THIS PAGE DECLASSIFIED IAW EO 13526

ROLL No. P0485-A
DATE FILMED 9-25-72
OPERATOR J. G.
LOCATION Maxwell AFB, Ala.
REDUCTION 26:1

CERTIFICATE OF AUTHENTICITY

This microfilm was created from the record copy of unit histories and related historical material of the United States Air Force stored in the Archives Branch of The Albert F. Simpson Historical Research Center at Maxwell AFB, Alabama. This facility is the official repository for these records in accordance with AF Regulation 210-3 and AF Manual 12-50. This microfilm was created in accordance with the provisions of AF Regulation 12-40 as AU Project AU-1B-67. The microfilming was completed under AF Contract F01600-71-C-0478 under the supervision of the Technical Systems Branch of The Albert F. Simpson Historical Research Center.

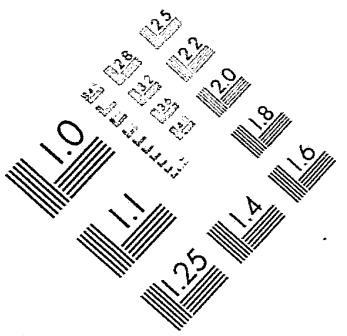
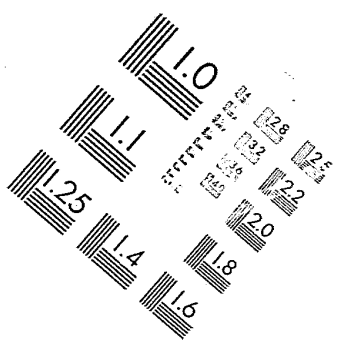
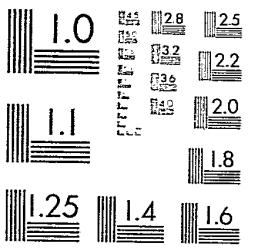
MARGUERITE K. KENNEDY
Chief, Archives Branch
The Albert F. Simpson Historical Research Center

BILLIE H. HIX
Chief, Technical Systems Branch
The Albert F. Simpson Historical Research Center

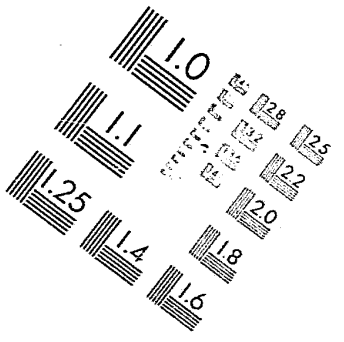
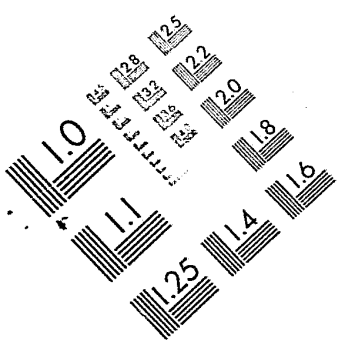
0002

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26.1

0003

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

HISTORY

of the

26th AIR DIVISION (DEF.)

for

1 JUL to 31 DEC. 1952

COPY 1 OF 5

967
Incl #1

0004

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Classified Secret
By Auth CG 26th AD
Date 3 Mar 53 Init

HISTORY

of the

26TH AIR DIVISION (DEFENSE)

1 July through 31 December 1952

Prepared by A/1c Robert I. King, Historical Section, 26th Air Division (Defense), in accordance with procedures set forth in AFM 210-1, 15 September 1952; AFR 210-3, 30 August 1951; ADCR 210-1, 10 February 1952, as amended by 210-1A, 6 March 1952 and EADFR 210-1, 10 April 1953.

CHAIN OF COMMAND

EASTERN AIR DEFENSE FORCE

AIR DEFENSE COMMAND

UNITED STATES AIR FORCE

APPROVED BY:

Helen M. Lewis
HELEN M. LEWIS
2nd Lt., USAF
Historical Officer

HANLON H. VAN AUKEN
Colonel, USAF
Commanding

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SEC[illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Air Div (Def)	[illegible]	Roslyn, New York	Roslyn, New York	[illegible], New York
[illegible] Squadron		Roslyn, New York	Roslyn, New York	[illegible], New York
[illegible] Grnd Obs Sq		Roslyn, New York	Roslyn, New York	[illegible], New York
[illegible] Sq	[illegible]	[illegible]	[illegible]	[illegible], N. J.
[illegible] Sq	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Sq	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Sq	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

0006

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

TABLE OF CONTENTS

Title Page

Units Covered in This History

Table of Contents

Foreward

PAGE

CHAPTER I ORGANIZATIONAL DEVELOPMENTS 1

Completion of Squadron Movement 1
Proposed Reorganization of 26th Air Division . . . 1
Chart: Proposed Units under 26th AD 5
Chart: Non T/O Personnel Authorization Table . 7

CHAPTER II THE MISSION AND ITS IMPLEMENTATION . . . 9

Mission 9
Operations Analysis 10
Operations Signpost 12
AAA 12
Navy Participation 13
Air National Guard 14
Surveillance 15
Electronic Countermeasures 16
Intercept Capability 17
GOC Participation 18
Conclusions 19
Recommendations 20
Operation Skywatch 20
Naval Penetrations 28
B-36 Penetration 28
Low Level Penetrations 31
Exercise 16-52 34
Operation Turkey Run 38

CHAPTER III EXPERIMENTS AND DEVELOPMENTS 43

Operation of Alternate ADCC 43
Operation of Alternate ADCC: Regulation 46
Passive Detection. 47
"TOMCIS" Multiple Corridor Identification System . 51
Chart: Atlantic ADIZ Corridor Assignment . . . 51A
Rescue Coordination Center 54
Air Defense Warnings 56
Test of Medium Frequency Tactical Control Fac . . 57
646th AC&W on Air Early Warning Progress 59

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

	PAGE
Proposed Operating Doctrine: AEW/CIC Aircraft Within Air Defense Command	62
Antennas for Picket Vessel Communications	65
Test of Division HF Radio Back-up Nets	66
HF-P/P Communications Exercise	68
CHAPTER IV SUPPLY AND MAINTENANCE	74
Need for AB-199 Arctic Type Towers in AC&W Sq	74
AN/TRC-1 Radio Sets	77
CHAPTER V MAJOR PROBLEMS	80
"How Are We Doing?"	80
Air Defense Systems Plan	84
Procedures for Coordinating Chaff Operations	93
Implementation of EADF SOP 55-25	95
Interference with Primary Radar at 771st AC&W Sq	98
AC&W Manning and Organization	102
CHAPTER VI MISCELLANEOUS	106
Exclusive Jurisdiction over AC&W Sites	106
Statistical Review	107
SUPPORTING DOCUMENTS	

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY INFORMATION

FOREWARD

The Air Defense of this division has never been tested in actual wartime conditions. American air defense never did get the unwelcome opportunity during World War II to show the stuff of which it was made as did British air defense in the Battle of Britain, and German air defense during the Allied strategic air assault from 1943 to 1945.

Today, American leaders know that never again will they be so immune from air assaults into our country's vitals.

The Air Defense Command, of which the 26th Air Division (Defense) is a component, is aware that you can't create an air defense system by uttering the word "sesame."

You must have a widespread organization equipped to detect, identify, and track hostile aerial forces and to guide weapons of destruction into contact with them. You must have the weapons themselves: aircraft, guided missiles, and various forms of antiaircraft artillery. You must set up visual and electronic countermeasures to nullify the enemy's means of gaining target information. You must initiate passive defense measures: dispersal of industry, stockpiling of critical items, fortification of positions, and build underground facilities. And to make a start toward all this, you must integrate the efforts of your various agencies, such as military, civil, and technical.

This then, is the goal of the 26th Air Division as a

SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

working member of the Air Defense Command. To keep a record of how we are building toward this goal, the History serves as the medium whereby we can see our past mistakes, achievements, and improvements.

Within the pages of this report you will find the story of this division from 1 July to 31 December 1952.

This marks the final report encompassing the entire 26th Air Division. As of the next History, 1 January 1953, the Wing historical sections under this division will cover the activities of the AC&W Squadrons assigned to their sector under the reorganization of the division.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CHAPTER I
"ORGANIZATIONAL DEVELOPMENTS"

COMPLETION OF SQUADRON MOVEMENT

The last of the squadrons within this division to move to its permanent site was the 647th AC&W Squadron. As was reported in the previous report, this was accomplished in April 1952 with permanent address of the 647th at Manassas, Virginia. But although the change to the new site had been accomplished, detachment #2 of that organization was still functioning at their lash-up site, Ft. Meade, Maryland.*1 This detachment remained at the old site until a crew from the Air Materiel Command arrived to dismantle the old radar. The detachment perforred this caretaker status until 18 July 1952 when under the authority of 26th Air Division General Order 22, detachment #2 of the 647th AC&W Squadron was deactivated.*2 Personnel of the detachment were then absorbed into the parent unit at their permanent site.

With this final detachment inactivated, the movement of squadrons within the 26th Air Division into the permanent AC&W System was completed. The permanent site number, location, and postal addresses of these units may be found at the beginning of this report.

PROPOSED REORGANIZATION OF 26TH AIR DIVISION

Although there had been much talk of a proposed re-organization of air divisions throughout the Air Defense

*1 See 26th AD(D) General Order Number 12 dtd 24 April 1952 not included in appendices.
*2 See 26th AD(D) General Order Number 22 dtd 18 July 1952 not included in appendices.

0011

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Command, the first official notification to the 26th Air Division came in the form of a TWX *3 on August 29 requesting the Commanding General, General Minty, and the Vice Commander, Colonel Van Arken, to attend a Wing and Division Commanders Conference at Headquarters EADF. This conference was called for the main purpose of announcing the proposed EADF reorganization.

The conference was held 2-3 September with General Minty in attendance from this division.

Another conference met on 7 November at EADF, and the following word was received that the organization discussed at this conference had been approved by Headquarters USAF.

A tentative starting date of 1 January 1953 was set for the reorganization to go into effect. The announced principles upon which the reorganization is based are as follows:

> "That there be a straight command line from EADF to division, to wings and operating units so as to provide each commander with the necessary tools with which to accomplish his mission.
>
> "That the air division level is the lowest level to which an air defense mission is assigned: i.e., that the air division is the lowest level which is charged with the air defense of a geographic area.
>
> "That it is considered desirable that there be one commander on an Air Force Base responsible for the activities of all Air Defense Command units located there." *4

The organization was planned with the 1955 EADF proposed

---

*3 See EADF TWX EAODO 30933, dtd 29 August 1952 in appendices (s.d. #1).

*4 See EADF Ltr EAOPR, dtd 14 Nov 52, Subj: "Headquarters EADF Briefing of Division Commanders on 1 January 1953 Organization," included in appendices (s.d. #2).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

setup in mind. The 1955 organization provided for a much smaller division area than we have now. Due to this reduction in the size of the division area and consequently the reduction in the number of operating units located therein, each of these units would report to the division headquarters and would be supervised by that headquarters without a requirement for an intervening wing headquarters. It was the feeling of EADF that the proposed plan of 1953 could be adapted to the requirements of the 1955 plan by utilizing the Headquarters Defense Wing for the additional headquarters air division (defense) required and assigning all subordinate units to the division in whose area they are located. ↓

Two defense wings, the 4709th at McGuire Air Force Base, New Jersey, and the 4710th at Newcastle County Airport, Delaware, which previously had commanded the fighter units attached to the 26th Air Division were now to become the Headquarters Defense Wings and assigned directly to this division.

In order to accomplish this, Air Defense Command submitted requests to USAF to inactivate all T/O air base squadrons and activate air defense groups as replacement units; redesignate all T/O air base groups as air defense groups. Consistent with this plan, fighter units located

↓ See EADF Ltr EACPR, dtd 14 Nov 52, Subj: "Headquarters EADF Briefing of Division Commanders on 1 January 1953 Organization," included in appendices (s.d. #2).

0013

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

on a base with an air defense group were to be assigned to the group; tenant fighter units located within defense wing areas were to be assigned to the Defense Wing Headquarters.*5

This move would bring the 45th and 75th Fighter Interceptor Squadrons now at Suffolk County Airport, New York, under the Defense Group at Suffolk. The 2d and 5th Fighter Interceptor Squadrons at McGuire AFB, New Jersey, would be under the Defense Group at McGuire. Both the Suffolk and the McGuire Defense Groups will in turn be under the 4709th Defense Wing at McGuire. The 330th Fighter Interceptor Squadron at Newcastle County Airport, Delaware, will be under the Defense Group at Newcastle. The 95th Fighter Interceptor Squadron at Andrews AFB, Washington, D. C.; the 98th at Dover, Delaware; the 48th at Langley, Virginia; and the Defense Group at Newcastle, Delaware, will be under the 4710th Defense Wing at Newcastle.

AC&W Squadrons within the division area are to be divided between the two wings as follows: 646th, Highlands, New Jersey, and 773rd at Montauk, New York, under control of 4709th; 647th, Manassas, Virginia; 648th, Benton, Pennsylvania; 770th, Palermo, New Jersey; 771st, Fort Custis, Virginia, and 772nd, Claysburg, Pennsylvania, to the 4710th Defense Wing.

The 648th AC&W Squadron at Benton, Pennsylvania will be

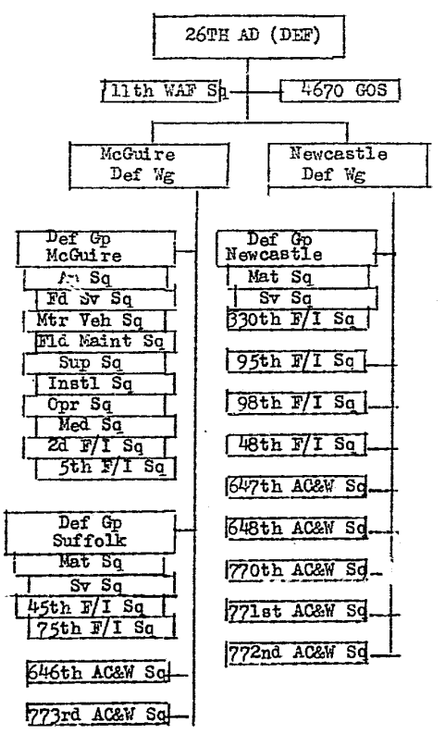
*5 See ADC Ltr ADCMO 322, dtd 12 Nov 52, Subj: "Reorganization of Air Defense Command" in appendices (s.d. #3).

SE[illegible]

0014

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526



UNITS OF 26TH AIR DIVISION UNDER PROPOSED REORGANIZATION

SECRET

0015

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

transferred from the 4710th Defense Wing to the 4709th Defense Wing when a fighter interceptor squadron at Stewart AFB, New York becomes operational.

Due to the requirement that this proposed organization be operated with the manpower presently available at the headquarters air division locations, certain limitations had to be placed upon the operation of this organization. With these limitations in mind, EADF stated:*6

> "The air division commander will be responsible for all activities of its subordinate units as indicated by the command line and will conduct the active air defense mission. This headquarters envisions that the air division will exercise command control over its subordinate units by inspection and staff supervision, depending upon this headquarters and defense wing headquarters for the functions required to be performed by a complete staff."

Since providing the division commander with a complete staff was impossible, certain areas of responsibility relating to the accomplishment of our mission were to be designated to either the headquarters or unit which could assure the carrying out of these responsibilities under the concept as previously stated and consistent with the proposed manpower allocation. It is important to remember though that each commander in the chain of command would be completely responsible for all activities of his unit and subordinate units, even though it is indicated that EADF may not look to him for action in certain areas of responsibility.

---

*6 Quoted from "Headquarters EADF Briefing of Division Commanders on 1 January Organization" (s.d. #2).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NON-T/O PERSONNEL AUTHORIZATION TABLE

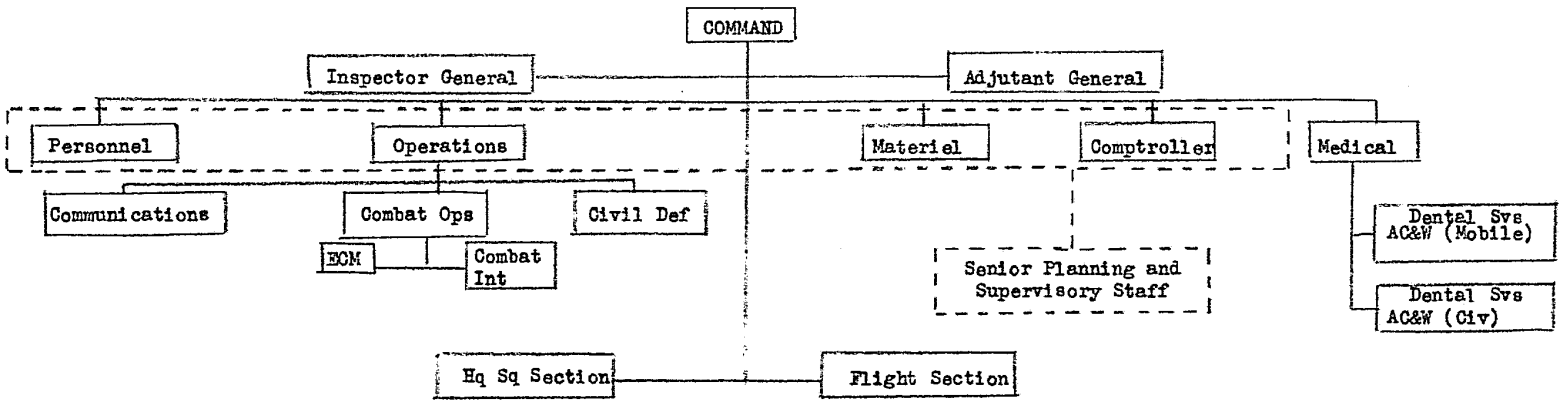
PART I - GENERAL

1. FUNCTION:

a. To conduct the air defense of the United States in the sector of responsibility assigned by the Commanding General, EADF.
b. To exercise command over all units, activities and installations assigned and attached to the Air Division and operational control over allocated Anti-Aircraft Artillery Units.
c. To organize, administer, equip, train and prepare for combat such units and combat crews of the USAF or other services as directed.

2. WORK-LOAD FACTORS:

a. Operation of Air Defense Control Center.
b. Operation of Military and Civilian air raid warning systems.
c. Training of all units and individuals of the USAF, assigned or attached, to the proficiency prescribed by applicable training standards.
d. Special remarks:
Participates in four (4) Air Defense exercises annually in coordination with other Air Division, Strategic Air Command and Tactical Air Command.



SE[illegible]ON

0017

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

As these various channels would be sent through EADF directly to the wings, a proposed T/O organization was prepared for Headquarters 26th Air Division authorizing 67 officers, 411 airmen and 21 civilians. This was felt to be adequate personnel necessary to conduct the active air defense mission and to continue the planning and supervisory staff functions.

This then, in a simplified outline, was the proposed reorganization facing the 26th Air Division at the end of this reporting period. The starting date of 1 January had been set ahead to 16 February or later.*7 The final organization and its effect on this division will be discussed in the next history.

*7 See EADF Ltr EACPR 320.3 dtd 10 Dec 52, Subj: "Proposed T/D for 4709th and 4710th Defense Wing Headquarters under impending reorganization," not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CHAPTER II
"THE MISSION AND ITS IMPLEMENTATION"

MISSION

The assigned mission of the 26th Air Division (Defense) remained the same as stated in the preceding History. Described in EADF Regulation 25-1, dated 13 May 1952, we conduct the air defense of our area of responsibility: carry out the training of all units and individuals of the USAF, assigned to this division, to the proficiency prescribed by applicable training standards; and we still continue to exercise all normal command functions over assigned organizations with operation control only over those organizations assigned for operational control.

To perform its mission, the 26th Air Division has been assigned a Headquarters at Roslyn, New York; Headquarters Squadron, 11th WAF Squadron, seven AC&W Squadrons (see chart preceding the narrative of this history) and the 4670th Ground Observer Squadron with eight detachments throughout the area.

In the accomplishment of our mission we exercised operational control over USAF fighter-interceptor units, AAA units, and certain naval and marine fighter units within our sector, and in turn received logistical support from certain large military installations located near our various assigned installations.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

OPERATIONS ANALYSIS

As in the past, an analysis of operations in this division was presented each month in an Operations Summary prepared by the Intelligence Section.*8 In each is incorporated a complete narrative analysis of operations for the month, backed up with numerous charts and graphs that clearly portray such information as: Flight plan analysis, breakdown of radar tracks, scrambles, interceptions, identification, etc.

Part of the makeup of these summaries comes from the semi-monthly breakdown of radar tracks.*9 Copies of these and the monthly operations summaries are included in the appendices of this History in the belief that the figures are of historical interest. But here in the narrative section of the History, a summary is considered sufficient. The following figures represent the totals for the six month period covered by this History:

BREAKDOWN OF RADAR TRACKS 26TH AIR DIVISION SECTOR PERIOD 1 JULY 52 THRU 31 DECEMBER 52.

1. Tracks Identified Promptly:	CAA	MFS	TOTAL
Correlated by Flight Plan	2108	1281	3389
Identified w/i 5' (VHF/DF F/F)	273	22	295
Identified Prior to Intercept	414	97	512*
Intercepted and Identified	123	437	564**
SUB TOTAL	2918	1837	4760***

* Includes one (1) surface vessel.

*8 See Operations Summaries for the period July through December 1952 included in appendices (s.d. #4).
*9 See "Breakdown of Radar Tracks, 26th Air Division Sector" for the period between 1 July and 31 December 1952 included in appendices (s.d. #5).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

** Includes four (4) surface vessel.
*** Includes five (5) surface vessel.

2. Final Classification of Other Tracks:

	CAA	MFS	TOTAL
Later Identified	45	72	117
Unknown with related F/P	14	86	100
Unknown without related F/P			154
SUB TOTAL	59	158	371
TOTAL NO. OF TRACKS	2977	1995	5131***

3. Breakdown of Reasons for Failure to Intercept in Section 2 Above:

	Scramble	No Scramble	Total
Search Radar Performance	72	1	73
No Ftrs at suitable location	2	78	80
Abortion of A/C causing delay	4		4
Communications performance	4		4
Controller's error (GCI)	70	14	84
Controller's error (Control Center)	1		1
Airborne Radar Performance	1		1
Weather or Darkness	22	84	106
Height Finder Performance	3		3
Pilot's error	1		1
Airborne Radar Performance	3		3
Ftrs had to use wx corridor	2		2
Picket vessel performance	2	1	3
Other	3		3
Fighter Performance	3		3
	193	178	371

4. Classification:

	CAA	MFS	TOTAL
Correlations	2108	1281	3389
Non-Correlations	869	714	1742*
	2977	1995	5131*

5. Action on Non-Correlations

Identified w/i 5'	273	22	295
Identified prior to intercept	414	97	512**
Intercepted and Identified	123	437	564***
Later Identified	45	72	117
Unknown with related F/P	14	86	100
Unknown without related F/P			154
TOTAL	869	714	1742*

* Includes five (5) surface vessels
** Includes four (4) surface vessel
*** Includes four (4) surface vessels.

0021

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

OPERATIONS SIGNPOST

"Operations Signpost" provided the 26th Air Division with excellent training, although the period of the exercise was longer than necessary in view of the amount of strike activity.*10 The operation took place between 24 July 1952 and 28 July 1952 in accordance with EADF Operations Plan 1-52.

Attack routes during the exercise were excellent. This division experienced a heavy attack from the North on the morning of 27 July, followed closely by an over-water attack from the Southeast. We were also attacked on the morning of 28 July from the North and East. As always, the fact that civil traffic is not controlled during an exercise provided the Fakers with diversionary aircraft since free traffic was, in many cases, confused with Faker activity.

A lack of realism and loss in training for Control Center personnel was seen as a result of alerting procedures not being tested.

AAA:

Coordinated teamwork between AAA and Air Force reached its highest level between the 52nd AAA Brigade and this headquarters during "Operations Signpost." This was largely due to the operation of a liaison line between the two

*10 See 26th AF(T) Ltr ADAMC 323.2 dtd 1[illegible] August 1952, Subj: "Operations Signpost" included in appendices ([illegible]).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

headquarters making it possible to keep both commanders fully informed. Such coordination was not possible with the 35th and 53rd Brigades since ADC did not authorize the energizing of the liaison lines to those headquarters. Heavy AF traffic over the ADDC lines severely limited the passing of AAA information between brigades and control center.

It is apparent that some confusion resulted from the practice of changing a "Hostile Faker" track to "Friendly Faker" under certain circumstances. It seems, however, that the AAA Liaison Officers at the ADDC's might have more adequately handled the situation by simply continuing to pass the plots to the AAOC's as "Hostile Faker."

NAVY PARTICIPATION:

In general, naval participation was good. Use was made where possible of Navy fighters in both CAP and intercept operations. Naval Squadrons were at first under the impression that they were assigned only for training and so failed to carry "hot guns." When discovered, this situation was remedied except at Quonset Point. The fighters at Quonset Point were not capable of using "hot guns" and were, therefore, released from use during the rest of the exercise.

AEW aircraft from Quonset Point were passed to control of the 33rd Air Division and effectiveness was unknown to this Division. One AEW aircraft from Patuxent River participated on the night of 24 July. A sortie was originally [illegible] but was changed by Patuxent and the

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

aircraft was sent to work with the picket vessel at Station #2. Since there was no activity on this night, the effectiveness cannot be determined.

Naval radar was generally integrated effectively with out AC&W operations. Participating were the stations at Jamestown, R. I., Atlantic City, N. J., and Norfolk, Va. There appeared to be a lack of proper coordination between the Palermo Direction center and Atlantic City Naval Radar, in that there was some difficulty in transferring control of a Navy fighter being controlled by Atlantic City radar to the Palermo Direction Center. The situation was corrected at the time.

Picket vessels were "on station" at Station #1 and 2 throughout the exercise; no early warning on faker strikes was furnished the AC&W system since, in all cases, the direction center had a track on the strike aircraft before it was reported by the picket vessel. This should not be considered as a reflection on a picket vessel value or capability since strike aircraft in their vicinity was very limited. Communication difficulties between picket vessels and ground radar stations were generally the same as those experienced in the picket vessel communication tests. *11

AIR NATIONAL GUARD:

Satisfactory coordination was experienced between this headquarters and ANG units. They seemed eager to take part

*11 Reader is referred to "Antennas for Picket Vessel Communication" page 65 of this narrative report.

0024

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

and have indicated their desire to participate in future exercises. Advance alert commitments established prior to the exercise were maintained. Participation by ANG units increased our defense capabilities somewhat, but due to the type of aircraft in these units, intercept attempts against high flying target aircraft proved futile. The ANG units apparently were not clear as to the requirements for "Hot Guns" on their alert aircraft. Participating units should be acquainted with the fact that all Air Defense Directives apply to any unit standing alert.

SURVEILLANCE:

Surveillance procedures within this division received thorough testing and the overall results showed substantial improvements. Radar range was generally excellent, due, probably, to the fact that all strikes in this division were high altitude. Altitude information was, on the whole, still below desired minimums and height finder coverage was considered inadequate for the accomplishment of the defense mission. The height finding results at FPS-3 sites were better than in past exercises, but once again CPS-6B sites provided more actual height readings and at greater ranges. Most altitudes were on coverage patterns. *12

Air situation picture at Direction Centers and Control Center was quite accurate and complete except during the

*12 A complete breakdown of Statistical Data in "Operations Signpost" will be found in 26th AD(D) Ltr ADOCO 373.2 dtd 5 August 52, Subj: "Operation Signpost" included in appendices (s.d. ##)

0025

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

period of near saturation on 27 July. The Direction Centers reported some saturation of overlap communication facilities, due primarily to the fact that in many cases overlap plotters had to work two lines because of space limitations behind small plotting boards. Improvement in cooperation between Montauk and North Truro have produced substantial results in coordination efforts between this headquarters and the 32nd Air Division.

ELECTRONIC COUNTERMEASURES:

Generally, radar jamming did not affect the operation of the system or our individual stations due to use of anti-jamming circuits and the state of training of operators. In one case it appeared that sufficient chaff was dropped to confuse station P-30, in that strike aircraft in a single flight were able to delay the detection of a breakup into two flights; one apparently to attack Pittsburgh, the other to proceed to Washington.

Anti-aircraft gun laying radar observed chaff drops but in no reported case did the chaff cause these radars to break lock or lose target.

Instances of VHF jamming, both by tone and random noise modulation were fairly effective in causing loss of communication on certain tactical channels; however, stations operating under EADF SCF 55-14, switched channels and this particular jamming only affected one intercept to any degree.

The transmission and display of status information was

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

considered the best yet achieved during an exercise. There is, however, room for improvement in the passing of status information between Direction Centers.

The energizing of engineered circuits was accomplished by Air Defense Command at the beginning of the exercise. The energizing order did not include the lines between AAOC's and Control Centers, and these lines are needed in order to accomplish adequate coordination with anti-aircraft brigades. No difficulties with engineered circuits were reported.

INTERCEPT CAPABILITY:

Results of this exercise show that our intercept capability and procedure has improved since our last exercise. Only two tracks penetrated the bomb release line of our primary targets before being intercepted. Throughout the exercise we were able to maintain sufficient interceptors on advance states of readiness to insure Faker destruction.

The use of control procedure was very effective and the only form of control used. All strike aircraft penetrated our area under excellent weather conditions and during daylight hours, so no opportunity existed to test night and weather interceptions.

Utilization of CAP was employed by conventional aircraft and was fairly effective. Employment of CAP by conventional aircraft offers the best use against low and medium flying conventional targets, however, conventional type aircraft

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

have poor capability, either from readiness alert or CAP, against high flying target aircraft. The use of ground alerts offers maximum intercept capabilities from Jet type aircraft.

GOC PARTICIPATION:

Approximately 42% of the organized Observation Posts within the 26th Air Division participated in "Operation Signpost." All these posts were not on duty on a round-the-clock basis.

Training in plotting, filtering and telling procedures was limited due to the low number of observation posts which were operational at any one time during the exercise. The restrictions placed on reportable airborne objects and the lack of low altitude Faker missions reduced the training that could have been given to observation posts.

The plotting equipment used in the filter centers is satisfactory in principle, but the pips are not, in that the colors on the time section of the pips wear off. The plastic stands are unsatisfactory due to easy breakage and are too light. Lack of air conditioning in the operations rooms of the filter centers is a definite handicap, plus crowded conditions in the operations room hindering the operation. This is being resolved by relocating the filter centers at New Haven, Conn., Trenton, N. J., Harrisburg, Pa., Pittsburgh, Pa., and Baltimore, Md. A request has been made to relocate the White Plains, New York Filter Center, and the Richmond Filter Center acquired additional space as of

0028

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

September 1952.

CONCLUSIONS:

The exercise benefited all units of the division, and training provided during strike period was excellent.

It is felt that the period of the exercise should have been limited to that time during which we could expect strike activity. The Fighter Wings lost considerable training time, and Navy and Air National Guard units were asked to stand alert for a much longer time than the training afforded them warranted.

Considerable confusion resulted from numerous changes to the procedures outlined in EADF Operations Plan 1-52 during or just prior to the exercise. Since exercise procedures must be thoroughly understood and assimilated by all operating personnel, last minute changes are very difficult to disseminate completely and clearly and will invariably bring about errors in interpretation and implementation.

It is the belief of this headquarters that the intelligence requirements, reports, and procedures have grown out of all proportion to the benefit derived therefrom. With the exception of intercept controllers and battle commanders, the job of all ADC operational personnel is the gathering and passing of intelligence information. The duplication of this intelligence operational information by intelligence personnel and through separate intelligence

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

channels is a waste of personnel and effort. Throughout the exercise, we received a steady stream of intelligence information from EADF intelligence in duplication of information already received through operational liaison with adjacent control centers. The intelligence information was generally useless because it was received 30 minutes to one hour later.

RECOMMENDATIONS:

That future exercises include simulated Air Defense readiness warnings and air raid warnings.

That the length of future exercises be more nearly commensurate with the amount of strike activity anticipated.

That engineered circuits between anti-aircraft brigades and control centers be energized for all air defense exercises.

That exercises be conducted in accordance with EADF Operations Plan 1-52 or, where changes are necesaary, that changes not be made less than ten days prior to the start of an exercise.

That the entire system of intelligence requirements and reports be reviewed for the purpose of proper manpower utilization and elimination of duplication of effort.

OPERATION SKYWATCH

Around the clock Ground Observer Operation! This was "Operation SKYWATCH" which began on 14 July 1952.

This initiation of Ground Observer Corps on 24 hour alert duty marked the first time since the conclusion of World War II that civilians had been placed on continuous

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

operation as part of the aircraft detection system for alerting interceptors and to destroy possible enemy bombers.

"Operation SKYWATCH" was decided upon after considerable study by U. S. Air Force and Federal Civil Defense Administration officials. General Benjamin W. Chidlaw, Commander of the Air Defense Command, stated: "We need every ounce of detection possible to avert what could be the most costly sneak air attack in the history of the world."

How does GCC work? Observation posts, where airplanes are spotted by human eyes, cover the area where the radar eye cannot see.

Filter Centers are collecting stations for information received from the observation posts. Here information is evaluated and passed along to the appropriate radar site and correlated with what data may be available from electronic detection.

Each filter center covers from 150 to 250 observation posts. The filter centers of the 26th Air Division are located in New Haven, Conn.; White Plains, New York; Trenton, New Jersey; Harrisburg and Pittsburgh, Pennsylvania; Baltimore, Maryland; Richmond and Roanoke, Virginia.

How has Operation SKYWATCH progressed? Unfortunately, studies conducted by ADF in the first two months of operation determined that Ground Observer Corps visual and aural air intelligence have been ineffectively integrated into the

0031

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

over-all air defense surveillance system. *13

What accounted for this failure? Primary restrictions causing disappointing results were:

a. Active utilization of Ground Observer Corps intelligence is attempted within Air Defense Identification Zones, but effective utilization has not resulted, despite the considerable amount of information reported by the many active observation posts.

b. Ground Observer Corps Intelligence reported by the hundreds of civilian volunteers not within an Air Defense Identification Zone receives little active utilization other than during an exercise period, as a result of present air surveillance operating procedures.

c. Present filter center procedures as outlined in AF Manual 50-13 normally require two observation post reports on any airborne object or formations of aircraft before a track is established and relayed to an associated Air Defense Direction center. Valuable warning information may be lost as a result of this procedure.

How could these problems be overcome so as to achieve maximum effectiveness of the estimated 75,000 civilian volunteers who were operating the seventeen filter centers and approximately 1500 observation posts encompassed by the EADF "Operation Skywatch" area?

This division prepared a study based on our experience with Ground Observer Corps over the past year and a half with recommendations that we believed would improve the organization, utilization, and operational procedures of the GOC. *14

TO BEGIN, REORGANIZE THE COMMAND STRUCTURE of the Ground

*13 See EADF Ltr EAOCD 381 dtd 24 Sept 52 Subj: "Utilization of Ground Observer Corps intelligence in the Air Defense System" included in appendices (s.d. #2).

*14 See 26th AD(D) Ltr ADADC 321 dtd 14 Oct 52 Subj: "Utilization of Ground Observer Corps Intelligence in the Air Defense System" included in appendices (s.d. 49).

0032

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Observer Squadrons to allow closer supervision and control of the filter center organizations and state GOC coordinators.

TO BEGIN, REORGANIZE THE COMMAND STRUCTURE of the Ground Observer Squadrons to allow closer supervision and control of the filter center organizations and state GOC coordinators.

An opportunity for this exists in the pending reorganization of the Air Division in the Air Defense Command.

At the present time, the GOC Squadron Commander functions in a dual role as he carries the duties of Division Director of Civil Air Defense in addition to his Squadron Commander's position. Under this condition, he must exercise command over eight filter center detachments and the squadron headquarters, and supervise the activities of seven GOC state coordinators. To alleviate this, it is recommended that a Ground Observation Squadron be organized at each of the Wing Headquarters, which would have assigned to it the filter centers associated with AC&W Squadrons in the Wing.

MAKE FILTER CENTER AND RADAR SUBSECTOR BOUNDARIES IDENTICAL. This adjustment is necessary to allign the areas of interest of the radar station and its associated filter center. Under current boundary definitions, a filter center commonly reports to its radar station information on aircraft in another radar station's subsector, and in some instances it is impossible to display this GOC information on the

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

plotting board at the Direction Center.

THERE MUST BE A CONSTANT EXAMINATION OF all observation posts to obtain the best possible coverage and manning. The present criteria of an observation post every eight miles appears to be adequate. It must however, be continually modified because of the location of population center, local cooperation, telephone facilities, and tactical importance of the specific area. The organization of Observation posts on military reservations should contribute substantially to the GOC system in this sector.

Great emphasis should be placed on maximum use of Coast Guard stations. These stations on the coast line are at the outer edge of our GOC coverage and from this position can give us the earliest warning on a low level attack from the ocean.

THERE IS A DEFINITE NEED TO PROVIDE FILTER CENTERS WITH A SIMPLE AND EASILY UNDERSTOOD METHOD of filtering information to be passed to direction centers. In this division, radar information is filtered by considering all overland radar tracks friendly unless they are suspicious by virtue of high speed altitude, etc. This assumes that aircraft initially painted by radar overland orginiated in the U. S. The shortcomings of this perimeter concept are recognized. The most promising means of accomplishing simple but accurate filtering of GOC information in this division then is to

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

extend the concept of perimeter defense to the GOC. This would be accomplished as follows:

a. Observation posts would continue to report in accordance with the requirements of "Operation SKYWATCH." They would be further instructed in recognition of aircraft by type and would be required to report observations by type aircraft wherever possible.

b. Filter centers would receive and display all observation post reports. They would report to direction center all tracks which originate within a narrow strip along the coast proceding inland. (The strip would be established a sufficient distance from the coast line to assure a depth covered by at least two observation posts.) In areas within this strip, filter centers would report only unusual occurrences, formations and aircraft recognized as B-29 type. They would also report continuations of tracks originating in the coastal strip and tracks requested by the Direction Center.

It is recognized that this system leaves many observation posts and filter centers with only slight recognition of their contribution to air defense, and that this can result in morale and recruiting problems for the GOC. It is felt, however, that in this division other systems will result in burdening our AC&W system with such a volume of unusable information that it will be impossible to keep the level of AC&W interest in, and attention to, GOC information at its required high level. Training periods would be established during which filter centers would tell all tracks to direction centers for the purpose of training filter center personnel in handling heavy traffic. During emergency periods when non-tactical traffic is either controlled or grounded, all GOC tracks would be passed to direction centers, and it is believed that direction centers will be able to handle and intelligently evaluate this information.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ACTION SHOULD BE TAKEN ON THE FIRST GOC REPORT rather than waiting for two reports, when the aircraft is in an ADIZ or the recommended coastal zone, or is of suspicious nature. (i.e. B-29 type or formation of 4-engine aircraft) The criteria of establishing a GOC track only after receipt of two or more observation post plots was begun during GOC exercises conducted prior to "Operation SKYWATCH." It was necessary at that time in order to force intelligent filtering at the filter centers and to eliminate the multitudes of unusable single plots that were established during these exercises. This division has completely dropped this criteria for 2 tracks proceeding inland from the coastal area, and the track is established and relayed to the associated direction center on the first plot.

DIRECTION CENTERS SHOULD BE EQUIPPED with larger plotting boards. This change is desirable for many reasons, among which is the effect of small plotting boards on utilization of GOC information. The present scale (1 to 333.333) displays a filter center area as an area approximately 2⅓ feet square. A very small number of tracks in this small area will clutter the board to such an extent that it is very difficult for the Director to properly evaluate them.

TO IMPROVE RECRUITING AND EFFECTIVENESS of the GOC following measures are listed. Further comment on them is found in supporting document #9.

a. Filter center personnel should be individually screened as to their suitability for GOC work.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

b. Emphasis should be placed on the voluntary enrollment of military personnel and their families in civilian observation posts.

c. Filter centers should subdivide their area and make one person (with assistants, where possible) responsible for the observation posts in that area.

d. Continuous effort should be made to concentrate and properly schedule the efforts for GOC state coordinators where they are most needed.

e. All personnel involved in GOC activities should be cautioned against making commitments that cannot be fulfilled, i.e. promises regarding facilities, literature, pins, etc.

f. Filter center, GOC State Coordinators and Ground Observer Squadron personnel should be provided with instruction in PIO activities.

g. Leaflets should be used to publicize and recruit for the GOC.

h. Realistic training flights should be set up frequently to exercise the observation posts.

The case of Ground Observer Corps effectiveness remains one of trial and error in this period. "SKYWATCH" brought additional problems to air defense. A major problem is the lack of manned observer posts in critical areas. Repeatedly this is stated in Division reports.*15

Also important is more thorough training of GOC personnel in direction of flight, type of aircraft and altitude estimates.

With the solving of these difficulties there is no doubt that the Ground Observer Corps will provide an asset to our air defense system.

*15 See 26th AD Ltr ADOCO 373.2 dtd 23 Dec 52, Subj: "Report of Effectiveness of the GOC in the Air Defense System" included in appendices (s.d. #10) See 26th AD Ltr ADOCO 373.2 dtd 19 Aug 52, Subj: As above, included in appendices (s.d. #11)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NAVAL PENETRATION MISSIONS 11 THROUGH 14 AUGUST 1952

In an unknown number of naval penetrations from 11 through 14 August 1952, two strike missions detected by radar and intercepted were identified as strike aircraft. *16

GOC reported normal traffic during this period. Only the Trenton, New Jersey Center was able to give the opinion that of a total of 368 tracks during this period, 81 tracks were identified as Navy aircraft.

With the exception of the tracks intercepted, it must be concluded that all other raids went undetected by radar. Further, that GOC either did not see, or at least did not report, Navy aircraft except as noted in the New Jersey Center report.

It is recommended that repetition of this type of operation will contribute greatly to an appraisal of our defense potential against low level attack. However, it should be noted that this headquarters had no information relative to expected routes, times, and altitudes. Future exercises would allow an intelligent monitoring of our weaknesses and strengths at the time of happening.

B-36 PENETRATION, 7 AUGUST 1952

On 7 August 1952, B-36's penetrated this division in two raids of approximately 20 aircraft each; the first raid attacking Philadelphia and the second New York City. The

*16 See 26th AD(D) Ltr ADADC 373.2 dtd 21 August 52, Subj: "Report on Naval Penetration Missions, 11 through 14 August 1952" included in appendices (s.d. #12)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

attack on Philadelphia was intercepted by five flights before the bomb release line, and four of the flights made Tally-ho pounce. The attack on New York was intercepted and pounced by four flights, but all the pounces were so close to the target that it is improbable that we could claim any destruction prior to the bomb release line.*17

The early warning and tracking of the strikes was excellent and we received continuous information on both strikes from the time of initial pickup by the 32nd Air Division until final fade. We were operating from the alternate control center at Station P-9 during this mission and it was quite difficult to maintain an accurate picture of the situation as fighter action was being taken. It is felt that this was primarily due to plotting board limitations, which are discussed elsewhere in this history.*18

Fighter action against the strikes was limited by marginal weather. The fighters at New Castle remained grounded throughout the mission because of weather and the Dover Fighters were available only against the New York strike. McGuire and Suffolk fighters were available throughout the mission, however, McGuire fighters had to use the IFR scramble procedure against the Philadelphia strike. All

*17 See 26th AD(D) Ltr ADADC 373.1 dtd 14 Aug 52, Subj: "Report on B-36 Penetration, 7 August 1952" included in appendices (s.d. #13)

*18 See page 43 of this history, Subj: "Operation of Alternate ADCC."

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

All but one of the F-86's at Suffolk aborted and that one developed engine trouble which prevented an interception.

The New York strike followed the Philadelphia strike so closely that we were unable to land, reservice and scramble McGuire fighters in time to intercept the New York strike at an acceptable distance from their target. Since New Castle was below minimums, this left only fighters at Dover and the weather there was such that a scramble was delayed until the last minute.

It had been reported that the interceptions were generally not effective because of the very high altitude of the B-36's. Apparently the F-86's without tip tanks at McGuire were the only ones capable of accomplishing effective gunnery passes. F-47's from Suffolk made one Tally-ho, but did not accomplish a pounce.

With this mission and the missions of July 1 and 2, it has been fairly well determined that F-94's with tip tanks have very little capability against targets above 40,000 feet. The F-86's with tip tanks have marginal capability and those without tip tanks appear to be fairly effective. A recommendation of this mission was that a similar mission be scheduled, using F-94's without tip tanks.

This headquarters was directed quite early in the mission to advance <u>all</u> fighters to readiness. It is felt that this procedure is unrealistic in that most of the bases have limited ramp space and it is not possible to scramble more than four to six aircraft at a time to be airborne

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

within five minutes.

LOW LEVEL PENETRATION MISSIONS, 9, 10 and 11 SEPTEMBER 1952

During low level night penetration missions conducted by EADF units against this division on 9, 10 and 11 September, eleven aircraft which could be correlated with the penetration flights were detected.*19 Seven of the pickups were made by radar detection over water, and four were initiated by GOC over land. Fighters were vectored from scramble or CAP against each detection. Four interceptions were successfully completed. There was one AI interception with no visual contact with no pounce.

Radar maximum detection range was 170 miles for the FPS-3 and 105 miles for the CPS-6B. One FPS-3 site reported 90 to 100 percent radar return at ranges within 110 miles on a B-29 flying at an altitude of 500 feet. Maximum height finder range was reported as 71 miles. Abnormal radar ranges at low altitudes were due to ducting and temperature inversion. In at least one instance, a double inversion was reported.

In attempts to continue tracking the target, the antenna tilt of Station P-9 using a CPS-6B was adjusted to various positions. As the target headed inbound, the tilt was varied from a minus 5° to a plus 2.3°. It was found that lowering the antenna tilt aided over water tracking of low level targets substantially. Overland, however, the low antenna tilt caused

*19 See 26th AD(D) Ltr ADADO 373.13 dtd 29 Sep 52, Subj: "Low Level Penetration Missions, 9, 10, and 11 September 1052," included in appendices (s.d. #14).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ground returns so intense that targets were cancelled out. While the low antenna tilt does aid over water tracking of specified targets, the benefit gained is at the expense of early warning and is not practical for normal operation.

The proposed routes of the target aircraft were passed to all filter centers and observation posts prior to the test, and on the final night, courses, speed, and actual time of departure were passed to the filter centers with instructions to disseminate this information to observation posts along the route. In spite of these measures, the GOC information was meager.

GOC tracks appearing on the control center board had very little continuity, probably due to the small number of observation posts manned.

In the time between 2200Z, 10 September and 0900Z, 11 September one station reported a total of 71 GOC tracks received. Of the 71 GOC tracks, 29 initial plots were located within a 5-mile radius of AL2120. The second plot of 19 of these 29 tracks was within a five mile radius of AL1117. It is felt that this amount of traffic is somewhat representative of the traffic we could expect from two fully manned observation posts located on a busy airway. It is evident that information of this type and volume is very difficult to analyze and use.

Continued effort should be made to devise a system of keeping the amount of GOC information passed to the direction center within the capability of the direction center for

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

proper evaluation and action.

This headquarters is constantly studying the proper utilization of GOC information by direction centers, and test exercises of this type are of great assistance.

Fighter action in these low level darkness intercepts was satisfactory. The interceptions were all made by F-94's and it was reported that it was practically impossible to maintain lock-on due to excessive ground or sea return on AI equipment. Some success with the use of AI was reported using manual control. In one instance a fleet of vessels was detected by AI radar, resulting in the loss of contact with the airborne target.

In order to maintain 2-way VHF contact, it was generally necessary to keep one fighter at high altitude, relaying vectors to fighter at the altitude of the target.

The target aircraft were, in most instances, running without lights, and this factor plus haze at the target altitudes made the obtaining and maintaining of visual contact very difficult. The slow speeds of the targets also made successful interceptions and firing passes very difficult.

As anticipated, the greater fuel load of the F-94 was beneficial in that it provided additional range for low altitude work.

Comments on the penetrations were that low altitude missions be regularly scheduled during daylight hours as

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

well as darkness.

The advisability that future exercises select overland routes through areas of light traffic, in order to minimize the problem created by confusion of friendly traffic with the target aircraft.

Finally that future exercises utilize 4-engine aircraft. This not only will provide more realistic targets, but will also preclude the requirement to change operating procedures of the observation posts and filter centers.

EXERCISE 16-52

During the period of 27 October through 1 November 1952 all units under operational control of the 26th Air Division participated in EADF Exercise 16-52. Our assigned mission was to conduct defense operations against Naval Strike Forces in order to accomplish maximum training and gain practical experience in defense against this type of attack; also to enable the U. S. Navy to evaluate the capability of their aircraft to penetrate an Air Defense region.

On 10 October 1952, EADF Headquarters published Operations Order 16-52 which collected the necessary data, announced the mission, established responsibility, etc. *20

The simulated aggressor forces consisted of AD, F2H-2 and F-9-F aircraft of the U. S. Navy, which were launched from the Aircraft carrier Coral Sea (located 75 miles off shore) and which operated during day and night hours under

*20 See EADF Operations Order No. 16-52 dtd 10 Oct 52 not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

both VFR and IFR conditions and at irregular intervals during the period. Penetrations by the Navy AD aircraft were at minimum altitude and normally in a formation consisting of two or three ship elements. Penetrations by the F2H-2 and F-9-F aircraft were at high altitude.

Exercise 16-52 produced numerous problems during the period of the operation which brought a very severe drain on our air defense interceptor strength with resultant weakening of the air defense of the critical targets in the 26th Air Division sector. *21

It is felt that the passing of flight plan information to ADCC was completely unsatisfactory. In many instances strike routes were not furnished to ADCC and launching times, which were occasionally received, were always received after scramble action had been initiated. The result was that all fakers initially detected in the Air Defense Identification Zone had to be considered active air defense "Unknowns," and the provisions of paragraph 3x(5) of the operations order which was intended to preserve our active air defense potential during the exercise were wholly ineffective. Paragraph 3x(5) reads:

"Only two aircraft per fighter station will be scrambled specifically for the purpose of conducting intercepts against Navy strikes. However, aircraft on local training flights may be diverted and used for this purpose where practicable. Division Commanders will advance two aircraft from "Back-up"

*21 See 26th AD(D) Ltr ADADO 373 dtd 12 Nov 52, Subj: "Final Report on Exercise 16-52" included in appendices (s.d. #15)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

to "Readiness" at each fighter station which is within intercept range of the proposed faker strikes.

a. Based on launching times and proposed routes, "Back-up" aircraft will be advanced to "Readiness" in sufficient time to permit scramble against the faker strikes.

b. Aircraft will be reverted to normal status during periods of inactivity or when fakers are again out of intercept range of the fighter station."

The situation was even further aggravated by the fact that another Navy exercise was being conducted in this sector during part of the same period.

The Aircraft Carrier Coral Sea, which launched the faker forces, remained at a position 75 miles off the shore throughout the entire period and apparently conducted other operations during the exercise period. While in the initial stages of various missions, individual aircraft were detected in the process of "joining up," and it was very difficult to separate the faker aircraft from the other carrier traffic. This made the mission unrealistic from the faker standpoint, since it gave early warning of an impending attack, and also from the AC&W Standpoint, since it saturated our surveillance system. Delays resulting from this saturation were evident at ADCC and EADF Combat Operation Center.

GOC information was generally unsatisfactory; a large factor being that observation post manning was below the minimum requirement for effectiveness against a mission of this type. Further confusion was added by lack of continuous tracking and it was apparent that many observers were "trigger happy" and called miscellaneous traffic to the filter centers

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

as "Navy strikes." Despite these serious shortcomings, there were several instances in which GOC information aided in detection and interception of fakers. In at least two instances, GOC information was solely responsible for successful interceptions.

In order to gain some measure of AAA training, this division simulated "Guns Free." This condition is not particularly desirable; however, it was taken when it became evident that designation of fakers by flight plan correlation was impossible. Actual simulated engagements were limited since few strikes were flown over gun defended areas. Considerable difficulty was experienced in the passing of AAA action reports from Direction Centers to the Control Center. These reports were very numerous and, along with other surveillance action and status reports, quickly saturated the available communications facilities.

Intelligence reports, as usual, duplicated information previously received by normal overlap and cross-tell procedures. This duplication resulted in an additional and unnecessary load on our communications lines and wasted considerable time and effort of the Duty Intelligence Officer. Information contained in the "Enemy Contact Reports" required by EADF intelligence was largely a re-hash of information passed to EADF over tactical teletype.

Recommendations contained in the final report on Exercise 16-52 by this headquarters were:

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

"That communication facilities and procedures for passing flight plan information be arranged to provide this information in sufficient time for effective use by ADCC in order to eliminate unwarranted depletion of fighter forces.

"That, in future exercise of this type, the aircraft carrier be realistically positioned well beyond radar surveillance capacity.

"That frequent exercises be conducted for training of the GOC, and training of the AC&W system in the effective use of GOC information. Routes and times should be passed to filter centers before the mission so that filter center personnel can evaluate and correct O. P. reports as they are received.

"That intelligence reporting requirements be screened and revised to eliminate duplication."

OPERATION "TURKEY RUN"

In accordance with EADF Operations Order 18-52 published on 17 November 1952, the 26th Air Division participated in a mission called Operation "Turkey Run." On 9 December, Strategic Air Command forces, consisting of B-29 and B-45 aircraft, conducted simulated aggressor attacks on targets in the 26th and 32nd Air Division (Defense) sectors with the primary target for aggressor aircraft in the 762nd AC&W Squadron, North Truro, Massachuetts subsector. The primary purpose of this exercise was to provide a test of the effectiveness of the "quick-fix" station at North Truro with the secondary purpose to afford maximum training for participating EADF NAVY, MARINE, and EASTARAACOM units.

The 770th AC&W Sq of this division operating at Palermo, New Jersey reported overall good results from the exercise. *22

*22 See 770th AC&W ltr ACFOPS dtd 11 Dec 52, Subj: "Report of Operations Turkey Run," not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

The AN/UPX-6A Mark X IFF proved to be of great value in determining the location and the control of fighter aircraft. No maintenance problems were evident in the maintenance of the UPX-6A and operational results were excellent.

On the other hand, the Passive Detection equipment at Palermo proved to be of little value during this exercise. Few bearings were received and even fewer fixes were obtained from the P. D. section; however, this should not be indicative of the future value of such equipment. "Hot-line" difficulties were encountered between Passive Detection Stations and undoubtedly added to the unsatisfactory performance of the P. D. net.

Turkey run gave the 770th the opportunity to test their UHF equipment with Navy fighter aircraft. Three interceptions were accomplished using UHF as the only means of communications and no difficulties were encountered even at ranges in excess of 100 miles. The station utilized F-2-H and F-9-F aircraft from Atlantic City Naval Air Station and the cooperation receivedwas of great value. Commitments were practically at the discretion of the station and at no time were fighter aircraft depleated. The scramble to airborne time did not exceed three minutes. Fighters were also scrambled through adjacent stations and no difficulties were encountered.

Two faker aircraft were intercepted in the New York

0049

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

area and no tracks were displayed on the board because the overlay line to P-9 (646th AC&W Sq, Highlands, New Jersey) was saturated with other traffic; however, after Tally-ho was accomplished track numbers were received and radar tracks were correlated with information available at P-9. Another "Hot-line" could effectively be utilized between P-9 and P-54.

Four GOC tracks were correlated with radar information but doubt exists as to their identification. Aural GOC plots were received and identified as fakers; a feat considered difficult even for personnel well associated with aviation. An improvement in the continuity of GOC plots was evident but still leaves much to be desired.

It was the belief of the 770th station that "Turkey Run" was a mission that proved of great value to them and that missions of one day duration such as "Turkey Run" have decisive advantages over prolonged tests and should be welcomed and encouraged.

A master map to be used in the preparation of exercise overlays was received by headquarters 26th Air Division for use in "Turkey Run." The scale of the map was 1:300,000 and although it was not the scale originally agreed upon at an EADF meeting, it was considered satisfactory for the preparation of exercise overlays.*23

Improvements for reporting overlays following the

*23 See EADF Ltr EAOOT 381 dtd 20 Nov 52, Subj: "Exercise Overlays," not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Turkey Run exercise were discussed in a division letter to EADF, 24 December 1952.*24 Exercise overlays are in need of increased standardization for maximum clarity and usefullness. It is considered desirable that the required overlay blank forms be furnished by Headquarters EADF. This would curtail variation and organize unit efforts in presenting the operational information required. Subject overlays, thus prepared, should provide such basic reference data as grid, coastline, air defense installations (to include ADCC's, fighter bases and gun defended areas).

There were 140 hours required to accomplish the six overlays. Division Headquarters cannot justify the cost involved in making up these overlays and it is hoped the benefits derived from this presentation will justify the cost.

Recommendations by this headquarters regarding the overlays were:

To minimize confusion, overlays showing faker routes should be made available to division headquarters. This measure will enable divisions to correlate radar targets with specific mission, permit more realistic fighter employment and provide for more complete evaluation of GOC information. Further valuable information can be realized as a result of displaying individual targets in conjunction with faker missions.

A standard legend should be adopted and disseminated for use in any further submission of Exercise Mission charts. The complete history of each penetration track, and the pertinent prose remarks should be rendered in sequence, and within a specified area which is not in conflict with the mission, and course of each strike aircraft in the overlay.

Terminal points of action should be marked by a

*24 See 26th AF(D) Ltr ADOCO 373.2 dtd 24 Dec 52, Subj: "Overlays (Turkey Run)" included in appendices (s.d.#16)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

distinctive symbol and given a reference number to conform to the sequence of remarks.

a. Faded tracks (hashed arcs)
b. Dead reckoned tracks (hashed lines)
c. Hostile or faker tracks in red as normally displayed on vertical plotting boards and recorded on division overlays.
d. The fighter tracks in any color depending on the number of fighters used per track.
e. Point of Tally-ho by fighters indicated by a circle over the tracks and explained in the remarks section.
f. Point of Mission accomplished by a large "X" over the tracks and explained in the remarks section. To show completed action on track carried on through the system use "X" marks every inch or two.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CHAPTER III
"EXPERIMENTS AND DEVELOPMENTS"

OPERATION OF ALTERNATE ADCC

Due to construction work on the control room at 26th Air Division Headquarters, operation was transferred to the alternate ADCC at Station P-9, Highlands, New Jersey, on 30 July 1952 and continued until 8 August 1952. This transfer of operations served as a fairly accurate test of the performance we could expect from the alternate ADCC.*25.

Since engineered lines (including control and ARW nets) required at the alternate ADCC were not in place, it was necessary for the Primary ADCC to retain some of the control center functions:

a. Conelrad
b. Air Raid Warnings and Tests
c. Liaison with adjacent divisions
d. Relaying reports between alternate ADCC and EADF GOC.

After the first day of operations, it was determined that the use of bridged circuits (as outlined in inclosure 1 to 26th Air Division Regulation 55-27 shown following page) did not provide continuous reliable communications with stations not adjacent to the alternate ADCC, and on 31 July 1952 the circuitry was returned to its normal function. Station P-54 was required to relay information to and from stations P-55 and P-56, and station P-30 relayed information to and from station P-63. It is felt

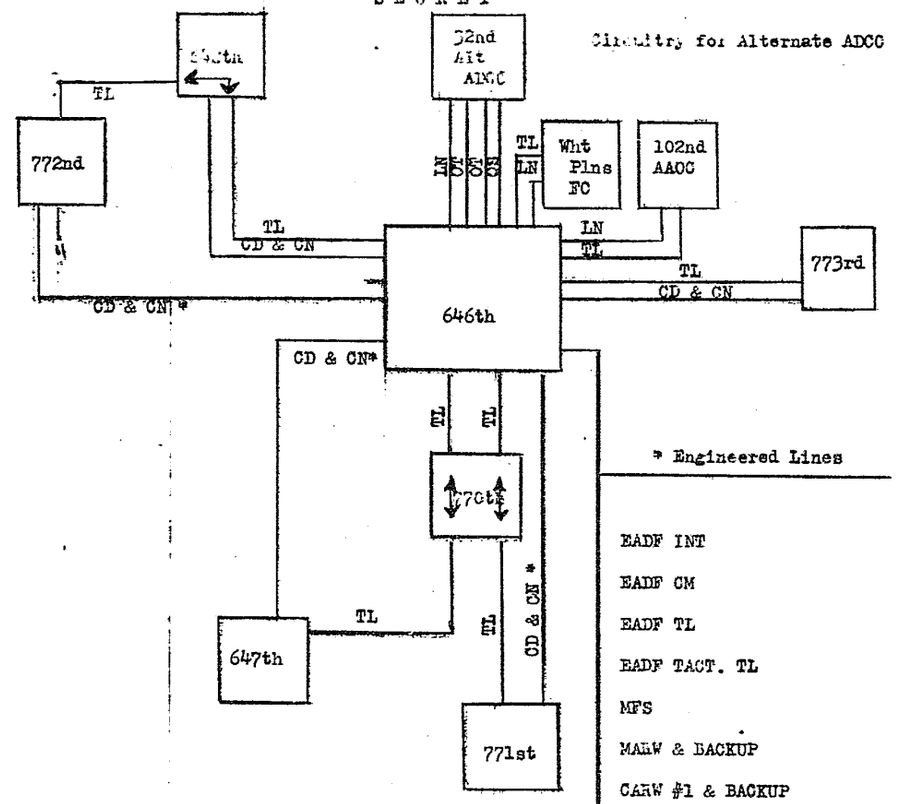
*25 See 26th AD(C), ltr [illegible] 370.2 dtd 14 Aug 52 subj: "Operation of Alternate ADCC" included in appendices (S.A. #17)

0053

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION
SECRET



Incl #1
26th AIR 55-27

SECRET
SECURITY INFORMATION
SECRET

0054

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

that the relaying of this information was unsatisfactory. The delay involved in relaying track information is undesirable but can be tolerated. There is, however, a definite requirement for one line to each station, to allow the battle commander to discuss details of operation and issue instructions. The relaying of such discussions or directives is time consuming and inaccurate, and would not permit effective operation during a period of attack.

The plotting board at station F-9 is too small for operation as an alternate ADCC (3'7" by 4' 4"). The scale now in use (1 to 333,333) is so small that binoculars are necessary to read tracks from the alternate ADCC position at the back of the operation room. Even at this scale, the board does not include coverage sufficient for ADCC use. Tracks in the southern portion of the division sector could not be plotted, and those from the north could not be plotted more than 145 miles north of New York City. During the big photo mission on 7 August 1952 the plotting board was of very little value to either the station or ADCS operation, and practically all information had to be obtained direct from adjacent stations, or from the radar scopes and directors. It is strongly urged that all stations have plotting boards large enough to allow the use of 1 to 250,000 scale. In the case of alternate ADCCs it is felt that this scale, and coverage of at least the entire division sector is an absolute necessity.

0055

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible] of I-[illegible] as an alter- [illegible] is unsatisfactory.

It is recommended that, [illegible] circuits [illegible] EADF [illegible] circuits be authorized for [illegible] from the alternate ADCC to stations [illegible] of sufficient size [illegible] operation of the alternate ADCC, [illegible].

[illegible] it [illegible] offer [illegible] alternate ADCC.

[illegible] recommendations [illegible] to the [illegible] circuits and that EADF [illegible] be amended accordingly.

EADF also [illegible] letter to [illegible] requesting [illegible] to purchase locally [illegible] board for [illegible] so that it could better [illegible] alternate ADCC function. [illegible]

[illegible] included in appendices [illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

OPERATION OF ALTERNATE ADCC: REGULATION

As a follow-up to the operation of our alternate ADCC (646th ACMW Squadron, Highlands, New Jersey) which assumed sector control during construction at primary ADCC, this headquarters published 26th AD Regulation 55-27 on 25 September.*27 This regulation establishes procedures and personnel requirements for operating the 646th ACMW Squadron Direction Center as an alternate ADCC when primary control center at Roslyn, New York is lost to the system. New regulation superseded 55-27 dated 3 June 1952.

Rewritten was the procedure for existing line modification of communications squadrons when alternate ADCC operates as ADCC of division.

Old regulation stated:

"The alternate ADCC will receive information over the same lines as have been previously employed. However, certain lines must be combined at other stations in order to afford complete coverage. Specifically these are:

(1) Two lines at the 770th ACMW Squadron will be patched over from the 771st and the 647th in parallel and tied directly to the 646th by passing the 770th completely. These will become the telling and the command and status lines for the 647th and 771st ACMW Squadrons.

(2) One line from the 646th will be bridged to the line between the 771st and the 648th. This will become the command and status line for these two stations."

Revised regulation now reads:

"The alternate ADCC will receive information over the same

---

*27 See 26th AD(D) Regulation 55-27 dtd 25 September 1952, Subj: "Operations Alternate ADCC" included in appendices (Ed. [illegible])

SECRET

0057

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

lines as have been previously employed. However, the 771st and 647th AC&W Squadrons will tell surveillance information to the 770th AC&W Squadron, which will in turn employ two existing lines to the alternate control center for relaying this information. The 772nd AC&W Squadron will employ the same procedure with the 646th AC&W Squadron acting as the intermediary."

Circuitry for Alternate ADCC is shown in diagram [illegible] bined [illegible] [illegible].

[illegible]

[illegible] [illegible], [illegible] identification, [illegible] locating [illegible] interference sources, Passive Detection is of considerable value to the Air Defense system.

Passive Detection as presently operating in the 26th Air Division consists of a multi-station net, with stations P-9, Highlands, New Jersey; P-45, [illegible], N. Y.; and P-54 Palermo, New Jersey, the units assigned.

Since with presently authorized equipment it is not possible to search all frequencies with a reasonable probability of intercept, frequency search must be limited to those areas that [illegible] indicated [illegible], [illegible] intelligence, [illegible] [illegible]. In the past in [illegible] [illegible] first [illegible] flight plan will provide information for future [illegible] with the resultant [illegible].

[illegible] peniless [illegible]

[illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

0059

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

In order to operate a complete and successful passive detection station on a 24 hour basis, the following equipment is recommended:

3 each Receivers AN/APR 9
3 each Pulse Analyzers, preferably AN/SLA-1
3 each DF assembly AN/APA 17B with antenna
3 each antenna with beam width of from 45 to 60 deg.

The unit at Montauk has designed and constructed a simple antenna, basically of the cylindrical paraboloid type which is soon to be tested. A similar antenna is being installed by the unit at Palermo. This antenna appears to have a wider beam width than the standard antenna and may provide a means of increasing the probability of intercept.

A controlled test of the range capabilities of the passive detection unit at Highlands was conducted on 8 January 1952, utilizing a B-29 aircraft carrying APS 13 Radar. Results of this test indicated that a maximum range capability of 257 statute miles with the aircraft at an altitude of 25,000 feet was attainable.

The problem at Navesink has been an extreme amount of interference completely destroying the usefulness of the frequencies covered by the M 129 and 131 of the APR 9 at close ranges. The site selected for operation provided screening by two hills from the AN/CPS-6B. However, they have successfully designed a blanking circuit which eliminates this interference. Tests are being conducted to ascertain if close proximity to the CPS-6B damages any portion of

SECURITY INFORMATION

0060

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

the receiver or if the recover time after blanking is great enough to affect probability of intercept of signals. *[illegible]

The tentative SOP for the passive Detection Net established procedures when the net became operational, which occurred the middle of October.

1. Detection.

a. All stations will normally conduct surveillance by searching in frequency over the assigned range and in azimuth by rotating the antennas.

b. Upon detection of a signal, search will cease. The signal will be tuned in and frequency, PRF, pulse width, and a bearing from the station to the signal will be obtained. Immediately thereafter a flash report will be sent to all stations in the net in the following sequence:

(1) Frequency (mega cycles)
(2) PRF (cycles per second)
(3) Pulse width (microseconds)
(4) Bearing signal (degrees from detecting station)
(5) Time of the bearing

c. Upon receipt of the flash report, the System Control Station will assign a track number and designate at least one other station to obtain bearings at two minute intervals and triangulate to obtain position of the aircraft radiating the signal.

d. When the first position has been obtained, the System Control Station will pass target azimuth range to the associated GCI station.

(1) Upon receipt of the initial position from the PD system the GCI station will treat the target in the same manner as one detected on the radar. The GCI station will be responsible for identification of the [illegible] correlation, interception [illegible], as prescribed by [illegible] procedures.

[illegible] Oct 52
[illegible] Included
[illegible]

[illegible] INFORMATION

0061

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

(2) When the GCI Station is carrying the track on its radar, the controller will so notify the passive detection system which will thereupon drop that target and return to surveillance.

2. Locating Radar Interference and Jamming:

A radar station encountering interference or jamming on its equipment may request that the Passive Detection System locate the source. The request will be made to the system control station, and will contain the nomenclature of the radar, the bearing of the source, and the type of interference (noise, railings, etc.). The System Control Station will designate at least two stations to triangulate on the interference, using detecting procedures. If the source appears to be stationary, the initial report will be made as in detection, except that the source is stationary. If the source is mobile, it will be treated as in detection. *30

At the end of this reporting period, all 3 stations in the 26th Air Division net were operating on an 8 hour schedule with standby, and were to continue on this schedule until sufficient personnel could be assigned to handle additional duties necessary for 24 hour operation.

"TOMCIS" MULTIPLE CORRIDOR IDENTIFICATION SYSTEM

Action on the proposed multiple corridor identification system, known as "Tomcis" was negligible throughout this reporting period awaiting USAF coordination by ADC.

Early in June a meeting was held at ENDF headquarters at which ADC officers were present. Mr. Mark Hammond, CAA Liaison officer of the 26th Air Division presented a list of procedures and equipment which would be needed to conduct tests using Atlantic City, as the site for a Radio Navigational station.

The [illegible] is located near Atlantic City. This material

*30 [illegible] dtd 14 Oct 52
[illegible]: "[illegible] Passive Detection" included in appendices (s.d.#21)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

ATLANTIC ADIZ

CORRIDOR ASSIGNMENT CHART

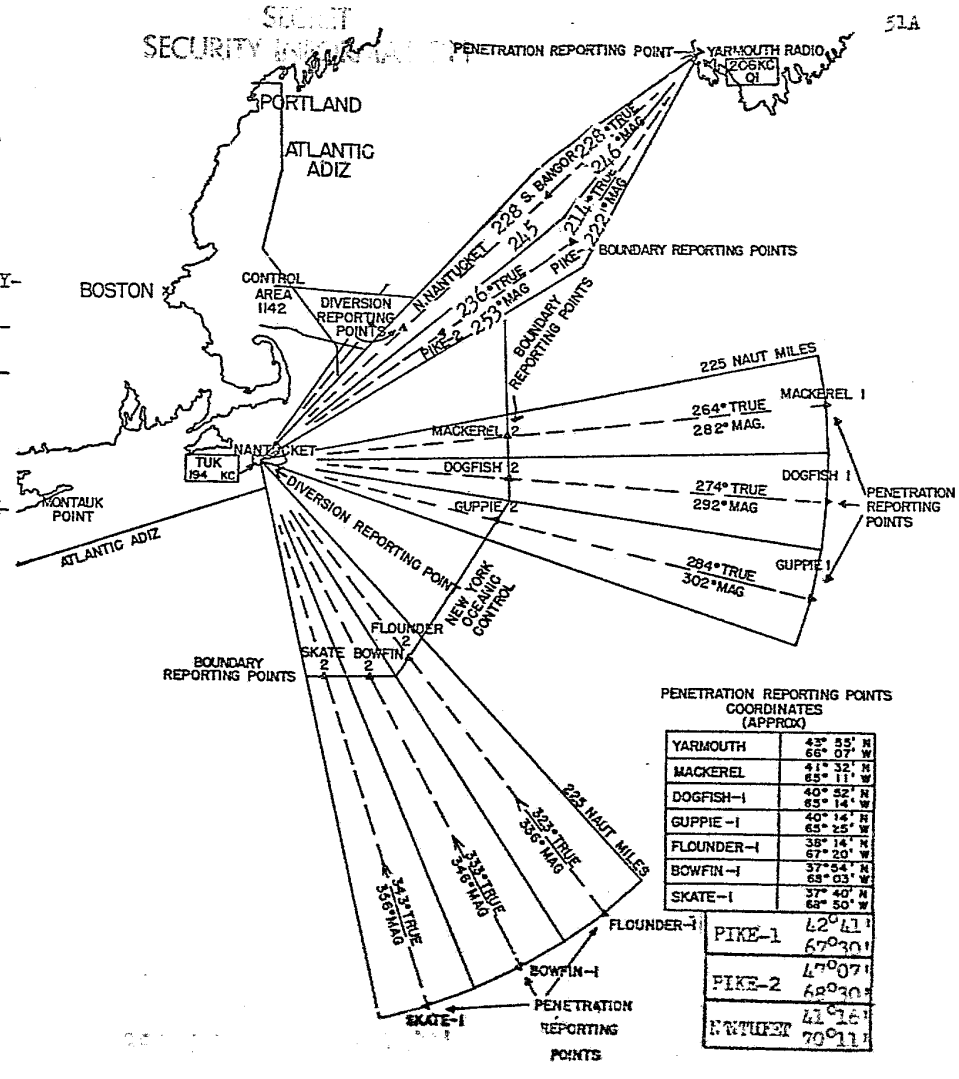
PILOTS WILL:

1. TRANSMIT ESTIMATED TIME OF CROSSING "PENETRATION REPORTING POINT" AT LEAST FORTY-FIVE (45) MINUTES PRIOR TO ACTUAL CROSSING EXCEPT WHEN PENETRATING VIA YARMOUTH. IN WHICH CASE, THE ESTIMATE WILL BE GIVEN TO THE LAST AIRWAY COMMUNICATION STATION PRIOR TO REACHING YARMOUTH.

2. PENETRATE THE CORRIDOR MARKED "X" AT THE DESIGNATED "PENETRATION REPORTING POINT."

3. GIVE POSITION REPORTS WHEN OVER "PENETRATION REPORTING POINT, BOUNDARY REPORTING POINT AND DIVERSION REPORTING POINT." ALSO INCLUDE ESTIMATE OF NEXT REPORTING POINT. EX. AF1234 OVER FLOUNDER 1 AT 55, 12000, ESTIMATE FLOUNDER 2 AT 40.

4. PROCEED ON CENTERLINE OF CORRIDOR TO DIVERSION REPORTING POINT UNLESS DIRECTED TO EXECUTE "CHECK TURN" AND/OR "AUTHENTICATION MANEUVER."



PENETRATION REPORTING POINTS COORDINATES (APPROX)

YARMOUTH	43° 55' N 66° 07' W
MACKEREL	41° 32' N 65° 11' W
DOGFISH-1	40° 52' N 65° 14' W
GUPPIE-1	40° 14' N 65° 25' W
FLOUNDER-1	38° 14' N 67° 20' W
BOWFIN-1	37° 54' N 69° 03' W
SKATE-1	37° 40' N 68° 50' W

PIKE-1	42°41' 67°30'
PIKE-2	41°07' 68°30'
NANTUCKET	41°16' 70°11'

0063

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

was then forwarded to ADC by EADF.

There was no further action on "Tomcis" in this division, until on the last day of the reporting period, 31 December, this division received a message from EADF:

"ADC HAS CALLED A CONFERENCE AT EADF 0900 EST 7 JAN 53 FOR PURPOSE OF DEVELOPING A BASIC PLAN OF ACTION TO IMPLEMENT PILOT TO 1 APRIL 53 ON A PORTLAND TEST BASIS THE NANTUCKET MULTIPLE CORRIDOR IDENTIFICATION SYSTEM (TOMCIS).....*31

It had been decided to proceed with the proposed Multiple Corridor test at Nantucket before Atlantic City, because radio navigational equipment was not available there.

The prime purpose of "Tomcis" is to increase the identification system capabilities of the Air Defence System, particularly with respect to the volume of aircraft movements within the area of application for which positive identification can be accomplished. The increase in identification capabilities is expected to reduce proportionately the number of identifications required by interceptor aircraft. Pilot participation in this procedure will be on a voluntary basis until declaration of a Military emergency at which time it is planned that entry through a corridor system will become mandatory. *32

---

*31 See EADF message EADOT-1 46569 dtd 31 Dec 52,Subj: "Tomcis" not included in appendices.

*32 See proposed 26th AD(D) Multiple Corridor System for identification of aircraft entering or penetrating towards the U.S. from over water E of the 30th Parallel and W of Nantucket,...I. not included in appendices.

SECRET SECURITY INFORMATION

0064

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

For a more complete description of the "Tomcio" procedures the reader is referred to the official 26th Air Division (Defense) History of 1 February to 30 June, 1952 (pge. 17-22) but it is of value here to condense the program for general knowledge of the reader.

The Atlantic City corridor system, with which this division is primarily concerned, will consist of four 10 deg. segments of a circle radiating 225 nautical miles seaward from the Atlantic Radio Beacon. These corridors will serve traffic from Bermuda and San Juan.

Upon leaving an overseas base at which a "Corridor" briefing office is located, the pilot will receive from the Operation office a sealed identification envelope containing the identification procedures for the flight.

This envelope will contain envelope identification number, corridor assignment, the check turn, and the authentication maneuver.

The pilot will open the envelope after take-off and be prepared to execute the required identification procedures.

The ARTC Center will pass the envelope identification number with the flight plan information to the Air Defense system at the time the pilot's Penetrating Point estimate is forwarded.

When radar [illegible] a message is issued by the Air Defense system to the pilot; this identification in the form of the

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible]

[illegible] turn, and/or whenever it is to be accomplished and if satisfactorily executed, the aircraft is released from further identification procedures.

If an aircraft fails to meet the identification requirements, other available means of identification, including interception, will be resorted to by the Air Defense System.

RESCUE COORDINATION CENTER

A Rescue Coordinating Center was established within the Air Defense Control Center at [illegible] on 1 July 195[illegible], for the purpose of coordinating all rescue activity within the [illegible]th Air Division (Defense) Command.[*2] Personnel of this RCC are assigned to Headquarters, 5th Air Rescue Group, Westover Air Force Base, and attached for duty to the [illegible]th Air Division.

In accordance with the joint agreement by Headquarters, Air Defense Command, and Headquarters, Air Rescue Service, the Rescue Coordination Center at the [illegible]th Air Division on the East coast and the [illegible]th Air Division at McChord Air Force Base, Washington on the West coast were the first to be activated within the Air Defense System. The agreement calls for [illegible]

[illegible] Center [illegible] number 17[illegible] proved to

---

[illegible] October 195[illegible], [illegible] included in [illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

be false, and the remaining 102 were actual. The monthly average for this period was 17 actual alerts and 28.3 false alerts. During this period Rescue aircraft, both Air Rescue Service and United States Coast Guard were scrambled a total of 66 times, for an average of 11 times per month. *24

Coordination was made between Air Rescue Service and the U. S. Coast Guard which enables USCG as well as USAF rescue aircraft to be scrambled and vectored by the ADCC during periods of emergency. Coordination was also established between U. S. Coast Guard Rescue Coordination Centers whereby they immediately alert and scramble Navy rescue aircraft in the event of a Search and Rescue emergency.

Should an aircraft in distress require intercept and/or escort, the RCC Controller located at the ADCC scrambles appropriate rescue aircraft to the scene of the emergency. The rescue aircraft as soon as possible, establish VHF contact with the ADCC for vector to the aircraft in distress. In the event of abandonment, crash landing or ditching of aircraft, the rescue aircraft is vectored to the last known position and furnished with all information relative as speed, altitude, heading, etc., at the last known position.

The control of rescue aircraft is vested within the ADDC for directional purposes until such time as it is determined that those facilities are no longer required for the efficient termination of the mission, whereupon the rescue aircraft reverts

*24 Statistics from RCC log on file at 4th AD(3), Roslyn, N.Y. not included in appendices.

0067

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

to accepted rescue procedures.

Squadron Operating procedures for Rescue Controllers and Rescue Coordination Center operation were prepared for use in the 26th Air Division ADDC. *35

AIR DEFENSE WARNINGS

On 30 October 1952, this division published 26th Air Division Regulation 55-35 which defined and established the actions required when Air Defense tests and actual warnings are issued by this headquarters. *36

This Regulation supersedes Division Regulation 55-35 dated 15 February 1952.

Of primary importance is a further clarification of the definition of "Warning White."

"Warning White" attack by hostile aircraft is improbable. (All clear) this is interpreted to mean that no hostile aircraft or unknown aircraft, suspected to be hostile, are known to be within or enroute to and the Air Defense Sector. "Warning White" normally will be used to release all agencies from a "Warning Red" or "Warning Yellow" condition. Prior to initial attack, when a military emergency is declared, Air Defense "Warning White" will be effective automatically throughout Air Defense Command, unless a higher degree of warning is indicated, and will automatically initiate an Air Defense Readiness warning condition. After the initial attack is over, "Warning White" will [illegible] the calling of an Air Defense Readiness [illegible] will be used only to indicate "All Clear."

For clarification on other definitions and procedures contained in the Regulation, [illegible] to supporting

[illegible]

*35 [illegible]

[illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

TEST OF MEDIUM FREQUENCY TACTICAL CONTROL FACILITIES

Overall results of tests of medium frequency tactical control facilities indicate that the tests with present equipment are unsuitable. More successful results might be attained using higher powered transmitters, but above all, it is apparent that it is absolutely necessary to provide a clear channel for the proper evaluation of the medium frequencies for tactical control. *37

Of tests conducted by the 646th ACEW Sq., Highlands, New Jersey, 647th ACEW Sq., Manassas, Virginia, 770th ACEW Sq., Palermo, New Jersey, and 773rd ACEW Sq., Montauk, New York, only the test by the 646th on 8 October 1952 resulted in very satisfactory communications.

The extreme need for a clear channel in these tests is vividly illustrated by excerpts from the 647th test on 21 October 1952 and the successful test by the 646th.

From the 647th report of test on 21 October:

> "An aircraft on the 140th Fighter Squadron used in the conduct of the test initially received the medium frequency signal when approximately twenty (20) miles northeast of the station, as it approached the station. It was then directed over the station and directed north at 20,000 feet. The medium frequency signal was received loud and clear at a distance from the station of thirty (30) miles. The signal grew weaker until at sixty-five (65) miles from the station it was no longer readable. The pilot was then requested to descend to 10,000 feet and [illegible] the station. Sixty (60) miles from the station, at 15,000 feet, the signal [illegible] the pilot was [illegible] to receive the transmissions until he had approached [illegible] sixty-five [illegible] miles from the

*37 [illegible] Subj: "[illegible] Tactical Control Facilities" [illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

station. He was then vectored toward Dover, Delaware, and the transmissions continued until the aircraft was eighty-five (85) miles from the station. At forty (40) miles the signal began to fade and at forty-five (45) miles, radio WLAC, Nashville, Tennessee, interferred with the signal to the extent that reception was very weak and distorted. The pilot stated that he could still discern an unreadable signal at a distance of eighty (80) miles and that it was his belief that the signal would have been readable had it not been for the interference from the commercial broadcast station." *38

The success of the 8 October test by the 646th was attributed to the fact that instead of operation being restricted to one specific frequency, the station was authorized to use any clear channel within the 1500-1600kc range. *39

Equipment utilized for the test included a RC-191 transmitter with a 1000 mmf variable capacitor between the antenna post and ground, and a 250 foot antenna oriented North and South approximately 40 feet above the ground. With the coupling switch set at minimum, antenna current of 3 amperes was obtained through the range 1500-1560 kc.

The first test made was totally unsuccessful because of the difficulty in finding a clear channel on which to transmit. Immediately prior to landing the pilot reported 1540 kc as being relatively clear. Using this channel during the second test proved to be highly successful. As planned, the aircraft flew

*38 See 26th AD(D) Ltr ADOCE 676 dtd 30 Oct. Subj: "Test of Medium Frequency Tactical Control Facilities," included in appendices (s.d. #25)
*39 See 26th AD(D) Ltr ADOCE 676 dtd 1[illegible] Oct 52, Subj: Same as above, included in appendices (s.d. #26)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

a track to a position approximately 142 miles from the station, reporting signal strength at two minute intervals. At this distance HF signals from the ground station were reported to be loud and clear. For short periods at 90 and 130 miles some fading was experienced, although contact with the aircraft was not lost at any time during the test. The aircraft flew at an altitude of 25,000 feet.

Therefore, this authorization for free channel permitted free operation which was not possible with previous tests. As a result, it is believed that effective control of aircraft can be maintained on medium frequencies if interference free channels are available for use.

646TH ACEW ON AIR EARLY WARNING PROGRESS

With the possibility of Air Early Warning plots on low flying aircraft at ranges of approximately 220 nautical miles from the target area, the Air Early Warning system was seen as a valuable asset to our Air Defense system. In a narrative report on previous AEW missions conducted by them, the 646th ACEW Squadron stated that if AEW aircraft can plot their position more accurately, establish their location at a point 150 nautical miles out into the Oceanic corridor, and providing HF communications stand up at this range the plots on aircraft at that distance are possible. *40

How had Airborne Early Warning come into being, and what was its initial purpose? *41

*40 See 646th ACEW Sq Ltr dtd [illegible] Sep 52, Subj: "Narrative Report on AEW Missions" included in appendices (s.d. #27)

*41 See Air Development Squadron [illegible] Ltr dtd 6 Jun 52, Subj: "Squadron Doctrine (Operational)", [illegible], not included in appendices.

0071

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

"The Airborne Early Warning System was born as a result of lessons learned in the latter phases of World War II. A means of extending the radar horizon of shipboard radars became desperately needed by our naval forces operating in the Pacific against the Japanese. The Japanese Kamikazi planes were approaching too low to be detected by shipboard radars until within 20 or 25 miles of the task force. This short range provided our forces with too little warning and it was most difficult to destroy them by CAP or surface gunfire before they succeeded in inflicting serious casualties.

"Our first answer to these attacks was the stationing of advance radar picket destroyers at some distance from the task force to provide early detection of the raids. These pickets were most entirely successful and they themselves were becoming casualties at a rapid rate. It became evident at this time that one possible solution was the use of a high powered airborne radar which could make use of its altitude to detect low flying raids at a long range.

"As a result of this need, the AN/APS-20 was developed. The laboratory model of the system was completed in late 1944 and was installed in a modified TBM-3C Grumond "Avenger" torpedo-bomber, designated the ATBM-3C (W). At the same time, the NAMU at Johnsville, Pa. began modification of about thirty-five TBM-3W aircraft. This system was termed the Airborne Early Warning (AEW) system.

"Shortly after the initial tests had indicated the potential value of the AEW system, plans were made to further the development by installing the equipment in large land based aircraft, where the added space and weight provisions would permit the installation of an airborne CIC. The Navy purchased nineteen B-17G aircraft and NAMU modified them into the airborne CIC configuration termed the PB-1W. This aircraft was equipped with all the airborne components of the carrier-based AEW system, and in addition was equipped with the ground stabilized multi-scope AN/APA-59 assembly, plotting facilities, and a newly developed system of inter-communications for the CIC crew, the AN/AIC-6.

"The carrier-based AEW system was originally en- [illegible] antenna, sent aloft [illegible] available on [illegible] CIC. The land-based aircraft

0072

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

on the other hand, were designed as a more extensive installation to test the feasibility of sending the AEW CIC aloft. The present trend of development is toward getting more and more operational control into the aircraft and in some tactical situations de-emphasizing the use of the radar relay and the functions of the surface CIC. One fact seems to stand out clearly --- as long as wars are fought over the ocean areas of the world or over the ocean approaches to the continents, it seems probable that AEW is here to stay. The basic concept is sound --- if we are not to be satisfied with the radar horizon range [illegible] from the shipboard masts, we must send our long range search radar aloft in an aircraft to realize a greater horizon."

In the past approximately fifteen AEW missions have been conducted in conjunction with the 646th. Important results to note were:

"At the beginning of the exercise HF communications were poor due to the use of local net frequencies which were not proper for the conditions that existed. This was resolved by the use of additional frequencies assigned for AEW missions. Since then HF communications have been very successful."

VHF communications, due to the fact that AEW are required to fly at an altitude so low as to make reception poor, have been unsatisfactory.

In many instances a very short time elapsed between the AEW plot and the radar plot of the 646th. This indicated that the AEW aircraft were operating at a range which precluded any real early warning.

Navigation difficulties caused several unnecessary scrambles. At times the AEW plots and the 646th stations' radar plots varied quite a bit in range and azimuth. This evidently was due to the AEW aircraft not locating their position accurately. In other instances very good plots

0073

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

have been reported by the AEW aircraft, these plots being within three miles of actual radar plots of the GCI/th station, the navigation in these cases evidently being much better.

In conclusion, the squadron stated that at a distance of 165 nautical miles from the installation and with a radar range of 70 nautical miles, the AEW aircraft obtain the same search coverage on tracks above 14,000 feet, but this position increases range on tracks below 14,000 feet by approximately fifty miles.

Proposed Operating Doctrine for use of U. S. Navy Multi-engine AEW/GCI aircraft in joint operations with USAF Air Defense Command.

The joint exercises of the past year by the 24th Air Division and Airborne Early Warning Squadron TWO (VW-2) (formerly Air Development Squadron FOUR (VX-4), have proven the advantages of Air Early Warning units in supplementing continental defense facilities. The AEW aircraft is capable of providing extended range of coverage, detection and reporting of low altitude aircraft, and interception of aircraft. AEW has made possible successful interception of aircraft not tracked by the ADDC, using target information furnished directly by the AEW aircraft.

In August 1952, a proposed operating doctrine, designed to crystalize information gained and procedure developed during these combined missions was prepared by

SECRET
SECURITY INFORMATION

0074

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

AEW Squadron TWO and the 26th Air Division for submission to the Chief of Staff, U. S. Air Force. *42

> "The basic principles of the doctrine are three. First, to supply a fundamental plan for successful integration of Navy multi-engine AEW aircraft within the Eastern Air Defense Force. This will allow implementation of the Aid Defense System as desired for both actual and training purposes. Second, to provide a simple and clear doctrine that may be used by untrained or inexperienced personnel in the future and allow them to profit from the experience gained by past exercises. Third, to insure the integrity and security of the Air Defense System, with regard to AEW operation."

The proposal was divided into two major sections. First, procedures for use employing equipment presently available, and second, recommendation for improved equipment.

Further comments on the proposal were listed by the Director of Operations of this Division, Colonel Dewitt S. Spain, in a letter written the first week of October 1952. *43

Chief among the recommendations in this letter were that prior to designating the altitude which will be a limiting factor in range with AEW aircraft, that adequate performance tests be carried out utilizing all available anti-cluster circuits, so that specific knowledge will be obtained regarding the effects of sea return under different sea conditions and altitudes.

Secondly, since the basic purpose of AEW and picket vessel is to extend the range of shore based stations in

---

*42 See AEW Squadron TWO Ltr dtd 26 Aug 52, subj: "Proposed Operating Doctrine for use of U.S. Navy Multi-engine AEW/CIC aircraft in joint operations with the USAF Air Defense Commands" included in appendices (s.d. [illegible]

*43 [illegible] Ltr [illegible] dtd 6 Oct 52, subj: "Proposed Operating Doctrine for use of U.S. Navy multi-engine AEW/CIC aircraft in Joint operations with USAF Air Defense Commands." [illegible] of, "included in appendices (s.d. [illegible])

0075

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

a seaward direction, it is felt that the doctrine should not recognize a requirement for the AEW aircraft to patrol inside of established radar coverage for navigation purposes. It should rather point out the need for adequate navigation purposes, and communication to allow the barrier to be placed in the most effective location. Anything short of this should be specified as a temporary expedient which detracts from maximum utilization of AEW.

It is recommended that a test of radio-teletype be pushed as a primary means of communication, the obvious advantage being that receivers will obtain the benefit of full signal strength available from the transmitter, and that such intensity of signal is not dependent on the degree of modulation.

With these recommendations included, a new proposed operating doctrine was submitted at a conference at this headquarters on 10 December 1952. Attending were representatives of the Air Defense Command; Eastern Sea Frontier and Airborne Early Warning Squadron TWO.

On December 17 a letter of transmittal was written by the Commanding Officer, AEW Squadron TWO (VW-2) to state that operating procedures developed during the past year of participation in Air Defense exercises be forwarded to USAF Headquarters with the recommendation that the contained procedures be incorporated into a joint doctrine covering the use of U.S.Navy Multi-engined aircraft in operations with USAF Air Defense Commands. *44

*44 See AEW Squadron TWO Memorandum dtd 17 Dec 52, Subj: Proposed Operating Procedures for U.S.Navy Multi-engined AEW/CIC Aircraft in joint operations with USAF Air Defense Commands; change in letter of transmittal, not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANTENNAS FOR PICKET VESSEL COMMUNICATION

Covering a two day period from 1200Z - 2400Z, 30 July and 1200Z - 2400Z 31 July, five ACAW squadrons of this division (646th, 647th, 770th, 771st, 773rd) took part in a communications test from picket vessels to shore stations in an effort to determine the most effective antenna type, antenna height, method of antenna tuning, and calibration of station equipment for frequencies in use. Also an attempt was made to correct weaknesses uncovered in past tests. *45

The exercise resulted in a feeling by the 770th ACAW Squadron of this division that non-directional antennae would be the best for picket vessel communications. This is apparently borne out by the results obtained with "whip" antennae. *46

Utilizing the BC-610-E transmitters and SP-600-JX receivers the 770th tested the following types of antennas: Long wire, end fed inverted L, doublet, and 22 ft. "whip" transmitting. Receiver antennas were the double doublet type.

Many frequency changes were effected during the test periods. Using the doublet and whip antennas, the time consumed in changing settings, coils and loading the transmitter averaged about five minutes. Inasmuch as the

*45 See 26th AD(D) Ltr ADOCE 376.3 dtd 24 Jul 52, Subj: "Communications Test, Picket Vessel Nets," included in appendices (S.A.[illegible])

*46 See 770th ACAW Ltr ACFCOM 376.1[illegible] dtd 4 Aug 52, Subj: "Summary Report on Picket Vessel Mission", not included in appendices.

0077

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

long wire antennas are very difficult to tune, frequency changes took much longer.

Contact was established and maintained on all types of antennas used. The contacts using the long wire antennas were weak but readable. Contacts using the doublet and "whip" antennas were usually loud and clear, with some very loud and clear checks reported. Height of the long wire antennas is approximately fifty feet and the installation is of a nature that they cannot be readily raised or lowered to test the effect of different heights. The long wire antennas were tuned with the modified tuning unit incorporating the large tuning condensers. The doublet antennas were used without a tuning unit and the "whip" antennas were used with an unmodified tuning unit. The majority of operations on both nets which the 770th used were the day primary frequencies but loud and clear checks were obtained on all frequencies at various times.

TEST OF DIVISION HF RADIO BACK UP NETS

The 26th Air Division conducted a communications test on the 16th of July 1952 covering the HF radio back up nets within the division. *47

---

*47 See 26th AD(D) Ltr ADOC 3d 6 August 1952 Subj: "Report of Communications Testing Period" included in appendices (S.A. [illegible])

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Five nets out of twelve passed traffic during the 24 hour period. These nets are as follows:

(1) Net 1 - Fair
(2) Net 3 - Fair
(3) Net 6 - Fair-poor
(4) Net [illegible] - Fair-poor
(5) Net 11 - Good

Nets 1 through 11B and Net 6 (2nd AD) were reported as active. Five nets: [illegible] and 11 were inoperative during the entire 24 hour test period for reasons ranging from negative contact due to heavy interference (both man-made and natural) to equipment failures. The latter cause of outage accounted for approximately [illegible] of the total outage of equipment in use in the active nets.

The 753rd [illegible] Squadron and the 776th [illegible] Squadron stated that more frequent exercises be held [illegible] [illegible] type of [illegible] net [illegible] not [illegible] as [illegible].

[illegible] reported Net 11 inoperative during the test period. [illegible] net for [illegible] (30th Air Division)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

and the 126th and 127th Fighter Squadrons are the other stations in this net. In this instance closer coordination during communications test between adjacent divisions is equally imperative for overlap telling purposes.

Where voice communication is not fully readable for reliable reception, it was suggested that the Net Control Stations will designate A-1 emission to be used throughout the net until conditions are deemed favorable by the Net Control Station for voice communication.

It is hoped that the proposed COI - [illegible] series, net and frequency revisions, will alleviate the complaints stemming from improper antenna orientation and equipment utilization.

HF-P/P COMMUNICATIONS EXERCISE

All nets of HF-P/P communications system in the 26th Air Division were part of an EADF system wide communications exercise on 15 October 1952.

The HF-P/P nets are set up as the back-up system to the primary communications of wire used throughout this command.

The following is a summary of operations conducted on each net. *48

Net B - Frequency: Day channel 71; Night Channel 23

Units	Location
Hq EADF (RCS)	Stewart AFB, New York
Hq 26th Air Div	Roslyn, New York
Hq 4707th Def Wg	Otis AFB, Mass.
Hq 4709th Def Wg	McGuire AFB, New Jersey
Hq 4710th Def Wg	New Castle AFB, Del.

*48 See 26th AD(D) report ADOCE 376 dtd 30 Oct 52, subj: "Summary Report of Communications Exercise (RCS:EADF-H2) Included in Appendices (s.d. #33)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

A total of 43 dummy messages were passed during the testing period. There was no outage time attributed to equipment failure. No 26th Air Division made no contact with Hq 4707th Defense Wing throughout the test period. The reason for this, and on 80% outage with Hq 4710th Defense Wing is unknown.

Net 1 - Frequency: Day channel 64; Night channel 35

Units	Location
Hq 26th Air Div (ACS)	Roslyn, New York
773rd ACGW Sq	Montauk, New York
45th Ftr Intcp Sq	Suffolk County AFB, N.Y.
137th Ftr Intcp Sq	White Plains, N. Y.
74th Ftr Intcp Sq	Suffolk County AFB, N. Y.

A total of 107 messages were passed between stations in this net. No outage time due to equipment failure. No contact was made with 137th Ftr Squadron with reason unknown.

Net 2 - Frequency: Day channel 78; Night channel 64

Units	Location
Hq 26th Air Div (ACS)	Roslyn, New York
648th ACGW Sq	Benton, Penna.

A total of 11 messages were passed during the testing period. Outage time of 50% of test period attributed to moderate to heavy QRM.

Net 3 - Frequency: Day channel 79; Night channel 31

Units	Location
Hq 26th Air Div	Roslyn, New York
647th ACGW Sq	Manassas, Va.
772nd ACGW Sq	Claysburg, Penna.

A total of 75 messages were passed during the testing period. All outage time logged on this net was due to heavy QRM.

Net 5 - Frequency: Day channel 69; Night channel 7

Units	Location
646th ACGW Sq	Highlands, N. J.
773rd ACGW Sq	Montauk, N.Y.
Hq 4707th Def Sq	McGuire AFB N.J.

SECRET

0081

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

A total of 35 messages were passed during the testing period. The reason for outage between 646th ACW Sq and 77nd ACW Sq is unknown. No equipment failure occurred during this period.

Net 6 - Frequency: Day channel 75; Night channel 46

Units	Location
646th ACW Sq	Highlands, N.J.
648th ACW Sq	Benton, Penna.
656th ACW Sq	Saratoga Springs, N.Y.

No contact was made on this net during the testing period. The reason for the outage is unknown, according to reports submitted by the stations concerned.

Net 7 - Frequency: Day channel 68; Night channel 21

Units	Location
646th ACW Sq	Highlands, N.J.
770th ACW Sq	Palermo, N. J.
46th Ftr Intcp Sq	Dover, Del.
Atlantic City NAS GCI	Atlantic City, N. J.

A total of 14 messages were passed during the testing period. Outages between the 770th ACW Sq, 646th ACW Sq., and 14th Ftr Sq were due to the fact that the 770th ACW Sq operating personnel were being used in a maximum effort in picket vessel operation.

Net 8 - Frequency: Day channel 54; Night channel 29

Units	Location
646th ACW Sq	Highlands, N.J.
771st ACW Sq	Ft. John Custis, Va.
119th Ftr Intcp Sq	Newark, N. J.
4710th Def Wg	Newcastle AFB, Del.

No traffic passed during this testing period and the reason for outage is unknown.

Net 9 - Frequency: Day channel 55; Night channel 45

Units	Location
770th ACW Sq	Palermo, N.J.
647th ACW Sq	Manassas, Va.
771st ACW Sq	Ft. John Custis, Va
104th Ftr Intcp Sq	Baltimore, Md.

0082

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

A total of 79 messages were passed during the test period. Approximately 11 hours outage attributed to transmitter failure at 771st ACW Sq.

Net 10 - Frequency: Day channel 6[illegible]95 kc; Night channel 63

Units	Location
[illegible]7th ACW Sq	[illegible], Va.
[illegible]th Ftr Intcp Sq	Andrews AFB, Md

No contact was established between [illegible]th ACW Sq and 1[illegible]1st Fighter Squadron during the testing period.

