideas and data obtained by the instructors, who had attended the Filterer's Course at the Fighter Command School in Orlando.

The new grid system was superimposed on the old SCS-5 plotting boards, and used in the Wing and F.C.A. Operations Rooms, and new tables were constructed for the Filter Room. Diligent work by all instructors of the department made it possible for a new four week course in the new system to

be taught. One of the most difficult features of the entire system was the developement of a cannery, which was used to simulate the actual calls from radar stations to the plotters at the filter tables in the Radar Filter Room.

Period: November 1942.

Upon the successful results of having converted building 11-B-10, it was decided to convert 11-C-28 to the New United Nations System, similar to the setup in building 11-B-10. Thereby, it was possible to increase our enrollment and increase our teaching efficiency, due to the addition of more buildings and instructors.

Plans were made to construct a jeep room to further simulate actual calls from radars and arouse greater interest for the students. Due to the lack of available building facilities, it was decided to alter a classroom and provide space for the jeep room. The jeep room consisted of a floor map of an actual section of one of the theaters of operations, at that time. The Drafting Section planned on painting the new grid layout on the floor, drawn to scale, and having the placement of the various radar stations, airports, and cities contained. From ideas submitted by the school staff, miniature mechanisms, known as jeeps, were being designed that would simulate aircraft. They would have speed regulators, and be mounted on wheels, so that they could be battery propelled, and substituted for actual aircraft flights. A new method of simulating radars inaccuracies, also were being developed, whereby the man in the cannery could call in the correct range, but sent forth to the plotter an azimuth error. A similar jeep floor and cannery method was used in Orlando with moderate success.

A semi-permanent schedule having been in use, it was planned to have a group of instructors compose an instructors handbook. This booklet was

to contain all subjects being taught in the school, and a brief outline of all important data to be transmitted to the student. Also, listed under each subject were to be the teaching aids to be used in giving the lesson. This booklet a purpose was to enable every instructor to thoroughly train students in the important features of each subject. Uniformity of teaching was the goal of the composition of this booklet.

After two weeks of the plotting course the ten most outstanding students in each plotting class were recommended for the filtering course. However the requirements for a student to enter the course were an Otis test mark of 40 or above. This test served the purpose of determining students capabilities of the coordination needed by a filterer. The first filtering group was comprised of 20 students and an officer was in charge. After two weeks of intensive study, arrangements were made so that students of the filtering class were able to observe the actual operation of the radar units enabling the students to study the characteristics and limitations of the various radar units.

Period: December 1942

In order to handle the increase in enrollment, night school was originated. This experiment proved quite satisfactory because with the buildings then available ample facilities were proveded for both night and day students.

A new cannery system was installed. The cannery was to be used to simulate actual calls from radars. The new system simply required the canner to read from a typewritten sheet instead of using an overlay, and grease pencil. The new system enabled the students to be given more varied, and better controlled reports. It eliminated the necessity of training students in the overlya system, thus permitting more time for plotting, filtering etc.

"Lobe Charts" which are calibrated vertical polar diagrams, were made by the Drafting Section to be used by the filtering students. These charts enabled the filterer to figure heights from 270 Radar calls.

A Public Address amplifier was connected with the monitoring system of the SCS-5. It was used to aid, and correct the students in the various operation procedures.

Period: January 1943 - March 1943 Inclusive

In January the filtering class was working in a fixed filter room which was adjacent to classroom 8. This was to be a complete set-up, with emphasis on the filter table. The filter table was split in two, one half showing the land area, and the other covering the sea area, and was quite different from the type of table being used for instructional purposes, because of its irregular shape. The fixed filter room was intended to bring the actual field operations, closer to the students. A small filtering group was started at night, as an experiment, but it proved very unsatisfactory. After a week of experimenting, the class was assigned to the regular day schedule. Plan were being made for a mechanical unit to regulate the pulse clock, because it had to be operated manually.