Net 11 - Frequency: Day channel 60; Night channel 16

Units	Location
64[illegible]th ACW Sq	Benton, Penna.
77[illegible]d ACW Sq	Clayspurg, Penna
330th Ftr Intcp Sq	Stewart AFB, N.Y.

A total of 1[illegible] messages were passed during this period. Thirteen hours of outage between the two stations was logged while operating on the night frequency. Approximately two hours outage was due to [illegible].

Net 15 - Frequency: Day channel

No contact was established between 770th ACW Sq and 151st AAOD at Swarthmore, Pa. Lack of equipment and personnel at the AAOD appears to be the reason for failure to establish contact.

Net 6 - 32d Air Division - Frequency: Day channel 69; Night channel 8

Units	Location
76[illegible]rd ACW Sq	Shawnee, New York
[illegible]th ACW Sq	Benton, Pa.

A total of [illegible] messages were passed during the test period. Outage time was attributed to [illegible] at the 76[illegible]rd ACW Sq and [illegible] prevailing [illegible] conditions. Approximately [illegible] hours of outage was logged.

Net [illegible] - [illegible] Air Division - Frequency: Day channel [illegible]; Night channel [illegible]

0083

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Units	Location
762d [illegible]	[illegible] Truro, Mass.
654th [illegible]	Brunswick, Maine
773rd [illegible]	Montauk, N. Y.
Hq 4707th Def Wg	Otis AFB, Mass.
Jamestown [illegible]	Jamestown, R. I.
152nd Ftr Intcp Sq	Hillsgrove, R. I.

A total of [illegible] messages were passed during this period. Outage was due to Hq 4707th Defense Wing not being operational and heavy [illegible].

Equipment failures [illegible] very little effect on the outage time and were held at a minimum. Lack of sufficient equipment at the various sites hindered operations more so than operational breakdowns.

Commercial power was used throughout the test period and at no time was emergency power put into use.

Equipment used throughout the testing period consisted of:

SP-600 Receiver	BC-779 Receiver
BC-342[illegible] Receiver	BC-610E Transmitter
T4/FRC Transmitter	BC-191 Transmitter
AN/ART-13 Transmitter	

In summarizing the evaluation reports from the squadrons concerned, it is noted that the opinion prevails that approximately 70 - 75% of the traffic can be passed by radio in the case of wire failures. It is also felt that with additional operating personnel and new equipment, this efficiency would improve considerably.

Failure of organizations to submit detailed and accurate reports regarding circuit outages made staff evaluation of the

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

system this determination of required action difficult. This Bureau is making every effort to insure that adequate reports are submitted by subordinate organizations.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY INFORMATION

CHAPTER IV
"SUPPLY AND MAINTENANCE"

NEED FOR AB-199 ARCTIC TOWERS IN AC&W SQUADRONS

It had been the desire of the 26th Air Division for some time to acquire arctic type towers and radomes for those squadrons who operated up to six months of the year with freezing temperatures. With present type towers, operations were being hampered continuously during these months and it was extremely difficult and dangerous to perform daily maintenance and to repair equipment in time of a breakdown.

USAF and ADC, due to budgetary limitations were forced to limit allocation of arctic type radomes to those locations within their command at which it was absolutely essential to operation. Consideration at these commands was being given to modifying the AN/FPS-3 to incorporate a rotating joint and permit the removal of r.f. components from the pedestal and their subsequent installation in a room on or adjacent to the tower, also the possibility of modifying existing temperate type towers to enable radome installation there on. *49

*49 See USAF 1st Ind AFOAC-E/A dtd 18 Sept 52 Subj: "Requirements for Additional Arctic Type Towers and Radomes - Permanent AC&W Programs" Basic letter from ADC to USAF dtd 20 Jun 52 included in appendices (s.d. #34)

SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

EADF informed us that complete information was needed if we were to be considered eligible for the limited AB-199 Arctic Towers available.*50

The 772d AC&W Squadron at Claysburg, Pa. was of main concern to this headquarters. No information was available regarding actual weather conditions or actual dates of outages at this location last winter. The squadron concerned attempted to operate on AN/TPS-1B through the months of December 1951, January and February 1952. The actual installation of the AN/FPS-3 occurred in January and February of this year and the site did not enter the net until mid-March 1952.*51

Information available from personnel at the site during last winter indicates that weather conditions due to ice, high winds, extreme cold, etc., prevented proper maintenance of components on the tower at least two days of every week. Only evidence substantiating this statement was an unsatisfactory report submitted

*50 See EADF 1st Ind EAOCE-E 676.3 (25 Sep 52) dtd 2 Oct 52 Subj: "Requirements for Additional Arctic Type Towers and Radomes - Permanent AC&W Program" included in appendices (s.d. #35)

*51 See 26th AD(D) 2d Ind ADMAT 676.3 dtd 3 Oct 52 Subj:"Requirements for Additional Arctic Type Towers and Radomes Permanent AC&W Program" included in appendices (s.d. #36)

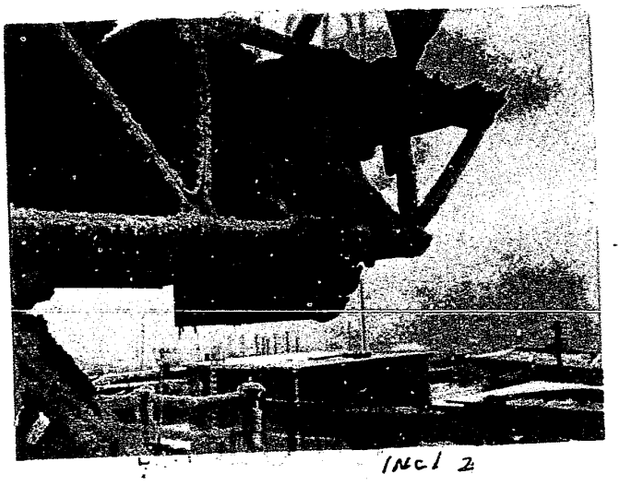
0087

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

on extreme icing conditions encountered at the site. *52

Photograph of equipment concerned:



Incl 2

During the winter months, the 772d AC&W site is almost constantly covered by low hanging clouds and experiences constant winds. These conditions tend to increase icing on the tower and components.

This site is experiencing difficulty with their temperate type tower in that they cannot maintain an adequate level. From last winter through the present, they check and adjust the level of the tower components on an average of approximately once every two weeks.

*52 See 772d AC&W Squadron Unsatisfactory Report dtd 21 March 52 Subj: "T/C Radar Set AN/FPS-3 Serial #37" included in appendices (s.d. #37)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

They believe this is the result of extreme ice and winds suffered by the equipment during the last winter. No satisfactory method has as yet been found to correct this difficulty.

These facts were forwarded to EADF headquarters on 3 October 1952. On 1 December this Division was informed that Air Materiel Command had been directed to ship AD-199 arctic towers to the 772d AC&W Squadron and 773rd AC&W Squadron. No information was available as to shipment date.*53

AN/TRC-1 RADIO SETS

This division was informed on 12 July 1952 by EADF Headquarters that six AN/TRC-1 radio sets were marked for shipment to this headquarters. They further directed that we take action to determine the circuits on which the equipment will be employed, and that steps should be taken to find usable frequencies in the 70-100 mc band.*54

This was accomplished by the Communications and Electronics Section which selected three nets for the equipment:

---

*53 See ADC Ltr ADMEL-2 413.44 dtd 21 Nov 52 Subj: "Allocation of AD-199 Arctic Towers to ADC AC&W Activities" included in appendices (s.d. #39)

*54 See EADF Ltr EAOCF-C 476.3 dtd 12 July 52 Subj: "AN/TRC-1 Radio Sets" included in appendices (s.d. #39)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Net #1 - P-9 to Fort Wadsworth AAOC, Brooklyn, New York.
Net #2 - P-55 to 121st Ftr Sq, Andrews AFB, Washington, D. C.
Net #3 - P-45 to 118th Ftr Sq, Suffolk AFB, New York.

These three nets were already in operation on a H/F net and the changeover would result in an additional VHF net.

In preparation of this material, difficulty was found in the selection of frequency assignment for the nets, plus the fact that interference of TV Channel 4, would require modification on the proposed frequencies.*55

Nevertheless the request for frequency assignment and required data was forwarded to EADF. In meetings at this headquarters between Colonel Nelson B. Brooks, Director of C&E, and Mr. Frank Colonna, RCA Technical Representative, the AN/TRC-1 sets were discussed and found to be unneeded by this division. The 3 nets selected would derive no benefit from their installation.

Mr. Colonna telephoned Captain Vick of EADF and explained that the sets would be of no additional value to this division and if they were needed more urgently elsewhere, this division would concur with their re-assignment.

---

*55 See 26th AD(D) 1st Ind AAOCE 676.3 dtd 30 Jul 52 Subj: "AN/TRC-1 Radio Sets" included in appendices (s.d. 40)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Captain Vick stated that the 30th Air Division could utilize the sets to advantage and therefore the shipment was diverted to that division and the action on the request for frequencies was cancelled.*56

*56 See EADF 2d Ind FAGGR-C 676.3 dtd 18 Aug 52 Subj: "AN/TRC-1 Radio Sets" included in appendices (s.d. 41)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CHAPTER V
"MAJOR PROBLEMS"

"HOW ARE WE DOING?"

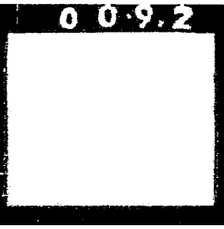
"How Are We Doing?" was a letter written by the Commanding General of the 26th Air Division, Brigadier General Russell J. Minty on 8 November 1952. The letter was not a complete discussion of our air defense operation, but did call attention to two areas where the General felt improvement was needed. *57

He broke the judging of our Air Defense Forces into three phrases. Phase one is the action taken to detect and identify the first hostile aircraft. Phase two is the action taken during the period from the identification of the first hostile aircraft until that time when the Air Defense Forces are augmented by additional personnel, aircraft and other equipment, in accordance with our plans. Phase three is the period after this augmentation has been completed.

At any particular time the action taken in phase one will depend largely upon the action which we plan to take tonight or tomorrow and our answer to "How Are We Doing?" in Phase one should be evaluated on the basis of those things which we now have in effect. Perhaps the weakest point in our present operation is our inability to turn away from probable A-Bomb targets an unknown which appears

*57 See 26AD(D) Ltr ADACG 373.1 dtd 8 Nov 52 Subj: "How Are We Doing?" included in appendices (s.d.#42)

0 0 9 2



THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

to be one of our B-29's, but on which we have no flight plan information. The General commented:

> "I do not believe that the Air Defense Command can be forgiven if it detects such an unknown and follows it in to such a target as New York City without taking any action against it prior to its dropping an atomic bomb."

This problem was more thoroughly discussed and partial solutions proposed in letter from this Headquarters, subject: "Preventing TU-4 Type Bombers from Reaching a Critical Target Before Identification" dated 14 May 1952.*58

The recommendation of the General was that action be taken making it possible to divert B-29 or B-50 type aircraft wherever they are detected enroute toward a probable A-Bomb target, provided we have not been able to properly identify them. This includes provisions to require them to land at a designated airport if necessary for identification. In connection with this procedure, decision must be made that we will shoot if necessary to force the airplanes into this diversion.

Phase two involves the actions necessary to change our air defense operation from a limited peacetime status to maximum wartime effort. These actions, in addition to the normal surveillance, identification, etc., at a typical Air Defense Direction Center, would be approximately as

*58 See 26th Air Division History 1 February to 30 June 1952 supporting Document #30.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

follows:

a. Interception and destruction of identified hostiles.
b. Alerting active fighter units, AAA units, and filter centers.
c. Alerting own base.
d. Calling augmentation crews.
e. Integration of augmenting personnel into existing crew.
f. Federalizing Air National Guard Squadrons.
g. Alerting Navy air and radar units.
h. Setting up procedures to identify all air traffic.
i. And reporting actions taken and status of various units involved.

It is obvious that if we determine the size of our crews on duty in these centers, based only on the ability to handle and identify the peacetime traffic, that those crews will not be sufficiently large to take on the additional duties of combat action, calling in additional people, issuing various ways as outlined above. Our present manning, said the General, is based upon the needs for phase one and not upon the needs for phase two. Letter from this headquarters, subject: "Aircraft Control and Warning Personnel Standards", dated 8 December 1951, reference PO&T 322, outlined briefly the need for controllers in an ADCC based on continuous manning for phase two.*[59]

The General felt that the manpower planning for each of our centers be based upon the manpower required during

*59 See s.d.#53 this appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

the early stages of Phase two. There must be people on duty in our centers to carry out all the functions which cannot wait for the arrival of augmentation personnel.

It appeared to General Minty that phase three had been given relatively a great deal more consideration in our planning than have Phase one and Phase two, and as a result he believed we are better prepared to take care of Phase three than either one or two. He also noted that if the enemy decides upon an all-out surprise attack with all A-Bombs to be dropped almost simultaneously, we may never have a Phase three of importance.

Major General Morris W. Nelson, Commanding General of NADF, in answering General Minty's letter stated he agreed in principle with the recommendation concerning identification of aircraft. He also pointed out that when the multiple corridor system is in operation, a more positive identification of aircraft will be possible. Also, ADC has requested all agencies, military and civilian, to file flight plans for multi-engine aircraft on flights north of the 37th parallel. Neither of these are the final answer to the identification problem, though, and General Nelson indicated that he was sending a copy of General Minty's letter to General Benjamin W. Chidlaw, ADC Commander, with his approval of the ideas and

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

recommendations expressed in the letter.

A new T/O authorization policy for AC&W units was being formulated by USAF, with ADC assistance, which was more realistic in its approach to individual assigned operational functions, administrative problems, and support situations. General Nelson added that he believed that the new authorization policy will place EADF in a better position to accomplish the operational requirements which are similar to those outlined by General Minty for Phases 1 and II. *60

AIR DEFENSE SYSTEMS PLAN

As the 26th Air Division progresses in scope and experience, we are naturally finding numerous fallacies in our operation and are aware that there is much room for improvement in the whole program.

In November of 1951, General Minty had written a letter to EADF containing requirements for improvements in equipment and utilization of the same in our air defense system which he felt were needed immediately. *61 Many of these difficulties pertaining to identification,

*60 See EADF Ltr EACOT-A 381 dated 3 Dec 52 Subj: "(Uncl) Improvements Under Advisement in Certain Critical Areas of Importance" included in appendices (s.d.#43)

*61 See 26th AF(D) Ltr DO 381, Subj: "Requirements, Air Defense" dtd 17 Nov 51, included in appendices of 26th AF(D) History 1 Oct 51, 1 Feb 52.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Air Traffic Altitude Evaluation, and Communications have now been improved.

A request in June of this year from higher headquarters for submission of an Air Defense Systems plan for the EADF area by our division gave us the opportunity to comment not only on the favorable factors of our present defense system, which we feel to be basically sound, but to list recommendations and improvements applying to our presently operating system. *62

Let's begin with some operational difficulties to which recommendations were directed.

Due to delays involved in controlling all scrambles from the control center, this headquarters envisions fighter squadrons being scrambled and controlled by direction centers under the supervision of the control center. It is recognized that there are occasions when the control center must allocate and coordinate scrambling of fighters, but this authority is inherent in its supervisory capacity and can be exercised whenever necessary.

The control center should retain responsibility for red, yellow and white alert decisions, and means for dissemination of air raid warnings, control of air traffic and electro-

*62 See 26th AD(D) ltr ADADC 381 dtd 7 Jul 52, Subj: "Air Defense Systems Plan" included in appendices (s.d.#44)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

magnetic radiations, and other functions encompassing areas involving several direction centers.

SURVEILLANCE

The transmission of the surveillance picture between sub-sectors and/or sectors should be through direct communication between adjacent AC&W Squadrons. The communications between control centers should be established only for liaison and coordination purposes.

MANNING

All stations should be manned and equipped to provide surveillance, identification, and control capability. The manning for each function may, however, be modified according to the requirements of individual stations. Stations P-30, P-55 and P-63 do not currently require identification capability; however, the capability will be required and used when security control of air traffic is implemented or when identification of internal traffic is introduced.

All stations should eventually be equipped with VHF/DF and passive detection equipment, and it is critically needed now at coastal stations (P-9, P-45, P-54 and P-56) to improve perimeter identification and surveillance.

There is a need for each station to be continuously manned with sufficient officer personnel to assure the station's capability to perform its required functions

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

immediately on the identification of the first hostile aircraft. These functions are broken down into:

Surveillance and Identification - The location and identification of unknown or hostile aircraft.

It is believed that these are actually separate functions, but they may be combined during the initial stages of an attack for the time it takes to call up emergency crews.

Control - The control of fighters to intercept and destroy unknown and hostile aircraft.

Supervision - The coordination of the efforts of the station and notification, alerting and coordination of other forces available to the station.++

The importance of this function varies with the number of such forces assigned to the station.+

COMMUNICATIONS

A communications plan to meet present or future requirements for air defense must contain a basic communication system, plus an adequate backup to this system. The communication equipment required for this plan must be able to provide positive communications utilizing any or all of the following facilities:

Low Frequency Radio	Microwave Radio
High Frequency Radio	Teletype
Very High Frequency Radio	Radio Teletype
Ultra High Frequency Radio	Telephone

+ See 26th AD(D) Ltr AFAK 381 dtd 7 Jul 52 Subj: "Air Defense Systems Plan" included in appendices (s.d.744, pp.2)

++ Forces such as GCC, Navy Fighter, Navy Radar, ANG Fighters, AAA

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

This headquarters favors use of microwave radio for the basic communication system between ground points. It is felt that the present telephone system for ground-to-ground communication is satisfactory but the high frequency radio backup is entirely undependable. It appears probable that the backup for a telephone system will have to be microwave in order to have the required reliability. Since the installation of this microwave backup would be quite expensive, it seems more economical to use microwave as the primary communications and the less expensive TWL telephones for backup. It is also understood that microwave communications is more secure, and less subject to sabotage than telephone.

The recommendations by this headquarters for the most effective means of communications for our various needs follows:

In the reporting and telling between ADDC's and ADCC, microwave should be used with a backup TWL telephone network to be used in the event of radio failure.

The same microwave set should be utilized for contact from ADC Director to Fighter Operations, with the TWL telephone network in the event of radio failure.

Inasmuch as the aircraft scramble is vitally important, it is felt that it should be further backed up by HF radio

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

to be used as a last resort. Good frequency assignment concurrent with radio propagation prediction planning would insure contact at a time when most needed.

AIRCRAFT CONTROLLING FROM ADDC

The primary means of communications from ADDC to aircraft should be VHF and UHF, as that is the standard equipment for aircraft. Where aircraft are used, equipped with either VHF or UHF, communications should be arranged to have simultaneous transmission on the VHF and UHF control frequencies.

As an alternate control means, broadcast control should be used utilizing a frequency between 100kc and 1700kc. Reception in the fighter aircraft is possible by use of the AN/ARN-6 which is standard equipment for fighters. Since a transmitter in this range is not standard for fighter aircraft, control would be blind so far as the director is concerned. Broadcast control transmitters should be of sufficient power to minimize possible jamming from aircraft or other sources. Use should be made of the high power commercial broadcast stations, by having them keyed from the ADDC by microwave link. If commercial broadcast stations cannot be used, high power transmitter should be located at the ADDC. Transmitters should be multi-channel type to facilitate passing of aircraft from

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

one control sector to another. Since it is believed that VHF and UHF control is most susceptible to jamming, it would therefore become the weakest link in the AC&W system. Broadcast control or an alternate directing method cannot be over-emphasized. The best equipment available should be utilized for this purpose.

REPORTING FROM PICKET VESSELS

For speed and dependability in reporting Radio Teletype should be the primary method. It would not require the number of repeat transmissions that has been experienced by voice transmission and it is much faster than the C.W. operation.

In the event of equipment failure or jamming, Radio Teletype should be backed up by HF Radio with the backup by voice transmission. C.W. operation, although slower could be used as a last resort. Adequate frequencies should be assigned to insure usable frequencies consistent with frequency propagation predictions. This method would also apply as the most advantageous for reporting from AEW aircraft.

AIRCRAFT CONTROLLING FROM PICKET VESSELS

VHF/UHF should be used for the primary means of communications with a backup of broadcast control. The same conditions which would apply to aircraft controlling from

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ADDC are also applicable to Picket Vessels.

For Aircraft Controlling from AEW aircraft, VHF and UHF are advisable with the broadcast control backup, with the exception that the AEW could not utilize a high power transmitter due to technical and installation difficulties.

AACC Telling

With a TML telephone in the event of radio failure, Microwave radio should be the primary method of telling information AACC's. As a protection against TML telephone, HF radio could be used as a last resort.

Microwave should also be established between fighter center and ADDC with the TTL backup.

TACTICAL TELETYPE AND CRYPTO

In order to pass any type of directive or classified message Landline teletype nets should be established at all AC&W stations. All stations should further be equipped with on-line cryptographic facilities. A backup for Landline teletype is advisable.

In addition to the previous mentioned communications equipment, certain other types of electronic equipment, other than Air Force radar, are essential to the Air Defense System. These are:

IFF Identification
Passive Detection
VHF-UHF/DF
Radars from other services

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

IFF identification, Mark X or better is used by radar station to transmit and receive a signal to and from an aircraft or other object to aid in identifying the object. With use of coder head, combinations of signals may be used, that would lessen an enemy's chance of breaking code.

The advantage of Passive Detection is its ability to intercept signals emitted by airborne, shipborne etc., radar or radio equipment. Triangulation by two or more stations permits location of object carrying radar. Primary communications by passive detection stations (usually located at a radar) is by microwave, backed up by TTL telephone.

As an aid to the identification problem and to act as a homing device for our aircraft, some type of DF, direction finder VHF/UHF is essential. Triangulation by two or more stations permits location of vehicle emitting the transmitted signal.

Upon agreements with the other services, periodic tests should be held at which time radar information is exchanged via communications network.

Radars of other services located within the overlap range of our radar stations would not be required for our use; only those radars covering areas which our radars do not cover, would be needed. In the event of failure of any

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

of our radars, due to enemy or natural causes, use should be made of the closest radar of the other service. Close liaison would be required to work out inter-service procedures for best accomplishing the air defense of our area.

PROCEDURES FOR COORDINATING CHAFF OPERATIONS

Referring to a USAF letter dated 1 July 1952 and outlining procedures for coordinating Chaff Operations, this Division felt that the outlined procedures "are hazardous to sound air defense, in that they allow an enemy a means for eluding or confusing the Air Defense System." *63

The USAF procedures were such that a formation of enemy aircraft which was able to penetrate our Air Defense perimeter without detection could, while airborne and still at low altitude, request and obtain a Stream Clearance. They could then start a chaff drop and climb, and quite effectively conceal the fact that there was a formation of aircraft climbing to bombing altitude. The information regarding the chaff drop would be given to the Air Defense System through CAA, but would be considered only a training mission.

It was the suggestion of this division that any aircraft anticipating chaff operation file an IFR or VFR

*63 See 26th AD(I) Ltr ADAIC 676.3 dtd 26 Aug 52 Subj: "Procedures for Coordinating Chaff Operations" included in appendices (s.d.545)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

flight plan before take off, and that no Stream Clearance be granted unless such flight plan had been filed and received. These flight plans and subsequent position reports should be passed to the Air Defense Control Center concerned by the CAA.

EADF felt likewise about this matter and added the fact that:

> "The request for "Stream Clearance" for chaff drops.....falls in the same category as flight plans filed in the air. The air defense system is built around an acceptance of flight plans as adequate identification. As long as flight plans filed in the air are accepted and passed to the radar units, the possibility of the enemy filing a flight plan and proceeding unmolested to the target exists."*64

Headquarters ADC agreed that EADF and the 26th Air Division's concern over filing of flight information was well taken. The fallacy of accepting airborne flight plans, either civil or military, they said, has been recognized for some time. Compromise results will be forthcoming, they announced, in the Revised AFR 60-22, "Recognition of Military Aircraft in Certain Areas" which will prohibit ADIZ penetration flight plans being filed while airborne as well as prohibiting flight plan changes while airborne to penetrate an ADIZ. CAA part 620, "Security Control of Air Traffic" will urge civil pilots to file ADIZ penetra-

*64 See EADF 1st Ind EAOOT-A 676.3 dtd 5 Sep 52 Subj: "Procedures for Coordinating Chaff Operations" included in appendices (s.d.46)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

tion flight plans prior to departure.

"The USAF letter outlining chaff procedures is considered", says ADC, "as supplemental instructions to ADCR 50-8, 'Standing Operating Procedure for ADC AITC ECM Training Missions', and ADCR 51-4, 'Standing Operating Procedures for SAC-ADC Interceptor Bomber Training'."

The procedures outlined in these regulations provide for:

a. Alerting information to ADC, ADCC and interested radar installations by unit commanders of aircraft. In the case of ADC ECM aircraft, complete coordination with site commander is a prerequisite before ECM training mission can be carried out.

b. Filing of a flight plan through CAA.

c. Authentication where any doubt exists as to the identity of either party.

d. Establishing communications between jamming aircraft and ADDC concerned before and during ECM mission on frequency specified in related regulations.

The provisions of existing regulations pertaining to ECM operations provide as much security as is possible in the interim, concluded ADC. *65

IMPLEMENTATION OF EADF SOP 55-25

While this headquarters was in the process of complying with the provisions of EADF SOP 55-25, 20 November 1952,

*65 See ADC 2nd Ind ADOOT-C 676.3 dtd 3 October 1952 Subj: "Procedures for Coordinating Chaff Operations" included in appendices (s.d.#47)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

General Minty indicated serious objections to the provisions of this SOP, based on a reduced Direction Center capability during an emergency.*66 Paragraph 4, of the SOP was responsible for the General's concern. It requires the release of one PPI scope and one Video-Mapping unit to AAA personnel when control of aircraft is involved. None of the Direction Centers under this division have equipment assigned to the extent that will permit release of the specified items without a reduced defense potential.

Most critical with regard to PPI scopes in the condition at 77Oth AC&W Squadron, although the difficulty applies to the other Direction Centers, but not to same extent because of differences in the available equipment.

Palermo has six PPI scopes. One of these is required to be utilized exclusively with the AN/FPS-5 height finder. Two are required for search, one long-range and one short range. If the fourth one is turned over to the anti-aircraft personnel, that would leave only two PPI scopes for control use in an emergency. One of these is normally located in the maintenance room and would have to be moved to the control room after the emergency had been

*66 See 26th AD(D) Ltr ADADC 300.8 dtd 5 December 52 Subj: "Implementation of EADF SOP 55-25" included in appendices (s.d. #48)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY INFORMATION

declared. As drastic reductions of potential of the 770th AC&W Squadron in order to provide the AAA with these critically needed PPI scopes is not believed justified.

As the 647th AC&W Squadron has two Video-Mapping units, the General's following remarks do not apply to that squadron, but do apply to all other Direction Centers. The Direction Centers are still charged with the recovery of fighters. At Dover, New Castle and Suffolk Air Force Bases there is no GCA available and the GCI must control the fighters until they are turned over to the control tower. At Andrews and McGuire GCA is available but in case of GCA failure an emergency GCI approach is needed. All of the Direction Centers are basing their recovery plans and GCI approaches on the use of Video-Mapping Units.

It is believed that the antiaircraft could use a fixed scale with a Georef grid superimposed on the PPI scope to better advantage in their work than could the Direction Center utilize a similar method in solving its fighter recovery program.

With the exception of the 647th AC&W Squadron, it was General Minty's recommendation that the turning over of the required equipment to the AAA be made on a temporary or test basis until such time as replacement equipment has

SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

been furnished in order that the equipment may be pulled back for Direction Center use during an emergency.

INTERFERENCE WITH PRIMARY RADAR AT 771ST AC&W SQ

The primary radar of the 771st AC&W Squadron at Ft. Custis, Virginia, (AN/FPS-3) has for the past year experienced a severe amount of interference, which is present at all hours of the day and night, and is of such intensity that the ability of the squadron to accomplish its mission in active air defense is being seriously hampered. *67

The interference is being caused by other radars in the area which take the form of railings, spokings, and running rabbits on the scope. The intensity approximates condition "5" most of the time and reading targets through it is exceedingly difficult if not impossible.

Several months ago, it was suspected that the interference was caused by naval radars located at NOB Norfolk. After a talk between the Chief Director of the 771st AC&W Squadron with electronic officers of the Com-AirLant staff at NAS Norfolk, three separate flights were made by ferret aircraft of the Fleet Airborne Electronics Squadrons in an attempt to locate the source of the interference, with the results of each flight confirming the fact that the inter-

*67 See 771st AC&W Sq Ltr dtd 2 Dec 52 Subj: "Interference with Primary Radar" included in appendices (s.d.#49)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

ference originated at NOB Norfolk.

Local attempts to resolve the problem had been unsuccessful because of too many naval radars operating on the frequency band between 1250 and 1350 mcs. There are several naval agencies at Norfolk operating radars of this type including The Fleet Training Center, the Naval Radar School, The Naval Air Station surveillance radar, and all aircraft carriers and most medium and large size fleet units.

Further difficulties were eminent when officers from CincLant Fleet and ComAirLant stated at a ComAirLant headquarters Conference on 17 November 1952 that a large quantity of new radars in the "L" band were being delivered and that they were being installed aboard ship as rapidly as possible. This fact will undoubtedly increase the interference.

The Naval officers agreed that active air defense radar should have priority and that the interference should be reduced or eliminated. As a result of this conference, it was agreed that a frequency assignment in this area might solve the problem. A specified portion band would be exclusively reserved for the radar at the 771st AC&W Squadron and no naval radar would use that portion of the band in this area. Because of the number of incoming and outgoing naval traffic not based in their area, the Naval Officers

SECRET
SECURITY INFORMATION

0 1 1 1

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

stated that it was a matter that would require coordination and dissemination by Chief of Naval Operations, but that if queried for their opinions and recommendations by the Chief of Naval operations they would endorse and concur in frequency assignment.

In order to make a positive recommendation to correct the problem, Division headquarters suggested on December 19, 1952, that a series of tests be made by the 771st AC&W Squadron to determine the intensity of radiated side band frequencies of a pulsed radar set to justify and substantiate the suggestion of frequency assignment.*[68]

This test will utilize the primary radar and available test equipment at the 771st AC&W Squadron in conjunction with one "L" band naval radar in the vicinity of Norfolk. Local coordination will be effected with the Navy to have the radar operational at the desired time.

The test will be conducted in two phases as described below. Phase one will attempt to measure the intensity and frequency (in terms of departure from the carrier frequency) of side bands produced by a radar operating within line of sight distance from another radar. The following procedures were recommended by Division Headquarters, although any

*68 See 26th AD(D) 1st Ind 413.44 dtd 19 Dec 52 Subj: "771st AC&W Sq Subject; Interference with Primary Radar" included in appendices (s.d.#50)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

desired alternate method to obtain results could be employed.

a. Both radar antennas should be stopped and be aimed directly at each other.

b. The FPS-3 Transmitter will be turned off.

c. The LB receiver will be turned to the exact frequency of the naval radar.

d. The FPS-3 receiver will be tuned away from the operating frequency of the naval radar in 1 or 5 mc steps.

e. Record the intensity of the interfering signal at each change of receiver tuning after the receiver has been peaked for maximum response.

f. Continue the checks until the intensity of the naval signal approaches the MDS figure of the receiver.

g. As a suggested method for determining the amplitude of the interference, compare it with a pulse from the TS-419 of the same frequency and amplitude.

h. If time permits, data may be gathered on the upper beam also because of the difference in antenna gain and lobe pattern of the two beams.

Phase two will involve a determination of the band pass characteristics of the T/R cavity and will be accomplished as follows:

a. Set up the signal generator as for an MDS test.

b. Attenuate the test target to establish a 3, 6, and 10db down level on the A Scope.

c. Maximize the test signal and note the frequency.

d. Detune the signal generator in 1mc increments, maximize the signal by returning the Local Oscillator, but do not retune the T/R cavity.

e. Continue the receiver and signal generator detuning process until the amplitude of the test signal reaches the levels previously established. Record frequency at each level. This should give the band pass of

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

the IF strip.

After conclusion of the tests, the results therefrom will be forwarded to Division Headquarters along with a scope photograph taken during period of non-interference, and Scope photographs taken during normal interference periods as experienced at the 771st AC&W Squadron. As all naval facilities were to be non-operational during the holiday season, this time was suggested as an excellent opportunity to gain the desired information.

AC&W MANNING AND ORGANIZATION

According to Air Defense Command, allocation of troop spaces, T/D or T/O, for AC&W Squadrons will be under constant study for possible change. During this operation and consumption stage we are undergoing, a more flexible method will be required. Individual units may require additional personnel authorization; however, troop space ceilings will not change.

ADC in May of 1952 directed EADF to conduct a study of the manning requirements in their permanent AC&W system with the objective of determining the advisability of discontinuing the use of the current method of allocating troop spaces. *69

*69 See ADC Ltr ADOOC 320.3 dtd 7 May 52 Subj: "AC&W Manning and Organization" included in appendices (s.d.-51)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

The 26th Air Division offered comments on the various studies which were forwarded to them.*70

Referring to a study by Brigadier General Clinton D. Vincent on "Operations and Organization of the ADDC-AC&W Squadron" 26th Air Division agreed that the personnel and equipment authorization of each squadron should be determined individually in view of its mission and peculiar requirements.

The EADF letter "AC&W Manning and Organization, 7 June 1952" said:

> "It is felt we (EADF units) can afford to provide adequate manpower at critical AC&W stations to assure maximum continuous operation 24 hours a day."

This division felt our policy should, rather, provide adequate at all AC&W stations to assure at least minimum continuous capability in all of the functions in each station, which are apt to be required at that station during the early stages of offensive action.

There are four separate and distinct direction Center functions which must be operating at 100% in the early stages of an attack. These are:

(1) Identification.
(2) Air Surveillance.

---

*70 See 26th AD(D) Ltr ADADC 320.3 dtd 8 Jul 52 Subj: "AC&W Manning and Organization"included in appendices (s.d. 52)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

(3) Radar Scope Control of Fighters.
(4) Control Room Supervision Including GCC and AAA Facilities.

Except for the consolidation of identification and air surveillance, each function requires the personal attention of an officer. We faced the problem of incorrect authorization of ADDC controllers in December of 1951.*71 Our four Type 11 Squadrons, were authorized four Controllers and four Movement and Identification Officers, but if we were to provide competent personnel capable of effecting position rotation in the Direction Center, we felt that at least 12 controllers were required. This illustrates the idea of different concepts of requirements within Divisions.

As to the EADF study on factors to consider in categorizing AC&W stations,*72 this division is of the opinion that the perimeter stations are over-emphasized by the numerical rating system. These stations are given a basic credit of 10 and, in practically every case, are given the additional weights for degree of identification responsibilities and degree of normal daily penetration

*71 See 26th AD(D) Ltr PC&R 322 dtd 8 Dec 51 Subj: "Aircraft Control & Warning Personnel Standards" included in appendices (s.d.#53)
*72 See EADF ltr EADPR 320.3 dtd 7 Jun 52 Subj: "AC&W Manning and Organization" not included in appendices.

THIS PAGE DECLASSIFIED IAW EO 13526

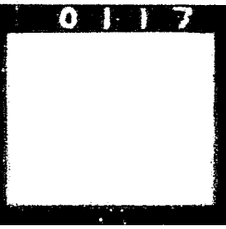
THIS PAGE DECLASSIFIED IAW EO 13526

traffic. This will consistently reflect a greater spread between perimeter stations and all other internal stations.

The paragraphs of the study giving weight to the factors appears to be improper. It was 26th Air Division Headquarters belief that the stations with doubtful EW assistance or no EW assistance should be the most heavily manned since, in all probability, they will have very little warning during which to augment crews on duty. Those stations that have EW assistance may receive advance information in sufficient time to augment their crews in time to be effective when action is required of them.

They also felt that the numerical system of giving weights on which to base manning requirements does not provide an accurate evaluation of the stations in this division. It is doubtful that a formula will be devised which will replace individual analysis of stations.

In supporting document 44 of this History is an outline of the functions and responsibilities of the individual stations as contained in the Air Defense Systems Plan, 26th Air Division dated 7 July 1952. On the basis of these, this Division would place stations P-45, P-9, P-54 and P-56 in Class 1; P-55 and P-30 in Class 2; and P-63 in Class 3.



THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CHAPTER VI
"MISCELLANEOUS"

EXCLUSIVE JURISDICTION OVER ADC'S SITES

Although the land comprising the sites of squadrons in the 26th Air Division has been acquired by the Federal Government or the Air Force, it is found that total jurisdiction over these properties is still not totally vested with the Federal Government.*73

Unless this exclusive jurisdiction is given, state and local officials may legally request, and possibly gain, admittance to the installations when they are acting to enforce local police, fire, taxing and other regulations, thus endangering the security of the installation.

Because the nature of the mission of our squadrons makes the highest degree of security of paramount importance, correspondence was initiated 15 December 1952 by the Judge Advocate, 26th Air Division, thru higher headquarters requesting

*73 See 26AD(D) Ltr ADAJA dtd 15 Dec 52 Subj: "Request for Exclusive Jurisdiction Over Lands Comprising the Aircraft Control and Warning Site Near Montauk, New York" included in appendices (s.d.#54)
See 26AD(D) Ltr ADAJA dtd 15 Dec 52 Subj: "Cession of Exclusive Jurisdiction Over Roslyn Air Force Base to the Air Force by the State of New York" included in appendices (s.d.#55)
See 26AD(D) Ltr ADAJA dtd 15 Dec 52 Subj: "Request for Exclusive Jurisdiction Over the Lands Comprising the Aircraft Control and Warning Squadron in the Vicinity of Highlands, New Jersey" included in appendices (S.d.#56)
See 26AD(D) Ltr ADAJA dtd 15 Dec 52 Subj: "Request for Exclusive Jurisdiction Over Lands Comprising Part of the Aircraft Control and Warning Site in the Vicinity of Ft. John Custis" included in appendices (s.d.#57)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

that Headquarters USAF initiate action which would culminate in complete and total jurisdiction over the installations in this division vested in the Federal Government in accordance with Section 255 Title 40 United States Code and appropriate state laws.

STATISTICAL REVIEW

Each month, the Division Comptroller Section compiles a Statistical Review which is intended to provide the Commanding Officers within this command, information and statistics pertaining to divisional activities.

Such information as percent of authorized personnel, trend of estimated TDY cost, Courts Martial data, Vehicle accident rates, etc., are presented in graphs and analysis form.

These reviews serve as a guide to the units and indicate when further investigations and corrective action may result in better programing for the achievement of the mission.

We have included the monthly reviews covering this reporting period in order that the reader may refer to them for information or statistics contained therein. *74

*74 See "Statistical Review 26th Air Division included in appendices (s.d. #58 thru 62)

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SUPPORTING DOCUMENTS

0120

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

FM HQ EADF STEWART AFB NEWBURGH NY 282310Z 29 Aug 52 UNCLASSIFIED

TO REGN/CG 26Th ADIV (DIF) ROSLYN NY
JEDBW/CG 30TH ADIV DEF WILLOW RUN APRT BELLEVILLE MICH
JEPSN/CG 32D ADIV (DIF) HANCOCK APRT EASTWOOD STa 6 SYRACUSE NY
JEDPK/CG 4706TH DEF WG OHARE INTERNATIONAL APRT PARK RIDGE ILL
JEDFJ/CG 4708TH DEF WG SELFRIDGE AFB MICH
JEPDG/CG 4707th DEF WG OTIS AFL FALMOUTH MASS
JEPME/CG 4709TH DEF WG MCGUIRE AFB TRENTON NJ
JEPNL/CG 4710TH DEF WG NEW CASTLE COUNTY APRT WILMINGTON DEL
CAA/CG 4711TH DEF WG PRESQUE ISLE AFB PRESQUE ISLE MAINE
EADDO 30933

A TWO-DAY WING AND DIV COMMANDERS CONF WILL CONVENE AT THIS XXXXXXX HEADQUARTERS AT 1300 HRS ON 2 SEPT 52. AGENDA ITEMS INCLUDE FLYING SAFETY CMA COMMAND DISCIPLINE CMA PERSONNEL AND MATERIAL PROBLEMS AND PROPOSED EADF ORGANIZATION. REPRESENTATION FR YOUR COMD WILL BE LIMITED TO THE COMMANDER AND VICE-COMMANDER OR DEPUTY COMMANDER. IT IS DESIRED THAT THE VICE-COMMANDER OR DEPUTY COMMANDER REMAIN AT THIS HQ FOR APPROX 5 DAYS TO ASSIST IN THE PREPARATION OF CONCEPT AND THE DETERMINATION OF FUNTIONS AT EACH LEVEL OF COMD WITHIN EADF.

28/2338Z AUG JEPNB

REF YOUR MSG AT 29/0437Z OUT

0121

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

EAOFR 322 14 Nov 1952

SUBJECT: Headquarters EADF Briefing of Division Commanders on 1 January 1953 Organization

TO: Commanding General
26th Air Division (Defense)
Roslyn, New York

1. Inclosed are copies of charts and the formal portion of the briefing on the 1 January 1953 organization as presented at the conference held 7 November 1952 at this headquarters.

2. Informal information has been received from Headquarters Air Defense Command that Headquarters U. S. Air Force has approved the organization as discussed at this meeting. However, Headquarters U. S. Air Force has not taken action in each instance to authorize defense groups, the recommended manning document for each headquarters air division (defense) and headquarters defense wing, or the boundary change for the 30th Air Division (Defense).

3. Another conference is tentatively scheduled in early December for the purpose of further discussion of the 1 January 1953 organization. Commanders may present any recommended changes to EADF's proposed method of operation under the 1953 organization at that conference.

BY COMMAND OF MAJOR GENERAL NELSON:

C. J. DILLON
Capt., USAF
Asst. Air Adj. Gen

1 Incl

1 Briefing

0122

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

HEADQUARTERS EASTERN AIR DEFENSE FORCE

BRIEFING OF DIVISION COMMANDERS ON

1 JANUARY 1953 ORGANIZATION

By Colonel W. H. Williamson

INCL #1

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

HEADQUARTERS EADF BRIEFING FOR AIR DIVISION COMMANDERS, 7 NOVEMBER 1952

The purpose of this briefing is to present to the Division Commanders this headquarters' operational concept that will allow for the proper functioning of this command under the proposed reorganization tentatively scheduled for implementation about 1 January 1953. Along with this concept, we will attempt to outline in some detail the areas of responsibility associated with the accomplishment of our assigned mission and indicate the agency to which this headquarters will look for the actions necessary to assure accomplishment of these responsibilities.

Before going into these items, we would like to review the proposed organization. After much study and a Defense Force Commanders' meeting, ADC's proposed organization was based upon the following principles to meet the requirements of air defense:

1. That there be a straight command line from EADF to division, to wings and operating units so as to provide each commander with the necessary tools with which to accomplish his mission.

2. That the air division level is the lowest level to which an air defense mission is assigned; i.e., that the air division is the lowest level which is charged with the air defense of a geographic area.

3. That it is considered desirable that there be one commander on an Air Force Base responsible for the activities of all Air Defense Command units located there.

4. Since the air division is the lowest level to which a defense mission is assigned, it is desirable that all units report directly to that headquarters, except where the number of units located in an air division area is such that they cannot be adequately supervised by one headquarters. It will then be necessary to interpose an intermediate headquarters between the air division and the operating units. Based upon these principles and the normally accepted principles of organization, the proposed organization of EADF is reflected in this chart.

(Showed Chart #1 - EADF Organization
#2 - A.D. &U. Wing areas)

These charts are similar to the charts shown at the Commanders' conference in September with the corrections made that were decided upon at that time. The chart showing unit assignment is still not completely accurate for 1 January 1953 due to changes in the program that have taken place since this chart was prepared. However, it still illustrates the 1 January organization and is sufficiently accurate for this discussion.

It appears logical that this organization, to be acdeptable now, must be adaptable to future requirements ith a minimum of changes and with no changes in principles, if that is possible. Therefore, we would like to

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

review briefly the future requirements for an organization scheduled for about 1955. The 1955 organization provides for a much smaller division area than we now have. Due to this reduction in the size of the division area and consequently the reduction in the number of operating units located therein, each of these units will report to the division headquarters and will be supervised by that headquarters without a requirement for an intervening wing headquarters.

(Showed chart #3 - 1955 division boundaries.)

This chart indicates the proposed areas of responsibility for each division within EADF in the 1955 plan. The proposed organization for January of 1953 can be adapted to the requirements of the 1955 plan by utilizing the headquarters defense wing for the additional headquarters air division (defense) required and assigning all subordinate units to the division in whose area they are located.

The 1953 organization is considered the most desirable interim organization for EADF. However, due to the requirement that this organization be operated with the manpower presently available and with the limited facilities presently available at the headquarters air division locations, certain limitations must be placed upon the operation of this organization. The limitations of manpower and facilities will not permit the providing of each headquarters with a complete staff necessary to operate following the straight command lines as indicated on the organizational chart. With these limitations in mind, this headquarters developed a concept of operation for this organization. This concept was stated to ADC as follows:

> *"The air division commander will be responsible for all activities of its subordinate units as indicated by the command line and will conduct the active air defense mission. This headquarters envisions that the air division will exercise command control over its subordinate units by inspection and staff supervision, depending upon this headquarters and defense wing headquarters for the functions required to be performed by a complete staff."

With this concept in mind, proposed Tables of Distribution were prepared for headquarters air division (defense), providing in those headquarters the personnel necessary to conduct the active air defense mission and a planning and supervising staff function. Under this same concept, Tables of Distribution were prepared for headquarters defense wing providing those headquarters with as complete a staff as possible so that all normal areas of responsibility will be inspected.

* Quoted from Hq EADF letter to Hq ADC, EAOPR 322, Subject: Organization of EADF, 1 January 1953, dated 12 September 1952.

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

(Showed two charts - #4 - Headquarters Air Division (Defense)
#5 - Headquarters Defense Wing.)

Since it has been impossible to provide the division commander with a complete staff, this headquarters has attempted to determine the areas of responsibility relating to the accomplishment of our assigned mission and to indicate the headquarters or unit to which we will look for the actions necessary to assure the accomplishment of these responsibilities under the concept as previously stated and consistent with the proposed manpower allocation. I would like to point out here again that each commander in the chain of command will be completely responsible for all activities of his unit and subordinate units, even though it is indicated that this headquarters may not look to him for actions in certain areas of responsibility.

Since this headquarters is organized functionally, it appeared logical to list on separate charts the areas of responsibility for each of the major staff agencies of this headquarters. Colored (or numbered) lines indicate those organizations that will be required to perform actions to assure accomplishment in areas of responsibility listed. The specific actions and the scope of those actions that must be taken in relation to the specific area of responsibility will vary in accordance with the level and authority of each command. We will now go through each of these charts and will attempt to explain them.

In discussion of charts 6 through 14, the following notes are applicable:

EADF actions with headquarters air divisions (defense) on areas of responsibility which are internal to the division headquarters, Ground Observer Squadron or WaF Squadron, are not indicated by lines.

On these charts, when colored (or numbered) lines go from EADF to wings and then stop -- that does not mean that actions are not performed in areas of responsibility indicated, below the headquarters wing level, but, that such actions follow the command line down and back to the headquarters wing.

RESTRICTED

0126

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
AIR DEFENSE COMMAND
ENT AIR FORCE BASE
COLORADO SPRINGS, COLORADO

ADOMO 322 12 Nov 1952

SUBJECT: Reorganization of Air Defense Command

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. USAF has approved the reorganization of this command as outlined in letter ADOMO 322, "Air Defense Command Organization", 16 August 1952. Defense Force boundary changes are now under study at Headquarters USAF and it is expected that approval for these changes effective 1 January 1953 will be forthcoming. The T/O for an air defense group is now in the process of publication and advance distribution is expected by 22 November 1952.

2. In keeping with the proposed reorganization plan, requests have been submitted to USAF to:

a. Inactivate all T/O air base squadrons and activate air defense groups as replacement units.

b. Redesignate all T/O air base groups to air defense groups.

3. Attached for your information and study are draft copies of the General Orders that will be published by this headquarters to effect the reorganization. Consistent with the reorganization plan:

a. Fighter units located on a base with an air defense group are being assigned to the group.

b. Tenant fighter units located within defense wing areas are being assigned to the defense wing headquarters.

c. AC&W squadrons operating at permanent locations within a defense wing area are being assigned to the defense wing headquarters. Assignments of AC&W squadrons within the 27, 28, 29th 31st, 33rd, and 34th Air Divisions will remain unchanged.

d. Assignments of AC&W squadrons which are in a training statue will remain unchanged.

e. To maintain uniformity throughout the command, assignments of crash boat flights and USAF squadrons are not being made to air defense groups.

0127

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq ADC ADOMC [illegible] Subject: Reorganization of Air Defense Command (cont'd)

3. It is requested you review the proposed assignments keeping in mind the policy outlined in paragraph 2, and submit your concurrence or suggested revisions to this headquarters prior to 24 November 1952.

BY COMMAND OF GENERAL CHIDLAW:

/s/ LEWIS E. SMITH
Captain, USAF
Ass't Adj Gen

0128

THIS PAGE DECLASSIFIED IAW EO 13526

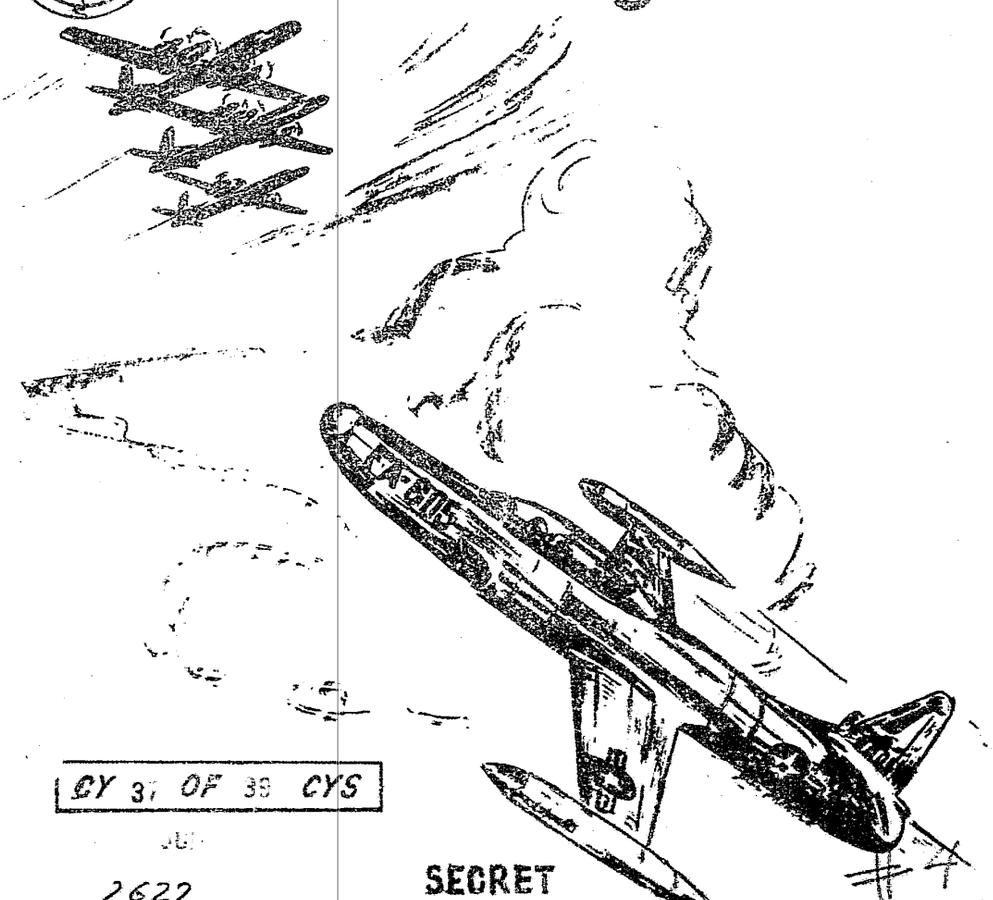
THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY



CY 37 OF 39 CYS

2627

SECRET

0129

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date
Initials WHH

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

0130

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC
1 cy CG EADF
1 cy CG WADF
1 cy CG CADF
1 cy Comar E Sea Frontier
1 cy CG 25th ADIV
1 cy CG 26th ADIV
1 cy CG 27th ADIV
1 cy CG 28th ADIV
1 cy CG 29th ADIV
1 cy CG 30th ADIV
1 cy CG 31st ADIV
1 cy CG 32nd ADIV
1 cy CG 33rd ADIV
1 cy CG 34th ADIV
1 cy CG 35th ADIV

1 cy Comdr Fleet - Air
Quonset Point NAS, R.I.
1 cy Comdr Fleet - Air Det
Atlantic City, N.J.
1 cy Comdr Air Flt Marine Forces
Cherry Point, N.C.
1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.
4 cys CG 4709 Defense Wg.
5 cys CG 4710 Defense Wg.
3 cys Historian, 25th ADIV
1 cy CO 646th AC&W Sqdn
1 cy CO 647th AC&W Sqdn
1 cy CO 648th AC&W Sqdn
1 cy CO 770th AC&W Sqdn
1 cy CO 771st AC&W Sqdn
1 cy CO 772nd AC&W Sqdn
1 cy CO 773rd AC&W Sqdn

53 cys TOTAL DISTRIBUTION

0131

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents

	Page
Analysis	1
Initial Breakdown of Established Penetration Tracks	3
Breakdown of Non-correlated Tracks	4
Action against Non-correlated Tracks	5
Reasons for no Scramble on Non-correlated Tracks	6
Reasons for no Scramble on Tracks not identified within 5 min.	7
Scramble Results	8
Scramble Results (Less "Identification prior to Intercept" & "Identification within 5 minutes"	9
Reasons for Failure of Attempted Interceptions	10
Final Breakdown of Established Penetration Tracks	11
Number of Incoming Tracks properly Identified	12
Number of Incoming Tracks not properly Handled	13
Ownership of Penetration Tracks	14

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANALYSIS

1. During July there was a 2.8% increase in Civilian Airline traffic and a 3.7% increase in Military traffic. The number of tracks, other than unknowns without related flight plan, increased from 836 in June to 861 tracks in July. Of the 877 tracks that were plotted, 639 (72.8%) were initally identified by flight plan correlation. This is a 1.6% decrease over correlations for June.

2. The chart on page 4 portrays a breakdown of non-correlations. Of the 238 violations, 211 (88.7%) were accounted for, a 6.0% increase over June figures. The number of flights which were identified by VHF/DF procedures increased from 57 (26.0%) in June to 69 (28.9%) in July. This increase may be attributed to anincrease in civil traffic which utilized VHF/DF procedures for identification. The percentage for identification by flight plan revision or late flight plan increased from 25 (11.4%) to 53 (22.2%).

3. There were 195 scrambles effected during the month of July. This accounts for action against 81.9% of the non-correlated tracks. This is a 10.3% increase in scrambles for the month of July.

4. Of the 43 (18.1%) tracks not scrambled against, 35 (81.4%) were "scrambles saved" as a result of identification within 5 minutes after track was established by VHF/DF or flight plan revision. This is a 20% increase in scrambles saved over the June figure. The remaining tracks for which no intercept was attempted are shown on page 7. No fighters at suitable location 8 (100%) accounted for all of the no scramble against non-correlated tracks.

5. A total of 89 (45.7%) scrambles resulted in successful interceptions. (See chart on page 8) 75 (38.4%) were identified prior to intercept and 8 (4.1%) were identified within 5 minutes, but not soon enough to save scrambles. Of the total scrambles, 23 (11.8%) failed to effect interception as compared to 23 (14.7%) in June. Excluding identification prior to intercept and identification within 5 minutes, successful interceptions increased from 84 in June to 89 in July.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANALYSIS (Cont'd)

6. Breakdown of reasons for non-successful intercept is shown on page 10. Of the 23 unsuccessful intercepts, 11 (47.9%) were due to search radar performance, 5 (21.9%) due to controllers error, 2 (8.7%) due to no fighters in suitable location, and 1 (4.3%) each to controllers error (Control Center), communications performance, weather, abortion of aircraft, and airborne radar performance.

7. The chart on page 11, which portrays the final breakdown of all established tracks, shows a decrease from the June figures for percent of tracks correlated by flight plan from 74.4% to 72.7% in July. The percentage for identification prior to intercept, 8.5%, is higher than for June, 5.4%. Identified within 5 minutes increased from 3.8% to 4.9% in July. The later identified figure decreased from 19 (2.2%) to 4 (0.5%). Unknown with related flight plans decreased from 20 (2.3%) to 13 (1.5%) in July. Unknowns without related flight plans decreased from 18 (2.1%) to 14 (1.6%) for July.

8. Graphic portrayal of the daily action to identify penetration tracks is shown on pages 12 and 13.

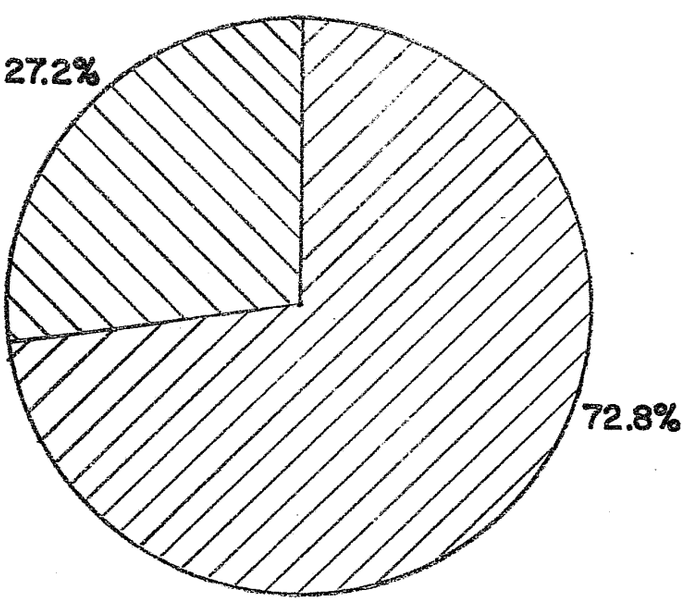
9. The chart on page 14 breaks down the correlations and violations by Civil and Military aircraft for the month of July.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

INITIAL BREAKDOWN OF ESTABLISHED PENETRATION TRACKS

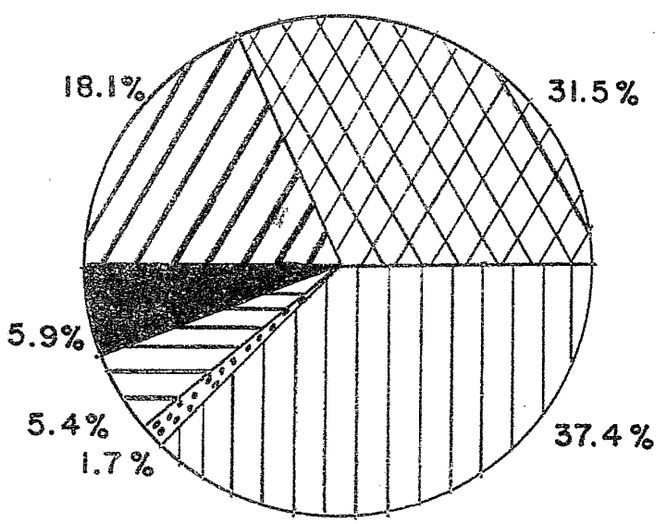


CORRELATIONS	639
NON-CORRELATIONS	238
TOTAL TRACKS	877

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF NON-CORRELATIONS

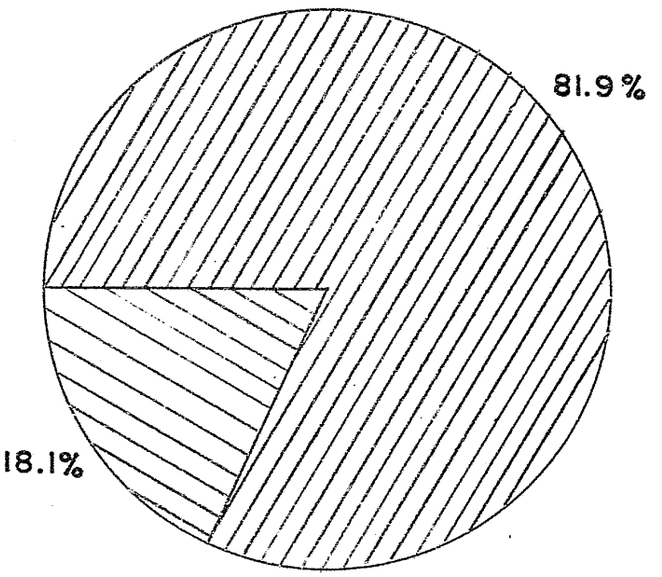


//////	IDENTIFIED within 5 MIN.	43
XXXXXX	IDENTIFIED prior to INTERCEPT	75
||||||	INTERCEPTED and IDENTIFIED	89
.....	LATER IDENTIFIED	4
======	UNKNOWN with RELATED FLT. PLAN	13
------	UNKNOWN without RELATED FLT. PLAN	14
	TOTAL	238

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ACTION AGAINST NON-CORRELATED TRACKS



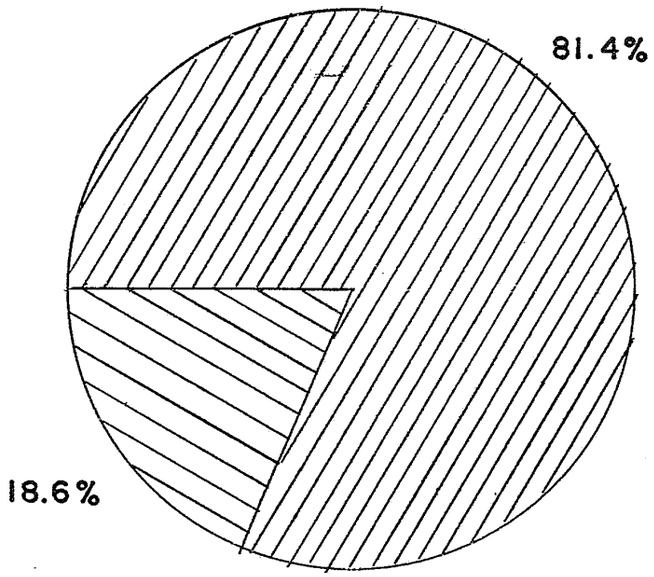
SCRAMBLE EFFECTED	195
SCRAMBLE NOT EFFECTED	43
TOTAL NON-CORRELATED TRACKS	238

0137

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR NO SCRAMBLE
on
NON-CORRELATED TRACKS



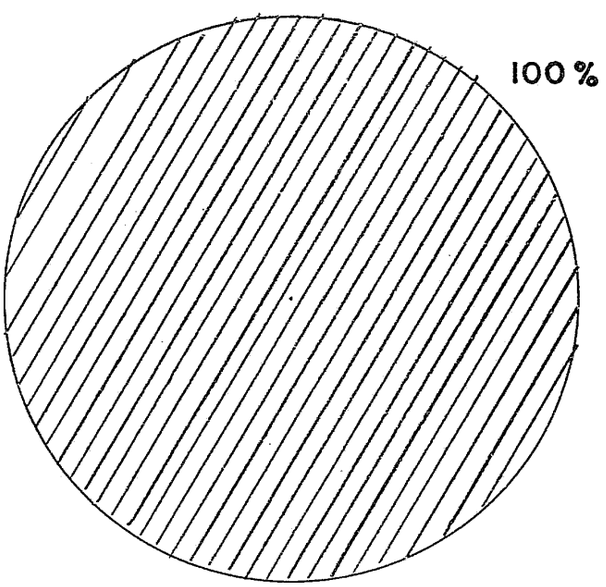
//////	SCRAMBLES SAVED	35
\\\\\\	VARIOUS REASONS (Page 7)	8
	TOTAL	43

0138

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR NO SCRAMBLE
on
NON-CORRELATED TRACKS
NOT IDENTIFIED WITHIN 5 MIN.



NO FTRS at SUITABLE LOCATION 8

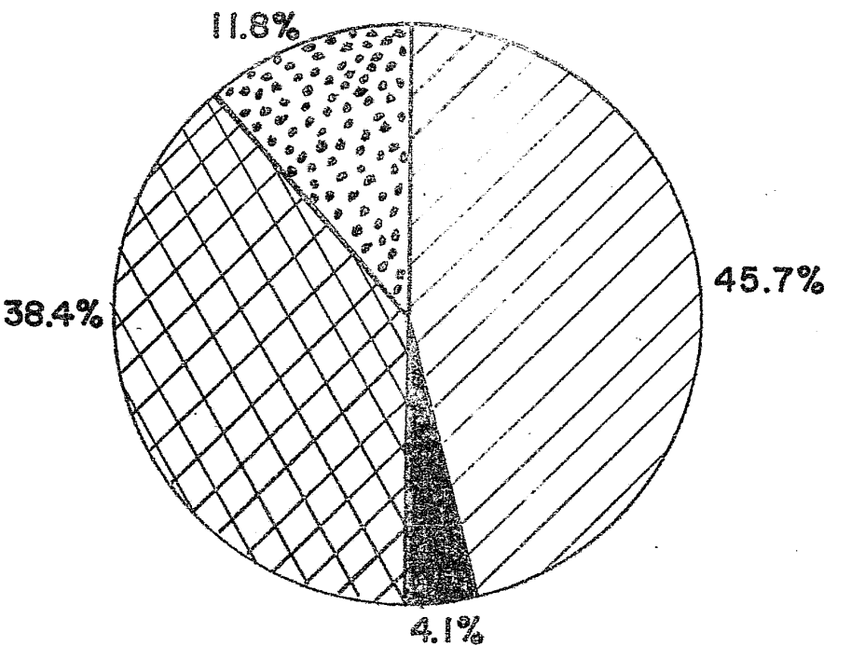
TOTAL NON-CORRELATED TRACKS 8
on which intercept not attempted

0139

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SCAMBLE RESULTS



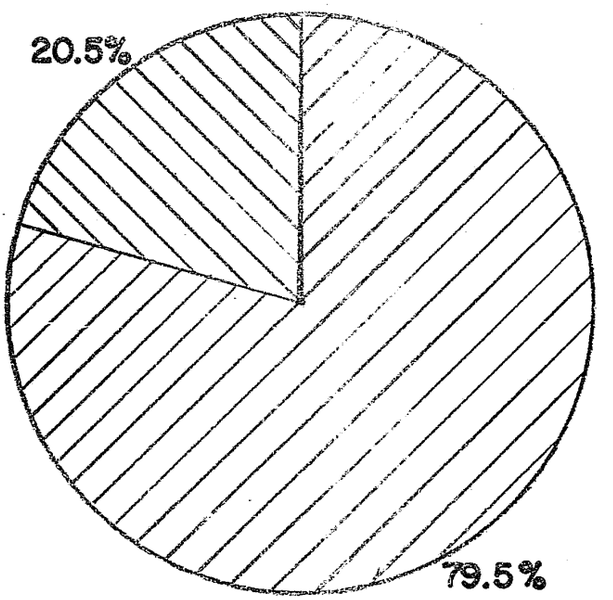
INTERCEPT SUCCESSFUL	89
IDENTIFIED W/IN 5 MIN.	8
IDENTIFIED PRIOR TO INTERCEPT	75
INTERCEPT NOT SUCCESSFUL	23
TOTAL INTERCEPTS ATTEMPTED	195

0140

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESULTS OF ATTEMPTED INTERCEPTIONS



▨	SUCCESSFUL	89
▨	NON-SUCCESSFUL	23
	TOTAL ATTEMPTS	112

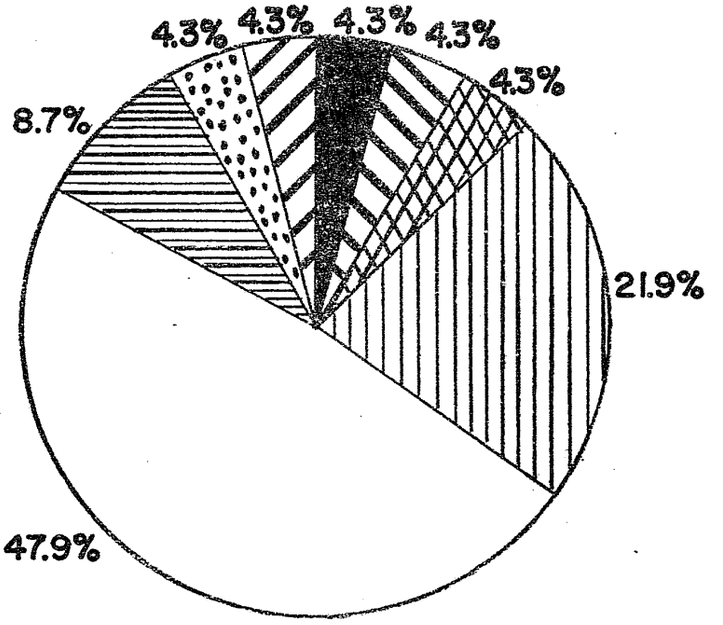
less identification prior to intercept & identification within 5 min.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR FAILURE OF ATTEMPTED INTERCEPTIONS



WEATHER	1
CONTROLLERS ERROR CONTROL CENTER	1
COMMUNICATIOR PERFORMANCE	1
CONTROLLERS ERROR GCI	5
SEARCH RADAR PERFORMANCE	11
NO FIGHTERS AT SUITABLE LOCATION	2
ABORTION OF A/C	1
AIRBORNE RADAR	1
TOTAL INTERCEPT FAILURES	23

SECRET

0142

THIS PAGE DECLASSIFIED IAW EO 13526

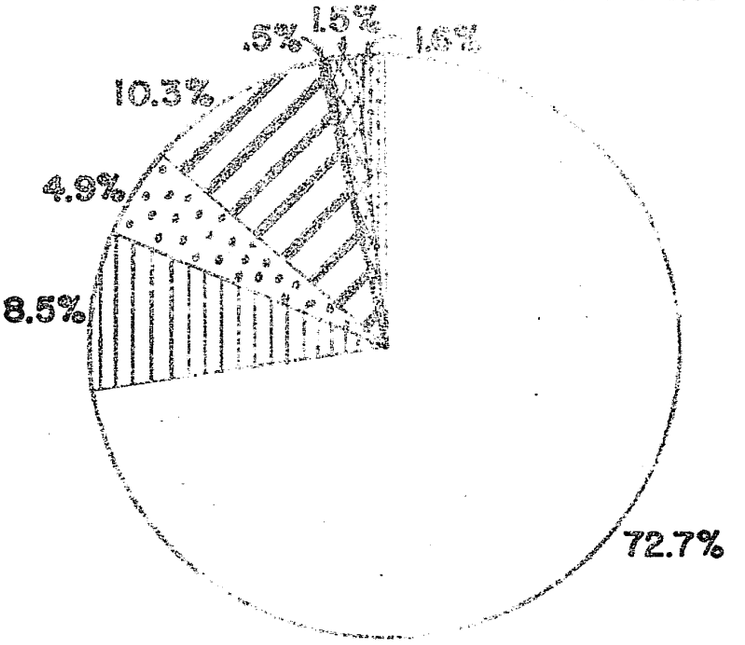
THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN

OF

ESTABLISHED PENETRATION TRACKS



	CORRELATED BY FLT. PLAN	639
	IDENTIFIED PRIOR TO INTERCEPT	75
	IDENTIFIED W/IN 5 MIN.	43
	INTERCEPTED AND IDENTIFIED	89
	LATER IDENTIFIED	4
	UNKNOWN WITH CORRELATED FLIGHT PLAN	13
	UNKNOWN WITHOUT CORRELATED FLIGHT PLAN	14
	TOTAL PENETRATION TRACKS	877

SECRET

11

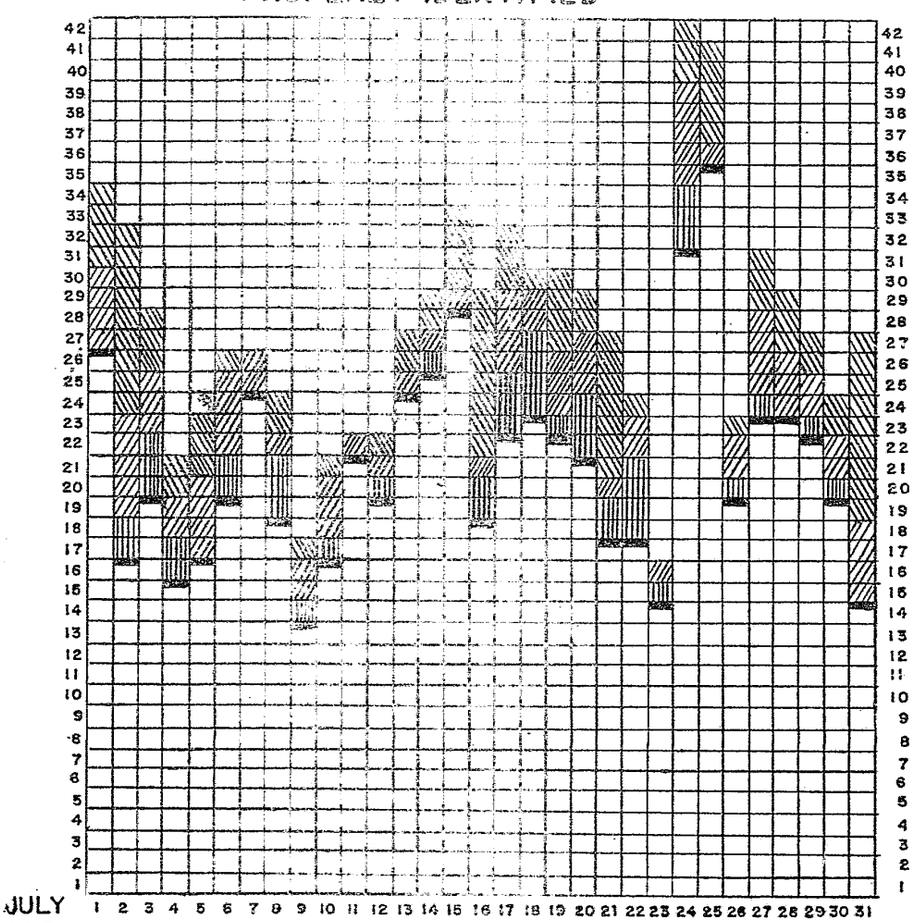
0143

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NUMBER OF INCOMING TRACKS PROPERLY IDENTIFIED



Intercepted	89
Identified prior to Intercept	75
Identified within 5 Min	43
Flight Plan Correlated (1 min.)	639
TOTAL	846

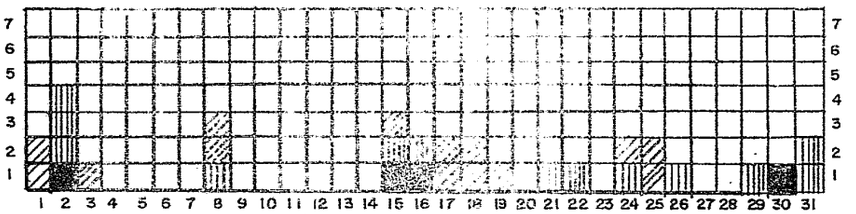
SECRET
12

0144

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



JULY 1952

UNKNOWN WITHOUT RELATED FLIGHT PLAN	14
UNKNOWN WITH RELATED FLIGHT PLAN	13
LATER IDENTIFIED	4
TOTAL	31

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

OWNERSHIP OF PENETRATION TRACKS

OWNERSHIP	CORRELATIONS		VIOLATIONS		TOTAL TRACKS
Pan American	301	87.5%	43	12.5%	344
Eastern Airlines	78	83.0	16	17.0	94
Colonial	54	100.0	0	0.0	54
B O A C	16	88.9	2	11.1	18
Trans-Canada	15	93.7	1	6.3	16
Venezuelan	13	86.7	2	13.3	15
N C	1	33.3	2	66.7	3
Air France	1	50.0	1	50.0	2
Flying Tigers	0	0.0	1	100.0	1
Trans-World Airways	0	0.0	1	100.0	1
1 Twin-Engine	0	0.0	1	100.0	1
R C A F	0	0.0	1	100.0	1
TOTAL CIVIL A/C	479	87.1%	71	12.9%	550
Navy	184	72.5%	70	27.5%	254
Air Force	13	44.8	16	55.2	29
MATS	24	85.7	4	14.3	28
TOTAL MILITARY A/C	221	71.1%	90	28.9%	311

TOTAL PENETRATION TRACKS (Less Unknowns without related flight plan) 861

Of the correlations above, the system carried 11 PAA, 2 Eastern, 1 Colonial, 3 Navy and 1 Air Force flights as violations because of system deficiencies. There was no violation against the pilot. Also of the correlations above, 38 PAA, 3 Eastern, 1 Navy and 1 MATS flights were identified within 5 minutes after track was established by VHF/UF procedures or flight plan.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

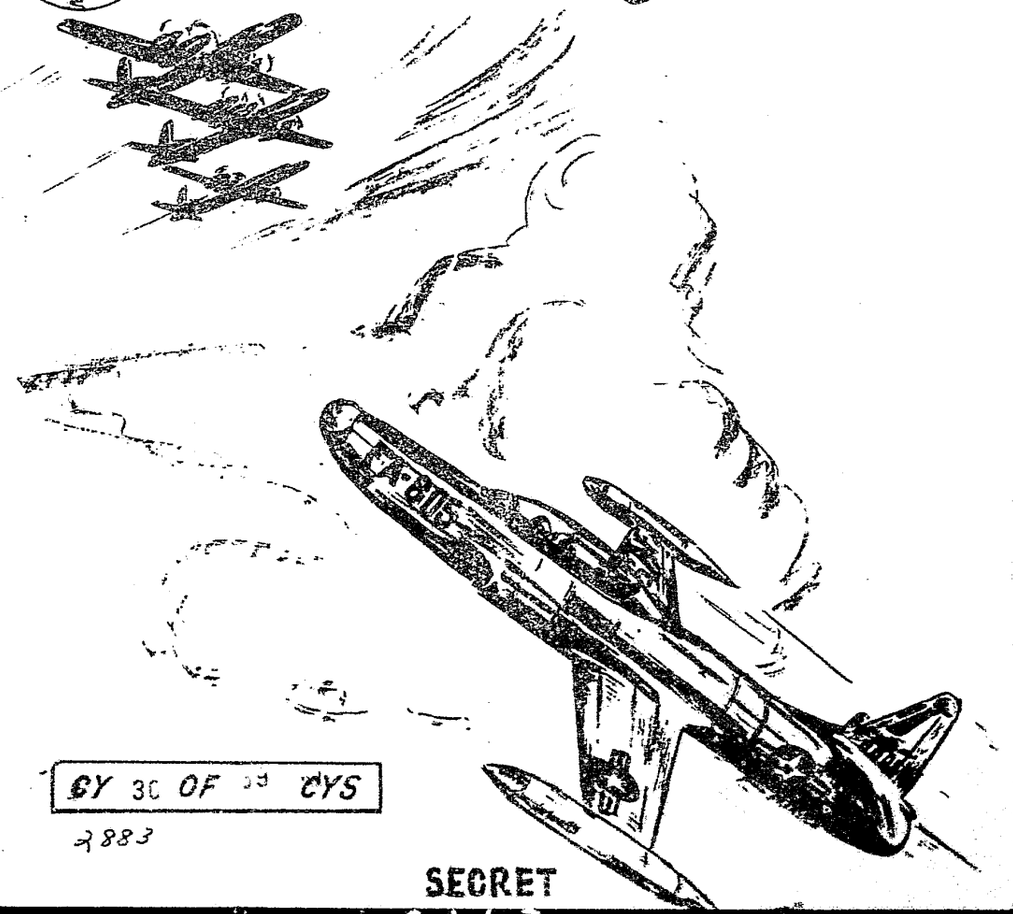
HIST-304S

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY



BY 30 OF 30 CYS

3883

SECRET

0147

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date SEP 5 1952
Initials

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC
1 cy CG EADF
1 cy CG WADF
1 cy CG CADF
1 cy Comdr E Sea Frontier
1 cy CG 25th ADIV
1 cy CG 26th ADIV
1 cy CG 27th ADIV
1 cy CG 28th ADIV
1 cy CG 29th ADIV
1 cy CG 30th ADIV
1 cy CG 31st ADIV
1 cy CG 32nd ADIV
1 cy CG 33rd ADIV
1 cy CG 34th ADIV
1 cy CG 35th ADIV

1 cy Comdr Fleet - Air
Quonset Point NAS, R.I.
1 cy Comdr Fleet - Air Det
Atlantic City, N.J.
1 cy Comdr Air Flt Marine Forces
Cherry Point, N.C.
1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.
4 cys CG 4709 Defense Wg.
5 cys CG 4710 Defense Wg.
3 cys Historian, 26th ADIV
1 cy CO 646th AC&W Sqdn
1 cy CO 647th AC&W Sqdn
1 cy CO 648th AC&W Sqdn
1 cy CO 770th AC&W Sqdn
1 cy CO 771st AC&W Sqdn
1 cy CO 772nd AC&W Sqdn
1 cy CO 773rd AC&W Sqdn

39 cys TOTAL DISTRIBUTION

0149

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents

	Page
Analysis	1
Initial Breakdown of Established Penetration Tracks	3
Breakdown of Non-correlated Tracks	4
Action against Non-correlated Tracks	5
Reasons for no Scramble on Non-correlated Tracks	6
Reasons for no Scramble on Tracks not identified within 5 Min.	7
Scramble Results	8
Scramble Results (Less "Identification prior to Intercept" & "Identification within 5 minutes"	9
Reasons for Failure of Attempted Interceptions	10
Final Breakdown of Established Penetration Tracks	11
Number of Incoming Tracks properly Identified	12
Number of Incoming Tracks not properly Handled	13
Ownership of Penetration Tracks	14

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANALYSIS

1. During August there was an 8.3% increase in Civilian Airline traffic and a 9.3% increase in Military Traffic over July figures. The number of tracks, other than unknowns without related flight plan, increased from 801 in July to 937 in August. Of the 956 tracks that were plotted, 651 (68.1%) were initially identified by flight plan correlation. This is a 4.7% decrease over correlations for July.

2. The chart on page 4 portrays a breakdown on non-correlations. Of the 305 violations, 275 (90.2%) were accounted for, a 1.5% increase over July figures. The number of flights which were identified by VHF/DF procedures increased from 83 (28.5%) in July to 84 (28.4%) in August. This increase may be attributed to an increase in civil traffic which utilized VHF/DF procedures for identification. The number identified by flight plan revision or late flight plan increased from 53 (22.2%) in July to 64 (21.6%) in August.

3. There were 248 scrambles effected during the month of August as compared with 195 in July. This accounts for action against 81.3% of the non-correlated tracks. This is a 27.3% increase in scrambles for the month of August over the month of July.

4. Of the 57 (18.7%) tracks not scrambled against, 32 (56.1%) were "scrambles saved" as a result of identification, within 5 minutes after track was established, by VHF/DF or flight plan revision. This is a 25.3% decrease in scrambles saved over the July figure. The remaining tracks for which no intercept was attempted are shown on page 7. No fighters at suitable location 17 (58.0%), controllers error (GCI) 2 (8.0%), and weather or darkness 6 (24.0%) accounted for the no scrambles against non-correlated tracks.

5. A total of 121 (48.7%) scrambles resulted in successful interceptions. (See chart on page 6) 102 (41.2%) were identified prior to intercept and 7 (2.8%) were identified within 5 minutes, but not seen enough to save scrambles. Of the total scrambles, 18 (7.3%) failed to effect interception as compared to 23 (11.8%) in July. Excluding the identification prior to intercept and identification within 5 minutes, successful interceptions increased from 89 in July to 121 in August.

0151

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

6. Breakdown [illegible] intercepts is shown on Page 10. [illegible], 10 (55.5%) were due to search radar per[illegible]. [illegible] were due to controllers error, 1 (5.5%) was due to [illegible] were due to weather, and 1 (5.5%) was [illegible].

7. The [illegible] the final breakdown of all established [illegible] the July figures for the percentage of [illegible] from 78.7% to 68.1% in August. The percentage [illegible] prior to intercept, 10.7%, is higher than for [illegible]. [illegible] within 5 minutes decreased from 4.9% in July to [illegible]. The number identified figure increased from [illegible] with related flight plans decreased [illegible] August. Unknowns without related flight [illegible] from July to 13 (2.0%) in August.

8. Graphic [illegible] identity penetration tracks is shown on [illegible].

9. The chart [illegible] the correlations and violations by Civil and Military aircraft for the month of July.

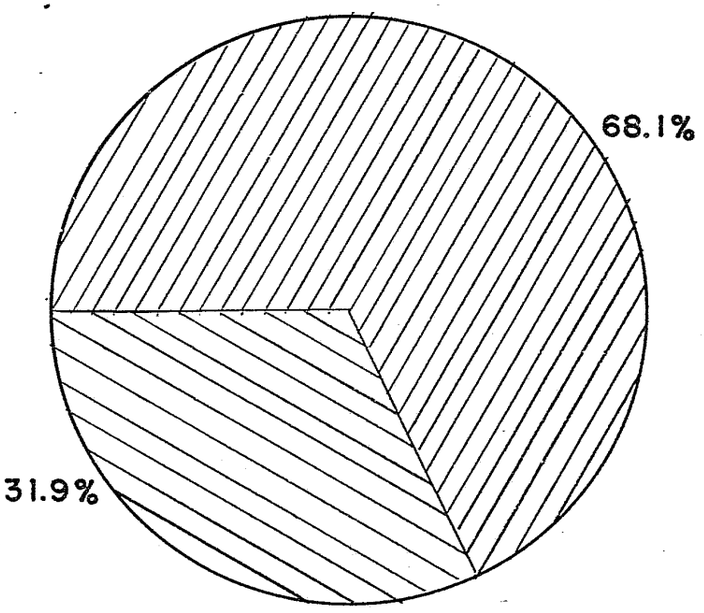
0152

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

INITIAL BREAKDOWN of ESTABLISHED PENETRATION TRACKS



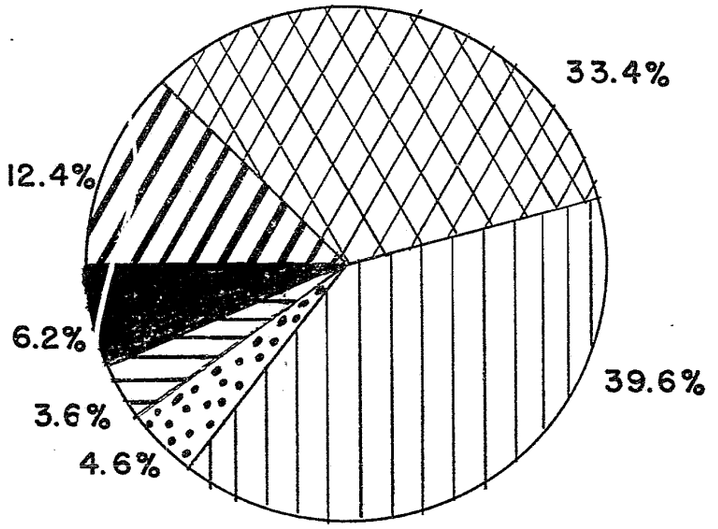
CORRELATIONS	651
NON-CORRELATIONS	305
TOTAL TRACKS	956

SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF NON-CORRELATIONS



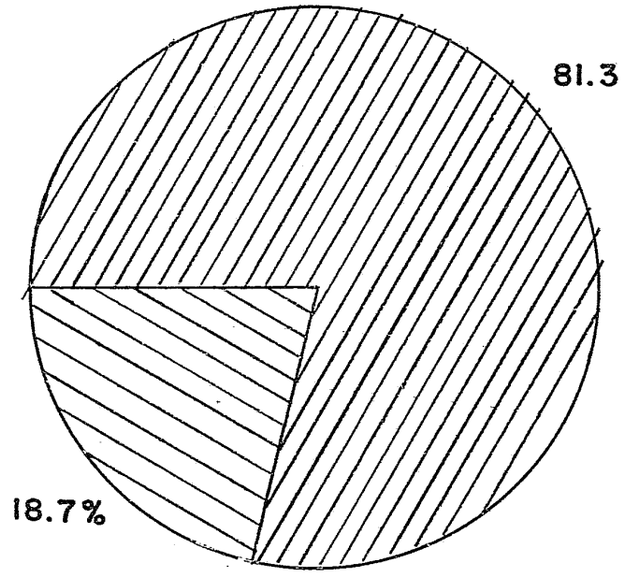
IDENTIFIED within 5 MIN.	38
IDENTIFIED prior to INTERCEPT	102
INTERCEPTED and IDENTIFIED	121
LATER IDENTIFIED	14
UNKNOWN with RELATED FLT. PLAN	11
UNKNOWN without RELATED FLT. PLAN	19
TOTAL	305

0154

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ACTION AGAINST NON-CORRELATED TRACKS

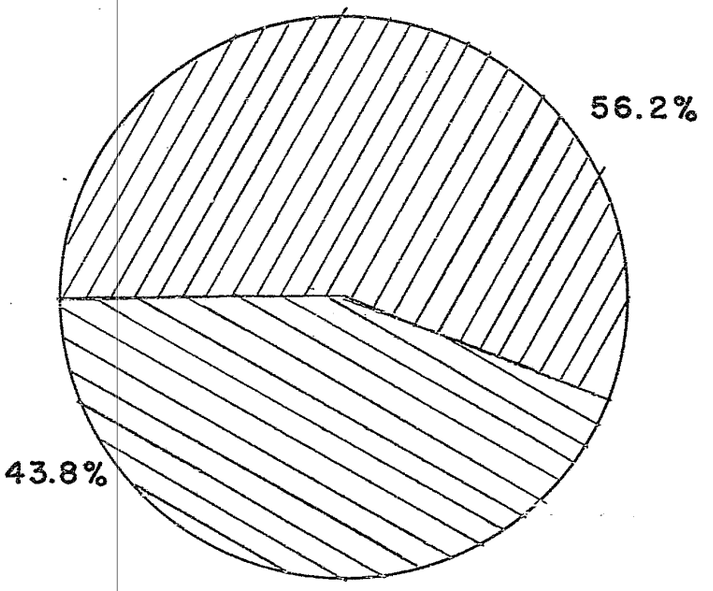


//////	SCRAMBLE EFFECTED	248
\\\\\\	SCRAMBLE NOT EFFECTED	57
	TOTAL NON-CORRELATED TRACKS	305

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR NO SCRAMBLE
on
NON-CORRELATED TRACKS



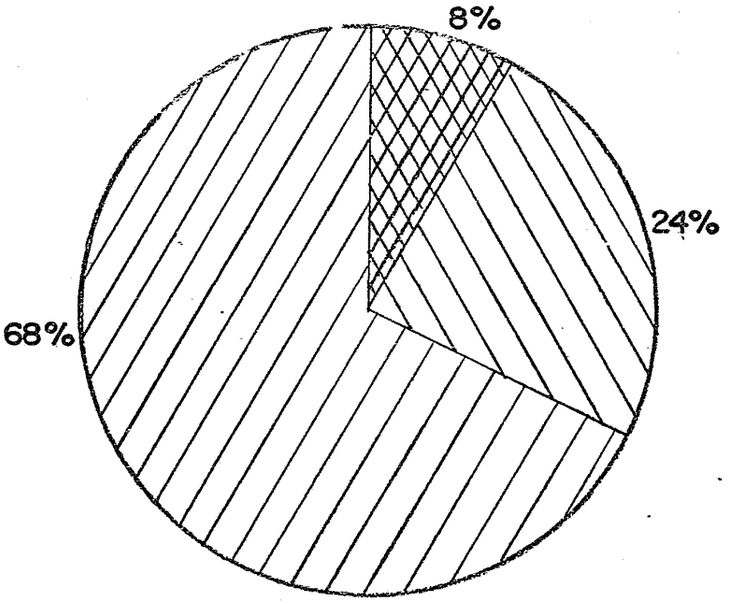
//////	SCRAMBLES SAVED	32
\\\\\\	VARIOUS REASONS (Page 7)	25
	TOTAL	57

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR NO SCRAMBLE ON NON-CORRELATED TRACKS NOT IDENTIFIED WITHIN 5 MIN.



CONTROLLERS ERROR (G.C.I.)	2
WEATHER OR DARKNESS	6
NO FTRS AT SUITABLE LOCATION	17
TOTAL NON-CORRELATED TRACKS ON WHICH INTERCEPT NOT ATTEMPTED	25

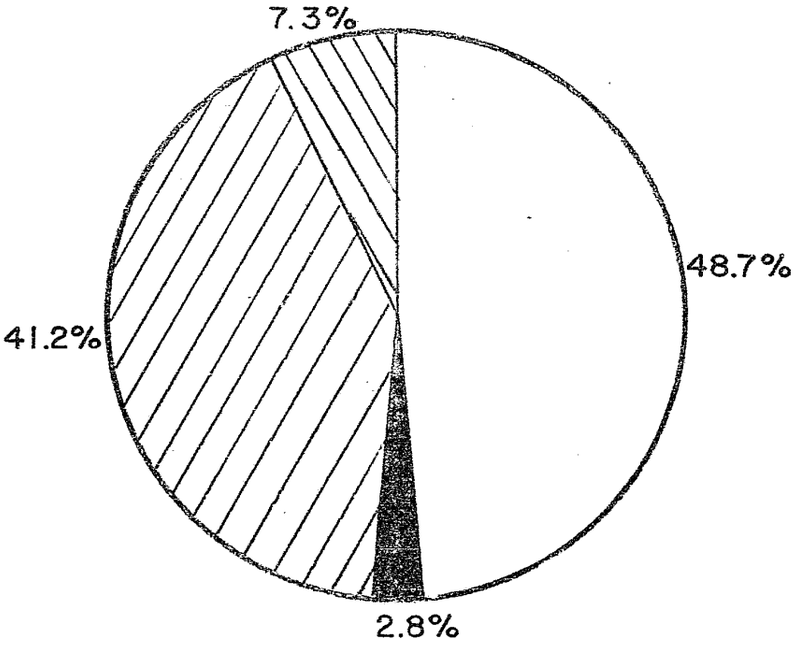
SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

SCRAMBLE RESULTS



	INTERCEPT SUCCESSFUL	121
	IDENTIFIED W/IN 5 MIN.	7
	IDENTIFIED PRIOR TO INTERCEPT	102
	INTERCEPT NOT SUCCESSFUL	18
	TOTAL INTERCEPTS ATTEMPTED	248

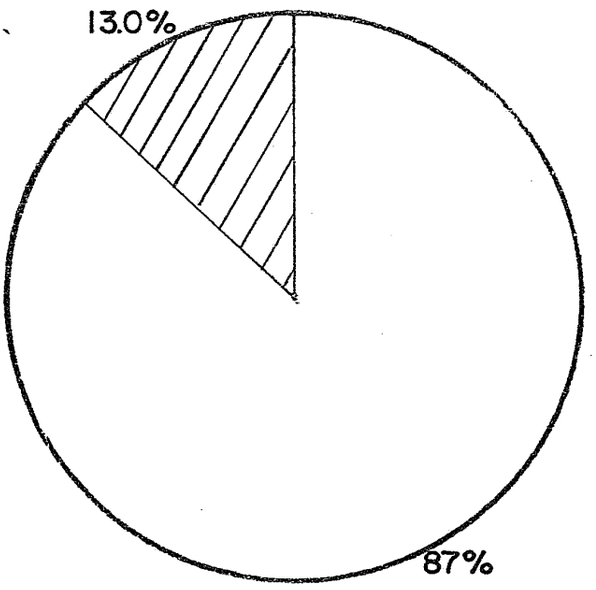
SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

RESULTS OF ATTEMPTED INTERCEPTIONS



	SUCCESSFUL	121
	NON-SUCCESSFUL	18
	TOTAL ATTEMPTS	139

LESS IDENTIFICATIONS PRIOR TO INTERCEPT & IDENTIFIED WITHIN 5 MIN.

SECRET

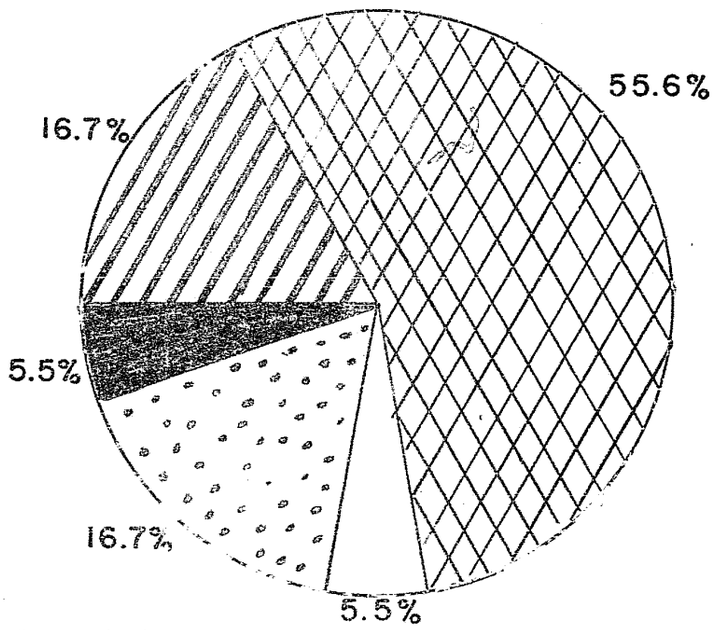
0159

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR FAILURE of ATTEMPTED INTERCEPTIONS



WEATHER	3
SEARCH RADAR PERFORMANCE	10
FIGHTER PERFORMANCE	1
CONTROLLER'S ERROR GCI	3
ABORTION OF AIRCRAFT	1
TOTAL INTERCEPT FAILURES	18

SECRET

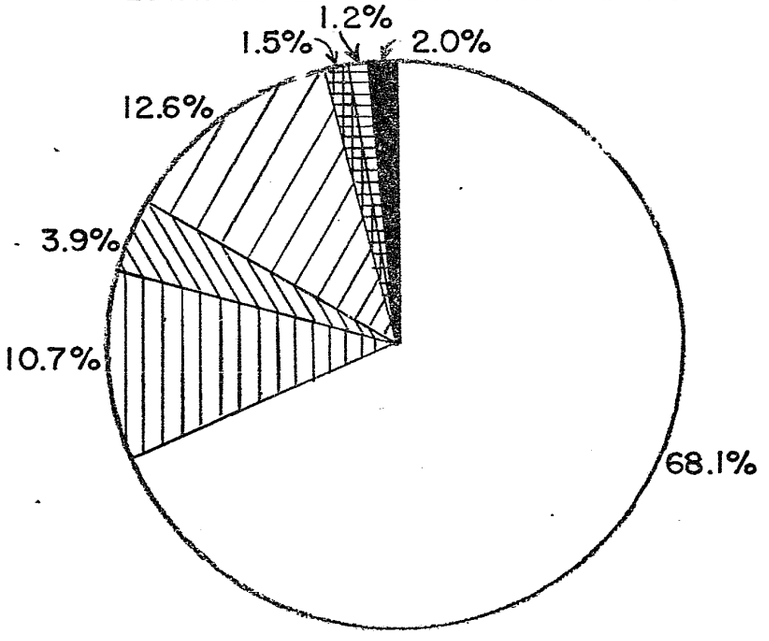
0160

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN OF ESTABLISHED PENETRATION TRACKS



CORRELATED BY FLT. PLAN	651
IDENTIFIED PRIOR TO INTERCEPT	102
IDENTIFIED W/IN 5 MIN.	38
INTERCEPTED & IDENTIFIED	121
LATER IDENTIFIED	14
UNKNOWN W/RELATED FLIGHT PLAN	11
UNKNOWN W/OUT RELATED FLIGHT PLAN	19
TOTAL PENETRATION TRACKS	956

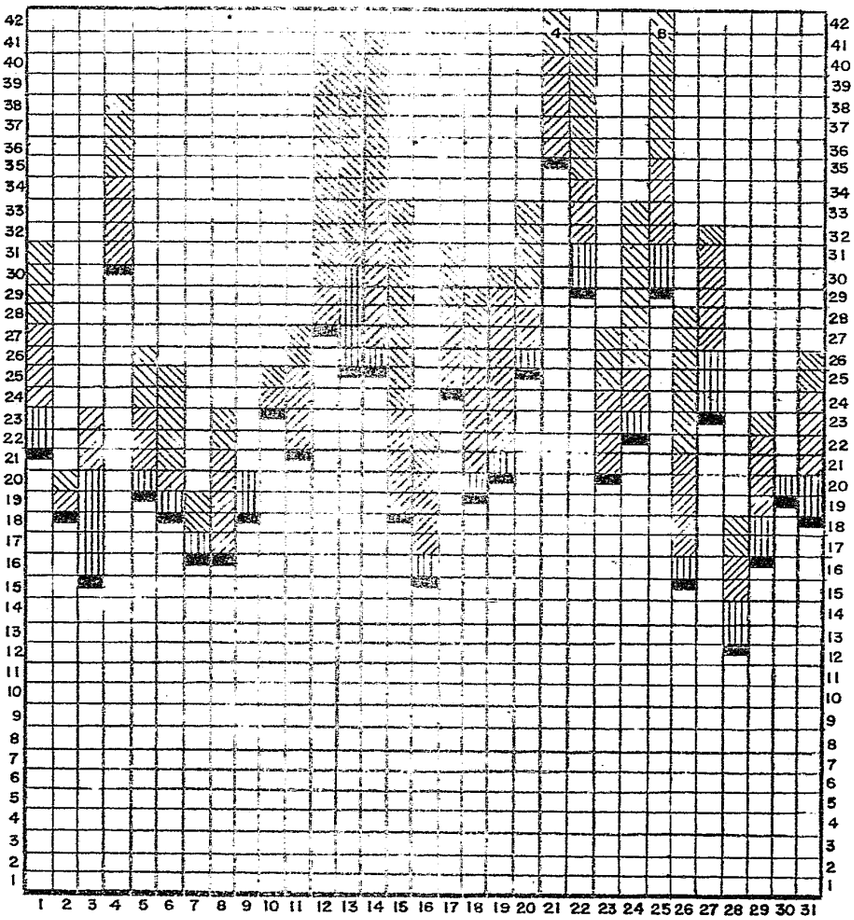
SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NUMBER OF INCOMING TRACKS PROPERLY IDENTIFIED



AUG
1952

INTERCEPTED		121
IDENTIFIED PRIOR TO INTERCEPT		102
IDENTIFIED WITHIN 5 MIN.		38
FLIGHT PLAN CORRELATED (1 MIN.)		651
	TOTAL	912

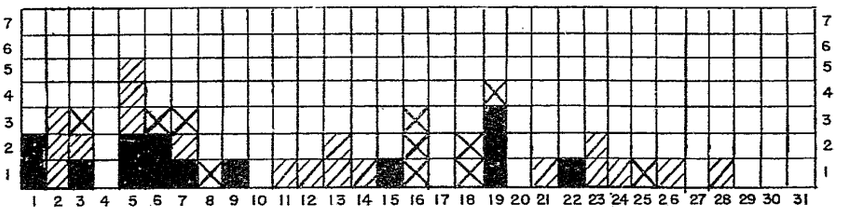
SECRET
12

0162

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



AUGUST 1952

UNKNOWN W/OUT RELATED FLIGHT PLAN	19
UNKNOWN WITH RELATED FLIGHT PLAN	11
LATER IDENTIFIED	14
TOTAL	44

0163

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

OWNERSHIP OF PENETRATION TRACKS

OWNERSHIP	CORRELATIONS		VIOLATIONS		TOTAL TRACKS
Pan American	276	78.6%	75	21.4%	351
Eastern Airlines	82	62.5%	49	37.5%	131
Colonial	56	94.9%	3	5.1%	59
B.O.A.C	21	87.5%	3	12.5%	24
Trans-Canada	10	83.3%	2	16.7%	12
Venezuelan	11	84.6%	2	15.4%	13
Air France	1	100.0%	0	0.0%	1
N.C.	0	0.0%	2	100.0%	2
R.C.A.F.	0	0.0%	3	100.0%	3
TOTAL CIVIL A/C	457	76.7%	139	23.3%	596
Navy	189	66.8%	94	33.2%	283
Air Force	17	43.6%	22	56.4%	39
MATS	15	78.9%	4	21.1%	19
TAL MILITARY A/C	221	64.8%	120	35.2%	341
TOTAL PENETRATION TRACKS (Less Unknowns without related flight plan)					937

Of the correlations above, the system carried 5 PAA, 3 BOAC, 1 Colonial, 4 Navy, and 4 Air Force flights as violations because of system deficiencies. There was no pilot violation. Also of the correlations above, 13 PAA, 15 Eastern, 1 Colonial, 1 Trans-Canada and 6 Navy flights were identified within 5 minutes after track was established by VHF/DF procedures or flight plan..

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

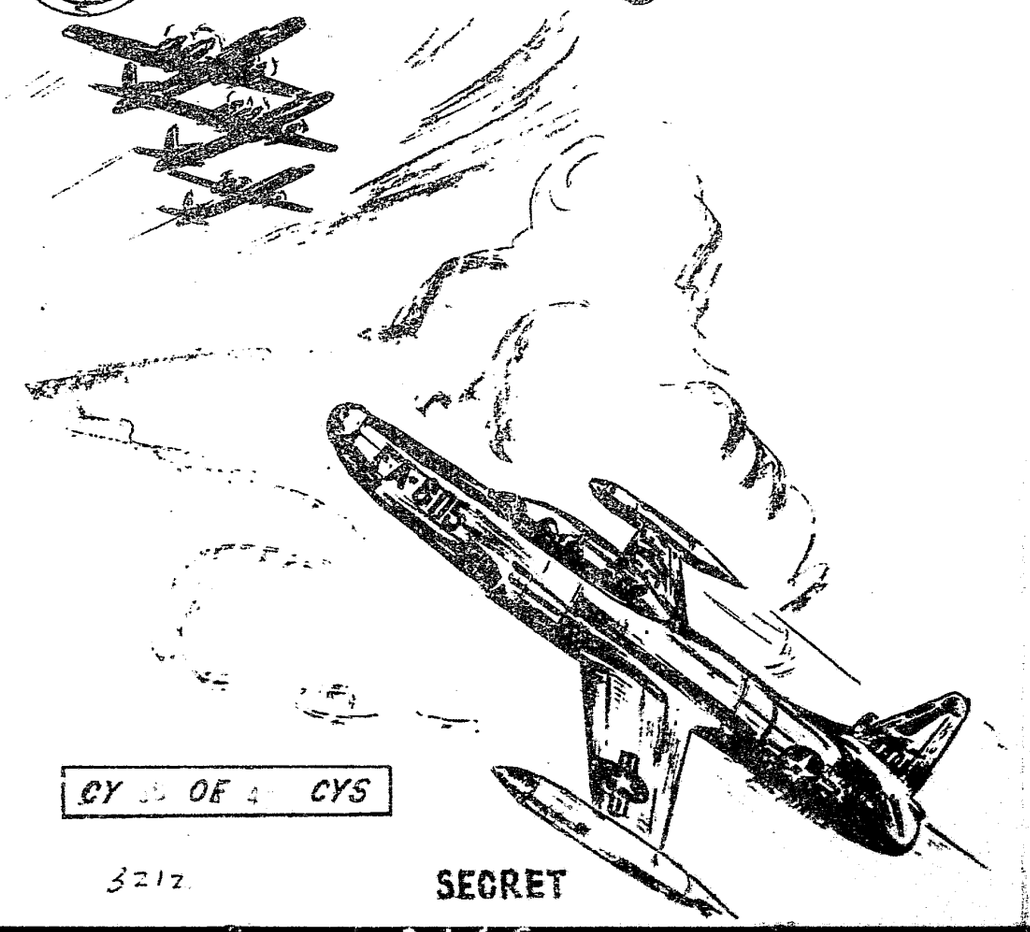
HIST-4

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY



CY 3 OF 4 CYS

3212

SECRET

0165

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date OCT 6 1957
Initials WFB

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC

1 cy CG EADF

1 cy CG WADF

1 cy CG CADF

1 cy Comdr E Sea Frontier

1 cy CG 25th ADIV

1 cy CG 26th ADIV

1 cy CG 27th ADIV

1 cy CG 28th ADIV

1 cy CG 29th ADIV

1 cy CG 30th ADIV

1 cy CG 31st ADIV

1 cy CG 32nd ADIV

1 cy CG 33rd ADIV

1 cy CG 34th ADIV

1 cy CG 35th ADIV

1 cy Cmdr Fleet - Air
Quonset Point NAS, R. I.

1 cy Comdr Fleet - Air Det
Atlantic City, N. J.

1 cy Comdr Air Flt Marine Forces
Cherry Point, N. C.

1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.

4 cys CG 4709 Defense Wg.

5 cys CG 4710 Defense Wg.

4 cys Historian, 26th ADIV

1 cy CO 646th AC&W Sqdn

1 cy CO 647th AC&W Sqdn

1 cy CO 648th AC&W Sqdn

1 cy CO 770th AC&W Sqdn

1 cy CO 771st AC&W Sqdn

1 cy CO 772nd AC&W Sqdn

1 cy CO 773rd AC&W Sqdn

40 cys TOTAL DISTRIBUTION

0167

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents Page

Analysis.....1

Initial Breakdown of Established Penetration Tracks.....3

Breakdown of Non-correlated Tracks.....4

Action against Non-correlated Tracks.....5

Reasons for no Scramble on Non-correlated Tracks.....6

Scramble Results.....7

Results of Attempted Interceptions (Less "Identification prior to Intercept" & "Identification within 5 minutes").....8

Reasons for Failure of Attempted Interceptions.....9

Final Breakdown of Established Penetration Tracks.....10

Number of Incoming Tracks properly Identified.....11

Number of Incoming Tracks not properly Handled.....12

Ownership of Penetration Tracks.....13

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANALYSIS

1. The total number of penetration tracks decreased from 956 in August to 835 in September. This decrease reflects the annual seasonal slump in overseas traffic of the commercial airlines. Of the 835 tracks plotted, 598 or 71.6% were initially identified by flight plan correlation which represents a small gain over the 68.1% correlations for August. (See chart on page 3.)

2. The chart on page 4 portrays the results of action taken to identify the non-correlated tracks originally classified as "UNKNOWN". Of the 237 non-correlations, 226 (95.4%) were subsequently identified which compares favorably with the month of August when only 90.2% of non-correlated tracks were subsequently identified. An additional 9 tracks, although remaining unknown, were closely related to a corresponding flight plan and are considered as possible correlations. Only 2 penetration tracks remained totally unknown after all identification procedures were applied and possible correlations eliminated. The number of non-correlated tracks which were identified by VHF/DF procedures increased from 86 in August to 90 in September. This increase is attributable to increased proficiency in the utilization of VHF/DF procedures for identification of civil air traffic. The number of tracks identified by flight plan revision or late flight plan information decreased from 66 in August to 56 in September.

3. There were 180 scrambles effected during the month of September as compared with 248 in August. This accounts for action against 75.9% of the non-correlated tracks. (See chart on page 5)

4. Of the 57 tracks on which intercept was not attempted, 37 (64.9%) were "scrambles saved" as a result of identification, within 5 minutes after track was established by VHF/DF procedures or flight plan revision. The remaining tracks for which no intercept was attempted are as follows, (See page 6): No fighters at suitable location, [illegible] (21.[illegible]%) Controllers errors ([illegible]), [illegible] (1.7%); and Weather or darkness [illegible] ([illegible].8%).

0169

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ANALYSIS (Cont'd)

5. A total of 76 (42.3%) scrambles resulted in interceptions (see chart on page 7). 74 (41.1%) were identified prior to intercept and 22 (12.2%) were identified within 5 minutes, but not soon enough to save scrambles. Of the total scrambles, 8 (4.4%) failed to effect interception as compared to 18 (7.3%) in August. The number of interceptions effected decreased from 121 in August to 76 in September. (See chart on page 8)

6. Breakdown of reasons for non-successful intercepts is shown on page 9. Of the 8 unsuccessful intercepts, 1 (12.5%) was due to search radar performance, 5 (62.5%) were due to controllers errors (GCI), and 2 (25.0%) were due to weather.

7. The chart on page 10, which portrays the final breakdown of all established tracks, shows an increase from the August figures for the percentage of tracks correlated by flight plan from 68.1% to 71.3% in September. The percentage for identification prior to intercept, 8.8%, is .9% lower than the same figure for August. Identifications within 5 minutes increased from 3.9% in August to 7.0% in September. The later identified figure increased from 14 (1.5%) to 17 (2.0%). Unknowns without related flight plans decreased from 19 (2.0%) in August to 2 (.2%) in September.

8. Graphic portrayal of the daily action to identify penetration tracks is shown on pages 11 and 12.

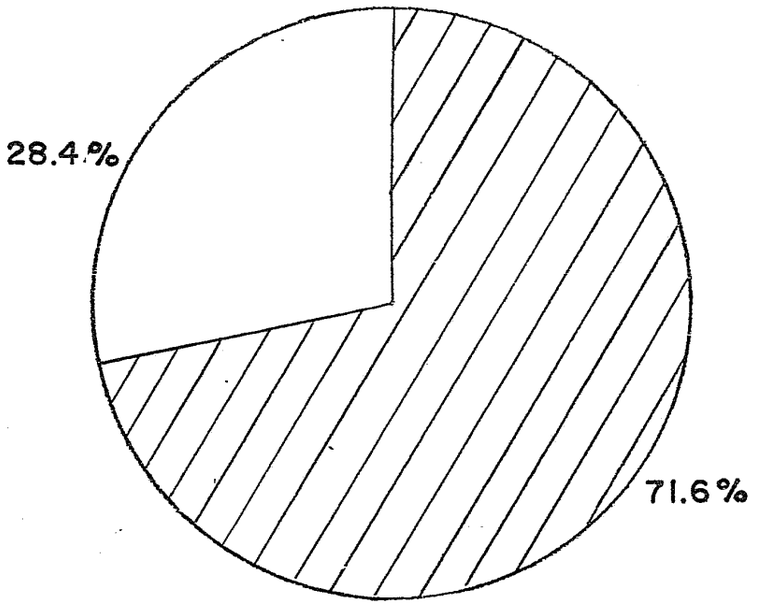
9. The chart on page 13 breaks down the correlations and violations by Civil and Military aircraft for the month of September.

0170

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

INITIAL BREAKDOWN
OF
ESTABLISHED PENETRATION TRACKS



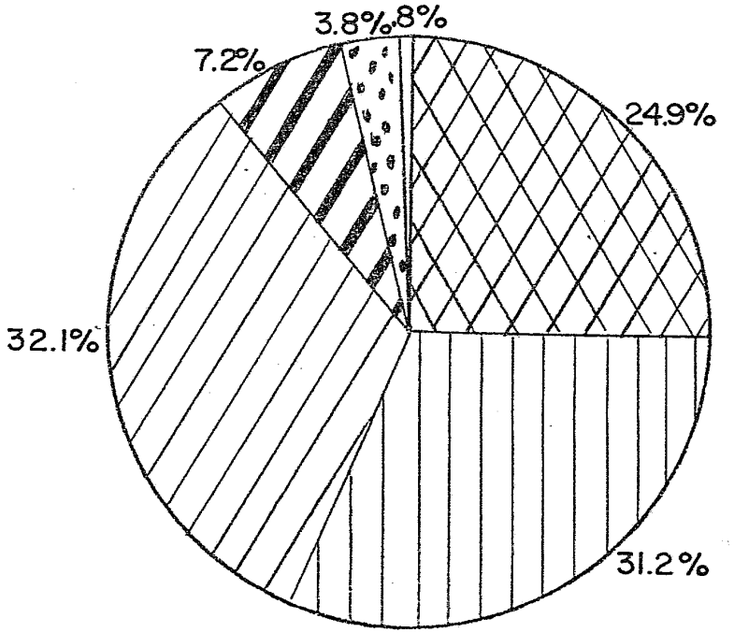
CORRELATIONS	598
NON-CORRELATIONS	237
TOTAL TRACKS	835

0171

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF NON-CORRELATIONS



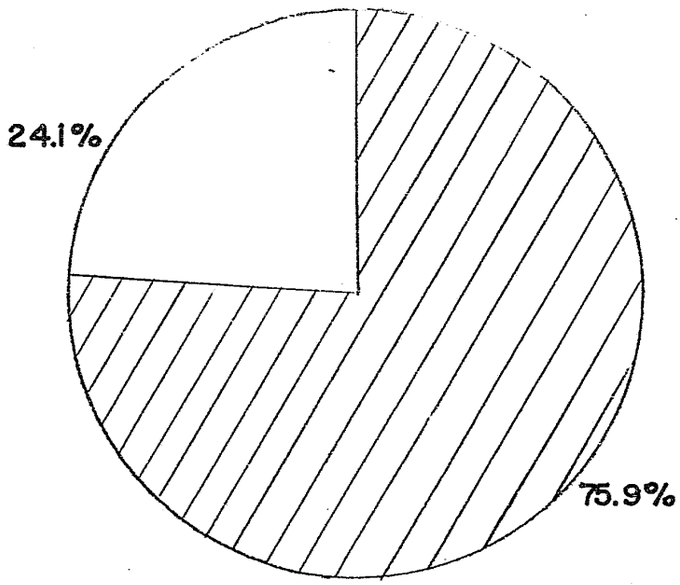
▨	IDENTIFIED W/IN 5 MIN.	59
▥	IDENTIFIED PRIOR TO INTERCEPT	74
▨	INTERCEPTED AND IDENTIFIED	76
▨	LATER IDENTIFIED	17
▨	UNKNOWN WITH RELATED FLIGHT PLAN	9
▭	UNKNOWN W/OUT RELATED FLIGHT PLAN	2
	TOTAL	237

0172

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ACTION AGAINST NON-CORRELATED TRACKS



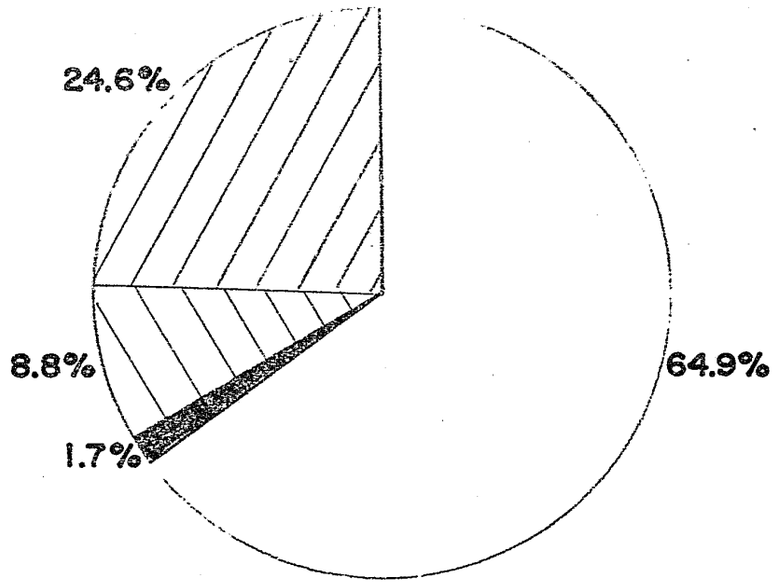
//////	SCRAMBLE EFFECTED	180
	SCRAMBLE NOT EFFECTED	57
	TOTAL NON-CORRELATED TRACKS	237

0173

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR NO SCRAMBLE ON NON-CORRELATED TRACKS



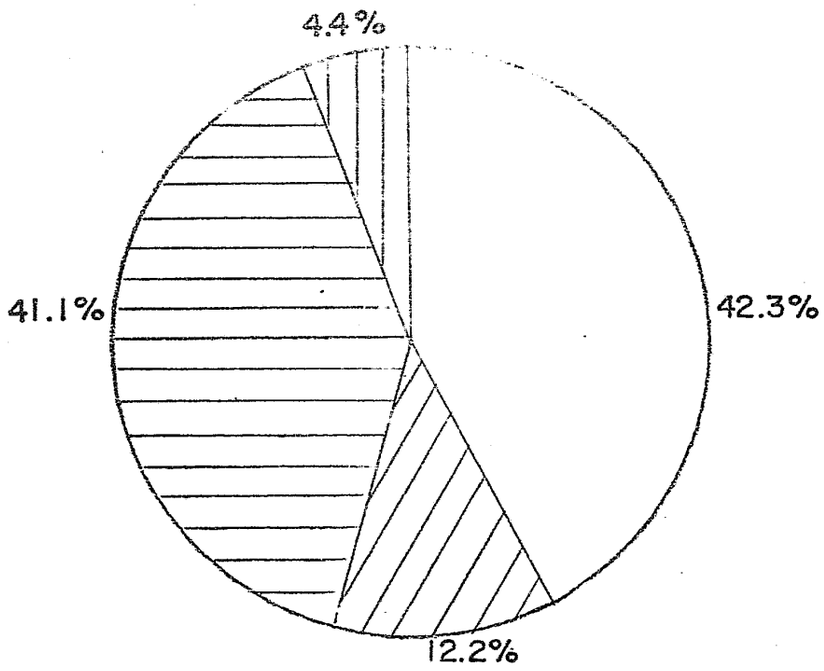
SCRAMBLE SAVED	37
CONTROLLER'S ERROR (G.C.I.)	1
WEATHER OR DARKNESS	5
NO FTRS AT SUITABLE LOCATION	14
TOTAL NON CORRELATED TRACKS ON WHICH INTERCEPT NOT ATTEMPTED	57

0174

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SCRAMBLE RESULTS



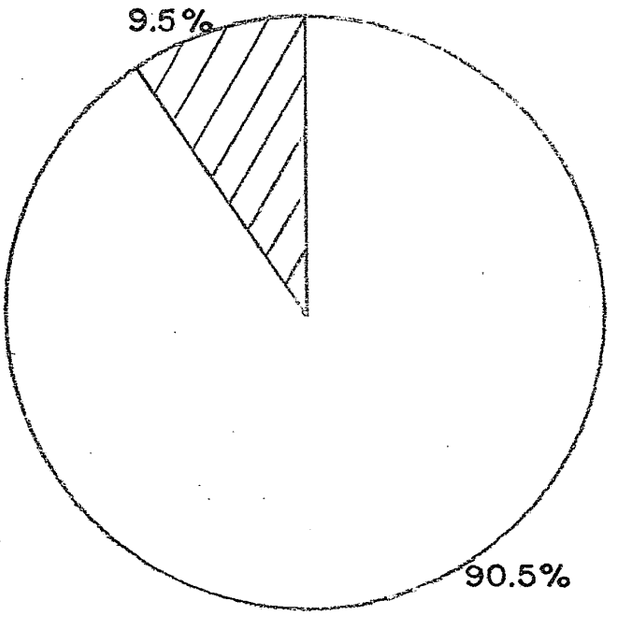
INTERCEPT SUCCESSFUL	76
IDENTIFIED W/IN 5 MIN.	22
IDENTIFIED PRIOR TO INTERCEPT	74
INTERCEPT NOT SUCCESSFUL	8
TOTAL INTERCEPTS ATTEMPTED	180

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

RESULTS OF ATTEMPTED INTERCEPTIONS



SUCCESSFUL	76
NON SUCCESSFUL	8
TOTAL ATTEMPTS	84

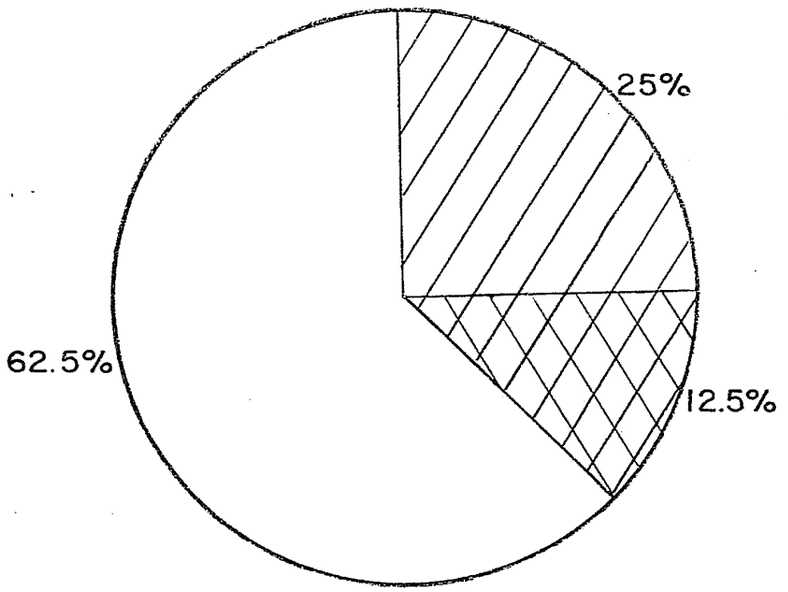
LESS IDENTIFICATIONS PRIOR TO INTERCEPT & IDENTIFIED WITHIN 5 MIN.

SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR FAILURE OF ATTEMPTED INTERCEPTIONS



//////	WEATHER	2
XXXXX	SEARCH RADAR PERFORMANCE	1
	CONTROLLER'S ERROR (G.C.I.) —	5
	TOTAL INTERCEPT FAILURES	8

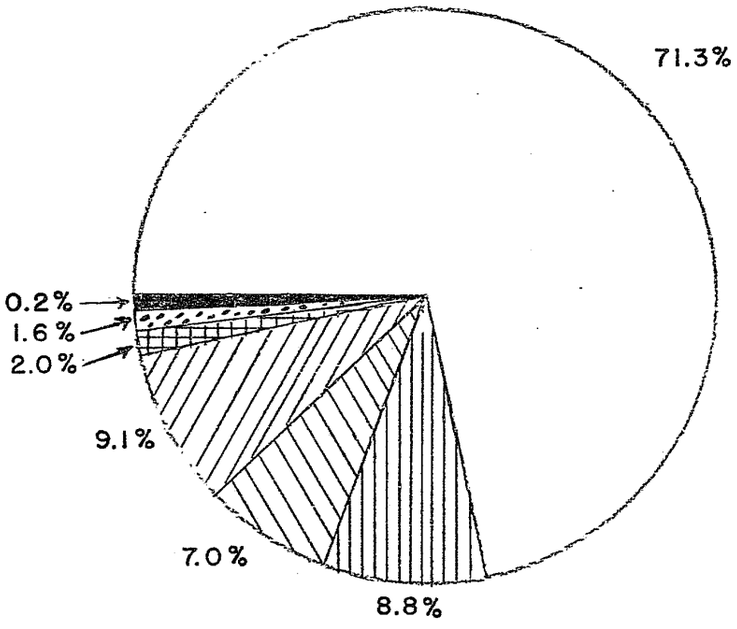
0177

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN of ESTABLISHED PENETRATION TRACKS



	CORRELATED BY FLT. PLAN	598
	IDENTIFIED PRIOR TO INTERCEPT	74
	IDENTIFIED within 5 MINUTES	59
	INTERCEPTED and IDENTIFIED	76
	LATER IDENTIFIED	17
	UNKNOWN with RELATED FLT. PLAN	9
	UNKNOWN without RELATED FLT. PLAN	2
	TOTAL PENETRATION TRACKS	835

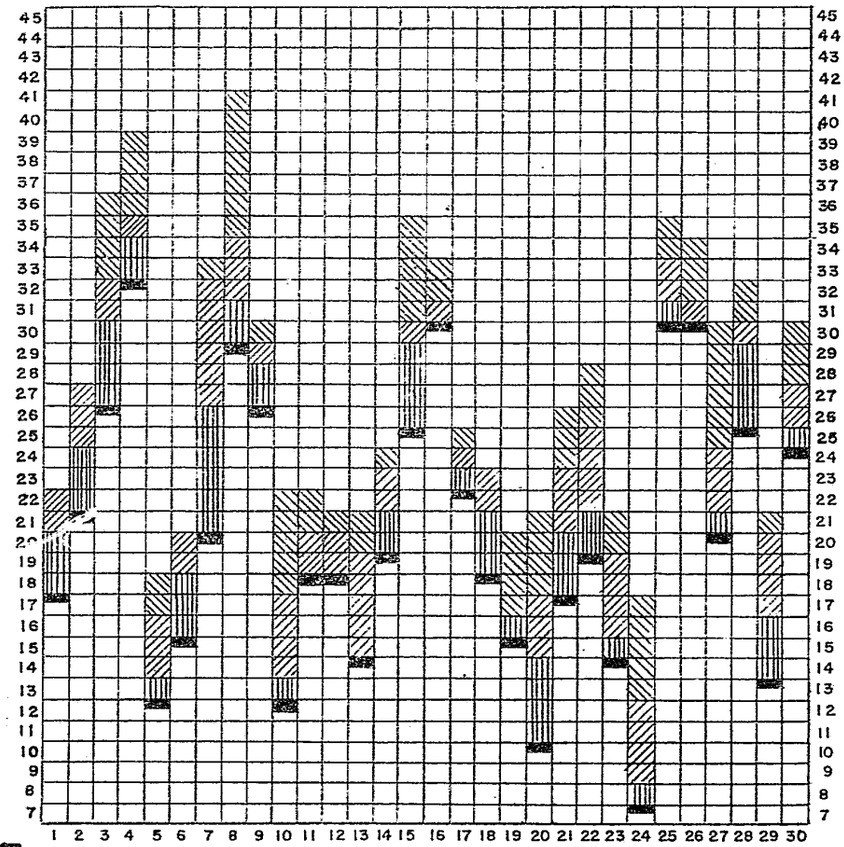
SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NUMBER OF INCOMING TRACKS PROPERLY IDENTIFIED



SEPT. 1952

INTERCEPTED	76
IDENTIFIED PRIOR TO INTERCEPT	74
IDENTIFIED WITHIN 5 MINUTES	59
FLIGHT PLAN CORRELATED (1 MINUTE)	598
TOTAL	807

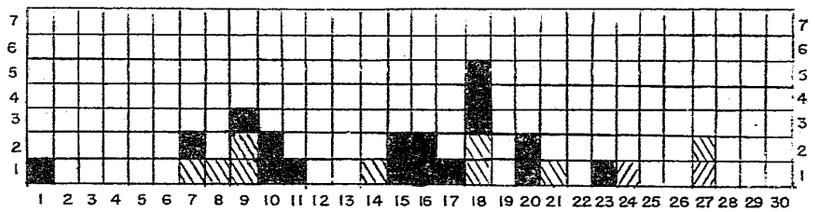
SECRET
11

0179

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



SEPTEMBER 1952

UNKNOWN W/OUT RELATED FLIGHT PLAN	2
UNKNOWN- WITH RELATED FLIGHT PLAN	9
LATER IDENTIFIED	17
TOTAL	28

0180

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

OWNERSHIP OF PENETRATION TRACKS

	CORRELATIONS		VIOLATIONS		TOTAL TRACKS
Pan American	252	79.6%	63	20.0%	315
Eastern Airlines	76	86.4%	12	13.6%	88
[illegible]	43	[illegible] %	0	%	43
[illegible]	[illegible]	[illegible]%	3	18.7%	16
[illegible]	9	[illegible]%	3	25. %	12
[illegible]	[illegible]	[illegible]	1	14.2%	7
[illegible]	4	100 %	0	%	4
[illegible]	1	%	3	100 %	3
[illegible]	0	%	1	100 %	1
[illegible]	[illegible]	[illegible]	83	[illegible]	[illegible]
[illegible]	[illegible]	21.2%	78	20.8%	[illegible]
[illegible]	[illegible]	[illegible]%	14	82.4%	17
[illegible]		[illegible]%	1	[illegible]%	[illegible]
		[illegible]%		[illegible]%	
[illegible]	254	21. %	[illegible]	[illegible]%	[illegible]

TOTAL PENETRATION TRACKS ([illegible] without [illegible] flight plans [illegible])

[illegible] was no
[illegible] were
[illegible] as

SECRET

0181

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hist - 4 cys

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY

CY OF 4 CYS

SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date_____
Initials_____

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC

1 cy CG EADF

1 cy CG WADF

1 cy CG CADF

1 cy Comdr E Sea Frontier

1 cy CG 25th ADIV

1 cy CG 26th ADIV

1 cy VC, 26th ADIV

1 cy Director of Communications
26th ADIV

3 cys Director of Intelligence
26th ADIV

4 cys Historian, 26th ADIV

1 cy CG 27th ADIV

1 cy CG 28th ADIV

1 cy CG 29th ADIV

1 cy CG 30th ADIV

1 cy CG 31st ADIV

1 cy CG 32nd ADIV

1 cy CG 33rd ADIV

1 cy CG 34th ADIV

1 cy CG 35th ADIV

1 cy CG MATS
Andrews AFB, Maryland

1 cy Cmdr Fleet - Air
Quonset Point NAS, R. I.

1 cy Comdr Fleet - Air Det
Atlantic City, N. J.

1 cy Comdr Air Flt Marine Forces
Cherry Point, N. C.

1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.

5 cys CG 4709 Defense Wg

5 cys CG 4710 Defense Wg

1 cy CO 646th AC&W Sqdn

1 cy CO 647th AC&W Sqdn

1 cy CO 648th AC&W Sqdn

1 cy CO 770th AC&W Sqdn

1 cy CO 771st AC&W Sqdn

1 cy CO 772nd AC&W Sqdn

1 cy CO 773rd AC&W Sqdn

47 Cys TOTAL DISTRIBUTION

0184

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents

	Page
Analysis	1
Initial Breakdown of Established Penetration Tracks	3
Breakdown of Non-correlated Tracks	4
Action against Non-correlated Tracks	5
Reasons for no Scramble on Non-correlated Tracks	6
Scramble Results	7
Results of Attempted Interceptions (Less "Identification prior to Intercept" & "Identification within 5 minutes")	8
Reasons for Failure of Attempted Interceptions	9
Final Breakdown of Established Penetration Tracks	10
Number of Incoming Tracks properly Identified	11
Number of Incoming Tracks not properly Handled	12
Ownership of Penetration Tracks,,	13
Fighter Action Time Averages	14

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

ANALYSIS

1. The total number of ADIZ penetration tracks increased from 835 in September to 917 in October. This increase in traffic was due to naval [illegible] activity during "Exercise [illegible]" which took place the period 29-31 October. Of the 917 penetration tracks, only 555 or 60.5% were initially identified by flight plan correlation. (See chart on page 3.)

2. The chart on page 4 shows the [illegible] action taken to identify the 362 non-correlated tracks originally classified as "UNKNOWN." During October, 77 non-correlated tracks were [illegible] by VHF/DF procedures, 90 were identified by flight plan revision or upon receipt of late flight plan and 1 was identified by air speed.

3. There were 297 scramtles against non-correlated tracks during October, a large increase over the 180 scrambles in September. (See chart on page 5.)

4. Of the 65 non-correlated tracks on which intercept was not attempted, 26 (40%) were "scrambles saved" as a result of identification, within 5 minutes after track was established by VHF/DF procedures or flight plan revision. Reasons for not scrambling against the remaining non-correlated tracks were as follows: Controller's error, 1 (1.5%); Weather or Darkness, 16 (24.6%); no fighters at suitable location, 22 (33.9%). (See chart on page 6.)

5. A total of 119 (40%) scrambles resulted in interceptions (See chart on page 7.) Of the remaining scrambled aircraft, 13 (4.4%) were recalled when the tracks were identified within 5 minutes and 98 (33%) interceptions were cancelled due to identification prior to intercept. Of the total scrambles, 67 (22.6%) aircraft failed to complete interceptions. (See chart on page 8.)

6. Principal reasons for non-successful intercepts were search radar performance and GCI Controller's error. (Chart on page 9.)

SECRET

0186

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible]

[illegible] tracks is shown on page 19 while the [illegible] results of the daily action to identify penetrat[illegible] 13 are shown the correlations and violations for [illegible].

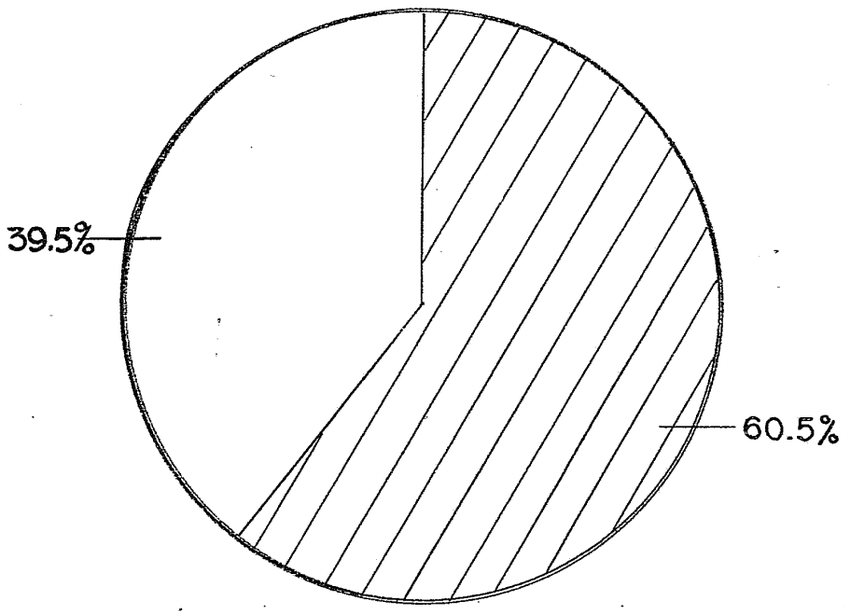
8. Average times for scramble and turnaround by fighter [illegible] have been included in this issue and are shown on page [illegible].

0187

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

INITIAL BREAKDOWN OF ESTABLISHED PENETRATION TRACKS



//////	CORRELATIONS	555
	NON-CORRELATIONS	362*
	TOTAL TRACKS	917*

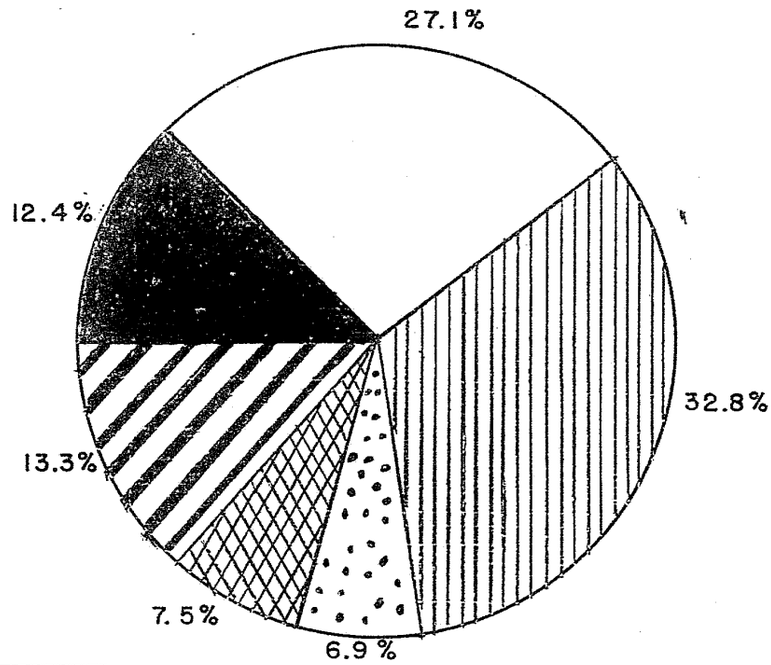
*INCLUDES ONE SURFACE VESSEL

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

BREAKDOWN OF NON-CORRELATIONS



IDENTIFIED within 5 MIN.	45
IDENTIFIED prior to INTERCEPT	98
INTERCEPTED and IDENTIFIED	*119
LATER IDENTIFIED	25
UNKNOWN with RELATED FLT. PLAN	27
UNKNOWN without RELATED FLT. PLAN	48
TOTAL	362

* Includes 1 surface vessel

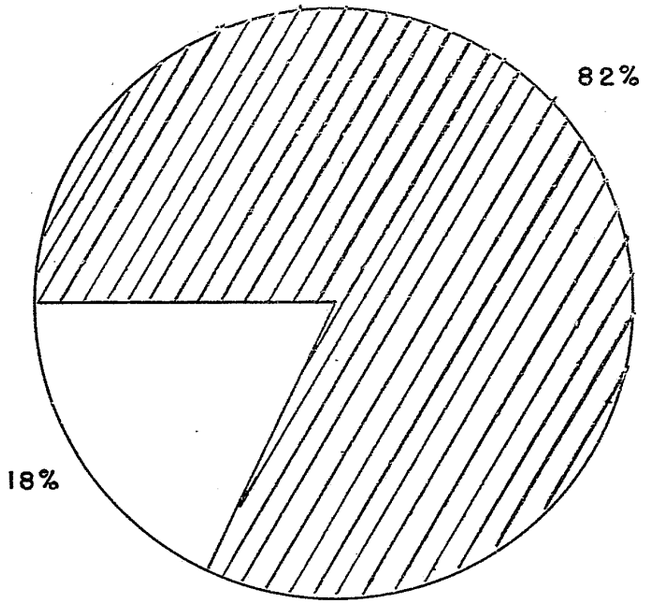
SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

ACTION AGAINST NON-CORRELATED TRACKS



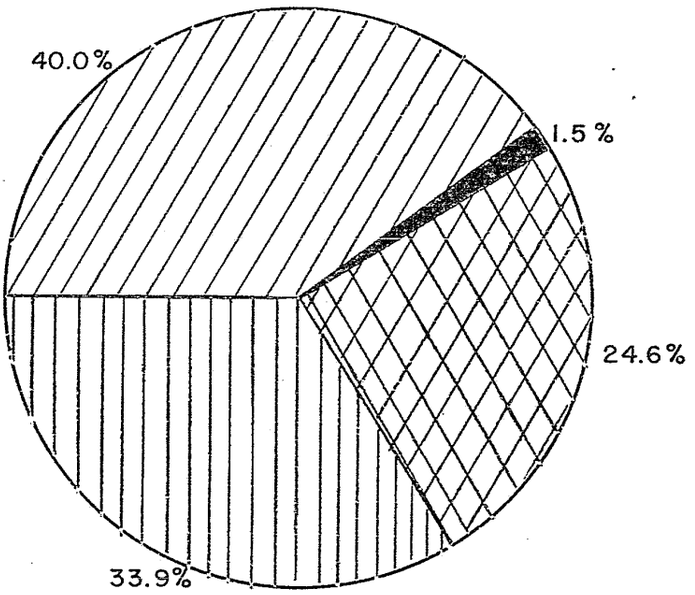
SCRAMBLE EFFECTED	297
SCRAMBLE NOT EFFECTED	65
TOTAL NON-CORRELATED TRACKS	362

SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

REASONS FOR NO SCRAMBLE
on
NON-CORRELATED TRACKS

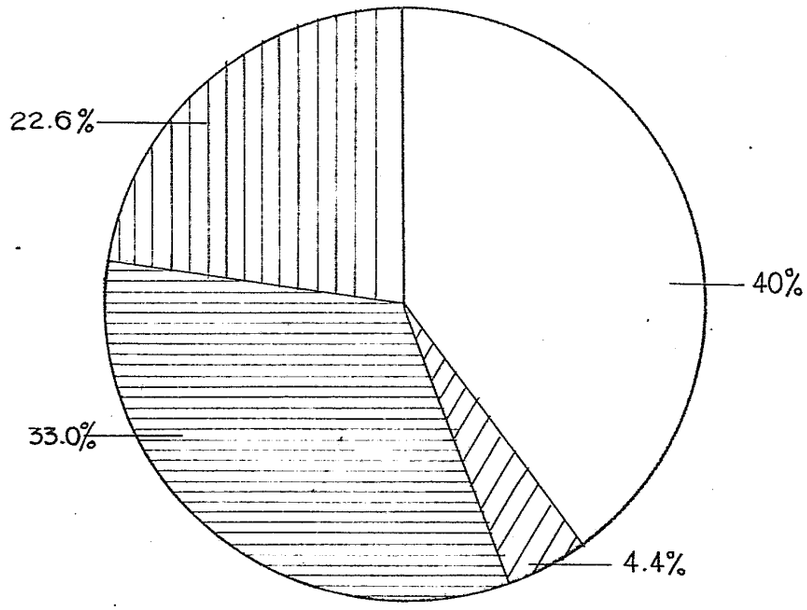


SCRAMBLES SAVED	26
CONTROLLER'S ERROR (GCI)	1
WEATHER or DARKNESS	16
NO FTRS at SUITABLE LOCATION	22
TOTAL NON-CORRELATED TRACKS ON WHICH INTERCEPT NOT ATTEMPTED	65

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SCRAMBLE RESULTS



INTERCEPT SUCCESSFUL	119 *
IDENTIFIED W/IN 5 MIN.	13
IDENTIFIED PRIOR TO INTERCEPT	98
INTERCEPT NOT SUCCESSFUL	67
TOTAL INTERCEPTS ATTEMPTED	297*

* INCLUDES ONE SURFACE VESSEL

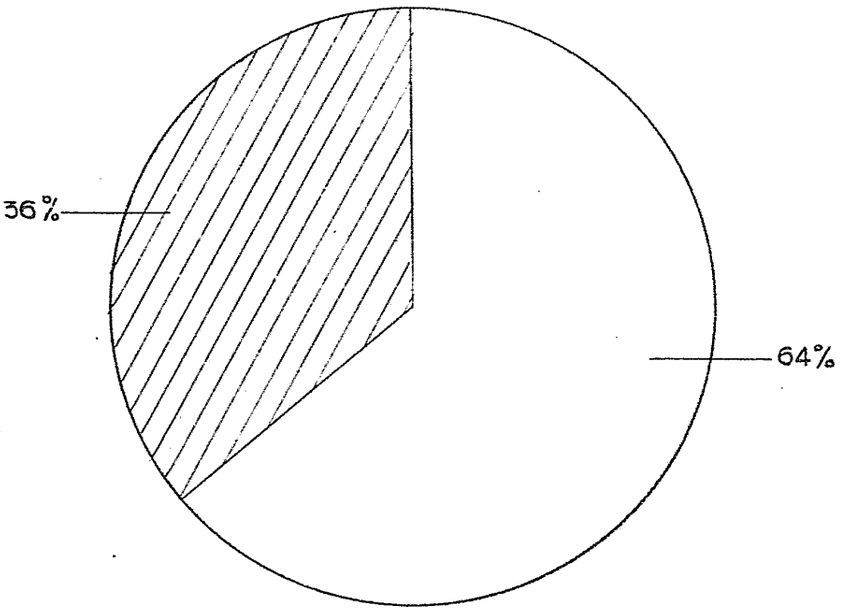
0192

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

RESULTS OF ATTEMPTED INTERCEPTIONS



SUCCESSFUL	119*
NON SUCCESSFUL	67
TOTAL ATTEMPTS	186*

LESS IDENTIFICATIONS PRIOR TO INTERCEPT & IDENTIFIED WITHIN 5 MIN.

*INCLUDES ONE SURFACE VESSEL

SECRET

8

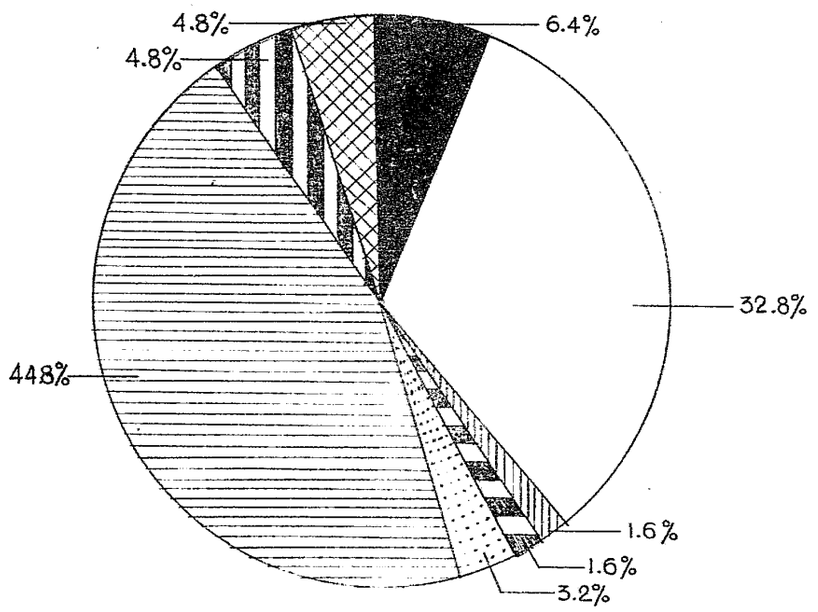
0193

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR FAILURE OF ATTEMPTED INTERCEPTIONS



WEATHER OR DARKNESS	4	HEIGHT FINDER PERFORMANCE	2
CONTROLLER'S ERROR (G.C.I.)	20	SEARCH RADAR PERFORMANCE	27
PILOT'S ERROR	1	FIGHTER PERFORMANCE	3
AIRBORNE RADAR PERFORMANCE	1	OTHER	3
		TOTAL	61

SECRET

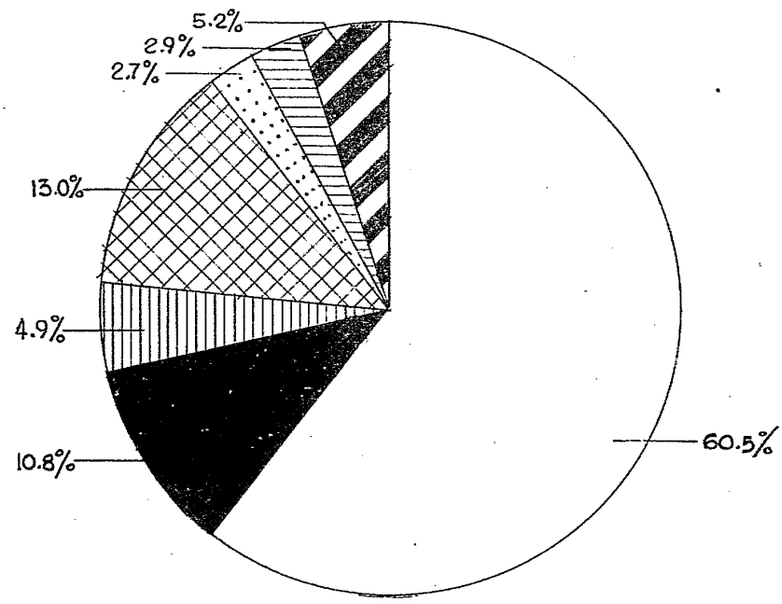
0194

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN of ESTABLISHED PENETRATION TRACKS



CORRELATED BY FLT. PLAN	555
IDENTIFIED PRIOR TO INTERCEPT	98
IDENTIFIED within 5 MINUTES	45
INTERCEPTED and IDENTIFIED	119*
LATER IDENTIFIED	25
UNKNOWN with RELATED FLT. PLAN	27
UNKNOWN without RELATED FLT. PLAN	48
TOTAL PENETRATION TRACKS	917*

*. INCLUDES ONE SURFACE VESSEL

SECRET

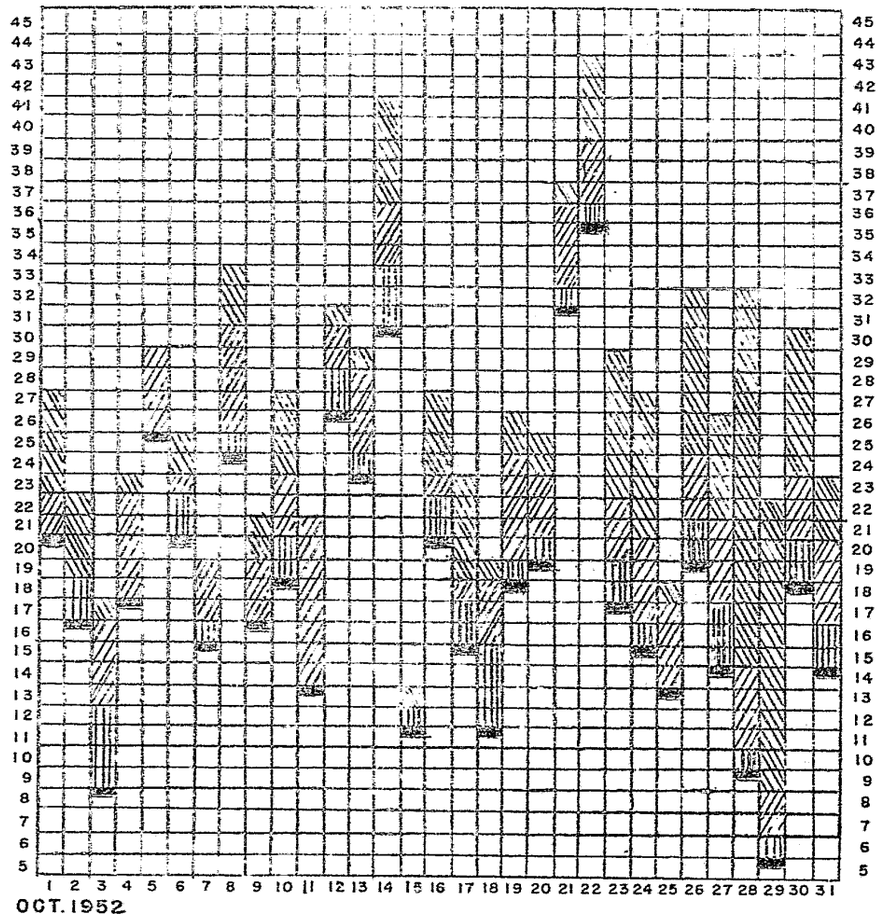
0195

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NUMBER OF INCOMING TRACKS PROPERLY IDENTIFIED



	INTERCEPTED	119 *
	IDENTIFIED prior to INTERCEPT	98
	IDENTIFIED within 5 MINUTES	45
	FLT. PLAN CORRELATED	555
*Includes 1 Surface Vessel	TOTAL	817*

SECRET

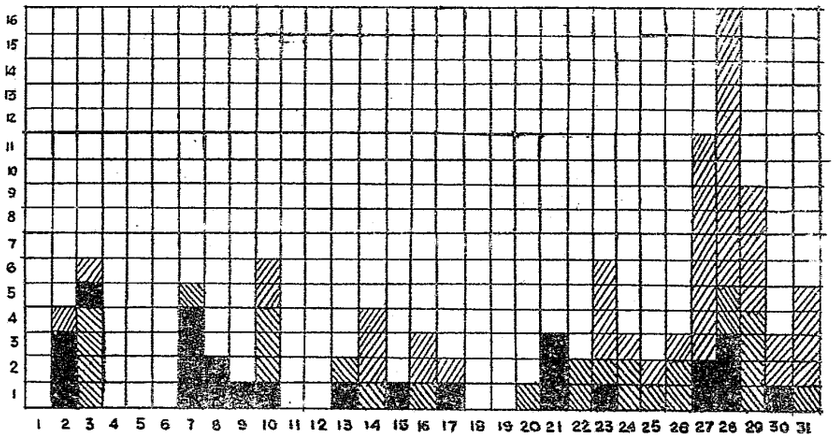
11

0196

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



OCTOBER 1952

UNKNOWN W/OUT RELATED FLIGHT PLAN	48
UNKNOWN WITH RELATED FLIGHT PLAN	27
LATER IDENTIFIED	25
TOTAL	100

0197

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

OWNERSHIP OF PENETRATION TRACKS

OWNERSHIP	CORRELATIONS		VIOLATIONS		TOTAL TRACKS	
Pan American	196	73.6%	70	26.4%	266	59.0%
Eastern Airlines	71	74.8%	24	25.2%	95	21.1%
Colonial	42	100 %	0	0%	42	9.3%
B O A C	8	61.5%	5	38.5%	13	2.9%
Trans-Canada	14	100 %	0	0%	14	3.1%
Venezuelan	10	71.4%	4	28.6%	14	3.2%
Air France	1	100 %	0	0%	1	0.2%
Netherlands	0	0 %	1	100 %	1	0.2%
Norwegian	0	0 %	1	100 %	1	0.2%
Trans-World Airlines	0	0 %	1	100 %	1	0.2%
Privately Owned	0	0 %	3	100 %	3	6.7%
TOTAL CIVIL A/C	342	75.8%	109	24.2%	451	100 %
Navy	215	60.7%	139	39.3%	354	85.3%
Air Force	14	45.2%	17	54.8%	31	7.5%
MATS	23	92 %	2	8 %	25	6.5%
RCAF	1	33 %	2	67 %	3	.7%
TOTAL MILITARY A/C	253	61.2%	160	38.8%	413	100 %

TOTAL PENETRATION TRACKS (Less Unknowns without related flight plans and surface vessels) 864

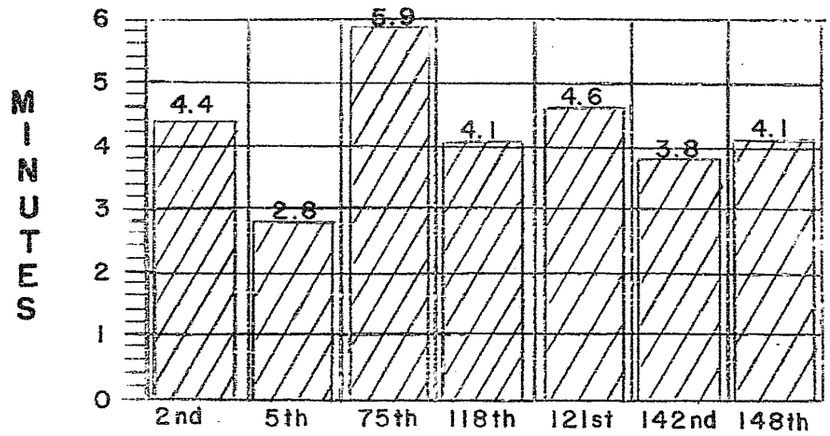
Of the correlations above, the system carried 8 PAA, 3 Colonial, 3 Navy, and 1 MATS flights as violations because of system deficiencies. Also 16 PAA, 4 Eastern, 2 Colonial, 1 Trans-Canada, 2 Navy, and 1 MATS flights were identified prior to initiation of scramble action and are shown as correlations above.

THIS PAGE DECLASSIFIED IAW EO 13526

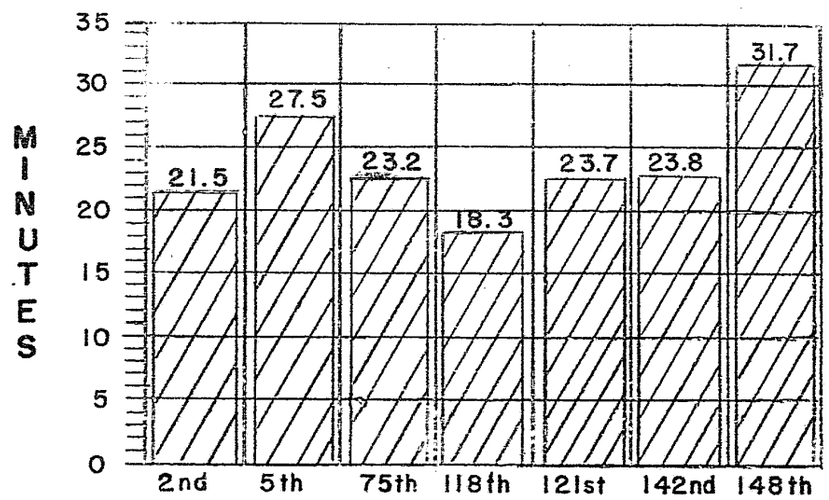
THIS PAGE DECLASSIFIED IAW EO 13526

FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION

SCRAMBLE TO AIRBORNE (TIME AVERAGE)



TURNAROUND (TIME AVERAGE)



0199

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY

CY OF CYS

SECRET

0200

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date
Initials

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

0201

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC

1 cy CG EADF

1 cy CG WADF

1 cy CG CADF

1 cy Comdr E Sea Frontier

1 cy CG 25th ADIV

1 cy CG 26th ADIV

1 cy VC, 26th ADIV

1 cy Director of Communications
26th ADIV

3 cys Director of Intelligence
26th ADIV

4 cys Historian, 26th ADIV

1 cy CG 27th ADIV

1 cy CG 28th ADIV

1 cy CG 29th ADIV

1 cy CG 30th ADIV

1 cy CG 31st ADIV

1 cy CG 32nd ADIV

1 cy CG 33rd ADIV

1 cy CG 34th ADIV

1 cy CG 35th ADIV

1 cy CG MATS
Andrews AFB, Maryland

1 cy Cmdr Fleet - Air
Quonset Point NAS, R. I.

1 cy Comdr Fleet - Air Det
Atlantic City, N. J.

1 cy Comdr Air Flt Marine Forces
Cherry Point, N. C.

1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.

5 cys CG 4709 Defense Wg

5 cys CG 4710 Defense Wg

1 cy CO 646th AC&W Sqdn

1 cy CO 647th AC&W Sqdn

1 cy CO 648th AC&W Sqdn

1 cy CO 770th AC&W Sqdn

1 cy CO 771st AC&W Sqdn

1 cy CO 772nd AC&W Sqdn

1 cy CO 773rd AC&W Sqdn

47 Cys TOTAL DISTRIBUTION

0202

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents

	Page
Summary	1
Initial Breakdown of Established Penetration Tracks	2
Breakdown of Non-Correlated Tracks	3
Action Against Non-Correlated Tracks	4
Reasons for no Scramble on Non-Correlated Tracks	5
Scramble Results	6
Results of Attempted Interceptions (Less "Identification prior to Intercept" & "Identification within 5 minutes")	7
Reasons for Failure of Attempted Interceptions	8
Final Breakdown of Established Penetration Tracks	9
Number of Incoming Tracks properly Identified	10
Number of Incoming Tracks not properly Handled	11
Ownership of Penetration Tracks	12
Fighter Action (Scramble Time Averages)	13
Fighter Action (Turnaround Time Average)	14

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SUMMARY

1. The total number of ADIZ penetration tracks decreased from 917 in October to 822 in November. Of the 822 penetration tracks, 530 (64.5%) were initially identified by flight plan correlation. (See chart on page 2.)

2. The chart on page 3 outlines the results of action taken to identify the 292 non-correlated tracks which were originally classified as "UNKNOWN". The high number of unknowns without related flight plans is attributed to the fact that Navy "Exercise Strike", which ended 1 November, involved the operation of Naval carriers near or within the ADIZ for several days after completion of the exercise. During November, 73 non-correlated tracks were identified by VHF/DF procedures and 66 were identified by flight plan revision or upon receipt of late flight plan.

3. There were 200 scrambles against non-correlated tracks during November, a sizeable decrease compared with the 297 scrambles effected in October. (See chart on page 4.)

4. Of the 92 non-correlated tracks on which intercept was not attempted, 29 (31.5%) were "scrambles saved" as a result of identification within 5 minutes after the tracks were established by either VHF/DF procedures or flight plan revision. Reasons for not scrambling against the remaining non-correlated tracks were as follows: No Fighters at Suitable Location - 10 (10.9%); Controller's error - 5 (5.4%); Weather or Darkness - 48 (52.2%). (See chart on page 5.)

5. A total of 84 (42%) scrambles resulted in interceptions. (See chart on page 6.) Of the remaining scrambled aircraft, 18 (9%) were recalled when the tracks were identified within 5 minutes and 52 (26%) of the interceptions were cancelled due to identification prior to intercept. Of the total scrambles, 46 (23%) aircraft failed to complete interceptions. (See chart on page 7.)

6. Principal reasons for non-successful intercepts were GCI Controller's Error, Search Radar Performance, and Weather or Darkness. (See chart on page 8.)

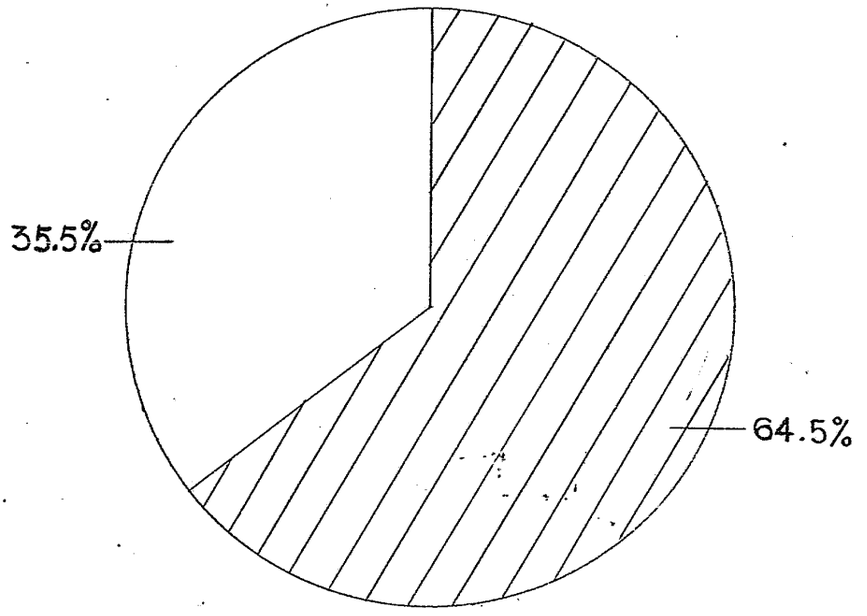
7. The final breakdown of established penetration tracks is shown on page 9 while the charts on pages 10 and 11 portray results of the daily action to identify penetration tracks. On page 12 are shown the correlations and violations for November, by ownership.

8. Time averages for scrambles (page 13) and turnarounds (page 14) are shown for each of the fighter squadrons.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

INITIAL BREAKDOWN OF ESTABLISHED PENETRATION TRACKS



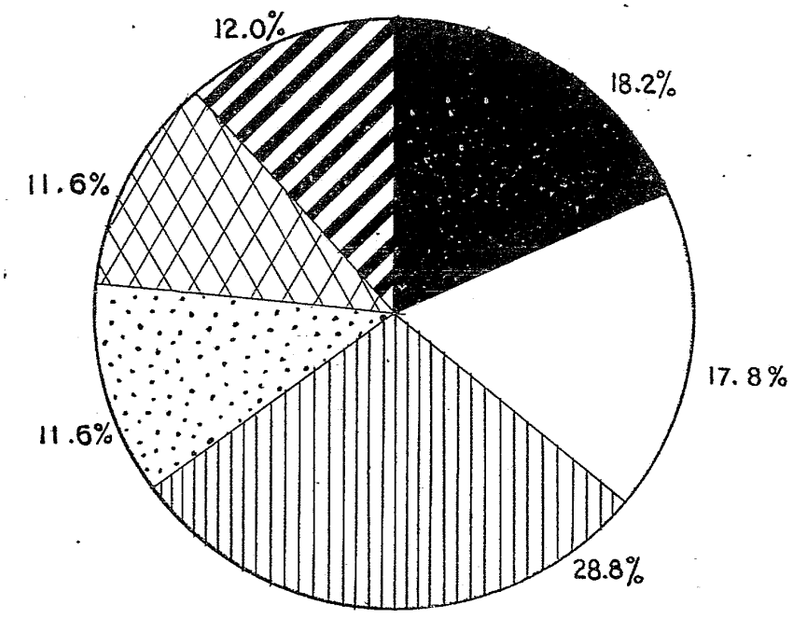
//////	CORRELATIONS	530
	NON-CORRELATIONS	292*
	TOTAL TRACKS	822*

*INCLUDES TWO SURFACE VESSELS

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF NON-CORRELATIONS



■	IDENTIFIED within 5 MIN.	53
□	IDENTIFIED prior to INTERCEPT	52
▥	INTERCEPTED and IDENTIFIED	*84
⁘	LATER IDENTIFIED	34
▩	UNKNOWN with RELATED FLT. PLAN	34
▨	UNKNOWN without RELATED FLT. PLAN	35
	TOTAL	*292

* Includes two surface vessels

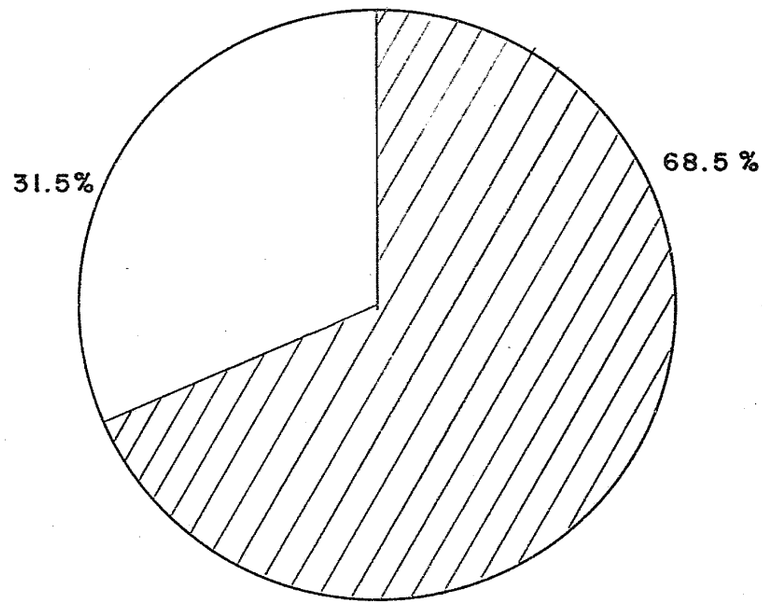
0206

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

ACTION AGAINST
NON-CORRELATED TRACKS



SCRAMBLE EFFECTED	200
SCRAMBLE NOT EFFECTED	92
TOTAL NON-CORRELATED TRACKS	292

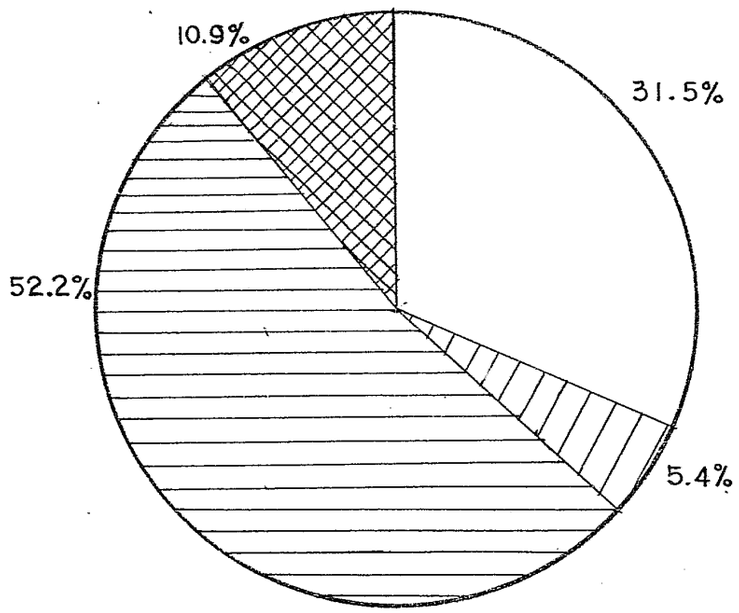
0207

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR NO SCRAMBLE on NON-CORRELATED TRACKS



SCRAMBLES SAVED	29
CONTROLLER'S ERROR (GCI)	5
WEATHER or DARKNESS	48
NO FTRS. at SUITABLE LOCATION	10
TOTAL NON-CORRELATED TRACKS ON WHICH INTERCEPT NOT ATTEMPTED	92

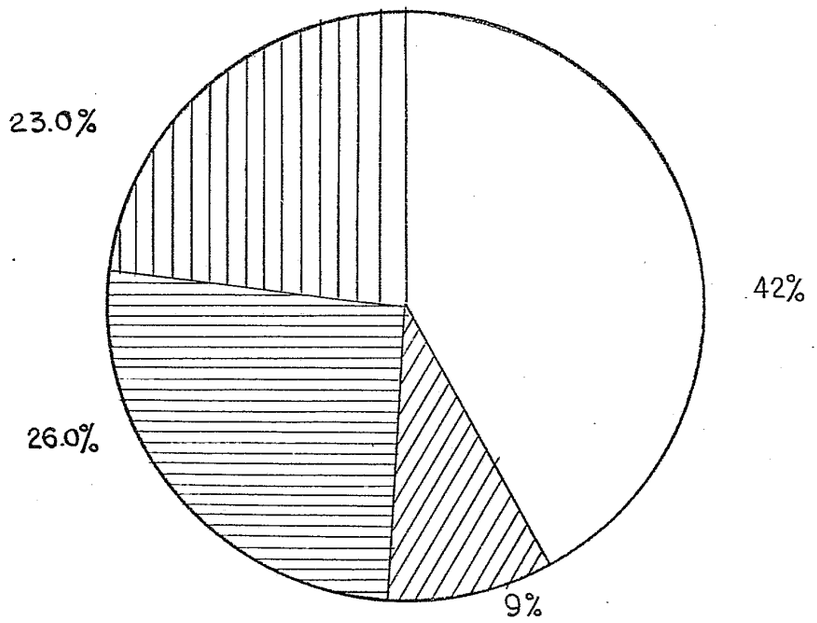
SECRET

0208

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SCRAMBLE RESULTS



INTERCEPT SUCCESSFUL	84 *
IDENTIFIED W/IN 5 MIN.	18
IDENTIFIED PRIOR TO INTERCEPT	52
INTERCEPT NOT SUCCESSFUL	46
TOTAL INTERCEPTS ATTEMPTED	200*

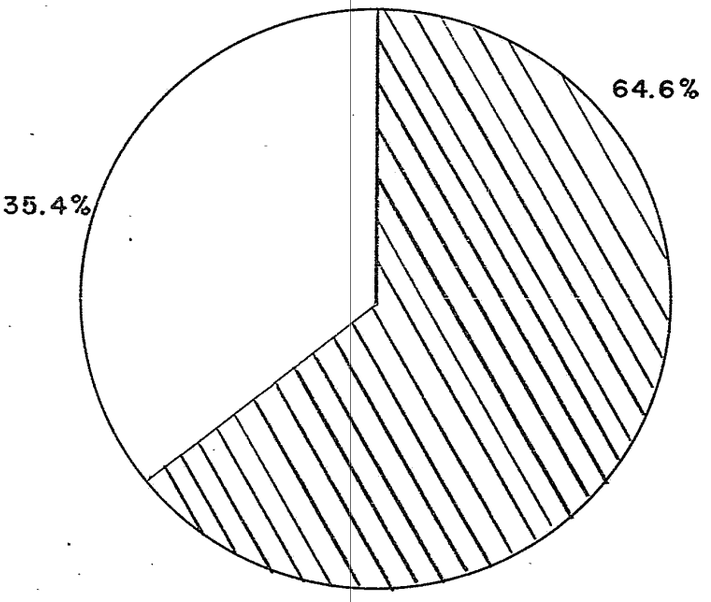
* INCLUDES TWO SURFACE VESSELS

0209

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESULTS OF ATTEMPTED INTERCEPTIONS



SUCCESSFUL	* 84
NON-SUCCESSFUL	46
TOTAL ATTEMPTS	* 130

less identifications prior to intercept & identified with 5 min.

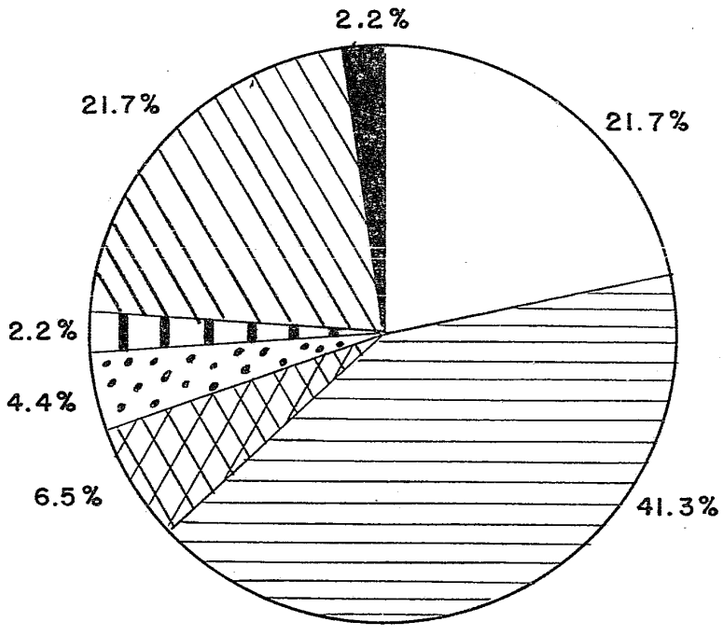
* Includes Two Surface Vessels

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR FAILURE of ATTEMPTED INTERCEPTIONS



WEATHER OR DARKNESS	10	HEIGHT FINDER PERFORMANCE	1
CONTROLLER'S ERROR (G.C.I.) *	19	SEARCH RADAR PERFORMANCE	10
COMMUNICATIONS PERFORMANCE	3	ABORTION OF A/C CAUSING DELAY	1
AIRBORNE RADAR PERFORMANCE	2	TOTAL	46

* One (1) Controller's Error (GCI) [illegible] section of the 3rd Air Division on a track emanating from [illegible].

SECRET

8

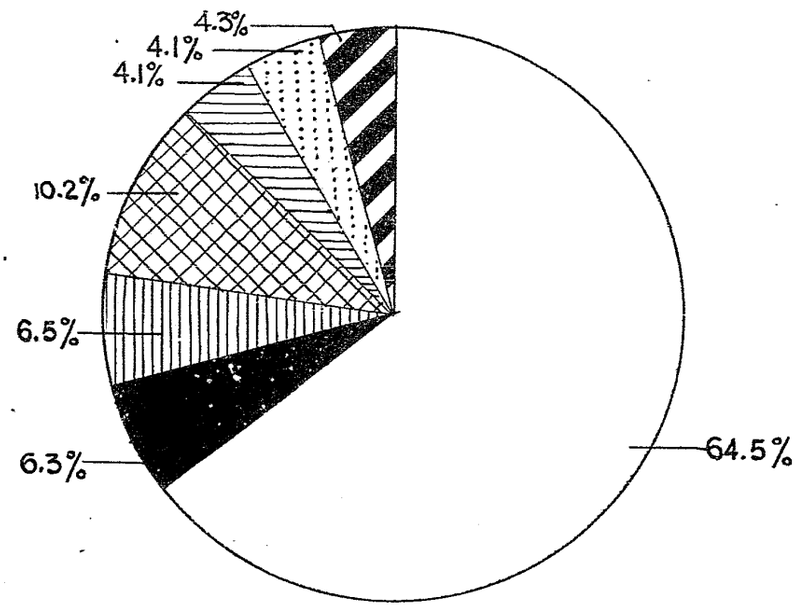
0211

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN of ESTABLISHED PENETRATION TRACKS



CORRELATED BY FLT. PLAN	530
IDENTIFIED PRIOR TO INTERCEPT	52
IDENTIFIED within 5 MINUTES	53
INTERCEPTED and IDENTIFIED	84*
LATER IDENTIFIED	34
UNKNOWN with RELATED FLT. PLAN	34
UNKNOWN without RELATED FLT. PLAN	35
TOTAL PENETRATION TRACKS	822*

* INCLUDES TWO SURFACE VESSELS

SECRET

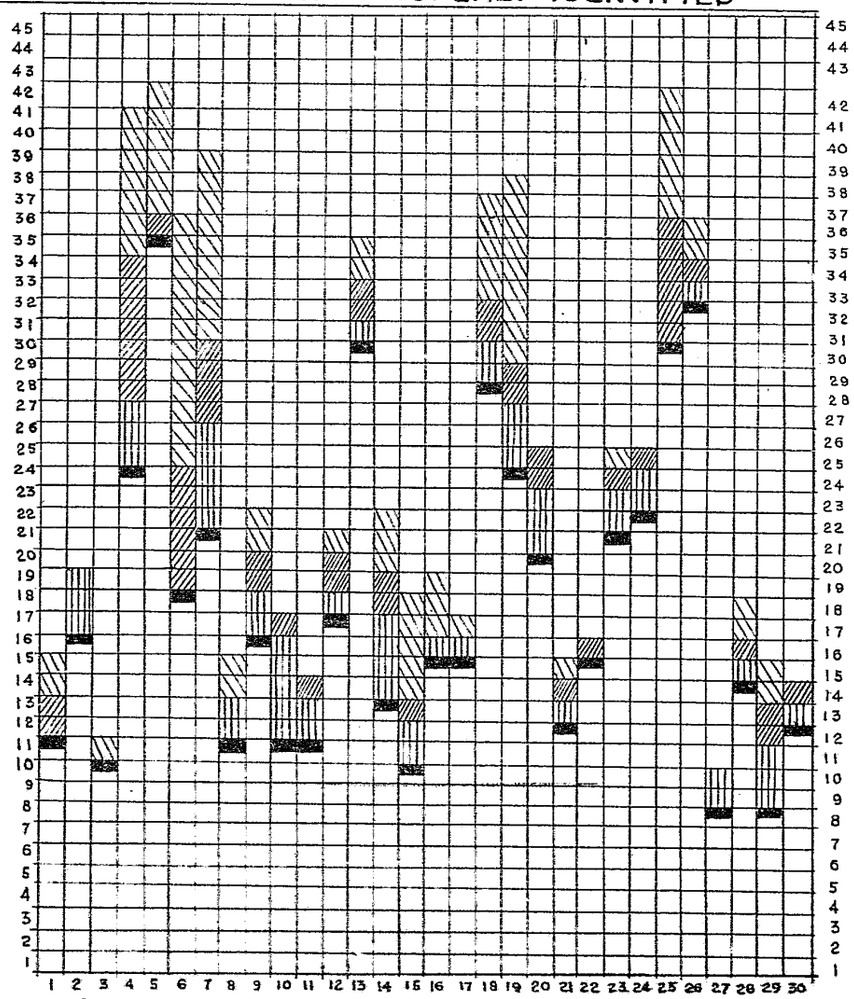
0212

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NO. OF INCOMING TRACKS PROPERLY IDENTIFIED



INTERCEPTED	84*
IDENTIFIED prior to INTERCEPT	52
IDENTIFIED within 5 MINUTES	53
FLT. PLAN CORRELATED	530
TOTAL	719*

*Includes Two Surface Vessels

SECRET

10

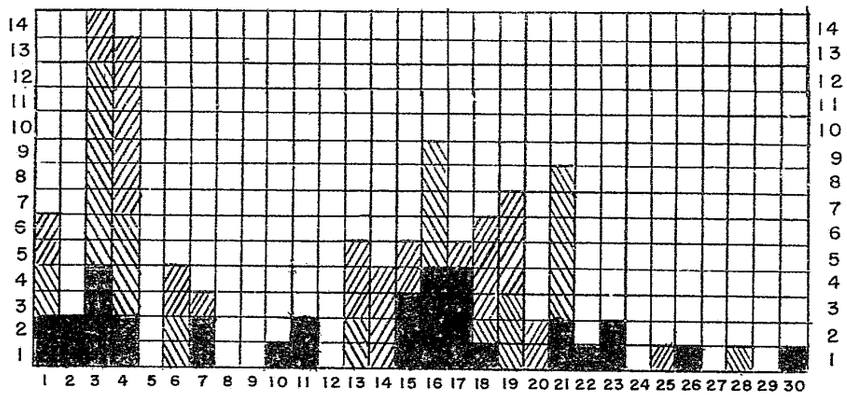
0213

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



UNKNOWN W/OUT RELATED FLIGHT PLAN	35
UNKNOWN WITH RELATED FLIGHT PLAN	34
LATER IDENTIFIED	34
TOTAL	103

SECRET

11

0214

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL

OWNERSHIP OF PENETRATION TRACKS

OWNERSHIP	CORRELATIONS		VIOLATIONS		TOTAL TRACKS	
Pan American	166	75.8%	53	24.2%	219	54.9%
Eastern Airlines	75	85.3%	13	14.7%	88	22.0%
Colonial	35	97.2%	1	2.8%	36	9.3%
National Airlines	0	0%	1	100%	1	0.2%
B O A C	13	86.7%	2	13.3%	15	3.8%
Trans-Canada	13	92.9%	1	7.1%	14	3.5%
Venezuelan	12	85.7%	2	14.3%	14	3.5%
Air France	1	100%	0	0%	1	0.2%
Netherlands	1	50%	1	50%	2	0.5%
Netherlands Antilles	1	100%	0	0%	1	0.2%
British Colonies	0	0%	1	100%	1	0.2%
Spain	1	100%	0	0%	1	0.2%
Privately Owned	0	0%	6	100%	6	1.5%
TOTAL CIVIL A/C	318	79.7%	81	20.[illegible]%	399	100%
Navy	215	64.7%	117	35.2%	332	86.0%
Air Force	17	63.0%	10	[illegible]	27	7.0%
MATS	[illegible]	[illegible]	[illegible]	19.2%	26	6.7%
RCAF	0	0%	1	100%	1	.3%
TOTAL MILITARY A/C	253	65.6%	133	[illegible]	386	100%
COMPLETE TOTAL	571	72.7%	[illegible]	[illegible]	785	100%

TOTAL PENETRATION TRACKS (Less Unknowns without related flight plans and surface vessels). 785

Of the correlations above the system carried [illegible] 1 Eastern, 1 Colonial, 1 Venezuelan, 2 Air Force, 4 Navy flights [illegible] because of system deficiencies. Also 18 PAA, 5 Eastern, 1 British Overseas Airways, 2 Trans-Canada, Netherlands Antilles and 2 Venezuelan flights were identified prior to initiation of scramble action and [illegible] correlations above.

CONFIDENTIAL

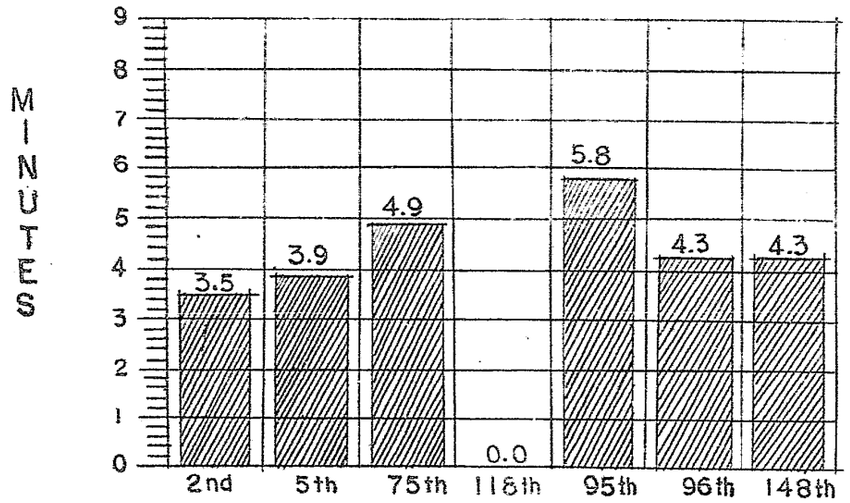
12

0215

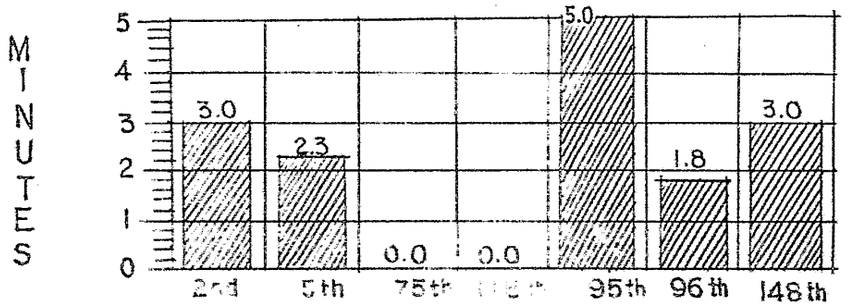
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION
SCRAMBLE TO AIRBORNE (TIME AVERAGE)
(FROM COMBAT READINESS ALERT STATUS)



FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION
SCRAMBLE TO AIRBORNE (TIME AVERAGE)
(FROM RUNWAY ALERT STATUS)



0216

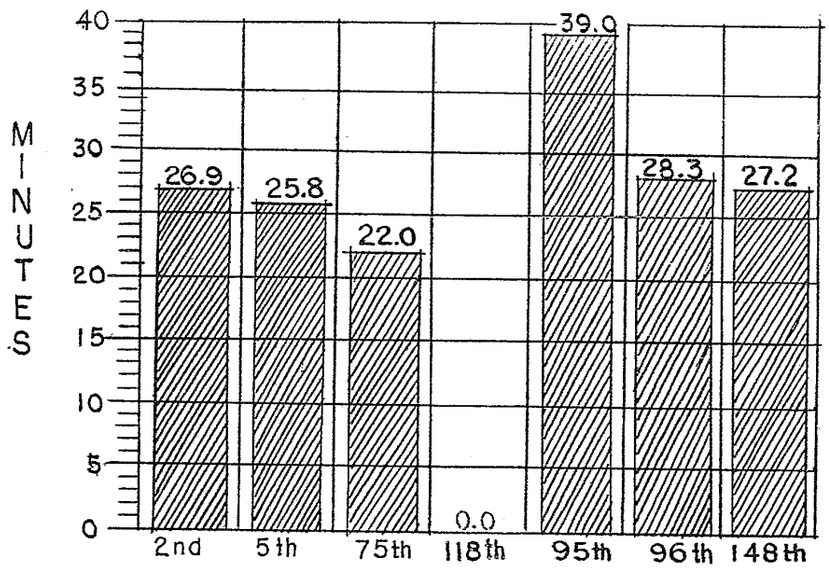
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION

TURNAROUND (TIME AVERAGE)



0217

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

Security Information

26th AIR DIVISION (DEFENSE)

OPERATIONS SUMMARY

CY 16 OF 47 CYS

102

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CLASSIFIED SECRET
By Auth of: CG 26th AD (D)
Date [illegible]
Initials [illegible]

This Document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C. Sections 793 and 794. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

PREPARED BY:

DIRECTOR OF INTELLIGENCE
OFFICE OF DEPUTY FOR OPERATIONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

0219

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DISTRIBUTION

1 cy CG ADC

1 cy CG EADF

1 cy CG WADF

1 cy CG CADF

1 cy Comdr E Sea Frontier

1 cy CG 25th ADIV

1 cy CG 26th ADIV

1 cy VC, 26th ADIV

1 cy Director of Communications
26th ADIV

3 cys Director of Intelligence
26th ADIV

4 cys Historian, 26th ADIV

1 cy CG 27th ADIV

1 cy CG 28th ADIV

1 cy CG 29th ADIV

1 cy CG 30th ADIV

1 cy CG 31st ADIV

1 cy CG 32nd ADIV

1 cy CG 33rd ADIV

1 cy CG 34th ADIV

1 cy CG 35th ADIV

1 cy CG MATS
Andrews AFB, Maryland

1 cy Cmdr Fleet - Air
Quonset Point NAS, R. I.

1 cy Comdr Fleet - Air Det
Atlantic City, N. J.

1 cy Comdr Air Flt Marine Forces
Cherry Point, N. C.

1 cy Comdr Air Forces, US Atl Flt
Norfolk NAS, Va.

5 cys CG 4709 Defense Wg

5 cys CG 4710 Defense Wg

1 cy CO 646th AC&W Sqdn

1 cy CO 647th AC&W Sqdn

1 cy CO 648th AC&W Sqdn

1 cy CO 770th AC&W Sqdn

1 cy CO 771st AC&W Sqdn

1 cy CO 772nd AC&W Sqdn

1 cy CO 773rd AC&W Sqdn

47 Cys TOTAL DISTRIBUTION

0220

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Table of Contents

Page

Summary. 1

Initial Breakdown of Established Penetration Tracks 2

Breakdown of Non-Correlated Tracks. 3

Action Against Non-Correlated Tracks. 4

Reasons for no Scramble on Non-Correlated Tracks. 5

Scramble Results. 6

Reasons for Failure of Attempted Interceptions. 7

Final Breakdown of Established Penetration Tracks. 8

Number of Incoming Tracks Properly Identified. 9

Number of Incoming Tracks Not Properly Identified. 10

Ownership of Penetration Tracks. 11

Fighter Action (Scramble Time Averages). 12

Fighter Action (Turnaround Time Average). 13

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

SUMMARY

1. The total number of ADIZ penetration tracks decreased from 322 in November to 724 in December. Of the 724 penetration tracks, 435 (57.5%) were initially identified by flight plan correlation. (See chart on page 2.)

2. The chart on page 3 outlines the results of action taken to identify the 308 non-correlated tracks which were originally classified as "UNKNOWNS". During the month of December, 114 non-correlated tracks were identified by VHF/DF procedures and 80 were identified by flight plan revision or upon receipt of late flight plan.

3. During December there were 270 scrambles against non-correlated tracks, a marked increase compared with the 200 scrambles effected in the month of November. (See chart on page 4.) Reasons for not scrambling against the remaining 33 non-correlated tracks are shown on page 5.

4. A total of 75 (27.8%) scrambles resulted in interceptions. Of the remaining scrambled aircraft, 35 (12.7%) were recalled from runway alert (scrambles saved), 17 (6.2%) were recalled when the tracks were identified within five minutes and 111 (40.4%) of the interceptions were recalled due to identification prior to intercept. Of the total scrambles, 37 (13.4%) aircraft failed to complete interceptions. (See chart on page 6.)

5. Principal reasons for non-successful intercepts were GCI Controller's Error and Search Radar Performance. (See chart on page 7.)

6. The final breakdown of established penetration tracks is shown on page 8, while the charts on pages 9 and 10 portray results of the daily action to identify penetration tracks. The correlations and violations for the month of December are shown by ownership on page 11.