Plotting and filtering problems were being made and typed so that they could be used on every table in the filter room. However, they were not satisfactory because the time for the radar sweep was not considered. A plot was passed every minute on each flight regardless of its position from the Radar and consequently accurate tracking and simulated control of aircraft was impossible. Speed range cuts were not even considered.

In February the fixed filter room was completed. Arrangements were made to receive reports from Radars in the field. These reports were

to be sent by radio to the Radio School and in turn the Radio School would transmit the reports to the Fixed Filter Room. The plan proved unsatisfactory from an instructional point of view, due to the small amount of air traffic.

In March a new filter board was made by the Drafting Section on which were painted Ground Observer posts. On the reverse side of the board was painted a "condensed Grid". Problems for this new board were soon under construction. Lobe charts took on a new appearance with the tinting of the active areas of the lobe with the same color as the station. This tinting made the lobes visable for a greater distance, thus making height reading easier. Another idea to make plotting a little faster was put into play, when the drafting section painted a black spot on the basic grid square at 5050. This point determined the center of the basic grid.

During this period several innovations took place in the Ground Observers Course. A new reporting procedure using numbers was tried and approved. Compass field trips were also tried and proved satisfactory. The Sadowsky Spotter for synthetic training proved valuable. An improved weather course was introduced. This new system proved very satisfactory, and was used as the basis for all weather reporting by the Ground Observers. Radio procedure followed the old American procedure. Use of telephone net for synthetic training proved valuable.

PERIOD: April 1943 - June 1943 Inclusive

The new joint British American program of radio procedure was introduced into the Ground Observer Course at this time, and this new system proved so satisfactory that after official approval, the Ground Observer Section took over all radio operations. It was at this time also that

map problems in the use of the compass were introduced into the new consolidated training schedule of the Ground Observer Course.

The lecture on Demolition which was previously a part of the four weeks Plotting courses, was eliminated from the schedule because it was considered that this subject could be covered by the organization to which the student would be assigned.

It was thought that the colors painted on the filter boards could be improved, therefore experiments with different colors were carried on. However, it was found that the former colors; Sea Green and Blue, were ideal for all purposes. The change in classification of plotter's notebooks; from Confidential to Restricted, took place at this time. Previously notes on any Confidential subject matter could not be taken.

A means of motivation on the students part, was offered in the form of a carton of cigarettes, to the student who had shown the most improvement in the Filter Course. It was very effective for a while, and did stimulate the classes. Drafting students and Ground Observer students also were eligible to win the prize of cigarettes.

As the filtering classes were larger, and the Department was now teaching Filter Officers, the need was felt for more and better filter problems. Since there were a group of instructors trained in Very High Frequency (VHF) who knew air navigation, they were put to work on these new problems. These problems were made in the quarter of a minute which would more simulate the actual reports from Radar, as it would show the sweep of the Radar, and make possible speed range cuts.

Problems were also made for the Information Center Block as there

were not enough "Jeeps" to keep all the personnel busy. Also problems were made for the status clerks in the Wing Operations Room and the Fighter Control Area Operations Rooms.

PERIOD: July 1943 - September 1943 Inclusive

The Ground Observer section continued to experiment with a telephone net in connection with giving the students actual operation in Radio-Telephone and reporting procedure. New lesson plans were written, tried, proved successful, and approved. The use of the Sadowski Spotter was discontinued in the Ground Observer Reporting Procedure. The reason for its discontinuance was the fact that the equipment was removed from organizations T/BA. Aircraft flights arranged by the Department substituted for the Sadowsky Spotter. In September a new reporting procedure introducing the reporting of grid co-ordinates at the relay station was adopted. Relay station plotting boards were constructed, and used in simulated operation. In connection with the new reporting procedure, a magnetic board and equipment were used and proved most efficient for simulating field conditions.

The Drafting section devised various Air Defense Grid problems. Problems in connection with field surveying, and problems using the Cruising Transit were tried.