7. Time averages for scrambles (page 12) and turnarounds (page 13) are shown for each of the fighter squadrons.

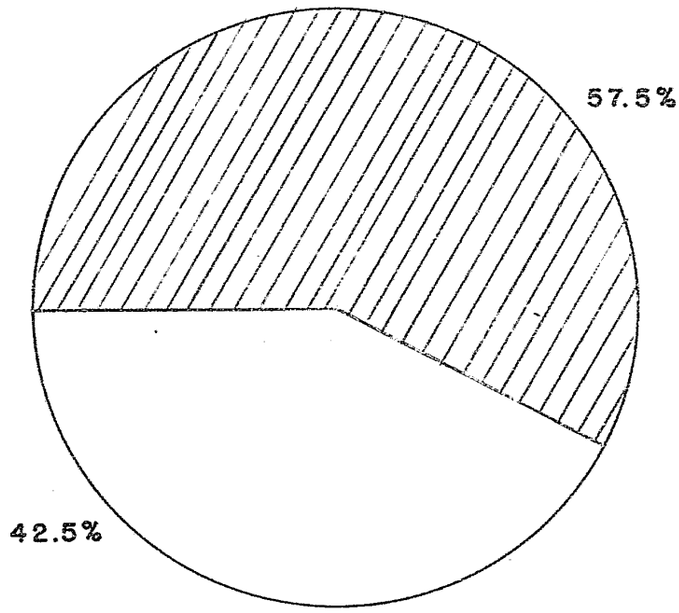
SECRET

0222

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

INITIAL BREAKDOWN of ESTABLISHED PENETRATION TRACKS



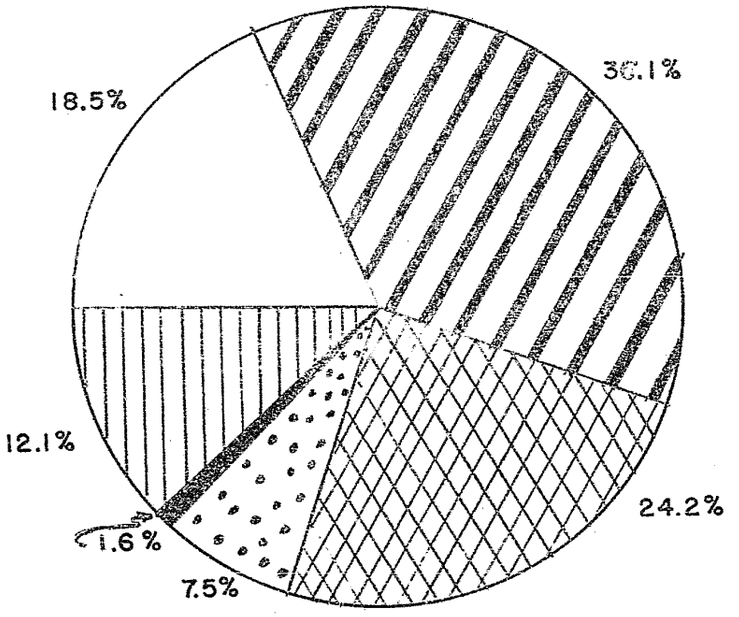
//////	CORRELATIONS	416
	NON-CORRELATIONS	308
	TOTAL	724

0223

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF NON-CORRELATIONS



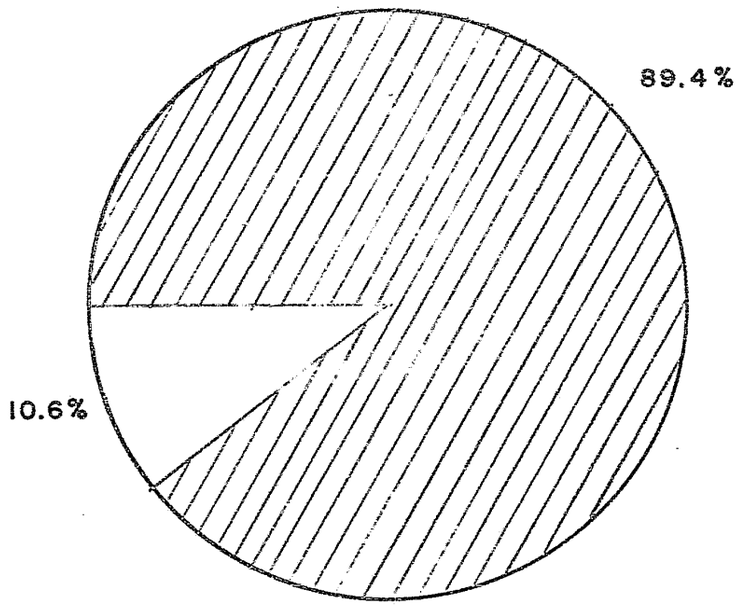
IDENTIFIED within 5 MIN.	57
IDENTIFIED prior to INTERCEPT	111
INTERCEPTED and IDENTIFIED	75
LATER IDENTIFIED	23
UNKNOWN with RELATED FLT. PLAN	5
UNKNOWN without RELATED FLT. PLAN	37
TOTAL	308

0224

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ACTION AGAINST NON-CORRELATED TRACKS



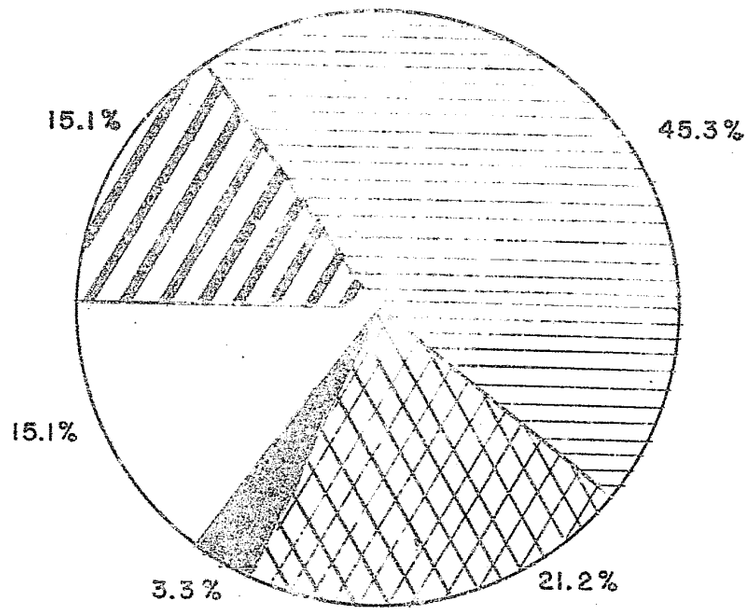
SCRAMBLE EFFECTED	275
SCRAMBLE NOT EFFECTED	33
TOTAL NON-CORRELATED TRACKS	308

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR NO SCRAMBLE
on
NON-CORRELATED TRACKS



CONTROLLER'S ERROR (GCI)	5
WEATHER or DARKNESS	15
NO FTRS. at SUITABLE LOCATION	7
PICKET VESSEL PERFORMANCE	1
IDENTIFIED within 5 MIN., NO SCRAMBLE DUE TO WX	5
TOTAL NON-CORRELATED TRACKS ON WHICH INTERCEPT NOT ATTEMPTED	33

SECRET

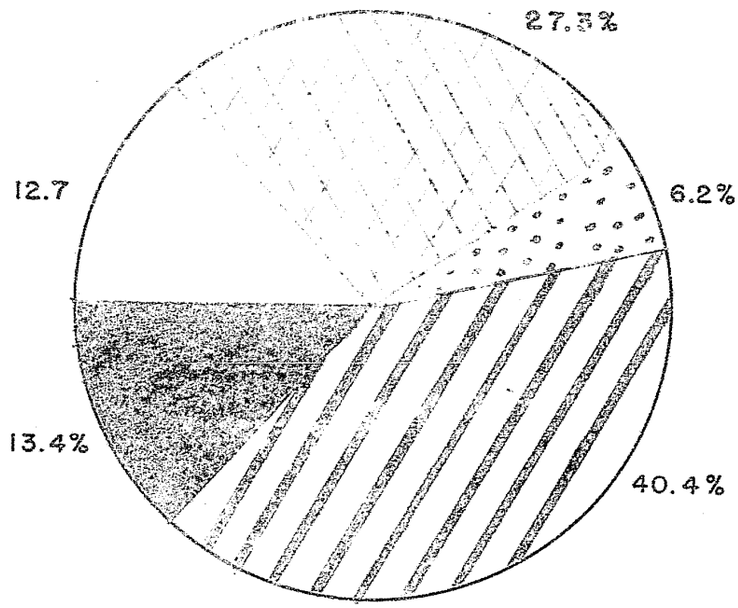
0226

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

SCRAMBLE RESULTS



XXXXX	INTERCEPT ACCOMPLISHED	75
:::::	IDENTIFIED W/IN 5 MIN.	17
////	IDENTIFIED PRIOR TO INTERCEPT	111
	SCRAMBLES SAVED	35
	INTERCEPT NOT SUCCESSFUL	37
	TOTAL INTERCEPTS ATTEMPTED	275

SECRET

6

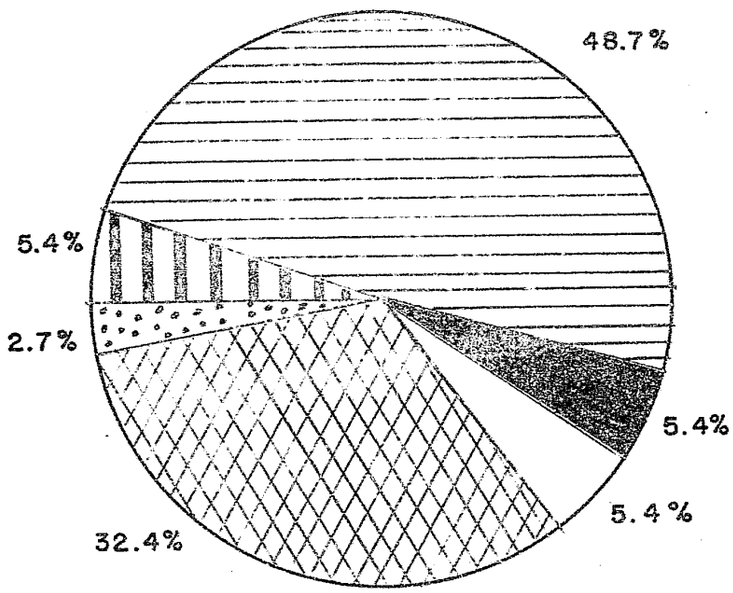
0227

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

REASONS FOR FAILURE of ATTEMPTED INTERCEPTIONS



WEATHER or DARKNESS	2
CONTROLLER'S ERROR (G.C.I.)	18
FTRS. had to use WX CORRIDOR	2
PICKET VESSEL PERFORMANCE	2
SEARCH RADAR PERFORMANCE	12
ABORTION OF A/C CAUSING DELAY	1
TOTAL	37

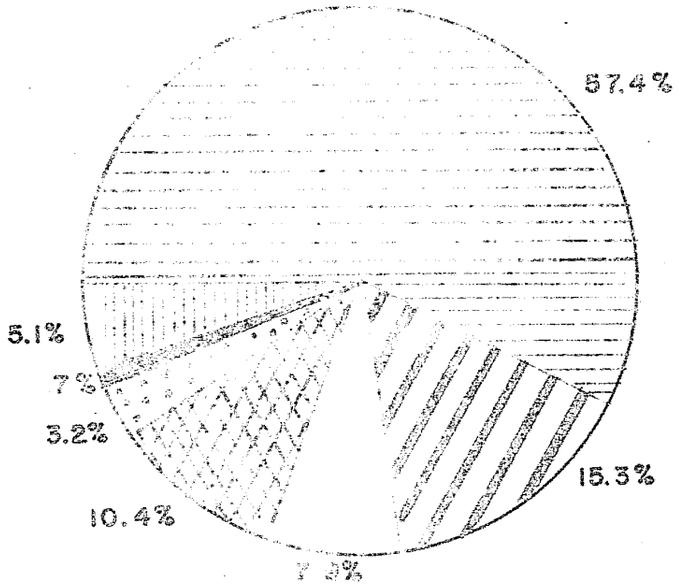
0228

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

FINAL BREAKDOWN
OF
ESTABLISHED PENETRATION TRACKS



	CORRELATED BY A FLT PLAN	416
	IDENTIFIED prior to INTERCEPT	111
	IDENTIFIED within 5 MINUTES	57
	INTERCEPTED and IDENTIFIED	75
	LATER IDENTIFIED	23
	UNKNOWN with RELATED FLT. PLAN	5
	UNKNOWN without RELATED FLT. PLAN	37
	TOTAL PENETRATION TRACKS	724

SECRET
9

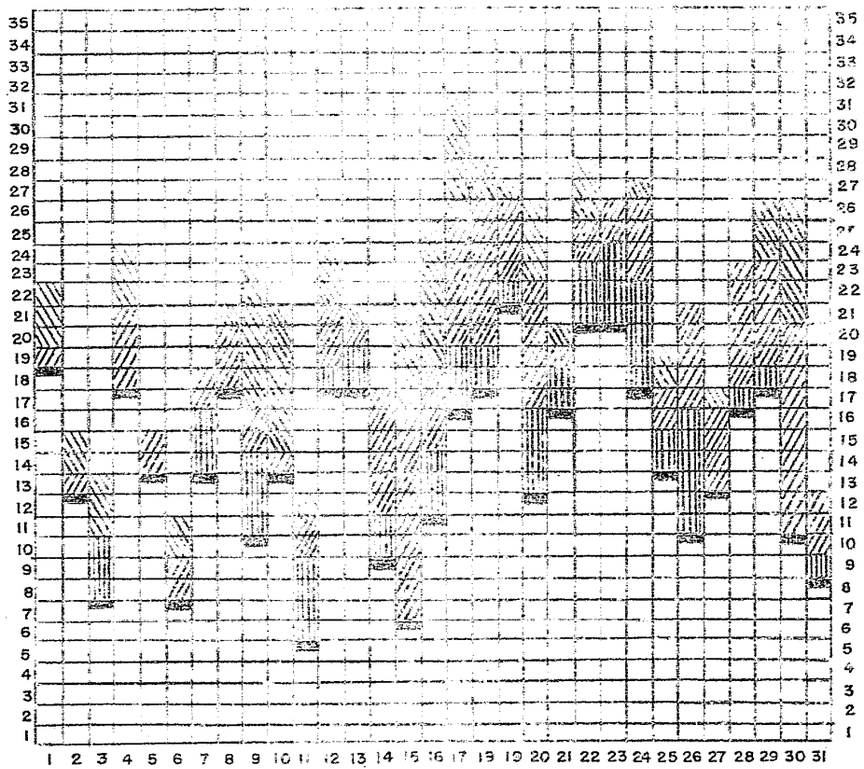
0229

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

NO. OF INCOMING TRACKS
PROPERLY IDENTIFIED



INTERCEPTED and IDENTIFIED	75
IDENTIFIED prior to INTERCEPT	111
IDENTIFIED within 5 MIN.	57
FLT. PLAN CORRELATED	416
TOTAL	659

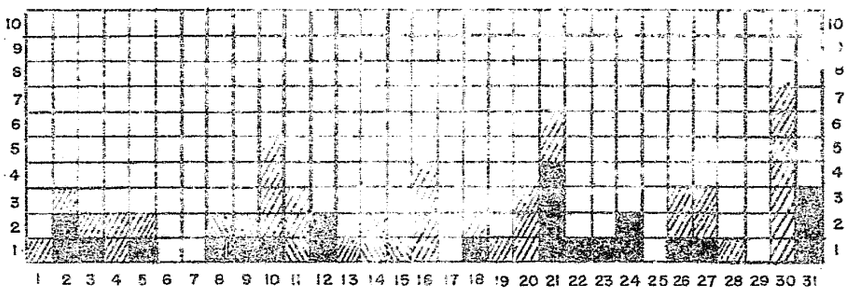
SECRET

0230

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

NUMBER OF INCOMING TRACKS NOT PROPERLY HANDLED



DEC. 1952

UNKNOWN W/OUT RELATED FLT. PLAN	37
UNKNOWN WITH RELATED FLT. PLAN	5
LATER IDENTIFIED	23
TOTAL	65

0231

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL

OWNERSHIP					
Pan American					
Eastern Airlines					
Colonial					
National Airlines					
B O A C					
Trans-Canada					
Venezuelan					
Air France					
Netherlands					
Netherlands Airlines					
Trans-World Airlines					
Seaboard Airlines					
Privately Owned					
TOTAL CIVIL AIR					
Navy				128	
Air Force					
MATS					
RCAF					
TOTAL MILITARY AIR					
COMPLETE TOTAL					
TOTAL PENETRATION DATA					

Colonial
foreign
Priv
of

CONFIDENTIAL

0232

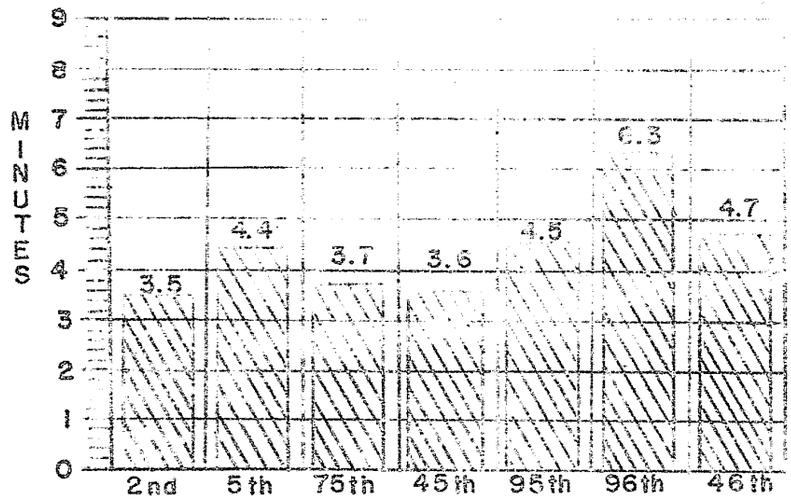
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

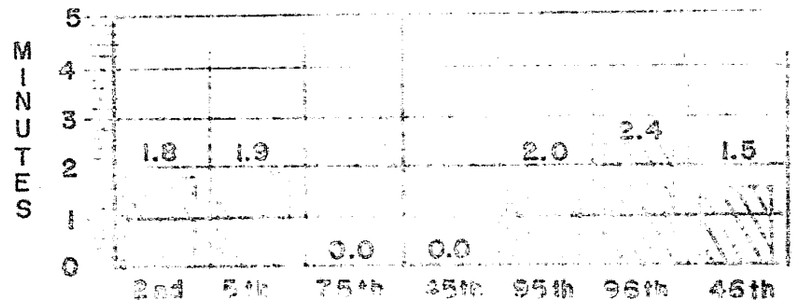
SECRET

FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION

SCRAMBLE TO AIRBORNE (TIME AVERAGE)
(FROM COMBAT READINESS ALERT STATUS)



SCRAMBLE TO AIRBORNE (TIME AVERAGE)
(FROM RUNWAY ALERT STATUS)



SECRET

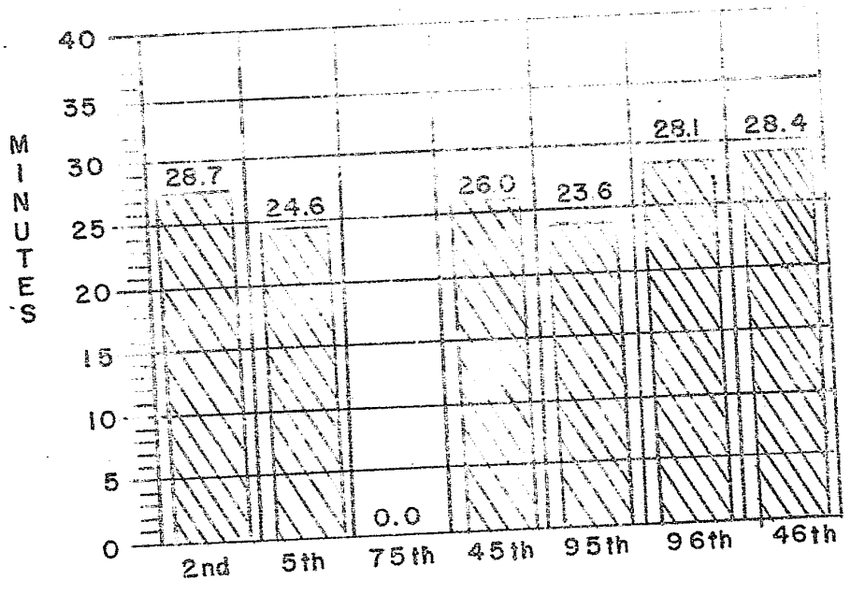
0233

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

FIGHTER ACTION TIME AVERAGES
BY FIGHTER ORGANIZATION

TURNAROUND (TIME AVERAGE)



0234

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 1 - 15 JULY 52

1. TRACKS IDENTIFIED PROMPTLY:	CAA		AFS		TOTAL	
Correlated by Flight Plan	223	81.4	76	64.4	299	75.1
Identified w/in 5' (VHF/DF, F/F)	14	5.1	2	1.7	16	4.0
Identified prior to Intercept	29	10.6	6	5.1	35	8.8
Intercepted & Identified	8	2.9	27	22.9	35	8.8
SUB TOTAL	274	100.0	111	94.1	385	96.7
2. FINAL CLASSIFICATION OF OTHER FLIGHTS						
Later Identified			2	1.7	2	.5
Unknown with related F/P			5	4.2	5	1.3
Unknown without related F/P					6	1.5
SUB TOTAL			7	5.9	13	3.3
TOTAL	274	100.0	118	100.0	398	100.0

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE	Scramble	No Scramble	Total
Search Radar Performance	6		6 46.1%
No Ftrs at Suitable Location		6	6 46.1%
Abortion of A/C Causing delay	1		1 7.8
	7	6	13 100.0

B. 1. CLASSIFICATION OF FLIGHTS	CAA		AFS		TOTAL	
Correlations	223	81.4	76	64.4	299	75.1
Non-correlations	51	18.6	42	35.6	99	24.9
TOTAL	274	100.0	118	100.0	398	100.0
2. ACTION ON NON-CORRELATIONS						
Identified within 5 min	14	27.5	2	4.8	16	16.2
Identified prior to Intercept	29	56.8	6	14.2	35	35.4
Intercepted & Identified	8	15.7	27	64.3	35	35.4
Later Identified			2	4.8	2	2.0
Unknown with related F/P			2	11.9	5	5.0
Unknown without related F/P					6	6.0
TOTAL	51	100.0	42	100.0	99	100.0

3. 2, (24.3%)of CAA non-correlated tracks were identified by VHF/DF procedures, 19 (19.2) were identified by late or revised flight plan.

4. Average number of tracks per day - 26.4

0235

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C. [illegible] ACTION

Intercept not attempted	17	17.2%					Runway Alert	11	6.7
Intercepted attempted	82	82.8	Successful	25	32.6		Results Per A/C	46	35.9
			Id w/ [illegible]	5	6.2				
			Id prior	35	45.2				
			Un known	7	9.6				
				99	100.0				

99

47

D. CORRELATION OF PENETRATION TRACKS

Airline	Correlations		Violations			Total Tracks
Pan American	121	86.3%	6	13.3%	75.0%	127
Eastern	42	93.3	3	6.7	37.5	45
Colonial	28	100.				28
Air Overseas Air	7	100.	1	14.3	12.5	8
Trans-Caribe	2	100.0				2
Venezuelan	6	85.7	1	14.3	12.5	7
M, G,	1	50.0	1	50.0	12.5	2
CAP			1	100.	12.5	1
Air Mexico			1	100.0	12.5	1
	243	88.8	31	11.2	100.0	274
B-47 (Friendly)			1	100.0	100.0	1
Navy	61	67.0	30	33.0	78.9	91
Air Force	7	58.3	5	41.7	13.1	12
MATS	11	78.5	3	21.5	7.9	14
	79	67.5	38	32.5	100.0	117

Of the correlations above, the system carried 4 Pan American, 1 Colonial, 1 Eastern and 1 Navy Flight as violations because of systems deficiencies. "There was no violation against the Pilot. Also, 12 Pan American, 2 Eastern, 1 Navy and 1 MATS flight were identified within 5 minutes after track was established by VHF/IF procedures or flight plan.

E. FLIGHT/FLIGHT PLAN ACCOUNT

Flights with F/P rec'd for:	274	100.0	99.3%	101	85.6	85.5	375	3547	66.8
Flights with no F/P rec'd	0	0.0		17	14.4		17	4.3	
TOTAL TRAFFIC	274	100.0%		118	100.0%		392	100.0	
F/P rec'd, Flt no Acc't for	2		.7	184		64.5	186		33.2
Total Flight Plans rec'd	276		100.0	285		100.0	561		100.0

0236

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 16-31 JULY 52

4. 1. TRACKS IDENTIFIED CORRECTLY:

	CAA		LFS		TOTAL	
Correlated by Flight Plan	201	72.6	139	71.6	340	71.0
Identified w/i 5' (VHF/DF, P/P)	27	9.7	0		27	5.6
Identified prior to Intercept	31	11.2	9	4.6	40	8.4
Intercepted & Identified	16	5.8	38	19.6	54	11.3
SUB TOTAL	275	99.3	186	95.9	461	96.3

2. FINAL CLASSIFICATION OF OTHER TRACKS:

Later Identified	0		2	1.1	2	.3
Unknown with related F/P	2	.7	6	3.1	8	1.7
Unknown without related F/P					8	1.7
SUB TOTAL	2	.7	8	4.2	18	3.7
TOTAL	277	100.0	194	100.0	479	100.0

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE

	Scramble	No Scramble	Total	
No Ftrs at Suitable Location	2	2	4	22.2
Communications performance	1		1	5.5
Search Radar performance	5		5	27.9
Controller's Error (GCI)	5		5	27.9
Controller's Error (Control Center)	1		1	5.5
Airborne Radar Performance	1		1	5.5
Weather or Darkness	1	6	1	5.5
TOTAL	16	2	18	100.0

---

4. 1 CLASSIFICATION OF FLIGHTS

	CAA		LFS		TOTAL	
Correlations	201	72.5	139	71.7	340	71.0
Non Correlations	76	27.5	55	28.3	131	39.0
TOTAL	277	100.0	194	100.0	479	100.0

2. ACTION ON NON-CORRELATIONS

Identifed within 5 min	27	35.6	0		27	19.4
Identified prior to Intercept	31	40.7	9	16.4	40	28.8
Intercepted and Identified	16	21.1	38	69.1	54	38.8
Later Identified	0		2	3.6	2	1.4
Unknown with related F/P	2	2.6	6	10.9	8	5.8
Unknown without related F/P					8	5.8
TOTAL	76	100.0	55	100.0	139	100.0

3. 45 (59.2%) of CAA non-correlated tracks were identified by VHF/DF procedures, 13 (17.1) were identified by late or revised flight plan.

4. Average number of tracks per day - 29.9

0237

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV - 16 31 July 52 Con't

c. SCRAMBLE ACTION

Intercept not attempted	26	18.7			6		Runway Alert	24 92.3
Intercept attempted	113	81.3	Sucessful	54	47.7		Reasons Per A.	2 7.7
	139	100.0	Id w/in'	3	2.8			26 100.0
			Id Prior	40	35.4			
			UnSaccessf	16	14.1			
				113	100.0%			

D. OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations			Total Tracks
Pan American	150	88.8	19	11.2	47.5	169
Eastern	36	72.0	14	28.0	35.0	50
Colonial	26	100.0	0			26
Br Overseas Airways	9	90.0	1	10.0	2.5	10
Trans-Canada	7	87.5	1	12.5	2.5	8
Venezuelan	7	87.5	1	12.5	2.5	8
M.C.	0		1	100.0	2.5	1
Air France	1	100.0	0			1
Flying Tigers	0		1	100.0	2.5	1
TWA	0		1	100.0	2.5	1
1 Twin Eng Trans	0	0	1	100.0	2.5	1
	236	85.5	40	14.5	100.0	276
Navy	123	75.5	40	24.5	77.0	163
Air Force	6	35.3	11	64.7	21.1	17
MATS	13	92.9	1	7.1	1.9	14
	142	73.2	52	26.8	100.0	194

Of the correlations above, the system carried 7 Pan American, 1 Eastern, 2 Navy and 1 Air Force flight as violations because of systems deficiencies. Also, 26 Pan American, and 1 Eastern Flight were identified within 5 minutes after track was established by VHF/DF procedures or flight plan.

E. FLIGHT/FLIGHT PLAN ACCOUNT

Flights with F/P Acc't for:	277	100.0	99.3%	166	85.5%	35.8	443	92.5	59.6
Flights with no F/P Rec'd	0	0%	———	28	14.5	———	36	7.5	———
TOTAL TRAFFIC	277	100.0		194	100.0		479	100.0	
F/P Rec'd, Flt no Acc't For	3		1.1	297		64.2	300		40.4
Total Flight Plans Rec'd	280		100.0	463		100.0	743		100.0

0238

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 1-15 AUGUST 1952

1. TRACKS IDENTIFIED PROMPTLY:	OAA		MFS		TOTAL	
Correlated by Flight Plan	215	73.4%	95	62.1%	310	67.6%
Identified w/i 5' (VHF/DF, F/P)	16	5.5%	2	1.3%	18	3.9%
Identified Prior to Intercept	35	11.9%	6	3.9%	41	8.9%
Intercepted & Identified	22	7.5%	41	26.8%	63	13.7%
SUB TOTAL	288	98.3%	144	94.1%	432	94.1%
2. FINAL CLASSIFICATION OF OTHER TRACKS:						
Later Identified	2	0.7%	8	5.2%	10	2.2%
Unknown with related F/P	3	1.0%	1	0.7%	4	0.9%
Unknown without related F/P					13	2.8%
SUB TOTAL	5	1.7%	9	5.9%	27	5.9%
TOTAL	293	100%	153	100%	459	100%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	Scramble	No Scramble	Total	
No Ftrs at Suitable Location		12	11	40.8%
Weather or Darkness	2	6	8	29.6%
Search Radar Performance	6		6	22.2%
Controllers Error (GCI)	1		1	3.7%
Fighter Performance		1	1	3.7%
TOTAL	9	18	27	100%

B. 1. CLASSIFICATION OF FLIGHTS	OAA		MFS		TOTAL	
Correlations	215	73.4%	95	62.1%	310	67.6%
Non-correlations	78	26.6%	58	37.9%	149	32.4%
TOTAL	293	100%	153	100%	459	100%
2. ACTION ON NON-CORRELATIONS:						
Identified within 5 min.	16	20.5%	2	3.5%	18	12.1%
Identified prior to Intercept	35	44.9%	6	10.3%	41	27.5%
Intercepted and Identified	22	28.2%	41	70.7%	63	42.2%
Later Identified	2	2.6%	8	13.8%	10	6.7%
Unknown with related F/P	3	3.8%	1	1.7%	4	2.7%
Unknown without related F/P					13	8.8%
TOTAL	78	100%	58	100%	149	100%

3. 37 (47.5%) of OAA non-correlated tracks were identified by VHF/DF procedures.
19 (24.4%) were identified by late or revised flight plan.

4. Average number of tracks per day - 30.6

0239

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV 1-15 August 1952 Cont'd

C. SCRAMBLE ACTION

Intercept not attempted	34	22.8%	- - - - - - - - - - - - -			Runway Alert	16	47.1%
Intercept attempted	115	77.2%	- Successful	63	54.8%	Reasons ParA3	18	52.9%
	149	100%	Id w/i 5'	2	1.7%		34	100%
			Id Prior	41	35.7%			
			Unsuccessful	9	7.8%			
				115	100%			

D. OWNERSHIP OF PENETRATION TRACKS:

Airline	Correlations		Violations			Total Tracks
Pan American	142	85.5%	24	14.5%	41.4%	166
Eastern	46	65.7%	24	34.3%	41.4%	70
Colonial	25	96.2%	1	3.8%	1.7%	26
Br Overseas Airways	11	91.7%	1	8.3%	1.7%	12
Trans-Canada	6	85.7%	1	14.3%	1.7%	7
Venezuelan	5	83.4%	1	16.6%	1.7%	6
American	0	0.0%	1	100.0%	1.7%	1
MC&F	0	0.0%	3	100.0%	5.3%	3
N.C.	0	0.0%	2	100.0%	3.4%	2
	235	80.2%	58	19.8%	100%	293
Navy	80	62.5%	48	37.5%	90.5%	128
Air Force	12	70.6%	5	29.4%	9.5%	17
Mats	8	100.0%	0	0.0%	0.0%	8
	100	65.4%	53	34.6%	100%	153

Of the correlations above, the system carried 1 Pan-American, 1 Colonial, 2 British Overseas Airways, 2 Navy and 1 Air Force flights as violations because of system deficiencies. Also, 8 Pan-American, 8 Eastern, and 2 Navy flights were identified within 5 minutes after track was established by VHF/DF procedures or late flight plan.

E. FLIGHT/FLIGHT PLAN ACCOUNT

	CAA			IFS			TOTAL		
Flights with F/P acc't for:	293	100.0%	99.7%	135	88.2%	40.1%	429	93.3%	68.0%
Flights with no F/P recd:	0	0.0%		18	11.8%		31	6.7%	
TOTAL TRAFFIC	293	100.0%		153	100.0%		460	100%	
F/P Recd, Flt not acct for:	1		0.3%	201		59.9%	202		32.0%
Total Flight Plans Rec'd:	294		100%	336		100%	631		100%

0240

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 16-31 AUGUST 1952

	CAA		MFS		TOTAL	
A. 1. TRACKS IDENTIFIED PROMPTLY:						
Correlated by Flight Plan	220	72.9%	121	64.0%	341	68.6%
Identified w/i 5' (VHF/DF,F/P)	20	6.6%	0	0.0%	20	4.0%
Identified Prior to Intercept	48	15.9%	13	6.9%	61	12.3%
Intercepted & Identified	14	4.6%	44	23.3%	58	11.7%
SUB TOTAL	302	100%	178	94.2%	480	96.6%
2. FINAL CLASSIFICATION:						
Later Identified		0.0%	4	2.1%	4	.8%
Unknown with related F/P	0	0.0%	7	3.7%	7	1.4%
Unknown without related F/P					6	1.2%
SUB TOTAL	0	0.0%	11	5.8%	17	3.4%
TOTAL	302	100%	189	100%	497	100%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	Scramble	No Scramble	Total	
Search Radar Performance	5		5	29.4%
Weather or Darkness	1	1	2	11.8%
No Ftrs at Suitable Location		5	5	29.4%
Controllers Error (GCI)	2	2	4	23.5%
Abortion of A/C Causing Delay	1		1	5.9%
TOTAL	9	8	17	100%

	CAA		MFS		TOTAL	
B 1. CLASSIFICATION OF FLIGHTS:						
Correlations	220	72.7%	121	64.0%	341	68.6%
Non-correlations	82	27.1%	68	36.0%	156	31.4%
TOTAL	302	100%	189	100%	497	100%
2. ACTION ON NON-CORRELATIONS:						
Identified within 5 min.	20	24.4%	0	0.0%	20	12.8%
Identified Prior to Intercept	48	58.5%	13	19.1%	61	39.1%
Intercepted and Identified	14	17.1%	44	64.7%	58	37.2%
Later Identified	0	0.0%	4	5.9%	4	2.6%
Unknown with related F/P	0	0.0%	7	10.3%	7	4.5%
Unknown without related F/P					6	3.8%
TOTAL	82	100%	68	100%	156	100%

3. 44 (53.7%) of CAA non-correlated tracks were identified by VHF/DF procedures. 24 (29.3%) were identified by late or revised flight plan.

4. Average number of tracks per day - 31.1

SECRET

C-332

SECRET NOFORN

0241

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

Breakdown of Radar Tracks - 26th ADIV 16-31 August 52 Cont'd

[illegible] ACTION:

Intrcpt not attempted	23	14.6%	- - - - - - - - - - - -			Runway Alert	15	65.2%
Intrcpt attempted	133	85.4%	Successful	52	44.0%	Reasons Par #3	8	[illegible]
	156	100%	Id w/i 5'	5	3.7%		23	100%
			Id Prior	61	45.6%			
			Unsuccessful	9	6.7%			
				133	100%			

D. [illegible] OF [illegible] TRACKS:

Airline	Correlations		Violations		Total Tracks	
Pan American	134	72.5%	51	27.5%	61.3%	185
Eastern	36	61.0%	23	39.0%	19.5%	59
Colonial	30	90.9%	3	9.1%	10.9%	33
Br Overseas Airways	10	83.4%	2	16.6%	4.0%	12
Trans-Canada	4	80.0%	1	20.0%	1.7%	5
Venezuelan	6	85.7%	1	14.3%	2.3%	[illegible]
Air France	1	100.0%	0	0.0%	0.3%	[illegible]
	221	73.2%	81	26.8%	100%	302
Navy	109	70.8%	45	29.2%	82.4%	154
Air Force	5	22.7%	17	77.3%	11.7%	22
MATS	7	63.6%	4	36.4%	5.9%	11
	121	64.7%	66	35.3%	100%	187

Of the correlations above, the system carried 4 Pan-American, 1 British Overseas Airways, 3 Air Force and 2 Navy flights as violations because of system deficiencies. Also, 11 Pan-American, 7 Eastern, 1 Colonial and 1 Trans-Canada flights were identified within 5 minutes after track was established by VHF/DF procedures or late flight plan.

E. FLIGHT/FLIGHT PLAN ACCOUNT:

	CAA			NFS			TOTAL		
Flights with F/P acctd for:	302	100%	99.7%	189	99.5%	50.2%	491	98.6%	72.3%
Flights with no F/P recd:	0	0.0%		1	0.5%		7	1.4%	
TOTAL TRAFFIC	302	100%		190	100%		498	100%	
F/P Recd, Flt not acct for:	1		0.3%	187		49.8%	188		27.7%
	303		100%	376		100%	679		100%

SECRET
SECURITY INFO

0242

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 1-15 SEPTEMBER 1952

A. 1. TRACKS IDENTIFIED PROMPTLY	CAA		MFS		TOTAL	
Correlated by Flight Plan	183	74.2%	121	69.2%	304	71.6%
Identified w/i 5' (VHF/DF,F/F)	27	11.0	6	3.4	33	7.8
Identified Prior to Intercept	28	11.2	10	5.7	39*	9.2
Intercepted & Identified	4	1.6	30	17.1	35*	8.3
SUB TOTAL	242	98.0	167	95.4	411**	96.9
2. FINAL CLASSIFICATION OF OTHER TRACKS						
Later Idnetified	4	1.6	4	2.3	8	1.9
Unknown with related F/P	1	.4	4	2.3	5	1.2
SUB TOTAL	5	2.0	8	4.6	13	3.1
TOTAL	247	100.0%	175	100.0%	424**	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE

	Scramble	No Scramble	Total	
No Ftrs in Suitable Location	0	5	5	38.4%
Weather or Darkneww	1	3	4	30.8
Controllers Error (GCI)	4	0	4	30.8
TOTAL	5	8	13	100.0

B. 1. CLASSIFICATION OF TRACKS	CAA		MFS		TOTAL	
Correlations	183	74.1%	121	69.2%	304	71.7%
Non-Correlations	64	25.9	54	30.8	120**	28.3
TOTAL	247	100.0	175	100.0	424**	100.0
2. ACTION ON NON-CORRELATIONS						
Identified within 5 min	27	42.2	6	11.2	33	27.5
Identified Prior to Intercept	28	43.8	10	18.5	39*	32.4
Intercepted and Identified	4	6.2	30	55.5	35*	29.2
Later Identified	4	6.2	4	7.4	8	6.7
Unknown with related F/P	1	1.6	4	7.4	5	4.2
TOTAL	64	100.0	54	100.0	120	100.0

3. 41 (64.1) of CAA non-correlated tracks were identified by VHF/DF procedures.
19 (29.7) were identified by late or revised flight plans

4. Average number of tracks per day - 28.3

* Included one (1) surface vessel.

** Includes two (2) survace vessels.

0243

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C. SCRAMBLE ACTION

Intercept not attempted	29	24.2%				Runway Alert	21	72.4
Intercept attempted	91	75.8	Successful	35	38.5%	Reasons Par A3	8	27.6
	120	100.0%	Id w/i 5'	12	13.2		29	100.0
			Id Prior	39	42.9			
			Unsucc	5	5.4			
				91	100.0			

D. OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations		Total Tracks	
Pan American	123	79.8	31.	20.2	154	62.5
Eastern	39	90.7	4	9.3	43	17.4
Colonial	28	100.0	0	0	28	11.3
Br Overseas Airways	5	62.5	3	37.5	8	3.2
Trans-Canada	4	66.7	2	33.3	6	2.4
Venezuelan	5	71.4	2	28.6	7	2.8
Air France	1	100.0	0	0	1	0.4
	205	83.0	42	17.0	247	100.0
Navy	94	72.3	36	27.7	130	74.2
Air Force	19	63.3	11	36.7	30	17.2
MATS	11	73.4	4	26.6	15	8.6
	124	70.8	51	29.2	175	100.0%

Of the correlations above, the system carried 1 Pan American, 2 Air Force and 1 Navy Flights as violations because of system deficiencies. Also, 15 Pan American, 5 Eastern and 1 Venezuelan non-correlated flights were identified prior to initiation of scramble action and are shown as correlations aobve.

0244

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 16-30 SEPTEMBER 1952

A. 1. TRACKS IDENTIFIED PROMPTLY

	CAA		AFS		TOTAL	
Correlated by Flight Plan	166	72.1%	128	71.6%	294	71.7%
Identified w/i 5' (VHF/DF, F/P)	26	11.2	0	0	26	6.3
Identified Prior to Intercept	29	12.5	6	3.3	35	8.5
Intercepted and Identified	7	3.3	34	19.0	41	9.8
SUB TOTAL	288	99.1%	168	93.9%	396	96.3%

2. FINAL CLASSIFICATION OF OTHER TRACKS

Later Identified	2	.9%	7	3.9%	9	2.2%
Unknown with related F/P	0	0	4	2.2	4	1.0
Unknown without related F/P	[illegible]	[illegible].0	0	0	2	.5
TOTAL	230	100.0%	179	100.0%	411	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE

	Scramble	No Scramble	Total	
Weather or Darkness	1	2	3	20.0%
Controller's Error (GCI)	1	1	2	13.3%
Search Radar Performance	1	0	1	6.7
No Fighters at Suitable Location	0	9	9	60.0
	3	12	15	100.0%

B. 1. CLASSIFICATION OF TRACKS

	CAA		AFS		TOTAL	
Correlations	166	72.2%	128	71.5%	294	71.5%
Non-Correlations	64	27.8	51	28.5&	117	28.5
TOTAL	230	100.0%	179	100.0%	411	100.0%

2. ACTION ON NON-CORRELATIONS

Identified within 5 min	26	40.7%	0	0%	26	22.2%
Identified Prior to Intetcept	29	45.3	6	11.8	35	29.2
Intercepted and Identified	7	10.9	34	66.7	41	35.1
Later Identified	2	3.1	7	13.7	9	7.7
Unknown with related F/P	0	.0	4	7.8	4	3.4
Unknown without related F/P	0	0	0	0	2	1.7
TOTAL	64	100.0%	51	100.0	117	100.0%

3. 33 (51.6) of CAA non-correlated tracks were identified by VHF/DF procedures. 24 (37.5) were identifed by late or revised flight plans

4. Average number of tracks per day - 27.4

0245

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV 16-30 September 1952 Cont'd

c. SCRAMBLE ACTION

Intercept not attempted	28	23.9%				Runway Alert	16	57.2%
Intercept attempted	89	76.1%	Successful	41	46.1%	Reasons Par	12	42.8%
	117	100.0%	Id w/i 5'	10	11.2		28	100.0%
			Id Prior	35	39.3			
			Unsuccess	3	3.4			
				89	100.0			

D. OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations		Total	
PanAmerican	109	72.3%	32	22.7%	141	61.4%
Eastern	37	82.2	8	17.8	45	19.6
Colonial	20	100.0	0	0	20	8.7
Br Oversees Airways	8	100.0	0	0	8	3.5
Trans-Canada	5	83.3	1	16.7	6	2.6
Venezuelan	5	71.4	2	28.6	7	3.0
American Airlines	0	0	1	100.0	1	.4
Trans-World Airlines	0	0	1	100.0	1	.4
Provately Owned	0	0	1	100.0	1	.4
	184	80.0%	45	20.0	230	100.0%
Navy	101	70.2%	43	29.8%	144	80.5%
Air Force	14	73.7	5	26.3	19	10.6
Mats	13	92.9	1	7.1	14	7.8
CAP	0	0	2	100.0	2	1.1
	128	71.5%	51	28.5%	179	100.0%

Of the correlations above, the system carried 2 Pan American flights as violations because of system deficiencies, Also, 11 Pan American, 4 Eastern and 1 Venezuelan non-correlated flights were identifed prior to initiation ofscramble action and are shown as correlations above.

0246

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26th AIR DIVISION SECTION
PERIOD 1-15 OCTOBER 1952

A. 1. TRACKS IDENTIFIED PROMPTLY

	CAA		MPS		TOTAL	
Correlated by Flight Plan	157	71.6%	125	68.3%	282	69.0%
Identified w/i 5' (VHF/DF, F/P)	17	7.8	2	1.2	19	4.6
Identified prior to intercept	40	18.3	7	3.8	47	11.6
Intercepted & Identified	2	.9	28	15.3	30	7.3
SUB TOTAL	216	98.6	162	88.5%	378	92.5%

2. FINAL CLASSIFICATION OF OTHER TRACKS

Later Identifeid	3	1.4%	11	6.0%	14	3.4%
Unknown with related F/P	0	0	10	5.5	10	2.4
Unknown without related F/P	0	0	0	0	7	1.7
SUB TOTAL	3	100.0%	183	100.0	31	7.5%
TOTAL	219	100.0	183	100.0	409	100.0

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE

	Scramble	No Scramble	Total	
Weather or Darkness	0	9	9	29.0%
Controller's Error (GCI)	4	0	4	12.9
Search Radar Performance	6	0	6	19.3
No Fighters at Suitable Location	0	11	11	35.5
Height Finder Performance	1	0	1	3.2
	11	20	31	100.0

B. 1. CLASSIFICATION

Correlations	157	71.7%	125	68.3%	282	68.9%
Non-Correlations	62	28.3	58	31.7	127	31.1
	219	100.0%	183	100.0	409	100.0%

2. ACTION ON NON-CORRELATIONS

Identified within 5 min.	17	27.4%	2	3.4%	19	15.9%
Identified Prior to Intercept	40	64.6%	7	12.1	47	37.0
Intercepted and Identified	2	3.2	28	48.4	30	23.7
Later Identified	3	4.8	11	18.9	14	11.0
Unknown without related F/P	0	0	10	17.2	10	7.9
Unknown without related F/P	0	0	0	0	7	5.5
TOTAL	62	100.0%	58	10010%	127	100.0%

3. 37 (30.3%) of CAA non-co related tracks were identified by VHF/DF procedures.
22 (35.4%) were identified by late or rev sed flight plans.

4. Average number of tracks per day - 27.3

0247

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV 1-15 October 1952 Cont'd

C. SCRAMBLE ACTION

Intrep not attempted	28	22.1%				Runway Alert	8	28.6
Intrep attempted	99	77.9	Successfull	30	30.3%	Reasons Par 3A	20	71.4%
	127	100.0%	Id v/i 5'	5	5.1		28	100.0%
			Id prior	47	47.4			
			Unsuccessful	17	17.2			
				99	100.0			

D. OWNERSHIP OF PENETRATION TRACKS:

Airline	Correlations		Violations		Total Tracks	
Pan American	99	75.0%	33	25.0%	132	60.2%
Eastern	34	77.3	10	22.7	44	20.1
Colonial	19	100.0	0	0	19	8.7
Br Oversees Airways	4	66.7	2	33.3	6	2.7
Trans-Canada	6	100.0	0	0	6	2.7
Venezuelan	6	100.0	0	0	6	2.7
Netherlands	0	0	1	100.0	1	.5
Norwegian	0	0	1	100.0	1	.5
Air France	1	100.0	0	0	1	.5
Privately Owned	0	0	3	100.0	3	1.5
	169	77.2%	50	22.8%	219	100.0%
Navy	109	70.8%	45	29.2%	154	84.2%
Air Force	5	38.4	8	61.6	13	7.1
MATS	13	100.0	0	0	13	7.1
RCAF	1	33.3	2	66.7	3	1.6
	128	70.0%	55	30.0%	183	100.0%

Of the correlations above, the system carried 4 Pan American and 3 Navy flights as violations because of system deficiences. Also, 7 Pan American and 1 Eastern Flights were identifed prior to initiation of scramble action and are shown as correlations above.

0248

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 16-31 OCTOBER 1952

	CAA		MFS		TOTAL	
1. TRACKS IDENTIFIED PROMPTLY						
Correlated by Flight Plan	152	65.5%	121	51.7%	273	53.8%
Identified within 5' (VHF?DF, P/P)	23	9.9	3	1.3	26	5.1
Identifeid Prior to Intercept	40	17.2	11	4.7	41	10.0
Intercepted & Identified	14	6.0	74	31.6	*89	17.5
SUB TOTAL	229	98.6%	209	89.3%	*439	86.4%
2. FINAL CLASSIFICATION OF OTHER TRACKS						
Later Identified	1	.5%	10	4.3%	11	2.2%
Unknown with related F/P	2	.9	15	6.4	17	3.3
Unknown without related F/P	0	0	0	0	41	8.1
SUB TOTAL	3	1.4	25	10.7%	69	13.6%
TOTAL	232	100.0	234	100.0	*508	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE

	Scramble-	No Scramble	Total	
Weather or Darkness	4	6	10	14.5
Controller's Error (GCI)	16	1	17	24.6
Pilot's Error	1	0	1	1.5
Airborne Radar Performance	1	0	1	1.5
Height Finder Performance	1	0	1	1.5
Search Radar Performance	21	1	22	31.8
No Fighters at Suitable Locations	0	11	11	15.9
Other	6	0	6	8.7
	50	19	69	100.0

	CAA		FAA		TOTAL	
B- 1. CLASSIFICATION						
Correlations	152	65.5%	121	51.7%	273	53.8%
Non-Correlations	80	34.5	113	48.3	*235	46.2
	232	100.0	234	100.0	*508	100.0
2. ACTION ON NON*CORRELATIONS						
Identified within 5 min	23	28.8	3	2.7	26	11.1
Identified prior to Intercept	40	50.0	11	917	51	21.7
Intercepted and Identified	14	17.5	74	65.5	*89	37.9
Later Identified	1	1.2	10	8.8	11	4.7
Unknown with related F/P	2	2.5	15	13.3	17	7.2
Unknown with out related F/P	0	0	0	0.0	41	17.4
	80	100.0	113	100.0	*235	100.0

3. 34 (42.5%) of CAA non-co related tracks were identified by VHF/D procedures
30 (37.5%) were identified by late or revised flight plans

4. Average number of tracks per day 31.7

* Includes one (1) surface vessel

0249

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of radar Tracks - 26th ADIV 16-31 October 1952

C. SCRAMBLE ACTION

Intrep not attempted	37	15.7%				Runway Alert	18	48.6%
Intrep attempted	*198	84.3	Successful	*89	44.9%	Reasons Per A3	19	51.4%
	*235	100.0	Id w/i 5'	8	4.0		37	100.0
			Id prior	51	25.8			
			Unsuccessful	50	25.3			
				*198	100.0			

D. OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations		Total	
Pan American	97	72.5%	37	27.5%	134	57.8
Eastern	37	72.5	14	27.5	51	21.9
Colonnil	23	100.0	0	0	23	9.9
Br Overseas Airways	4	57.1	3	42.9	7	3.2
Trans-Canada	8	100.0	0	0	8	3.4
Venezuelan	4	50.0	4	50.0	8	3.4
TWA	0	0	1	100.0	1	.4
	173	74.6%	59	25.4	232	100.0
Navy	106	52.5%	97	47.8%	203	86.8%
Air Force	9	47.5	10	52.5	19	8.1
MATS	10	83.3	2	16.7	12	5.1
	125	53.5%	109	46.5%	234	100.0%
COMPLETE TOTAL	298	64.0%	168	36.0%	466	100.0%

Of the correlations above, the system carried 4 Pan American, 3 Colonial, and 1 MATS flights as violations because of system deficiencies. Also 9 Pan American, 3 Eastern, 2 Colonial, 1 Transcanada, 2 Navy and 1 MATS flights were identified prior to initiation of scramble action and are shown as correlations above

* Includes one (1) surface vessel

SECRET

0250

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 1-15 NOVEMBER 1952

A. 1. TRACKS IDENTIFIED PROMPTLY

	CAA		AFS		TOTAL	
Correlated by Flight Plan	142	68.6%	112	57.1%	254	59.7%
Identified w/i 5' (VHF/DF, F/P)	25	12.1	5	2.5	30	7.1
Identified prior to Intercept	22	10.6	9	4.6	31	7.3
Intercepted & Identified	7	3.4	45	23.0	52	12.2
SUB TOTAL	196	94.7%	171	82.2%	367	86.3%

2. FINAL CLASSIFICATION OF OTHER TRACKS

Later Identified	10	4.8%	8	4.1%	18	4.2%
Unknown with related F/P	1	.5	17	8.7	18	4.2
Unknown without related F/P	0	0	0	0	23	5/3
SUB TOTAL	11	5.3	25	12.8	426	13.7
TOTAL	207	100.0%	196	100.0%	426	100.0

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	SCRAMBLE	NO SCRAMBLE	TOTAL	
Weather or Darkness	6	20	26	44.0%
Controller's Error (GCI)	*14	3	17	28.3
Communications Performance	2	0	2	3.4
Height Finger Performance	1	0	1	1.7
Search Radar Performance	6	0	6	10.2
No Fighters at Suitable Location	0	6	6	10.2
Abortion of A/C causing delay	1	0	1	1.7
	30	29	59	100.0%

B. 1. CLASSIFICATION

	CAA		AFS		TOTAL	
Correlation	142	68.8%	112	57.1%	254	59.6%
Non-Correlations	65	31.4	84	42.9	172	40.4
	207	100.0	196	100.0	426	100.0

2. ACTION ON NON-CO RELATIONS

	CAA		AFS		TOTAL	
Identified within 5 min	25	38.5%	5	5.9%	30	17.3%
Identified prior to Intercept	22	33.8	9	10.7	31	18.0
Intercepted & Identified	7	10.8	45	53.7	52	30.2
Later Identified	10	15.4	8	9.5	18	10.5
Unknown with related F/P	1	1.5	17	20.2	18	10.4
Unknown without related F/P	0	0	0	0	23	13.4
	65	100.0%	84	100.0%	172	100.0%

3. 41 (63.1%) of CAA non-correlated tracks were identified by VHF/DF procedures 19 (29.2%) were identified by late or revised flight plan.

4. Average number of tracks per day 28.4

* One (1) Controller's Error (GCI) was effected by a station of the 32nd Air Division on a track emanating from their area.

0251

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

Breakdwon of Radar Tracks - 26th ADIV 1-15 November 1952 Cont'd

C. SCRAMBLE ACTION

Int not attempted	44	25.6%					
Int attempted	128	74.4	Successful	52	40.7%	Runway Alert	15 34.1
	172	100.0	Id w/i 5'	15	11.7	Reasons par A3	29 65.9%
			Id prior	31	24.2		44 100.0
			Unsuccessful	30	23.4		
				128	100.0		

D. OWNERSHIP OF PENETRATION TRACKS:

Airline	Correlations		Violations		Total Tracks	
Pan American	85	74.5%	29	25.5%	114	55.1%
Eastern	35	79.5	9	20.5	44	21.2
Colonial	18	94.8	1	22.3	19	9.2
Br Overseas Airways	7	77.7	2	0	9	4.3
Trans-Canada	7	100.0	0	02	7	3.4
Venezuelan	8	100.0	0	0	8	3.9
Air France	1	100.0	0	0	1	.5
Netherlands	1	100.0	0	C	1	.5
British Colonies	0	0	1	100.0	1	.5
Privately Owned	0	0	3	100.0	3	1.5
	162	78.3	45	21.7	207	10010
Navy	99	57.9	72	42.1	171	87.3
Air Force	5	45.5	6	54.5	11	5.6
MATS	11	78.6	3	21.4	14	7.1
	115	58.6	81	4144	196	100.0
COMPLETE TOTAL:	277	68.7%	126	31.3%	403	100.0%

Of the correlations above, the system carried 2 Pan American, 1 Eastern 1 Colonial, 1 Venezuelan, 1 Air Force and 2 Navy flights as violations because of system deficiencies. Also, 8 Pan American, 4 Eastern, 1 Trans-Canada, and 2 Venezuelan flights were identified prior to initiation of scramble action and are shown as correlations above.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
PERIOD 16-30 NOVEMBER 1952

1. TRACKS IDENTIFIED PROMPTLY	CAA		MFS		TOTAL	
Correlated by Flight Plan	141	73.5%	135	71.0%	276	69.7%
Identified w/i 5' (VHF/DF, F/P)	23	11.9	0	0	23	5.8
Identified prior to Intercept	14	7.3	7	3.7	21	5.3
Intercepted & Identified	4	2.1	26	13.7	*32	8.1
SUB TOTAL	182	94.8%	168	88.4%	*352	88.9%
2. FINAL CLASSIFICATION OF OTHER TRACKS						
Later Identified	8	4.2%	8	4.2%	16	4.0%
Unknown with related F/P	2	1.0	14	7.4	16	4.0
Unknown without related F/P	0	0	0	0	12	3.1
SUBTOTAL	10	5.2%	22	11.6%	44	11.1%
TOTAL	192	100.0%	190	100.0%	*396	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	Scramble	No Scramble	Total	
Weather or darkness	4	22	26	59.0%
Controller's Error (GCI)	5	2	7	15.9
Airborne Radar Performance	2	0	2	4.6
Communications Performance	1	0	1	2.3
Search Radar Performance	4	0	4	9.1
No Ftrs at Suitable Location	0	4	4	9.1
	16	28	44	100.0%

B. 1. CLASSIFICATION

	CAA		MFS		TOTAL	
Correlations	141	73.4%	135	71.1%	276	69.7%
Non-Correlations	51	26.6	55	28.9	*120	30.3
	192	100.0%	190	100.0	*396	100.0%

2. ACTION ON NON-CORRELATIONS

	CAA		MFS		TOTAL	
Identified within 5 min	23	45.2%	0	0	23	19.4%
Identified prior to Intercept	14	27.4	7	12.7	21	17.5
Intercepted & Identified	4	7.8	26	47.3	*32	26.7
Later Identified	8	15.7	8	14.5	16	13.7
Unknown with related F/P	2	3.9	14	25.5	16	13.7
Unknown wit out related F/P	0	0	0	0	12	10.0
	51	100.0%	55	100.0%	*120	100.0%

3. 29 (56.9%) of CAA non-correlated tracks were identified by VHF/DF procedures. 16 (31.4%) were identified by late or revised flight plans

4. Average number of tracks per day - 26.4

* Includes two (2) surface vessels

FORMATION

0253

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV 16-30 Nov 52, Cont'd

C. SCRAMBLE ACTION

						Ident w/i 5' (no Int attempted due to various reasons)	6	12.5
Int not attempted	48	40.0%				Runway Alert	14	29.2
Int attempted	*72	60.0	Successful	* 32	44.4%	Reasons For A3	28	58.3%
	*120	100.0%	Id w/i 5'	3	4.2		48	100.0%
			Id prior	21	29.2			
			Unsuccessful	16	22.2			
				* 72	100.0%			

D. OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations		Total Tracks	
Pan American	81	77.2%	24	28.8%	105	54.6%
Eastern	40	90.9	4	9.1	44	22.9
Colonail	17	100.0	0	0	17	8.9
Br Overseas Airways	6	100.0	0	0	6	3.1
Trans-Canada	6	85.7	1	14.3	7	3.6
Venezuelan	4	66.7	2	33.3	6	3.1
National Airlines	0	0	1	100.0	1	.5
Netherlands	0	0	1	100.0	1	.5
Nethe lands Antilles	1	100.0	0	0	1	.5
Spain	1	100.0	0	0	1	.5
Privately owned	0	0	3	100.0	3	166
	156	81.3%	36	18.7%	192	100.0%
Navy	116	72.0%	45	28.0%	161	84.8%
Air Force	12	75.0	4	25.0	16	8.4
MATS	10	83.3	2	16.7	12	6.3
RCAF	0	0	1	100.0	1	.5
	138	72.6%	52	27.4%	190	100.0%
Complete Total	294	77.0%	88	23.0%	383	100.0%

Of the correlations above, the system carried 1 Pan American, 1 Air Force and 2 Navy flights as violations because of system deficiences. Also, 10 pan Pan American, 1 Eastern, 1 British Overseas Airways, 1 Trans-Canada and 1 Netherlands Antilles were identified prior to initiation of scramble actions and are shown as correlations above.

0254

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
26TH AIR DIVISION SECTOR
FOR ICD 1-15 DECEMBER 1952

A. 1. TRACKS IDENTIFIED PROMPTLY

	CAA		MPS		TOTAL	
Correlated By Flight Plan	116	62.7%	64	60.3%	180	59.0%
Identified w/i 5' (VHF/DF, F/F)	17	9.2	2	1.9	19	6.2
Identified Prior to Intercept	36	19.5	4	3.8	40	13.1
Intercepted and Identified	8	4.3	30	28.3	38	12.5
SUB TOTAL	177	95.7%	100	94.3%	277	90.8%

2. FINAL CLASSIFICATION OF OTHER TRACKS

Later Identified	5	2.7%	4	3.8%	9	3.0%
Unknown with related F/P	3	1.6	2	1.9	5	1.6
Unknown without related F/P	0	0	0	0	14	4.6
SUB TOTAL	8	4.3	6	5.7%	28	9.2%
TOTAL	185	100.0%	106	100.0%	305	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	Scramble	No Scramble	Total	
Weather or Darkness	0	7	7	25.0%
Controller's Error (GCI)	8	3	11	39.3
Search Radar Performance	6	0	6	21.4
No Ftrs at Suitable Location	0	3	3	10.7
Abortion of A/C causing Delay	1	0	1	3.6
	15	13	28	100.0%

B. 1. CLASSIFICATION

	CAA		MPS		TOTAL	
Correlations	116	62.7%	64	60.4%	180	59.0%
Non-Correlations	69	37.3	42	39.6	125	41.0%
	185	100.0%	106	100.0%	305	100.0%

2. ACTION ON NON-CORRELATIONS

	CAA		MPS		TOTAL	
Identified within 5 min.	17	24.6%	2	4.8%	19	15.2%
Identified Prior to Intercept	36	52.5	4	9.6	40	32.0
Intercepted & Identified	8	11.6	30	71.2	38	30.4
Later Identified	5	7.3	4	9.6	9	7.2
Unknown with related F/P	3	4.3	2	4.8	5	4.0
Unknown without relatedf/P	0	0	0	0	14	11.2
TOTAL	69	100.0%	42	100.0%	125	100.0%

3. 38 (34.2%) of the non-correlated CAA and MPS tracks were identified by VHF/DF procedures.
30 (27.0%) were identified by late or revised flight plan.

4. Average number of tracks per day - 23.9

0255

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C. 1. SCRAMBLE ACTION AGAINST NON-CORRELATIONS

Intercepts Attempted:		
Intercept Action Initiated - Track Identified Prior to Ftr Take-Off	10	8.0%
Scramble Effected - Track Identified within 5 min.	6	4.8
Identified Prior to Intercept	40	32.0
Intercept Successful	38	30.4
Intercept Unsuccessful	15	12.0%
SUB TOTAL	109	87.2%
2. Intercepts Not Attempted		
Reasons, Per A3	13	10.4%
Identified w/i 5', No Scramble Due to Wx	3	2.4
	16	12.8%
TOTAL NON-CORRELATIONS	125	100.0%

OWNERSHIP OF PENETRATION TRACKS

Airline	Correlations		Violations		Total Tracks	
Pan American	71	63.4%	41	36.6%	112	60.8%
Eastern	28	84.9	5	15.1	33	17.8
Colonial	15	100.0	0	0	15	8.1
British Overseas Airways	6	75.0	2	25.0	8	4.3
Trans-Canada	6	100.0	0	0	6	3.2
Venezuelan	4	66.7	2	33.3	6	3.2
Trans-World Airlines	0	0	1	100.0	1	.5
Air France	0	0	1	100.0	1	.5
Netherlands	0	0	1	100.0	1	.5
Privately Owned	0	0	2	100.0	2	1.1
	130	70.2%	55	29.8%	185	100.0%
Navy	52	65.0%	28	35.0%	80	75.5%
Air Force	6	35.2	11	64.8	17	16.0
MATS	7	77.8	2	22.2	9	8.5
	65	61.2%	41	38.8%	106	100.0%
Complete Total	195	67.0%	96	33.0%	291	100.0%

Of the Correlations above, the system carried 2 Pan American, 2 Colonial, and one Navy Flights as violations because of system deficiencies. Also 5 Pan American, 4 Eastern, 1 British Overseas Airways flights were identified prior to initiation of scramble action and are shown as correlations above.

0256

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

BREAKDOWN OF RADAR TRACKS
20TH AIR DIVISION SECTOR
PERIOD 16-31 DECEMBER 1952

1. TRACKS IDENTIFIED PROMPTLY	CAA		MFS		TOTAL	
Correlated by Flight Plan	192	60.3%	43	56.5%	235	56.3%
Identified w/i 5" (VHF/DF&F/P)	38	11.9	0	0	38	9.1
Identified Prior to Intercept	62	19.4	9	11.9	71	17.0
Intercepted & Identified	17	5.3	20	26.3	37	8.8
SUB TOTAL	309	96.9%	72	94.7%	381	91.2%
2. FINAL CLASSIFICATION OF OTHER TRACKS						
Later Identified	10	3.1%	4	5.3%	14	3.3%
Unknown without related F/P	0	0	0	0	23	5.5
SUB TOTAL	10	3.1%	4	5.3%	37	8.8%
TOTAL	319	100.0	76	100.0%	418	100.0%

3. BREAKDOWN OF REASONS FOR FAILURE TO INTERCEPT TRACKS IN SECTION 2 ABOVE:

	Scramble	No Scramble	TOTAL	
Weather or Darkness	2	8	10	27.1%
Controller's Error (GCI)	11	2	13	35.1
Search Radar Performance	6	0	6	16.2
No Ftrs at Suitable Location	0	4	4	10.8
Fighters had to use wx corridor	1	0	1	2.7
Picket VesselPerformance	2	1	3	8.1
	22	15	37	100.0%

B. 1. CLASSIFICATION

	CAA		MFS		TOTAL	
Correlations	192	60.2%	43	56.6%	235	56.2%
Non-Correlations	127	39.8	33	43.3	183	43.8
	319	100.0%	76	100.0%	418	100.0%

2. ACTION ON NON-CORRELATIONS

	CAA		MFS		TOTAL	
Identified w/i 5"	38	30.0%	0	.0%	38	20.8%
Identified Prior to Intercept	62	48.8%	9	27.3%	71	38.8%
Intercepted & Identified	17	13.4%	20	60.6%	37	20.2%
Later Identified	10	7.8%	4	12.1%	14	7.6%
Unknown without related F/P	0	.0%	0	.0%	23	12.6%
TOTAL	127	100 %	33	100 %	183	100 %

3. 73 (39.9%) of the non-correlated CAA and MFS tracks were identified by VHF/DF procedures.
____ (27.3%) were identified by late or revised flight plan.

4. Average number of tracks per day - 26.1

0257

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Breakdown of Radar Tracks - 26th ADIV 16-31Dec 52, Cont'd

C 1. SCRAMBLE ACTION AGAINST NON-CORRELATIONS

Intercepts Attempted:		
Intercept Action Initiated - Track Identified Prior to Ftr Take-Off	25	
Scramble Effected - Track Iden within 5 min.		
Identified Prior to Intercept		
Intercepts Successful		
Intercept Unsuccessful (Par A3)	22	12.0%
	166	90.7%

2. Intercepts Non Attempted

Reasons, Par A3	15	8.2%
Identified w/i 5", No Scramble Due to wx	2	1.1%
SUB TOTAL	17	9.3%
TOTAL NON-CORRELATIONS	183	100 %

D. OWNERSHIP OF PENETRATION TRACKS:

Airline	Correlations		Violations		Total Tracks	
Pan American	131	65.8%	68	34.2%	199	50.0%
Eastern	31	64.6%	17	35.4%	48	12.1%
Colonial	31	93.9%	2	6.1%	33	8.3%
British Overseas Airways	10	83.3%	2	16.7%	12	3.4%
Trans-Canada	7	77.8%	2	22.2%	9	2.3%
Venezuelan	7	53.9%	6	46.1%	13	3.3%
Netherlands Antilles	1	100.0%	0	.0%	1	.3%
National Airlines	0	.0%	1	100.0%	1	.3%
Seaboard and Western	2	66.7%	1	33.3%	3	.8%
	220	69.0%	99	31.0%	319	80.8%
Navy	25	56.8%	19	43.2%	44	11.0%
Air Force	12	66.7%	6	33.3%	18	4.6%
MATS	7	53.8%	6	46.2%	13	3.3%
RCAF	1	100.0%	0	.0%	1	.3%
	45	59.2%	31	40.8%	76	19.2%
Complete Total	265	67.1%	130	32.9%	395	100.0%

Of the correlations above, the system carried, 1 British, 1 Navy, 1 Air Force and 2 Pan American flights as violations because of system deficiencies. Also, 17 Pan American, 6 Eastern, 1 British, 1 Seaboard & Western flights were identified prior to initiation of scramble action and are shown as correlations above.

0258

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

SECRET
SECURITY INFORMATION

DSS/emn

ADADO 373.2

15 August 1952

SUBJECT: Operations Signpost

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The following report on "Operations Signpost" is forwarded in accordance with paragraph 2d of Annex A to EADF Operations Plan 1-52.

2. "Operations Signpost" provided the 26th Air Division with excellent training, but it is felt that the period of the exercise was longer than necessary in view of the amount of strike activity. It is appreciated that the interval between photo reconnaissance strike and bombing attacks may be realistic according to SAC tactics, but it is doubtful that this country will receive the benefit of two or three days' warning afforded by photo reconnaissance before an actual bombing attack. The attack routes were excellent. This division experienced a heavy attack from the North on the morning of 27 July, followed closely by an overwater attack from the Southeast. We were also attacked on the morning of 28 July from the North and East. As always, the fact that civil traffic is not controlled during an exercise provided the Fakers with diversionary aircraft since free traffic was, in many cases, confused with Faker activity.

3. Alerting procedures were not tested during "Signpost" and it is felt that this detracted from the realism of the exercise and resulted in a loss in training for Control Center personnel.

4. Coordinated teamwork between AAA and Air Force reached its highest level between the 52nd AAA Brigade and this headquarters during "Operations Signpost." This was largely due to the operation of a liaison line between the two headquarters making it possible to keep both commanders fully informed. Such coordination was not possible with the 35th and 53rd Brigades since ADC did not authorize the energizing of the liaison lines to those headquarters. Heavy AF traffic over the ADDC lines severely limited the passing of AAA information between brigades and control center.

a. AAA Brigades reported the following number of flights, passed as Fakers, which actually came within gun range during the entire exercise:

New York - Brooklyn	-	4
Washington	-	4
Baltimore	-	2
Philadelphia	-	0

SECRET
SECURITY INFORMATION

0259

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

b. It is apparent that some confusion resulted from the practice of changing a "Hostile Faker" track to "Friendly Faker" under certain circumstances. It is felt, however, that since similar situations occurred in two previous exercises, that the AAA Liaison Officers at the ADDC's might have more adequately handled the situation by simply continuing to pass the plots to the AAOC's as "Hostile Fakers."

5. In general, naval participation was good.

a. Use was made where possible of Navy fighters in both CAP and intercept operations. Naval squadrons were at first under the impression that they were assigned only for training and so failed to carry "hot guns." When discovered, this situation was remedied except at Quonset Point. The fighters at Quonset Point were not capable of using "hot guns" and were, therefore, released from use during the rest of the exercise.

b. AE aircraft from Quonset Point were passed to control of the 32nd Air Division and effectiveness is unknown to this division. One AEW aircraft from Patuxent River participated on the night of 24 July. A barrier was originally planned off Norfolk but was changed by Patuxent and the aircraft was sent to work with the picket vessel at Station #2. Since there was no activity on this night, the effectiveness cannot be determined.

c. Navy Anti-Aircraft participated at New York City, Philadelphia and Norfolk, but the extent of their effectiveness is unknown.

d. Naval radar at Jamestown, R. I., Atlantic City, N. J., and Norfolk, Va., participated and generally were effectively integrated with our AC&W operations. There appeared to be lack of proper coordination between the Palermo Direction Center and Atlantic City Naval Radar, in that there was some difficulty in transferring control of a Navy fighter being controlled by Atlantic City radar to the Palermo Direction Center. This situation was corrected at the time.

e. Picket Vessels were on station at Station #1 and 2 throughout the exercise. They did not, however, furnish the AC&W system early warning on any of the Faker strikes since, in all cases, the direction center had a track on the strike aircraft before it was reported by the picket vessel. This should not be considered as a reflection on picketvessel value or capability, since strike activity in their vicinity was very limited. Communications difficulty between picket vessels and ground radar stations were generally the same as those experienced in the picket vessel communications tests.

6. Coordination between this headquarters and ANG Units participating in "Operations Signpost" was found to be satisfactory. ANG Units seemed eager to take partand have indicated their desire to participate in future exercises. Operational integration of these units into the Air Defense System proved, on the whole, satisfactory. Advance alert commitments established prior to the

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq 26th AD (D) ADADO 373.2 Subj: Operations Digest (Cont'd)

exercise were maintained. Participation by ANG Units increased our defense capabilities somewhat, but due to the type of aircraft in these units, intercept attempts against high flying target aircraft proved futile. The ANG Units apparently were not clear as to the requirement for "Hot Guns" on their alert aircraft. It should be pointed out to all participating units that all Air Defense Directives apply to any unit standing alert. Increased efforts to properly indoctrinate these units will be made by this headquarters.

7. Surveillance procedures were again thoroughly tested and it is felt that the overall results within the division showed substantial improvement.

a. Radar range was generally excellent, due, probably, to the fact that all strikes in this division were high altitude. Altitude information was, on the whole, still below desired minimums and height finder coverage was considered inadequate for the accomplishment of the defense mission. The height finding results at FPS-3 sites were better than in past exercises, but once again, CPS-6B sites provided more actual height readings and at greater ranges. Most altitudes were based on coverage patterns.

b. Air situation picture at Direction Centers and Control Center was quite accurate and complete except during the period of near saturation on 27 July. The Direction Centers reported some saturation of overlap communication facilities, due primarily to the fact that in many cases overlap plotters had to work two lines because of space limitations behind small plotting boards. It was reported that overlap information from stations of adjacent divisions was inadequate during the 27 July strike but was excellent during the 28 July strike. It is felt that the coordination efforts of this headquarters and 32nd Air Division have produced substantial results since the cooperation between Montauk and North Truro continued to improve. We intend to apply the same effort toward smoothing out the operation between Saratoga Springs and our stations at Highlands and Benton. Liaison between control centers was excellent throughout the exercise.

c. Direction Centers were unable to adequately filter normal traffic from overland Faker raids and it is felt that incomplete cross-telling was a contributing factor to this deficiency.

d. The capability to carry a continuous track on Faker strikes was substantially improved over past exercises. The major limiting factor was the cross-telling deficiencies.

8. Electronic countermeasures against our system included mechanical and electronic radar jamming and jamming of VHF tactical frequencies.

a. Generally, radar jamming did not affect the operation of the system or our individual stations due to use of anti-jamming circuits and the state of training of operators. In one case, it appeared that sufficient chaff was dropped to confuse station P-30, in that strike aircraft in a single flight were able to delay the detection of a breakup into two flights; one apparently to attack Pittsburgh, the other to proceed to Washington (Track Nos. L-89L and L-90L).

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

b. Anti-aircraft gun laying radar observed chaff drops but in no reported case did the chaff cause these radars to break lock or lose target.

c. Instances of VHF jamming, both by tone and random noise modulation, were fairly effective in causing loss of communication on certain tactical channels (F, G and E-13); however, stations operating under EADF SOP 55-14 switched channels and this particular jamming only affected one intercept to any degree. There was one case of a Faker aircraft apparently giving erroneous vectors which did not materially effect the interception and served only as a nuisence. A DF bearing was obtained on the aircraft that was suspected to be giving the vectors but at the time of the DF bearing, the interference was only CW jamming.

9. Airborne radar capabilities were not adequately tested during this exercise since the attacks were all conducted during daylight VFR conditions.

10. The transmission and display of status information was generally satisfactory and is considered the best yet achieved during an exercise. There is still, however, room for improvement in the passing of status information between Direction Centers.

11. The energizing of engineered circuits was accomplished by Air Defense Command at the beginning of the exercise. The energizing order did not include the lines between AAOC8s and Control Centers, and it is felt that these lines are needed in order to accomplish adequate coordination with anti-aircraft brigades. No difficulties with engineered circuits were reported.

12. The operational landline communications facilities are apparently adequate and the saturations experienced were generally the result of inability of Direction Centers to use these lines as planned because of plotting board size limitations.

13. Results of this exercise show that our intercept capability and procedure has improved since our last exercise.

a. Only two tracks penetrated the bomb release line of our primary targets before being intercepted.

b. Throughout the exercise we were able to maintain sufficient interceptors on advance states of readiness, to insure Faker destruction.

c. Passing of fighters was satisfactory throughout the exercise. Utilization of trailer aircraft was not employed.

d. The use of close control procedure was very effective and the only form of control used. All strike aircraft penetrated our area under excellent weather conditions and during daylight hours, so no opportunity existed to test night and weather interceptions.

e. Use of CAP was employed by conventional aircraft and was fairly effective. Employment of CAP by conventional aircraft offers the best utilization against low and medium flying conventional targets, however, conventional type aircraft have poor capability, either from readiness alert

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

or C&F, against high flying target aircraft. The use of high states of ground alerts offers maximum intercept capacilities from Jet type aircraft.

14. It was necessary to augment operating crews at all Direction Centers and the Control Center, in order to attain maximum capability during the exercise. In most cases, this consisted of doubling crews and working personnel 12 hours on and 12 hours off. In view of our personnel limitations, it is felt that this is thoroughly realistic, but it must be recognized that over a long period, individual efficiency and overall capability will be adversely affected. The fact that there were extened periods of inactivity during this crew augmentation was detrimental to the morale of the crew members and should be avoided whenever possible.

15. Base Defense Plans were implemented at each installation of this command immediately after the beginning of "Operations Signpost", at 2400 hours, 23 July 1952. Defense Plans were kept in effect for two (2) hours and then were terminated at the discretion of installation commanders.

a. Sabotage Alert Plans were implemented by all AC&W stations on the following times and dates:

(1) Implemented - 0210 hrs, 24 Jul 52 - Terminated - 0700 hrs 24 Jul 52

(2) Implemented - 1330 hrs, 25 Jul 52 - Terminated - 0700 hrs 26 Jul 52

(3) Implemented - 2345 hrs, 26 Jul 52 - Terminated - 0800 hrs 27 Jul 52

b. Squadrons are still not quite familiar with proper Sabotage Alert Plan procedures as outlined in EADF Regulation 56-1, 10 May 1951, and Par 13, AFR 205-5, 17 July 1952. This headquarters will initiate instructions to assist in bringing training up to more acceptable standards.

16. a. Approximately 42% of the organized Observation Posts within the 26th Air Division (Defense) participated in "Operation Signpost." All these posts were not, however, on duty on a round-the-clock basis.

b. Training in plottings, filtering and telling procedures was limited due to the low number of observation posts which were operational at any one time during the exercise. The restrictions placed on reportable airborne objects and the lack of low altitude Faker missions reduced the training that could have been given to obarvation posts.

c. Aircraft Flash Messages received at filter centers were in conformance with procedures outlined in AFM 50-12. The average time to receive messages was twenty-one (21) seconds. It is felt that the accuracy of the GOC reports with regard to exact location of aircraft has been improving resulting in increased correlation between GOC and radar tracks but concrete examples of this improvement were not observed during theoperation.

d. Because of the limited manning at observation posts, the capability of the GOC to carry continuous and accurate tracks is very limited.

e. The average time from the time of observation through the filter center to the established track to the ADDC was two (2) minutes.

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

f. The plotting equipment used in the filter centers is satisfactory in principle but the pips are not satisfactory in that the colors on the time section of the pips wear off. The plastic stands are unsatisfactory in that they break and are too light for use. Lack of air conditioning in the operations rooms of the filter centers is a definite handicap. Crowded conditions in the operations rooms hinder the operation. This is being resolved by relocating the filter centers at New Haven, Conn., Trenton, N. J., Harrisburg, Pa., Pittsburgh, Pa., and Baltimore, Md. A request is being prepared to relocate the White Plains, New York, Filter Center and the Richmond Filter Center is acquiring additional space at its present location as of September 1952.

CONCLUSIONS:

17. The exercise was of substantial benefit to all units of this division. The training provided during the strike periods was excellent.

18. It is felt that the period of the exercise should have been limited to that time during which we could expect strike activity. The Fighter Wings lost considerable training time, and Navy and Air National Guard Units were asked to stand alert for a much longer period than the training afforded them warranted.

19. Considerable confusion resulted from numerous changes to the procedures outlined in EADF Operations Plan 1-52 during or just prior to the exercise. Since exercise procedures must be thoroughly understood and assimilated by all operating personnel, last minute changes are very difficult to disseminate completely and clearly and will invariably bring about errors in interpretation and implementation.

20. We believe that the intelligence requirements, reports and procedures have grown out of all proportion to the benefit derived therefrom. We feel that with the exception of intercept controllers and battle commanders, the job of all AC&W operational personnel is the gathering and passing of intelligence information. The duplication of this intelligence/operational information by intelligence personnel and through separate intelligence channels is a waste of personnel and effort. It is felt that intelligence officers at defense force level should evaluate intelligence situations from the picture displayed at defense force COC and disseminate that evaluation to interested outside agencies. Throughout the exercise, we received a steady stream of intelligence information from EADF intelligence in duplication of information already received through operational liaison with adjacent control centers. The intelligence information was generally useless because it was received 30 minutes to one hour later.

RECOMMENDATIONS:

21. That future exercises include simulated Air Defense readiness warnings and air raid warnings.

22. That the length of future exercises be more nearly commensurate with the amount of strike activity anticipated.

23. That engineered circuits between anti-aircraft brigades and control centers be energized for all air defense exercises.

24. That exercises be conducted in accordance with EADF Operations Plan 1-52 or, where changes are necessary, that changes not be made less than ten (10) days prior to the start of an exercise.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

25. That the entire system of intelligence requirements and reports be reviewed for the purpose of proper manpower utilization and elimination of duplication of effort.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

ADCCO 373.2

5 August 1952

SUBJECT: Operation Signpost

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Following data and statistics are submitted as required by paragraph 1 b. of Appendix II to Annex A, Operations Plan 1-52.

2. Reference paragraph 2 a., Item I (2) Radar, the following is a breakdown of radar equipment used at stations during exercise:

STATION	LOCATION	EQUIPMENT	STATUS AND FUNCTION
646th	Highlands, N. J.	AN/CPS-6B	GCI Operational INOP 5 hrs 47 min.
		AN/GPX-4	Identification Operational
647th	Manassas, Va.	AN/FPS-3	GCI INOP 2 hrs 5 min.
		AN/CPS-4	Height INOP 25 hrs 15 min.
		AN/UPX-4	Identification Operational
648th	Benton, Pa.	AN/CPS-6B	GCI INOP 6 hrs 48 min.
		AN/UPX-7A	Identification INOP 38 hrs 5 min.
770th	Palermo, N. J.	AN/FPS-3	GCI INOP 3 hrs 25 min.
		AN/FPS-5	Height finder - INOP 1 hr
		AN/GPX-4	Identification - INOP 5 hrs 18 min.
771st	Ft. Custis, Va.	AN/FPS-3	GCI INOP 1 hr 5 min
		AN/CPS-4	Height INOP 14 hrs 54 min.
		AN/GPX-4	Identification INOP 1 hr 5 min.
772d	Blueknob, Pa.	AN/FPS-3	Search INOP 2 hrs 12 min.
773d	Montauk, N. Y.	AN/FPS-3	GCI INOP 6 hrs 27 min.
		AN/FPS-5	Height Operational
		AN/UPX-7A	Identification Operational

3. Reference paragraph 2 b. Item 2 - Track Overlays. Overlays for the period 24 July through 28 July 1952 are submitted in book form composed of 66 pages.

4. Reference paragraph 2 x, Item 3 - Statistical Data. Submitted as follows for paragraph 3 of Appendix II to Annex A, 3a:

(1) Total number of penetration tracks - 225.

(a) As defined by Eastern Air Defense Force SOP 55-3, paragraph 2c - 181 (penetration tracks).

(b) As defined by EADF SOP 55-3, paragraph 2 e - 44. (suspicious tracks).

0266

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

(2) Initial identification by ADDC of total number of penetration tracks:

(a) Unknown - 94

(b) Friendly - 131

(3) Final identification of penetration tracks:

(a) Unknown - 17.

(b) Faker - 22

(c) Friendly - 186

(4) Number of penetration tracks identified by:

(a) Flight plan correlation - 140

(b) Interception - 68

(c) EADF CCC - 0

(5) Number of penetration tracks initially identified as unknown on which no intercept was attempted - 7.

(a) Darkness - 0

(b) Weather - 0

(c) Target faded before scramble - 0

(d) Contact lost before scramble - 0

(e) No fighter available - 0

(f) Out of intercept range - 1

(g) Target identified as friendly prior to scramble - 6

(6) Number of penetration tracks initially identified as unknown on which intercept attempted - 87.

(a) From scramble - 82

(b) From CAP - 5

(7) Number of unknown tracks on which intercepts successful:

(a) From scramble - 63

(b) From CAP - 5

0267

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

(8) Number of faker tracks on which intercept successful:

(a) From scramble - 17

(b) From CAP - 4

(9) Number of unknown tracks on which attempted intercept not successful - 19.

(a) Type of control used: Close

(10) Reasons for unsuccessful intercepts:

(a) Search radar performance - 5

(b) Controllers error - 7

(c) Out of intercept range (entered other division) - 3

(d) Unable to intercept before reaching heavy New York traffic - 1.

(e) Unable to intercept before reaching heavy Washington traffic - 1.

(f) Lost contact prior to intercept - 1.

(g) Tactical aircraft performance - 1.

(11) Number of flight plans received from penetration flights:

(a) From CAA -95

(b) From MFS - 131

(12) Number of flight plans correlated with established tracks:

(a) From CAA - 72

(b) From MFS - 59

(13) Average time lapse from initial identification of unknown aircraft by ADDC to interception:

(a) From scramble:

F-94 - 38.1 minutes
F-47 - 47 minutes
F-2H - 33.5 minutes
F-9F - 24.3 minutes

(b) From CAP:

0268

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

F-47 - 45 minutes
F-94 - 46.5 minutes

(14) Average time lapse from establishment of track at ADDC to receipt of first plot at ADCC - 1.3 minutes.

(15) Average time lapse obtained by spot checks between plot of target at ADDC other than initial plot and receipt of same plot at ADCC - 15 seconds.

(16) Communications - Station 55:

(a) On the 25th July 1952 a saturated condition on Silvertone overlap tactical line existed for a period of 30 minutes. Silvertone plotter was connected to Soapberry and Thorndyke and could not handle traffic for both stations. This condition commenced at 1952Z.

(b) On 25 July 1952 at approximately 1400Z extreme difficulty was encountered in attempting to pass overlap information to Percussion and receive track numbers from Percussion.

(c) At approximately 1959Z, 25 July 1952, a saturated condition existed on the Soapberry overlap tactical line and lasted for 30 minutes. Soapberry plotter was connected to Silvertone and Thorndyke and could not handle the traffic for both stations.

(d) Station 54: Current land line communications facilities are adequate with the exception of the CD and CN line to the ADCC at Roslyn, the scramble line to Oceana, the CD and CN line to ComAirLant and the status line to NAS Norfolk. All of these agencies are on the same line. This line was completely saturated on many occasions during the exercise.

(17) See Reports submitted by filter centers.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

1 Incl
Book of Overlays
(66 pages)

0269

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

[illegible]

[illegible] 1 [illegible]

[illegible]

1. [illegible]

2. [illegible]:

a. [illegible] effective utili- [illegible]

b. [illegible] of civilian volunteers [illegible] little active utilization [illegible] period, as a result of present air surveillance operating procedures.

c. Present filter center procedures [illegible] Manual 50-1 [illegible] observation [illegible] formations of aircraft [illegible] relayed to an associated Air Defense Direction [illegible] information [illegible] procedure.

3. [illegible] observation [illegible] are being operated [illegible] civilian volunteers [illegible] the "Operation Skywatch" [illegible] region. [illegible] citizens are giving their time without compensation in [illegible] country. Every effort [illegible]

SECRET
SECURITY INFORMATION

0270

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

JSS/mlp

26 [illegible] 381

14 October 1952

SUBJECT: Utilization of Ground Observer Corps Intelligence in the Air Defense System

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Reference letter, your headquarters, AGCO 381, subject as above, 24 September 1952.

2. The following are recommendations of this headquarters to improve the organization, utilization and operational procedures of the Ground Observer Corps:

a. RECOMMENDATION: Reorganize the command structure of the Ground Observer Squadrons to allow closer supervision and control of the filter center organizations and State ROC Coordinators.
REMARKS: In the pending reorganization of the Air Divisions in the Air Defense Command, which will assign the Defense Wings immediately under the Air Divisions in the chain of command and which will also place the AOI Squadrons, under the Wing Command in the same manner as the Fighter-Interceptor Squadrons, an opportunity is created to improve the supervision and inspection of filter center detachments and State ROC Coordinators. At the present time, the ROC Squadron Commander functions in a dual role wherein he carries the duties of Division Director of Civil Air Defense in addition to his Squadron Commander's position. Under this condition, he must exercise command over 8 filter center detachments and the squadron headquarters, and supervise the activities of 7 ROC State Coordinators. To alleviate this excessive span of control, it is recommended that:

(1) A Ground Observer Squadron be organized at each of the Wing Headquarters. Such a unit would be comprised of the following:

(a) Squadron Commander

(b) Administrative Officer

(c) Senior clerk

(d) Typist

SECRET
SECURITY INFORMATION

0272

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

This unit would have assigned to it the filter centers associated with AC&W Squadrons in the Wing.

(2) A Directorate of civil Air Defense be established at each division headquarters. The State GOC Coordinators would be assigned to the division as part of Directorate of Civil Air Defense, and the Division Director of Civil Air Defense would formulate overall operational policies for filter center operation.

b. RECOMMENDATION: Make filter center and radar subsector boundaries identical.

COMMENT: It is felt that this adjustment is necessary to align the areas of interest of the radar station and its associated filter center. Under current boundary definitions, a filter center commonly reports to its radar station, information on aircraft in another radar station's subsector, and, in some instances, it is impossible to display this GOC information on the plotting board at the direction center.

This boundary re-alignment can be accomplished without moving filter centers, under the assumption that the filter center need not be within the area covered by its assigned observation post. Filter center boundary re-alignment will require changing filter center plotting boards, and reassigning many observation posts with different filter centers.

c. RECOMMENDATION: Continue constant examination of all observation posts to obtain best possible coverage and manning.

COMMENT: The present criteria of an observation post every 8 miles appears to be adequate. It must, however, be continually modified because of the location of population centers, local cooperation, telephone facilities and tactical importance of the specific area. The cooperation of other Air Force commands and military services in organizing observation posts on military reservations should contribute substantially to the GOC system in this sector. These posts, being under military authority, would be much easier to control and would, in many cases, provide observers who are exceptionally well qualified.

It is felt that very great emphasis should be placed on maximum use of Coast Guard stations. These stations on the coast line are at the outer edge of our GOC coverage and from this position can give us the earliest warning on a low level attack from the ocean. In locations where Coast Guard telephones are not sufficient to handle the additional GOC communications requirement, we should install Air Force tell circuits for the use of the Coast Guard Observation Post.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26 [illegible] 381 subj: Utilization of GOC Intelligence in the Air Defense System

[illegible]. RECOMMENDATION: Provide filter centers with a simple and easily understood method of filtering information to be passed to Direction Centers. COMMENT: Under current conditions where air traffic outside of [illegible] is not controlled or monitored for identification, it is impossible for Direction Centers to handle radar or GOC information available to them. It is necessary, therefore, to develop a means of filtering this information to separate that which is of air defense interest. In this division, radar information is filtered by considering all overland radar tracks friendly unless they are suspicious by virtue of high speed, high altitude, etc. This assumes that aircraft initially painted by radar overland, originated in the [illegible]. The shortcomings of this perimeter concept are recognized. In this division, however, it appears that the best means of accomplishing simple but accurate filtering of GOC information is to extend the concept of perimeter defense to the GOC. This would be accomplished as follows:

(1) Observation posts would continue to report in accordance with the requirements of "Operation [illegible]". They would be further instructed in recognition of aircraft by type and would be required to report observations by type aircraft whenever possible.

(2) Filter centers would receive and display all observation post reports. They would report to direction center all tracks which originate within a narrow strip along the coast proceeding inland. (The strip would be established a sufficient distance from the coast line to assure a depth covered by at least two observation posts.) In areas not within this strip, filter centers would report only unusual occurrences, formations and aircraft recognized as B-29 type. They would also report continuations of tracks originating in the coastal strip and tracks requested by the Direction Center.

It is recognized that this system leaves many observation posts and filter centers with only slight recognition of their contribution to air defense, and that this can result in morale and recruiting problems for the GOC. It is felt, however, that in this division other systems will result in burdening our ACEW system with such a volume of unusable information that it will be impossible to keep the level of ACEW interest in, and attention to, GOC information at its required high level. Training periods would be established during which filter centers would tell all tracks to direction centers for the purpose of training filter centers personnel in handling heavy traffic. During emergency periods when non-tactical traffic is either controlled or grounded, all GOC tracks would be passed to direction centers, and it is felt that direction centers will be able to handle and intelligently evaluate this information.

0274

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

e. [illegible]: Action should be taken on the first GOC report rather than waiting for two reports, when the aircraft is in an [illegible] or the recommended coastal zone, or is of suspicious nature (i.e. [illegible] type, or formation of 4-engine aircraft).

[illegible]: The criteria of establishing a GOC track only after receipt of two or more observation post plots was established during GOC exercises conducted prior to "Operation [illegible]". It was necessary at that time in order to force intelligent filtering at the filter centers and to eliminate the multitudes of unusable single plots that were established during these exercises. This division has completely dropped this criteria for tracks proceeding inland from the coastal area, and the track is established and [illegible] to associated direction center on the first plot.

f. [illegible]: [illegible]

[illegible]: This change is desirable for many reasons, [illegible] the effect of small plotting [illegible] utilization of GOC information. The present scale (1 to [illegible]) [illegible] filter center [illegible] square. [illegible] board to such an [illegible] evaluate them.

2. The orientation and cross-training of [illegible] personnel, in [illegible] requirements and procedures should be accomplished by the following:

a. Frequent periods of instruction of [illegible] personnel in GOC procedures and the need for maximum use of GOC intelligence, with filter center personnel as instructors. These periods couldvery well be integrated into Ground Training and I & E periods.

b. Frequent visits between direction centers and filter centers.

c. One instruction period conducted at each [illegible] Squadron by the Division Commander or a senior division staff officer, emphasizing to all squadron personnel the individual responsibility of each man for correct presentation of the GOC program to the public and the need for the GOC in the air defense system.

d. Use of aircraft controllers (AFSC 1635) in both filter center and direction center duties, with fairly frequent rotations. It is recognized that this proposal will be very difficult to implement in the immediate future because of acute shortages of controllers .

3. The following measures are recommended to improve recruiting and effectiveness of the GOC:

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

a. RECOMMENDATION: Filter center personnel should be individually screened as to their suitability for GOC work.

(1) Sound knowledge of the GOC and ACW.

(2) Nature and personable in judgement and appearance.

(3) Enthusiastic approach to selling the GOC.

(4) Willingness to work long and irregular hours

(5) Ability to express themselves before groups.

b. RECOMMENDATION: [illegible] personnel [illegible]
COMMENT: [illegible] personnel. [illegible]

c. [illegible]
COMMENT: It is felt that this plan would allow filter center personnel to become thoroughly familiar with a particualr portion of the filter center area and concentrate their efforts on the posts in that area. This would assure continuity in the associations between filter center and observation post personnel, and provide one person to whom each post can look for instruction and guidance. Wherever possible, the subdivision should include not more than 50 posts.

d. RECOMMENDATION: Continuous effort should be made to concentrate and properly schedule the efforts of GOC State Coordinators where they are most needed.
COMMENT: [illegible] justified in view of expected results, etc. They must be continuously briefed and re-orientated on obtaining maximum benefit from the utilization of their time. It is felt that thisprogram would be enhanced by the reorganization outlined in paragraph 2a.

e. RECOMMENDATION: All personnel involved in GOC activities should be cautioned against making commitments that cannot be fulfilled.
COMMENT: Many promises regarding facilities, literature, wings, pins, badges and certificates have been made and have not been kept. This has a very bad effect on morale and participation of [illegible] in the GOC.

SECURITY INFORMATION

0276

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26ADADO 381 Subj: Utilization of GOC Intelligence in the Air Defense System

SECRET
SECURITY INFORMATION

f. RECOMMENDATION: Filter center GOC State Coordinators and Ground Observer Squadron personnel should be provided with instruction in PIO activities.
COMMENT: Personnel associated with the GOC program are continuously involved in publicity campaigns using newspapers, radio and television. The [illegible] PIO can be of assistance to them in this type work, but it would seem that a course of instruction in setting up campaigns and properly utilizing news media would be beneficial.

g. RECOMMENDATION: Leaflets should be used to publicize and recruit for the GOC.
COMMENT: [illegible] was made on the West Coast by a B-29 which flew over designated cities at low altitude and dropped leaflets. The message on each leaflet explained that the B-29 which passed over had penetrated our air defense system without radar detection, explained the need for the GOC, etc. It is felt that similar flights in this area would be very effective.

h. RECOMMENDATION: [illegible] frequently to exercise the observation posts.
COMMENT: [illegible] for formations of aircraft so that they would be easily distinguishable by observation post and filter center personnel, but not involve changes to their SOP. Complete reports on the success of specific observation posts and filter centers could be disseminated to the GOC after each exercise flight, to provide recognition of the efforts and capabilities of GOC participation. It is not intended that these flights be concentrated in large exercises, but that they be arranged at local level with any aircraft that are available. In many cases it would be possible to make intercepts against these flights, and obtain the additional training benefits.

FOR THE COMMANDING GENERAL:

[illegible]

SECURITY INFORMATION

0277

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

GHA/mlp

26ADOCO 373.2 23 December 1952

SUBJECT: Report of Effectiveness of the Ground Observer Corps in the Air Defense System, RCS: EADF V-5

TO: Commanding General
Eastern Air Defense Force
ATTN: Director of Statistical Services
Stewart Air Force Base
Newburgh, New York

1. The following report is submitted in accordance with paragraph 3, EADF Letter 55-10, dated 4 November 1952.

2. a. Narrative of general effectiveness: The general effectiveness for the preceding month has not been very effective. Track information is becoming more usable with operational experience at ADDC's.

b. Specific cases indicating Ground Observer Corps Effectiveness in the Air Defense System: None.

c. Number of intercepts attempted on Ground Observer Corps Intelligence: Two (2).

(1) On 16 November 1952 a multi-jet, very high, track F217 was reported. Scramble action was taken without successful interception on GOC track information. Later, intelligence from GOC proved to be a few single jets instead of one multi-jet.

(2) On 29 November 1952 CAP fighter vectored for unknown object without locating same. There was no radar information on this reported object.

d. Number of intercepts attempted on all intelligence: 126.

e. Number of intercepts successful from GOC intelligence: None.

f. Number of intercepts successful from all intelligence: 90.

g. Number of tracks where GOC intelligence was utilized to dead reckon during period when radar was effective: 21 tracks.

h. Number of GOC tracks correlated with radar: 731.

0278

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26ADOCC 373.2 Subj: Report of Effectiveness of the GOC in the Air Defense System, RCS: EADF V-5

i. Length of average track each filter center in miles:

New Haven	19	Pittsburgh	24
White Plains	46	Baltimore	8
Trenton	20	Richmond	5
Harrisburg	75		

j. Length of longest track each filter center in miles:

New Haven	101	Pittsburgh	153
White Plains	95	Baltimore	30
Trenton	89	Richmond	95
Harrisburg	176		

k. Total number of GOC tracks each filter center:

New Haven	962	Pittsburgh	840
White Plains	8321	Baltimore	866
Trenton	1476	Richmond	2323
Harrisburg	2983		

l. Number of GOC tracks plotted by ADOC's: 8,646.

m. Number of aircraft flash calls each filter center:

New Haven	21,548	Pittsburgh	22,321
White Plains	25,963	Baltimore	23,984
Trenton	28,750	Richmond	8,361
Harrisburg	28,963		

n. Average cost per flash call each filter in cents:

New Haven	34	Pittsburgh	65
White Plains	x	Baltimore	45
Trenton	35	Richmond	36
Harrisburg	61		

o. Indication of GOC effectiveness in coordination with Air Rescue or other services: None.

p. Comments and recommendations for improved GOC operational procedures:

(1) Improvement is contingent upon increasing the number of GOC posts operational.

(2) Activation of GOC posts on all military posts or installations.

(3) More thorough training in direction of flight, type of aircraft, and altitude estimates.

0279

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26ADOOC 373.2 Subj: Report of Effectiveness of the GOC in the Air Defense System, RCS: EADF V-5

(4) Elimination of time delays in reporting from posts to ADDC's.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C O P Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

AFOCC 373.2 19 August 1952

SUBJECT: GOC Report

TO : Commanding General
Western Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Refer to CADF message, number WACCO 29164, dtd 14 Aug 52

2. The general effectiveness of GOC in Exercise Signpost and Navy Exercise 11-14 August 1952, is indicated by the fact that only one interception was made on a strike aircraft that can be directly attributed to GOC information. The majority of GOC information obtained during the exercises, while of some value for training the Ground Observer - GOI team, proved to be of little value and somewhat confusing to the Battle Commander.

3. The effectiveness of GOC information during the period of 14 July - 14 August 1952, is substantially the same as that outlined in the foregoing paragraph. However, the lack of manned observer posts in critical areas may be considered the major contributing factor.

4. Certain individual cases serve to indicate that GOC information can be effective. Specifically:

a. One strike aircraft was intercepted by virtue of GOC information.

b. One report of an unusual target was received.

c. One intercept completed on a civil air carrier as a result of GOC reporting.

5. Number of interdicts attempted on GOC information. - Two.

6. Number of intercepts made on GOC information. - Two.

7. Number of times when GOC information was utilized to DF during periods when radar was ineffective. - One.

8. Largest track carried by each Filter Center:

0281

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ADOCO 373.2 Subject: GOC Report (Cont'd)

White Plains	39 miles
New Haven	52 "
Trenton	65 "
Richmond	60 "
Baltimore	70 "
Harrisburg	16 "
Pittsburg	30 "
Roanoke	Non-operational

9. Average length of tracks carried by each Filter Center:

White Plains	Average track only one plot
New Haven	23 miles
Trenton	22 "
Richmond	10 "
Baltimore	32 "
Harrisburg	16 "
Pittsburg	Average track only one plot
Roanoke	Non-operational

10. Total number of GOC tracks from 14 July to 14 August - 7,824

11. Number of GOC tracks correlated with radar - 337 for period of report.

12. GOC has, on one occassion, assisted in locating an aircraft that crashed.

13. In the opinion of this headquarters, manning additional observation posts and continous training in order to raise the skill level of all concerned is the primary means by which the effectiveness of the GOC can be increased. This will result in the desired track continuity required where radar cannot be effective.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

0282

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C O P Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

GHA/jar

ADADO 373.2

21 August 1952

SUBJECT: Report on Naval Penetration Missions, 11 through 14 August 1952

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Findings of this headquarters are as follows:

a. Two strike missions detected by radar and intercepted. Identified as strike aircraft. (Overlay herewith).

b. GOC reported normal traffic during this period. Only the Trenton, New Jersey Center was able to give an opinion that of a total of 368 tracks during this period, 81 tracks were identified as Navy aircraft.

2. With the exception of the tracks intercepted, it must be concluded that all other raids went undetected by radar. Further, that GOC either did not see, or at least did nor report, Navy aircraft except as noted in paragraph 1.

3. It is recommended that repetition of this type of operation will contribute greatly to an appraisal of our defense potential against low level attack. However, it should be noted that this headquarters had no information relative to expected routes, times and altitudes. Future exercises would allow an intelligent monitoring of our weaknesses and strengths at the time of happening.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

1 Incl:
2 Track Overlay (2 cys)

0283

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/amm

ADADO 373.1

14 August 1952

SUBJECT: Report on B-36 Penetration, 7 August 1952

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The following report is forwarded in accordance with instructions contained in EADF Msg EAOOT-50 1496, dated 2 August 1952.

2. The B-36's penetrated this division in two raids of approximately 20 aircraft each, the first raid attacking Philadelphia and the second raid attacking New York City. The attack on Philadelphia was intercepted by five flights before the bomb release line, and four of the flights made Tally-ho pounce. The attack on New York was intercepted and pounced by four flights, but all the pounces were so close to the target that it is improbable that we could claim any destructions prior to the bomb-release line.

3. The early warning and tracking of the strikes was excellent and we received continuous information on both strikes from the time of initial pick-up by the 32d Air Division until final fade. We were operating from the alternate control center at Station P-9 during this mission and it was quite difficult to maintain an accurate picture of the situation as fighter action was being taken. It is felt that this was primarily due to plotting board limitations which are being discussed in separate correspondence.

4. Fighter action against the strikes was limited by marginal weather. The fighters at New Castle remained grounded throughout the mission because of weather and the Dover Fighters were available only against the New York strike. McGuire and Suffolk fighters were available throught the mission, however, McGuire fighters had to use the IFR scramble procedure against the Philadelphia strike. All but one of the F-86's at Suffolk shorted, and that one developed engine trouble which prevented an interception.

5. The New York strike followed the Philadelphia strike so closely that we were unable to land, reservice and scramble McGuire Fighters in time to intercept the New York strike at an acceptable distance from their target. Since New Castle was below minimums, this left only fighters at Dover, and the weather there was such that scramble was delayed until the last minute.

6. It has been reported that the interceptions were generally not effective because of the very high altitude of the B-36's. Apparently the F-86's without tip tanks at McGuire were the only ones able to accomplish effective gunnery passes. F-47's from Suffolk made one Tally-ho, but did not accomplish a Pounce.

SECRET
SECURITY INFORMATION

0284

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

7. Conclusions:

a. With this mission and the missions of July 1 and 2, it is felt that it has been fairly well determined that F-94's with tip tanks haver very little capability against targets above 40,000 feet. The F-86's with tip tenks have marginal capability and those without tip tanks appear to be fairly effective.

b. This headquarters was directed quite early in the mission to advance all fighters to readiness. It is felt that this procedure is unrealistic in that most of the bases have limited ramp space and it is not possible to scramble more than four to six aircraft at a time, to be airborne within five minutes.

8. Recommendations:

a. It is recommended that a similar mission be scheduled, using F-94's without tip tanks.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

2 Incls:
1. Overlay Chart
Track C-15 (2 cys)
2. Overlay Chart
B-36 Exercise (2cys)

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

DSS/jar

26ADADO 373.13

29 Sep 1952

SUBJECT: Low Level Penetration Missions, 9, 10 and 11 September 1952

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The following report is submitted in compliance with TWX, your headquarters, EAOOT-FO 31589, dated 6 September 1952, as modified by conversation with Major Alexander,

2. GENERAL INFORMATION:

a. Aircraft which could be correlated with the penetration flights were detected 11 times by this division. Seven of the pickups were made by radar detection over water, and four were initiated by GOC over land.

b. Fighters were vectored from scramble or CAP against each detection.

c. Four interceptions were successfully completed. There was one AI interception with no visual contact and one visual contact with no pounce.

3. RADAR:

a. Maximum detection range was 170 miles for the FPS-3 and 105 miles for the CPS-6B. One FPS-3 site reported 90 to 100 percent radar return at ranges within 110 miles on a B-29 flying at an altitude of 500 feet. Maximum height finder range was reported as 71 miles. Abnormal radar ranges at low altitudes were due to ducting and temperature inversion. In at least one instance, a double inversion was reported.

b. Antenna tilt of CPS-6B at Station P-9 was adjusted to various positions in attempts to continue tracking the target. As the target headed inbound, the tilt was varied froma minus 5o to a plus 2.3o. It was found that lowering the antenna tilt aided over water tracking of low level targets substantially. Overland, however, the low antenna tilt caused ground returns so intense that targets were cancelled out. While the low antenna tilt does aid over water tracking of specific targets, the benefit gained is at the expense of early warning and is not practical for normal operation.

SECRET
SECURITY INFORMATION

0286

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26ADADC 373.13 Subj: Low Level Penetration Missions, 9, 10 and 11 Sep 52

4. GROUND OBSERVER CORPS:

a. The proposed routes of the target aircraft were passed to all filter centers and observation posts prior to the test, and on the final night, courses speed and actual time of departure were passed to the filter centers with instructions to disseminate this information to observation posts along the route. In spite of these measures, the GOC information was meager.

b. Four GOC tracks correlated with the routes of the target aircraft. Interception was made on one track which proved to be a DC-6. Interception could probably have been completed on another GOC track, but due to a director's error, interceptor aircraft were diverted to another target. Shortly after this diversion, the GOC target faded from the system. Although additional aircraft were scrambled, they reached the area some 10 minutes after the track faded, and subsequent search was unsuccessful. GOC tracks appearing on the control center board had very little continuity, probably due to the small number of observation posts manned.

c. One station reported a total of 71 GOC tracks received between 2200Z, 10 September, and 0900Z, 11 September. Of the 71 GOC tracks, 29 initial plots were located within a 5-mile radious of AL2120. The second plot of 19 of these 29 tracks was within a five-mile radius of AL1117. It is felt that this amount of traffic is somewhat representative of the traffic we could expect from two fully manned observation posts located on a busy airway. It is evident that information of this type and volume is very difficult to analyze and use.

5. FIGHTERS:

a. It is generally felt that the fighter action in these low level darkness intercepts was satisfactory. The interceptions were all made by F-94(s, and it was reported that it was practically impossible to maintain lock-on due to excessive ground or sea return on AI equipment. Some success with the use of AI was reported using manual control. In one instance a fleet of fessels was detected by AI rader, resulting in the loss of contact with the airborne target.

b. In order to maintain 2-way VHF contact, it was generally necessary to keep one fighter at high altitude, relaying vetors to the fighter at the altitude of the target.

c. The target aircraft were, in most instances, running without lights, and this factor plus haze at the target altitudes made the obtaining and maintaining of visual contact very difficult. The slow speeds of the targets also made successful interceptions and fireing passes very difficult.

d. As anticipated, the greater fuel load of the F-94B was beneficial in that it provided additional range for low altitude work.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

5. CONCLUSIONS:

a. Radar results obtained in this test were better than normal low altitude coverage due to weather phenomena encountered.

b. The GOC information was scanty, but it is felt that the AC&W system is still not taking full advantage of the information it receives from the GOC. This headquarters is continuing to study the proper utilization of GOC information by direction centers, and tests or exercises of this type are of great assistance.

6. RECOMMENDATIONS:

a. That low altitude missions be regularly scheduled during daylight hours as well as darkness.

b. That future exercises select overland routes through areas of light traffic, in order to minimize the problem created by confusion of friendly traffic with the target aircraft.

c. That future exercises utilize 4-engine aircraft. This not only will provide more realistic targets, but also will preclude the requirement to change operating procedures of the observation posts and filter centers.

d. That continued effort be made to devise a system of keeping the amount of GOC information passed to the direction center within the capability of the direction center for proper evaluation and action.

FOR THE COMMANDING GENERAL:

1 Incl
Track Overlays (16 sheets)

E. H. GAILLOT
Major, USAF
Adjutant General

SECURITY INFORMATION

0288

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DOS/mlj

26ADADO 373 12 November 1952

SUBJECT: Final Report on Exercise 16-52

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The following comments and inclosures are forwarded in accordance with paragraph 1b of Annex B to EADF Operations Order 16-52.

2. It is felt that the passing of flight plan information to ADCC was completely unsatisfactory. In many instances faker strike routes were not furnished to ADCC and launching times, which were occasionally received, were always received after scramble action had been initiated. The result was that all fakers initeilly detected in the ADIZ had to be considered active air defense "unknowns", and the provisions of paragraph 3x (5) of the operations order, which was intended to preserve our active air defense potential during the exercise, were wholly ineffective. This exercise caused a very severe drain on our air defense interceptor strength with resultant weakening of the air defense of the critical targets in the 26th Air Division Sector. The situation was even further aggravated by the fact that another Navy exercise was being conducted in this sector during part of the same period.

3. The Aircraft carrier Coral Sea, which launced the faker forces, unrealistically remained on station within approximately 75 miles of the coast and apparently conducted other operations during the exercise period. During the initail stages of various missions, individual aircraft were detected while in the process of "joining up", and it was very difficult to separate the faker aircraft from the other carrier traffic. This made the mission unrealistic from the faker standpoint, since it gave early warnign of an impending attack, and also from the AC&W Standpoint, since it saturated our surveillance system. Delays resulting from this saturation were evident at ADCC and EADF GOC.

GOC manning was generally below the minimum requirement for effectiveness against missions of this type. Continuous tracking was lacking, and it was apparent that many observers were "trigger happy" and called miscellaneous traffic to the filter centers as "Navy strikes". This served to add further confusion to an already difficult problem. Despite these serious shortcomings, there were several instances in which GOC information aided in detection and interception of fakers. In at least two instances, GOC information was solely responsible for successful interceptions.

0289

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

5. In order to gain some measure of AAA training, this division simulated "Guns Free". This condition is not particularly desirable, however it was taken when it became evident that designation of fakers by flight plan correlation was impossible. Actual simulated engagements were limited, since few strikes were flown over gun defended areas. Condiserable difficulty was experienced in the passing of AAA action reports from Direction Centers to the Control Center. These reports were very numerous, and along with other surveillance action and status reports, quickly saturated the available communications facilities.

6. Conclusions:

a. Lack of flight plan information on faker strikes caused reduction of our air defense potential to a very dangerously low level.

b. Positioning of the faker aircraft carrier was unrealistic and introcued unwarranted surveillance problems.

c. GCC information, althought it contributed to a limited extent to our capability, was generally unsatisfactory because of limited manning of observeation posts and errors in reporting friendly traffic as "fakers".

d. Intelligence reports, as usual, duplicated information previously received by normal overlap and cross-tell procedures. This duplication resulted in an additional and unnecessary load on our communications lines and wasted considerable time and effort of the Duty Intelligence Officer. Information contained in the "Enemy Contact Reports" required by EADF intelligence was largely a re-hash of information passed to EADF over tactical teletype. (Form 7.)

7. Recommendations:

a. That communication facilities and procedures for passing flight plan information be arranged to provide this information in sufficient time for effective use by ADCC, in order to eliminate unwarranted depletion of fighter forces.

b. That, in future exercises of this type, the aircraft carrier be realistically positioned well beyond radar surveillance capability.

c. That frequent exercises be conducted for training of the GCC, and training of the AC&W system in the effective use of GCC information. Routes and times should be passed to filter centers before the mission, so that filter center personnel can evaluate and correct the C.P. reports as they are received.

0290

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

d. That intelligence reporting requirements be screened and revised to eliminate Duplication.

FOR THE COMMANDING GENERAL:

1 Incl:
Overlap Charts - 79 sheets

E. H. GAILLOT
Major USAF
Adjutant General

0291

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

JHA/mlp

26ADCCO 373.2 24 December 1952

SUBJECT: Overlays (Turkey Run)

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. In compliance with paragraph 6, letter, Headquarters EADF, 20 November 1952, Subject: "Exercise Overlays", the following suggestions are submitted.

2. To avoid confusion of intersecting tracks, the action presented on any one overlay (attached) was arbitrarily chosen to keep such tracks separated. This necessitated an increased number of overlays, and as logical a sequence as possible for clarity is displayed.

3. Exercise overlays are in need of increased standardization for maximum clarity and usefulness. It is considered desirable that the required overlay blank forms be furnished by Headquarters EADF. This would curtail variation and organize unit efforts in presenting the operational information required. Subject overlays, thus prepared, should provide such basic reference data as grid, coastline, air defense installations (to include ADCC's, fighter bases and gun defended areas.)

4. There were 140 man hours required to accomplish the enclosed overlays. This headquarters cannot justify the cost involved in making up these overlays and it is hoped the benefits derived from this presentation will justify the cost.

5. Recommendations:

a. To minimize confusion, overlays showing faker routes should be made available to division headquarters. This measure will enable divisions to correlate radar targets with specific missions, permit more realistic fighter employment, and provide for more complete evaluation of GOC information. Further valuable information can be realized as a result of displaying individual targets in conjunction with faker missions.

b. A standard legend should be adopted and disseminated for use in any further submission of Exercise Mission charts. The complete history of each penetration track, and the pertinent prose remarks should be rendered in sequence, and within a specified area which is not in conflict with the mission and course [illegible].

0292

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26ADOCO 373.2 Sub j: Overlays (Turkey Run)

c. Terminal points of action should be marked by a distinctive symbol and given a reference number to conform to the sequence of remarks.

(1) Faded tracks (hashed arcs).

(2) Dead reckoned tracks (hashed lines).

(3) Hostile or faker tracks in red as normally displayed on vertical plotting boards and recorded on division overlays.

(4) The fighter tracks in any color depending on the number of fighters used per track.

(5) Point of Tally-Ho by fighters indbated by a circle over the tracks and explained in the remarks section.

(6) Point of Mission Accomplished by a large "X" over the tracks and explained in the remarks section. Toshow completed action on track carried on through the system, use "X" marks every inch or two.

FOR THE COMMANDING GENERAL:

E. F. SMITH
Major, USAF
Asst Adj Gen

6 Incls:
6 Overlays

0293

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

COPY

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/ms

ADADO 370.2

14 August 1952

SUBJECT: Operation of Alternate ADCC

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Due to construction work on the control room at this headquarters, operation was transferred to the alternate ADCC at Station P-9 on 30 July 1952 and continued until 8 August 1952. The following comments and recommendations drawn from this operation are forwarded for consideration.

2. Since engineered lines (including control and ARW nets) required at the alternate ADCC were not in place, it was necessary for the Primary ADCC to retain some of the control center functions:

a. Conelrad.

b. Air Raid Warnings and Tests.

c. Liaison with adjacent divisions.

d. Relaying reports between alternate ADCC and EADF GOC.

3. It was determined that the use of bridged circuits as outlined in inclosure 1 to 26th Air Division Regulation 55-27 did not provide continuous reliable communications with stations not adjacent to the alternate ADCC, and on 31 July the circuitry was returned to its normal function. Station P-54 was required to relay information to and from stations P-55 and P-56, and station P-30 relayed information to and from station P-63. (See Incl #1) It is felt that this relaying of

0294

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

information was unsatisfactory. The delay involved in relaying track information is undesirable but can be tolerated. There is however a definite requirement for one line to each station, to allow the battle commander to discuss details of operation and issue instructions. The relaying of such discussions or directives is time consuming and inaccurate, and would not permit effective operation during a period of attack.

4. The plotting board at station P-9 is too small for operation as an alternate ADCC (6' 7" by 8' 6"). The scale now in use (1 to 333, 333) is so small that binoculars are necessary to read tracks from the Alternate ADCC position at the back of the operations room. Even with this scale, the board does not include coverage sufficient for ADCC use. Tracks in the southern portion of the division sector could not be plotted, and those from the north could not be plotted more than 145 miles north of New York City. During the big photo mission on 7 August 1952 the plotting board was of very little value to either the station or ADCC operation, and practically all information had to be obtained direct from adjacent stations, or from the radar scopes and directors. It is strongly felt that <u>all</u> stations need plotting boards large enough to allow the use of 1 to 250,000 scale. In the case of alternate ADCCs it is felt that this scale, and coverage of at least the entire division sector is an absolute necessity.

5. The operation, within the limitations outlined above, was satisfactory, but the capabilities of P-9 as an alternate ADCC during attack of heavy activity is unsatisfactory. It is felt that the accomplishment of the recommendations below would give the station adequate capability as an alternate ADCC.

6. Recommendations:

a. That, in addition to required engineered circuits as outlined in Attachment 1 to EADF SOP 55-2, engineered circuits to be authorized for command and control from the Alternate ADCC to stations P-55, P-56, and P-63.

b. That station P-9 be authorized a plotting board of sufficient size to include the 26th Division Sector, and overlap necessary to the operation of the alternate ADCC, using a scale of 1 to 250,000.

FOR THE COMMANDING GENERAL:

L. H. TAILLOT
Major, USAF
Adjutant General

0295

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq 26th Air Div (Def) 370.2 Subject: Operation of Alternate ADCC

EAOOT-A 360.11 (14 Aug 52) 1st Ind 5 September 1952

HQ EASTERN AIR DEFENSE FORCE, Stewart Air Force Base, Newburgh, New York

TO: Commanding General, 26th Air Division (Defense), Roslyn, New York

1. This headquarters concurs in recommendation of paragraph 6a above. Submit wire requirements in accordance with EADF Regulation 100-3. EADF SOP 55-2 will be amended accordingly.

2. Reference recommendation in paragraph 6b above, this headquarters is preparing a letter to ADC requesting authority to purchase locally a larger plotting board for P-9 so that this station can better perform its alternate ADCC function.

BY COMMAND OF MAJOR GENERAL NELSON:

ROBERT J. ORTELT
Capt, USAF
Asst. Air Adj. Gen.

0296

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

CLASSIFIED SECRET
By Auth CG 26th AD (D)
Date 2/25/72 Init.

DIVISION REGULATION)
NUMBER 55-27)

HEADQUARTERS 26TH AIR DIVISION (DEF)
ROSLYN, NEW YORK
25 SEPTEMBER 1952

OPERATIONS

Alternate ADCC

(This Div Reg supersedes Div Reg 55-27, dtd 3 June 52)

1. PURPOSE: To establish the procedures and personnel requirements for operating the 646th AC&W Squadron Direction Center as an alternate ADCC when primary Control Center at Roslyn, New York, is lost to the system.

2. GENERAL: At such time as the primary Control Center becomes non-operational, either temporarily or permanently, the Commanding Officer of the 646th AC&W Squadron at Highlands, New Jersey, will assume sector control. In addition, he will organize and establish his operations sections to assume the responsibilities and functions of a Control Center.

3. PROCEDURES:

a. Additional Communications: The engineered circuits shown in Inclosure #1 must be energized when the alternate ADCC assumes control. These circuits in conjunction with certain of the existing lines will form the operational network as shown in the above named inclosure. Some of these latter lines must serve a dual function for both Direction Center and Control Center operation.

b. Existing Line Modification: The alternate ADCC will receive information over the same lines as have been previously employed. However, the 771st and 647th AC&W Squadrons will tell surveillance information to the 770th AC&W Squadron, which will in turn employ two existing lines to the alternate Control Center for relaying this information. The 772nd AC&W Squadron will employ the same procedure with the 648th AC&W Squadron acting as the intermediary.

c. Additional Personnel Requirements for ADCC Functions:

(1) One officer to serve as Air Sea Rescue Officer.

(2) Two additional plotters will be required, one for the relayed telling circuit from the 647th and one for the relayed telling line from the 771st.

(3) Two additional status clerks will be required in order to accommodate the additional fighter and radar status information.

3090

Secret

0297

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

(4) One additional teller will be added to the two ADCC reporting personnel, and the three will comprise a reporting team which will tell directly to EADF.

4. ALTERNATE ADCC ARRANGEMENT OF DIRECTION CENTER: Refer to Inclosure 2 which establishes the physical layout of the Direction Center at the 646th AC&W Squadron modified to accomodate Control Center functions. When ordered to function as an alternate ADCC, the AAA Liaison personnel will move from the position that they now occupy, which is designated as the battle commander position, to the opposite dais where there new position is shown in dotted lines. On the lowest right-hand dais, a position will be established by the Air Sea Rescue Officer as shown in the inclosure. With the addition of personnel as shown, plus the battle commander who will be the squadron commanding officer or his authorized representative until relieved by division headquarters personnel, there will be no additional personnel requirements since it is anticipated that plotting room personnel will be trained in the functions of implementing the CONELRAD, SCATANA, CARW, and MARW alert. These latter functions will be monitored by the Air Surveillance Officer located on the dias immediately below the battle commander.

5. RESPONSIBILITIES:

a. It will be the responsibility of the 646th AC&W Squadron Commanding Officer to assume control of the sector when contact to all AC&W Squadrons with the Control Center at Roslyn has been broken and cannot be immediately re-established. The Squadron Commander will, at that time, effect the following:

(1) Energize engineered circuits.

(2) Direct modified use of existing lines.

(3) Organize the Control Center with the required additional personnel.

(4) Retain sector control until relieved by the Division Commander or his authorized representative.

b. It will be the responsibility of the other squadrons in the Division to adjust circuitry arrangements, reporting and traffic in the most expeditious manner, in order that control at the alternate ADCC may be effected with the least possible delay.

Secret

0298

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

c. The Commanding Officers of the 647th, 648th, 770th, 771st and 772nd AC&W Squadrons will, at the direction of the alternate Control Center, effect the reporting procedures as given in paragraph 3b.

BY COMMAND OF BRIGADIER GENERAL MINTY:

OFFICIAL:

E. H. GAILLOT
Major, USAF
Adjutant General

E. H. GAILLOT
Major, USAF
Adjutant General

2 Incls:
1. Circuitry for Alternate ADCC
2. Alternate ADCC Arrangements

DISTRIBUTION:
"I" & "D" Plus
EADF - 5 cys
ATTN: Dir, O&T

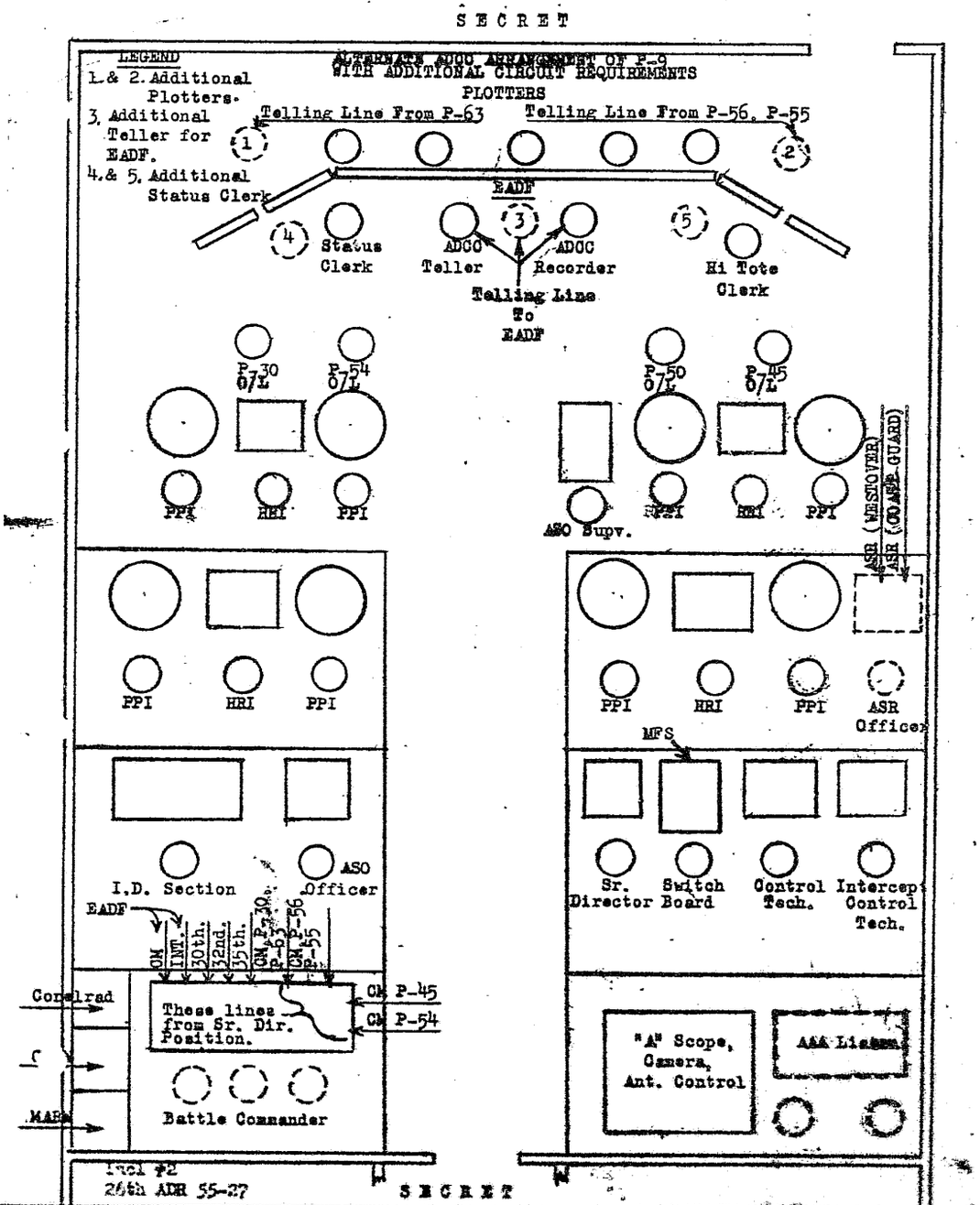
Secret

0299

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET



0300

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

LAA/amm

26ADOCE 413.44

14 Oct 1952

SUBJECT: Passive Detection

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Reference.

a. Letter your headquarters, subject "Passive Detection", dated 2 October 1952, file EADCE-E 413.44.

2. 1st Lt. Barnett R. Agins, Division ECM Officer, was appointed to supervise and monitor the Passive Detection program within this command and has been so functioning since the inception of this program.

3. Attached hereto as Inclosures 1 and 2 are an evaluation detailed to the extent possible under the present degree of system completion, and the tentative procedures to be utilized by the system at such time as it is operational as a multi-station net. It is anticipated that presently existing problems relative to antennas and power will be solved and the net will begin operation on or about 20 October 1952. The tentative procedures attached as Inclosure 2, which include the coordination of D/F cuts and the passing of information into the AC&W system will be tested at that time and altered to the extent necessary.

4. Since with presently authorized equipment it is not possible to search all frequencies with a reasonable probability of intercept, frequency search must be limited to those areas that an educated guess, based on Intelligence, indicates an attacker will be using. Under these circumstances, passive detection is of considerable value to the Air Defense system. If the guess is correct, an attacker is forced to forego the use of his navigational radar or be subject to early warning. If this guess is incorrect, intercept and analysis of signals from the first detected hostile or B-29 type aircraft without flight plan will provide information for future operations with the resultant benefits.

5. In order to operate a complete and successful passive detection station on a 24 hour basis, the following equipment is recommended:

a. 3 each receivers AN/APR 9.

b. 3 each Pulse analyzers, preferably AN/UPA-1.

c. 3 each BP assembly AN/APA 17B with antenna.

d. 3 each antenna with beam width of from 45 to 60°.

0301

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

6. Personnel requirements consist of 15 operator plotters, five qualified ECM mechanics, one NCOIC and one ECM officer.

7. Physical facilities should consist of a small building capable of housing this equipment and providing necessary heat and ventilation. In this respect, it is believed that successful development of blanking circuits to avoid interference from the primary radars may make it possible to install the passive detection equipement in the operations building.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

2 Incls:
1. Evaluation of Present AD/S in 26th AD (D)
2. SOP - ED

0302

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

EVALUATION OF PRESENT [illegible] WAR DIVISION

1. Due to the lack of [illegible] power supply for the L/F [illegible] AN/APA-17 at Palermo and Montauk, the only [illegible] detection station in this division that has been operational is the station at Navesink, N. J.

2. Since April 19[illegible], the station at Navesink has been operating on a [illegible] hour basis. An examination of the logs indicates that a number of signals have been intercepted which, by their characteristics and rate of azimuth and/or signal strength change, appear to be airborne. In most cases, it has not been possible to correlate the bearing obtained with a track carried by the radar. In some instances, the radar carried no track at that azimuth which may indicate that the aircraft [illegible] outside of radar coverage; in other instances there was traffic which could not be identified as carrying radar.

3. It appears from the logs that most of the surface vessels approaching or leaving New York Harbor carry radar which [illegible] electronic characteristics [illegible] airborne navigational radar. This causes some difficulty in locating airborne signals as is indicated by logs.

4. It is believed that single station operation has some value in conjunction with an [illegible] as a possible aid in identification and in location of jamming and/or interference to the primary radar. It is the opinion of this headquarters that no evaluation of passive detection [illegible] system can be made on the basis of single station operation.

5. The equipment in use at Navesink is considered as minimum satisfactory with the following exceptions:

a. Antenna (AS-54/AP-19) has too narrow a beam to provide good probability of interception.

b. Pulse analyzer AN/APA-11A is too slow for the rapid determination of pulse width and PRF.

c. Lack of test equipment.

6. The unit at Montauk has designed and constructed a simple antenna, basically of the cylindrical [illegible] type which is soon to be tested. A similar antenna is being installed by the unit at Palermo. This antenna appears to have a wider [illegible] than the [illegible] antenna and may provide a means of increasing the probability of [illegible].

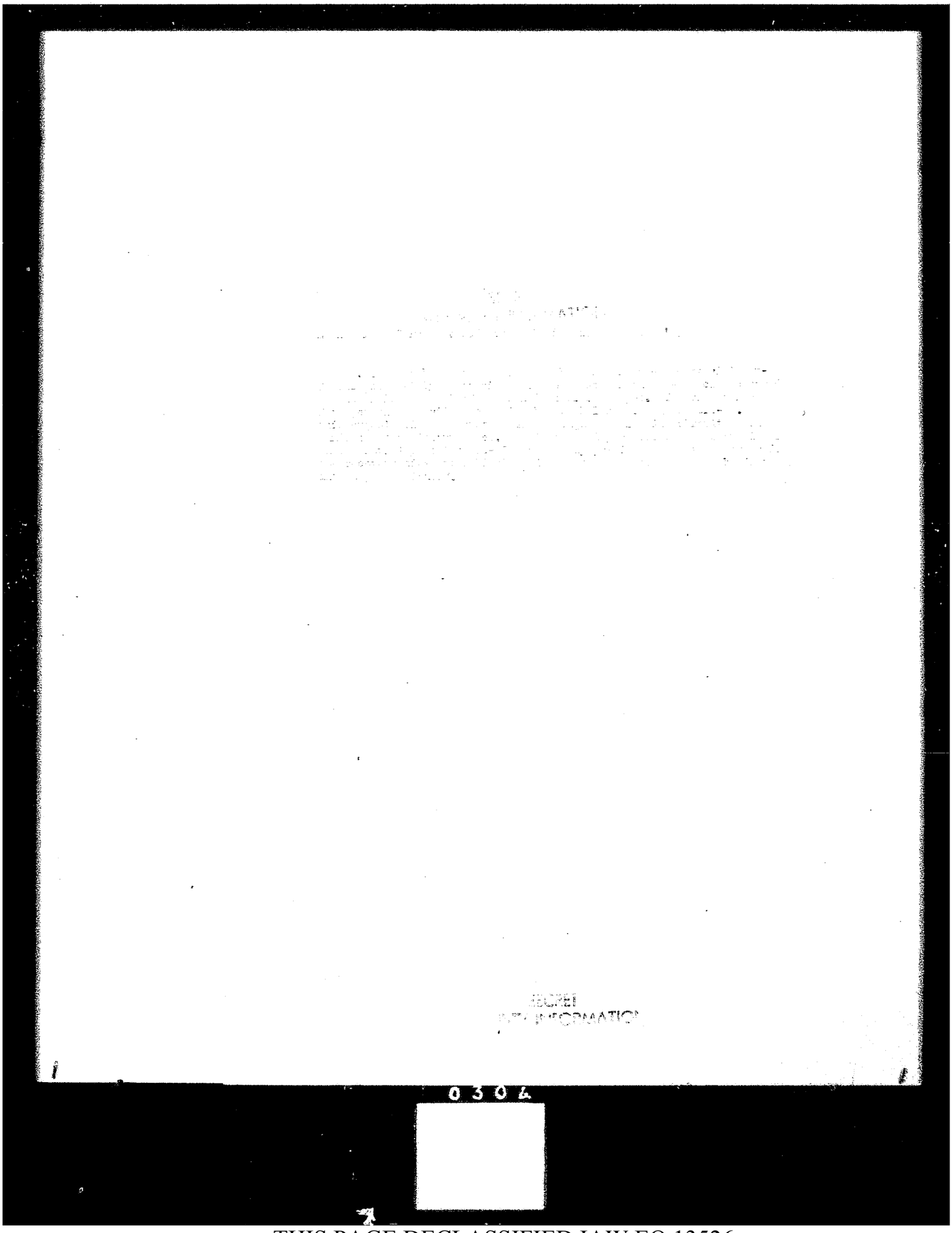
7. A [illegible] of the range capabilities of [illegible] [illegible] utilizing a [illegible] aircraft carrying [illegible] radar. [illegible] of this test indicated that [illegible] the aircraft [illegible].

SECRET
SECURITY INFORMATION

0303

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526



SECRET
INFORMATION

0304

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

I. [illegible]

1. [illegible] Division [illegible] covering [illegible] terms, [illegible] identification, and locating [illegible] and interference [illegible]. The system consists of three (3) stations in the following locations:

a. T-9 (System Control Station)

b. T-45

c. T-34

2. The System Control Station will [illegible] of track numbers, [illegible] the [illegible] system. It is responsible for [illegible], accomplishing this by providing [illegible].

II. [illegible]

1. Detection

a. All stations will [illegible] conduct surveillance by searching in frequency over [illegible] signal range [illegible] the [illegible].

b. Upon detection [illegible] signal search will cease. The signal will be tuned in and frequency, PRF, pulse width, and a bearing from the station to the signal will be obtained. Immediately thereafter a flash report will be sent to all stations in the set in the following sequence:

(1) Frequency (megacycles)

(2) PRF (cycles per second)

(3) Pulse width (microseconds)

(4) Bearing signal (degrees from detecting station)

(5) Time of the bearing

c. Upon receipt of the flash report, the System Control Station will assign a track number [illegible] designated [illegible] to obtain bearing [illegible] signal. The System Control Station will synchronize [illegible] to obtain position of the aircraft [illegible] signal.

0305

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible] -- [illegible] Detection (cont'd)

d. When the first position [illegible], the System Control Station will [illegible] target [illegible] the [illegible] SCI Station.

(1) Upon receipt [illegible] from the [illegible] System the SCI Station will [illegible] target [illegible] as one detected [illegible]. The SCI Station will be responsible for [illegible] correlation, [illegible] or other [illegible], as prescribed by existing regulations and procedures.

(2) When the SCI Station is [illegible], the controller will [illegible] the [illegible] which will [illegible] upon [illegible] to [illegible].

[illegible]. Locating [illegible] Interference [illegible]:

[illegible] Station [illegible] interference [illegible] equipment may [illegible] the [illegible] System locate the source. The request will be made to the System Control Station, [illegible] will contain the nomenclature of [illegible], [illegible] of interference (noise, [illegible], etc.). The System Control Station will designate at least two stations to [illegible] the interference, using detecting procedures. If the source appears to be stationary, the initial report will be made as in detection, except that the [illegible] station will be advised that the source is stationary. If the source is mobile, it will be treated as in detection.

0306

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
Roslyn, New York

DSS/rvs

ADADO 373.4

10 October 1952

SUBJECT: Rescue Coordination Center (RCC)

TO: See Distribution

1. A Rescue Coordination Center (RCC) has been established within the Air Defense Control Center (ADCC) by Air Rescue Service for the purpose of coordinating all rescue activity within the 26th Air Division (Defense) Command.

2. The RCC will, at all times, maintain a rescue controller on duty to receive all information relative to emergencies and any other information regarding rescue activity. The rescue controller will have the capability of scrambling and controlling USAF rescue aircraft to perform rescue missions.

3. Coordination has been established between Air Rescue Service and United States Coast Guard which will enable USCG as well as USAF rescue aircraft to be scrambled and vectored by the ADCC during periods of emergency. Coordination has also been established between US Coast Guard Rescue Coordination Centers whereby they will immediately alert and scramble Navy rescue aircraft in the event of a Search and Rescue emergency.

4. In the event of an aircraft in distress requiring intercept and/or escort, the RCC Controller located at the ADCC will scramble appropriate rescue aircraft to the scene of the emergency. The rescue aircraft will, as soon as possible, establish VHF contact with the ADDC for vector to the aircraft in distress. In the event of abandonment, crash landing or ditching of aircraft, the rescue aircraft will be vectored to the last known position and will be furnished with all information relative to speed, altitude, heading, etc., at the time of last known position.

5. The control of rescue aircraft will be vested within the ADDC for directional purposes until such time as it is determined that those facilities are no longer required for the efficient termination of the mission, whereupon the rescue aircraft will revert to accepted rescue procedures.

6. All Air Rescue Service Aircraft will be identified for plotting purposes as AR followed by the last three numbers of the aircraft. USCG rescue aircraft will be identified as CG followed by the last three numbers of the aircraft. Navy Rescue aircraft will be identified as NA followed by the last three numbers of the aircraft.

7. The following aircraft are assigned to perform rescue missions within the area of the 26th Air Division (Defense), and coordination has been established which will allow control by the ADCC and vectoring by ADDC as

RESTRICTED

0307

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ADDO 373.4 Subj: Rescue Coordination Center (RCC)

a. Flight "A", 5th Air Rescue Squadron, Westover AFB, Mass:

4 - SA-16
1 - H-5
1 - C-82

b. USCG station, Brooklyn, N Y:

2 - PBM	2 - JRF (Grumman Goose)	1 - HO3S
2 - UF-1	1 - HO4S (H-19)	
3 - PBY	4 - HTL (Available)	

c. USCG station, Elizabeth City, N C:

3 - PBM	1 - R5D	1 - HO5S
4 - PB-1G	1 - JRB	
4 - JRF	2 - HO4S	

d. USCG station, Salem, Mass:

1 - PBM	2 - JRF	1 - HO5S
3 - UF-1	1 - HO3S	

8. The following US Navy aircraft are assigned a primary mission of rescue. These aircraft are equipped with the necessary communications equipment to permit control by ADCC's.

a. NAS, Atlantic City: 1 PBY and 1 TBM.

b. NAS, Norfolk, Va: 1 PBM and 1 HO3S.

c. NAS, Chincoteague, Md: 1 PBM, 1 PBY, and 1 HO3S.

d. NAS, Quonset Point, RI: 1 UF and 2 AFs.

e. NAS, Quantico, Md: 1 HRS

f. NAS, Lakehurst, N J: 12 Blimps, 2 JRBs, 2 FMBs, 2 FF6s, 1 R4D, and 1 HO3S.

g. NAS, Patuxent River, Md: 1 PBY, HO3S available.

9. The primary aircraft utilized for rescue duty within the area of the 26th Air Division (Defense) are as follows:

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

a. SA-16 (USN, USCG UF-1)

A twin engine amphibious type aircraft utilized for overwater flights capable of open sea landings in moderate sea conditions.
Normal cruising speed 140 knots.
Maximum cruising speed 190 knots.
Normal fuel hours 6.
Maximum fuel hours 16.

b. PBM

A twin engine patrol seaplane utilized for extended overwater flights capable of open sea landings.
Normal cruising speed 119 knots.
Normal hours fuel 18.8.
Maximum hours fuel 23.4.

c. PBY (Catalina)

A twin engine amphibious aircraft utilized for extended overwater flights capable of open sea landings.
Normal cruising speed 105 knots.
Normal hours fuel 21
Maximum hours fuel

d. PB-1G (USAF B-17)

A four engine patrol bomber converted to rescue use by the addition of a droppable A-1 life boat.
Normal cruising speed 135 knots.
Normal hours fuel 17.6.
Maximum hours fuel (One Bombay) 21.8.

e. R5D (USAF C-54)

A four entine transport aircraft converted to rescue use, equipped with droppable life rafts and other survival equipment.
Normal cruising speed 135 knots.
Normal hours fuel 22.5.
Maximum hours fuel 28.5.

f. JRF (Grumman Goose)

A twin engine utility amphibious aircraft utilized for inshore (protected water) landings.
Normal cruising speed 115 knots.
Normal hours fuel 3.2.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

g. H-5 (USN USCG HO3S)

A general utility 4-place helicopter utilized for transporting personnel to and from areas where fixed wing landing facilities are unavailable.
Normal cruising speed 65 knots.
Normal hours fuel 4.

h. H-19 (USN, USCG HO4S)

A general utility helicopter capable of over 2000 pounds payload and able to operate above 10,000 feet.
Normal cruising speed 75 knots.
Normal hours fuel 4.

10. Aircraft communication and electronic equipment is as follows:

a. All fixed wing aircraft operated by Air Rescue Service and USCG as primary rescue aircraft, with the exception of the JRF, are equipped with the following communication and electronic equipment:

AN/ARA 8A, VHF Homer
AN/APN 9, Loran
AN/APN 12, IFF Interogator
AN/APS-31 or AN/APS-15, Search Radar
VHF, HF, and LF, and Liaison Communication Equipment
ADF-[illegible]G, Radio Compass

b. Naval aircraft operated as primary rescue aircraft are similarly equipped with the possible exception of search radar equipment.

c. Helicopter aircraft are equipped with VHF, HF, and LF Communication Equipment.

11. Until such time as rescue aircraft may be equipped with 133.2 (GCI common) all rescue aircraft will utilize 121.5 (emergency) as a common frequency with ADDC's of this command. The emergency frequency will only be utilized during actual rescue missions.

12. In addition to the above airborne rescue facilities, the USCG operates an extensive network of lifeboat stations within the costal area of the 26th Air Division (Defense). These lifeboat stations are connected into a common telephone communication net which will allow for immediate alerting and dispatching in time of emergency.

13. The intent of this letter is to supplement existing rescue procedures, rather than to replace them. It is requested that information regarding local rescue arrangements be forwarded to this headquarters for dissemination to all units.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

ADADO 373.4 Subj: Rescue Coordination Center (RCC)

14. The Senior Controller of the RCC, Major A. C. Reinhart Jr., will visit the ADDC's and Fighter Units of this command in the near future to discuss matters pertaining to Air Rescue Service. Suggestions as to how the efficiency of Rescue Coordination Centers can be improved are encouraged and requested from ADDC's and Fighter Units.

15. This letter supersedes letter, Subj: "Rescue Coordination Center (RCC)", 26th Air Division (Defense), undated, file number ADADO 373.4.

BY COMMAND OF BRIGADIER GENERAL KINTY:

E. H. GAILLOT
Major, USAF
Adjutant General

DISTRIBUTION
"C"

RESTRICTED

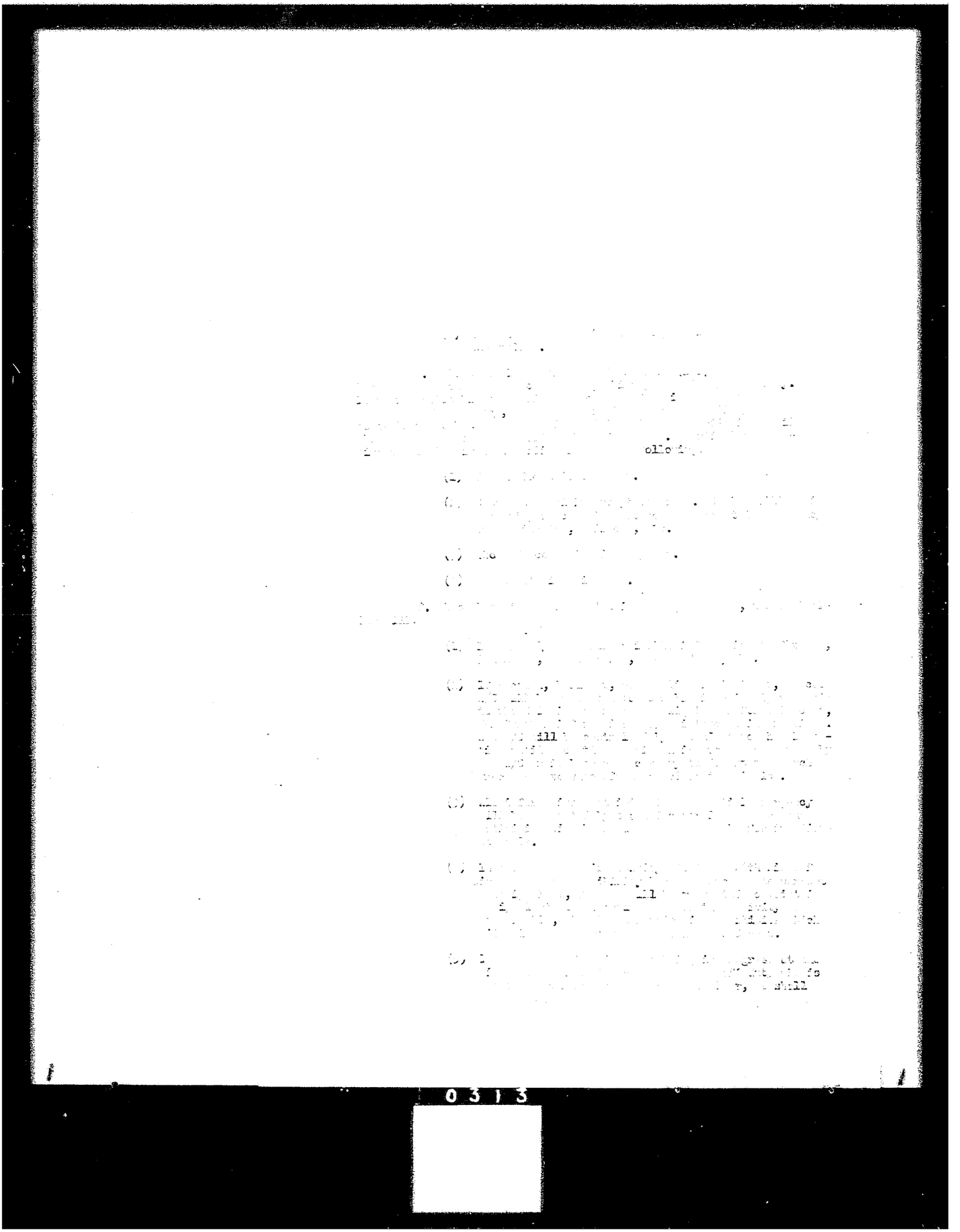
0311

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526



THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION
ROSLYN RESCUE COORDINATION CENTER
5th Air Rescue Squadron, ARS-ATS
Roslyn (Long Island) New York

11 July 1952

RCC 26 AD SOP
NUMBER 55-2

OPERATIONS

Rescue Controllers Procedures

1. Purpose: To outline a Standing Operation Procedure to act as a general guide for the rescue controller. This SOP will be revised as experience dictates.

2. Scope: The provisions of this SOP are directive in nature and apply to all members of the RCC 26th Air Division (Defense).

3. Responsibility: It is the responsibility of all members of the RCC to become familiar with the instructions contained herein.

4. Definitions: The definitions used in this SOP are the same as those defined in ARS Reg 20-1.

5. Procedures:

a. The RCC controller will normally report for work ten (10) minutes prior to time his shift officially starts.

b. He will become familiar with the activities of previous shifts.

c. He will obtain briefing from controller being relieved and become thoroughly familiar with active missions.

d. He will become familiar with the general weather situation by checking the latest weather map and other data in the weather office.

e. Check the log maintained by the control technician to verify results of line checks.

f. Obtain aircraft status report from Flight "A", 5th AR Sq, and ascertain the alert aircraft number and alert pilot's name and log same.

g. Become familiar with the CCI station status.

h. Become familair with the general fighter status.

ARTHUR G. REINHART JR.
Major, USAF
Senior Controller

SECRET
SECURITY INFORMATION

0315

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

CLASSIFIED SECRET
BY AUTH CG 26TH AD
DATE 31 Oct 52 INIT. [illegible]

DIVISION REGULATION)

NUMBER 55-35)

HEADQUARTERS 26TH AIR DIVISION (DEF)
ROSLYN, NEW YORK
30 OCTOBER 1952

OPERATIONS

Air Defense Warnings

(This Regulation supersedes Division Regulation 55-35, 18 February 1952, and amendments thereto.)

INDEX

Section	Subject	Paragraph
I	General	1 - 3
II	Definitions	4 - 11
III	Responsibilities	12 - 14
Annex A - Appendix I-V	Alert Check Lists	

SECTION I

General

1. It is not considered practicable or feasible to list all possible actions to be taken upon declaration of a military emergency. In addition to the actions outlined herein, further actions should be taken consistent with current policies, directives, and operating instructions, in order that the mission of the 26th Air Division will be accomplished as effectively as possible.

2. PURPOSE: To define and establish the actions required when tests and actual warnings are issued by this or higher headquarters in accordance with ADCR 55-39, 55-40, 55-41.

3. SCOPE: This directive is applicable to the following units:

a. Control Center (ADCC).

b. Direction Centers (ADDC), or Ground Controlled Intercept Stations (GCI).

c. Fighter units (Air Force)

d. Antiaircraft and Naval, [illegible] Air National Guard units under operational control of 26th Air Division [illegible] of emergency.

e. Ground Observer Corps Filter Centers.

3493 Secret

0316

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

SECTION I:

Definitions

4. AIR DEFENSE PREPAREDNESS TEST: This test is to determine the time required to bring the system to a manning and equipment status that would permit maximum sustained operations. Insofar as practicable, this test will simulate an actual alert. However, Navy, CARW, MARW, CAA and FOC (CONELRAD) alerting will not be effected on a test basis unless specifically so prescribed. GOC alerting will be limited to the filter centers.

5. AIR DEFENSE READINESS WARNING: This is a degree of readiness whereby the defense system and associated organizations under its operational control are placed in a state of maximum, immediate operational preparedness. It is intended that this condition will provide maximum [illegible] potential for relatively short periods of time. It will be declared by air divisions or higher headquarters when the movement of unknown aircraft, or an evaluation of current intelligence so warrants. It will normally dictate the restriction of leaves and passes, the cancellation of all training and the concentration of effort on security and preparation for an actual attack. This warning will not be disseminated to civilian agencies.

6. "WARNING YELLOW": Attack by hostile aircraft is probable. (This is interpreted to mean that hostile aircraft are en route toward the air defense sector, or unknown aircraft, suspected to be hostile, are within the air defense sector.) An estimate of the situation will be given to agency receiving the warning.

7. "WARNING RED": Attack by hostile aircraft is imminent. (This is interpreted to mean that hostile aircraft or unknown aircraft, manifestly hostile in intent, are within or in the immediate vicinity of the air defense sector with a high probability of entering subject sector.) An estimate of the situation will be given the agency receiving the warning.

8. "WARNING WHITE": Attack by hostile aircraft is improbable. (All Clear) (This is interpreted to mean that no hostile aircraft or unknown aircraft, suspected to be hostile, are known to be within or en route toward the air defense sector.) Warning White normally will be used to release all agencies from a Warning Red or Warning Yellow condition. Prior to initial attack, when a military emergency is declared, air defense Warning White will be effective automatically throughout Air Defense Command, unless a higher degree of warning is indicated, and will automatically initiate an Air Defense Readiness Warning condition. After the initial attack is over, Warning White will not again require the calling of an Air Defense Readiness Warning since it will be used only to indicate All Clear.

9. MILITARY EMERGENCY: For air defense purposes, a military emergency may be defined to be any state of events which indicates to the Commanding General, [illegible], or higher authority, that [illegible] is either in progress, imminent, or [illegible], probable as to require [illegible] plans and [illegible] developed for the air defense [illegible] emergency may be constituted by one [illegible]

Secret

0317

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

a. An enemy attack on the United States. [illegible] hostile acts as defined in ADCR 55-10.

b. A declaration by the Commanding General, ADC, when intelligence indicates that a hostile air attack on the United States is imminent.

c. A directive issued by the Joint Chiefs of Staff.

d. Presidential proclamation and/or Congressional declaration that a state of war exists.

A declaration of a military emergency will be made only one time, and from then on the emergency will continue to exist until such time as the cause of the declaration is removed, or by notification by higher headquarters that enemy action is no longer contemplated.

10. SCATANA: This is a plan implemented through CAA. The objectives are:

a. To provide control of air traffic, thus minimizing interference with the air defense system during a condition of Warning Red, Warning Yellow or Warning White, after a military emergency has been declared or an attack has occurred.

b. To deny the use of radio navigational aids to enemy aircraft.

c. Consistent with air defense requirements, to permit maximum utilization of aircraft and airspace by military and civil agencies engaged in essential operations during a military emergency.

11. CONELRAD: A plan to maintain radio broadcast stations under specialized electronic control which will nullify navigational aid to enemy forces and, at the same time, provide an emergency communication net for Civil Defense.

SECTION III:

Responsibilities

12. The declaration of a Warning Red or Warning Yellow is the responsibility of the Air Division (Defense) Commander or higher headquarters. Critical air defense situations may arise when the Division Commander cannot be contacted, which will require positive action by the Senior Officer present for duty at the ADCC. When this includes ordering a fighter aircraft to attack a hostile aircraft or the declaration of the above-mentioned warnings, these decisions will normally be cleared, prior to issuance, with EADF. All personnel in the operational chain of command and all fighter pilots should thoroughly understand the provisions of EADF SOP 80-2 and ADC [illegible], relative to engagement procedures.

SECRET

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

Div Reg 55-35, 30 October 1952 (Cont'd)

13. Appendices I through V of Annex A establish the required alerting action for the following officers:

a. COC Duty Officer, ADCC.

b. Duty Controller, ADCC.

c. Duty Director, ADDCs and GCIs.

d. Duty Officer of Fighter Units.

e. Duty Officer of Filter Centers.

14. All air defense units under the operational control of this headquarters will post the appropriate check list for guidance during any of the foregoing warnings.

BY COMMAND OF BRIGADIER GENERAL MINTY:

E. H. GAILLOT
Major, USAF
Adjutant General

OFFICIAL:

E. H. GAILLOT
Major, USAF
Adjutant General

ANNEX: "A"
Alert Check Lists

APPENDICES:
I - COC Duty Officer
II - Duty Controller (ADCC)
III - Duty Director (ADDC & GCI)
IV - Duty Officer of Fighter Units
V - Duty Officer of Filter Centers

DISTRIBUTION:
"G" Plus
137th Ftr Sq, West Chester Co Aprt, N.Y. - 2 cys
119th Ftr Sq, Newark, N.J. - 2 cys
104th Ftr Sq, Baltimore, Md. - 2 cys
152nd Ftr Sq, Hillsgrove, R.I. - 2 cys

Secret

0319

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

secret

ANNEX A

to

26th Air Division (Def) Regulation 55-35

ALERT CHECK LISTS

1. The purpose of this Annex is to provide each level of command with a check list to be utilized under the following conditions:

a. Air Defense Preparedness Test.

b. Actual Warnings to include:

(1) Air Defense Readiness Warning

(2) Warning Yellow

(3) Warning Red

(4) Warning White

2. The following positions are covered:

a. COC Duty Officer - Appendix I

b. Duty Controller, ADCC - Appendix II

c. Duty Director, AADCs and GCIs - Appendix III

d. Fighter Unit Duty Officer - Appendix IV

e. Filter Center Duty Officer - Appendix V

secret

0320

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

APPENDIX I TO ANNEX A

Alert Check Lists — ADOC Duty Officer

1. In addition to the criteria for specified Warnings, there will be certain special conditions which will create the necessity for calling one of the Warnings as defined in the Regulation. These are:

a. Prior to the initial attack, if a military emergency is announced, a Warning White is automatic unless a higher degree of Warning is indicated, and an Air Defense Readiness Warning will be automatically instituted throughout the entire Air Defense Command. The check list for Air Defense Readiness will be used, except that ARTCCs will be notified to implement Security Control of Air Traffic under Warning White conditions.

b. During or prior to the initial attack, if any Division in ADC goes on a Warning Red or Warning Yellow status, other divisions will initiate a condition of not less than a Warning Yellow. Release from Yellow or Red to Warning White can be effected only by the Commanding General, ADC, who will determine when the initial attack phase is completed.

c. After the initial attack phase has been declared over by the Commanding General, ADC, air division commanders will initiate the appropriate air defense Warning at their own discretion, depending upon the air defense situation within or in the immediate vicinity of their respective sectors of air defense, except when directed to initiate specific Warnings from higher headquarters.

2. Check List for AIR DEFENSE READINESS WARNING, WARNING RED, WARNING YELLOW and AIR DEFENSE PREPAREDNESS TEST.

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
a. Notify Senior Controller (ADCC) of type of alert.	Yes	Yes	Yes	Yes
b. Notify Switchboard of type of alert.	Yes	Yes	Yes	Yes
c. Notify adjacent Divisions (30th, 32nd, 35th) when initial warning is initiated in Division. EADF also must be notified.	No	Yes	Yes	Yes

Secret

0321

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

APPENDIX I TO ANNEX A, Alert Check [illegible] Duty Officer (Cont'd)

	[illegible]	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
d. PRIOR TO THE [illegible] ATTACK, IF NO MILITARY EMERGENCY EXISTS, notify the Air Traffic Control Centers of the following: (1) "Military [illegible] has not been declared. However, the area 26th (Alfa, Bravo or Alfa & [illegible] WARNING [illegible] do not implement SCARAFA until further orders." (2) [illegible]	No	No	No	Yes
[illegible]	No	No	Yes	No
e. WHEN [illegible] EXISTS, AND AT ALL TIMES [illegible] INITIAL ATTACK, notify Air Traffic Control Center of the following: (1) WARNING RED AREA 26th Alfa, Bravo or Alfa & Bravo.	No	No	No	Yes
(2) WARNING YELLOW AREA 26th Alfa, Bravo or Alfa & Bravo.	No	No	Yes	No
f. [illegible] EMERGENCY EXISTS, [illegible]		No	[illegible]	Yes
g. [illegible]				Yes
[illegible]			Yes	Yes
h. [illegible] EADF, instruct the Control Center to order the Direction Centers where appropriate, to federalize ANG Fighter Units	No	If dir	If dir	If dir

Secret

0322

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

APPENDIX I TO ANNEX A, Alert Check List --- OOC Duty Officer (Cont'd)

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
j. Put Roslyn Base Security Defense Plan into effect, cancel training, leaves, & passes (Call Base CO, Ext. 100, or Adj, Ext 101 during normal duty hours. At all other times notify Off of the Day.)	Yes, (except for training, leaves & passes)	Yes, (Check cancellation of leaves with CG.)	Yes	Yes

3. The above check list will be utilized in issuing a Warning White or on relief from other alert or test status to insure that all units placed on alert have been relieved.

4. If an AIR DEFENSE READINESS WARNING does not advance to a WARNING YELLOW or WARNING RED, the ending of the alert will be effected by issuing the following message: "Air Defense Readiness Warning is cancelled."

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

APPENDIX 1 TO ANNEX A

Alert Check List - Duty Controller (ADC):

1. Check List for AIR DEFENSE READINESS WARNING, WARNING YELLOW, WARNING RED and AIR DEFENSE PREPAREDNESS TEST:

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
a. Pass alert warning as given by COC Duty Officer, in following priority: (1) To radar stations with scramble lines to fighter units. (2) To radar stations with AAA lines. (3) To remaining radar stations.	Yes	Yes	Yes	Yes
b. Issue CARW and MARW alert.	No	No	Yes	Yes
c. Only if directed by COC Duty Officer, instruct Direction Centers, where appropriate, to federalize ANG Fighter units.	No	If dir	If dir	If dir
d. Report to EADF, the time the following units become operational and their status: (1) Control Center (2) Direction Centers (3) AAA Units (4) GOC Filter Centers (5) Naval & Marine Radar Stations, where applicable.	Yes No	Yes Yes	Yes Yes	Yes Yes
e. Relay fighter preparedness status to EADF as outlined in ADC Reg 55-20, 18 Feb 1952.	Yes	Yes	Yes	Yes
f. Maintain a time record of all incoming and outgoing alert messages.	Yes	Yes	Yes	Yes

2. The above check list will be utilized in issuing a Warning White, or on relief from other alert or test status, to ensure that all units placed on alert have been relieved.

Secret

0324

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

secret

APPENDIX 17 TO ANNEX A

Alert Check List — Duty Director (ADDE & D.I.)

1. Check List for AIR DEFENSE READINESS WARNING, WARNING YELLOW, WARNING RED and AIR DEFENSE PREPAREDNESS TEST

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
a. Pass alert warning as given by Control Center in the following priority:				
(1) To all fighter units under your operational control, to include Naval & Marine organizations, and prescribe state of preparedness. (Note: Under an "AIR DEF READINESS WARNING" all fighters will be brought to "Readiness"; relief from this status will be given by ADCC.)	Yes, (Except Navy & Marine which will not be alerted.)	Yes, (Except Navy & Marine which will not be alerted.)	Yes	Yes
(2) To AAA Units.	Yes	Yes	Yes	Yes
(3) To all GOC Filter Centers	Yes	Yes	Yes	Yes
b. Only if directed by Control Centers, federalize ANG Fighter units, and energize Toll Military Lines for scramble purposes.	No	If dir	If dir	If dir
c. Cancel all training, leaves and passes. Place squadron on an emergency operational basis.	Yes. (Except for tng, leaves & passes)	Yes, (Check cancellation of leaves with CG)	Yes	Yes
d. Implement local base security defense plan.	Yes	Yes	Yes	Yes
e. Report to the Control Center the times that the following units become operational and their status:				
(1) Direction Center				
(2) AAA Units (where applicable)				
(3) GOC Filter Centers	Yes	[illegible]	[illegible]	[illegible]
(4) Naval & Marine Radar Units (where applicable)	No			

secret

0325

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

APPENDIX III TO ANNEX A — Duty Director (ADDC & GCI) (Cont'd)

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
f. Relay fighter preparedness status to Control Center in accordance with ADC Reg 55-20, 18 Feb 52, and all subsequent changes as soon as they occur. (This will include Federalized ANG, Navy and Marine fighter units when applicable.)	Yes	Yes	Yes	Yes

2. The above check list will be utilized in issuing a Warning White, or on relief from other alert or test status, to insure that all units placed on alert have been relieved.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

APPENDIX IV TO ANNEX A

Alert Check List — Duty Officer of Fighter Units

1. Check List for AIR DEFENSE READINESS WARNING, WARNING YELLOW, WARNING RED and AIR DEFENSE PREPAREDNESS TEST:

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
a. Place aircraft and crews in state of preparedness directed by Direction Center.	Yes	Yes	Yes	Yes
b. Cancel all local training missions, leaves and passes. Return all aircraft other than those on active air defense missions to their normal base.	Yes, (except for leaves, passes)	Yes, (check leaves with CG	Yes	Yes
c. Implement procedures for rapid servicing and re-arming of A/C.	Yes	Yes	Yes	Yes
d. Report aircraft state of preparedness to Direction Center in accordance with ADC Reg 55-20, 18 Feb 52.	Yes	Yes	Yes	Yes
e. Implement local base security defense plan.	Yes	Yes	Yes	Yes

2. The above check list will be utilized in issuing a Warning White, or on relief from other alert or test status, to insure that all personnel placed on alert have been relieved.

Secret

0327

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Secret

APPENDIX V TO ANNEX A

Alert Check List — Filter Center Duty Officer

1. Check List for AIR DEFENSE READINESS WARNING, WARNING YELLOW, WARNING RED and AIR DEFENSE PREPAREDNESS TEST.

	AIR DEF PREPAREDNESS TEST	AIR DEF READINESS WARNING	WARNING YELLOW	WARNING RED
a. Alert all [illegible] military personnel.	Yes	Yes*	Yes	Yes
b. Alert administrative supervisor.	No	Yes*	Yes	Yes
c. Place filter center on a status capability of maximum sustained operation.	No	No	Yes	Yes
d. Request observation posts to man for maximum sustained operation	No	No	Yes	Yes
e. Report to the Direction Center, the time that filter center becomes operational.	Yes	Yes	Yes	Yes
f. Implement local security plan.	Yes	Yes	Yes	Yes

2. The above check list will be utilized in issuing a Warning White, or on relief from other alert or test status, to insure that all personnel placed on alert have been relieved.

3. When during Air Defense Exercises, the terms, "simulated Warning Yellow" or "simulated Warning Red" are used, no action involving notification of observation posts will be taken.

*NOTE: The detachment commander and administrative supervisor should prepare plans for alerting filter center personnel, observation posts, in the event this Warning advances to Red or Yellow.

Secret

0328

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
F
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
Roslyn, New York

MSB/amm

26ADCOE 676

10 OCT 1952

SUBJECT: Test of Medium Frequency Tactical Control Facilities

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
ATTN: C&T
Newburgh, New York

1. References:

a. Message your headquarters EADCT-A 01798 dated 27 September 1952.

b. Letter this headquarters, Subject: "Test of Medium Frequency Tactical Control Facilities" dated 16 October 1952, file 26ADCOE 676.

2. A test of medium frequency tactical control was made on 21 October 1952 by the 647th AC&W Squadron in conjunction with the 148th Fighter Interceptor Squadron as directed by reference 1 a.

3. The results of the test were unsatisfactory in that Radio Station WLAC, Nashville, Tennessee, interferred seriously on the frequency authorized for use by the 647th AC&W Squadron.

4. An aircraft of the 148th Fighter Interceptor Squadron used in the conduct of the test initially received the medium frequency signal when approximately 20 miles northeast of the station, as it approached the station. It was then directed over the station and directed north at 20,000 feet. The medium frequency signal was received loud and clear at a distance from the station of 30 miles. The signal grew weaker until at 65 miles from the station it was no longer readable. The pilot was then requested to descend to 10,000 feet and head back towards the station. 60 miles from the station, at 15,000 feet, the signal was readable but weak. At 10,000 feet, the pilot was unable to receive the transmissions until he had approached a position approximately 35 miles from the station. He was then vectored toward Dover, Delaware, and the transmissions continued until the aircraft was 85 miles from the station. At 40 miles, the signal began to fade and at 45 miles, radio station WLAC interferred with the signal to the extent that reception was very weak and distorted. The pilot stated that he could still discern an unreadable signal at a distance of 80 miles and that it was his belief that the signal would have been readable had it not been for the interference from the commercial broadcast station.

0329

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

5. This test again points out the absolute necessity of providing a clear channel for the proper evaluation of the use of medium frequencies for tactical control. Of the four tests conducted by this organization, only one has been considered to be a satisfactory evaluation of the facility. This test was reported to your headquarters by reference 1 b, and its success is believed to be attributed entirely to the availability of an interference-free channel.

FOR THE COMMANDING GENERAL:

/s/t/ E. H. GAILLOT
Major, USAF
Adjutant General

SECRET

0330

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY [illegible]

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

MSB/amm

26ADOCE 676

16 October 1952

SUBJECT: Test of Medium Frequency Tactical Control Facilities

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. References.

a. Letter your headquarters, subject; "Monthly Communications Technical Instructor's Report," File EADCE-C 319.1, dated 23 September 1952 and 1st Indorsement thereto, this headquarters, dated 29 September 1952.

b. Message your headquarters, EADCE-C C1835, dated 3 October 1952.

c. Letter this headquarters, subject: "Test of Medium Frequency Tactical Control Facilities, file ADC&E 676, dated 17 September 1952.

2. Additional tests of medium frequency tactical control facilities as requested by this headquarters in reference 1 a. and approved by your headquarters in reference 1 b. were conducted on 8 October 1952 by 646th AC&W Sq. These tests resulted in very satisfactory communications.

3. Equipment utilized for the test included a RC-191 transmitter with a 1000 mmf variable capacitor between the antenna post and ground, and a 260 foot antenna oriented North and South approximately 40 feet above the ground. With the coupling switch set at minimum, antenna current of 3 amperes was obtained through the range 1500-1560 kc.

4. The first test made was totally unsuccessful because of the difficulty in finding a clear channel on which to transmit. Immediately prior to landing the pilot reported 1540 kc as being relatively clear.

5. The second test was conducted on 1540 kc and proved to be highly successful. As planned, the aircraft flew a track to a position approximately 142 miles from the station, reporting signal strength at 2 minute intervals. At this distance MF signals from the ground station were reported to be loud and clear. For short periods at 90 and 130 miles some fading was experienced, although contact with the aircraft was not lost at any time during the test. The aircraft flew at an altitude of 25,000 feet.

6. The success of this test as compared to those reported by reference 1 c. is believed to be attributed to the following factor:

a. Instead of operation being restricted to one specific frequency, the station was authorized to use any clear channel within the 1500-1600 kc range.

SECRET

SECURITY [illegible]

0 3 3 1

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

This authorization permitted interference free operation which was not possible during previous tests.

7. As a result of this test, it is believed that effective control of aircraft can be maintained on medium frequencies if interference free channels are available for use.

8. A track overlay made during the test is attached as Inclosure #1.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

1 Incl:
Track Overlay

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

C
O
P
Y

646TH AIRCRAFT CONTROL AND WARNING SQUADRON
26th Air Division (Defense)
Highlands, New Jersey

8 September 1952

SUBJECT: Narrative Report on AEW Missions

TO: Commanding General
26th Air Division (Defense)
ATTN: Director of PCR
Roslyn, New York

1. In the past, approximately fifteen (15) AEW Missions have been conducted in conjunction with this station. The following results are noted.

a. At the beginning of the exercise HF communications were poor due to the use of local net frequencies which were not proper for the conditions that existed. This was resolved by the use of additional frequencies assigned for AEW Missions. Since then HF communications have been very successful.

b. VHF communications have not been satisfactory due to the fact that AEW aircraft are required to fly at an altitude so low as to make reception poor based on range from the station.

c. In many instances a very short time elapsed between the AEW plot and the radar plot of this station. This indicates that the AEW aircraft were operating at a range which precluded any real early warning.

d. At times the AEW plots and this station's radar plots varied quite a bit in range and azimuth. This evidently was due to the AEW aircraft not locating their position accurately. This caused several unnecessary scrambles. In other instances, very good plots have been reported by the AEW aircraft, these plots being within three (3) miles of actual radar plots of this station. Evidently the navigation in these instances was much better.

e. With the AEW aircraft stationed 125 nautical miles from this installation and having a radar range of 70 nautical miles, the same search coverage on tracks above 14,000 feet is obtained. This position increases range on tracks below 14,000 feet by approximately fifty (50) miles.

2. It is felt that if the AEW aircraft can plot their position more accurately, establish their station at a point 150 nautical miles

SECRET
SECURITY INFORMATION

0333

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Narrative Report on AEW Missions (cont'd)

out into the Oceanic corridor, providing HF communications stand up at this range, they will become a valuable asset to the Air Defense System. Early warning plots on low flying aircraft will then be available at ranges of approximately 220 nautical miles from the main target area.

3. It is suggested that on each successive exercise, the AEW aircraft be moved farther and farther out to sea, distance based on communications reception, until a point at least 150 nautical miles from this station is reached.

FOR THE COMMANDING OFFICER:

HERBERT GANDEL
2nd Lt, USAF
Adjutant

0334

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

HJW:rd

26 August 1952

SECRET
SECURITY INFORMATION

From: Commanding Officer, Airborne Early Warning Squadron TWO
To: Chief of Naval Operations
Via: (1) Commander Operational Development Force
(2) Commander Air Force U.S. Atlantic Fleet
(3) Commander Eastern Sea Frontier
(4) Commander in Chief, U.S. Atlantic Fleet

Subj: Proposed Operating Doctrine for use of U.S. Navy Multi-engine AEW/CIC aircraft in joint operations with USAF Air Defense Commands; Submission of

Ref: (a) 26th Air Div (Def) Operations Plan 3-51
(b) AirDevRonFOUR Squadron Doctrine
(b) ComPoDevFor secret ltr ser 0034 dtd 7 Mar 52 Second Indorsement on ComEastSeaFron ltr ser 0011 of 16 Jan 1952
(d) Joint Action Armed Forces

Encl: (1) Subject Proposed Operating Doctrine

1. Reference (a) directs procedures to be used during preliminary exercises conducted jointly by the 26th Air Division (Defense) and this command. Refenence (b) outlines general procedures employed by this command during AEW missions. As set forth by refer nce (c), this squadron's mission includes the investigating and recomm nding of doctrine and proc dures for various missions which may be performed by multi-engined AEW aircraft. Refer nc (d) sets forthe the principles, doctrines, and procedures governing the activitites and performance of the Armed Forces when two or more service or elements thereof are acting together.

2. This proposed doctrine, enclosure (1), is designed to crystalize information gained and proc dure developed during the past year as a result of joint ex rcises by the 26th Air Division (Defense) and Airborne Early Warning Squadron TWO (VW-2), (formerly Air Development Squadron FOUR (VX-4). This experience has proven the advantages of AEW units supplementing continental defense facilities. The AEW aircraft is capable of providing extended range of coverage, detection and reporting of low altitude aircraft , and interception of aircraft. AEW has made possible successful interception of aircraft

SECRET

SECRET
SECURITY INFORMATION

#28

0335

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

not tracked by the ADDC, using target information furnished directly by the AEW aircraft.

3. This proposal is divided in two major sections. First, procedures for use employing equipment presently available, and second, recommendations for improved equipment.

4. The procedures and recommendations set forth in enclosure (1) are concurred in by the 26th Air Division (Defense). Concurrently, the proposed doctrine is being submitted to the Chief of Staff, U.S. Air Force by the Commanding General, 26th Air Division (Defense).

5. Transmission by United States Registered Mail or Registered Guard Mail is authorized in accordance with Article 1513.2 United States Navy Regulations, 1948.

R. A. ROWE

0336

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

SECRET
SECURITY INFORMATION

PROPOSED OPERATIONAL DOCTRINE
FOR USE OF U. S. NAVY TWIN-ENGINE AEW/CIC AIRCRAFT
IN JOINT OPERATIONS WITH USAF AIR DEFENSE COMMANDS

1. Principles

The basic principles of this doctrine are three. First, to supply a fundamental plan for successful integration of Navy multi-engine AEW aircraft within the Eastern Air Defense Force. This will allow implementation of the Air Defense System as desired for both actual and training purposes. Second, to provide a simple and clear doctrine that may be used by untrained or inexperienced personnel in the future and allow them to profit from the experience gained by past exercises. Third, to insure the integrity and security of the Air Defense System, with regard to AEW operation.

2. Equipment Characteristics

a. The range which AN/APS-20A with the fixed antenna may be expected to achieve against air targets will depend largely on five factors:

(1) The altitude of the AEW aircraft.

(2) The altitude of the target aircraft.

(3) Size and number of target aircraft.

(4) Sea Conditions.

(5) Radar Ducting (Anomalous Propagation

b. If sea return is light the An/APS-20A radar will detect propeller driven aircraft at the following ranges providing their altitude is below 20,000 feet.

Target	Distance
(1) Single A/c (TBM size)	50 - 60 Miles
(2) 2a/c TBM size or 1 twin engined medium bomber	75 - 80 Miles
(3) 4 Single a/c in formation or 1 four engined bomber	90 - 100 Miles
(4) Large Formations	140 - 150 Miles

Enclosure (1)

SECRET

SECURITY INFORMATION

0337

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

PROPOSED OPERATING DOCTRINE
FOR USE OF U. S. NAVY MULTI-ENGINE AEW/CIC AIRCRAFT
IN JOINT OPERATIONS WITH USAF AIR DEFENSE COMMANDS

c. The APS-20A radar as installed in the PB-1W aircraft (bottom mount) rapidly loses its effectiveness as target altitudes increase over 20,000 feet. When targets are above this limit, the standard bottom mount configuration is not consistently dependable for early warning nor can CAP be effectvely controlled against high altitude targets.

d. Jet aircraft are more difficult to detect and track then conventional aircraft. Detection ranges vary greatly depending on target altitude and target aspect. Jet V^2 have been detected at ranges of 50 - 60 miles. IFF increases the range and improves the reliability of tracking any friendly aircraft.

e. The AEW plane is limited in search altitude by the amount of sea return which is encountered. If the sea return extends out to the maximum range at which the particular type of air target may normally be detected, then the probability of detection becomes very low. Since early warning must provide protection against single aircraft as well as groups, the AEW plane is of doubtful value when engaged in airsearch missions where the sea return (with 70% receiver gain no anti-clutter circuits) extends beyond 50 miles. Calm sea conditions would allow an AEW altitude of 5,000 to 10,000 feet thus providing a greater radar horizon. Heavy sea conditions, however, would limit the AEW altitude to less than 2,000 feet thus reducing the radar horizon. In a state 2-3 sea, an AEW altitude of 3,000 feet provides a radar horizon of 95 miles against a target of 500 feet altitude. This range normally exceeds the detection range of single aircraft. Wheter or not the sea return encountered is excessive depends on the optimum detection range for that type of target expected. Judicial use of anti-clutter circuits should be employed to reduce excessive sea andweather return. Caution should be taken to introduce only ani-clutter neces ary to be able to read through the interferende. Excessive amounts of anti-clutter circuits will result in cutting down the received sensitivity to an unnecessary degree.

f. When a search operator detects a raid, it is reported to the CICO and tracked to determine course and speed. The CICO sends the contact report over the Combat Information Net and the raid is designated. After the initial report the course and speed should be reported as soon as possible, as well as "up to minute" plots. AEW will continue to report the raid until it is picked up by the controlling station radars, at which time the AEW aircraft is usually directed to cease reporting. When the AEW plane has

Enclosure (1)

SECRET.

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/mlp

26ADADC 373.22

8 October 1952

SUBJECT: Proposed Operating Doctrine for Use of U.S. Navy Multi-engine AEW/CIC Aircraft in Joint Operations with USAF Air Defense Commands: Submission of

TO: Commanding Officer
Airborne Early Warning Squadron TWO
Patuxtent River, Maryland

1. The following comments are forwarded for your consideration. If it is desired, we will be glad to confer further with you on this subject.

2. Paragraph 2e: It is recommended that prior to designating the altitude which will be a limiting factor in range whit the AEW aircraft, that adequate performance tests be carried out utilizing all available anti-clutter circuits, so that specific knowledge will be obtained regarding the effects of sea return under dirrerent sea conditions and altitudes. If such tests have been conducted, it is felt that specific data could be included in this paragraph.

3. Paragraphs 2g and 2h: It should be brought out that if each AEW aircraft employs movements to avoid losing a target in sea return, such movements must be limited in order to prevent the assigned sector from being without radar coverage.

4. Paragraph 3A: Since the badic purpose of AEW and picket vessel is to extend the range of shore based stations in a seaward direction, it is felt that this doctrine should not recognize a requirement for the AEW aircraft to patrol inside of established radar coverage for navigation purposes. It should rather point out the need for adequate naviagation and communication to allow the barrier to be placed in the most effective location. Anything short of this should be specified as a temporary expedient which detracts from maximum utilization of AEW.

5. Paragraph 3b: No mention has been made of radio-teletype.

6. Paragraph 5a: The second sentence should read, "this will aid identification of the AEW plane and by the aid of a plane".

7. Paragraph 6a: Relative to navigation aids, it is recommended that the utilization of Loran be considered since this offers a practical means of position orientation.

SECRET
SECURITY INFORMATION

0339

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

26ADADC 373.22 Subj: SECURITY INFORMATION
Proposed Operating Doctrine for use of USN Multi-engine AEW/CIC A/C in Joint Operation with USAF ADCs; Submission of

6. Recommendations - Paragraph 1bf It is recommended that a test of radio-teletype be pushed as the promary means of communication, the obvious advantage being that receivers will obtain the benefit of full signal strength available from the transmitter, and that such intensity of signal is not dependent on the degree of modulation.

FOR THE COMMANDING GENERAL:

W. H. GAILLOT
Major USAF
Adjutant General

SECRET
SECURITY INFORMATION

0340

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL
SECURITY INFORMATION

C
O
P
Y

HEADQUARTERS
EASTERN AIR DEFENSE FORCE
Stewart Air Force Base, Newburgh, N. Y.

EADCE 676.3 17 July 1952

SUBJECT: Communications Test, Picket Vessel Nets

TO: Commander
Destroyer Force
U. S. Atlantic Fleet
c/o F.P.O.
New York City, New York

1. It is requested that 3 standby picket vessels be dispatched to the priority stations listed below, for a communications test during the periods 1200Z - 2400Z, 30 Jul 52, and 1200Z - 2400Z, 31 Jul 52.

2. Picket vessel "A" will be responsible for stations 4 and 3; vessel "B", stations 2 and 1; and vessel "C", stations 6 and 5. Vessels will test from stations in that order, moving from first station to second station during the period 0001Z - 1159Z, 31 Jul 52.

3. To gain the maximum benefit from the tests, primary and secondary shore stations will utilize the test periods to determine the most effective antenna type, antenna height, method of antenna tuning and for the calibration of station equipment for frequencies in use. It is very desirable that each picket vessel have the capability of giving relative signal strength, through the medium of a field strength meter or similar device. The picket vessel, as NCS, will make the initial call on the primary frequency. As an observation of past exercises, it is recommended that a definite sequence in changing frequencies be established and that practice in changing frequencies be included in the test in an effort to reduce delay during each exercise. Operation capabilities will not be tested; therefore, passing of plots are not to be required.

4. a. Effective 0001Z, 30 July 52, that portion of EADF COI 24-2, concerning picket vessel nets, is changed and the following is substituted. Primary and secondary stations, and assigned frequencies are included:

CONFIDENTIAL
SECURITY INFORMATION

0341

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL
SECURITY INFORMATION

Hq EADF EaOCE-C 676.3 Subject: Communications Test, Picket Vessel Nets

PICKET VESSEL NET #1

Day: 5980 (P) 4462.5 (A)	Frequency Kc	Night: 3037.5 (P) 2732 (A)
Unit		Location
PV Station 1 (NCS)		Station #1
773d AC&W Sq (Primary)		Camp Hero, N. Y.
646th AC&W Sq (Secondary)		Navesink, N. J.

PICKET VESSEL NET #2

Day: 5767.5 (P) 4450 (A)	Frequency Kc	Night: 3052.5 (P) 2798 (A)
Unit		Location
PV Station #2 (NCS)		Station #2
773d AC&W Sq (Primary)		Camp Hero, N. Y.
770th AC&W Sq (Secondary)		Palermo, N. J.

PICKET VESSEL NET #3

Day: 5812.5 (P) 4660 (A)	Frequency Kc	Night: 3017.5 (P) 2878 (A)
Unit		Location
PV Station #3 (NCS)		Station #3
762d AC&W Sq (Primary)		North Truro, Mass.
654th AC&W Sq (Secondary)		Brunswick NAS, Me.

PICKET VESSEL NET #4

Day: 5735 (P) 4487.5 (A)	Frequency kc	Night: 3337.5 (P) 2894 (A)
Unit		Location
PV Station #4 (NCS)		Station #4
654th AC&W Sq (Primary)		Brunswick NAS, ME.
762d AC&W Sq (Secondary)		North Truro, Mass.

CONFIDENTIAL
SECURITY INFORMATION

0342

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL
SECURITY INFORMATION

PICKET VESSEL NET #5

Day:	Frequency Kc	Night:
5290 (P)		3422.5 (P)
4675 (A)		2936 (A)

Unit	Location
PV Station #5 (NCS)	Station #5
646th AC&W Sq (Primary)	Navesink, Mil Res. N. J.
770th AC&W Sq (Secondary)	Palermo, N. J.

PICKET VESSEL NET #6

Day:	Frequency Kc	Night:
5590 (P)		3330 (P)
4715 (A)		4317.5 (A)

Unit	Location
PV Station #6	Station #6
771st AC&W Sq (Primary)	Ft Custis, Va
647th AC&W Sq (Secondary)	Quantico, Va

(P) - Primary

(A) - Alternate

b. Call words and call signs of units affected are as follows:

Unit	Call Word	Call Sign
646th AC&W Sq	Dogcatcher	Z67
647th AC&W Sq	Thorndyke	W48
770th AC&W Sq	Silvertone	M5Ø
771st AC&W Sq	Strawberry	D49
773rd AC&W Sq	Pinkerton	ØIB
762nd AC&W Sq	Moonshine	3TI
654th AC&W Sq	Kidskin	WQ3

c. Picket vessels will use the call word listed in Section VI, EADF COI 26-2 for the initial call, then revert to the call word assigned to the particualr vessel or station.

d. Direct coordination between naval units and the affected shore stations is authorized. Reports of results are requested.

CONFIDENTIAL
SECURITY INFORMATION

0343

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL
SECURITY INFORMATION

Hq EADF EaOCE-C 676.3 Subject: Communication Test, Picket Vessel Nets

5. This test is an exercise in which an attempt will be made to correct weakness uncovered in past tests. An operational test of two nets will be conducted during the week of 4 - 8 August, this will be covered by separate correspondence.

FOR THE COMMANDING GENERAL:

s/ROBERT J. ORTELT
Capt, USAF
Asst. Air Adj. Gen.

Info cys to:
Commander Eastern Sea Frontier
Commander Escort Sq Sixteen
CG, 26th ADiv
CG, 32d ADiv

CONFIDENTIAL
SECURITY INFORMATION

4

0344

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

GCK/[illegible]

ADOCE 311

6 August 1952

SUBJECT: Report of Communications Testing Period

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Attn: Dir, Comm & Elect
Newburgh, New York

1. The following report of communications testing period 0001Z, 16 July 1952, to 2400Z, 16 July 1952, covering the HF radio back-up nets within the 26th Air Division is hereby submitted:

2. Upon receipt of all squadron reports covering those nets that were active during the test period, the following informational data was compiled:

a. Nets 1 thru 12, B, and Net 6 (32d AD), were reported as active.

b. Five nets (5) out of twelve (12) passed traffic during the 24 hour period. These nets are as follows:

(1) Net 1 - Fair
(2) Net 3 - Fair
(3) Net 8 - Fair-Poor
(4) Net 9 - Fair-Poor
(5) Net 11- Good

c. Nets 2, 5, 6, 7 and 12 were inoperative during the entire 24 hour test period for reasons ranging from negative contact due to heavy interference, both man made and natural, to equipment failures. The latter cause of outage accounted for approximately 5% of the total amount of equipment in use in the active nets.

d. This office concurs with the recommendations of the 773rd AC&W Sq and the 770th AC&W Sq wherein it was stated that more frequent exercises be held under 100% simulated landline failure to ascertain true analysis of the effectiveness of HF back-up. One instance was reported whereby one station within a net was operating A-1 while the remainder of the stations were operating A-3. This violation is the direct responsibility of the NCS which controls the type of emission in the net. Obviously, the Net Control Stations are not taking the initiative of running the nets according to procedures as outlined in ACP's 124 and 125.

e. The 772nd AC&W Sq reported Net 12 inoperative during the test period. [illegible] stacks have been made on this net for the past three months. The 662d AC&W Sq (30th Air Div) and the [illegible] and [illegible] Air Squadrons are the other stations [illegible] this net. In this instance, closer [illegible] during communications tests

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

between adjacent divisions is equally imperative for overlap telling purposes.

f. All squadrons reported heavy QRN, QRM on one or more assigned nets during the test period.

g. It is recommended that in those instances where voice communication is not fully readable for reliable reception, the NCS will designate A-1 emission to be used throughout thenet until conditions are deemed favorable by the NCS, for voice communication.

It is hoped that the proposed COI 24 series, net and frequency revisions, will alleviate the complaints stemming from improper antenna orientation and equipment utilization.

4. The test report from the 771st AC&W Sq gave the results of Net #9 only. According to the COI, the 771st AC&W Sq is committed to participation in four (4) nets; Numbers 8, 9, 13 and 16. This headquarters contacted the 771st AC&W Sq and informed them of the requirements of reporting all nets regardless of its activity during the exercise. Net #16 is not established since the AACD at Oxford, Va., is non-operational as yet. At present the squadron is utilizing the only two deltamatch antennas for both nets 8 and 9. The reports of these other nets will be forwarded as soon as they reach this headquarters. It was deemed advisable to handle the matter in this manner to prevent further delay.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

8 Incls:
1. 773rd, Nets 1,5,8 (2cys)
2. 772nd, " 3,12,11 (1 cy)
3. 771st, Net 9 (1 cy)
4. 770th, Net 7,9, (2 cys)
5. 648th, Net 32-6, 11, 2, 6 (2 cys)
6. 647th, Net 10,3,9 (2 cys)
7. 646th, Net 5,7,6,8 (2 cys)
8. 26th, Nets 1,3,2, B (2 cys)

0346

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

0347

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

Hq 26th AD(D) 26ADOCD 676 Subj: Summary Rept of Comm Tx (ACS: [illegible]-R2)

f. Net 6 - Frequency: Day Channel 75; Night Channel 46.

No contact was made on this net during the testing period. The reason for the outage is unknown, according to reports submitted by the stations concerned.

g. Net 7 - Frequency: Day Channel 62; Night Channel 21.

A total of 14 messages were passed during the testing period. Outages between the 770th AC&W Sq, 646th AC&W Sq and 148th Ftr. Sq. was due to the fact that the 770th AC&W Sq operating personnel were being used in a maximum effort in picket vessel operation.

h. Net 8 - Frequency: Day Channel 54; Night Channel 2[illegible].

No traffic passed during this testing period and the reason for outage is unknown.

i. Net 9 - Frequency: Day Channel 55; Night Channel 45.

A total of 79 messages were passed during the test period. Approximately 11 hours outage attributed to transmitter failure at 771st AC&W Squadron.

j. Net 10 - Frequency: Day Channel 6[illegible]95kc; Night Channel 63.

No contact was established between 647th AC&W Sq and 121st Fighter Squadron during the testing period.

k. Net 1[illegible] - Frequency: Day Channel 60; Night Channel 16.

A total of 14 messages were passed during this period. 13 hours of outage between the two stations was logged while operating on the night frequency. Approximately two hours outage was due to [illegible].

l. Net 15

No contact was established between 770th AC&W Sq and 1[illegible]1st AA[illegible] at Swathmore, Pa. Lack of equipment and personnel at the AA[illegible] appears to be the reason for failure to establish contact.

m. Net 6 - 3[illegible]d Air Division. Frequency: Day Channel [illegible]9; Night Channel [illegible].

A total of [illegible] messages were passed during the test period. Outage time was attributed to faulty equipment at the 7[illegible]d [illegible] and with prevailing Wave Propagation conditions. Approximately [illegible] hours of outage was logged.

0348

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

Hq 26th AD(D) 26ADCCE 676 Subj: Summary Rept of Comm Ex (RCS: EADF-H2)

n. 32nd Air Division Net 8 - Frequency: Day Channel 80; Night Channel 37.

A total of 2 messages were passed during this period. Outage was due to Hq 4707th Defense Wing not being operational and heavy QRM.

2. Equipment.

a. Equipment used throughout the testing period consisted of:

SP-600 Receiver
BC-779 Receiver
BC-342K Receiver
BC-610E Transmitter
T4/FRC Transmitter
BC-191 Transmitter
AN/ART-13 Transmitter

Equipment failures had very little effect on the outage time and were held at a minimum. Lack of sufficient equipment at the various sites hindered operations more so then operational breakdowns.

b. Commercial power was used throughout the test period and at no time was emergency power put into use.

3. Evaluation.

In summarizing the evaluation reports from the squadrons concerned, it is noted that the opinion prevails that approximately 70 - 75% of the traffic can be passed by radio in the case of wire failures. It is also felt that with additional operating personnel and new equipment, this efficiency would improve considerably.

4. Comments:

Failure of organizations to submit detailed and accurate reports regarding circuit outages had made difficult the staff evaluation of the system and determination of required action. This headquarters is making every effort to insure that adequate reports are submitted by subordinate organizations.

FOR THE COMMANDING GENERAL:

/s/t/ [illegible]
for [illegible]
Major, USAF
Adjutant General

0349

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

B/Ltr fr ADC, Ent AFB, Colorado Springs, Colorado to Dir of Comm, Hq USAF, Wash. 25, D. C. subj: "(Uncl) Requirements for Additional Arctic Type Towers and Radomes - Permanent AC&W Programs, dtd 20 June 1952.

AFOAC-E/A 1st Ind

Dept of the Air Force, Hq USAF, Washington 25, D. C. 18 SEP 1952

TO: Commanding General, Air Defense Command, Ent Air Force Base, Colorado Springs, Colorado

1. This headquarters concurs in the desirability of providing arctic type towers and radomes for all the sites listed in Inclosure No. 2. However, due to current budgetary limitations, it is necessary to limit this type of equipment to those locations at which it is absolutely essential to continued operations. In this respect low temperature alone is not considered sufficient justification to warrant installation of this type equipment. It is recognized that heavy precipitation, freezing rain, sleet, snow, high winds, etc. will seriously hamper operations if of a continuous nature. However, it is believed that these problems would be of such short duration at many of the sites that operations would not be seriously impaired.

2. Reference paragraph 5, basic letter. The ARDC has been requested to investigate the possibility of modifying existing temperate type towers to enable radome installation thereon. Your headquarters will be advised of the results of the above investigation when it is completed. It is also desired to point out that consideration is being given to modifying the AN/FPS-3 to incorporate a rotating joint and permit the removal of r. f. components from the pedestal and their subsequent installation in a room on or adjacent to the tower.

3. In view of the above it is requested that the radome requirements set forth in Inclosure No. 2 be reviewed and rejustified, utilizing the off-the-air time at specific sites as a basis. The off-the-air time should be divided into the following two categories.

a. Dates and time off-the-air due to inability to rotate the antenna and the weather phenomena responsible.

b. Dates and total time off-the-air due to inability of maintenance personnel to perform repair functions and the weather phenomena responsible.

4. Upon receipt of any revised requirements which may result from the reconsideration indicated in paragraph 3 above, this headquarters will initiate action to make the required equipment available to your command.

BY COMMAND OF THE CHIEF OF STAFF:

/signed/
H. A. FRENCH
Colonel, USAF
Chief, Electronics Systems Division
Director of Communications

2 Incls
n/c

SECRET
SECURITY INFORMATION

0350

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq ADC ADOCE-E 676.3 Subj: (Uncl) Romts for Additional Arctic Type Towers and Radomes--Permanent AC&W Program

EAOCE-E 676.3 (25 Sep 52) 1st Ind

HQ EASTERN AIR DEFENSE FORCE, Stewart AFB, Newburgh, N.Y. 2 Oct 1952

TO: Commanding General, 26th Air Division, Roslyn, New York

1. Reference letter, this headquarters, subject: Requirements for Additional Arctic Type Towers and Radomes, EAOCE-E 413.44, 2 July 1952.

2. Forwarded for compliance with par 2 of basic letter. It is desired that this information be forwarded to reach this headquarters not later than 20 October 1952.

3. It is realized that many of the radars now without radomes have been operational for a comparatively short time and that a complete evaluation of the effects of weather on the equipment cannot be made. In some cases, however, lashup radar was operated at or near the permanent radar site for an extended period. For this reason, it is desired that specific instances, if available, of permanent and lashup radar outages of both search and height finder due to weather be included in your reply. Any additional information which would substantiate the requirements for radomes should also be included.

BY COMMAND OF MAJOR GENERAL NELSON:

1 Incl
n/c

J. W. FOUNTAIN Jr.
Capt., USAF
Asst Air Adj Gen

0351

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq ADC, ADOCE-E 676.3, Subj: (Unclassified) Requirements for Additional Arctic Type Towers and Radomes-Permanent AC&W Program

26ADMMT 676.3 (25 Sep 52) 2nd Ind RDS/js

HEADQUARTERS 26TH AIR DIVISION (DEFENSE), Roslyn, New York

TO: Commanding General, Eastern Air Defense Force, Stewart Air Force Base, Newburgh, New York

1. Reference paragraph 2, basic letter, no definite information is available regarding actual weather conditions or actual dates of outages at this location during last winter. The squadron concerned attempted to operate on AN/TPS-1B through the months of December 1951, January and February 1952. The actual installation of the AN/FPS-3 occurred in January and February of this year and the site did not enter the net until mid-March 1952.

2. Information available from personnel at the site during last winter indicates that weather conditions due to ice, high winds, extreme cold, etc., prevented proper maintenance of components on the tower at least 2 days of every week. No records are presently available to substantiate this statement, but a UR was submitted on extreme icing conditions encountered at this site. UR in question carried 26th Air Division serial number 26-52-59 and was submitted classified. Subject UR included photographs of equipment concerned. During the winter months, the site is almost constantly covered by low hanging clouds and experiences constant high winds. These conditions tend to increase icing on the tower and components.

3. This site is experiencing difficulty with their temperate type tower in that they can not maintain an adequate level. From last winter through the present, they check and adjust the level of the tower components on an average of approximately once every two weeks. They believe this is the result of extreme ice and wind loads suffered by the equipment during the last winter. No satisfactory method has as yet been found to correct this difficulty.

FOR THE COMMANDING GENERAL:

1 Incl
n/c

E. H. GAILLOT
Major USAF
Adjutant General

0352

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET

CLASSIFIED SECRET
AUTH: CG ADC
23 Sep 1952 TCS

HEADQUARTERS
AIR DEFENSE COMMAND
Ent Air Force Base
Colorado Springs, Colorado

ADOCE-E 676.3 25 Sep 1952

SUBJECT: (Unclassified) Requirements for Additional Arctic Type Towers and Radomes--Permanent AC&W Program

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. References:

a. This Headquarters' letter ADOCE-E 676.3, subject as above, dated 20 June 1952, a copy of which was forwarded to your Headquarters.

b. First Indorsement to above-cited letter, from AFOAC-E/A, dated 18 September 1952, a copy of which is attached hereto for your information.

2. In order to assist this Headquarters in substantiating the requirements for additional towers and radomes, as listed in the inclosure to basic letter, it is desired that your Headquarters submit, before the end of October, the information requested by Headquarters USAF in paragraph 3 of first indorsement to basic letter.

3. Upon receipt of the information requested above, revised requirements will be submitted to Director of Communications USAF for approval and subsequent budgetary and procurement action.

BY COMMAND OF GENERAL CHIDLAW:

THOMAS C. SAVAGE
Major, USAF
Asst Adj Gen

1 Incl
1st Ind AFOAC-E/A, Hq USAF,
18 Sep 52, to letter ADOCE-E
676.3, this Headquarters, 20
Jun 52, subj as above

0353

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

WAR DEPARTMENT
AAF Form No. 54
(Revised 2-18-43)

(COPY)

WAR DEPARTMENT
ARMY AIR FORCES
UNSATISFACTORY REPORT
(See AAF Reg. 15-54 for Information on Proper Use of this Form)

(COPY)

TO BE FILLED IN BY STATION	
STATION SERIAL No.	DATE SUBMITTED
772-52-5	11 Mar 52

LEAVE BLANK		
A.S.C. SERIAL No.	REFER TO	CLASS

STATION	Claysburg, Penna.
ORGANIZATION	772d [illegible] Sqdn.
SUBJECT OF REPORT — Property Class—Name	16C Radar Set AN/FPS-3 Serial # 37
Manufacturer	Bendix
AAF Order or Shipping No.	W33-038ac21187
AIRCRAFT—Model & AAF Serial No.	
ENGINE—Model & AAF Serial No.	
UNIT OR ACCESSORY—Type, Model and Serial No.	Tower AB-178/FPS-3 Ser. #5
AIRCRAFT REPORTS ONLY — LAST D. I. R.—Depot	
Date	
Flying Time Since	
Total Flying Time	
ENGINE REPORTS ONLY — LAST OVERHAUL—Depot	
Hours Since	
Depots and Hours At Each Previous Overhaul	
PART — Name	Tower Aluminum AB-178/FPS-3
Part Drawing, Serial and Specification No.	AB-178/FPS-3, Ser. # 5, Spec # [illegible] 313
Time in Use	250 Hrs.
Quantity on Hand	1
Quantity Known Defective	
No. Previous Failures	None
Manufacturer	Blaw - Knox
Inspector's No. or Identification	Unknown

Indicate by "X" Disposition of Exhibit: [X] Photographed and Prints Enclosed; [ ] Held for Instructions; [ ] Sent Under Separate Cover; [ ] Sent in Attached Package; [ ] Repaired and Returned to Service; [ ] Disposed of (Explain Below.); [ ] To Overhaul Facility (INITIALS)

GIVE COMPLETE DETAILS, PROBABLE CAUSES AND RECOMMENDATIONS BELOW:
(Use Only Applicable Spaces Above—Avoid Unnecessary Repetition)

EXPEDITE

DESCRIPTION OF DIFFICULTY:
1. (a) Extreme icing of antenna and all equipment of AN/FPS-3 mounted on tower Aluminum AB-178/FPS-3 AF Stock # 1[illegible]-205 334 997.
(b) It is extremely difficult and dangerous to perform daily maintenance and to repair equipment in time of a breakdown during a major portion of the winter months.
PROBABLE CAUSE:
2. (a) All antenna equipment is mounted on Tower Aluminum AB-178/FPS-3 exposed to the weather at all times.
ACTION TAKEN:
3. (a) None.
RECOMMENDATIONS:
4. (a) Recommend that Tower Aluminum AB-178/FPS-3 be replaced with Tower AB-199/FPS-3 which has a radome attached.
APPLICATION OF UR DIGEST:
5. (a) UR Digest 00-65 series and T.O. 00-10-1 did not indicate any corrective action.

[illegible]
Capt. [illegible]
Radar Officer

ROUTING SEND ORIGINAL AND TWO COPIES DIRECT TO COMMANDING GENERAL, HQ. AIR SERVICE COMMAND, PATTERSON FIELD, FAIRFIELD, OHIO.

U. S. GOVERNMENT PRINTING OFFICE : 1943 38—[illegible]

#37

0354

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

SECRET
SECURITY INFORMATION

0355

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

[illegible]

[illegible] 413.44, Subj: [illegible]
[illegible] Activities

[illegible] 413.44 [illegible] Ind 1 Nov 52

[illegible]

To: Commanding General, 20th Air Division (Defense), Roslyn, New York

[illegible]

[illegible] 413.44 ([illegible]) [illegible] Ind [illegible]

[illegible]

To: Commanding Officers, 772nd and 773rd [illegible] Squadrons 5 Dec 52

1. Forwarded for [illegible] information.

2. No information is available as to shipment [illegible] construction [illegible] arrival.

BY COMMAND OF [illegible]:

[illegible]
Major, [illegible]
Adjutant General

SECRET
SECURITY INFORMATION

0356

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[redacted]

HEADQUARTERS
EASTERN AIR DEFENSE FORCE
Stewart Air Force Base, Newburgh, N. Y.

EAOCE-C 676.3 12 July 1952

SUBJECT: AN/TRC-1 Radio Sets

TO: Commanding General
26th Air Division
Roslyn, New York

1. This Command has recently obtained AN/TRC-1 equipment, Six (6) sets are marked for shipment to your headquarters.

2. It is desired that you take the necessary action to determine the circuits on which this equipment will be employed, giving priority to Alert Base - ADDC, and ADDC - AAOC requirements. On receipt of shipping document, be prepared to give the support base proper instructions on reshipment to the using units.

3. To facilitate the early use of the equipment, immediate steps should be taken to determine usable frequencies in the 70-100 Mc band and make requests to this headquarters in accordance with EADF COI 17-4. Requisitions for crystals can be made on authority of the COI and this letter.

BY COMMAND OF MAJOR GENERAL NEISON:

C. J. DILLON
Capt., USAF
Asst. Air Adj. Gen.

[redacted]

0357

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

Hq EADF EAOCE-C 676.3 Subj: AN/TRC-1 Radio Sets

ADOCE 676.3 (12 Jul 52) 1st Ind GGK/amm

HQ 26TH AIR DIVISION (DEFENSE), Roslyn, New York 30 July 1952

TO: Commanding General, Eastern Air Defense Force, Stewart Air Force Base, Newburgh, New York

1. Reference your letter EAOCE-C, 676.3, dated 12 July 52, regarding installation of AN/TRC-1 equipment within the 26th Air Division, the following proposed nets and frequency band assignment are listed below in order of expected operational feasibility:

Net #1 - P-9 to Fort Wadsworth AACC, Brooklyn, N. Y.
Net #2 - P-55 to 121st Ftr Sq, Andrews AFB, Washington, D. C.
Net #3 - P-45 to 118th Ftr Sq, Suffolk AFB, N. Y.

It is understood that all six sets will be utilized in the establishment of the above three nets (Fixed Service).

2. A consultation was held with Mr. Eichels of the FCC, presently assigned to the 26th Air Division, and after examination of the 70-100 mc band, it was decided to request any one frequency between 72.5 to 74.0 mc, within the band presently assigned to navigational aids which begins at 72.0 mc and extends to 76.0 mc. Peak power output of the AN/TRC is 50 watts; low power for short hauls and tuning is 10 watts.

3. This equipment is designed for a plus--minus 30 kc deviation which results in an overall variation of 60 kc. Additional modification may be required to meet the overall tolerance and attenuation factors to preclude possible interference on TV Channel 4 (66.0 - 72.0 mc), Channel 5 (76.0 - 82 mc) and navigational aids such as fan markers (75 mcs). The crystal frequency at the low end of the requested band for 72.5 mcs would be cut for fundamental frequency of 755.208 kc. The upper limit crystal would have a fundamental frequency of 770.833 kc. Any assigned frequency within this range would require a crystal cut for a frequency falling with in these limits. The final output frequency is a result of multiplying the fundamental 96 times.