In September the new Tactical Air Force which is to be used with overseas units was introduced into all courses. Filter problems with this new tactical situation were devised. New problems, including area raids, were constructed.

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C. Scope and Nature of Training Activities

Period: December 1941 - April 1942 Inclusive

After the first week the instructors acquired a few pieces of equipment for demonstration purposes for the students. Finally an old I.C. from Signal Hq. and Hq. Company at the Drew Field Air Base was set up in the assembly tent. Later two hospital ward tents and two pyramidal tents were given the Department. Near the close of the first cycle, all but the best two hundred men had to be dropped from school. Those who remained were to secure intensive training, and in one week be qualified for assignment to Signal Plotting Companies AA (Frontier) to man I.C.'s in Miami, Tampa, Charleston, Atlanta, and other centers in the Third Air Force area. For one week the instructors worked from eight in the morning until midnight. Instruction and practice at school all day, and then convoys to town with more practice in the Tampa I.C. from nine till midnight.

Through all these early days, schooling was harrased by the rain and wind which continually blew down the large assembly tent or ripped it to pieces. The students were subject to guard duty, K.P. etc. The same number of stucents never reported each morning.

School continued in spite of the many handicaps, poor supplies, and in-adequate facilities. As a natural outcome of the course it became necessary to have a drafting and wire section to construct and maintain the plotting boards and teaching aids. however their activities were limited due to the difficulties in obtaining materials.

March 1942 found the school organized sufficiently to handle an ever increasing enrollment. It was known as "Aircraft Warning Service Department" AAS Training Center, Third Intercepter Command". The AWW course was four weeks, six days a week. The students upon completion of the course were

were recommended for a particular SSN associated with the operation of an Information Center, ie. 725, 055, 714, and 515, based on the old T/O.

After the department head returned from Orlando with some sketched information about the "British System", additional lectures pertaining to this subject were given the students. A portable I.C. in a van was made available for instructional purposes. This portable I.C. was good only for demonstrations. By April 1942 the four week enlisted men's course included in addition to the fixed type of filter and information center work, an explanation of the mobile information center, and an introduction to the "British System". On Saturdays arrangements were made to have the best students work in the Tampa I.C.

Period: May 1942 - September 1942 inclusive

Training included practical operation of the different positions using the portable Information Center, the SCS-5. Theory contained orientation in the Ground Observer system, organization of the Air Warning Service. The master Grid system, used at that time, was taught in order that students would know the basis by which the location of Aircraft were plotted. For practice in locating a point, celluloid overlay sheets were used; many hours of practice were accomplished without much use of expensive material. The wrapping and care of the telephone head and chest sets contained in the SCS-5 and the painting and maintenance of the plotting boards were often lessons taught, which proved valuable reminders to the students of the importance for proper care of equipment. In as much as the system of Air Defense taught at that time, made use of Ground Observers reports, Aircraft Recognition and the Nomenclature of Aircraft were taught. Radar filtering was given most emphasis.

Both enlisted men and officers attended the school. The instruction was coordinated with AAFSAT and a constant liaison between Orlando and Drew Field was maintained. Destruction, or Demolition of an Information Center and its equipment, concluded the course.

The first two week Drafting Course began the first week of July 1942. Map reading, the Military Grid, the Master Grid system for the Aircraft Warning Service were the subjects given during the week of instruction. Board layout preparation and painting of Filter and Operation Boards comprised the second week of the Drafting Course. With the aid of Aeronautical Charts, the board layout was drawn up in smallscale and then transferred to the plotting boards. For a student project, the Telephone and Telegraph school SCS-5 boards were painted by the drafting students. About the time of the first Drafting Course, the British System of locating a position was taught to the students in addition to the method of location using the Master Grid System.

Another SCS-5 was installed in building 11-0-38, south east corner of Fifth and H streets; operation and training using this Portable Information Center progressed.