4. The distances involved between terminals of each net are as follows:

P-9 to Brooklyn AACC - Approximately 18 miles
P-45 to 118th Ftr Sq, Suffolk AFB - Approximately 43 miles
P-55 to 121st Ftr Sq, Andrews AFB - Approximately 29 miles

5. Probable terrain difficulties might possibly arise in the net linking P-45 to Suffolk AFB since the area of Hither Hills State Park lies ten miles due west of P-45 coincident with line of site. This area is over 250 feet at the highest point above P-45's elevation.

0358

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

CONFIDENTIAL

Hq, EADF 676.3 Subject: AN/TRC-1 Radio Sets

EAOGE-C 676.3 (12 Jul 52) 2d Ind 18 Aug 1952

HQ EASTERN AIR DEFENSE FORCE, Stewart Air Force Base, Newburgh, New York

TO: Commanding General, 26th Air Division, Roslyn, New York

Reference telephone conversation between Mr. Calonna, Headquarters 26th Air Division and Captain Vick of this headquarters. The shipment of AN/TRC-1 equipment to your command has been diverted to the 30th Air Division and action on the request for frequencies is cancelled.

BY COMMAND OF MAJOR GENERAL NELSON:

ROBERT JL ORTELT
Capt, USAF
Asst. Air Adj. Gen.

CONFIDENTIAL

41

0359

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

6. Previous FM surveys as run by WRAMA in the Washington-Andrews area revealed the possibility of FM Communications between P-55 and Andrews AFB. Line of site in this case was only broken by a hilltop 11 miles west of P-55. This survey assumed a tower height at P-55 of 90 feet.

7. There would be no apparent range difficulties in the link between P-9 and Brooklyn AAOC at Ft Wadsworth.

8. In the overall evaulation of these nets, consideration must be given to the present personnel status of the sites concerned. At this writing, little is known of the problems involving operating and maintenance facilities at the fighter squadrons and AAOC detachment bases. Operating feasibility on all nets will, in the final analysis, depend on actual field tests. An/TRC-1 equipment utilizes A-3 type emission.

9. Approximate azimuth of transmission path from

P-9 to Ft Wadsworth - 10°
P-55 to 121st Ftr Sq, Andrews AFB - 57°
P-45 to 118th Ftr Sq, Suffolk AFB - 260°

10. Call signs in the order they appear above:

a. Dogcatcher --Scoutmaster

b. Thorndyke --Redman

c. Pinkerton --Calico

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

0360

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

RJM/mlp

26ADACG 373.1

8 November 1952

SUBJECT: "How Are We Doing?"

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. It is worth while occasionally to stop and contemplate the answer to the question "How Are We Doing?". This letter does not propose to go into a complete discussion of this subject, but after considerable thought it is believed desirable to call attention to two areas in which we might make improvements.

2. There are three phases during which our air defense forces may be properly judged. Phase one is the action taken to detect and identify the first hostile aircraft. Phase two is the action taken during the period from the identification of the first hostile aircraft until that time when the Air Defense Forces are augmented by additional personnel, aircraft and other equipment, in accordance with our plans. Phase three is the period after this augmentation has been completed.

3. At any particular time the action taken in Phase one will depend largely upon the action which we plan to take tonight or tomorrow and we should evaluate our answer to "How Are We Doing?" in Phase one on the basis of those things which we now have in effect. Perhaps the weakest point in our present operation is our inability to turn away from probable A-Bomb targets an unknown which appears to be one of our B-29s, but on which we have no flight plan information. I do not believe the Air Defense Command can be forgiven if it detects such an unknown and follows it in to such a target as New York City without taking any action against it prior to its dropping an atomic bomb. This problem was more thoroughly discussed and partial solutions proposed in letter from this Headquarters, Subj: "Preventing TU-4 Type Bombers from Reaching a Critical Target before Identification" dated 14 May 1952, reference ADACG 373.1.

4. Phase two involves the actions necessary to change our air defense operation from a limited peacetime status to maximum wartime effort. These actions, in addition to the normal surveillance, identification, etc., at a typical Air Defense Direction Center, would be approximately as follows:

0361

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

a. Interception and destruction of identified hostiles.

b. Alerting active fighter units, AAA units, and filter centers.

c. Alerting own base.

d. Calling augmentation crews.

e. Integration of augmenting personnel into existing crew.

f. Federalizing Air National Guard Squadrons.

g. Alerting Navy air and radar units.

h. Setting up procedures to identify all air traffic.

i. And reporting actions taken and status of various units involved.

It is obvious that if we determine the size of our crews on duty in these centers, based only on the ability to handle and identify the peacetime traffic, that those crews will not be sufficiently large to take on the additional duties of combat action, calling in additional people, issuing various ways as outlined above. Until we determine the manpower continuously required in each of our centers, based on the manpower required during phase two, we have neglected an important part of our duties. It appears to the undersigned that our present manning is based upon the needs for phase one and not upon the needs for phase two. Letter from this headquarters, Subj: "Aircraft Control and Warning Personnel Standards", dated 8 December 1951, reference PO&R 322, outlines briefly the need for controllers in an ADCC based on continuous manning for Phase two.

5. It appears to the undersigned that phase three has been given relatively a great deal more consideration in our planning than have Phase one and Phase two, and as a result I believe that we are better prepared to take care of Phase three than we are of either Phase one or Phase two. It should also be noted that if the enemy decides upon an all-out surprise attack with all A-Bombs to be dropped almost simultaneously, we may never have a Phase three of importance.

6. It is recommended that action be taken making it possible for us to divert B-29 or B-50 type aircraft wherever they are detected enroute toward a probable A-Bomb target, provided we have not been able to properly identify them. This include provisions to require them to land at a

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

designated airport if necessary for identification. In connection with this procedure, decision must be made that we will shoot if necessary to force the airplane into this diversion.

7. It is also recommended that the manpower planning for each of our centers be based upon the manpower required during the early stages of Phase two as outlined above. We must have people on duty in our centers to carry out all the functions which cannot wait for the arrival of augmentation personnel.

R. J. MINTY
Brigadier General, USAF
Commanding

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
F
Y

HEADQUARTERS
Eastern Air Defense Force
Stewart Air Force Base, Newburgh, N.Y.

Classifed SECRET
by Auth: CG, EADF
Date 28 Nov 52
Initials: A.C.C.

EADOT-A 381

3 Dec 1952

SUBJECT: (Unclassified) Improvements Under Advisement in Certain Critical Areas of Importance

TO: Commanding General
26th Air Division (Defense)
Roslyn, New York

1. Reference is made to your letter of 8 November 1952, subject: "How Are We Doing." Your timely review of air defense problems and division of air defense planning and operations into three phases is deemed most appropriate.

2. I agree in principle with the recommendation you have outlined in paragraph 6 of your letter. As you know, ADC and USAF are in the process of finalizing action on the "Multiple Corridor" system of identification. Preparation of these procedures and final approval by all agencies concerned is time consuming. When the multiple corridor system is in operation, more positive identification of aircraft will be possible. Also, ADC has requested all agencies, military and civilian, to file flight plans for multi-engine aircraft on flights north of the 37th parallel. Admittedly, neither of the above can solve the entire identification problem nor are they a complete answer to your recommendation. However, in paragraph 4 below, I indicate further action I intend to take on your recommendation.

3. Reference paragraph 7 of your letter pertaining to the present manning of the Air Defense Command Aircraft Control and Warning System, the policy established by Headquarters USAF is as follows:

> "The policy of this headquarters with regard to operation of the U. S. AC&W System envisions a full time duty assignment for each officer and airman. It is not contemplated that all radar operations positions will be fully manned at all times to meet maximum enemy air attack. Instead, it is intended that the A&W System be manned on a 24 hour daily alert status with personnel in reserve at each installation to fully man the station for an 8 hour emergency period. It is

0364

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

EAOOT-A 381 Subject: (Unclassified) Improvements Under Advisement in Certain Critical Areas of Importance (Cont'd)

recognized that in event of emergency, it will be possible to increase the work week from 40 hours to 56, and possibly 70 hours for short periods. The manning of the U.S. AC&W System is therefore based upon:

a. 24-Hour Daily Radar Surveillance. (Stations not provided with standby radar equipment will be authorized a maximum of 1 hour off-the-air daily for routine maintenance.)

b. Performance of Identification Functions 24 Hours Daily.

c. Performance of operational functions limited to the requirement for normal peacetime air traffic with capability for 8-hour emergency period as outlined."

EADF does not agree with USAF manning policy as stated above. The disagreement is based upon two factors: present policy prohibits us from operating in a manner that we feel is essential; present manning does not afford flexibility in strength authorization to care for variance in assigned missions. We requested a T/D authorization or authority to re-allocate authorized T/O strength within the command. This request was disapproved by ADC. At the present time, USAF, with ADC assistance, is formulating a new T/O authorization policy for AC&W units which is more realistic in its approach to individual assigned operational functions, administrative problems and support situations. We believe that the new authorization policy will place us in a better position to accomplish the operational requirements which are similar to those you have outlined for Phases I and II.

4. In order to obtain further action on appropriate items in your letter, I am forwarding a copy to General E. W. Chidlaw indicating my concurrence with the ideas and recommendations hou have expressed.

/s/t/ L. R. NELSON
Major General, USAF
Commanding

0365

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/jar

ADADO 381

7 July 1952

SUBJECT: Air Defense Systems Plan

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Reference letter your headquarters, EAOPR 381, subject as above, dated 21 June 1952.

2. The systems plan for this division, outlined in the following paragraphs, involves only recommendations for improvements of the system as it is presently operating. It is felt that the present system is basically sound.

3. The concept of operations envisions fighter squadrons being scrambled and controlled by direction centers under the supervision of the control center. It is recognized that there are occasions when the control center must allocate and coordinate scrambling of fighters, but this authority is inherent in its supervisory capacity and can be exercised whenever necessary. Due to delays involved in controlling all scrambles from the control center, it is not recommended for standard procedure.

4. Station P-63 should be a GCI station and all other stations in this division should be direction centers. All report direct to the control center. (Station P-30 is not presently operating as a Direction Center due to lack of wire communications facilities but will assume scramble responsibilities as soon as adequate cable is available. Station P-56 is currently scrambling only Navy and Marine Corps fighters, when made available, but will scramble programmed fighters at Langley when they are in place.)

5. The control center should retain responsibility for red, yellow and white alert decisions, and means for dissemination of air raid warnings, control of air traffic and electromagnetic radiations and other functions encompassing areas involving several direction centers.

6. The operational chain of command is from division control center to AC&W squadron direction center, to individual pilot or flight leader.

7. This headquarters has no recommendations for changes to its sector or sub-sector boundaries.

SECURITY INFORMATION

0366

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION
ADADO 381 Subject: Air Defense Systems Plan

8. The transmission of surveillance picture between sub-sectors and/or sectors should be through direct communication between adjacent AC&W squadrons. The communications between control centers should be established only for liaison and coordination purposes.

9. All stations should be manned and equipped to provide surveillance, identification and control capability. The manning for each function may, however, be modified according to the requirements of individual stations. Stations P-30, P-55 and P-63 do not currently require identification capability, however, the capability will be required and used when security control of air traffic is implemented or when identification of internal traffic is introduced.

10. All stations should eventually be equipped with VHF/DF and passive detection equipment, and it is critically needed now at coastal stations (P-9, P-45, P-54 and P-56) to improve perimeter identification and surveillance.

11. Each station should be continuously manned with sufficient officer personnel to assure the station's capability to perform its required functions immediately on the identification of the first hostile aircraft. (See officer crew manning requirements in paragraph 12). These functions are:

a. Surveillance and identification. The location and identification of unknown or hostile aircraft. It is felt that these are actually separate functions, but they may be combined during the initial stages of an attack for the time it takes to call up emergency augmentation crews.

b. Control. The control of fighters to intercept and destroy unknown and hostile aircraft.

c. Supervision. The coordination of the efforts of the station and the notification, alerting and coordination of other forces available to the station. (i.e., GOC, Navy fighters, Navy radar, ANG fighters, AAA, etc.) The importance of this function varies with the number of such forces assigned to the station.

12. The following outlines the major responsibilities, functions, facilities and officer manning requirements at each AC&W station. The officer manning requirements is the minimum that we should accept as it represents the minimum acceptable immediately on identification of the first hostile. (*Indicates facility not currently available or programmed.)

a. P-45 - [illegible]

(1) [illegible]

[illegible]

[illegible]

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION
ADAD 3 1 Subject: Air Defense Systems Plan

(d) Naval radar at Atlantic City, New Jersey.

(e) Picket vessels (as made available).

(f) Filter center - Trenton, New Jersey.

(3) Identification.

(a) Normal facilities.

*(b) VHF/DF.

(4) Control - normal capability.

(5) Scramble responsibilities.

(a) Dover AFB, Delaware.

(b) Atlantic City NAS, New Jersey - Navy fighters.

(6) AAA - Philadelphia, Pennsylvania.

(7) Officer crew manning requirement - Three.

(a) Surveillance and identification.

(b) Control.

(c) Supervision.

[illegible] - [illegible]

(1) Major responsibilities.

(a) Protection of [illegible] - Newport [illegible].

(2) Surveillance.

(a) [illegible].

*(b) [illegible].

(c) [illegible].

(d) [illegible].

[illegible] C. Reprogrammed

[illegible]

SECURITY INFORMATION

0370

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY

(a) Filter center - Richmond Virginia.

(3) Identification.

(a) Normal facilities.

*(b) VHF/DF.

(4) Control - normal capability.

(5) Scramble responsibilities.

(a) Norfolk NAS, Virginia - Navy fighters.

(b) Cherry Pt. MCAS, N.C. - Marine Corps fighters (programmed for 35th Air Division).

(c) Oceana NAS, Virginia - Navy fighters.

(d) Langley AFB, Virginia (programmed).

(6) AAA - Norfolk, Virginia (programmed).

(7) Officer crew manning requirement - Three.

(a) Surveillance and identification.

(b) Control.

(c) Supervision.

e. F-55 - ADDC

(1) Major responsibilities.

(a) Protection of Washington and Baltimore.

(2) Surveillance.

(a) Search radar and height finder.

(b) Filter centers - Baltimore, Md. and Roanoke, Va.

(3) Identification - [illegible] required during [illegible].

(4) Control - normal capability.

(5) [illegible].

[illegible]

[illegible] fighters.

0371

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

(c) Anacostia NAT, Washington, D. C. - Navy fighters (reserve).

(6) AAA - Washington, D. C. and Baltimore, Maryland.

(7) Officer crew manning requirement - Two.

(a) Surveillance and Supervision.

(b) Control.

f. P-63 - GCI

(1) Major responsibilities.

(a) Protection of Washington, and passing of tracks from 30th Air Division in a direct attack on Washington from Chakotski Peninsula area. Intercession can only be accomplished with fighters passed from other direction centers.

(2) Surveillance.

(a) Search radar and height finder (height finder not installed, but programmed.)

(b) Filter center in Pittsburgh, Pennsylvania.

(3) Identification - No requirement now, but required during control of traffic.

(4) Control - normal capability. (Probably not required during first few minutes of an attack.)

(5) Officer crew manning requirement - One.

(a) Surveillance and supervision.

g. P-30 - ADDC

(1) Major responsibilities.

(a) Protection of New York, Philadelphia and Baltimore, and passing of track information from the 32nd Air Division in a direct attack from the Chakotski Peninsula area.

(b) Protection of Philadelphia, Baltimore and Washington, and passing of track information from the 30nd Air Division in a direct attack from the Murmansk area.

SECRET
SECURITY INFORMATION

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

(2) Surveillance.

(a) Search radar and height finder.

(b) Filter center - Harrisburg, Pennsylvania.

(3) Identification - Not required now, but required during control of traffic.

(4) Control - normal capability.

(5) Scramble responsibilities.

(a) New Castle County Airport, Maryland.

(b) Newark, New Jersey - Air National Guard fighters.

(c) Willow Grove NAS, Pa. - Navy fighters (reserve).

(d) Stewart AFB, New York (programmed).

(6) Officer crew manning requirement - Two.

(a) Surveillance and supervision.

(b) Control.

13. A communications plan to meet present or future requirements for Air Defense must contain a basic communication system, plus an adequate back-up to this system. The communication equipment required for this plan must be able to provide positive communications utilizing any or all of the following facilities:

Low Frequency Radio	Microwave Radio
High Frequency Radio	Teletype
Very High Frequency Radio	Radio Teletype
Ultra High Frequency Radio	Telephone

14. This headquarters favors use of microwave radio for the basic communication system between ground points. It is felt that the present telephone system for ground-to-ground communication is satisfactory, but the high frequency radio backup is entirely inadequate. It appears probable that the backup for a telephone system will have to be microwave in order to have the required reliability. Since the installation of this microwave backup would be quite expensive, it seems more economical to use microwave as the primary communications and the less expensive [illegible] for backup. It is [illegible] that microwave communications is more [illegible], and less subject to sabotage than telephone.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

15. The following is an outline of communications required, and the recommendation of this headquarters as to the best means to use:

a. Reporting and telling between ADDC's and ADCC's.

(1) Microwave radio should be used for all contact between ADDC's and between ADDC and ADCC.

(2) Microwave radio should be backed up with a TWL telephone network to be used in the event of radio failure.

b. Scramble lines:

(1) Microwave radio from ADDC director to Fighter operations should be utilized for scramble.

(2) Microwave radio should be backed up by TWL telephones in case of radio failure.

(3) Inasmuch as the aircraft scramble is vitally important, it is felt that it should be further backed up by HF radio to be used as a last resort. Good frequency assignment concurrent with radio propagation prediction planning would insure contact at a time when most needed.

c. Aircraft Controlling from ADDC's:

(1) The primary means of communications should be VHF and UHF, as that is the standard equipment for aircraft. Where aircraft are used, equipped with either VHF or UHF, communications should be arranged to have simultaneous transmission on the VHF and UHF control frequencies.

(2) Broadcast control, utilizing a frequency between 10[illegible] kc and 1700 kc, should be used for an alternate control means. Reception in the fighter aircraft is possible by use of the AN/ARN-6 which is standard equipment for fighters. Since a transmitter in this range is not standard for fighter aircraft, control would be in the blind so far as the director is concerned. Broadcast control transmitters should be of sufficient power to minimize possible jamming from aircraft or other sources. Use should be made of the high power commercial broadcast stations, by having them keyed from the ADDC by microwave link. If commercial broadcast stations cannot be used, high power transmitters should be located at the ADDC. Transmitters should be multi-channel type to facilitate passing of aircraft from one control sector to another. Since it is believed that VHF and UHF control is most susceptible to jamming, it would therefore become the weakest link in the ADDC system. Broadcast control or an alternate direction [illegible] power-emphasized. The [illegible] equipment [illegible] for this purpose.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible] Subject: Air-Defense Systems Plan

d. Reporting from Picket Vessels:

(1) Radio Teletype should be the primary method used for speed and dependability in reporting. It would not require the number of repeat transmissions that has been experienced by voice transmission and it is much faster than the C. W. operation.

(2) Radio Teletype should be backed up by HF Radio in the event of equipment failure or jamming. The backup should be voice transmission and C.W. operation, although slower, could be used as a last resort. Adequate frequencies should be assigned to insure usable frequencies consistent with frequency propagation predictions.

e. Aircraft controlling from Picket Vessels:

(1) VHF/UHF should be used for the primary means of communications. The provisions in paragraph 15c(1) would apply to ADDC also.

(2) Broadcast control should back up VHF and UHF. Paragraph 15c(2) above would apply to Picket Vessels also.

f. Reporting from AEW aircraft.

(1) Radio teletype should be the primary means of communications for the reasons set forth in paragraph 15d(1) above.

(2) HF radio should be used as backup in the event of equipment failure. The conditions of paragraph 15d(2) above should also apply.

(3) VHF or UHF could also be utilized where ranges permit.

g. Aircraft Controlling from AEW aircraft.

(1) VHF and UHF should be used as the primary communications for the reason in paragraph 15c(1) above.

(2) AEW aircraft should also have the facility of broadcast control. The provisions of paragraph 15c(2) above would apply except that the AEW aircraft could not utilize a high power transmitter due to technical and installation difficulties.

h. [illegible] Telling

(1) Microwave radio should be the primary method of telling information to [illegible]'s.

(2) Microwave radio should be backed up by [illegible] telephone in the event of radio failure.

(3) [illegible] should be established as [illegible] above.

SECRET

0-375

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

i. Reporting from GOC Filter Centers:

(1) Microwave radio links should be established between filter center and ADDC.

(2) Microwave radio should be backed up by TML telephone in the event of radio failure.

j. Tactical Teletype and Crypto:

(1) Landline teletype nets should be established at all ACEW stations to pass any type of directive or classified message. All stations should be equipped with on-line cryptographic facilities.

(2) Landline teletype should be backed up by TML telephone.

The above circuitry shoud follow the standard tactical voice circuit requirements as approved by Headquarters EADF, 22 January 1952.

16. In addition to the above communications equipment, certain other types of electronic equipment, other than Air Force radar, are essential to the air defense system. These are:

IFF identification	VHF-UHF/DF
Passive Detection	Radars from other services

a. IFF identification, Mark X or better:

(1) Used by radar station to transmit and receive a signal to/from an aircraft or other object to aid in identifying the object. With use of coder head, many combinations of signals may be used, that would lessen an enemy's chance of breaking code.

b. Passive Detection:

(1) Used to intercept signals emitted by airborne, shipborne etc, radar or radio equipment. Triangulation by two or more stations permits location of object carrying radar. Primary communications by PD stations (usually located at a radar) is by microwave, backed up by TML telephone.

c. VHF-UHF/DF

(1) As an aid to the identifcation problem and to act as a homing device for our aircraft, some type of DF is essential. Triangulation by two or more stations permits location of vehicle emitting the transmitted signal.

d. Radars from other services:

(1) Upon agreement with the other services, periodic tests should be held at which time radar information is exchanged via

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ADADO 381 Subject: Air Defense Systems Plan

communication network. Radars of other services located within the overlap range of our radar stations would not be required for our use, only those radars covering areas which our radars do not cover, would be needed. In the event of failure of any of our radars, due to enemy or natural causes, use should be made of the closest radar of the other service. Close liaison would be required to work out inter-service procedures for best accomplishing the air defense of our area.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major , USAF
Adjutant General

0377

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

COPY

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/mlp

ADADO 676.3

26 Aug 1952

SUBJECT: Procedures for Coordinating Chaff Operations

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. Reference letter, your Headquarters, subject and file as above, dated 1 August 1952, and letter, Headquarters USAF, subject as above AFOOP-FL, dated 1 July 1952.

2. It is felt that the procedures outlined in above-referenced Headquarters USAF letter are hazardous to sound air defense, in that they allow an enemy a means for eluding or confusing the Air Defense System.

3. Under the outlined procedures, a formation of enemy aircraft which was able to penetrate our Air Defense perimeter without detection could, while airborne and still at low altitude, request and obtain a Stream Clearance. They could then start a chaff drop and climb, and quite effectively conceal the fact that there was a formation of aircraft climbing to bombing altitude. The information regarding the chaff drop would be given to the Air Defense System through CAA, but would be considered only a training mission.

4. It is suggested that any aircraft anticipating chaff operation file an IFR or DVFR flight plan before take off, and that no Stream Clearance be granted unless such flight plan had been filed and received. These flight plans and subsequent position reports should be passed to the Air Defense Control Center concerned by the CAA.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

0378

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

Hq 26th ADiv (Def) ADADC [illegible] Subject: Procedures for Coordinating Chaff Operations

LAOCT-A 676.3 (26 Aug 52) 1st Ind 5 Sep 1952

HQ EASTERN AIR DEFENSE FORCE, Stewart Air Force Base, Newburgh, New York

TO: Commanding General, Air Defense Command, Ent Air Force Base, Colorado Springs, Colorado

1. The basic correspondence is forwarded for your consideration.

2. This headquarters concurs in the suggestion made in paragraph 4 of the basic letter.

3. The request for "Stream Clearance" for chaff drops as outlined in letter Headquarters USAF, AFOOP-FL, Subject: Procedures for Coordinating Chaff Operations, 1 July 1952, falls in the same category as flight plans filed in the air. The air defense system is built around an acceptance of flight plans as adequate identification. As long as flight plans filed in the air are accepted and passed to the radar units, the possibility of the enemy filing a flight plan and proceeding unmolested to the target exists.

FOR THE COMMANDING GENERAL:

ROBERT J. [illegible]
Capt, USAF
Asst. Air Adj. Gen.

0379

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

HQ 26th ADiv (Def) ADADO 676.3, Subject: (Restricted) Procedures for Coordinating Chaff Operations

ADCOT-C 676.3 (26 Aug 52) 2d Ind 3 Oct 1952

HQ AIR DEFENSE COMMAND, Ent Air Force Base, Colorado Springs, Colorado

TO: Commanding General, Eastern Air Defense Force, Stewart Air Force Base, Newburgh, New York

1. The point of concern outlined in basic is well taken. The fallacy of accepting airborne flight plans for identification, either civil or military, has been recognized for some time. We have been pursuing this problem continually with compromise results as outlined in para 2 below.

2. Revised AFR 60-22, "Recognition of Military Aircraft in Certain Areas", will prohibit ADIZ penetration flight plans being filed while airborne as well as prohibiting flight plan changes while airborne to penetrate an ADIZ. CAA Part 620, "Security Control of Air Traffic", will urge civil pilots to file ADIZ penetration flight plans prior to departure. Both of these revised regulations are completely coordinated and approved. Publication is expected in the near future.

3. As an additional measure of security in connection with airborne filed flight plans, this Headquarters requested Flight Service and the CAA to include the fact that the flight plan was filed while airborne, when passed to the ADDC. Flight Service agreed to this prodedure and presumably is doing so. The CAA is holding our request in abeyance until the new Part 620 is published. In a message to the CAA, 30 September 1952, we requested immediate action on their part. It is believed that our air defense facilities may more properly evaluate track behavior if it is known that a flight plan was filed while the aircraft was airborne.

4. The USAF letter referred to in basic is considered as supplemental instructions to ADCR 50-8, "STanding Operating Procedure for ADC-ARTC ECM Training Missions", and ADCR 51-4, "Standing Operating Procedure for SAC-ADC Interceptor Bomber Training". The procedures outlined in these regulations provide for:

a. Alerting information to ADC, ADCC and interested radar installations by unit commanders of aircraft. In the case of ADC ECM aircraft, complete coordination with site commander is a prerequisite before ECM training mission can be carried out.

b. Filing of a flight plan through CAA.

c. Authentication where any doubt exists as to the identity of either party.

SECRET
SECURITY INFORMATION

0380

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECURITY INFORMATION

ADCOT-C 676.3, Subject: (Restricted) Procedures for Coordinating Chaff Operations, 2d Ind (continued)

d. Establishing communication between jamming aircraft and ADDC concerned before and during ECM mission on frequency specified in related regulations.

5. We believe that the provisions of existing regulations pertaining to ECM operations provide as much security as is possible in the interim.

6. For your information, inclosed is a CAA Circular Letter to the CAA Regions regarding the handling of ECM missions.

BY COMMAND OF GENERAL CHIDLAW:

LEWIS E. SMITH
Captain, USAF
Ass't Adj Gen

1 Incl
CAA Circular Ltr, 20 Aug 52
Subj: "Procedures for Control of Military 'Chaff' Operations"

EADOT-A 676.3 (26 Aug 52) 3d Ind 11 Oct 1952

HQ EASTERN AIR DEFENSE FORCE, Stewart Air Force Base, Newburgh, New York

TO: Commanidng General, 26th Air Division (Defense), Roslyn, New York

1 Incl
n/c

A.D.C.

0381

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

26ALADO 300.8 5 December 1952

SUBJECT: Implementation of EADF SOP 55-25

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. This headquarters is in the process of complying with the provisions of EADF SOP 55-25, 20 November 1952. However, the undersigned believes that he should indicate serious objections to the provisions of this SOP, based on a reduced Direction Center capability during an emergency. This reduction is caused by the provisions of paragraph 4 of the SOP, which requires the release of one PPI scope and one Video-Mapping unit to AAA personnel when control of antiaircraft is involved. None of the Direction centers involved have equipment assigned to the extent that will permit release of the specified items without a reduced defense potential.

2. Since the condition with regard to PPI scopes is more critical at the 770th AC&W Squadron, that particular site will be discussed. The same remarks apply to the other Direction Centers but not to the same extent because of differences in the available equipment.

a. Palermo has six PPI scopes. One of these is required to be utilized exclusively with the AN/FPS-5 height finder. Two are required for search, one long range and one short range. If the fourth one is turned over to the antiaircraft personnel, this will leave only two PPI scopes for control use in an emergency. One of these is normally located in the maintenance room and will probably have to be moved to the control room after the emergency has been declared. It is not believed that justification exists for reducing the potential of the Direction Center of the 770th AC&W Squadron as drastically as this in order to provide the AAA with one of these critically needed PPI scopes.

3. The 647th AC&W Squadron has two Video-Mapping units. Therefore, the following remarks do not apply to this Squadron, but do apply to all other Direction Centers.

a. Direction Centers are still charged with the recovery of fighters. At Dover, New Castle and Suffolk Air Force Bases there is no [illegible] available on the [illegible] control the fighters until they are turned over to the control tower. At Andrews and Pocatello GCA is available but in case of GCA failure [illegible] is needed. All of the [illegible] and GCI approaches on the [illegible]

0382

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26AAAD 300.8 Subj: Implementation of AAM SOP 55-25

b. It is believed that the artificial could use a fixed scale with a Georef grid superimposed on the PI scope to better advantage in their work than could the Direction Center utilize a similar method in solving its fighter recovery program.

4. It is recommended that the turning over of the required equipment to the AAA be made on a temporary or test basis until such time as replacement equipment has been furnished in order that the equipment may be pulled back for Direction Center use during an emergency. The exception to this will be the Video-Mapping unit at the 647th AAA Squadron, since there are two of these units assigned at that location.

R. J. MITTY
Brigadier General, USAF
Commanding

0383

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

771ST AIRCRAFT CONTROL AND WARNING SQUADRON
Fort John Custis, Cape Charles, Virginia

2 December 52

SUBJECT: Interference With Primary Radar.

TO: Commanding General,
26th Air Division (Defense)
Roslyn, N. Y.

1. The primary radar of this squadron, an AN/ FPS-3, is experiencing a severe amount of interference. This interference is of such intensity that the ability of this squadron to accomplish its mission in active air defense is seriously hampered.

2. This interference is caused by other radars and is in the form of railings, spoking, and running rabbits. The intensity approximates condition "5" most of the time and reading targets through it is exceedingly difficult, if not impossible.

3. This interference has been constantly present at all hours of the day and night for more than a year. The intensity is increasing instead of either remaining constant or diminishing.

4. Several months ago, it was suspected that this interference was caused by naval radars located at NOB Norfolk. The Chief Director of this squadron discussed this possibility with electronics officers on the Com-AirLant staff at MAS Norfolk. The senior electronics staff officer of that headquarters agreed to utilize a ferret aircraft to attempt to locate the source of interference. Three separate flights were made for this purpose by ferret aircraft of the Fleet Airborne Electronics Squadron. The results of each flight confirmed the fact that the interference originated at NOB Norfolk.

5. Several attempts have been made since these flights to resolve this problem locally. These efforts have been unsuccessful for the reason that there are too many naval radars operating on the frequency band between 1290 and 1350 mcs. There are several naval agencies at Norfolk operating radars of this type. These agencies include: The Fleet Training Center, the Naval Radar School, The Naval Air Station surveillance radar, and all aircraft carriers and most medium and large size fleet units.

6. At a conference held on 17 November 1952 at ComAirlant headquarters, staff electronicofficers were present from CincLant Fleet and ComAirLant. They agreed that the active air defense radar should have priority and that the interference should be reduced or eliminated. These officers pointed out that a large quantity of new radars in the "L" band were being delivered and that they were being installed aboard ships as rapidly as possible. This fact will undoubtedly increase the interference.

SECRET
SECURITY INFORMATION

0384

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

771st AC&W Sq, Subject; Interference from Primary Radar (cont'd)

7. As a result of this conference, it was agreed that a frequency assignment in this area might solve the problem. A specified portion of the band would be exclusively reserved for the radar at this squadron and no naval radar would use that portion of the band in this area. The naval officers stated that such a recommendation could not be promulgated by either ComairLant or CincLant Fleet. They pointed out that ships and aircraft not based in this area, enter and leave with great frequency and hence it is a matter that to be effective would require coordination and dissemination by Chief of Naval Operations. These staff officers indicated that they would endorse and concur in frequency assignment if querried by Chief of Naval Operations for their opinion and recommendations.

8. It is therefore requested that appropriate steps be taken to effect necessary coordination with Chief of Naval Operations in order that this problem is resolved.

FOR THE COMMANDING OFFICER:

DONALD A. BARROW
2nd Lt., USAF
Adjutant

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

COPY

Hq 771st AC&W Sq Subj: Interference With Primary Radar

26ADOCE 413.44 (2 Dec 52) 1st Ind NSB/amm

HEADQUARTERS, 26TH AIR DIVISION (DEFENSE), Roslyn, New York 19 Dec 52

TO: Commanding Officer, 771st AC&W Squadron, Ft. John Custis, Virginia

1. It is the desire of this headquarters to make a positive recommendation relative to action required to alleviate the conditions outlined in basic letter. Accordingly, it is desired that a series of tests be made by the 771st AC&W Squadron to determine the intensity of radiated side band frequencies of apulsed radar set in order to justify and substantiate the suggestion of frequency assignment as made in paragraph 7, basic letter.

2. This test will utilize the primary radar and available test equipment at the 771st AC&W Squadron in conjunction with one "L" band naval radar in the vicinity of Norfolk. Local coordination will be effected with the Navy to have the radar operational at the desired time. The test will be conducted in two phases as described below.

3. Phase one will attempt to measure the intensity and frequency (in terms of departure from the carrier frequency) of side bands produced by a radar operating within line of sight distance from another radar. The following procedures are recommended, although any desired alternate method to obtain the data can be employed. Any additional information that can be furnished should be included:

a. Both radar antennas should be stopped and be aimed directly at each other.

b. The FPS-3 transmitter will be turned off.

c. The LB receiver will be turned to the exact frequency of the naval radar.

d. The FPS-3 receiver will be tuned away from the operating frequency of the naval radar in 1 or 5 mc steps.

e. Record the intensity of the interfering signal at each change of receiver tuning after the receiver has been peaked for maximum response.

f. Continue the checks until the intensity of the naval signal approaches the MDS figure of the receiver.

g. As a suggested method for determining the amplitude of the interference, compare it with a pulse from the TS-419 of the same frequency and amplitude.

SECRET
SECURITY INFORMATION

0386

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

h. If time permits, data may be gathered on the upper beam also because of the difference in antenna gain and lobe pattern of the two beams.

3. Phase two will involve a determination of the band pass characteristics of the T/R cavity and will be accomplished as follows:

a. Set up the signal generator as for an MDS test.

b. Attenuate the test target to establish a 3, 6 and 10db down level on the A Scope.

c. Maximize the test signal and note the frequency.

d. Detune the signal generator in 1mc increments, maximize the signal by returning the Local Oscillator, but do not retune the T/R cavity.

e. Continue the receiver and signal generator detuning process until the amplitude of the test signal reaches the levels previously established. Record frequency at each level. This should give the band pass of the T/R cavity without involving the band pass of the IF strip.

4. Upon conclusion of the tests, the results therefrom will be forwarded to this headquarters along with the following:

a. A scope photograph taken during periods of non interference.

b. Scope photographs taken during normal interference periods as experienced at the 771st AC&W Squadron.

5. This headquarters has been informed that all naval facilities are to be non operational during the forthcoming holiday season. This will afford an excellent opportunity to obtain the desired information.

BY COMMAND OF BRIGADIER GENERAL MINTY:

E. H. GAILLOT
Major, USAF
Adjutant General

SECRET
SECURITY INFORMATION

0387

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

AIR DEFENSE COMMAND
ENT AIR FORCE BASE
COLORADO SPRINGS, COLORADO

ADOMO 320.3 7 May 1952

SUBJECT: (Unclassified) AC&W Manning and Organization

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The problem of achieving the most effective utilization of available troop spaces for the AC&W system requires immediate and thorough attention. We have a troop space ceiling which will not change, in the near future, yet individual units require additional personnel authorizations. The present method of allocating troop spaces is through use of T/O 1-2129T with a Personnel Modification List and a T/D-A. This method is satisfactory while the system is in the early stage of development. Now that we are entering the operating and consumption stage a more flexible method is required. The attached study deals thoroughly with the details of the problem and offers as a solution the conversion of T/O to Non-T/O troop spaces for the permanent AC&W system.

2. You are directed to conduct a thorough study of the manning requirements of your portion of the permanent AC&W system with the objective of determining the advisability of discontinuing the use of the current method of allocating troop spaces. For this studyuse the following criteria.

a. All consideration for manpower requirements will be based on the USAF directed method of operation:

(1) 24 hour daily radar surveillance.

(2) Performance of identification functions 24 hours daily.

(3) Performance of operational functions limited to the requirements for normal peacetime air traffic with capability for 8 hour emergency period.

b. Any calculation of personnel requirements must assume the incumbents will be of average qualification for the skill desired. The study of the problem may be conducted in any way you wish. If sufficient information is now available in your headquarters to answer the questions below no field studies are required.

3. Desire a statement be furnished this headquarters as soon as practical but not later than 9 June 1952 answering the following:

SECRET
SECURITY INFORMATION

0388

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

ADOMO 320.3 Subj: (Unclassified) AC&W Manning and Organization (cont'd)

a. Are the total military and civilian troop spaces now allotted for the AC&W system in your command enough if the authority to shift each space (within limits as discussed below) were granted your headquarters? The answer must be based on the USAF concept of operation. The total troop spaces includes all spaces allotted Hq Air Division, Ground Observer Corps and AC&W units.

b. If conversion to Table of Distribution documents seems practical what means of control do you suggest to prevent excess in any activity? One suggestion has been to establish minimum and maximum amounts for common activities requiring explanation for variations above or below the limits. For example a hypothetical case might be: for Radar Maintenance of FPS-3 with EW mission the maximum will be 10 personnel the minimum 7. The difference of 3 would permit a degree of individual expression for each unit CO yet negate empire building to a large extent. If a unit has requirements such as equipment which requires excessive maintenance, the crew could be expanded and the explanation carried on the personnel authorization documents.

c. What period of time would you require to prepare documents to support the change if adopted? Do you require 30,60,90 days or longer to prepare accurate T/D's reflecting individual unit requirements within your recommended mehtod of control?

4. One portion of the attached study poses a question pertaining to the quantity of units with GCI capability. Desire comments on this subject as soon as possible. Your study of this problem must of course be influenced by the fact that the resources of your command are limited to those now authorized and thus "desirability" must be weighed against the hard fact of whether the goal can be supported.

BY COMMAND OF GENERAL CHIDLAW:

S/
DONALD C MORRIS
Captain, USAF
Asst Adj Gen

1 Incl
Oper & Orgn of the
ADDC-AC&W Sq
sys #2-10

SECRET
SECURITY INFORMATION

0389

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

DSS/mlp

ADADC 320.3

8 July 1952

SUBJECT: AC&W Manning and Organization

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. The following comments are forwarded in accordance with letter your headquarters, EAOPR 320.3, Subject: Letter of Transmittal, 23 June 1952.

2. Reference study by Brigadier General Clinton D. Vincent, Subject: Operation and Organization of the ADC - AC&W Squadron.

This headquarters agrees that the personnel and equipment authorization of each squadron should be determined individually in view of its mission and peculiar requirements.

b. It is felt that EADF's position regarding GCI capability for all stations is correct as it effects the 26th Air Division (Defense)

3. Reference EADF letter, EAOPR 320.3, Subject: AC&W Manning and Organization, 7 June 1952, and attached study.

a. Reference paragraph 6c, it is felt that we can affort to "provide adequate manpower at critical AC&W stations to assure maximum continuous operation 24 hours a day." Our policy should, rather, provide adequate manpower at all AC&W stations to assure at least mirimum continuous oppability in all the funcations in each station, which are apt to be required at that station during the early steges of offensive action.

b. Reference the study on factors to consider in categorizing AC&W stations, it is felt that the perimiter stations are over-emphasized by the numberical rating system. These stations are given a basic credit of 10 and, in practically every case, are given the additional weights for degree of identification responsibilities and degree of normal daily penetration traffic. This will consistently reflect a greater spread between perimiter stations and all other internal stations.

c. Paragraphs 1a &b of the guide for giving weight to the factors appears to be improper. It is felt that true stations with doubtful GCI assistance or no GCI assistance should be the most heavily manned

0390

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

since, in all probability, they will have very little warning during which to augment crews on duty. Those stations that have EW assistance may receive advance information in sufficient time to augment their crews in time to be effective when action is required of them.

d. This headquarters feels that the numerical system of giving weights on which to base manning requirements does no provide an accurate evaluation of the stations in this division. It is felt that no formula will be devies which will replace individual analysis of stations. On the basis of information concerning individual stations. Outlined in letter this headquarters, subject: Air Defense Systems Plan, dated 7 July 1952, we have attempted to outline the functions nd responsibilities of individual stations. On the basis of these, we could place stations P-45, P-9, P-54 and P-56 in Class 1; P-55 and P-30 in Class 2; and P-63 in Class 3.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

since, in all probability, they will have very little warning during which to augment crews on duty. Those stations that have EW assistance may receive advance information in sufficient time to augment their crews in time to be effective when action is required of them.

d. This headquarters feels that the numerical system of giving weights on which to base manning requirements does no provide an accurate evaluation of the stations in this division. It is felt that no formula will be devies which will replace individual analysis of stations. On the basis of information concerning individual stations. Outlined in letter this headquarters, subject: Air Defense Systems Plan, dated 7 July 1952, we have attempted to outline the functions and responsibilities of individual stations. On the basis of these, we would place stations P-45, P-9, P-54 and P-56 in Class 1; P-55 and P-30 in Class 2; and P-63 in Class 3.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Major, USAF
Adjutant General

0392

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

AMW/b-s

FC&R 322

8 December 1951

SUBJECT: Aircraft Control & Warning Personnel Standards

TO: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

1. EADF General Order #32, 25 November 1950, authorizes four Controllers and four Movement and Identification Officers in each od the following Squadrons;

a. 770th AC&W Squadron

b. 771st AC&W Squadron

c. 772nd AC&W Squadron

d. 773rd AC&W Squadron

This number is considered insufficient to enable the above squadrons to perform their assigned missions. It is recommended that the four Movement and Identification Officers be replaces by four Controllers, and that eight more Controllers - a total of 16 - be authorized for these Type II installations.

2. In substantiation of the foregoing, the following is submitted;

a. There are four separate and distinct direction Center functions which must be operating at 100% efficiency in the early stages of an attack. These are:

(1) Identification

(2) Air Surveillance

(3) Radar Scope Control of Fighters and

(4) Controll room supervision including GCI and AAA facilities.

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

3. Except for the consolidation of identification and air surveillance, each function requires the personal attention of an officer. Therefore, three qualified 1C14 officers are required at all times in order to provide competent personnel capable of effecting position rotation in the Direction Center.

4. To meet this commitment 24 hours a day, 7 days a week, 12 controllers are required. This does not account for such additional duties as indoctrination courses, familiarization visits, pilot-controller cross training programs, or losses due to sicknesses, leaves, and emergencies. To provide required replacements for absenteeism resulting from the foregoing, and to provide a controller to direct all operations for shift coordination, it is recommended that the request for 16 controllers be authorized.

FOR THE COMMANDING GENERAL:

E. H. GAILLOT
Captain, USAF
Air Adjutant General

0594

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

SECRET
SECURITY INFORMATION

COPY

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

IRM/eb

26ADJA 601

15 December 1952

SUBJECT: Request for Exclusive Jurisdiction Over Lands Comprising the Aircraft Control and Warning Site near Montauk, New York.

THRU: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

THRU: Commanding General
Air Defense Command
Ent Air Force Base
Colorado Springs, Colorado

TO: Director of Installations
Headquarters, USAF
Washington 25, D. C.

1. The land comprising this station, as shown by inclosure 1, is owned in fee by the Federal Government. It was first acquired by the Army, and then transferred to the Department of the Air Force. All available information indicates that the State of New York has not ceeded exclusive political jurisdiction over this area to the Federal Government under the provisions of Title 40 United States Code, Section 255.

2. Unless exclusive jurisdiction is vested in the Federal Government pursuant to Title 40 United States Code, Section 255, state and local officials may legally request, and possibly gain, admittance to this installation when they are acting to enforce local police, fire, taxing and other regulations, thus endangering the security of the installation.

3. The nature of the mission of this installation makes the highest degree of security of paramount importance; and for this reason, it is requested that Headquarters USAF initiate action which will culminate in complete and total jurisdiction over our installation vesting in the Federal Government in accordance with Section 52, Article 4 of the New York State Law and Title 40 United States Code, Section 255.

1 Incl:
Map

R. J. MINTY
Brigadier General, USAF
Commanding

0395

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

IRM/eb

26ADDAJA 601

15 December 1952

SUBJECT: Cession of Exclusive Jurisdiction over Roslyn Air Force Base to the Air Force by the State of New York.

THRU: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

THRU: Commanding General
Air Defense Command
Ent Air Force Base
Colorado Springs, Colorado

TO: Director of Air Installations
Headquarters USAF
Washington 25, D. C.

1. The land upon which this base is situated as shown by inclosure 1, was acquired by the Federal Government by eminent Domain, 1 November 1951.

2. However, exclusive jurisdiction was not requested at this time under Title 40 United States Code, Section 255.

3. Unless total jurisdiction is vested in the Federal Government pursuant to Title 40 United States Code, Section 255, state and local officials may legally request, and possibly gain, admittance to this installation when they are acting to enforce local police, fire, taxing and other regulations, thus endangering the security of the installation.

4. The nature of the mission of the 26th Air Division makes the highest degree of security of paramount importance; and for this reason, it is requested that Headquarters USAF initiate action which will culminate in complete and total jurisdiction over our installation vesting in the Federal Government in accordance with Section 52, Article 4 of the New York State Law and Section 255 Title 40 United States Code.

1 Incl:
Map

R. J. MINTY
Brigadier General, USAF
Commanding

0396

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

IRM/eb

26ADJA 601

15 December 1952

SUBJECT: Request for Exclusive Jurisdiction Over the Lands Comprising the Aircraft Control and Warning Squadron in the Vicinity of Highlands New Jersey.

THRU: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

THRU: Commanding General
Air Defense Command
Ent Air Force Base
Colorado Springs, Colorado

TO: Director of Air Installations
Headquarters USAF
Washington 25, D. C.

1. The land upon which this base is situated, as shown by inclosure 1, was first acquired by the United States Army. At the time of acquisition, or thereafter, the Army also acquired exclusive jurisdiction over this land from the State of New Jersey. At the end of the war the land was turned over to G.S.A., the successor to the War Assets Administration; from whom the Air Force re-acquired the property.

2. The Judge Advocate Generals Department of the U. S. Army advisors to the U. S. Army Corp of Engineers, has felt in similar situations that transfer of the land from the control of the military to another branch of the government might possible have the effect of vitiating the exclusive jurisdiction previously granted.

3. Unless the Air Force has exclusive jurisdiction over this property under 40 USC 255, it will be possible for state and local officials to legally request, and possible gain, admittance to this installation when they are acting to enforce local police, fire, taxing, and other regulations, thus endangering the security of the installation.

4. The nature of the mission of this installation makes the highest degree of security of paramount importance; and for this reason it is requested that Headquarters USAF initiate action which will culminate in the revesting in the Federal Government, of complete and total jurisdiction over this installation, in accordance with Section 255, Title 40 USC and appropriate state laws.

1 Incl:
Map

SECRET
[illegible]
Brigadier General, USAF
Commanding

0397

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

C
O
P
Y

SECRET
SECURITY INFORMATION

HEADQUARTERS
26TH AIR DIVISION (DEFENSE)
ROSLYN, NEW YORK

IRM/bg

26ADaJA 601

15 December 1952

SUBJECT: Request for exclusive jurisdiction over lands comprising part of this Aircraft Control and Warning Site in the vicinity of Fort John Custis

THRU: Commanding General
Eastern Air Defense Force
Stewart Air Force Base
Newburgh, New York

THRU: Commanding General
Air Defense Command
Ent Air Force Base
Colorado Springs, Colorado

TO: Director of Air Installations
Headquarters USAF
Washington 25, D. C.

1. The Air Force Aircraft Control and Warning site at Fort John Custis, as shown by inclosure #1., is composed of five tracts of land; see W.D.O.C.E. Map, Fort John Custis, M.A.D. 57, dated 16 August 1944 on file in the Washington District office of the United States Army Corp of Engineers. These tracts are denomirated as 3, 9, 13, 14, and are owned in fee by the Federal Government.

2. The map attached to the deed of cession from the Commonwealth of Virginia to the Federal Government dated 4 May 1943 on file in the above mentioned office seems to show that the Commonwealth of Virginia has ceeded exclusive political jurisdiction over all of the subject site to the Federal Government with the exception of Tract 9.

3. However, as is shown on inclosure #1., part of the transmitter building, a considerable part of the man-proof fence, and a part of the across road are upon this tract.

4. Unless total jurisdiction is vented in the Federal Government persuant to Title 40, United States code, Section 253, state as local officials may legally request, and possibly gain, admittance to this part of the installation when they are acting to enforce local police, fire, taxing, and other regulations; and wince admittance to this part of the installation would put them within the man-proof fence and possibly within the transmitter building, the security of the installation would be endangered.

5. The nature of the mission of this installation makes the highest degree of security of paramount importance; and for this reason it is requested that Headquarters USAF initiate action which will culminate in a vesting of complete and total jurisdiction over this installation in the Federal Government, in accordance with Section 255, Title 40, United States Code, and the appropriate state laws.

1 Incl:
Map

SECRET
SECURITY INFORMATION

R. J. MINTY
Brigadier General, USAF
Commanding

0398

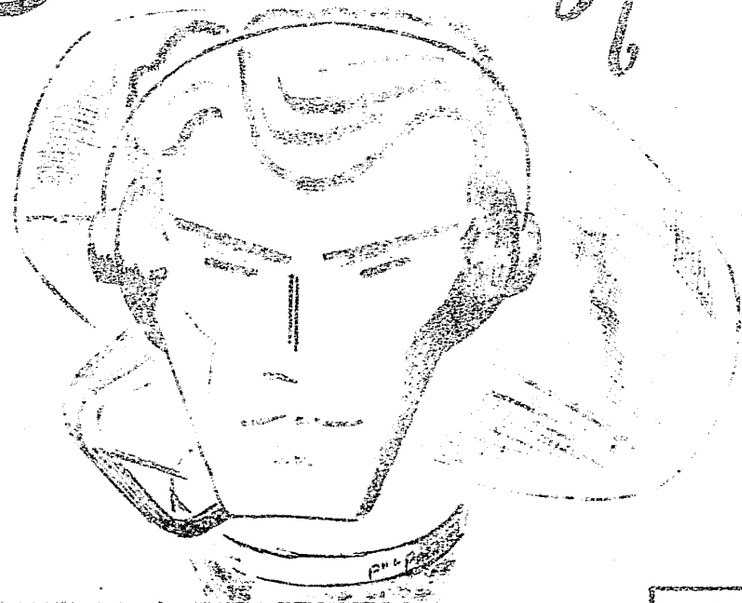
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

Office of the Comptroller

Statistical Review



26th AIR DIVISION (DEFENSE

ROSLYN, N.Y.

RESTRICTED

0399

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

26TH AIR DIVISION (DEFENSE)
STATISTICAL REVIEW
AUGUST 1952

I N D E X

Index. 1
Introduction 2
Roster of Unit Commanders (26th Air Division) 3
Roster of Unit Commanders (4670th GOS) 4
Percent of Authorized Officers Assigned 5
Percent of Authorized Airmen Assigned 6
Trend of Estimated TDY Travel Cost by Staff Sections 7
Trend of Estimated TDY Travel Cost by Staff Sections 8
Trend of Estimated TDY Travel Cost by Squadron 9
Trend of Estimated TDY Travel Cost by Squadron 10
Summary Courts Martial Data 11
AWOL Statistics 12
Status of Squadron Reporting 13
Status of Reporting by Squadron 14
Status of Squadron Reporting (646th) 15
Status of Squadron Reporting (647th) 16
Status of Squadron Reporting (648th) 17
Status of Squadron Reporting (770th) 18
Status of Squadron Reporting (771st) 19
Status of Squadron Reporting (772nd) 20
Status of Squadron Reporting (773rd) 21
Trend of Miles Traveled by Squadron 22
Trend of Miles Traveled by Squadron 23
Motor Vehicle Accident Rate by Squadron 24
Motor Vehicle Accident Rate (26th Air Division) 25
Total Ground Accident Rate 26

R E S T R I C T E D

0400

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

26TH AIR DIVISION (DEFENSE)

STATISTICAL REVIEW

INTRODUCTION

This Statistical Review is published monthly in order to provide the commanding officers, within this command, information and statistics pertaining to divisional activities.

The efficient use of the graphs and analysis presented herein should serve as a guide to the units and/or activities and indicate when further investigations and corrective actions may result in better programing for the achievement of the mission.

It is requested that comments and suggestions for improvements and/or additions to this review be addressed to:

COMMANDING GENERAL
26th Air Division (Def)
Attn: Comptroller
Roslyn, New York

0401

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF DETACHMENT COMMANDERS
4670TH GROUND OBSERVER SQUADRON
as of 31 August 1952

DETACHMENT AND LOCATION	NAME	RANK	SERIAL NUMBER
Headquarters Detachment Roslyn, New York	MAURICE A BRONER	Lt Col	AO 361879
Detachment #1 New Haven, Conn	RICHARD J CURTIS	Major	AO 559711
Detachment #2 White Plains, New York	FREDERICK B JOHNSON	Major	AO 661102
Detachment #3 Trenton, N. J.	NORRIS L. FARRINGTON	Major	AO 857601
Detachment #4 Harrisburg, Pa	CYRUS GRAYSON	Major	AO 854001
Detachment #5 Pittsburgh, Pa	JEROME G SCHWEICKERT	Major	AO 1703085
Detachment #6 Baltimore, Md	JOSEPH CHAZEN	Captain	AO 1635688
Detachment #7 Richmond, Va	FRANCIS M VAUGHAN	Major	AO 376238
Detachment #8 Roanoke, Va	GEORGE T BOOTHE JR	Captain	AO 697536

R E S T R I C T E D

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF UNIT COMMANDERS
26TH AIR DIVISION (DEF)
As of 31 August 1952

UNIT AND STATION	NAME	RANK	SERIAL NUMBER
26th Air Division (Def) Roslyn, New York	RUSSELL J. MINTY	Brig. Gen	224A
Hqs Squadron Section Roslyn, New York	GENE B. GROVE	Major	AO 854343
646th AC&W Squadron Highlands, New Jersey	LESTER B. GOLDBERG	Major	AO 563118
647th AC&W Squadron Manassas, Virginia	WILLIAM A. CROMARTIE	Major	AO 441303
648th AC&W Squadron Benton, Pennsylvania	EDWARD D. GILLESPIE	Major	AO 792360
770th AC&W Squadron Palermo, New Jersey	WILLIAM H. SHEPPARD	Major	AO 667860
771st AC&W Squadron Ft. Custis, Va.,	EZRA BALLARD JR	Major	AO 689733
772nd AC&W Squadron Claysburg, Pennsylvania	WILLIAM M. PRULL	Major	AO 580424
773rd AC&W Squadron Montauk, New York	MARTIN P. ALGER	Major	AO 433632
11th WAF Squadron Roslyn, N. Y.	HELEN M. LEWIS	2nd Lt	AL 2236597
4670th Grd Obs Squadron Roslyn, New York	MAURICE A. BRONER	Lt Col	AO 361879

R E S T R I C T E D

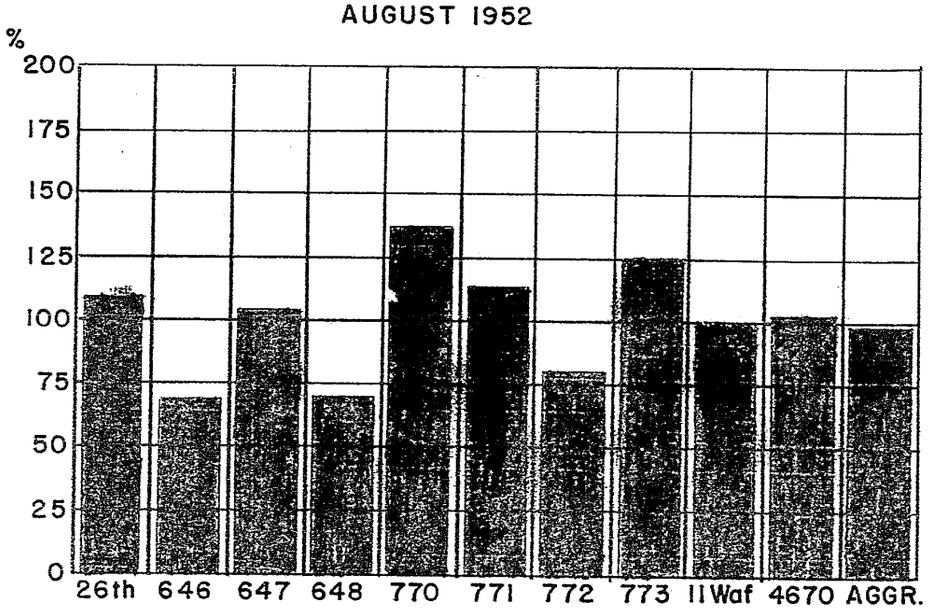
0403

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED OFFICERS ASSIGNED
26TH AIR DIVISION (DEFENSE)
AUGUST 1952



AUTH	79	33	16	34	16	16	16	16	1	43	270
ASGD	87	23	17	24	22	18	13	20	1	44	269
% AUTH/ASGD	110.1	69.7	105.6	70.6	137.5	112.5	81.2	125.0	100.0	102.3	99.6

SOURCE: AF-PI MORNING REPORTS

PREPARED BY: STAT. SV. 26 AD

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

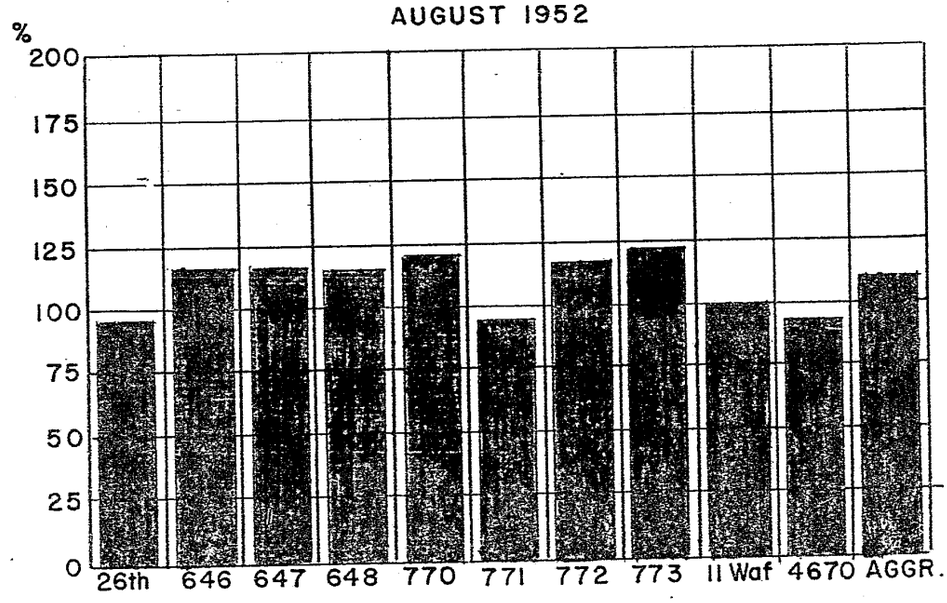
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED AIRMEN ASSIGNED

26 TH AIR DIVISION (DEFENSE)

AUGUST 1952



AUTH	388	261	179	270	179	179	179	179	3	84	1901
ASGD	375	307	211	315	225	167	212	220	3	78	2113
% AUTH/ASGD	96.6	117.2	117.8	116.6	120.1	93.9	118.4	122.9	100.0	92.8	111.1

SOURCE: AF-PI MORNING REPORTS

PREPARED BY: STAT. SV. 26 AD

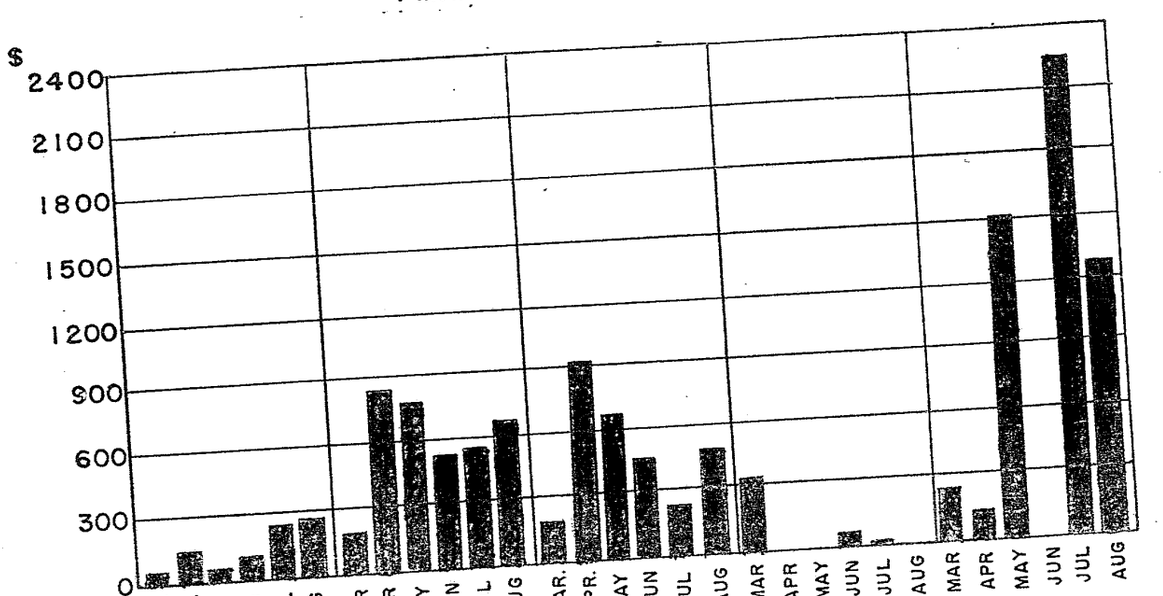
RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 MAR. THRU 31 AUG. 1952



RESTRICTED

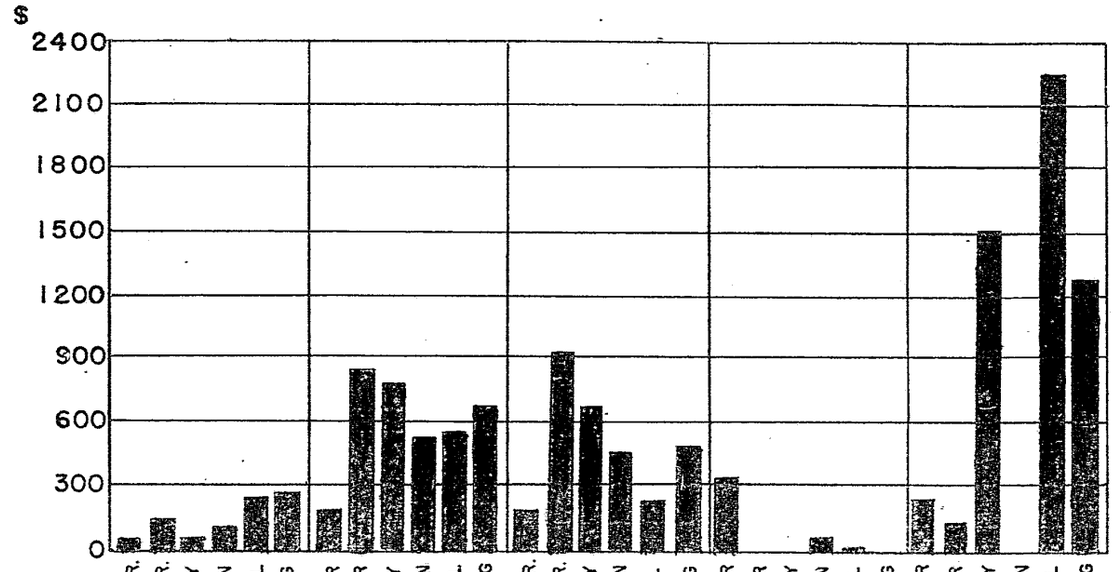
0406

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 MAR. THRU 31 AUG. 1952



COMMAND		D/P		D/M		J/A		A/S	
MAR.	18	MAR.	235	MAR.	245	MAR.	328	MAR.	275
APR.	144	APR.	864	APR.	905	APR.	0	APR.	125
MAY	18	MAY	791	MAY	700	MAY	0	MAY	1503
JUN	111	JUN	524	JUN	481	JUN	55	JUN	0
JUL	272	JUL	556	JUL	262	JUL	23	JUL	2261
AUG	285	AUG	679	AUG	482	AUG	0	AUG	1274

7

RESTRICTED

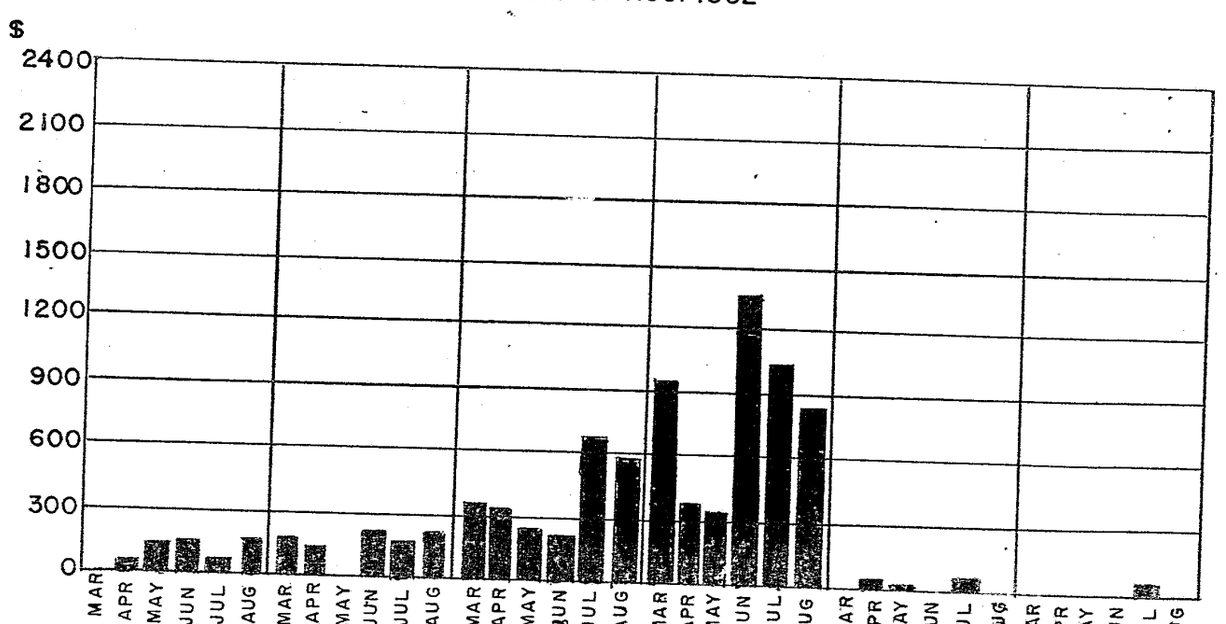
0407

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 MAR. THRU 31 AUG. 1952



COMP		CHAP		IG-PM		D/O		HSS		A/G	
MAR	0	MAR	189	MAR	411	MAR	919	MAR	0	MAR	0
APR	40	APR	152	APR	370	APR	357	APR	23	APR	0
MAY	99	MAY	0	MAY	288	MAY	334	MAY	18	MAY	0
JUN	114	JUN	168	JUN	238	JUN	1339	JUN	0	JUN	0
JUL	77	JUL	187	JUL	692	JUL	1112	JUL	37	JUL	28
AUG	169	AUG	211	AUG	591	AUG	834	AUG	0	AUG	0

8

RESTRICTED

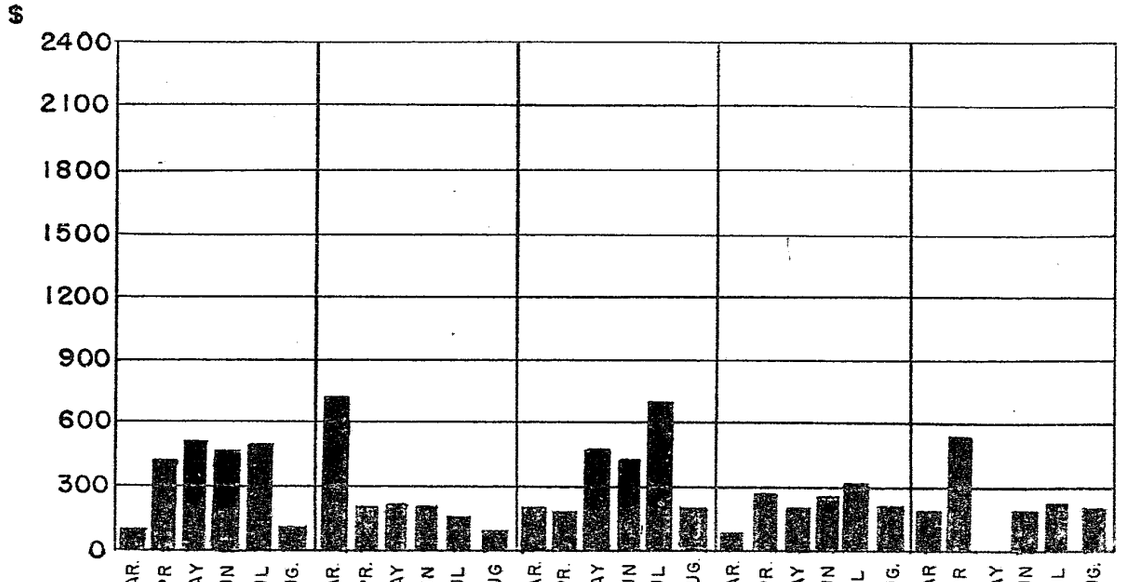
0408

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY BY SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEF.)
1 MAR. THRU 31 AUG.



646		647		648		770		771	
MAR.	91	MAR.	740	MAR.	222	MAR.	62	MAR.	192
APR	422	APR.	247	APR.	218	APR	270	APR.	557
MAY	528	MAY	258	MAY	491	MAY	212	MAY	0
JUN	499	JUN	255	JUN	439	JUN	268	JUN	216
JUL	512	JUL	175	JUL	712	JUL	305	JUL	247
AUG	106	AUG	87	AUG	198	AUG	213	AUG	203

RESTRICTED

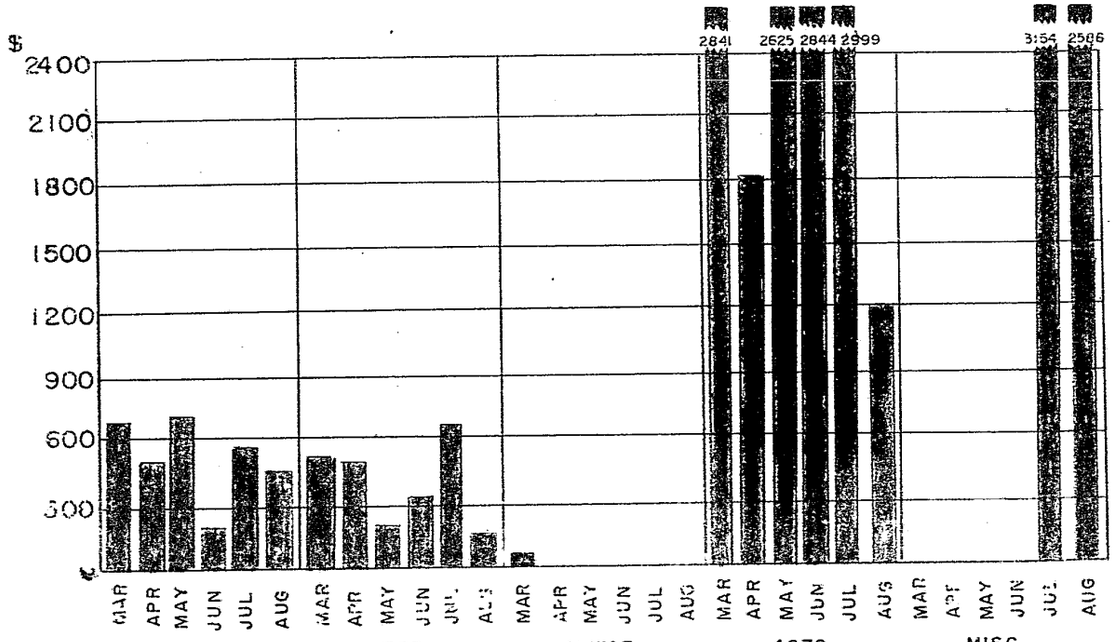
0409

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY COST BY SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEFENSE)
1 MAR. THRU 31 AUG. 1952



772		773		1 WAF		4670		MISC	
MAR	692	MAR	558	MAR	30	MAR	2841	MAR.	0
APR	504	APR	546	APR	0	APR.	1806	APR	0
MAY	741	MAY	222	MAY	0	MAY	2625	MAY	0
JUN	253	JUN	341	JUN	0	JUN	2844	JUN	0
JUL	581	JUL	670	JUL	0	JUL	2999	JUL	3154
AUG	470	AUG	153	AUG	0	AUG	1200	AUG	2586

RESTRICTED

0410

THIS PAGE DECLASSIFIED IAW EO 13526

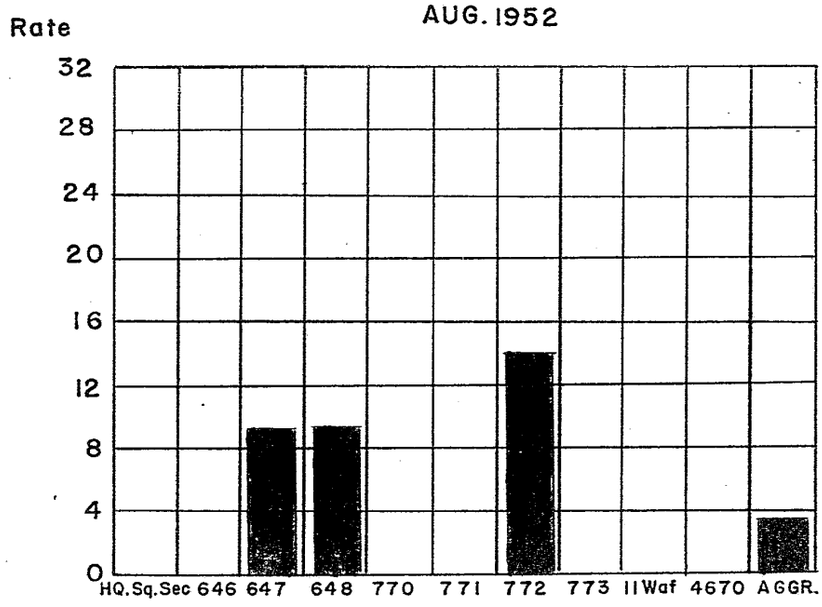
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

SUMMARY COURTS MARTIAL DATA

26th AIR DIVISION (DEFENSE)

AUG. 1952



	HQ.Sq.Sec	646	647	648	770	771	772	773	IIWaf	4670	AGGR.
CASES	0	0	2	3	0	0	3	0	0	0	8
RATE	0	0	9.4	9.5	0	0	14.1	0	0	0	3.7

PREPARED BY: STAT. SV 26 AD

$$\frac{\text{NO. CASES X 1000}}{\text{AVERAGE STRENGTH}} = \text{RATE per 1000 AMN.}$$

RESTRICTED

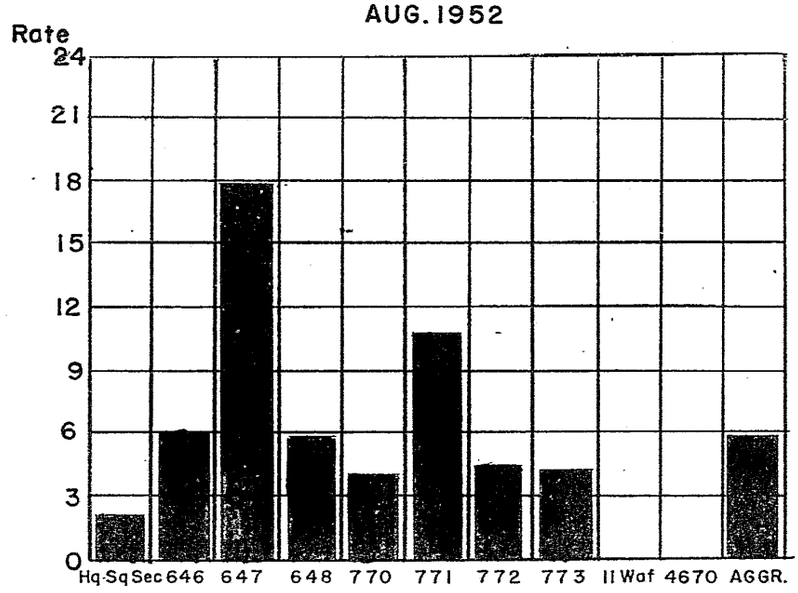
0411

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

AWOL STATISTICS
26TH AIR DIVISION (DEFENSE)
AUG. 1952



AWOL	1	2	4	2	1	2	1	1	0	0	14
RATE	2.1	6.0	17.9	5.8	4.0	10.8	4.4	4.1	0	0	5.8

SOURCE: APM RECORDS PREPARED BY: STAT. SV 26AD

$$\frac{\text{NO. AWOL} \times 1000}{\text{AVERAGE STRENGTH}} = \text{RATE per 1000}$$

12

RESTRICTED

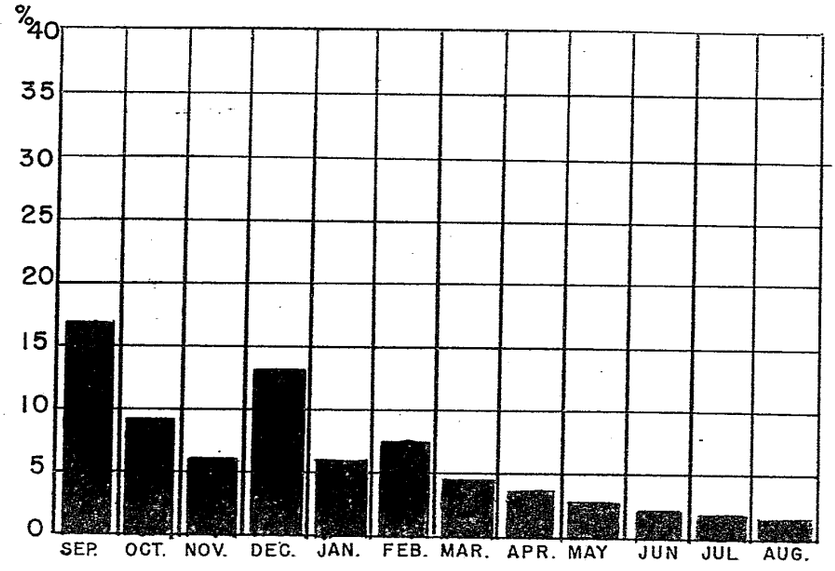
0412

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
26TH AIR DIVISION (DEFENSE)
1951-1952



	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.
REPTS. SUBMD	435	435	335	453	310	250	360	312	314	409	305	294
REPTS. LATE	74	39	20	61	19	18	17	12	10	9	6	5
% LATE	17	9	6	13	6.1	7.2	4.7	3.8	3.1	2.2	1.9	1.6

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV. 26AD

RESTRICTED

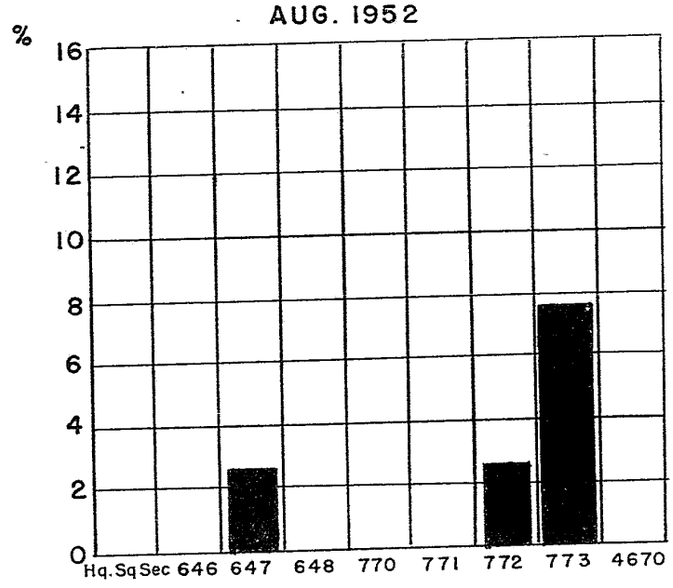
0413

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF REPORTS BY SQUADRON
26TH AIR DIVISION (DEFENSE)
AUG. 1952



	Hq. Sq Sec	646	647	648	770	771	772	773	4670
REPTS. SUBMD	16	39	39	40	37	39	39	39	6
REPTS. LATE	0	0	1	0	0	0	1	3	0
% LATE	0	0	2.5	0	0	0	2.5	7.6	0

RESTRICTED

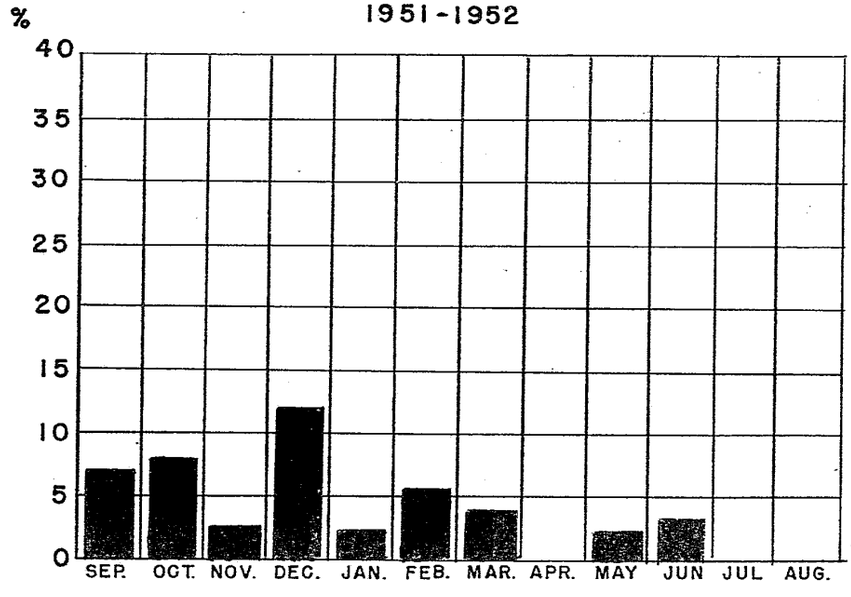
0414

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
646th AC & W SQUADRON
1951-1952



	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.
REPTS SUBMD	57	49	38	51	39	36	52	44	45	55	41	39
REPTS LATE	4	4	1	6	1	2	2	0	1	2	0	0
% LATE	7.0	8.1	2.6	11.8	2.6	5.5	3.8	0	2.2	3.5	0	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SVC 26AD

15

RESTRICTED

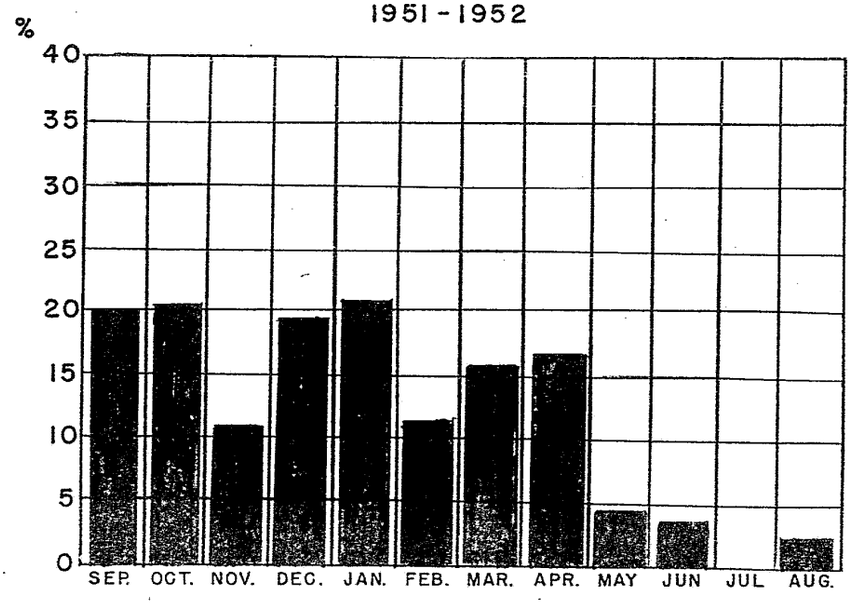
0415

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
647th AC & W SQUADRON
1951 - 1952



	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.
REPTS. SUBMD	50	44	37	51	38	35	51	43	46	55	41	39
REPTS. LATE	10	9	4	10	4	4	8	7	2	2	0	1
% LATE	20.0	20.4	10.8	19.6	21.0	11.4	15.7	16.8	4.3	3.5	0	2.5

SOURCE: SUSPENSE CARDS · PREPARED BY: STAT SV 26 AD

RESTRICTED

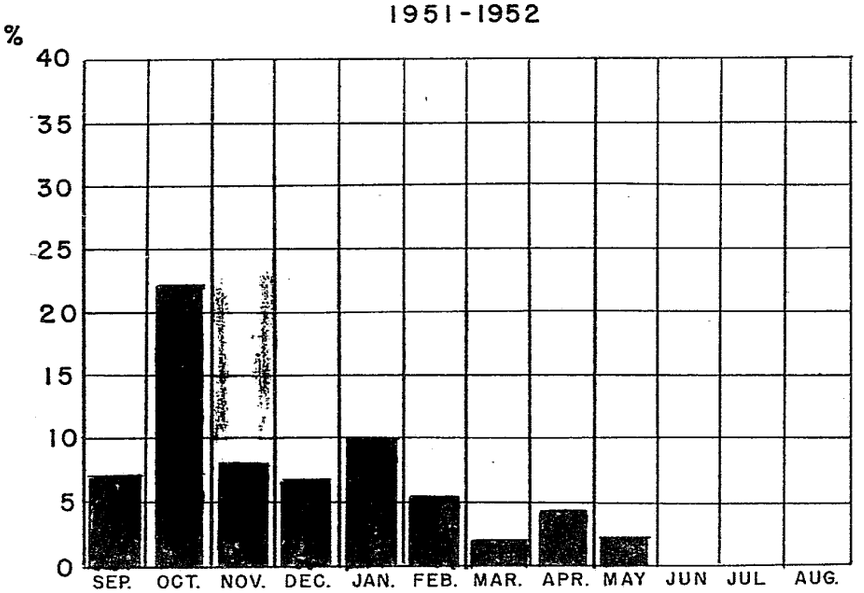
0416

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
648th A C & W SQUADRON
1951-1952



	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.
REPTS. SUBMD	57	50	38	52	40	36	51	44	45	56	41	40
REPTS. LATE	4	11	3	4	4	2	1	2	1	0	0	0
% LATE	7.0	22.0	7.9	7.7	10.0	5.5	1.9	4.5	2.2	0	0	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SV 26AD

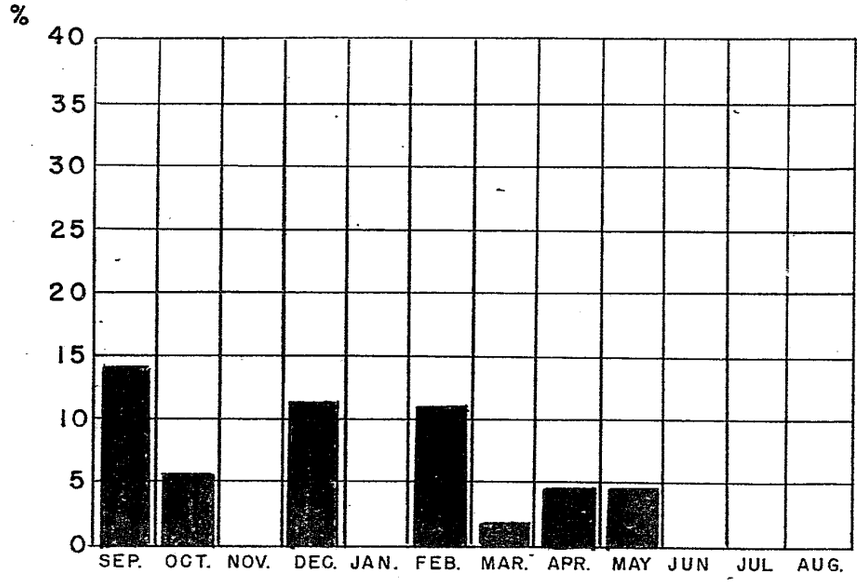
0417

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
770th AC & W SQUADRON
1951 - 1952



	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.
REPTS SUBMD	56	51	39	52	39	35	51	44	44	54	39	37
REPTS LATE	8	3	0	6	0	4	1	2	2	0	0	0
% LATE	14.3	5.8	0	11.5	0	11.4	1.9	4.5	4.5	0	0	0

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV 26 AD

RESTRICTED

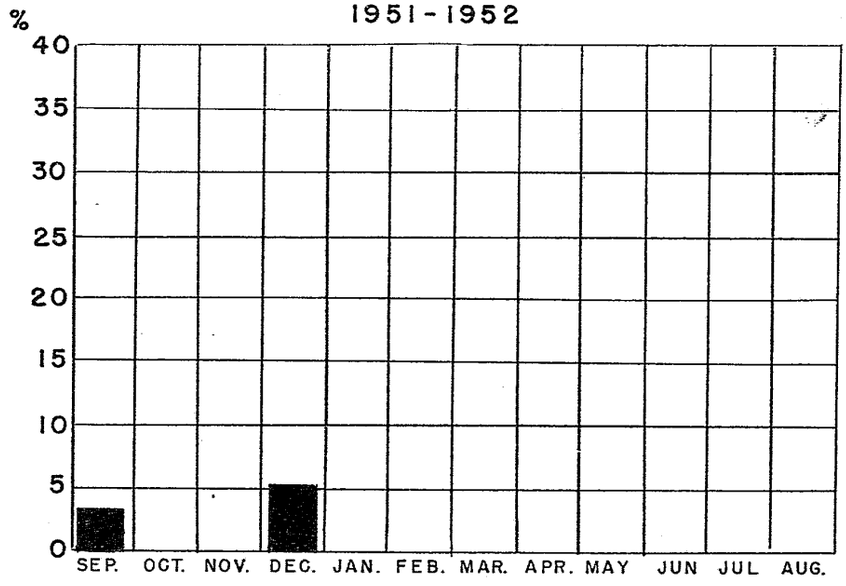
0418

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICT D

STATUS OF SQUADRON REPORTING
771st A C & W SQUADRON
1951 - 1952



REPTS SUBMD	58	53	38	55	40	32	52	45	44	55	39	39
REPTS LATE	2	0	0	3	0	0	0	0	0	0	0	0
% LATE	3.4	0	0	5.5	0	0	0	0	0	0	0	0

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV. 26 AD

RESTRICTED

0419

THIS PAGE DECLASSIFIED IAW EO 13526

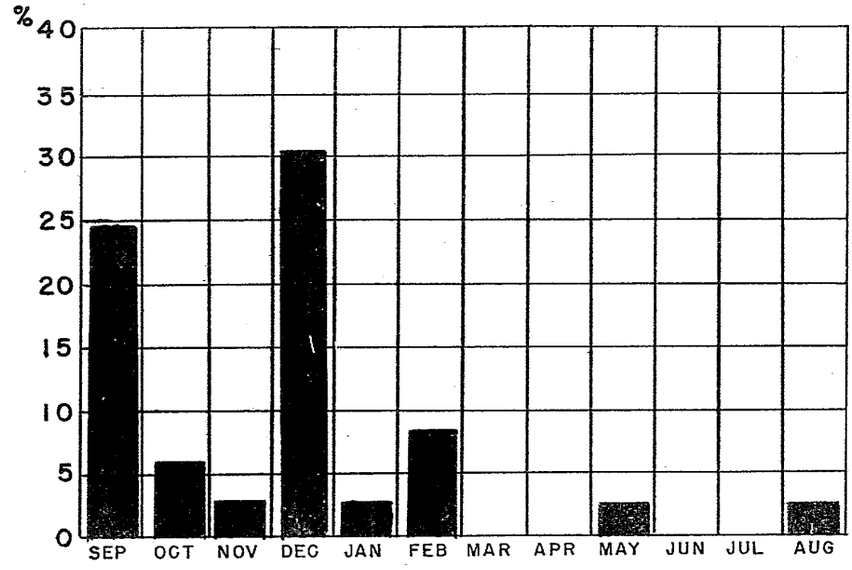
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

772nd AC & W SQUADRON

1951-1952



	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
REPTS. SUBMD	57	52	38	53	40	36	51	45	45	57	40	39
REPTS. LATE	14	3	1	16	1	3	0	0	1	0	0	1
% LATE	24.5	5.7	2.6	30.2	2.5	8.3	0	0	2.2	0	0	2.5

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV. 26 AD

RESTRICTED

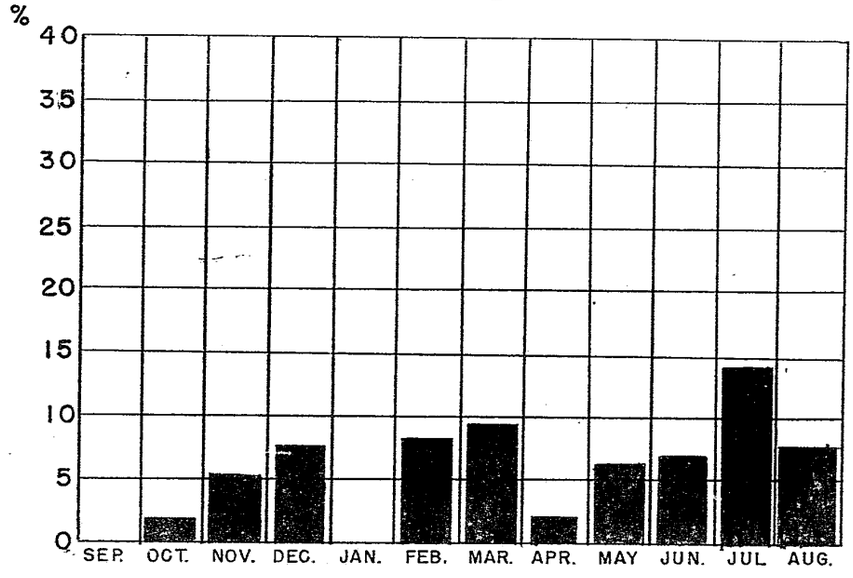
0420

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
773rd A C & W SQUADRON
1951-1952



REPTS. SUBMD	58	51	39	53	39	36	52	47	45	56	41	39
REPTS. LATE	0	1	2	4	0	3	5	1	3	4	6	3
% LATE	0	1.9	5.1	7.5	0	8.3	9.6	2.1	6.6	7.1	14.6	7.6

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

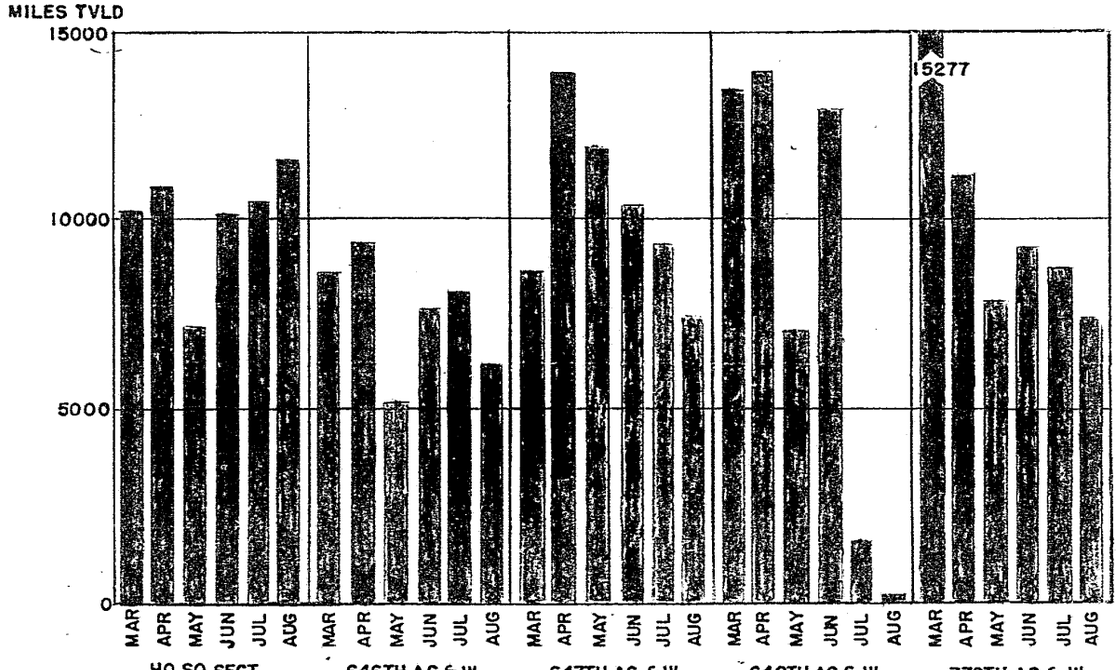
0421

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MILES TRAVELED BY SQUADRONS
26TH AIR DIVISION (DEFENSE)
1 MAR THRU 31 AUG 1952



HQ SQ SECT		646TH AC & W		647TH AC & W		648TH AC & W		770TH AC & W	
MAR	10141	MAR	8391	MAR	8405	MAR	13267	MAR	15277
APR	13449	APR	9136	APR	13651	APR	13651	APR	11231
MAY	7740	MAY	5048	MAY	11917	MAY	7615	MAY	7887
JUN	10003	JUN	7318	JUN	10309	JUN	12310	JUN	9277
JUL	12250	JUL	7964	JUL	9291	JUL	1195	JUL	8506
AUG	10984	AUG	6068	AUG	7172	AUG	11565	AUG	7250

RESTRICTED

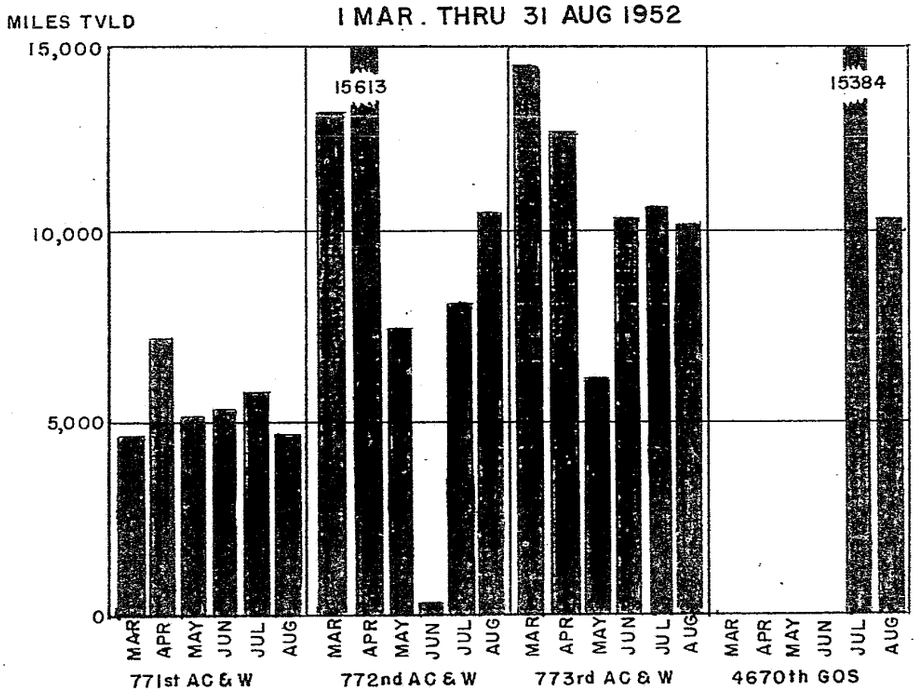
0422

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MILES TRAVELED BY SQUADRON
26TH AIR DIVISION (DEFENSE)
1 MAR. THRU 31 AUG 1952



771st AC & W		772nd AC & W		773rd AC & W		4670th GOS	
MAR	4780	MAR	13450	MAR	14843	*MAR	0
APR	7414	APR	15613	APR	12948	APR	0
MAY	5535	MAY	7493	MAY	6737	MAY	0
JUN	5553	JUN	1137	JUN	10299	JUN	0
JUL	6503	JUL	8024	JUL	10444	JUL	15384
AUG	4852	AUG	10493	AUG	10149	AUG	10185

*MAR. THRU JUN REPT AS AGGR FIGURE UNDER HQ. SQ. SECT.

RESTRICTED

0423

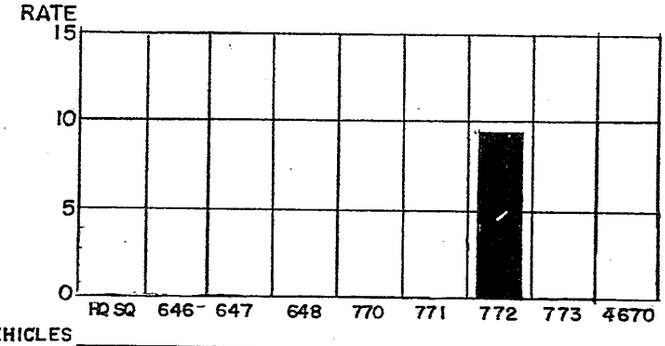
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE BY SQUADRON 26TH AIR DIVISION(DEFENSE)

AUG 1952



MOTOR VEHICLES

	RQ SQ	646	647	648	770	771	772	773	4670
NO. ACCDS	0	0	0	0	0	0	1	0	0
MI TVLD	10,984	6,068	7,172	11,565	7,250	4,852	10,493	10,149	10,185
DAYS O/SV	0	0	0	0	0	0	SALV	0	0

TOTAL NO. GRD ACCDS.

ON DUTY	1	0	8	7	0	2	5	11	0
OFF DUTY	1	0	0	2	1	0	1	0	0
MAN DAYS LOST	0	0	0	16	0	0	36	0	0

SOURCE AF FORM 122A PREPARED BY STAT SV 26 AD

$$\frac{\text{NO ACCDS} \times 100{,}000}{\text{MI TVLD}} = \text{RATE PER 100,000 MI.}$$

24

RESTRICTED

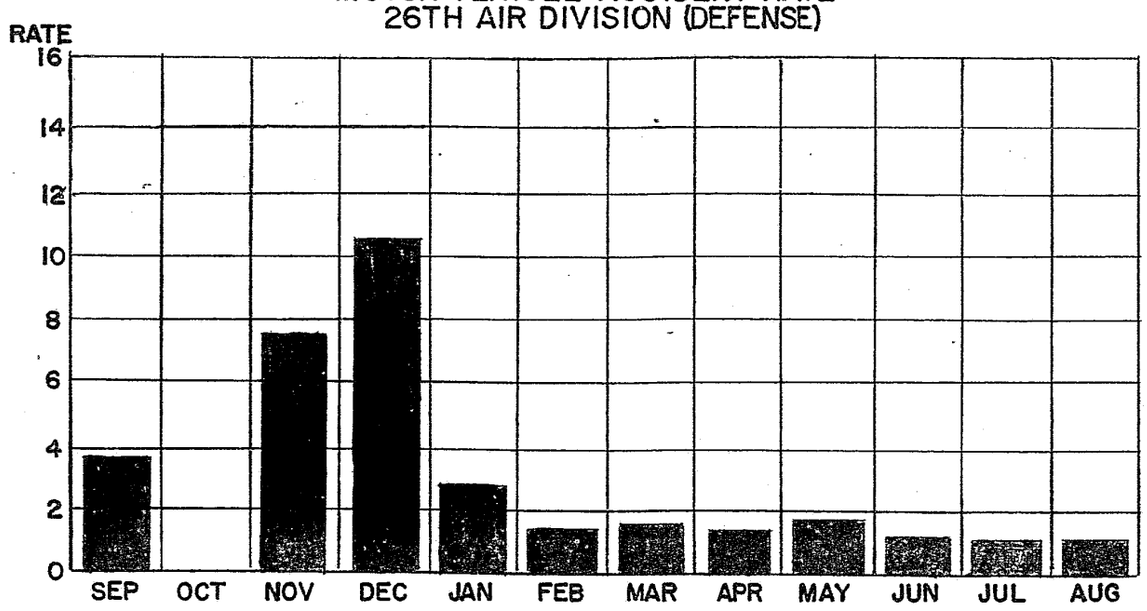
0426

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE
26TH AIR DIVISION (DEFENSE)



	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
NO. ACCDS.	3	0	7	10	2	1	1	1	1	1	1	1
MI. TVL'D.	76477	107054	95443	90566	81545	94282	88554	95160	59972	66206	79561	78718
DAYS O/SV	0	0	10	69	8	16	0	1	0	14	1/2	SALVAGED

SOURCE AF FORM 122A

PREPARED BY STAT SV 26AD

$$\frac{\text{NO. ACCDS. X 100,000}}{\text{MILES TRAVELED}} = \text{RATE PER 100,000 MI.}$$

25

RESTRICTED

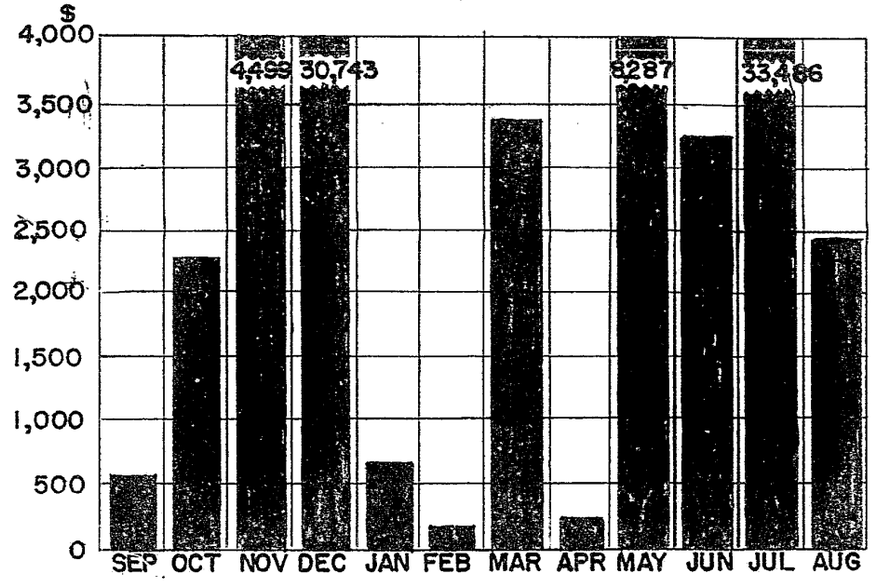
0425

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TOTAL GROUND ACCIDENT COSTS
26TH AIR DIVISION (DEF.)
1951-1952



COSTS $	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
	529	2263	4499	30743	630	183	3384	195	8287	3217	33486	2475

SOURCE: AF FORM 122A PREPARED BY: STAT SV 26AD

RESTRICTED

0426

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

Office of the Comptroller

Statistical Review

20th AIR DIVISION (DEFENSE)

ROSLYN, N.Y.

30 SEP

RESTRICTED

0427

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

INDEX

Trend of Estimated TDY Travel Cost by Staff Sections 8
Trend of Estimated TDY Travel Cost by Squadron 9
Trend of Estimated TDY Travel Cost by Squadron 10
Summary Courts Martial Data 13
AWOL Statistics 14
Status of Squadron Reporting 15
Status of Reporting by Squadron 16
Status of Squadron Reporting (344th) 17
Status of Squadron Reporting (345th) 18
Status of Squadron Reporting (346th) 19
Status of Squadron Reporting (770th) 20
Status of Squadron Reporting (771st) 21
Status of Squadron Reporting (772nd) 22
Status of Squadron Reporting (773rd) 23
Trend of Miles Traveled by Squadron 24
Trend of Miles Traveled by Squadron 25
Motor Vehicle Accident Rate by Squadron 26
Motor Vehicle Accident Rate (24th Air Division) 27
Total Guam Accident Cost 28

RESTRICTED

0428

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26TH AIR DIVISION (DEFENSE)

STATISTICAL REVIEW

INTRODUCTION

This Statistical Review is published monthly in order to provide the commanding officers within this command, information and statistics pertaining to divisional activities.

The efficient use of the graphs and analysis presented herein should serve as a guide to the units and/or activities and indicate when further investigations and corrective action may result in better programming for the achievement of the mission.

It is requested that comments and suggestions for improvements and/or additions to this review be addressed to:

COMMANDING GENERAL
26th Air Division (Defense)
ATTN: Comptroller
Roslyn, New York

0429

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

ROSTER OF UNIT COMMANDERS
26TH AIR DIVISION (DEF)
As of 30 September 1952

UNIT AND STATION	NAME	RANK	SERIAL NUMBER
26th Air Division (Def) Roslyn, New York	RUSSELL J. MINTY	Brig. Gen	224A
Hqs Squadron Section Roslyn, New York	GENE B. GROVE	Major	AO 854343
646th AC&W Squadron Highlands, New Jersey	LESTER B. GOLDBERG	Major	AO 563118
647th AC&W Squadron Manassas, Virginia	WILLIAM A. CROMARTIE	Major	AO 442303
648th AC&W Squadron Benton, Pennsylvania	EDWARD D. GILLESPIE	Major	AO 792360
770th AC&W Squadron Palermo, New Jersey	WILLIAM H. SHEPPARD	Major	AO 667860
771st AC&W Squadron Ft. Custis, Va.,	EZRA BALLARD JR	Major	AO 689733
772nd AC&W Squadron Claysburg, Pennsylvania	WILLIAM M. PRULL	Major	AO 580424
773rd AC&W Squadron Montauk, New York	ALFRED P. OSTRANDER	Major	AO 692186
11th WAF Squadron Roslyn, N.Y.	HELEN M. LEWIS	2nd Lt	AL 2236597
4670th Grd Obs Squadron Roslyn, New York	MAURICE A. BRONER	Lt Col	AO 361879

0430

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF DETACHMENT COMMANDERS
4670TH GROUND OBSERVER SQUADRON
as of 30 September 1952

DETACHMENT AND LOCATION	NAME	RANK	SERIAL NUMBER
Detachment #1 New Haven, Conn	JOSEPH D. McFADDEN	Captain	AO 572590
Detachment #2 White Plains, New York	FREDERICK B JOHNSON	Major	AO 661102
Detachment #3 Trenton, N.J.	NORRIS L. FARRINGTON	Major	AO 857601
Detachment #4 Harrisburg,Pa	CYRUS GRAYSON	Major	AO 851001
Detachment #5 Pittsburgh, Pa	JEROME C SCHWEICKERT	Major	AO 1703085
Detachment #7 Baltimore, Md	RICHARD J CURTIS	Major	AO 559711
Detachment #7 Richmond, Va.,	FRANCIS M VAUGHAN	Major	AO 376238
Detachment #8 Roanoke, Va	GEORGE T. BOOTHE JR	Captain	AO 697536

R E S T R I C T E D

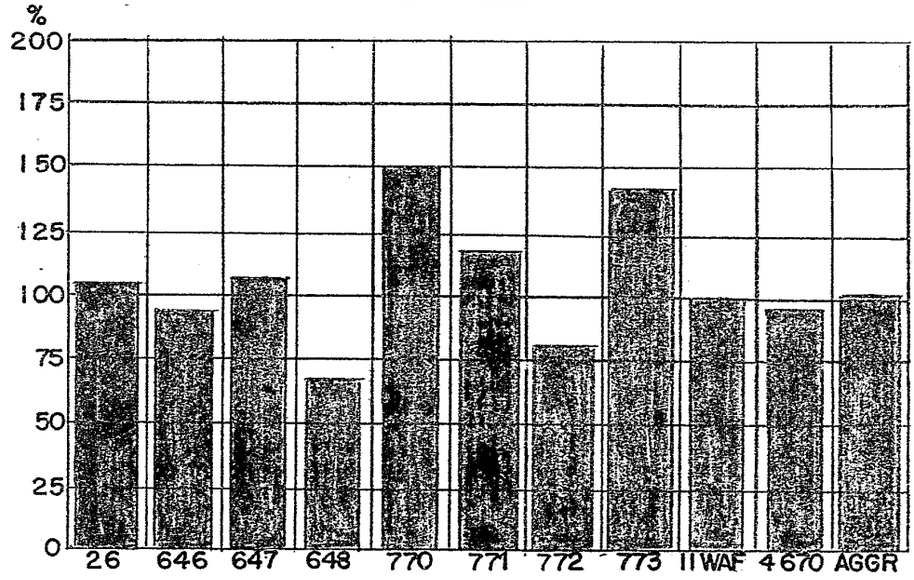
0431

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED OFFICERS ASSIGNED
26TH AIR DIVISION (DEFENSE)
SEPT. 1952



	26	646	647	648	770	771	772	773	IIWAF	4670	AGGR
AUTH	79	33	16	34	16	16	16	16	1	43	270
ASGD	83	31	17	23	24	19	13	23	1	41	275
AUTH/ASGD	105.1	90.8	106.2	67.5	150.0	118.7	81.2	143.7	100.0	95.3	101.8

SOURCE: AF-PI MORNING REPORTS PREPARED BY STAT SV 26AD

5

RESTRICTED

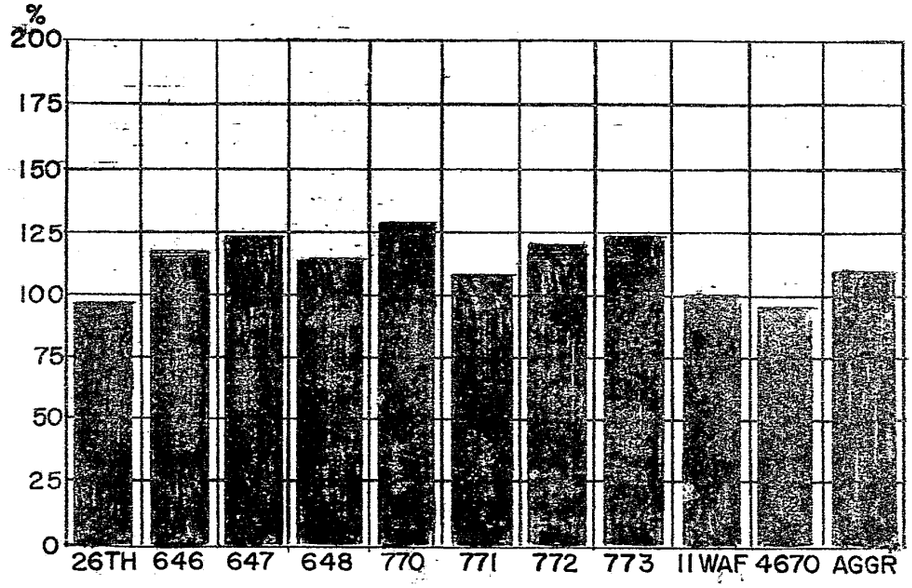
0432

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED AIRMEN ASSIGNED
26TH AIR DIVISION (DEFENSE)
SEPTEMBER 1952



	26TH	646	647	648	770	771	772	773	11WAF	4670	AGGR
AUTH	388	261	179	270	179	179	179	179	3	84	1901
ASGD	365	309	222	312	227	199	218	222	3	77	2154
%AUTH/ASGD	94.1	118.3	124.0	115.5	126.8	111.1	121.2	124.0	100.0	91.6	112.7

SOURCE: AF-PI MORNING REPORTS PREPARED BY: STAT SV 26TH AD

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

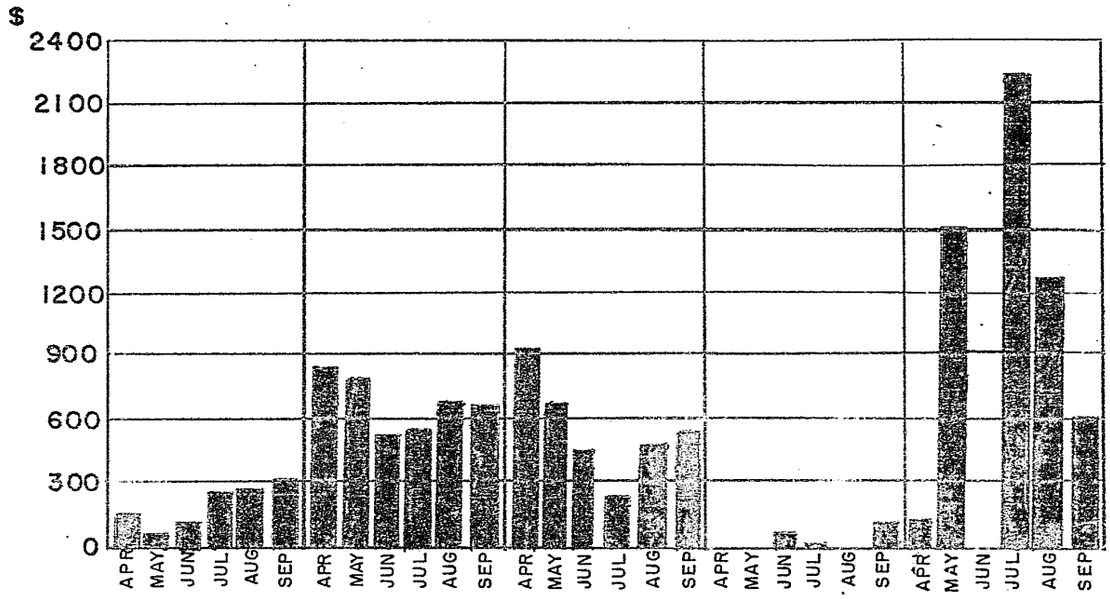
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTION

HQ. 26TH AIR DIVISION (DEFENSE)

1 APR. THRU 30 SEP 1952



COMMAND		D/P		D/M		J/A		A/S	
APR	144	APR	864	APR	905	APR	0	APR	125
MAY	18	MAY	791	MAY	700	MAY	0	MAY	1503
JUN	111	JUN	524	JUN	481	JUN	55	JUN	0
JUL	272	JUL	556	JUL	262	JUL	23	JUL	2261
AUG	285	AUG	679	AUG	482	AUG	0	AUG	1274
SEP	305	SEP	669	SEP	544	SEP	107	SEP	508

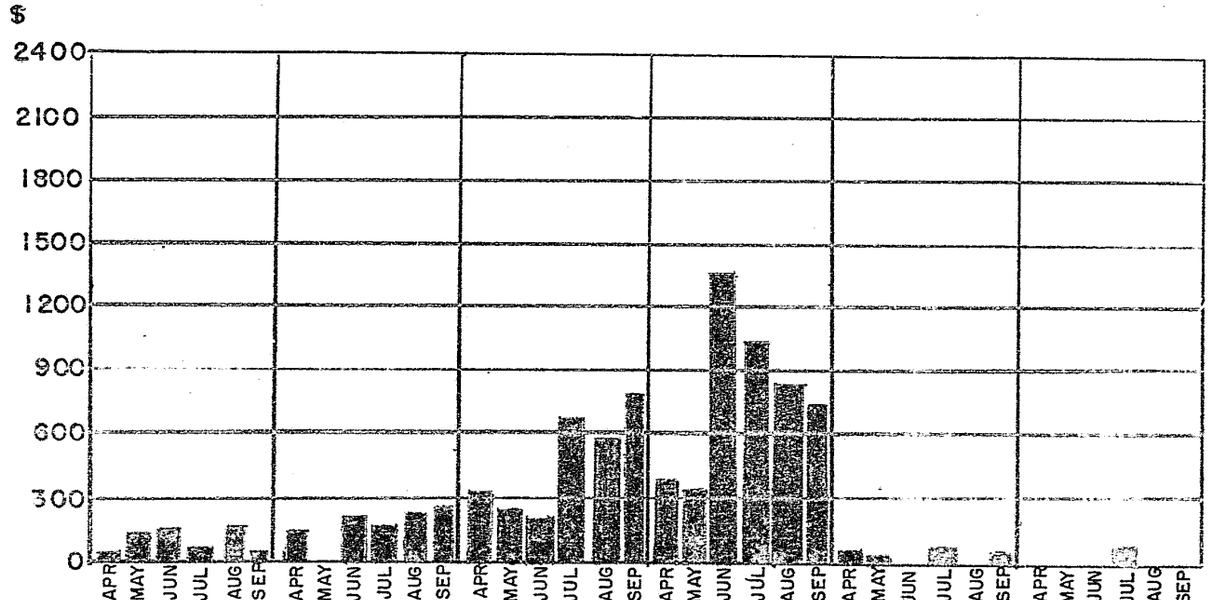
RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 APR. THRU 30 SEP. 1952



COMP		CHAP		IG-PM		D/O		HSS		A/G	
APR	40	APR	152	APR	370	APR	357	APR	23	APR	0
MAY	99	MAY	0	MAY	288	MAY	334	MAY	18	MAY	0
JUN	114	JUN	168	JUN	238	JUN	1339	JUN	0	JUN	0
JUL	77	JUL	187	JUL	692	JUL	1112	JUL	37	JUL	28
AUG	169	AUG	211	AUG	591	AUG	834	AUG	0	AUG	0
SEP	43	SEP	257	SEP	772	SEP	740	SEP	65	SEP	0

8

RESTRICTED

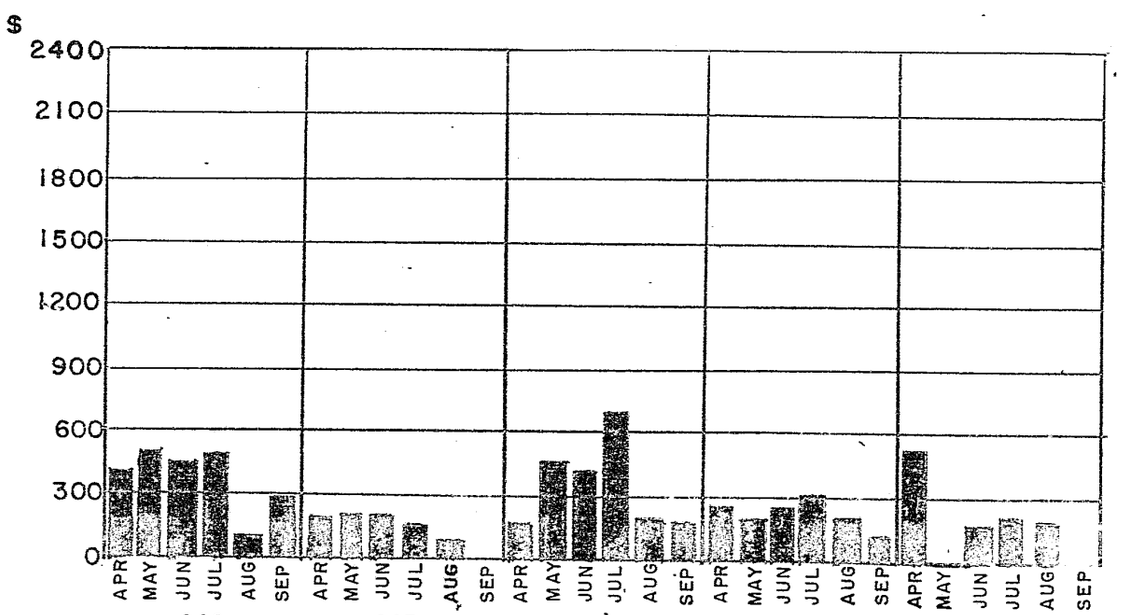
0435

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED T[illegible] BY SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEF)
1 APR. THRU 30 SEP. 1952



646		647		648		770		771	
APR	422	APR	247	APR	218	APR	270	APR	557
MAY	528	MAY	258	MAY	491	MAY	212	MAY	0
JUN	499	JUN	255	JUN	439	JUN	268	JUN	216
JUL	512	JUL	175	JUL	712	JUL	305	JUL	247
AUG	106	AUG	87	AUG	198	AUG	213	AUG	203
SEP	289	SEP	0	SEP	177	SEP	118	SEP	0

RESTRICTED

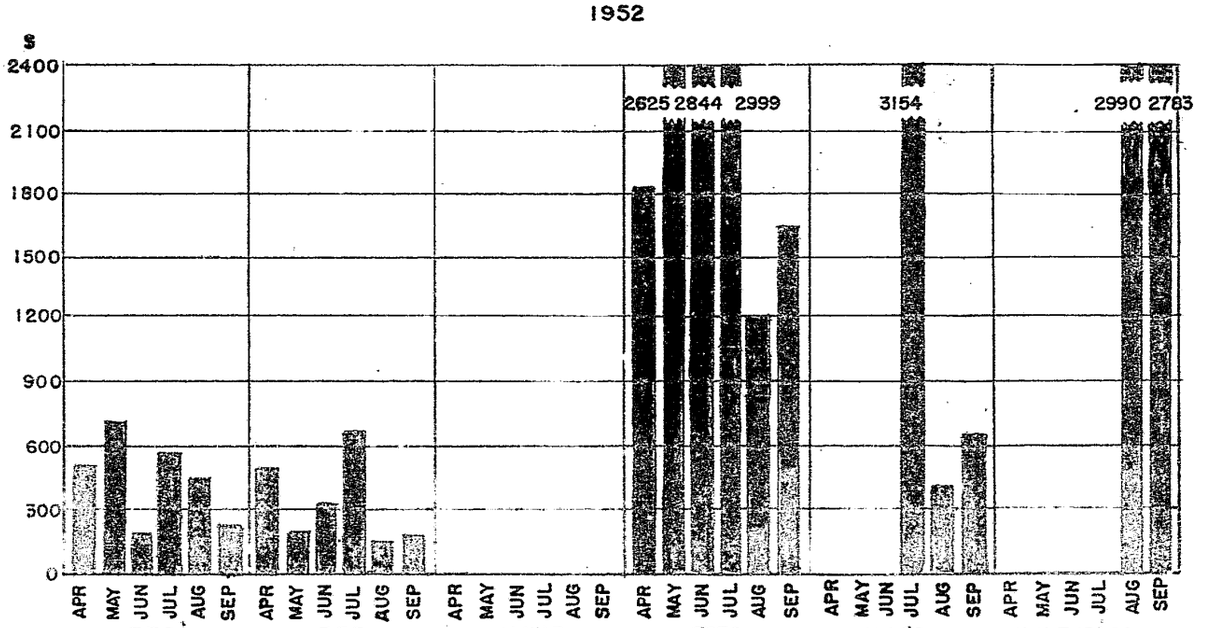
0436

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY SQUADRONS
HQ 26TH AIR DIVISION (DEFENSE)
1 APR THU 30 SEPT
1952



772		773		11 WAF		4670		* LFS		** TNPCSS	
APR	504	APR	546	APR	0	APR	1806	APR	0	APR	0
MAY	741	MAY	222	MAY	0	MAY	2625	MAY	0	MAY	0
JUN	253	JUN	341	JUN	0	JUN	2844	JUN	0	JUN	0
JUL	581	JUL	670	JUL	0	JUL	2999	JUL	3154	JUL	0
AUG	470	AUG	153	AUG	0	AUG	1200	AUG	414	AUG	2990
SEP	236	SEP	168	SEP	0	SEP	1674	SEP	659	SEP	~~2982~~ 2783

* LOCALLY FUNDED SCHOOLS
** TRAVEL NOT PROPERLY CHARGED TO SQUADRON OR SECTION

RESTRICTED

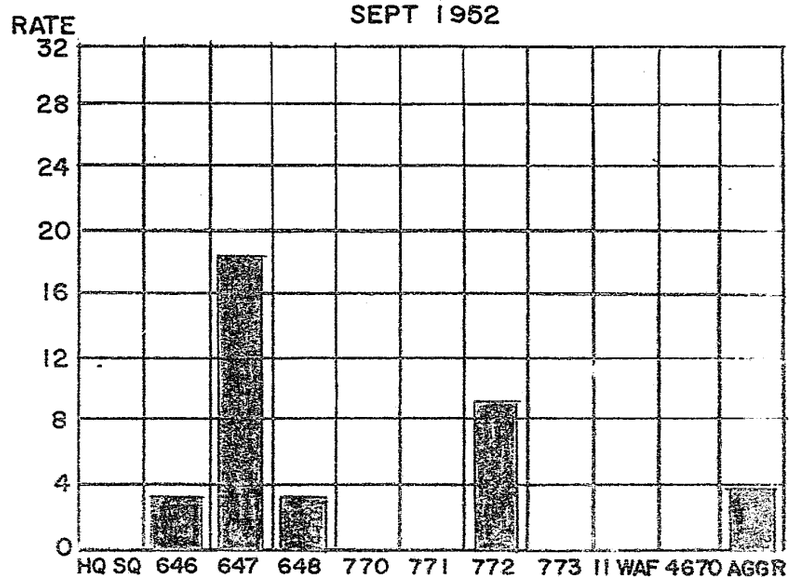
0437

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

SUMMARY COURTS MARTIAL DATA
26TH AIR DIVISION (DEFENSE)
SEPT 1952



CASES	0	1	4	1	0	0	2	0	0	0	8
	0	3.2	18.0	3.2	0	0	9.1	0	0	0	3.7

PREPARED BY STAT SV 26AD

$$\frac{\text{NO. CASES X 1000}}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1000 AMN}$$

11

RESTRICTED

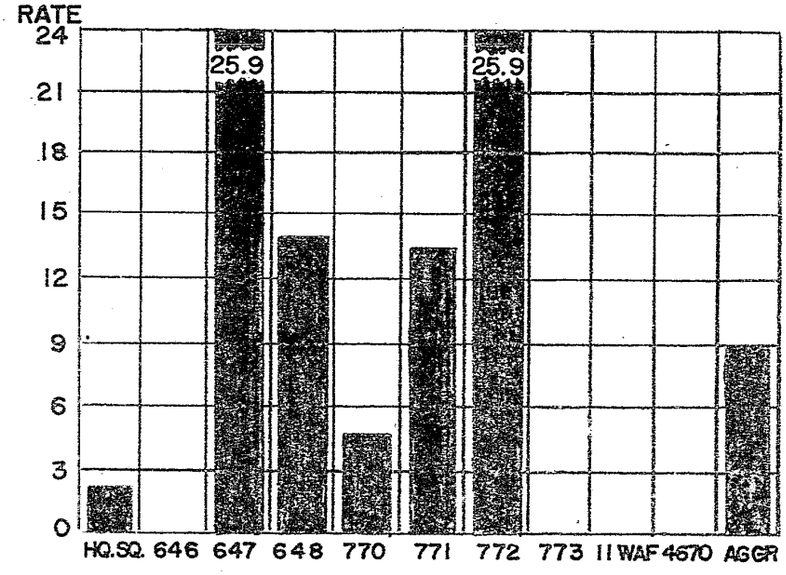
0438

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

AWOL STATISTICS
26TH AIR DIVISION (DEFENSE)
SEPT 1952



AWOL	1	0	6	5	1	3	6	0	0	0	22
RATE	2.2	0	25.9	14.6	3.9	13.7	25.9	0	0	0	9.0

SOURCE: APM RECORDS PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. AWOL} \times 1000}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1000}$$

RESTRICTED

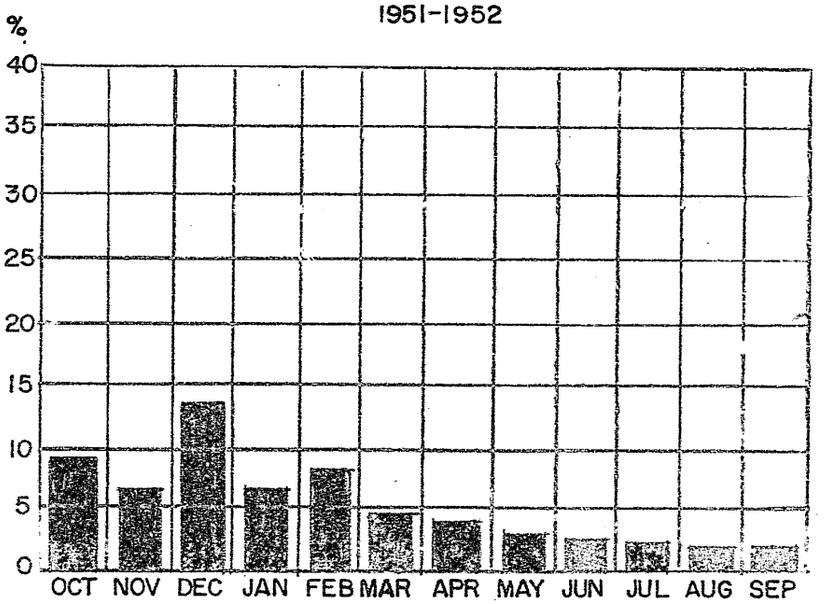
0439

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
26TH AIR DIVISION (DEFENSE)
1951-1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
REPTS SUBMD	435	335	453	310	250	360	312	314	409	305	294	294
REPTS LATE	39	20	61	19	18	17	12	10	9	6	5	5
% LATE	9	6	13	6.1	7.2	4.7	3.8	3.1	2.2	1.9	1.6	1.6

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

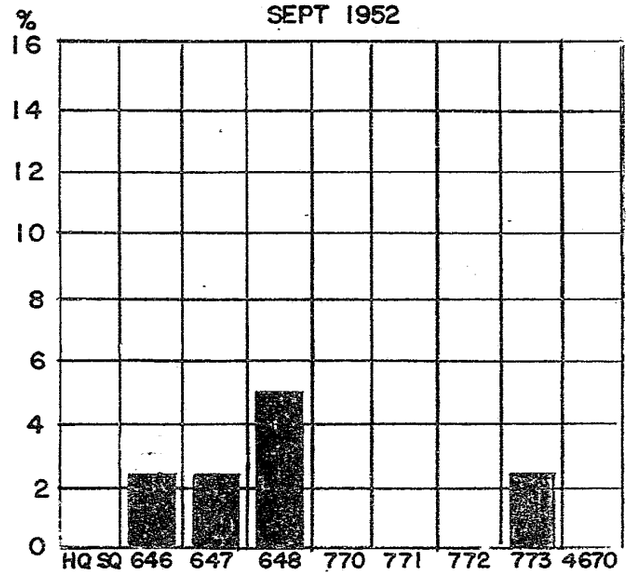
0440

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF REPORTS BY SQ
26TH AIR DIVISION (DEFENSE)
SEPT 1952



REPTS SUBMD	16	41	41	40	40	41	39	42	5
REPTS LATE	0	1	1	2	0	0	0	1	0
PERCENT LATE	.0	2.4	2.4	5.0	.0	.0	.0	2.4	.0

RESTRICTED

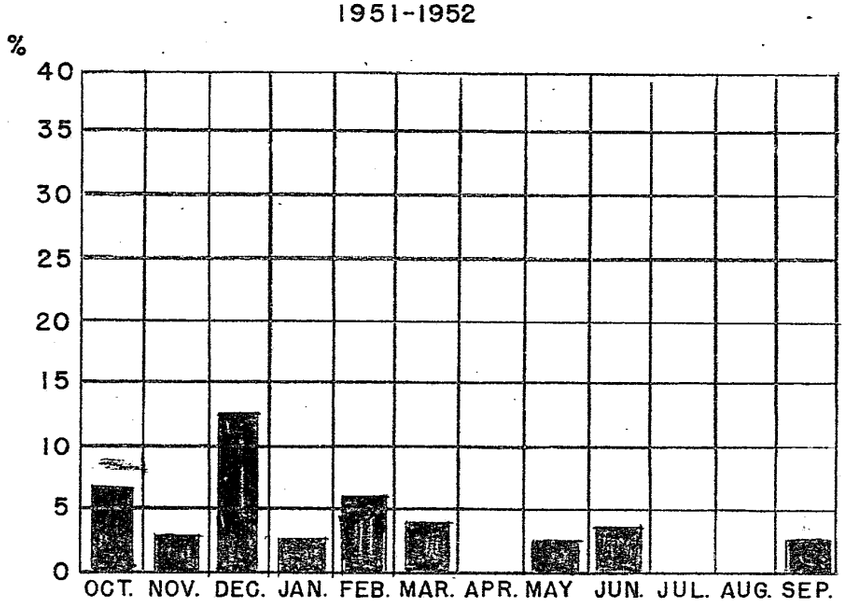
044.1

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
646th A C & W SQUADRON
1951-1952



	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.
REPTS SUBMD	49	38	51	39	36	52	44	45	55	41	39	41
REPTS LATE	4	1	6	1	2	2	0	1	2	0	0	1
% LATE	8.1	2.6	11.8	2.6	5.5	3.8	0	2.2	3.5	0	0	2.4

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SV 26AD

RESTRICTED

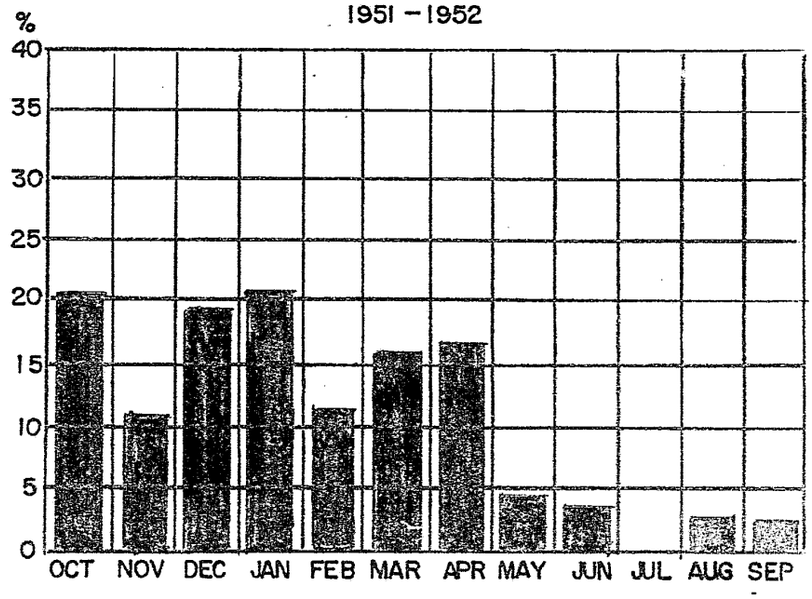
0442

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
647TH AC & W SQUADRON
1951 – 1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
REPTS SUBMD	44	37	51	38	35	51	43	46	55	41	39	41
REPTS LATE	9	4	10	4	4	8	7	2	2	0	1	1
% LATE	20.4	10.8	19.6	21.0	11.4	15.7	16.8	4.3	3.5	0	2.5	2.4

SOURCE SUSPENSE-CARDS PREPARED BY STAT SV 26AD

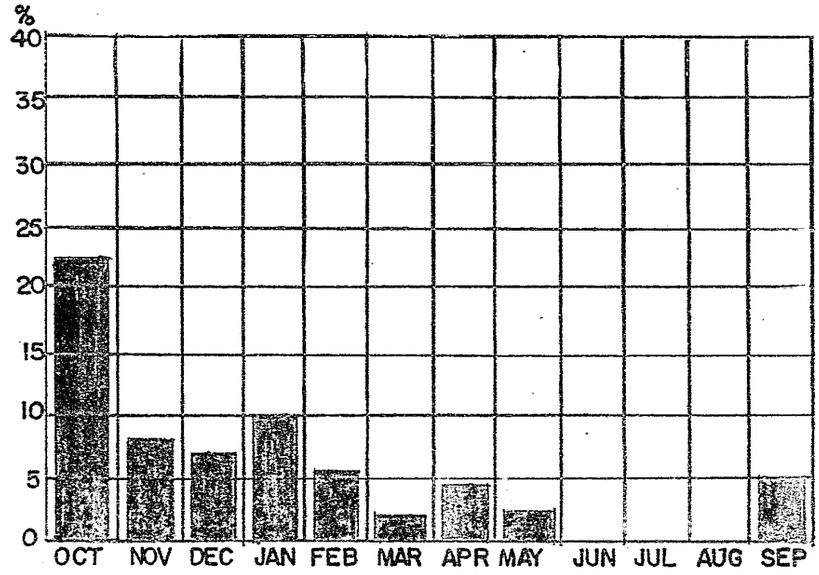
RESTRICTED

0443

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

STATUS OF SQUADRON REPORTING
648TH AC & W SQUADRON
1951-1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
REPTS SUBMD	50	38	52	40	36	51	44	45	56	41	40	40
REPTS LATE	11	3	4	4	2	1	2	1	0	0	0	2
	22.0	7.9	7.7	10.0	5.5	1.9	4.5	2.2	0	0	0	5.0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

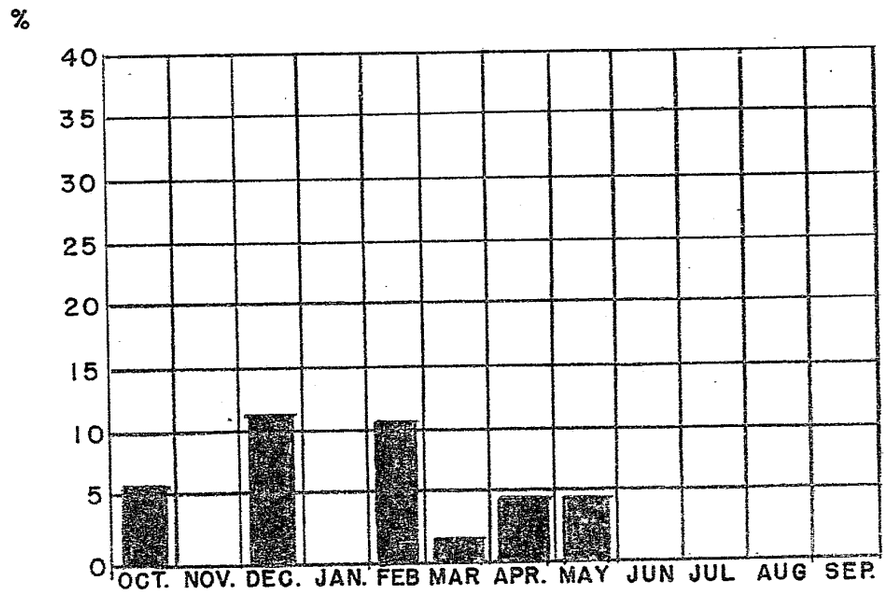
0446

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
770th AC & W SQUADRON
1951-1952



REPTS SUBMD	51	39	52	39	35	51	44	44	54	39	37	40
REPTS LATE	3	0	6	0	4	1	2	2	0	0	0	0
% LATE	5.8	0	11.5	0	11.4	1.9	4.5	4.5	0	0	0	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

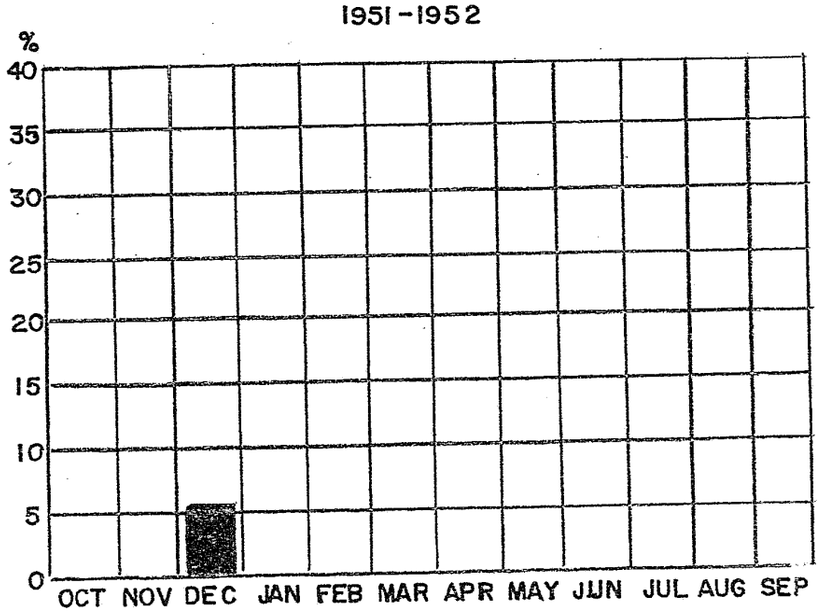
0445

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
771ST AC & W SQUADRON
1951-1952



REPTS SUBMD	53	38	55	40	32	52	45	44	55	39	39	41
REPTS LATE	0	0	3	0	0	0	0	0	0	0	0	0
% LATE	0	0	5.5	0	0	0	0	0	0	0	0	0

SOURCE: SUPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

0446

THIS PAGE DECLASSIFIED IAW EO 13526

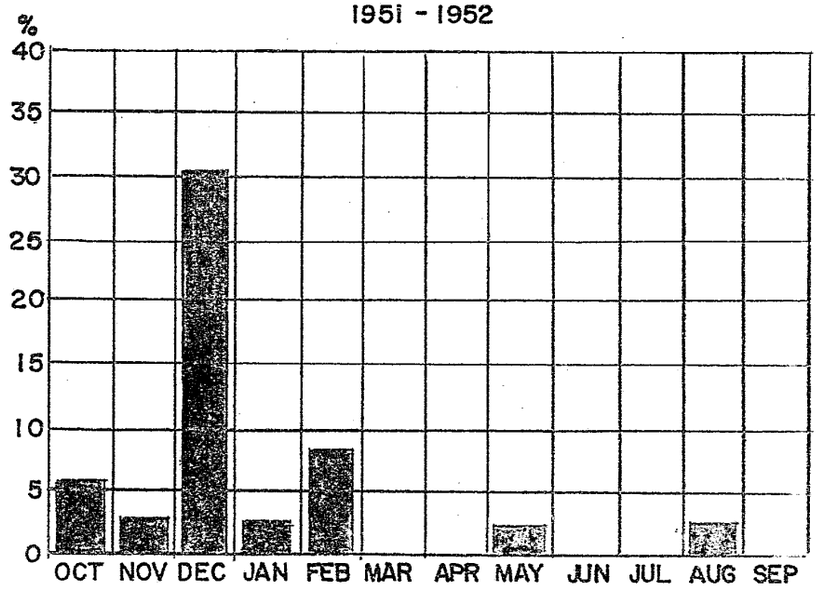
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

772ND AC & W SQUADRON

1951 - 1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
REPTS SUBMD	52	38	53	40	36	51	45	45	57	40	39	39
REPTS LATE	3	1	16	1	3	0	0	1	0	0	1	0
% LATE	5.7	2.6	30.2	2.5	8.3	0	0	2.2	0	0	2.5	0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

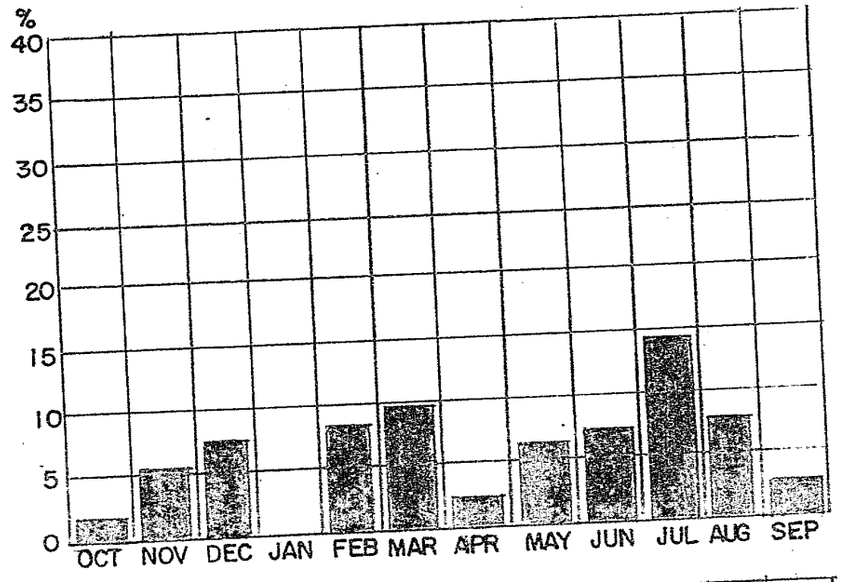
0447

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
773RD AC & W. SQUADRON
1951-1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
REPTS SUBMD	51	39	53	39	36	52	47	45	56	41	39	41
REPTS LATE	1	2	4	0	3	5	1	3	4	6	3	1
% LATE	1.9	5.1	7.5	0	8.3	9.6	2.1	6.6	7.1	14.6	7.6	2.4

SOURCE: SUSPENSE CARDS

PREPARED BY STAT SV 26AD

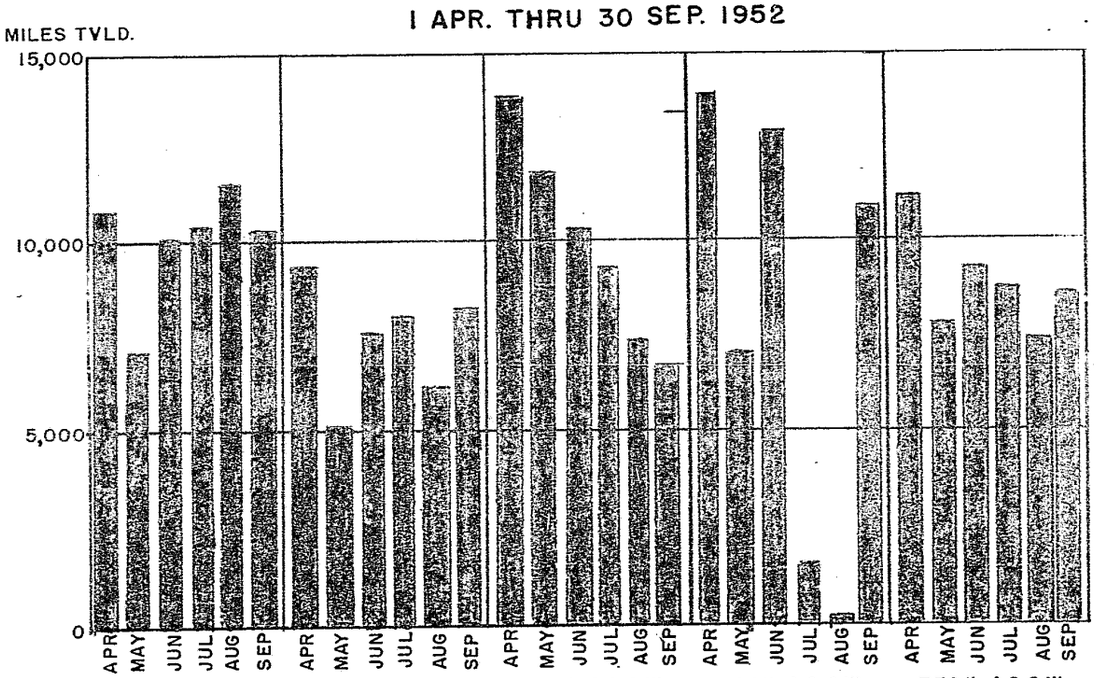
RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MOTOR MILES TRAVELED BY SQUADRONS
26TH AIR DIVISION (DEFENSE)
1 APR. THRU 30 SEP. 1952



HQ SQ. SEGT.		646th AC & W		647th AC & W		648th AC & W		770th AC & W	
APR.	13449	APR.	9136	APR.	13651	APR.	13651	APR.	11231
MAY	7740	MAY	5048	MAY	11917	MAY	7615	MAY	7887
JUN	10003	JUN	7318	JUN	10309	JUN	12310	JUN	9277
JUL	12250	JUL	7964	JUL	9291	JUL	1195	JUL	8506
AUG	10984	AUG	6068	AUG	7172	AUG	11565	AUG	7250
SEP	10253	SEP	8255	SEP	6710	SEP	10964	SEP	8587

RESTRICTED

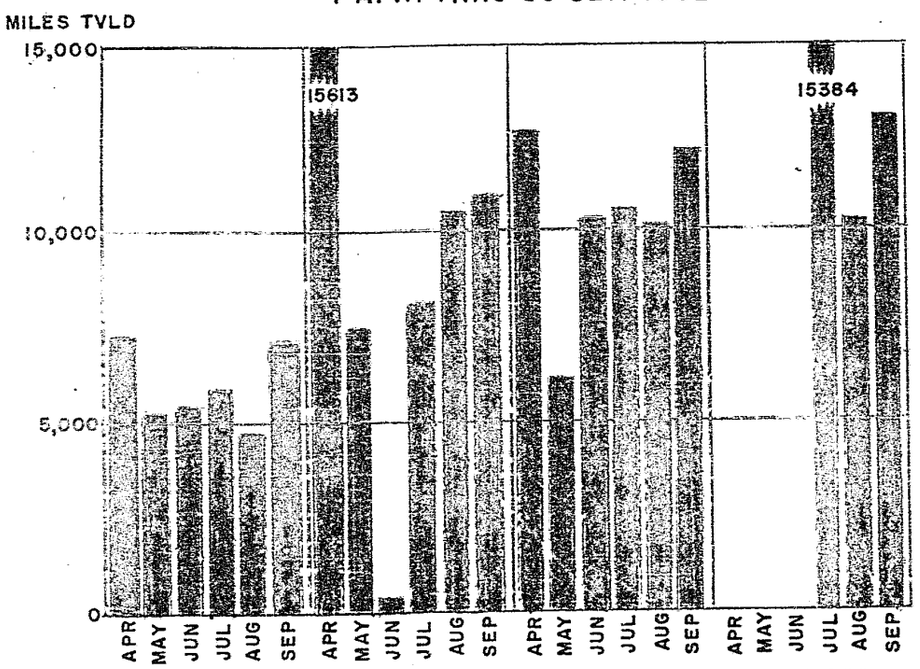
0449

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREN. F MILES TRAVELED Y SQUADRON
26 TH AIR DIVISION (DEFENSE)
1 APR. THRU 30 SEP. 1952



771st AC&W		772nd AC&W		773rd AC&W		4670th GOS	
APR.	7414	APR.	15613	APR	12948	*APR	0
MAY	5535	MAY	7493	MAY	6737	MAY	0
JUN	5553	JUN	1137	JUN	10299	JUN	0
JUL	6503	JUL	8024	JUL	10444	JUL	15384
AUG	4852	AUG	10493	AUG	10149	AUG	10185
SEP	7135	SEP	10961	SEP	12142	SEP	13061

*APR. THRU JUN REPT AS AGGR FIGURE UNDER HQ. SQ. SECT.

23

RESTRICTED

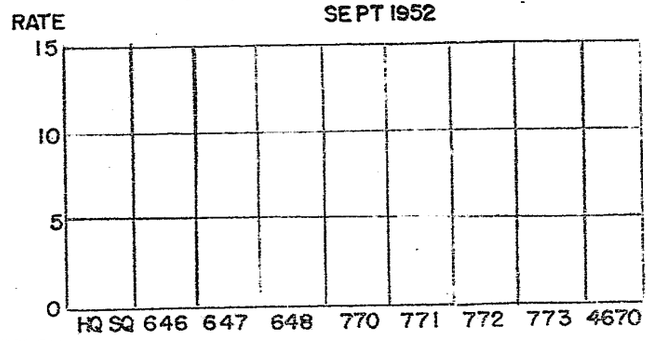
0450

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE BY SQUADRON 26TH AIR DIVISION (DEFENSE) SEPT 1952



MOTOR VEHICLES	HQ SQ	646	647	648	770	771	772	773	4670
NO. ACCDS.	0	0	0	0	0	0	0	0	0
MI TVLD	10253	8255	6710	10964	8587	7135	10961	12142	13061
DAYS O/SV	0	0	0	0	0	0	0	0	0

TOTAL NO. GRD ACCDS									
ON DUTY	1	0	9	9	2	8	6	24	0
OFF DUTY	0	0	0	1	0	0	0	0	0
MAN DAYS LOST	0	0	0	28	0	60	43	0	0

SOURCE: AF FORM 122A PREPARED BY STAT SV 26AD

$$\frac{\text{NO. ACCIDENTS} \times 100{,}000}{\text{MI. TVLD}} = \text{RATE PER 100,000 MI.}$$

24

RESTRICTED

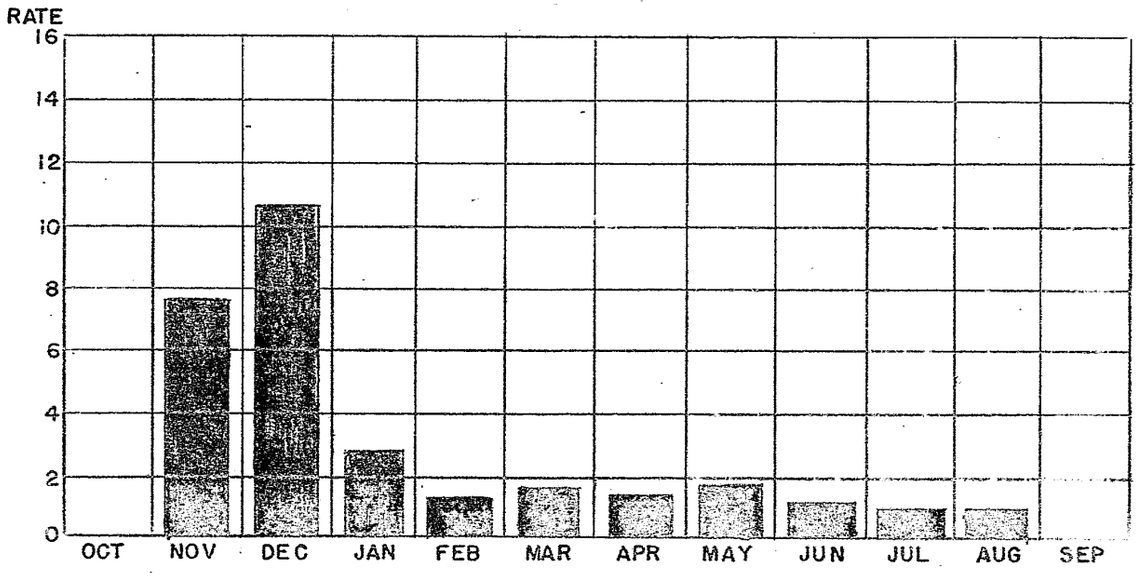
0451

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE
26TH AIR DIVISION (DEFENSE)
1951-1952



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
NO. ACCDS.	0	7	10	2	1	1	1	1	1	1	1	0
MI. TVLD.	107054	95443	90566	81545	94282	88554	95160	59972	66206	79561	78718	88058
DAYS O/SV	0	10	69	8	16	0	1	0	14	1/2	SALVAGED	0

SOURCE AF FORM 122A

PREPARED BY STAT SV 26AD

$$\frac{\text{NO. ACCDS. X 100,000}}{\text{MILES TRAVELED}} = \text{RATE PER 100,000 MI.}$$

25

RESTRICTED

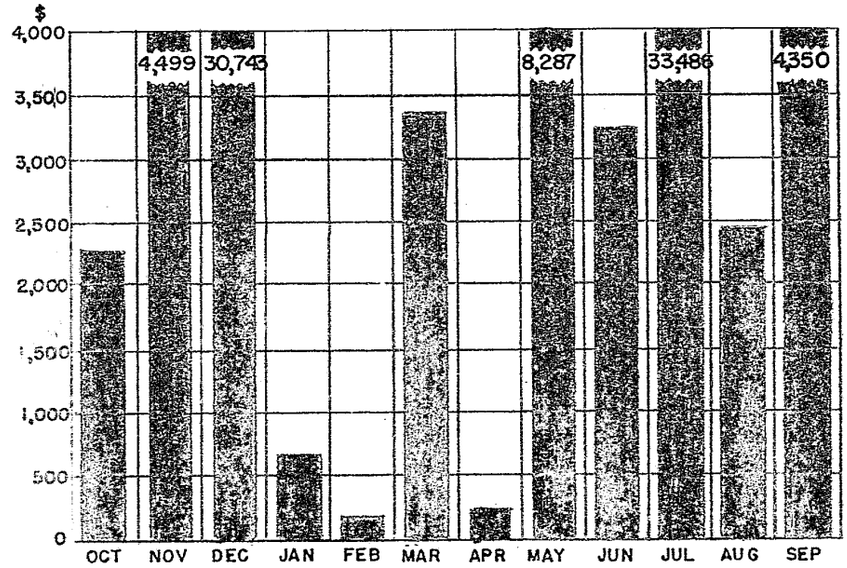
0452

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TOTAL GOUND ACCIDENT COSTS
26TH AIR DIVISION (DEF.)
1951-1952



COSTS $	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	2263	4499	30743	630	183	3384	195	8287	3217	33486	2475	4350

SOURCE: AF FORM 122A

PREPARED BY STAT SV 26AD

0453

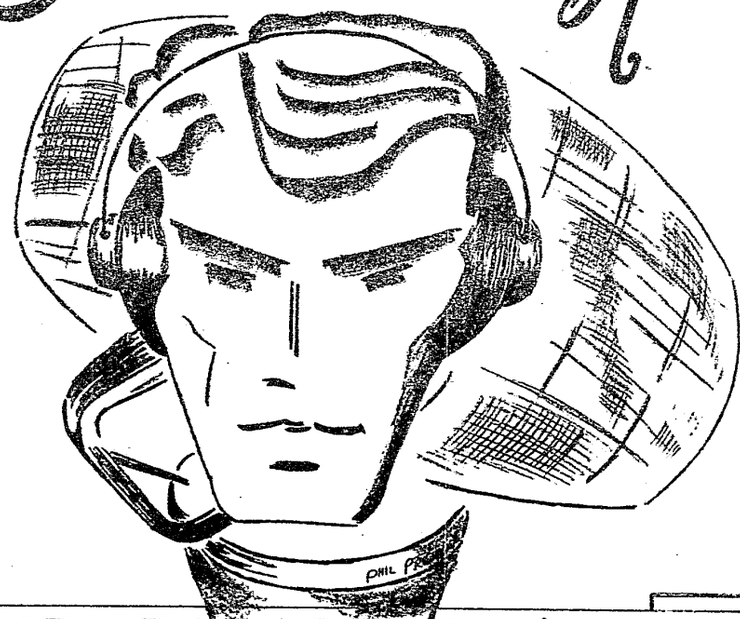
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

Statistical Review

Office of the Comptroller



26th AIR DIVISION (DEFENSE)

ROSLYN, N.Y.

31 OCT 1952

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26TH AIR DIVISION (DEFENSE)
STATISTICAL REVIEW
NOVEMBER 1952

INDEX

Index 1
Introduction 2
Roster of Unit Commanders (26th Air Division) 3
Roster of Unit Commanders (4670th CCS). 4
Percent of Authorized Officers Assigned 5
Percent of Authorized Airmen Assigned 6
Trend of Estimated TDY Travel Cost by Staff Sections. 7
Trend of Estimated TDY Travel Cost by Staff Sections. 8
Trend of Estimated TDY Travel Cost by Squadron. 9
Trend of Estimated TDY Travel Cost by Squadron. 10
Courts Martial Data 11
AWOL Statistics 12
Status of Squadron Reporting. 13
Status of Squadron Reporting. 14
Status of Squadron Reporting (Hq Sq Sec). 15
Status of Squadron Reporting (646th). 16
Status of Squadron Reporting (647th). 17
Status of Squadron Reporting (648th). 18
Status of Squadron Reporting (770th). 19
Status of Squadron Reporting (771st). 20
Status of Squadron Reporting (772nd). 21
Status of Squadron Reporting (773rd). 22
Trend of Motor Miles Traveled by Squadron 23
Trend of Motor Miles Traveled by Squadron 24
Motor Vehicle Accident Rate by Squadron 25
Motor Vehicle Accident Rate (26th Air Division) 26
Total Ground Accident Cost. 27

0455

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

26TH AIR DIVISION (DEFENSE)

STATISTICAL REVIEW

INTRODUCTION

This Statistical Review is published monthly in order to provide the commanding officers, within this command, information and statistics pertaining to divisional activities.

The efficient use of the graphs and analysis presented herein should serve as a guide to the units and/or activities and indicate when further investigations and corrective action may result in better programming for the achievement of the mission.

It is requested that comments and suggestions for improvement and/or additions to this review be addressed to:

COMMANDING GENERAL
26TH AIR DIVISION (DEFENSE)
ATTN: Comptroller
Roslyn, New York

13441

0456

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF UNIT COMMANDERS
76TH AIR DIVISION (DEF)
As of 31 October 1952

UNIT AND STATION	NAME	RANK	SERIAL NUMBER
26th Air Division (Def) Roslyn, New York	RUSSELL J. MINTY	Brig. Gen	224A
Hqs Squadron Section Roslyn, New York	GENE B. GROVE	Major	AO 854343
646th AC&W Squadron Highlands, New Jersey	LESTER B. GOLDBERG	Major	AO 563118
647th AC&W Squadron Manassas, Virginia	WILLIAM A. CROMARTIE	Major	AO 441303
648th AC&W Squadron Benton, Pennsylvania	EDWARD D. GILLESPIE	Major	AO 792360
770th AC&W Squadron Palermo, New Jersey	WILLIAM H.SHEPPARD	Major	AO 667860
771st AC&W Squadron Ft. Custis, Va	EZRA BALLARD JR	Major	AO 689733
772nd AC&W Squadron Claysburg, Pennsylvania	WILLIAM M. PRULL	Major	AO 580424
773rd AC&W Squadron Montauk, New York	ALFRED P. OSTRANDER	Major	AO 692186
11th WAF Squadron Roslyn, New York	HELEN M. LEWIS	2d Lt	AL 2236597
4670th Grs Obs Squadron Roslyn, New York	MAURICE A. BRONER	Lt Col	AO 361879

R E S T R I C T E D

17441

0457

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF DETACHMENT COMMANDERS
4670TH GROUND OBSERVER SQUADRON
as of 31 October 1952

DETACHMENT AND LOCATION	NAME	RANK	SERIAL NUMBER
Detachment #1 New Haven, Conn	JOSEPH D. McFADDEN	Captain	AO 572590
Detachment #2 White Plains, New York	FREDERICK B JOHNSON	Major	AO 661102
Detachment #3 Trenton, N.J.	NORRIS L. FARRINGTON	Major	AO 857602
Detachment #4 Harrisburg, Pa.	CYRUS GRAYSON	Major	AO 854002
Detachment #5 Pittsburgh, Pa.	JEROME G. SCHWEICKERT	Major	AO 1703085
Detachment #6 Baltimore, Md	RICHARD J CURTIS	Major	AO 559711
Detachment #7 Richmond Va	FRANCIS M VAUGHAN	Major	AO 376238
Detachment #8 Roanoke Va	GEORGE T BOOTHE JR	Captain	AO 697536

R E S T R I C T E D

17441

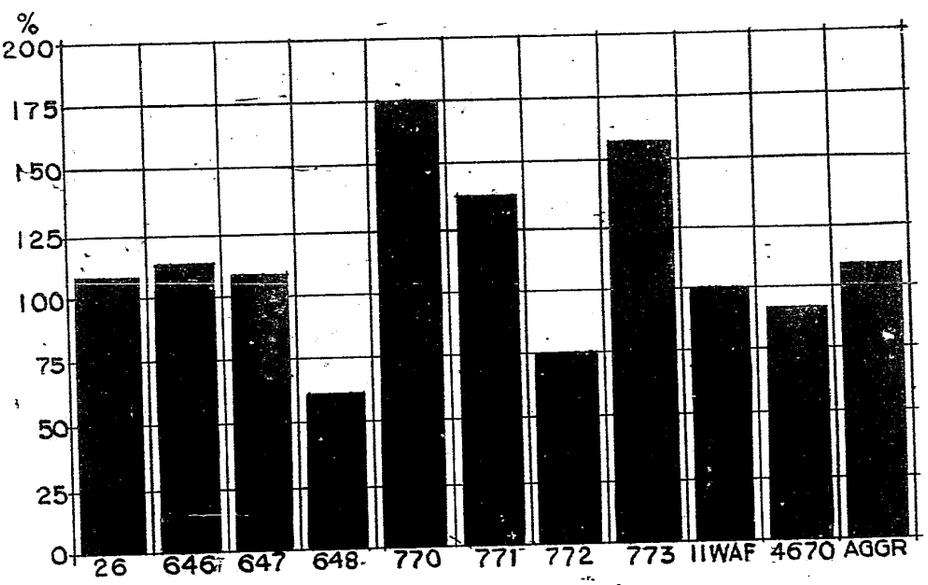
0458

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED OFFICERS ASSIGNED
26TH AIR DIVISION (DEFENSE)
OCT. 1952



AUTH	79	33	16	34	16	16	16	16	1	43	270
ASGD	84	37	17	22	28	22	12	25	1	40	288
AUTH/ASGD	106.3	112.1	106.2	64.7	175.0	137.5	75.0	156.3	100.0	93.0	106.7

SOURCE: AF-PI.MORNING REPORTS PREPARED BY STAT SV 26AD

5

RESTRICTED

17441

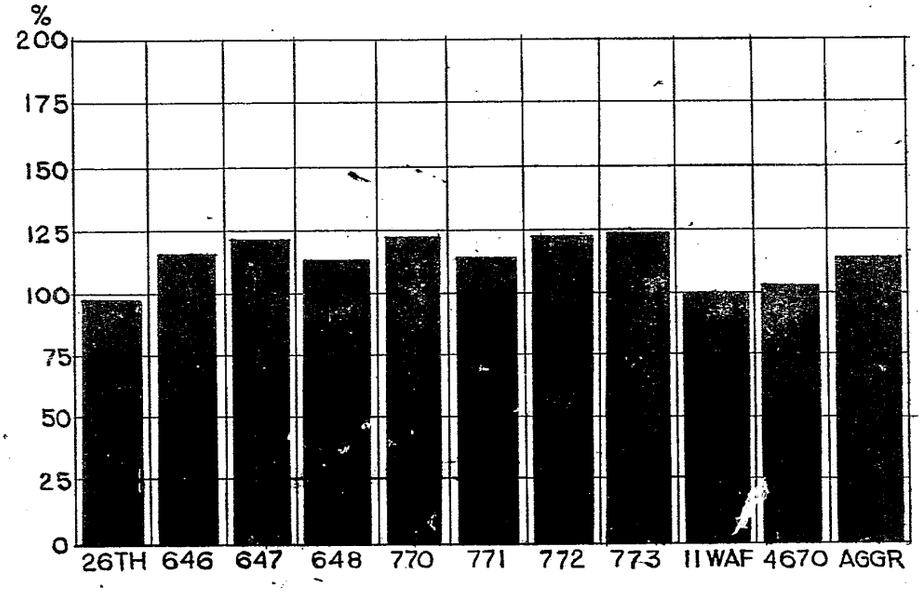
0459

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED AIRMEN ASSIGNED
26TH AIR DIVISION (DEFENSE)
OCTOBER 1952



AUTH	382	261	179	270	179	179	179	179	3	84	1901
ASGD	364	305	220	310	219	204	219	223	3	86	2153
%AUTH/ASGD	95.3	116.9	122.9	114.8	122.3	114.0	122.3	124.6	100.0	102.4	113.3

SOURCE: AF-PI MORNING REPORTS PREPARED BY: STAT SV 26TH AD

RESTRICTED

17441

0460

THIS PAGE DECLASSIFIED IAW EO 13526

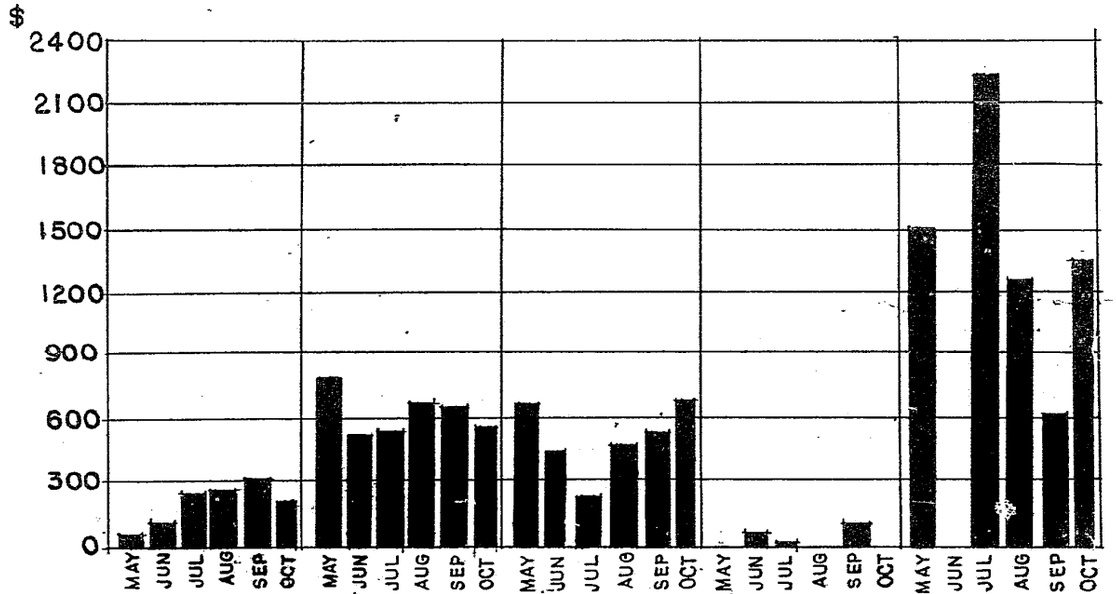
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF E TIMATED TDY TRA\ .L COST BY STAFF SEC. ION

HQ. 26TH AIR DIVISION (DEFENSE)

I MAY THRU 31 OCT. 1952



COMMAND		D/P		D/M		J/A		A/S	
MAY	18	MAY	791	MAY	700	MAY	0	MAY	1503
JUN	111	JUN	524	JUN	481	JUN	55	JUN	0
JUL	272	JUL	556	JUL	262	JUL	23	JUL	2261
AUG	285	AUG	679	AUG	482	AUG	0	AUG	1274
SEP	305	SEP	669	SEP	544	SEP	107	SEP	608
OCT	239	OCT	578	OCT	710	OCT	0	OCT	1355

RESTRICTED

17441

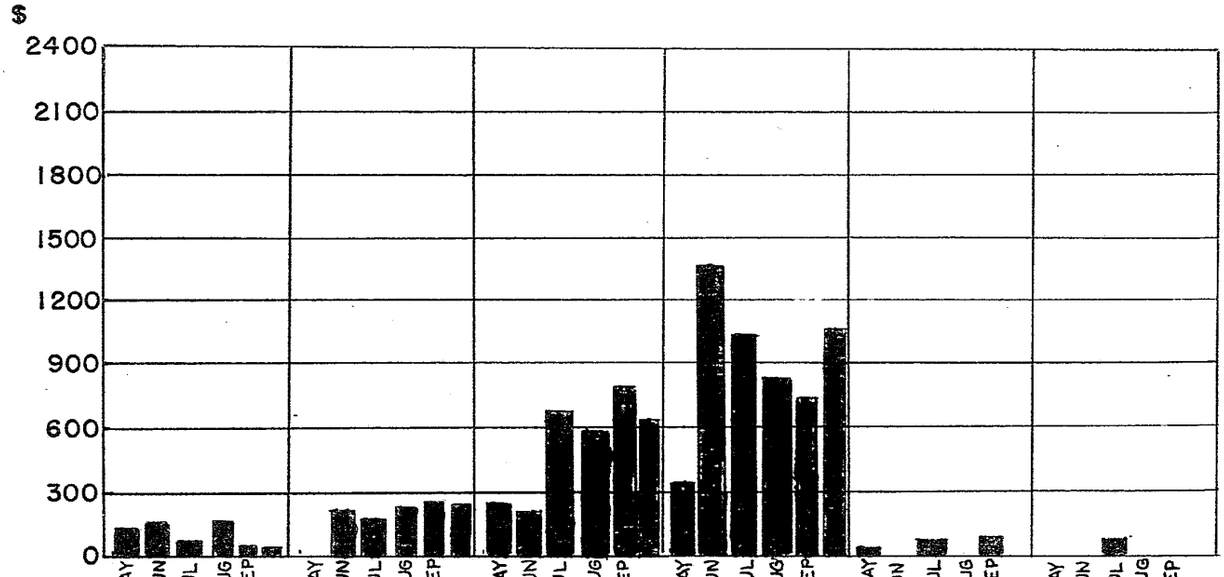
0461

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMA_D TDY TRAVEL CC_T BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 MAY THRU 31 OCT. 1952



COMP		CHAP		IG-PM		D/O		HSS		A/G	
MAY	99	MAY	0	MAY	288	MAY	334	MAY	18	MAY	0
JUN	114	JUN	168	JUN	238	JUN	1339	JUN	0	JUN	0
JUL	77	JUL	187	JUL	692	JUL	1112	JUL	37	JUL	28
AUG	169	AUG	211	AUG	591	AUG	834	AUG	0	AUG	0
SEP	43	SEP	257	SEP	772	SEP	740	SEP	65	SEP	0
OCT	74	OCT	235	OCT	625	OCT	1064	OCT	0	OCT	0

8

RESTRICTED

17441

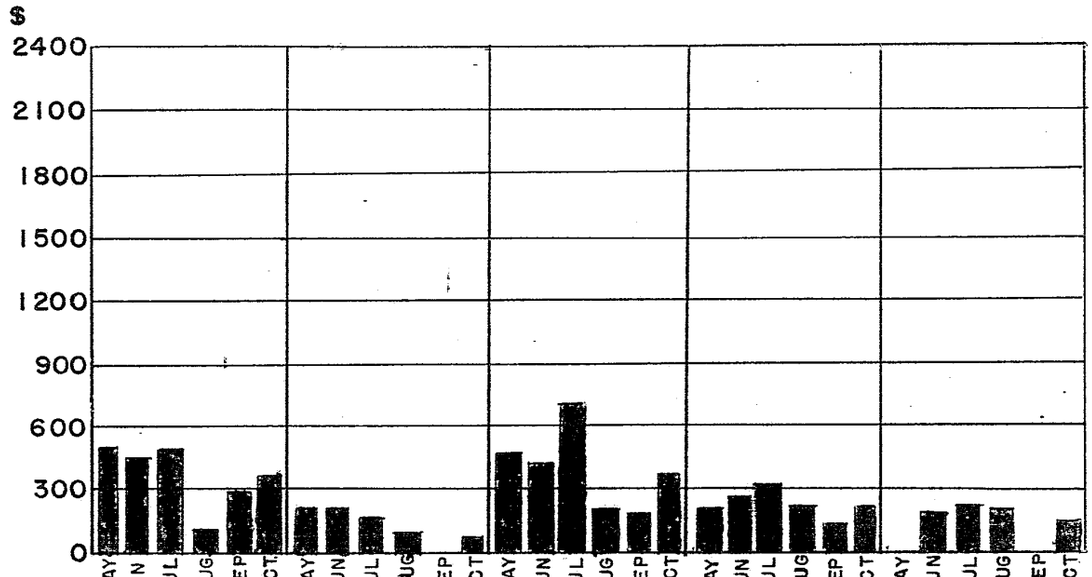
0462

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY BY SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEF.)
1 MAY THRU 31 OCT. 1952



646		647		648		770		771	
MAY	528	MAY	258	MAY	491	MAY	212	MAY	0
JUN	499	JUN	255	JUN	439	JUN	268	JUN	216
JUL	512	JUL	175	JUL	712	JUL	305	JUL	247
AUG	106	AUG	87	AUG	198	AUG	213	AUG	203
SEP	289	SEP	0	SEP	177	SEP	118	SEP	0
OCT	360	OCT	75	OCT	368	OCT	225	OCT	163

RESTRICTED

12441

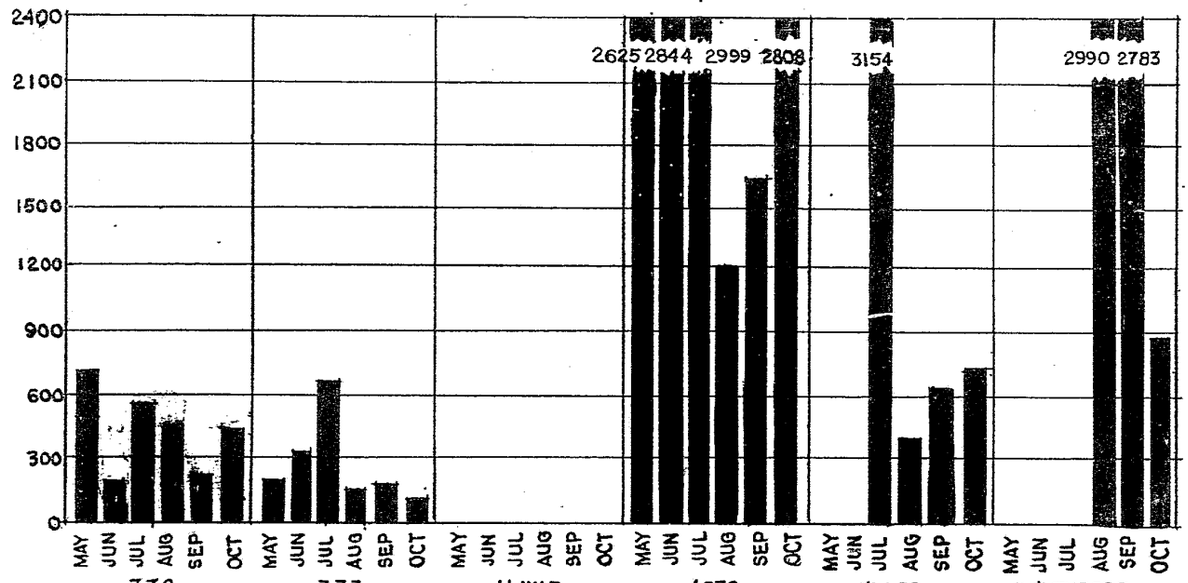
0463

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY SQUADRONS
HQ 26TH AIR DIVISION (DEFENSE)
1 MAY THU 30 OCT.
1952



772		773		11 WAF		4670		* LFS		** TNPCSS	
MAY	741	MAY	222	MAY	0	MAY	2625	MAY	0	MAY	0
JUN	253	JUN	341	JUN	0	JUN	2844	JUN	0	JUN	0
JUL	581	JUL	670	JUL	0	JUL	2999	JUL	3154	JUL	0
AUG	470	AUG	153	AUG	0	AUG	1200	AUG	414	AUG	2990
SEP	236	SEP	168	SEP	0	SEP	1674	SEP	659	SEP	2782
OCT	548	OCT	135	OCT	0	OCT	2808	OCT	724	OCT	887

* LOCALLY FUNDED SCHOOLS
** TRAVEL NOT PROPERLY CHARGED TO SQUADRON OR SECTION

RESTRICTED

17401

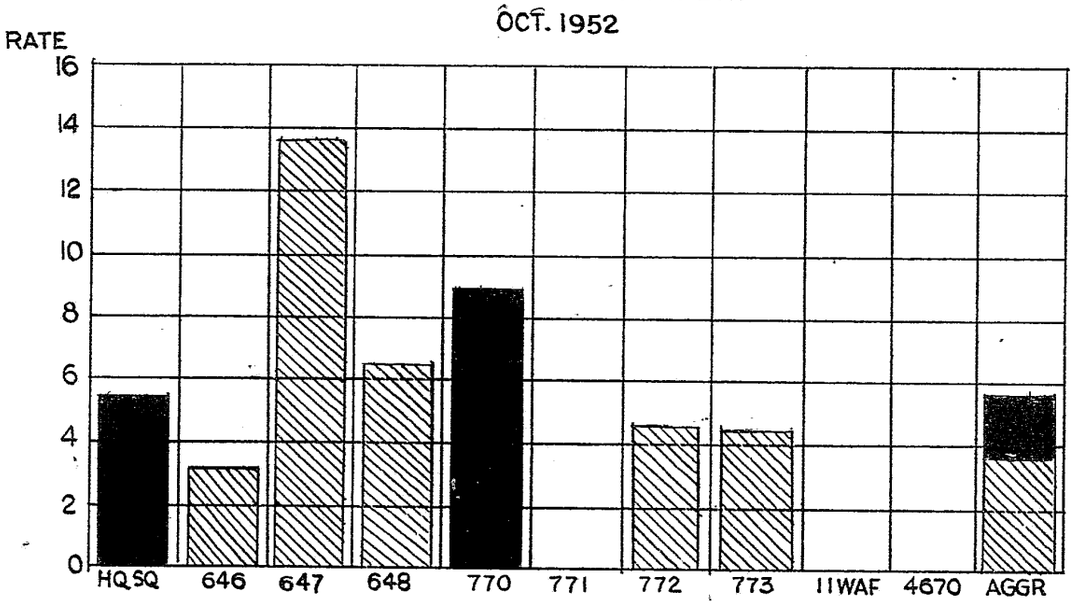
0464

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

COURTS MARTIAL DATA
26th AIR DIVISION (DEF.)
OCT. 1952



	HQ SQ	646	647	648	770	771	772	773	11WAF	4670	AGGR
SUMMARY C.M.	0	1	3	2	0	0	1	1	0	0	8
SPECIAL C.M.	2	0	0	0	2	0	0	0	0	0	4
GENERAL C.M.	0	0	0	0	0	0	0	0	0	0	0

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO CASES} \times 1000}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1000 AMN}$$

RESTRICTED

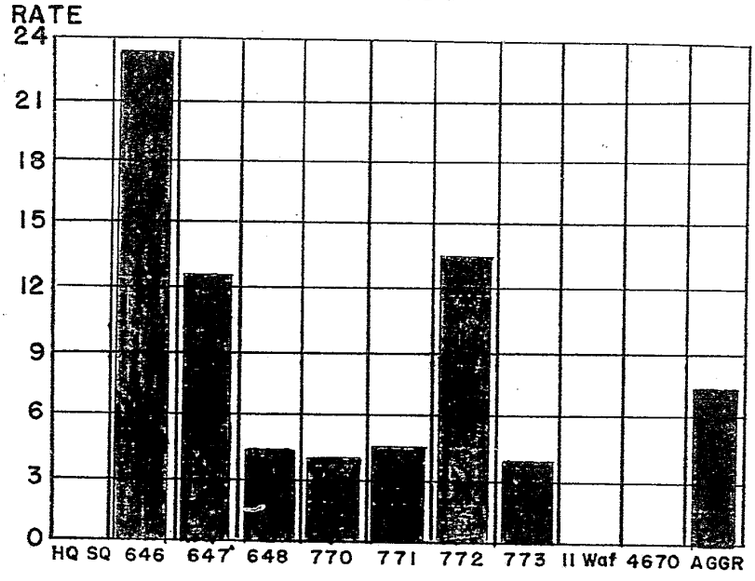
0465

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

AWOL STATISTICS
26TH AIR DIVISION (DEFENSE)
OCT. 1952



AWOL	0	8	3	1	1	1	3	1	0	0	18
RATE	0	23.4	12.6	4.3	4.0	4.4	13.6	4.0	0	0	7.4

SOURCE: APM RECORDS

PREPARED BY: STAT. SV. 26 AD

$$\frac{\text{NO. AWOL} \times 1{,}000}{\text{AVERAGE STRENGTH}} = \text{RATE per 1,000}$$

RESTRICTED

17441

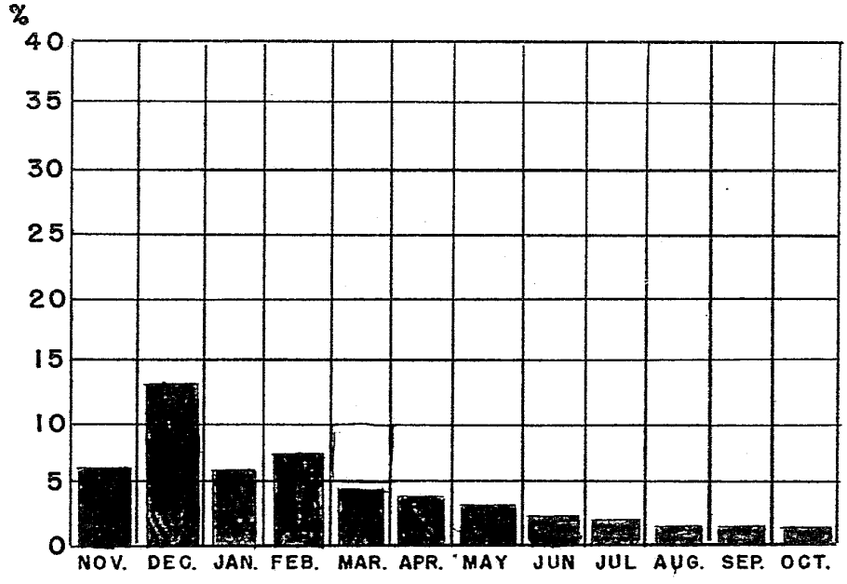
0466

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRIC[illegible]D

STATUS OF SQUADRON REPORTING
26th AIR DIVISION (DEFENSE)
1951-1952



	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.	SEP.	OCT.
REPTS SUBMD	335	453	310	250	360	312	314	409	305	294	294	346
REPTS LATE	20	61	19	18	17	12	10	9	6	5	5	5
% LATE	6	13	6.1	7.2	4.7	3.8	3.1	2.2	1.9	1.6	1.6	1.4

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

A 17401

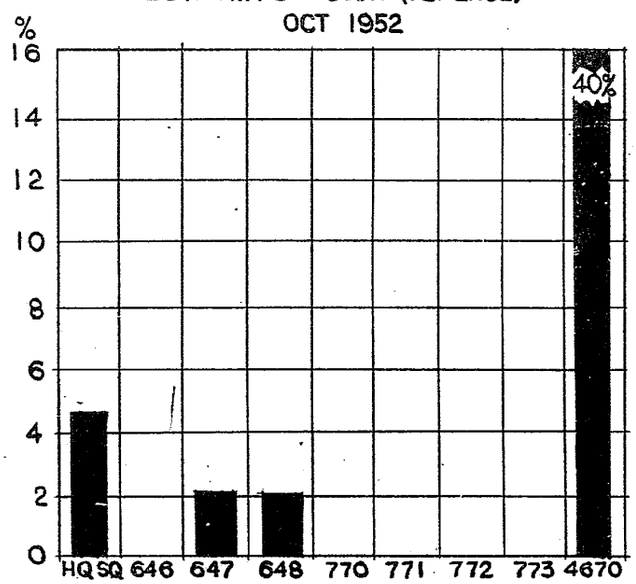
0467

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF REPORTS BY SQ
26TH AIR DIVISION (DEFENSE)
OCT 1952



	HQ SQ	646	647	648	770	771	772	773	4670
REPTS SUBMD	21	47	45	46	44	44	46	48	5
REPTS LATE	1	0	1	1	0	0	0	0	2
PERCENT LATE	4.7	.0	2.2	2.1	.0	.0	.0	.0	40.0

17441

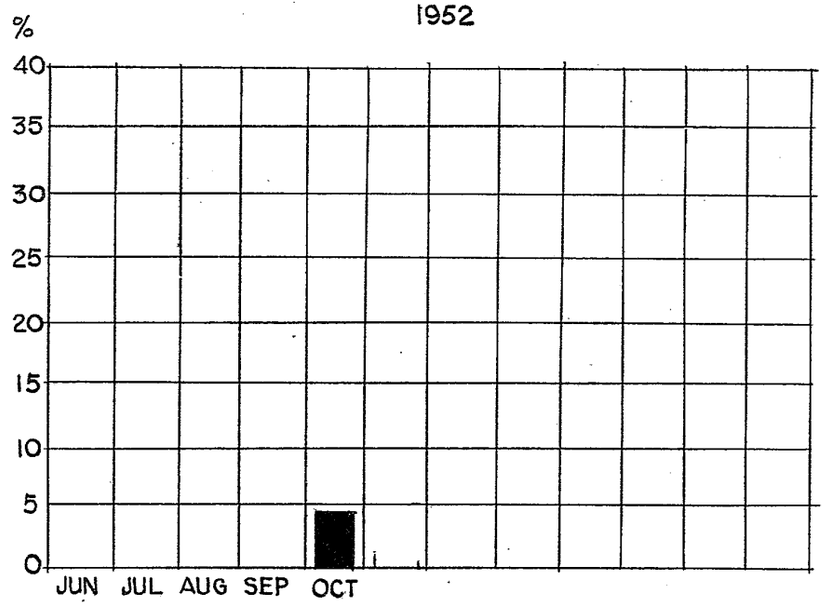
0468

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTEL

STATUS OF SQUADRON REPORTING
HQ. SQ. SECTION (26 AD)
1952



	JUN	JUL	AUG	SEP	OCT
REPTS SUBMD	13	19	15	16	21
REPTS LATE	0	0	0	0	1
% LATE	.0	.0	.0	.0	4.7

SOURCE: SUSPENSE CARDS

PREPARED BY STAT SV 26AD

RESTRICTED

12441

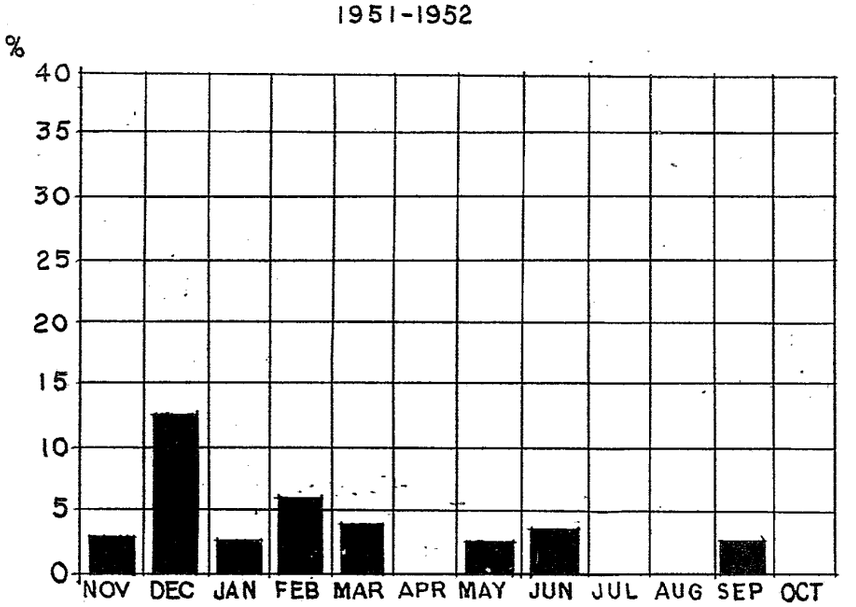
0469

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
646th A C & W SQUADRON
1951-1952



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
REPTS SUBMD	38	51	39	36	52	44	45	55	41	39	41	47
REPTS LATE	1	6	1	2	2	0	1	2	0	0	1	0
% LATE	2.6	11.8	2.6	5.5	3.8	0	2.2	3.5	0	0	2.4	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SV 26AD

RESTRICTED

17441

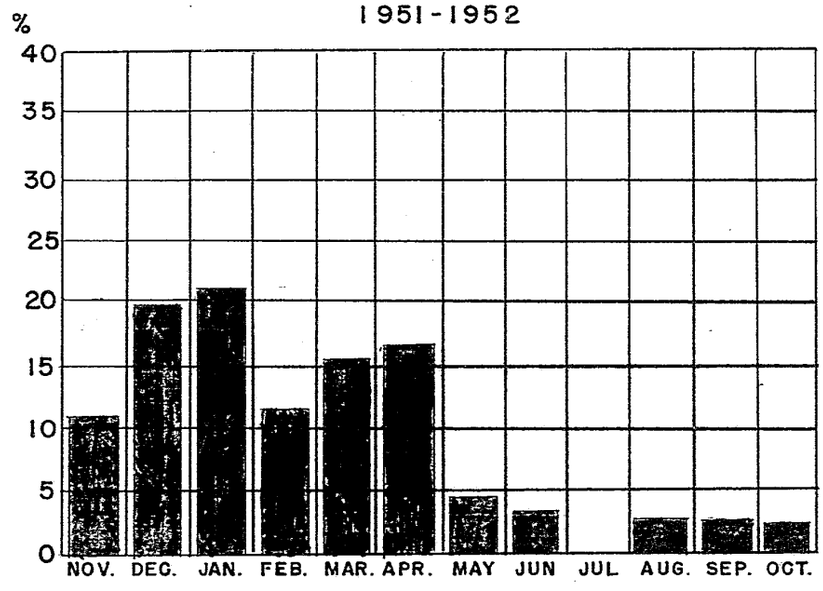
0470

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
647th A C & W SQUADRON
1951-1952



REPTS SUBMD	37	51	38	35	51	43	46	55	41	39	41	45
REPTS LATE	4	10	4	4	8	7	2	2	0	1	1	1
% LATE	10.8	19.6	21.0	11.4	15.7	16.8	4.3	3.5	0	2.5	2.4	2.2

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

17441

0471

THIS PAGE DECLASSIFIED IAW EO 13526

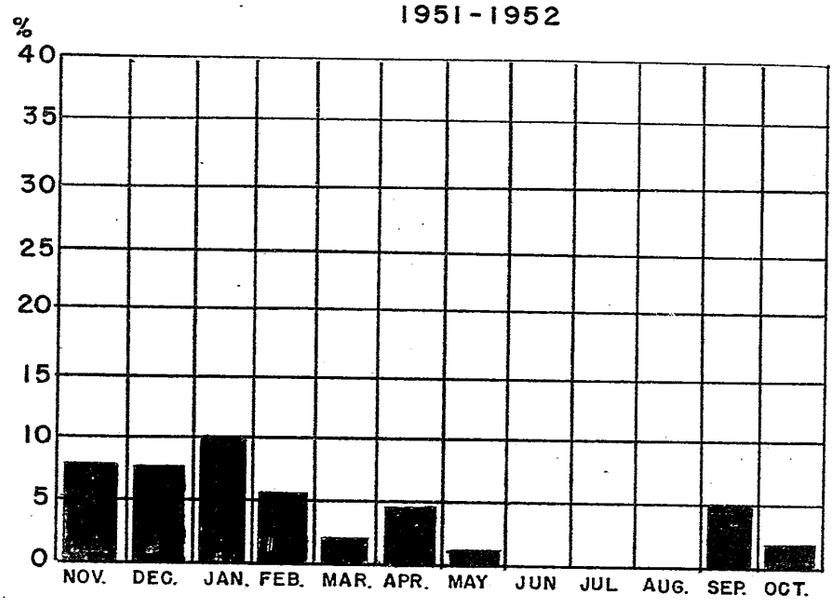
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

648th A C & W SQUADRON

1951 - 1952



	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.	SEP.	OCT.
REPTS SUBMD	38	52	40	36	51	44	45	56	41	40	40	46
REPTS LATE	3	4	4	2	1	2	1	0	0	0	2	1
% LATE	7.9	7.7	10.0	5.5	1.9	4.5	2.2	0	0	0	5.0	2.1

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT SV 26AD

RESTRICTED

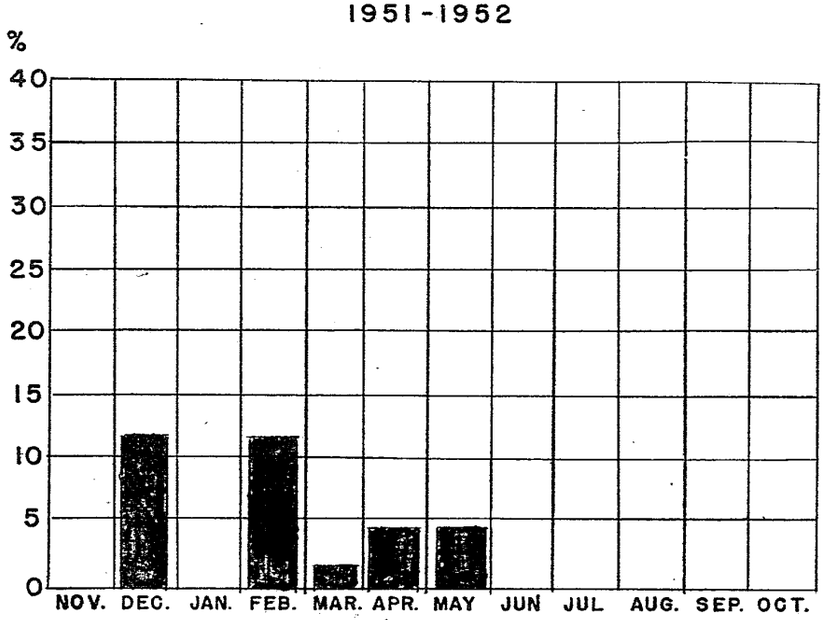
0472

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
770th A C & W SQUADRON
1951-1952



REPTS SUBMD	39	52	39	35	51	44	44	54	39	37	40	44
REPTS LATE	0	6	0	4	1	2	2	0	0	0	0	0
% LATE	0	11.5	0	11.4	1.9	4.5	4.5	0	0	0	0	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26 AD

RESTRICTED

17441

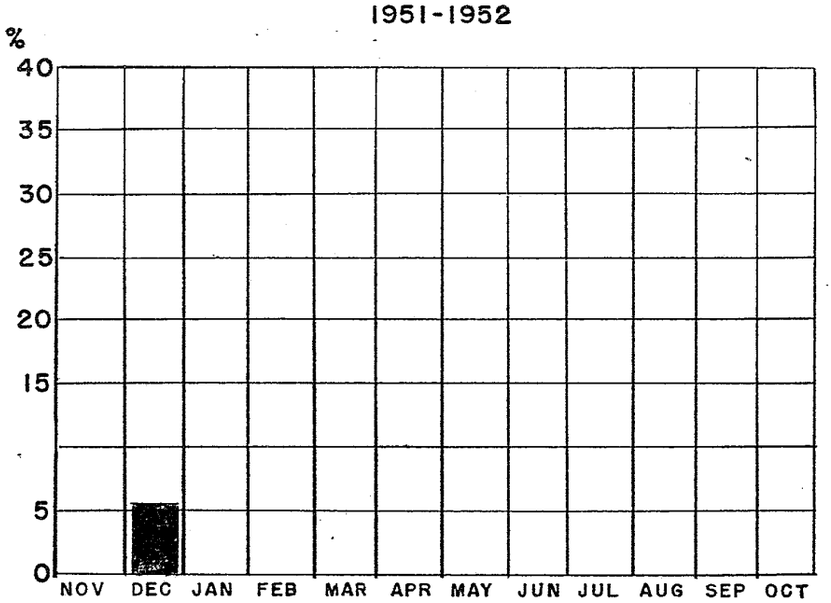
0473

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
771st AC&W SQUADRON
1951-1952



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
REPTS SUBMD	38	55	40	32	52	45	44	55	39	39	41	44
REPTS LATE	0	3	0	0	0	0	0	0	0	0	0	0
% LATE	0	5.5	0	0	0	0	0	0	0	0	0	0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

17441

0472

THIS PAGE DECLASSIFIED IAW EO 13526

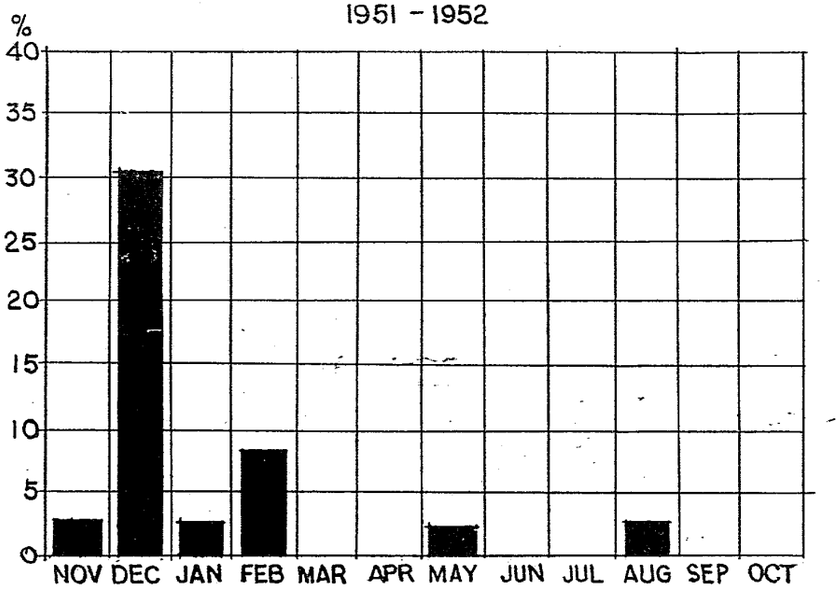
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

772ND AC & W SQUADRON

1951 - 1952



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
REPTS SUBMD	38	53	40	36	51	45	45	57	40	39	39	46
REPTS LATE	1	16	1	3	0	0	1	0	0	1	0	0
% LATE	2.6	30.2	2.5	8.3	0	0	2.2	0	0	2.5	0	.0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

17441

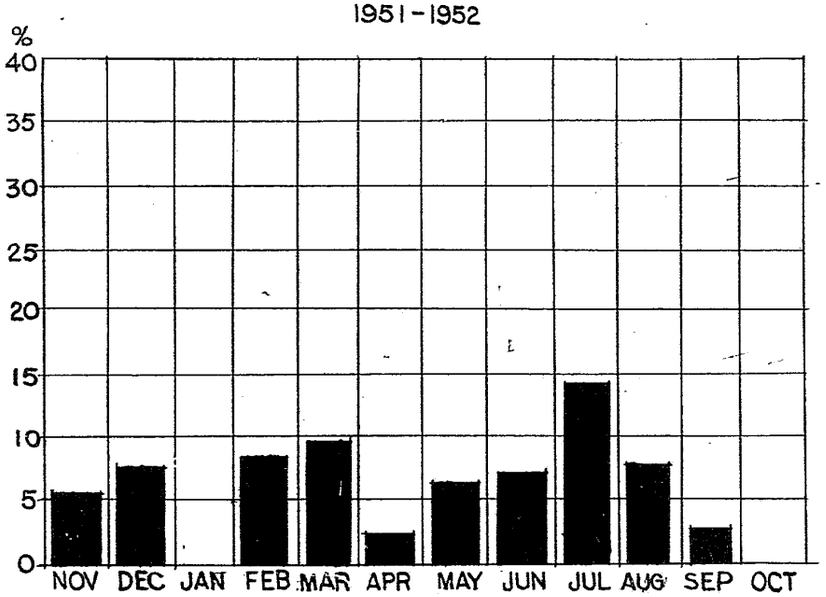
0475

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
773RD AC & W SQUADRON
1951 - 1952



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
REPTS SUBMD	39	53	39	36	52	47	45	56	41	39	41	48
REPTS LATE	2	4	0	3	5	1	3	4	6	3	1	0
% LATE	5.1	7.5	0	8.3	9.6	2.1	6.6	7.1	14.6	7.6	2.4	.0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

17441

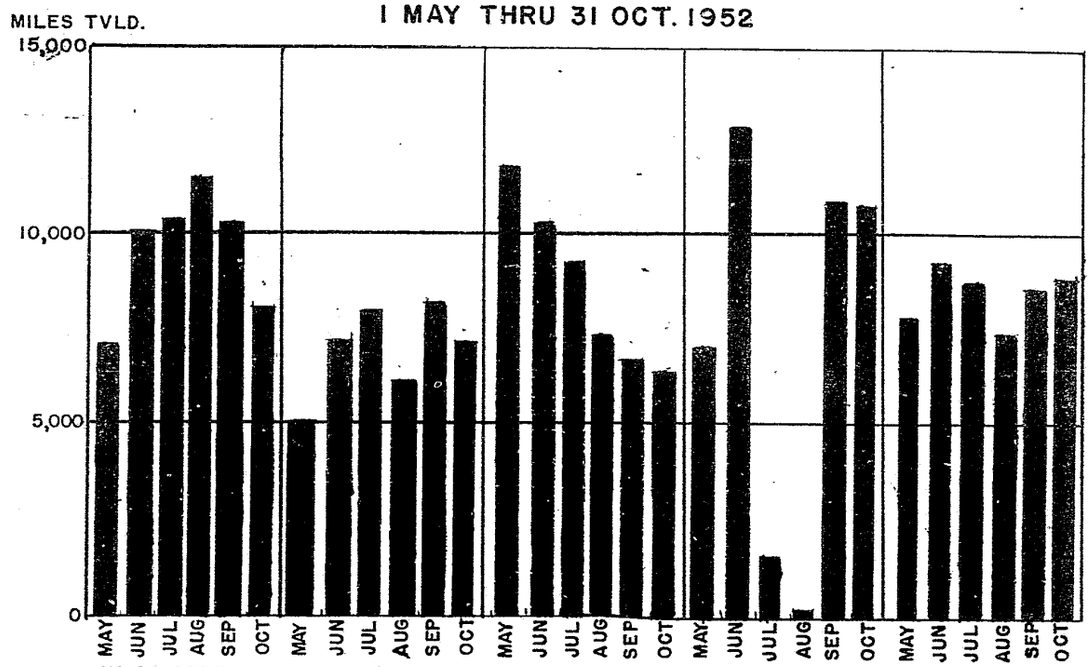
-0476

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MOTOR MILES TRAVELED BY SQUADRONS
26TH AIR DIVISION (DEFENSE)
1 MAY THRU 31 OCT. 1952



HQ. SQ. SECT.		646th AC&W		647th AC&W		648th AC&W		770th AC&W	
MAY	7740	MAY	5048	MAY	11917	MAY	7615	MAY	7887
JUN	10003	JUN	7318	JUN	10309	JUN	12310	JUN	9277
JUL	12250	JUL	7964	JUL	9291	JUL	1195	JUL	8506
AUG	10984	AUG	6068	AUG	7172	AUG	11565	AUG	7250
SEP	10253	SEP	8255	SEP	6710	SEP	10964	SEP	8587
OCT	8156	OCT	7320	OCT	6262	OCT	10904	OCT	8632

RESTRICTED

12441

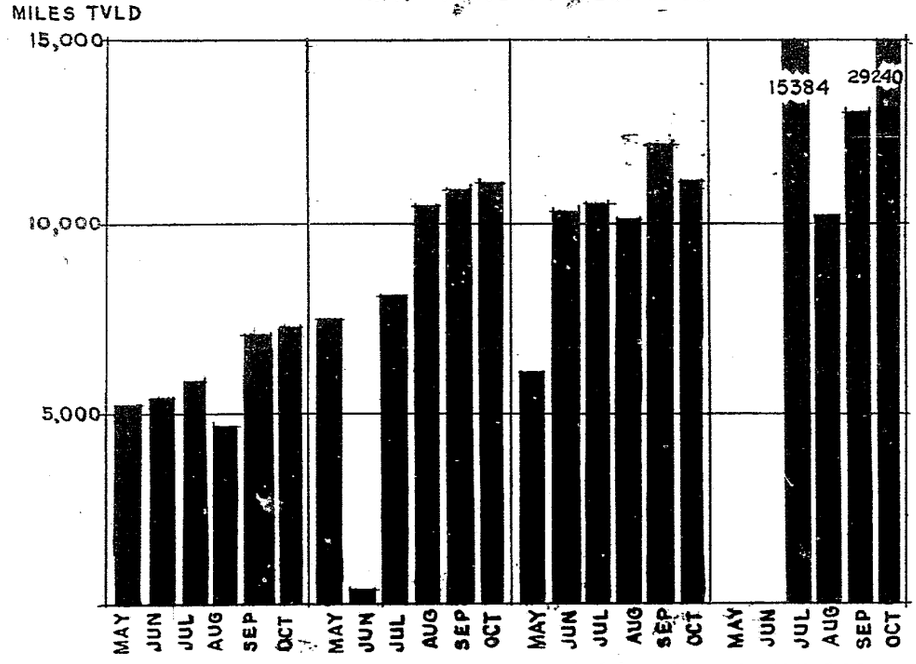
0473

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MOTC MILES TRAVELED Y SQUADRON
26 TH AIR DIVISION (DEFENSE)
1 MAY THRU 31 OCT. 1952



771st AC&W		772nd AC&W		773rd AC&W		4670th GOS	
MAY	5535	MAY	7493	MAY	6737	* MAY	0
JUN	5553	JUN	1137	JUN	10299	JUN	0
JUL	6503	JUL	8024	JUL	10444	JUL	15384
AUG	4852	AUG	10493	AUG	10149	AUG	10185
SEP	7135	SEP	10961	SEP	12142	SEP	13061
OCT	7261	OCT	10971	OCT	11617	OCT	29240

* MAY THRU JUN REPT AS AGGR FIGURE UNDER HQ. SQ. SECT.