Period: October 1942 - December 1942 Inclusive

The school's enrollment, at this time, being less than usual, made possible another group of instructors to the Fighter Command School in Orlando to study the New United States System, and to become more versatile in their teaching. The course undertaken was of six weeks duration, and upon graduation from the school, they were qualified as Filterers.

An attempt was made to try and limit groups to thirty (30) students with three or four instructors to a group. This provided one instructor for

each table thereby giving more individual instruction. The instruction at this time was limited to plotting with a brief description of the technique of filtering.

Though the filtering course was still in its experimental stage, much enthusiasm was aroused, and a greater number of students were sent to our school for training. Both plotting and filtering courses were being taught and much headway was noticed in the effectiveness of the new system. More instructors were added to our staff, so that more individual training could be given to the students. Seeming that the new system was here to stay, the school began to gain recognition throughout the field, and more and more students were desirous to attend. There being a lack of necessary training equipment, most of our materials were improvised and; although not perfect proved very satisfactory for training. Schedules were so arranged that students would get the necessary theory, and an abundance of actual practice.

At this time, many plotters, filterers, and Ground Observers were very much in demand; thereby, requiring training of students to be intensified. Maximum use of alloted time was rigidly enforced. Enrollment was being constantly increased; therefore, more buildings were required. Two more complete Information Centers, and several classrooms were anticipated.

Construction of these buildings was started immediately. New and uniform filter tables were designed, and constructed by the Drafting Section. A four week plotters course was still in effect, and the filterers course required a two week plotting course plus four weeks of filtering.

Period: January 1943 - September 1943 Inclusive

Enlisted men were being trained as plotters, Raid Orderlies, Speed Orderlies, Teller-Recorders, Status Clerks, Filterer's and Floor Supervisors. The specialist serial number for the corresponding positions were issued in accordance with the old Aircraft Warning System.

Additional Courses were conducted as follows: Refresher course for Ground Observers, Refresher course for individual units; Officer's Orientation Course; Orientation Course to Radar Students. The courses were later closely associated with actual field problems, relating to the mobile system of Aircraft Warning.

B. Pertinent Data on Training Aids

Period: December 1941 - April 1942 Inclusive

The first teaching aid was made available when the instructors to be reported to Headquarters for their assignment. This aid was a mimeographed booklet entitled "Organization of the Aircraft Warning Service" prepared by the Third Interceptor Command, Drew Field, Florida. The information contained in this booklet was very general in nature, as it was prepared originally for use by Civilian State Defense Councils.

Information about the AWS, being at premium, the potential instructors were issued passes which permitted them to go to town to obtain any additional information and to organize the courses. At first they used the Tampa Public Library. They found several articles on AWS in magazines there, the best of which was in a copy of the New York Times. It was in a private room in the library that the first course schedule was formed.

Meanwhile the future instructors of the AWS Department really knew very little about AWS, and had in fact never seen the equipment or the map tables used. Within a week however, the S-3 section at Headquarters, made arrangements whereby instructors could visit the Army Information Center in Tampa, which was under construction at the time. The officer in charge of the IC gave several lectures on the AW system. Desperate for additional knowledge and practical experience in the system, the instructors made a bargain with the colored Non-Commissioned Officer in charge of the Filter Center. In the mornings they went to the IC and cleaned the rooms, latrines, washed windows etc., and were rewarded for their morning efforts in the afternoon, for the operating personnel of the Filter Center agreed to answer all their questions and permitted them to work as plotters and filterers on the filter board.

Awaiting the official opening of school, more research was done at the library downtown and more questions asked at the Tampa Information Center. The instructors secured two stencils from the Reproduction Department, which had a room at Headquarters, and mimeographed some instructional material. With wrapping paper and crayons, several charts were made of the organization of the Third Air Force.

Cadre from the Fixed Information Centers of the Third Interceptor Command soon joined the Staff. Through contacts of the new staff members, a large assembly tent, and some old equipment, were obtained from the Drew Field Base.

About the first of February, information was available to the department. A few mimeographed copies of the 1st Interceptor Command's "TRAINING AND OPERATION MANUAL FOR FILTER AND INFORMATION CENTERS" (Tentative, For Service Test), reached the hands of the instructors. This source of material helped to standardize the information somewhat, even though it was not applicable in every detail to the procedures taught by the Tampa Information Center.

The large assembly tent housed the makeshift I.C. Two pyramidal tents were used as the personnel office and instructor's room. The meager supply and the commary after the I.C. were housed in a hospital ward tent. Two other hospital ward tents served as classrooms.

Construction of teaching aids tested the ingenuity of the instructors. In order to test co-ordinate reading, gridded celluloid sheets were used to simplify the grading of plots displayed by the student on his co-ordinate test paper. To teach basic map reading, and for a better understanding of geographical co-ordinates, an old orange marked with grease pencil served as a globe.

In April [illegible] 11-85 "Aircraft Warning Service" (mimeographed form) was made available to the instructors. This manual was soon out-dated due to the flexibility of [illegible].

Period: May 1942 -September 1942 Inclusive

With the establishment of the Aircraft Warning School at Fifth and H Streets, in May 1942 training aids were originated for the theory lessons. Charts depicting the equipment used in the American System of Air Defense were made. For the lessons in the nomenclature of Aircraft, and Aircraft Recognition, charts showing wing shapes, parts of aircraft were used to good advantage. Large scale plotting equipment for demonstration purposes was made. These included enlarged flash pips, card stands, and plotting items for the American System. For demonstration of the display of information, metal boards were made. With the use of magnetic plotting and filtering equipment demonstrations in the lecture rooms were made possible. The weekly trips to the Tampa Information Center proved a valuable training aid. Here the students toured the various rooms in the center, and also plotted the courses of Aircraft in the Tampa region.

With the start of instruction in the British system the latter part of September 1942, the making of many new training aids in the form of charts was begun in earnest. Diagrams of Filter Rooms, Path of Information, Plotters Equipment, Filterer's Equipment all were devised. The addition of training films on certain phases of the classified information proved very useful.

In order to give the students a better knowledge of radar performance, field trips to radars were scheduled as part of the course. This later proved to be one of the greatest factors toward improving and standardizing the course.

Period: October 1942 - December 1942 Inclusive

Since much confidential, and secret information was divulged to the filtering students; notebooks were issued, and kept in a large safe in the Department's Library office. Reference manuals for instructors and students were printed in quantity, and kept in the school library.

Lobe charts and many other charts and diagrams were devised, and made available to the instructors.

Period: January 1943 - March 1943 Inclusive

Though two classes of instructors had returned from the Fighter Command School at Orlando, we still did not have access to the notes and material they had taken there. It was all classified material, and had to be kept locked in a safe at the Radar School because we didn't have a safe at school here. During this month a safe was obtained, and all the material deposited at the Radar School was then deposited in our office whereby instructors could refer to their notes as often as they wished. Students until this time were not allowed to take notes on confidential and secret material, due to the insufficient depository facilities. The arrival of the safe gave the students an opportunity to learn the subject matter more thoroughly by referring to their notebooks after classes.

The instructors finally got a room of their own to work in, and to house their material and various supplies. Up till this time they had been shuttled about from one room to the next while class rooms, and practice rooms were being built, and equipped. It gave them an opportunity to function more efficiently.

Lectures were being given by the enlisted instructors, and each man had to make up an individual lesson plan for his own lecture. That led to discrepancies in teaching, and plans were started to standardize an instructors hand-book with lesson outlines so that all lectures would contain the same objectives and identical references. It was finished on the 26th of this month but was not put into use until March.

White name plates were made for every instructor at school which were to be displayed in front of the class while lecturing so that anyone coming into the classroom could without any difficulties see the name of the lecturer.

Period: April 1943 - June 1943 Inclusive

The "Jeep Room" was at last completed, and the Information Center Block was ready for operation. Its completion made possible the teaching of all positions of an Information Center. The mechanical jeeps gave added incentive to the operations. The jeeps simulated the actual flight of aircraft better than the canned flights.

The small library was not being used by as many students as might have been desired. Thus it was necessary to make the library more conducive to study. The library was enlarged and given more lighting facilities. Students came back at night to study.

Magnetic boards, plots, strength counters, height counters, filterers arrows, halums, and plaques were made to aid the instructor in his lectures. The magnetic board is probably one of the ideas for teaching aids that the school had originated.

It was found that the tops of the filter tables were wearing off very rapidly because of continual use. Varnishing the tops every eight weeks eliminated considerable wear and tear.

New lobe charts were made for the filter rooms as the old charts were wrongly proportioned, and actually not calibrations of 270 radar sites. New charts were also made to show the "pick up" height for a given range from a particular radar. These two new charts greatly aided the filterer in determining height of aircraft.

Period: July 1943 - September 1943 Inclusive

Specially designed plotting equipment arrived on July 6, 1943 which proved to be a great help in increasing the plotter's efficiency.

Many illustrated charts were developed by the Drafting section on various tactical situations, organizations, and procedures.

Training films produced by the United States Navy, Army Air Forces and Signal Corps are used with all courses of instruction.

The department's library was enlarged with the addition of the study hall which enables the students to come back in the evening and study.

Plastic models of various types of tanks, and aircraft were added to the training aids of the Ground Observer Course.

Height calculating tables were constructed for use in the Filter Room to enable the filterer to rapidly calculate the approximate height of a flight instead of using the vertical polar diagram.

SECTION IV
(Material and Supply)

Upon the arrival of enlisted men to Drew Field in January 1942, the Aircraft Warning Service School began to procure supplies from the Third Air Force. Telephone equipment, balconies, and Filter Center apparatus were obtained from the Signal Headquarters, and Headquarters Company Third Interceptor Command. Plotting equipment for training in the various positions in the Filter Center was requisitioned from the Tampa Information Center, Tampa, Florida. To house the Information Center for the Aircraft Warning Service School, one large assembly tent was provided by camp supplies; other tents for classroom use, and storage were obtained. Installations in the practice Filter Center were set up by the Aircraft Warning Service School Maintenance Section.

With the transfer of the school's location in May 1942 to Fifth Street and H Avenue, new buildings (11-B-10, 11-B-11, 11-B-27, and 11-B-26) were assigned to the Aircraft Warning School, this transfer necessitated additional supplies, and equipment. Among the more important installations at the new locations was the SCS-5, a portable Information Center. A second SCS-5 was procured shortly there after, and installed in building 11-B-28.

Expendable items of supply, such as paint for filter boards, and celluloid overlays, for use in plotting practice were obtained through school supply . The power units of the SCS-5 were installed in sheds, located outside of buildings 11-B-28 and 11-B-10; these sheds were designed and built by a newly organized School Utilities Section. Up to this time supply was

located in a room in building 10-B-11; in July 1942 the supply room was enlarged to include a good half of building 10-B-11; cases of the SCS-5 sets were stored there.

With the introduction of the British System of Air Defense , new tables for Filter Room practice were procured from School Utilities; additional paint was required and obtained through the supply of "B" Stage of the 506st Signal Aircraft Warning Regiment.

Drafting equipment comprising "T" squares, ink, rulers, drafting tables, and paper were procured through "B" Stage Supply. In devising charts and training aids for instructional purposes, illustration boards as used in posters, were obtained. For practical work in the drafting course, paint again was required; this, as in previous cases was obtained through "B" Stage Supply.

Equipment for Filter Room operation in the British System of Air Defense was procured through "B" Stage Supply. Pulse clocks, color clocks and automatic timers for their operation were designed and produced by the Signal Corps Repair Shop, Tampa, Florida. Communications in the Information Center Block were established by using a good part of the SCS-5 equipment; Western Electric Telephone head and chest sets No. 396-A, included in the SCS-5 were used in the New Radar Filter Room.

In the latter part of January 1943 additional buildings were acquired by the Information Center Department. These buildings (11-C-32, 11-C-35, and 11-C-46) were partitioned to include six Filter Rooms, three classrooms and One Information Center Block, in which the entire system of Air Defense was devised for demonstration purposes. At this time apparatus in building 11-C-28 was removed from the building. The building was then partitioned

into two Radar Filter Rooms with connecting, a small classroom and a complete Fixed Radar Filter Room. To provide equipment and installations in these various rooms more material was needed. A unique method was used so that the Filter boards in time, could be reversed for additional Radar Filter problems. Installations of the Filter tables required two hundred and ninety head sets (H-33), twenty thousand feet of field wire (W 110-B), twelve thousand feet W17 - W28 wire; this Signal Corps equipment was procured through "P" Stage Supply. Quartermaster equipment consisted of chairs, desks, and tables for classroom use.

Plastic plotting and filtering equipment was procured after a design was submitted. Numerals stamped on the plastic were in time worn off by excessive use, therefore it became necessary to have designed new plotting and filtering equipment, whereby the numerals would be embossed into the plastic. This method of manufacture provided longer wear for the equipment which was constantly in use.

Six volt wet cell battery powered four wheeled mechanisms called "Jeeps" were designed and produced in April 1943 by the Signal Corps Repair Shop, Tampa, Florida.

The Drafting Section was enlarged in order to produce the additional Filter tables, vertical polar diagrams, training aids, and "Jeep Room Floor Map". The equipment needed for this work included paint brushes, compasses, wheel brushes, "T" squares, rulers, paint, and cardboard. The Drafting course, extended to four weeks, required additional draftsman's sets, additional "T" squares, and lettering pens; this engineer equipment was procured through "P" Stage Supply.

Recognition Kits for use in training the students in the identification of aircraft in the Ground Observer course were obtained. The Spencer model was procured in February 1943. The Sadowsky Spotter was received in April 1943 and it gave the height of aircraft once it was sighted. Models made to scale, of many military aircraft both Allied and Axis were procured through WP State Supply.

All supplies, equipment, installations mentioned in this narrative may be verified by reference to memorandums, receipts, property records, and tally outs of the Supply Section of the Information Center Department.

SECTION V
Special Staff Activities

In the early stages no formal staff organization existed. The Department Head, because of the small size of the organization was able to exercise direct personal supervision of all activities. All other officers were instructors in certain of the courses for student officers.

As more facilities became available and enrollment increased, it became necessary to distribute responsibility. About 1 March 1943 a formal organization plan was put into effect:

An S-1 was detailed to be responsible for all personnel matters. The principal duties of this section are to maintain records of all students and to handle all correspondence pertaining to enrollment, cancellation of enrollment, and graduation of students.

An S-3 was detailed to be responsible for preparation of schedules and course outlines, development of testing methods, planning of special training methods and training aids, including preparation of armed flights, selection and training of instructors, and supervision of instruction. Originally the Chief Instructor (enlisted) operated directly under the Department Head; later this activity was also included in the S-3 section.

An S-4 was detailed to relieve the Department Head of responsibility for supply matters.

Five sections were established for direct supervision of instruction. These were: Plotting, Filtering, Drafting, Ground Observers, And Officer Training. Because of the close relation between plotting and filtering, these two sections have frequently been combined under one head, and recently, since the Officer Training program has been primarily filtering, instruction

in both enlisted and officer filtering has been under one hand.

The major problem of the S-1 section has been handling the required large volume of student records. At the peak of activity in May 1943, there was a turnover of approximately 200 students per week. Several records of each student are required, including a final report to be submitted in six copies.

The S-3 section has found the preparation offlight problems for the training of filterers to be its most difficult task. After several experiments, it has been decided that previously prepared "canned" flights where the flight is defiltered by instructor personnel, and the defiltered flight is written down and read off to the plotter in the practice room, is the most desirable method from the viewpoint of being able to control the load placed on the student. Other methods requiredtrained personnel to defilter flights in the practice room, andsuch personnel were not available. Preparation of problems has been a continuing process. Changes made in techniques produced criticisms of results being obtained which indicated that changes were needed. A number of problems of each type have to be available, as students soon become familiar with a given problem.

Another S-3 project has been the development of testing methods, with the cooperation of the Training Standards, Section, AAFTC. A satisfactory plotter's performance test was evolved after several trials, but so far no objective test has been developed for filtering or telling, and these are still graded by observation of performance.

Scheduling has presented some problems. It has not been possible to set up permanent schedules or lesson outlines due to the frequent changes

in tactics and techniques of AWS.

The most serious S-4 problems have arisen because many items of equipment used in the work here are not standard issue and have had to be procured from the manufacturer or constructed by the local signal corps repair depot.

SECTION VI
(Biography and Human Interest)

Notes On Information Center Department's History by 1st Sergeant John A. Hammel, Chief Instructor December 1941 - September 1943.

On a Saturday night, one week after "Pear Harbor", 1700 men entrained at Camp Wheeler, Georgia, for an unknown destination. Midst much cheering, shouting, singing, and ever-bubbling spirits, we left our very excellent basic training center with though of Trinidad, Panama Canal, the Ph llipines, etc., running through our minds.

Subsequent events to be noted later, bore out the logic of the shipment of men.. Of the 1700, most were men whose training in the Infantry consisted of combat intelligence, communications, supply, clerical work, and cooking. Most of these men were in their eighth week of basic, and all privates.

After a night spent on the train, we arrived in Tampa, Florida, at nine o'clock in the morning and pulled up on a siding on the west side of the town. Awaiting us were a number of G.I. trucks, which soon had us on our way toward our new camp, which was then passing from group to group as "Drew Field".

All the trucks came out Tampa Bay Boulevard, and turned left at what is now Tenth Street, and stopped. There we all jumped off the trucks to see our new home.

To the east was a vast expanse of tents which seemed to be set in the middle of a swamp of puddles, and deep mud. All were somewhat taken back, and discouraged by the situation. Just the night before, Hillsborough County had experienced one of its heaviest rains, and so, through this sea of mud and water, we were led to our tents by an officer who had arrived just the night before.

An acting 1st Sergeant, was picked from the men jumping off the trucks and he in turn picked acquaintances for platoon sergeants.

Along Tenth Street, 1700 x 2 barracks bags were dumped, and for some time the mad scramble of locating our bags was on.

Gathering up our bags, we piled them in our tents. Inside the pyramidal tents were new canvas cots and mattresses as yet unpacked.

Within several hours, everyone had set up their cots, and make-shift coat hangers were being installed by the handymen of each tent. Later in the day, blankets and pillows were issued.

One sustaining factor in this chaos, was the excellent food during these first few days.

The student cooks came with us, and I remember seeing them uncrating their equipment in field kitchens and getting ready for the first meal which was served late in the afternoon. How they managed in all the mud with water in the pits of their field stoves, was remarkable.

Nature was really in the raw at Drew Field! The meals were good, but we ate out of mess gear sitting on the ground. No latrines or running water existed except at the distant barracks which we languishly looked at.

Lister bags were set up and from there we drew water into canteens, and tin basins for washing and showering. East of the tent area, straddle trenches were dug in the rain soaked sand, and mud. Cars coming along Tampa Bay Boulevard the next morning, saw some startling sights!

At first we were organized into numbered companies in an attempt to organize tent city. However, the inexperienced NCO's, the lack of officers, and the rushed situation created enough chaos so that a missing man was not noticed. Aside from a little self-administered drill and several tent pitching details, bunk fatigue was enjoyed by most.