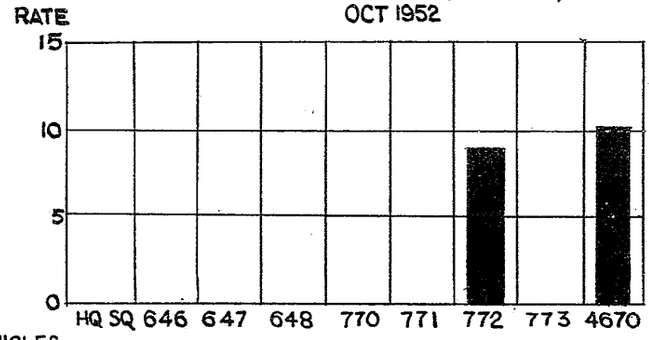
RESTRICTED

0478

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

MOTOR VEHICLE ACCIDENT RATE BY SQUADRON 26TH AIR DIVISION (DEFENSE) OCT 1952



MOTOR VEHICLES	HQ SQ	646	647	648	770	771	772	773	4670
NO. ACCDS.	0	0	0	0	0	0	1	0	3
MI TVLD	8156	7320	6262	10904	8632	7261	10971	11617	29240
DAYS O/SV	0	0	0	0	0	7	0	0	4

TOTAL NO. GRD ACCDS	HQ SQ	646	647	648	770	771	772	773	4670
ON DUTY	7	1	3	3	1	9	12	15	0
OFF DUTY	0	1	0	0	0	0	1	0	0
MAN DAYS LOST	0	3	0	0	0	0	2	0	0

SOURCE: AF FORM 122A PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. ACCIDENTS} \times 100{,}000}{\text{MI. TVLD}} = \text{RATE PER 100,000 MI.}$$

J7441

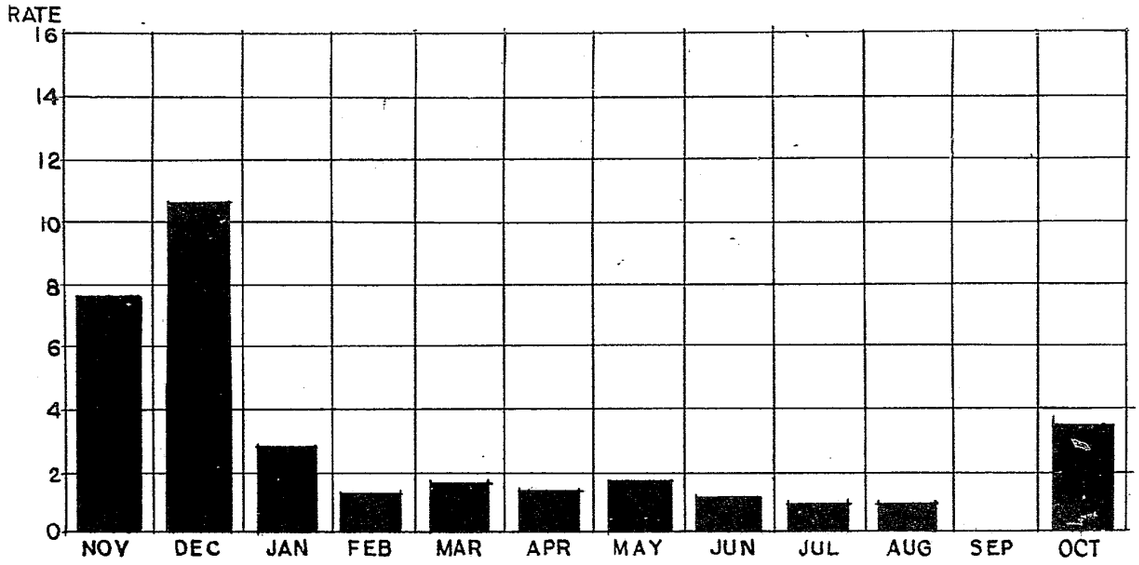
0479

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE
26TH AIR DIVISION (DEFENSE)
1951-1952



	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
NO. ACCDS.	7	10	2	1	1	1	1	1	1	1	0	4
MI. TVLD.	95443	90566	81545	94282	88554	95160	59972	66206	79561	78718	88058	100364
DAYS O/SV	10	69	8	16	0	1	0	14	1/2	SALVAGED	0	11

SOURCE AF FORM 122A

PREPARED BY STAT SV 26AD

$$\frac{\text{NO. ACCDS. X 100,000}}{\text{MILES TRAVELED}} = \text{RATE PER 100,000 MI.}$$

26

RESTRICTED

12441

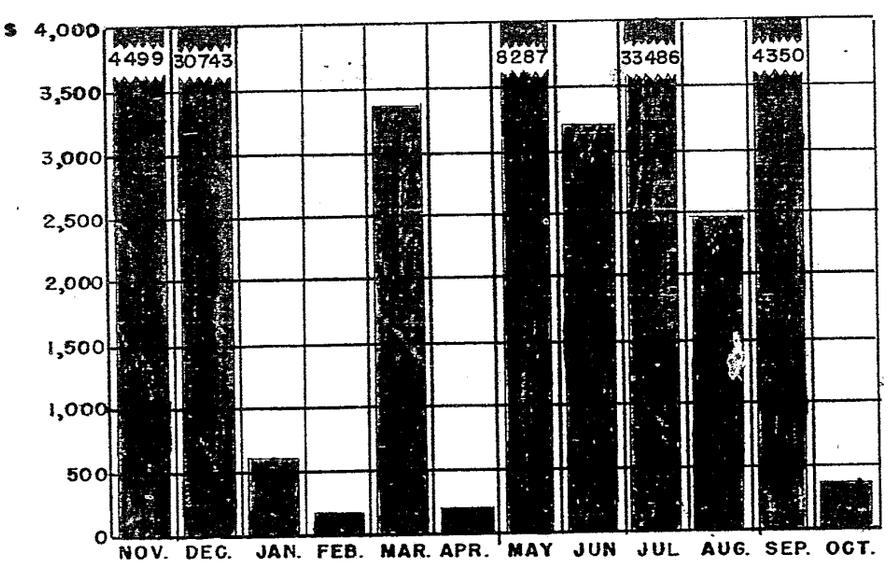
0480

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TOTAL GROUND ACCIDENT COSTS
26th AIR DIVISION (DEF.)
1951-1952



COSTS $												
	4499	30743	630	183	3384	195	8287	3217	33486	2475	4350	380

SOURCE: AF FORM 122A

PREPARED BY: STAT. SV. 26AD

RESTRICTED

17441

0481

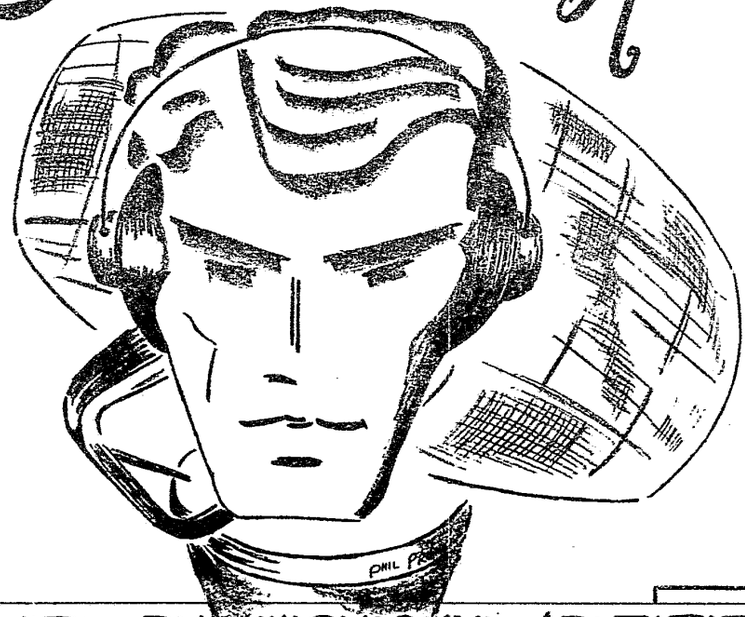
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

Statistical Review

Office of the Comptroller



26th AIR DIVISION (DEFENSE)

ROSLYN, N.Y.

RESTRICTED

0482

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

26TH AIR DIVISION (DEFENSE)
STATISTICAL REVIEW
DECEMBER 1952

INDEX

Index. . . . . .
Introduction . . . . . .
Roster of Unit Commanders (26th Air Division). . . . . .
Roster of Unit Commanders (1[illegible]0th GOS) . . . . . .
Content of Authorized Officers Assigned . . . . . .
Content of Authorized Airmen Assigned . . . . . .
Trend of Estimated TDY Travel Cost by Staff Section . . . . . .
Trend of Estimated TDY Travel Cost by Staff Section . . . . . .
Trend of Estimated TDY Travel Cost by Squadron . . . . . .
Trend of Estimated TDY Travel Cost by Squadron . . . . . .
Courts Martial Data . . . . . .
AWOL Statistics . . . . . .
Status of Squadron Reporting. . . . . .
Status of Squadron Reporting. . . . . .
Status of Squadron Reporting (Hq Sq Sec). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Status of Squadron Reporting ([illegible]). . . . . .
Trend of Motor Miles Traveled by Squadron . . . . . .
Trend of Motor Miles Traveled by Squadron . . . . . .
Motor Vehicle Accident Rate by Squadron . . . . . .
Motor Vehicle Accident Rate (26th Air Division) . . . . . .
Total Ground Accident Cost. . . . . .

RESTRICTED

0483

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

20TH AIR DIVISION (DEFENSE)

STATISTICAL REVIEW

INTRODUCTION

This Statistical Review is published monthly in order to provide the commanding officers, within this command, information and statistics pertaining to divisional activities.

The efficient use of the graphs and analysis presented herein should serve as a guide to the units and/or activities and indicate when further investigations and corrective action may result in better preparation for the achievement of the mission.

It is requested that reports and suggestions for improvement and/or additions to this [illegible] be addressed to:

COMMANDING GENERAL
20TH AIR DIVISION (DEFENSE)
ATTN: Comptroller
Brooklyn, New York

0484

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF UNIT COMMANDERS
26TH AIR DIVISION (DEF)
As of 30 NOVEMBER 1952

UNIT AND STATION	NAME	RANK	SERIAL NUMBER
26th Air Division (Def) Roslyn, New York	RUSSELL J. MINTY	Brig. Gen	224A
Hqs Squadron Section Roslyn, New York	GENE B. GROVE	Major	AO 854343
646th AC&W Squadron Highlands, New Jersey	LESTER B. GOLDBERG	Major	AO [illegible]3118
647th AC&W Squadron Manassas, Virginia	WILLIAM A. CROMARTIE	Major	AO 441303
648th AC&W Squadron Benton, Pennsylvania	EDWARD D. GILLESPIE	Major	AO 792360
770th AC&W Squadron Palermo, New Jersey	WILLIAM H. SHEPPARD	Major	AO 667860
771st AC&W Squadron Ft. Custis, Va	EZRA BALLARD, JR	Major	AO 689733
772nd AC&W Squadron Claysburgh, Pennsylvania	WILLIAM M. PRILL	Major	AO 580424
773rd AC&W Squadron Montauk, New York	ALFRED P. OSTRANDER	Major	AO 692186
11th WAF Squadron Roslyn, New York	HELEN M. LEWIS	2d Lt	AL 2236597
4670th Grs Obs Squadron Roslyn, New York	MAURICE A. BRONER	Lt Col	AO 361879

R E S T R I C T E D

0485

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF DETACHMENT COMMANDERS
457TH GROUND OBSERVER SQUADRON
as of 30 November 1952

DETACHMENT AND LOCATION	NAME	RANK	SERIAL NUMBER
Detachment #1 New Haven, Conn	RICHARD J. CURTIS	Major	AO 559[illegible]1
Detachment #2 White Plains, New York	FREDERICK F. JOHNSON	Major	AO 5o1102
Detachment #3 Trenton, N.J.	NORRIS L. HERRINGTON	Major	AO 85[illegible]01
Detachment #4 Harrisburgh, Pa	ROBERT F. LOUGHREY	Major	AO 753[illegible]0
Detachment #5 Pittsburgh, Pa	JEROME G. SCHNEICKERT	Major	AO [illegible]03085
Detachment #6 Baltimore, Md	PAUL R. SMITH	Major	AO 441819
Detachment #7 Richmond Va	FRANCIS M. VAUGHAN	Major	AO 376238
Detachment #8 Roanoke Va	GEORGE T BOOTHE JR	Captain	AO 697536

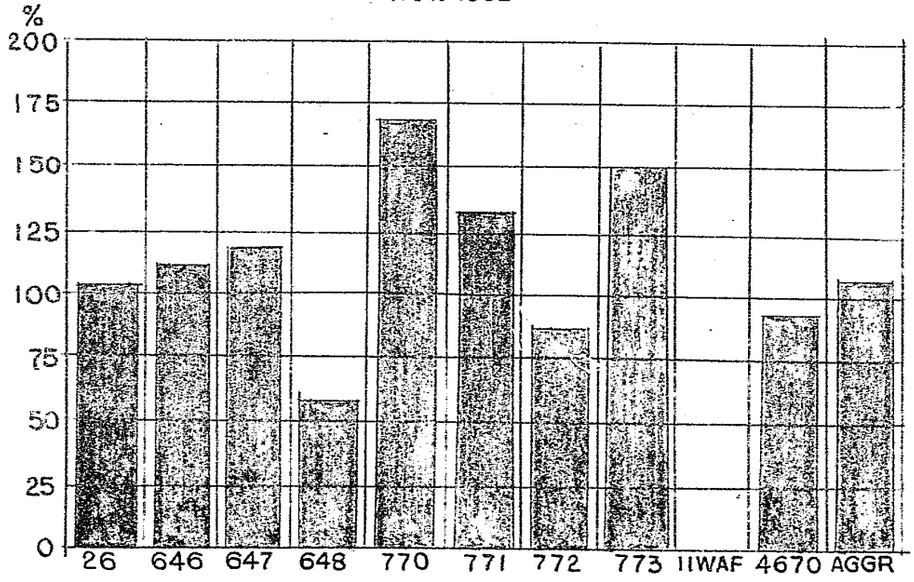
R E S T R I C T E D

0486

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

PERCENT OF AUTHORIZED OFFICERS ASSIGNED
26TH AIR DIVISION (DEFENSE)
NOV. 1952



	26	646	647	648	770	771	772	773	IIWAF	4670	AGGR
AUTH	79	33	16	34	16	16	16	16	1	42	269
ASGD	82	37	19	20	27	21	14	24	1	39	286
AUTH/ASGD	103.7	112.1	118.7	58.8	168.7	131.2	87.5	150.0	.0	92.8	106.3

SOURCE: AF-PI MORNING REPORTS PREPARED BY STAT SV 26AD

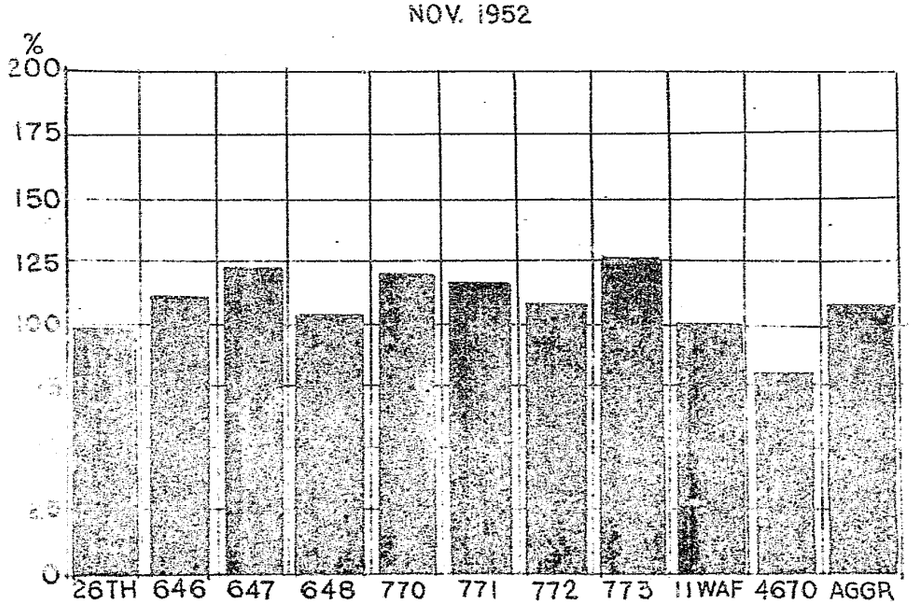
0487

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED AIRMEN ASSIGNED
26TH AIR DIVISION (DEFENSE)
NOV. 1952



AUTH	382	261	179	270	179	179	179	179	3	110	1921
ASGD	368	295	220	297	218	206	198	224	3	85	2114
%AUTH/ASGD	96.3	113.0	122.9	103.3	121.7	115.0	110.6	125.1	100.0	77.2	110.0

SOURCE: AF-P1 MORNING REPORTS PREPARED BY: STAT SV 26TH AD

RESTRICTED

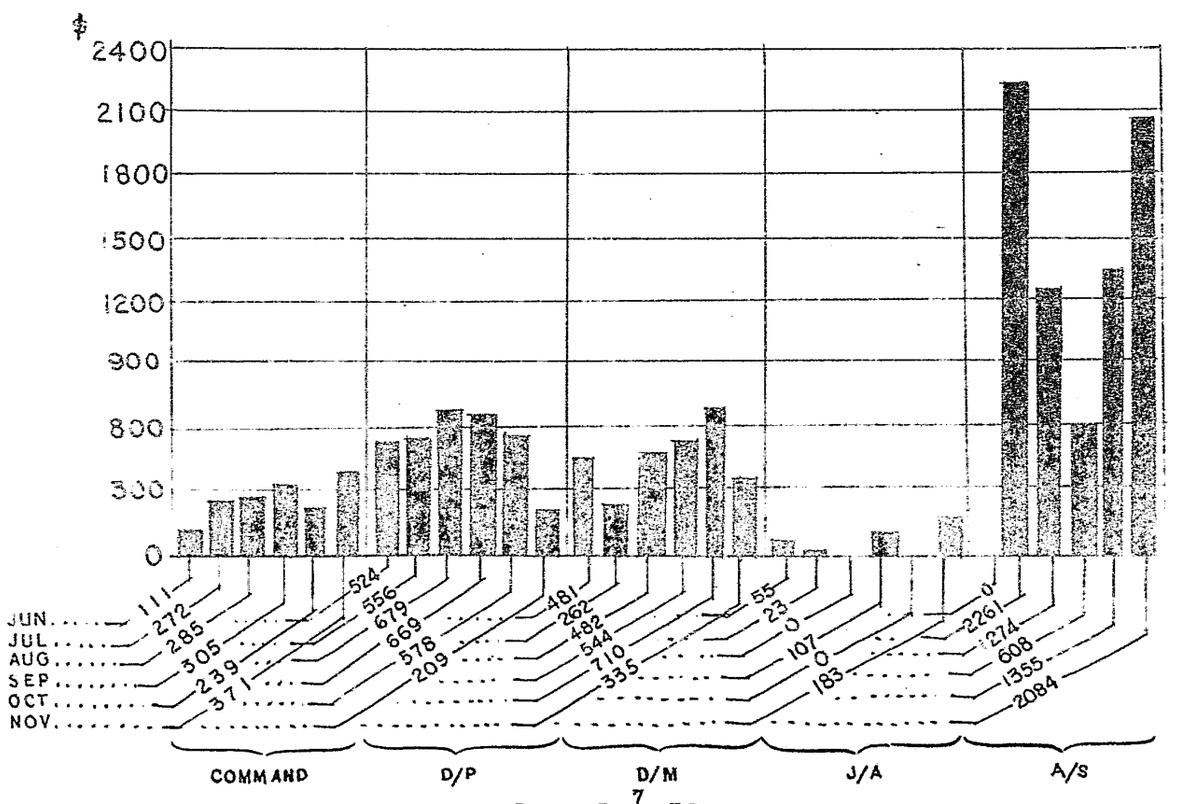
0488

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTION
HQ. 26TH AIR DIVISION (DEFENSE)
1 JUN THRU 30 NOV. 1952



RESTRICTED

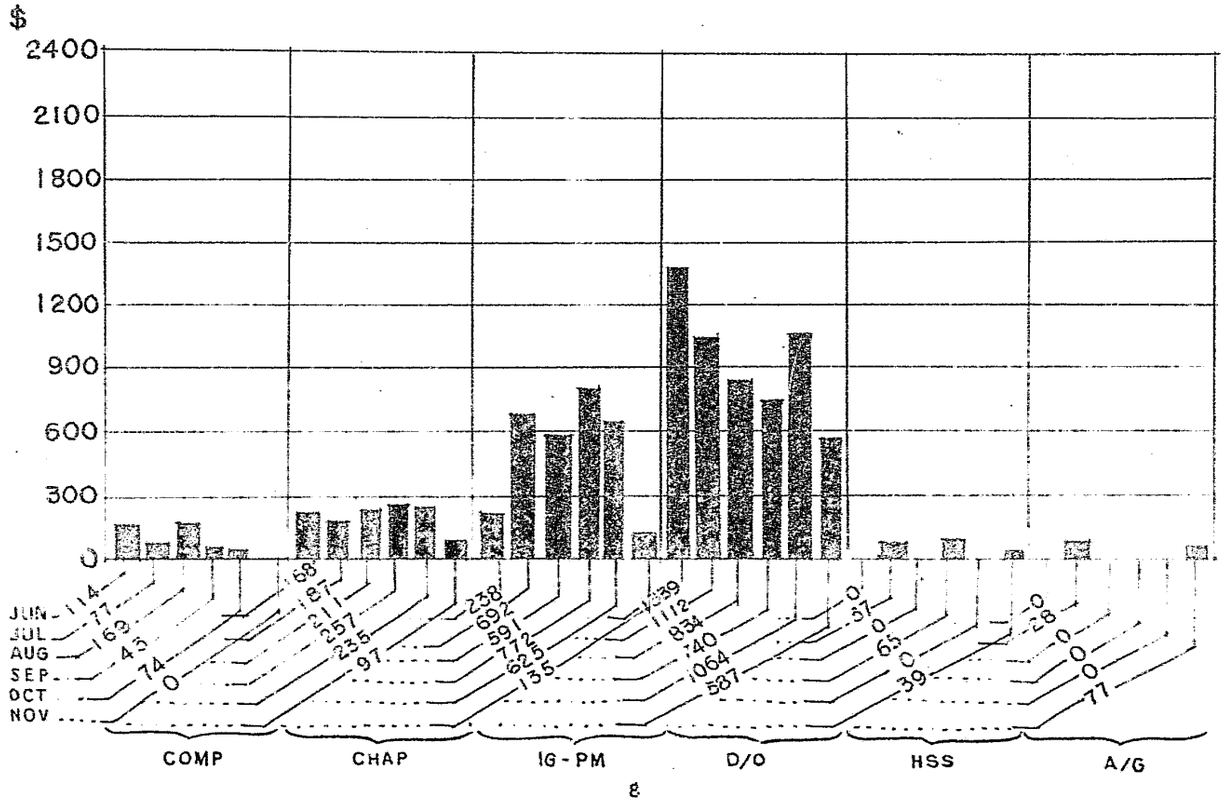
0489

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY STAFF SECTIONS
HQ. 26TH AIR DIVISION (DEFENSE)
1 JUN THRU 30 OCT. 1952



8

RESTRICTED

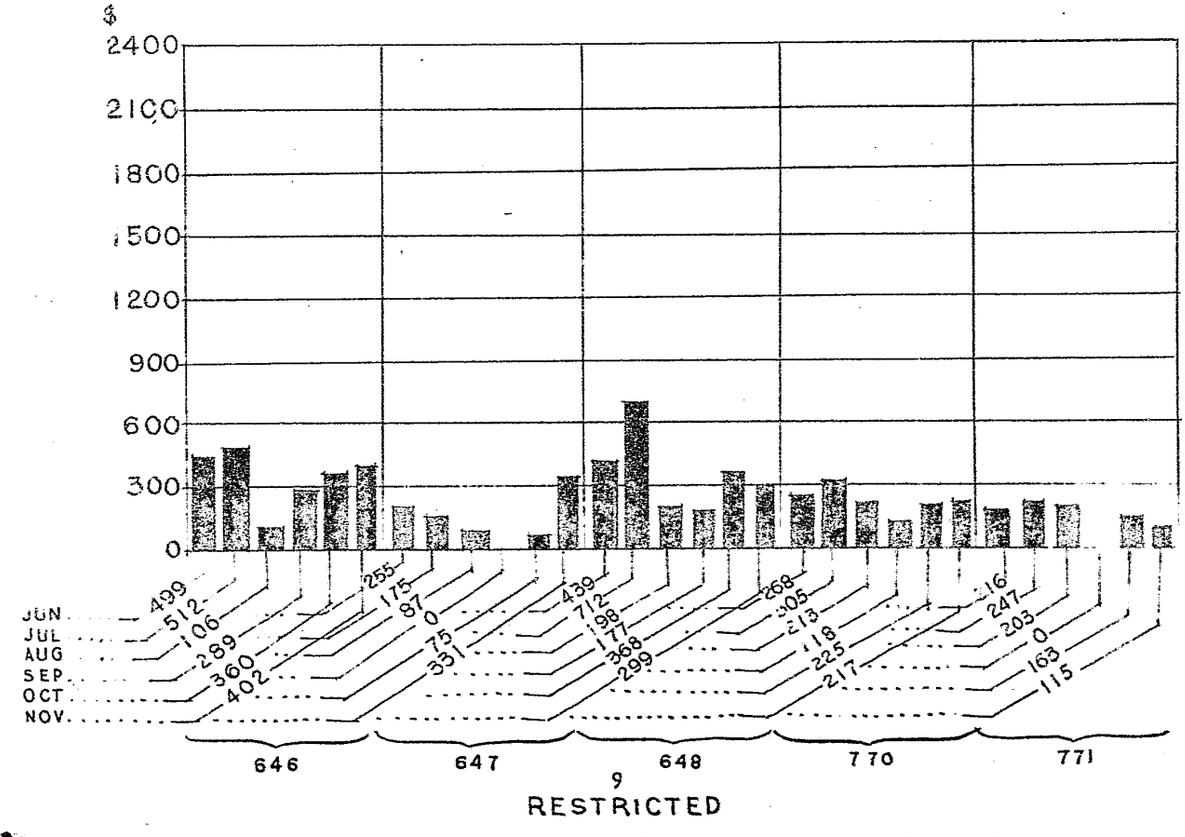
0490

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TD BY SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEF.)
JUN THRU 30 NOV. 1952



RESTRICTED

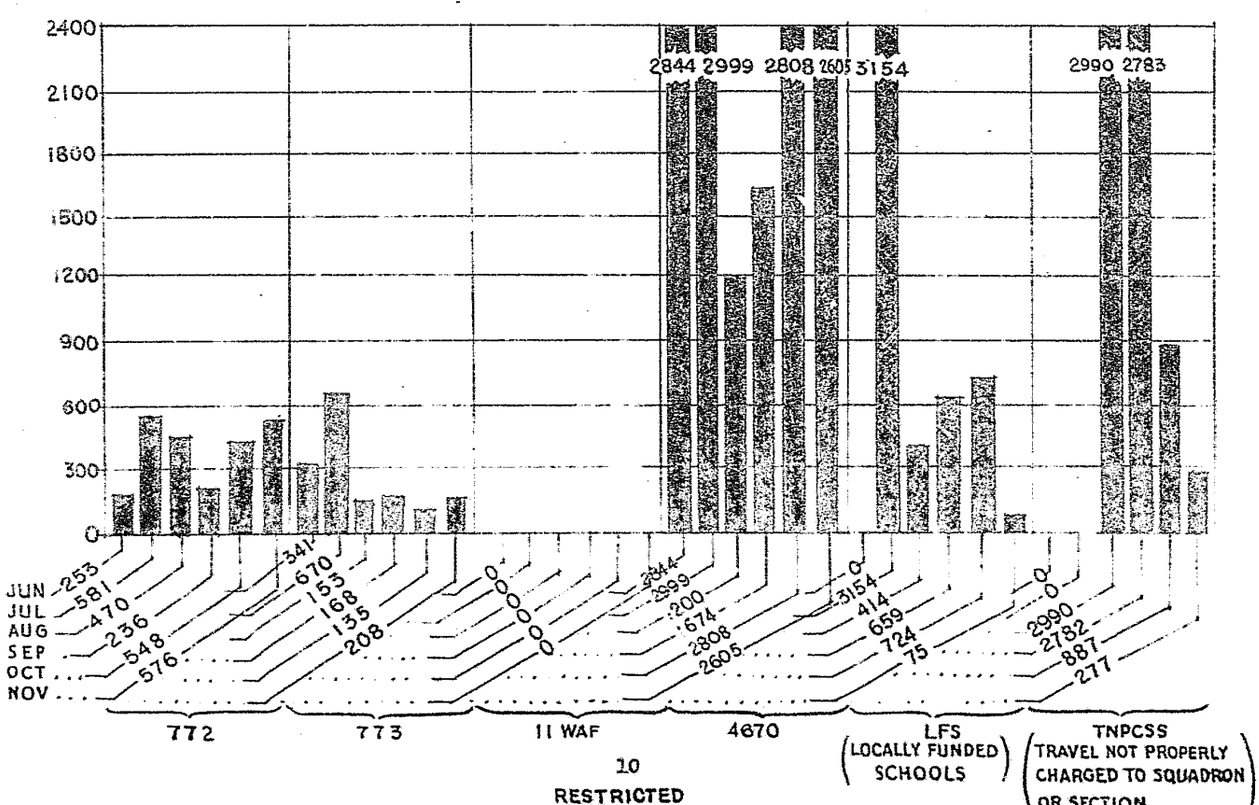
0491

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY TRAVEL COST BY SQUADRONS
HQ 26TH AIR DIVISION (DEFENSE)
1 JUN THRU 30 NOV.
1952



RESTRICTED

0492

THIS PAGE DECLASSIFIED IAW EO 13526

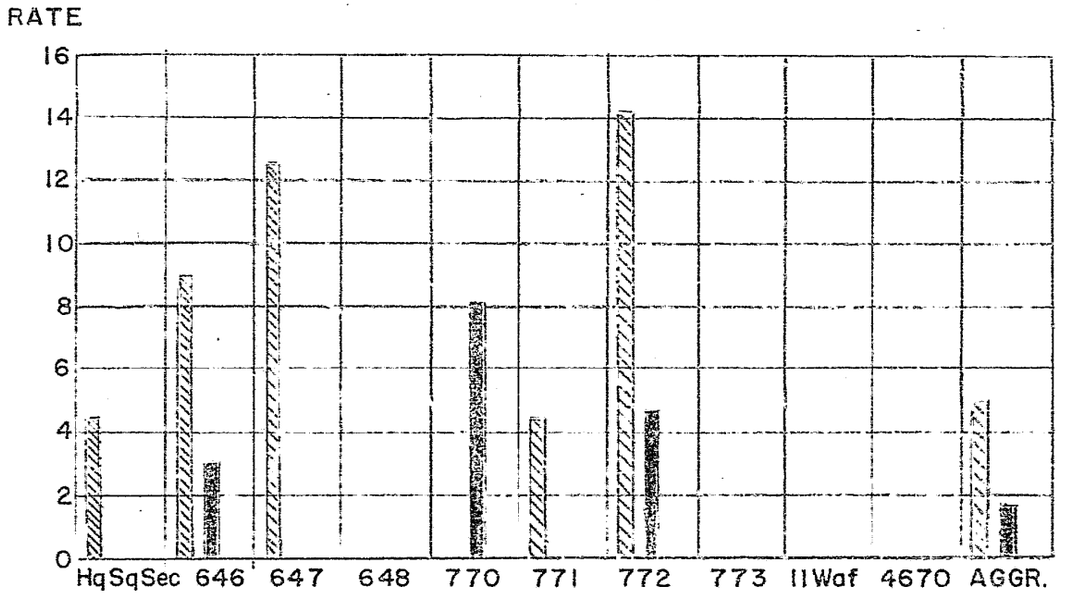
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

COURTS MARTIAL DATA

26TH AIR DIVISION (DEF.)

NOV. 1952



	HqSqSec	646	647	648	770	771	772	773	IIWaf	4670	AGGR.
SUMMARY CM	2	3	3	0	0	1	3	0	0	0	12
SPECIAL CM	0	1	0	0	2	0	1	0	0	0	4
GENERAL CM	0	0	0	0	0	0	0	0	0	0	0

PREPARED BY: STAT SV 26AD

$$\frac{\text{NO. CASES X 1,000}}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1,000 AMN.}$$

RESTRICTED

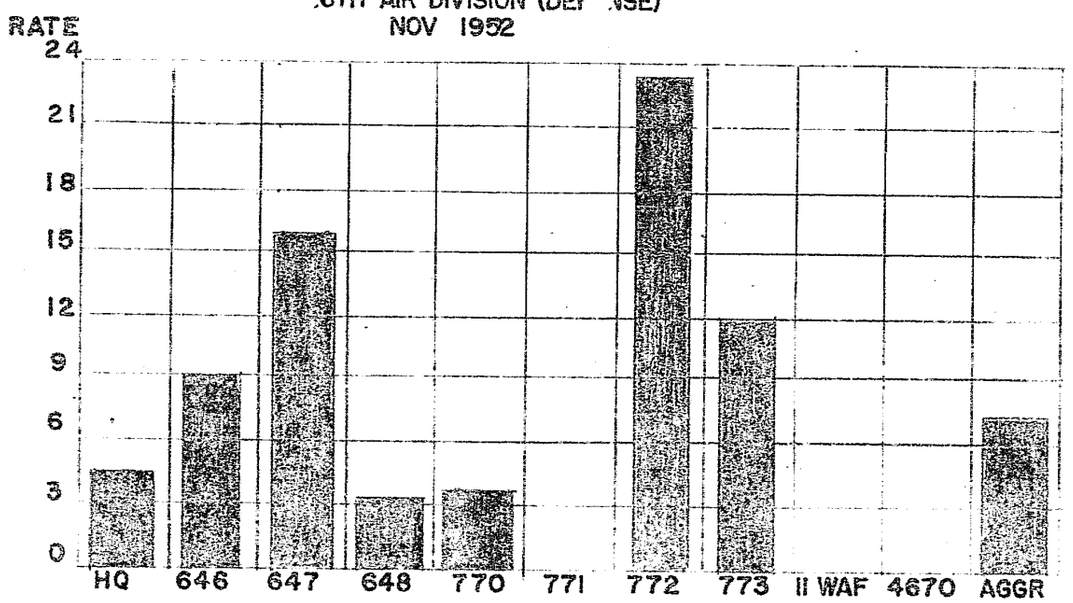
0493

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

AWOL STATISTICS
6TH AIR DIVISION (DEFENSE)
NOV 1952



	HQ	646	647	648	770	771	772	773	II WAF	4670	AGGR
AWOL	2	3	4	1	1	0	5	3	0	0	19
RATE	4.4	9.0	16.7	3.1	4.0	.0	23.5	12.0	.0	.0	7.9

SOURCE: APM RECORDS

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. AWOL} \times 1000}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1000}$$

RESTRICED

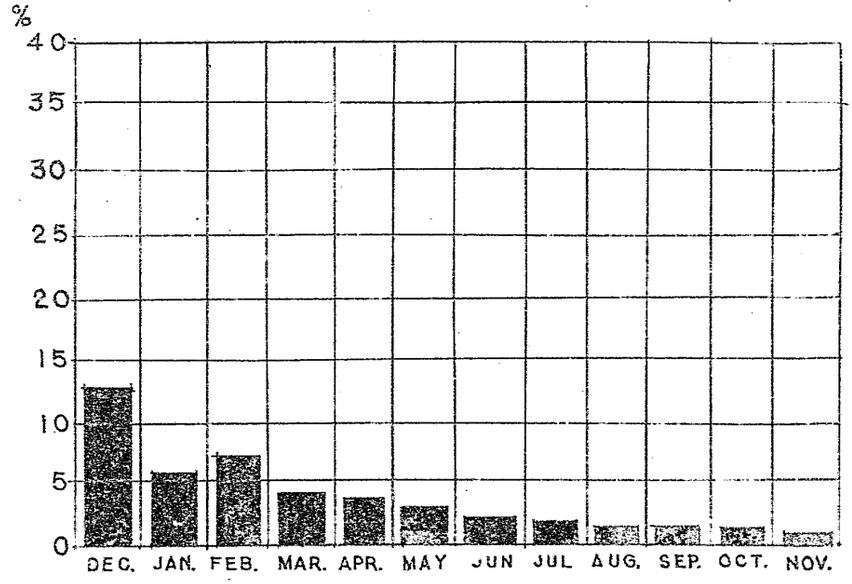
0494

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
26th AIR DIVISION (DEFENSE)
1951-1952



	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.	SEP.	OCT.	NOV.
REPTS SUBMD	453	310	250	360	312	314	409	305	294	294	346	297
REPTS LATE	61	19	18	17	12	10	9	6	5	5	5	3
% LATE	13	6.1	7.2	4.7	3.8	3.1	2.2	1.9	1.6	1.6	1.4	1.0

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV. 26 AD

15

RESTRICTED

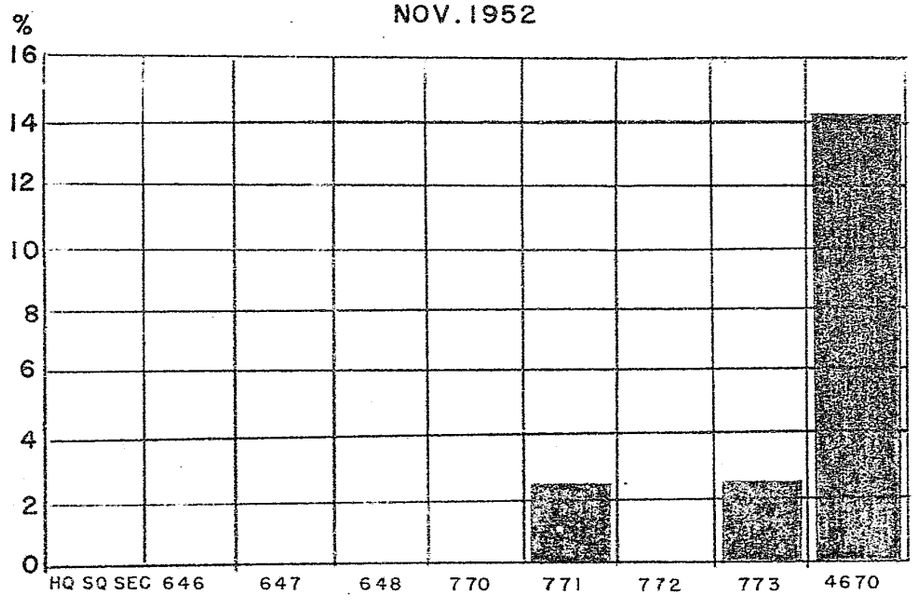
0495

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF REPORTS
BY SQUADRON
26TH AIR DIVISION (DEF.)
NOV. 1952



	HQ SQ SEC	646	647	648	770	771	772	773	4670
REPTS SUBMD	16	41	38	38	39	38	42	39	6
REPTS LATE	0	0	0	0	0	1	0	1	1
% REPTS LATE	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.5	14.2

14

RESTRICTED

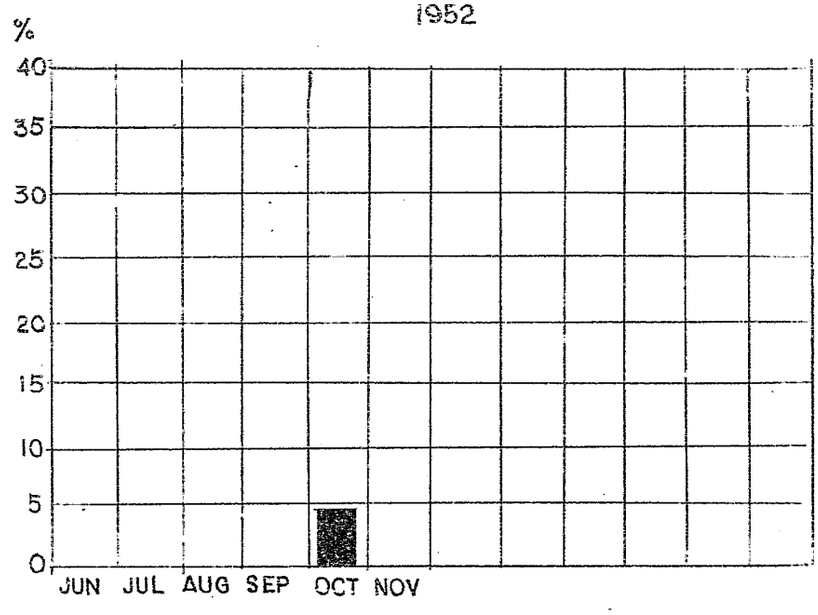
0496

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
HQ. SQ. SECTION (26 AD)
1952



	JUN	JUL	AUG	SEP	OCT	NOV
REPTS SUBMD	13	19	15	16	21	16
REPTS LATE	0	0	0	0	1	0
% LATE	.0	.0	.0	.0	4.7	.0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

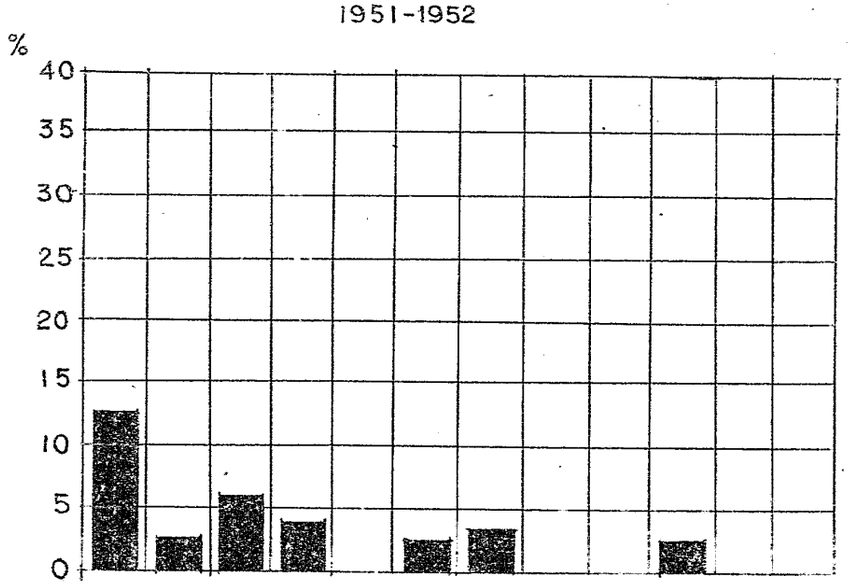
0497

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
646th A C & W SQUADRON
1951-1952



REPTS SUBMD	51	39	36	52	44	45	55	41	39	41	47	41
REPTS LATE	6	1	2	2	0	1	2	0	0	1	0	0
% LATE	11.8	2.6	5.5	3.8	0	2.2	3.5	0	0	2.4	.0	.0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SV 26AD

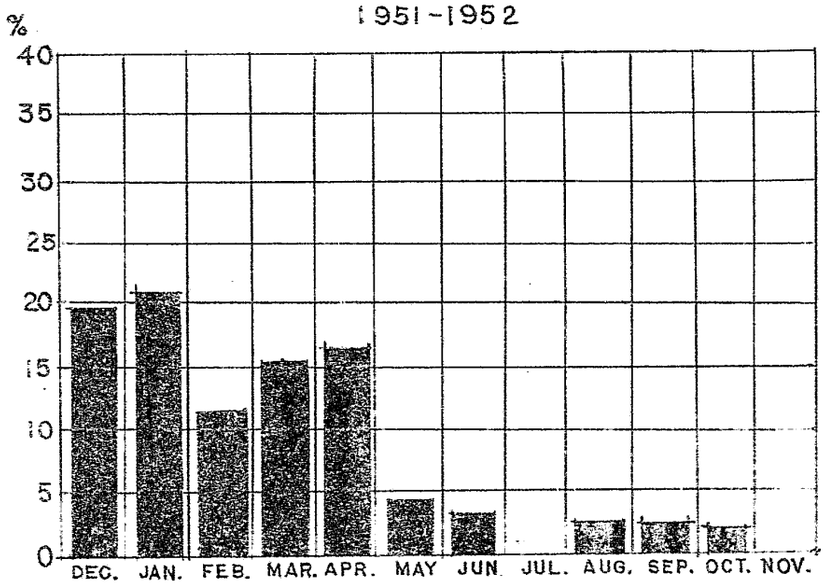
0498

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
647th A C & W SQUADRON
1951-1952



	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.
REPTS SUBMD	51	38	35	51	43	46	55	41	39	41	45	38
REPTS LATE	10	4	4	8	7	2	2	0	1	1	1	0
% LATE	19.6	21.0	11.4	15.7	16.8	4.3	3.5	0	2.5	2.4	2.2	.0

SOURCE - SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

0499

THIS PAGE DECLASSIFIED IAW EO 13526

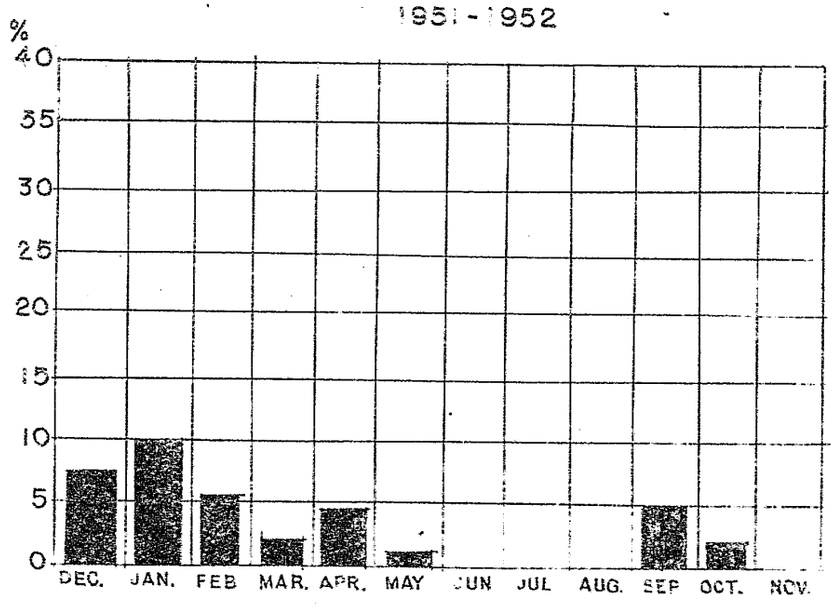
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

648th AC & W SQUADRON

1951 - 1952



REPTS SUBMD	52	40	36	51	44	45	56	41	40	40	46	38
REPTS LATE	4	4	2	1	2	1	0	0	0	2	1	0
% LATE	7.7	10.0	5.5	1.9	4.5	2.2	0	0	0	5.0	2.1	.0

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT SV 26AD

RESTRICTED

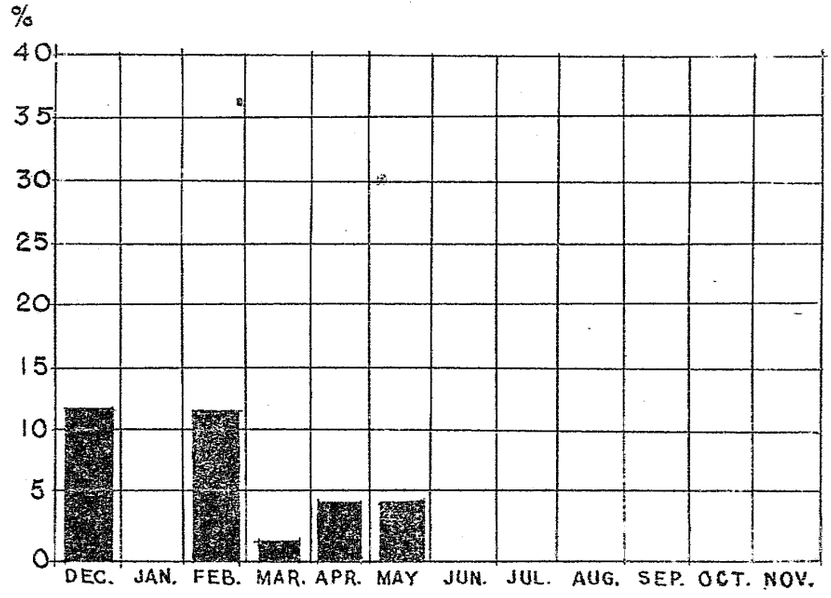
0500

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENTAGE OF SQUADRON REPORTING
770th A C & W SQUADRON
1951-1952



	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.
REPTS. SUBMD.	52	39	35	51	44	44	54	39	37	40	44	39
REPTS LATE	6	0	4	1	2	2	0	0	0	0	0	0
% LATE	11.5	0	11.4	1.9	4.5	4.5	0	0	0	0	0	.0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26 AD

19

RESTRICTED

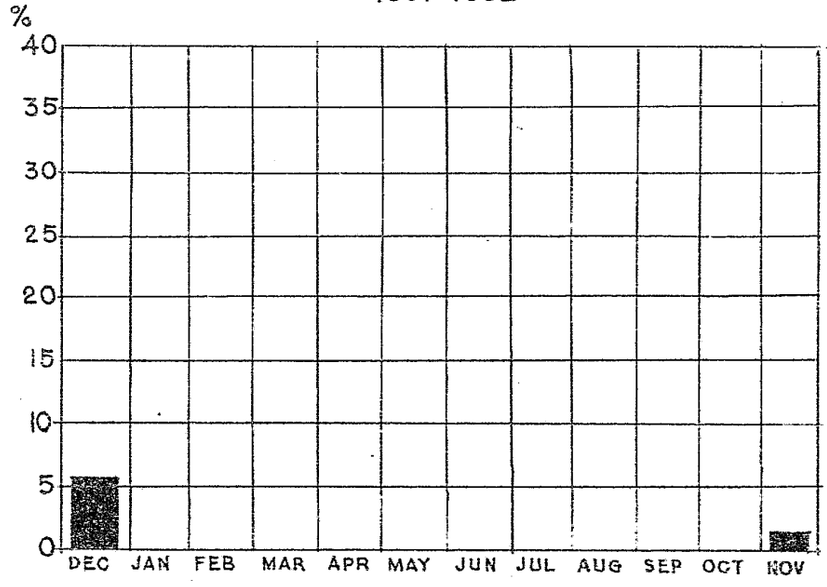
0501

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
771st AC&W SQUADRON
1951-1952



	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
REPTS SUBMD	55	40	32	52	45	44	55	39	39	41	44	38
REPTS LATE	3	0	0	0	0	0	0	0	0	0	0	1
% LATE	5.5	0	0	0	0	0	0	0	0	0	0	2.5

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26 AD

RESTRICTED

THIS PAGE DECLASSIFIED IAW EO 13526

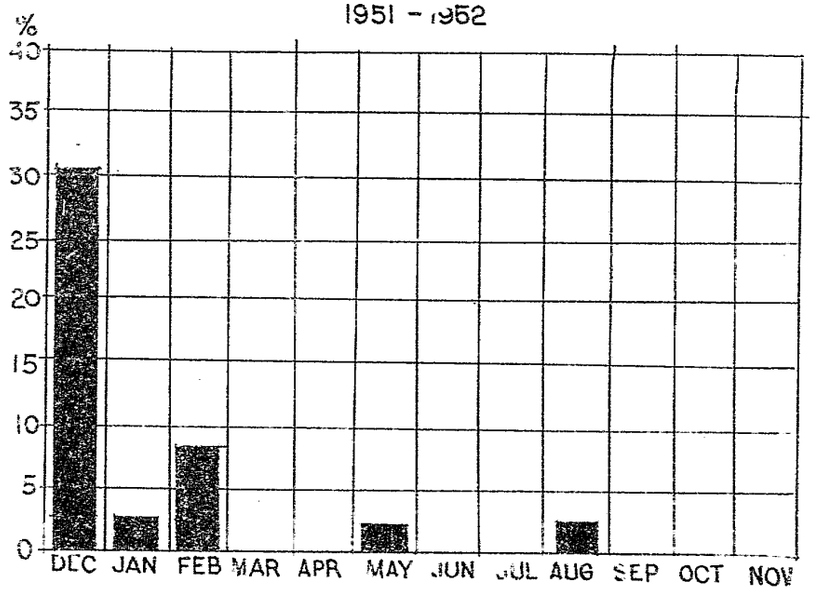
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

772ND AC [illegible] SQUADRON

1951 - 1952



REPTS SUBMD	53	40	36	51	45	45	57	40	39	39	46	42
REPTS LATE	16	1	3	0	0	1	0	0	1	0	0	0
% LATE	30.2	2.5	8.3	0	0	2.2	0	0	2.5	0	.0	.0

SOURCE: SUSPENSE CARDS

PREPARED BY STAT SV 26AD

RESTRICTED

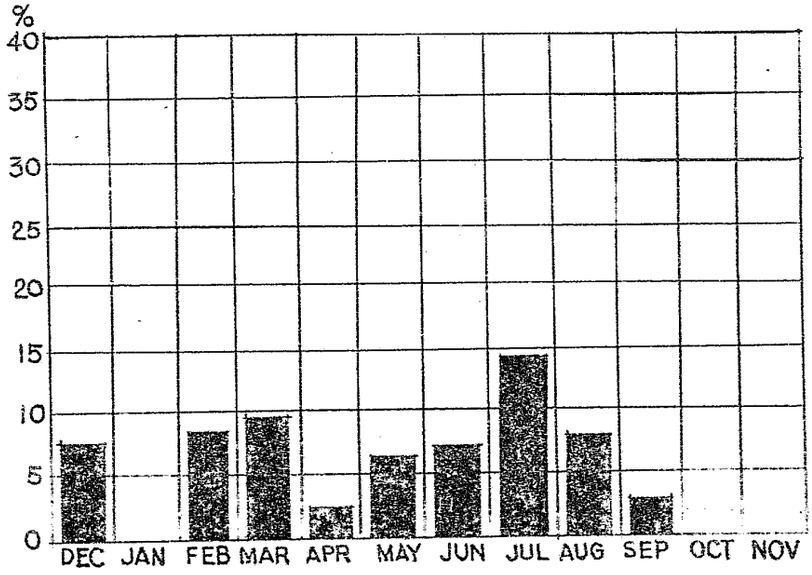
0503

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
773RD AC & W SQUADRON
1951-1952



	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
REPTS SUBMD	53	39	36	52	47	45	56	41	39	41	48	39
REPTS LATE	4	0	3	5	1	3	4	6	3	1	0	1
% LATE	7.5	0	8.3	9.6	2.1	6.6	7.1	14.6	7.6	2.4	.0	2.5

SOURCE: SUSPENSE CARDS

PREPARED BY STAT SV 26AD

RESTRICTED

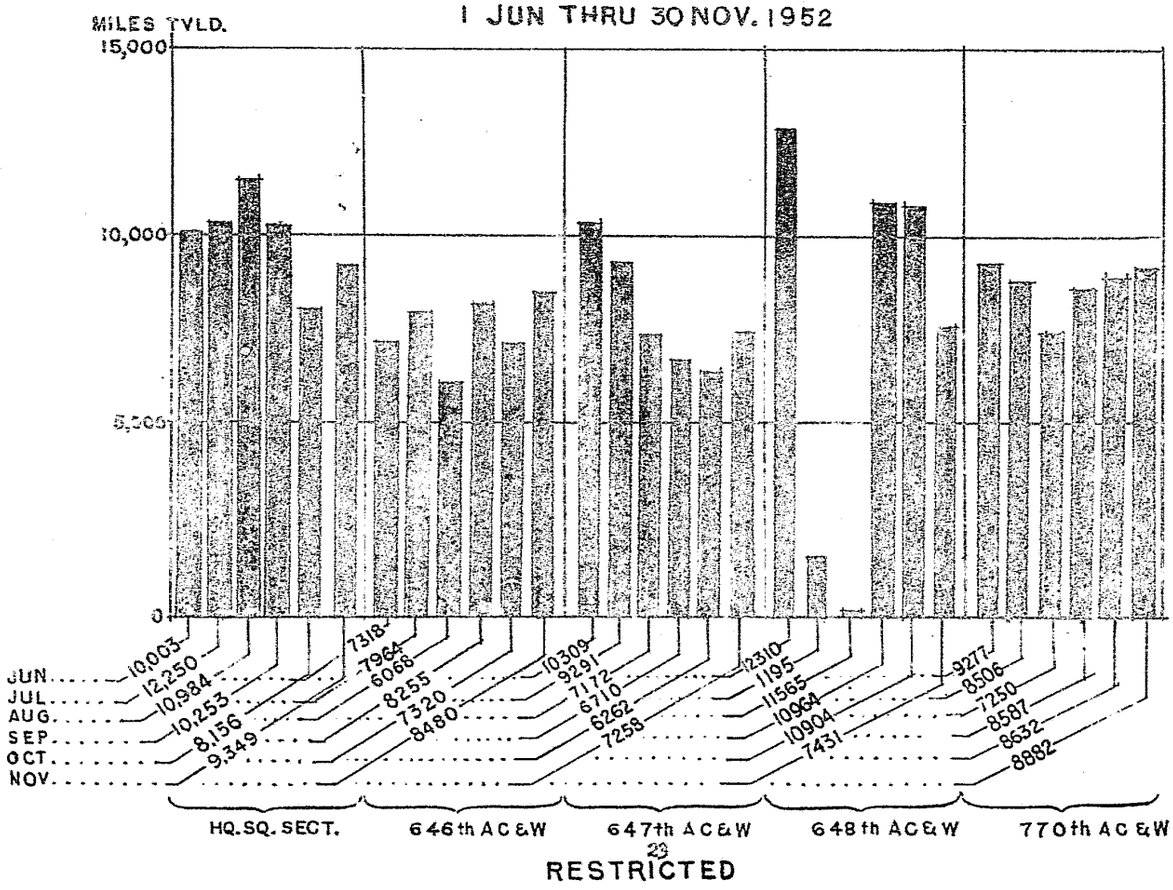
0502

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MOTOR MILES TRAVELED BY SQUADRONS
26TH AIR DIVISION (DEFENSE)
1 JUN THRU 30 NOV. 1952



RESTRICTED

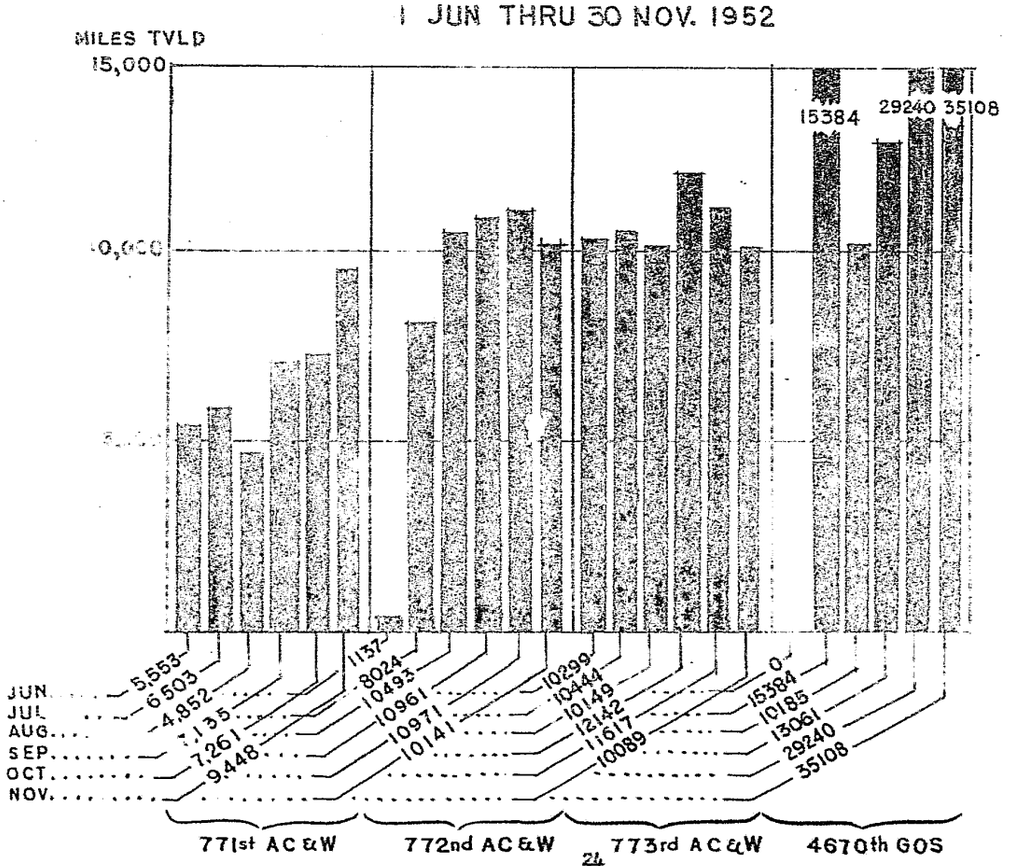
0505

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF M[illegible] R[illegible]LES TRAVELED BY SQUADRON
26TH AIR DIVISION (DEFENSE)
1 JUN THRU 30 NOV. 1952



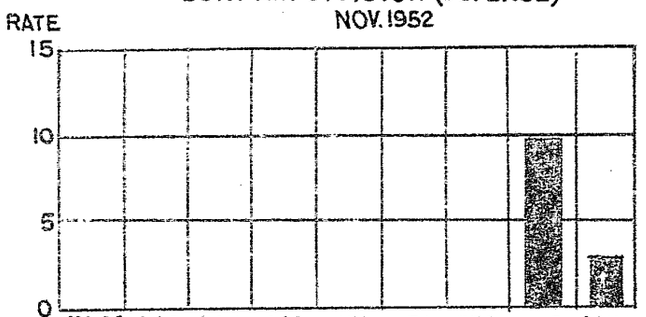
RESTRICTED

0506

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

MOTOR VEHICLE ACCIDENT RATE BY SQUADRON 26TH AIR DIVISION (DEFENSE) NOV. 1952



– MOTOR VEHICLES –	HQ SQ	646	647	648	770	771	772	773	4670
NO. ACCDS.	0	0	0	0	0	0	0	1	1
MI TVLD	9349	8480	7258	7431	8882	9448	10141	10089	25108
DAYS O/SV								14	70

TOTAL NO. GRD ACCDS									
ON DUTY	5	3	6	10	3	11	5	19	0
OFF DUTY	1	0	1	0	1	0	0	0	0
MAN DAYS LOST	12	3	10	0	15	0	0	0	0

SOURCE: AF FORM 122 A PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. ACCIDENTS} \times 100{,}000}{\text{MI. TVLD}} = \text{RATE PER 100,000 MI.}$$

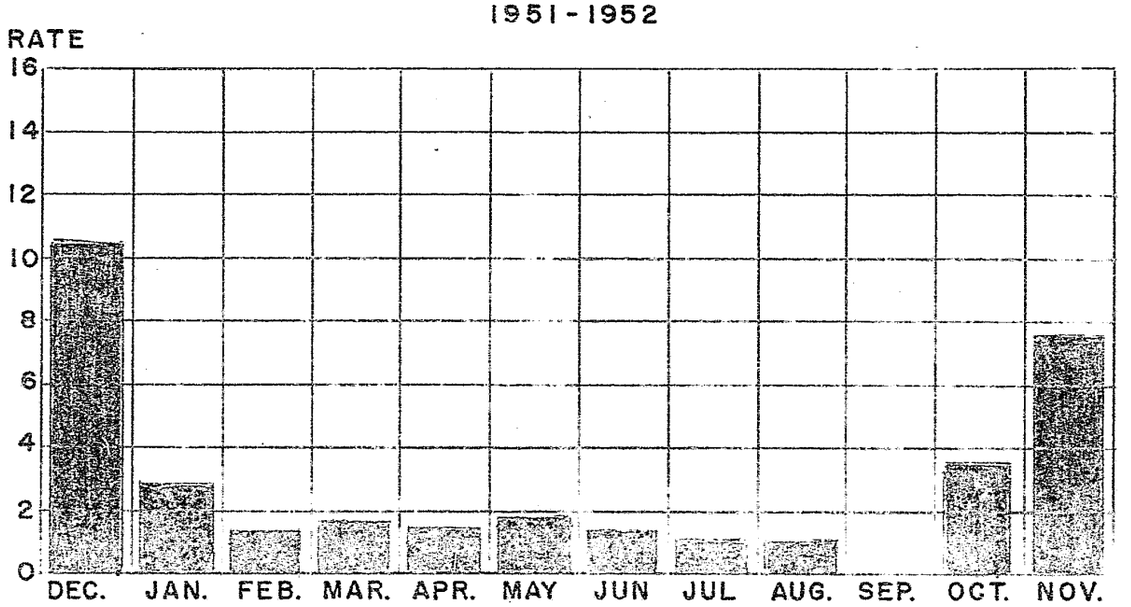
0507

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE
26TH AIR DIVISION (DEFENSE)
1951-1952



	DEC.	JAN.	FEB.	MAR.	APR.	MAY	JUN	JUL	AUG.	SEP.	OCT.	NOV.
NO. ACCDS	10	2	1	1	1	1	1	1	1	0	4	2
MI. TVLD	90566	81545	94282	88554	95160	59972	66206	79561	78718	88058	100364	106486
DAYS O/SV	69	8	16	0	1	0	14	1/2	SALVAGED	0	11	84

SOURCE AF FORM 122A

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. ACCDS. X 100,000}}{\text{MILES TRAVELED}} = \text{RATE PER 100,000}$$

RESTRICTED

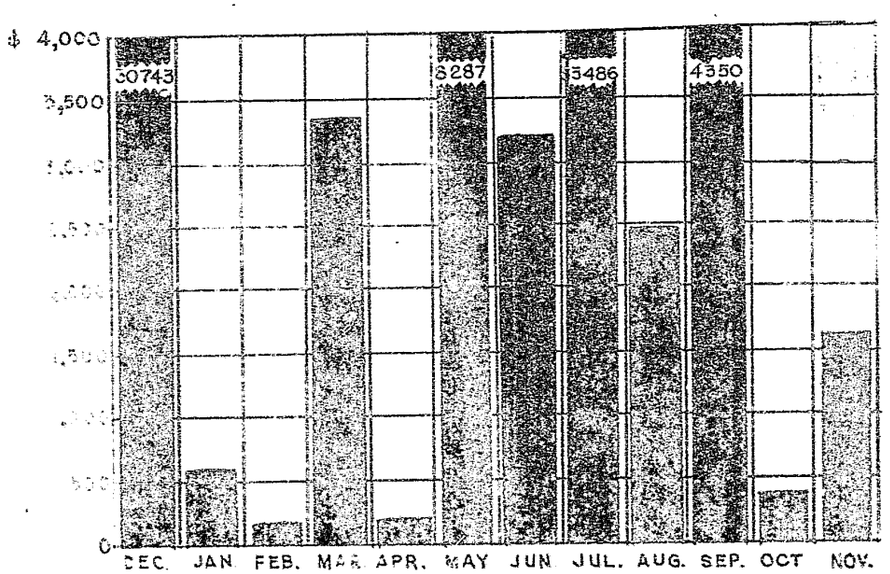
0508

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TOTAL GROUND ACCIDENT COSTS
26th AIR DIVISION (DEF)
1951-1952



COSTS $	20743	630	183	3384	195	8287	3217	33486	1475	4350	180	1620

SOURCE: AF FORM 122A PREPARED BY: STAT. SV. 26AD

0509

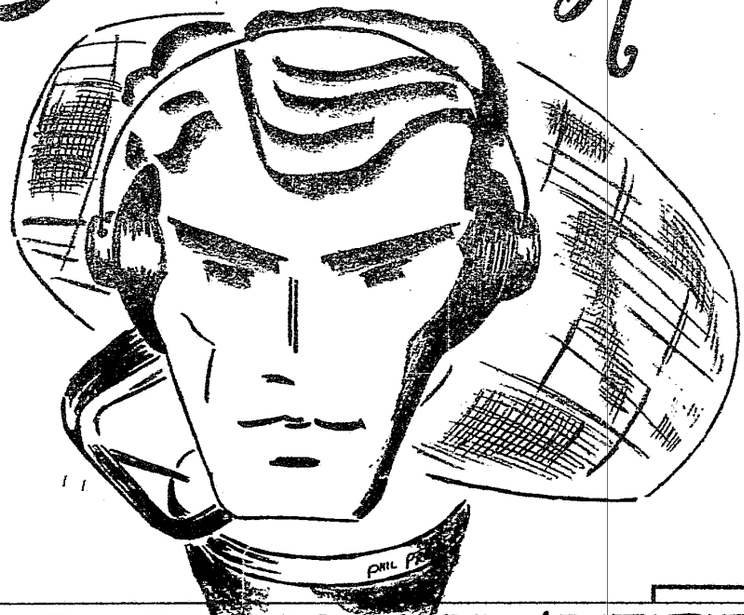
THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

HISTORIAN

Statistical Review



Office of the Comptroller

26th AIR DIVISION (DEFENSE)

ROSLYN, N.Y.

31 DEC 1952

RESTRICTED

0510

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

[illegible] AIR DIVISION (DEFENSE)
[illegible] STICAL REVIEW
[illegible] 1953

INDEX

dex . . . . . [illegible]
tr[illegible]ction . . . . . [illegible]
[illegible] of Unit Commanders ([illegible] Air Division) . . . . . [illegible]
[illegible] of Unit Commanders (4[illegible] Oth GOS) . . . . . [illegible]
[illegible] of Authorized Officers Assigned . . . . . [illegible]
[illegible] of Authorized A[illegible] Assigned . . . . . [illegible]
[illegible] of Estimated TDY Travel Cost by Staff Sections . . . . . [illegible]
[illegible] of Estimated TDY Travel Cost by Staff Sections . . . . . [illegible]
[illegible] of Estimated TDY Travel Cost by Squadron . . . . . [illegible]
[illegible] of Estimated TDY Travel Cost by Squadron . . . . . [illegible]
[illegible] Martial Data . . . . . [illegible]
[illegible] Statistics . . . . . [illegible]
[illegible] of Squadron Reporting . . . . . [illegible]
[illegible] of Squadron Reporting . . . . . [illegible]
[illegible] of Squadron Reporting (Hq Sq Sec) . . . . . [illegible]
[illegible] of Squadron Reporting (646th) . . . . . [illegible]
[illegible] of Squadron Reporting (647th) . . . . . [illegible]
[illegible] of Squadron Reporting (648th) . . . . . [illegible]
[illegible] of Squadron Reporting (770th) . . . . . [illegible]
[illegible] of Squadron Reporting (771st) . . . . . [illegible]
[illegible] of Squadron Reporting (772nd) . . . . . [illegible]
[illegible] of Squadron Reporting (773rd) . . . . . [illegible]
[illegible] of Motor Miles Traveled by Squadron . . . . . [illegible]
[illegible] of Motor Miles Traveled by Squadron . . . . . [illegible]
[illegible] Vehicle Accident Rate by Squadron . . . . . [illegible]
[illegible] Vehicle Accident Rate ([illegible] Air Division) . . . . . [illegible]
[illegible] Ground Accident Cost . . . . . [illegible]

0511

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

[illegible] DIVISION (DEFENSE)

STATISTICAL REVIEW

INTRODUCTION

This Statistical Review is [illegible] under background of the [illegible] operations, [illegible] and [illegible] of the Command Headquarters.

This [illegible] of some [illegible] of Command [illegible] the [illegible] of the [illegible] [illegible].

[illegible] submitted to:

COMMANDING GENERAL
[illegible] AIR DIVISION (DEFENSE)
ATTN: Comptroller
Roslyn, New York

RESTRICTED

0512

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

R E S T R I C T E D

ROSTER OF [illegible] COMMANDERS
20TH AIR DIVISION (DEF)
As of 31 December [illegible]

UNIT AND STATION	NAME	RANK	SERIAL NUMBER
20th Air Division (Def)	RUSSELL A. MINTI	Brig. Gen.	[illegible]
[illegible] Squadron Section Roslyn, New York	ALFRED IANNACCONE	Major	AO [illegible]
[illegible] AC&W Squadron [illegible]	LESTER B. GOLDBERG	Major	AO [illegible]
[illegible] AC&W Squadron [illegible], Virginia	WILLIAM C. CROMARTIE	Major	AO [illegible]
[illegible] AC&W Squadron Benton, [illegible]	[illegible] D. GILLESPIE	Major	AO [illegible]
[illegible] 0th AC&W Squadron Palermo, New Jersey	WILLIAM M. SHEPPARD	Major	AO [illegible]
[illegible] AC&W Squadron [illegible] Costis, Va.,	EZRA BALLARD, JR.	Major	AO [illegible]
[illegible]2nd AC&W Squadron Claysburg, Pennsylvania	WILLIAM M. PRULL	Major	AO [illegible]
[illegible]3rd AC&W Squadron Montauk, New York	ALFRED P. OSTRANDER	Major	AO [illegible]
11th WAF Squadron Roslyn, New York	HELEN M. LEWIS	2d Lt	AL [illegible]
4670th Gr Obs Squadron Roslyn, New York	MAURICE A. BRONER	Lt. Col	AO [illegible]

R E S T R I C T E D

0513

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

LIST OF DETACHMENT COMMANDERS
AIRCRAFT OBSERVER DIVISION
as of 1st December 1941

DETACHMENT AND LOCATION	NAME	RANK	SERIAL NUMBER
Detachment #1 New Haven, Conn.	RICHARD J. CURTIS	Major	AO [illegible]
Detachment #2 White Plains, New York	FREDERICK B. JOHNSON	Major	AO [illegible]
Detachment #3 Trenton, N. J.	NORRIS L. HARRINGTON	Major	AO [illegible]
Detachment #4 Harrisburg, Pa.	ROBERT P. LAMBERT	Major	AO [illegible]
Detachment #5 Pittsburgh, Pa.	JEROME G. SCHNEICKERT	Major	AO [illegible]
Detachment #6 Baltimore, Md.	PAUL R. SMITH	Major	AO [illegible]
Detachment #7 Richmond, Va.	FRANCIS M. VAUGHAN	Major	AO [illegible]
Detachment #8 Roanoke, Va.	GEORGE T. BOOTHE, JR.	Captain	AO [illegible]

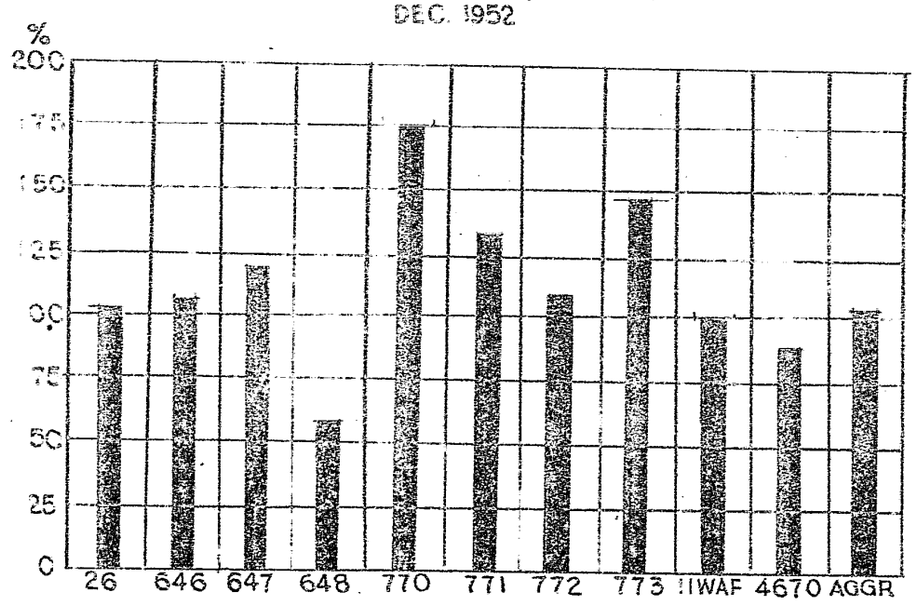
RESTRICTED

0514

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

PERCENT OF AUTHORIZED OFFICERS ASSIGNED
[illegible] AIR DIVISION (DEFENSE)
DEC. 1952



	26	646	647	648	770	771	772	773	IIWAF	4670	AGGR
AUTH	79	33	16	34	16	16	16	16	1	42	269
ASGD	81	35	19	20	28	21	15	23	1	38	281
AUTH/ASGD	102.5	106.0	118.7	58.8	175.0	131.2	106.6	143.7	100.0	90.4	104.4

SOURCE: AF-PI MORNING REPORTS PREPARED BY STAT SV 26AD

0515

THIS PAGE DECLASSIFIED IAW EO 13526

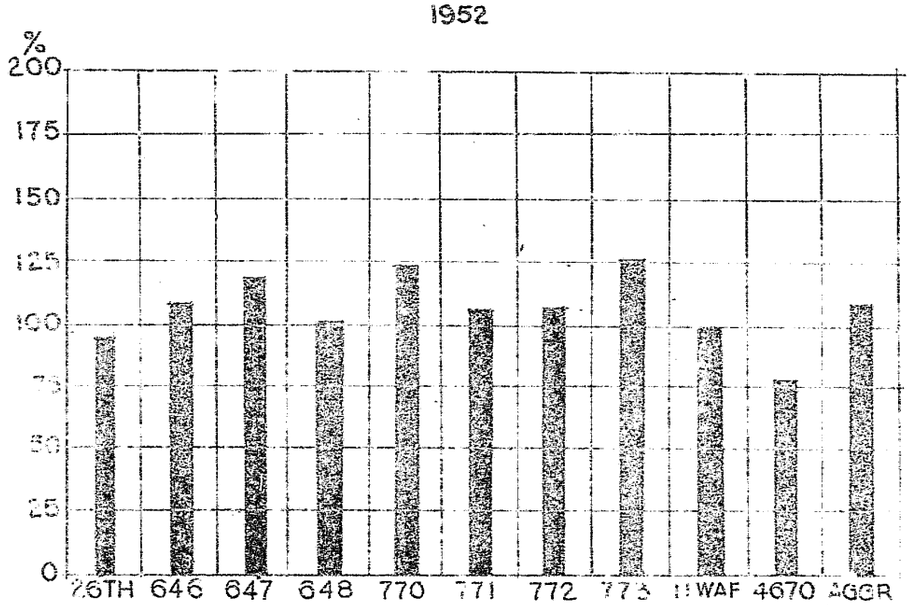
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

PERCENT OF AUTHORIZED AIRMEN ASSIGNED

26TH AIR DIVISION (DEFENSE)

1952



	26TH	646	647	648	770	771	772	773	USWAF	4670	AGGR
AUTH	382	261	179	270	179	179	179	179	3	110	1921
ASGD	371	282	216	273	221	201	204	226	3	85	2082
%AUTH/ASGD	97.1	108.0	120.6	101.1	123.4	112.2	113.9	126.2	100.0	77.2	108.3

SOURCE: AF-PI MORNING REPORTS PREPARED BY: STAT SV 26TH AD

RESTRICTED

0516

THIS PAGE DECLASSIFIED IAW EO 13526

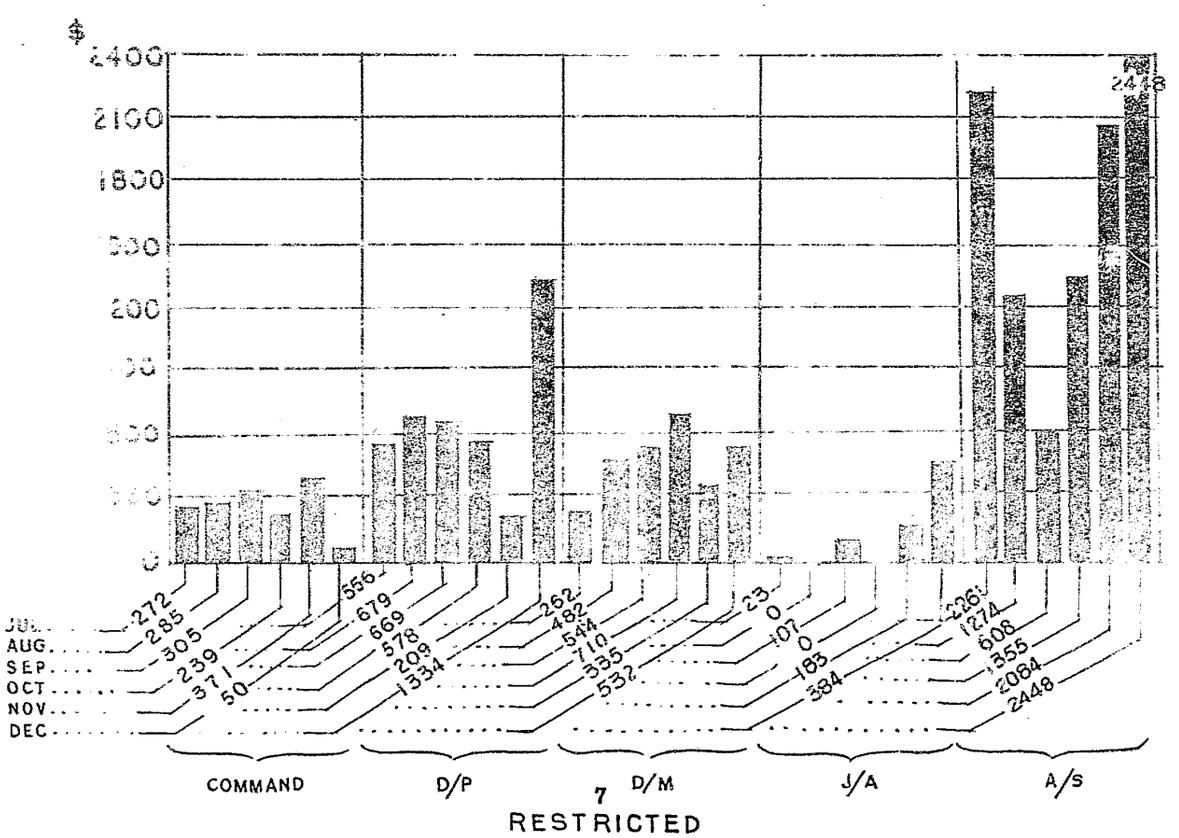
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED DAILY TRAVEL COST BY STATION

HQ. 20TH AIR DIVISION (DEFENSE)

JUL THRU 31 DEC. 1942



RESTRICTED

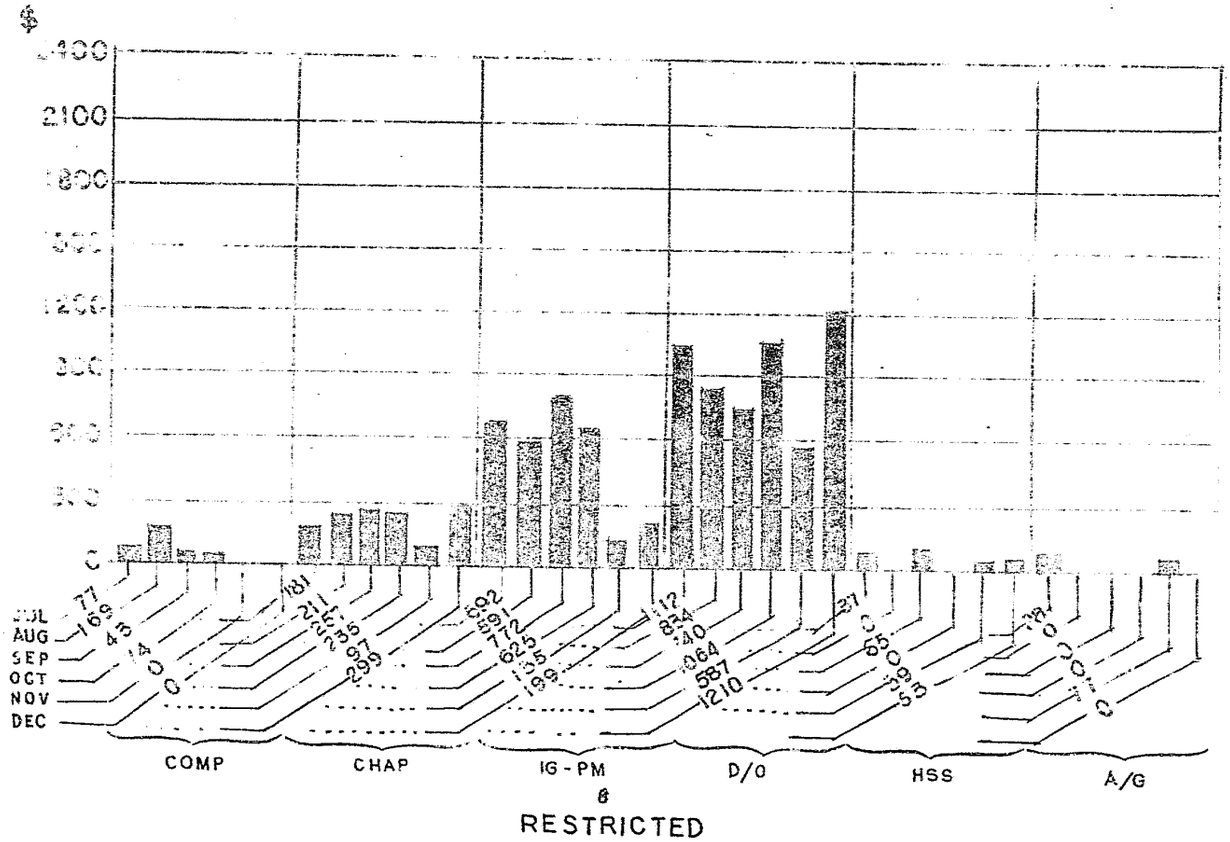
0517

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMAT[illegible] BY TRAVEL COST BY C[illegible]
HQ. 20TH AIR DIVISION (DEFENSE)
1 JUL THRU 31 DEC. 1952



RESTRICTED

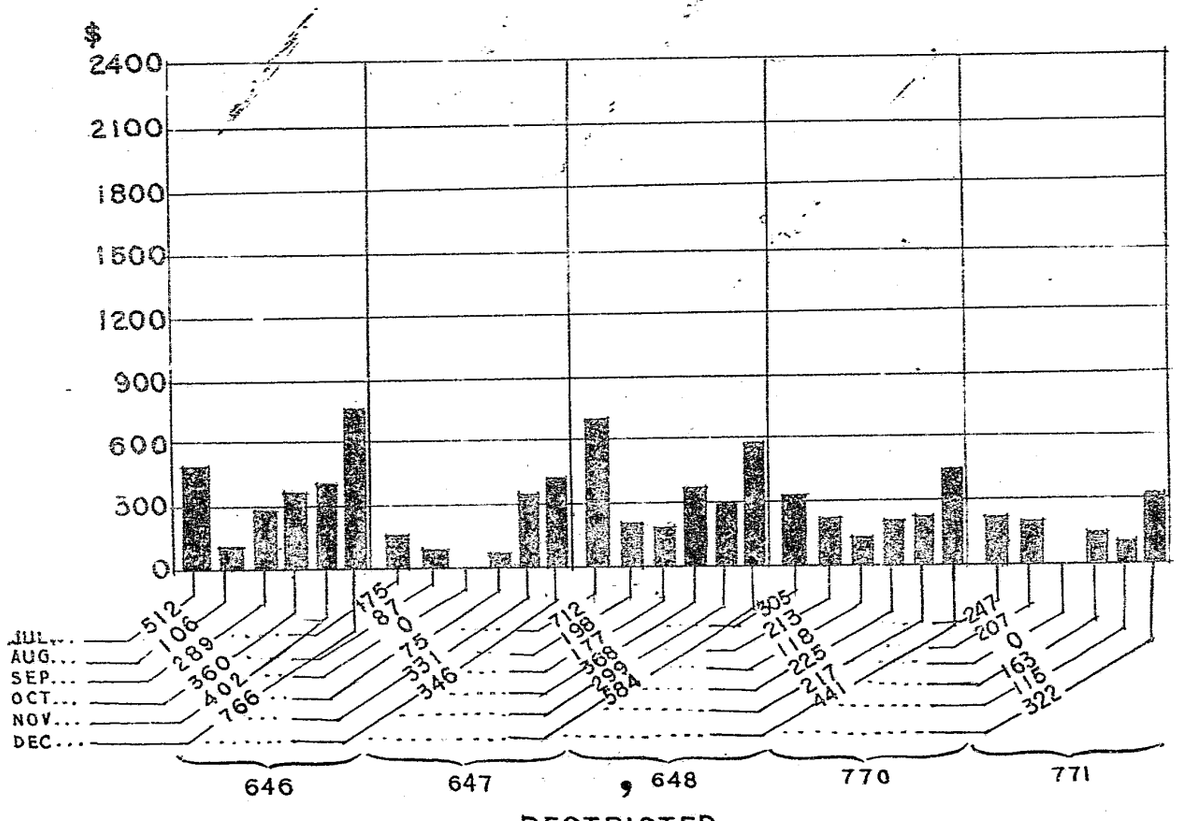
0518

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED TDY PW SQUADRONS
HEADQUARTERS 26TH AIR DIVISION (DEF.)
1 JUL THRU 31 DEC. 1952



RESTRICTED

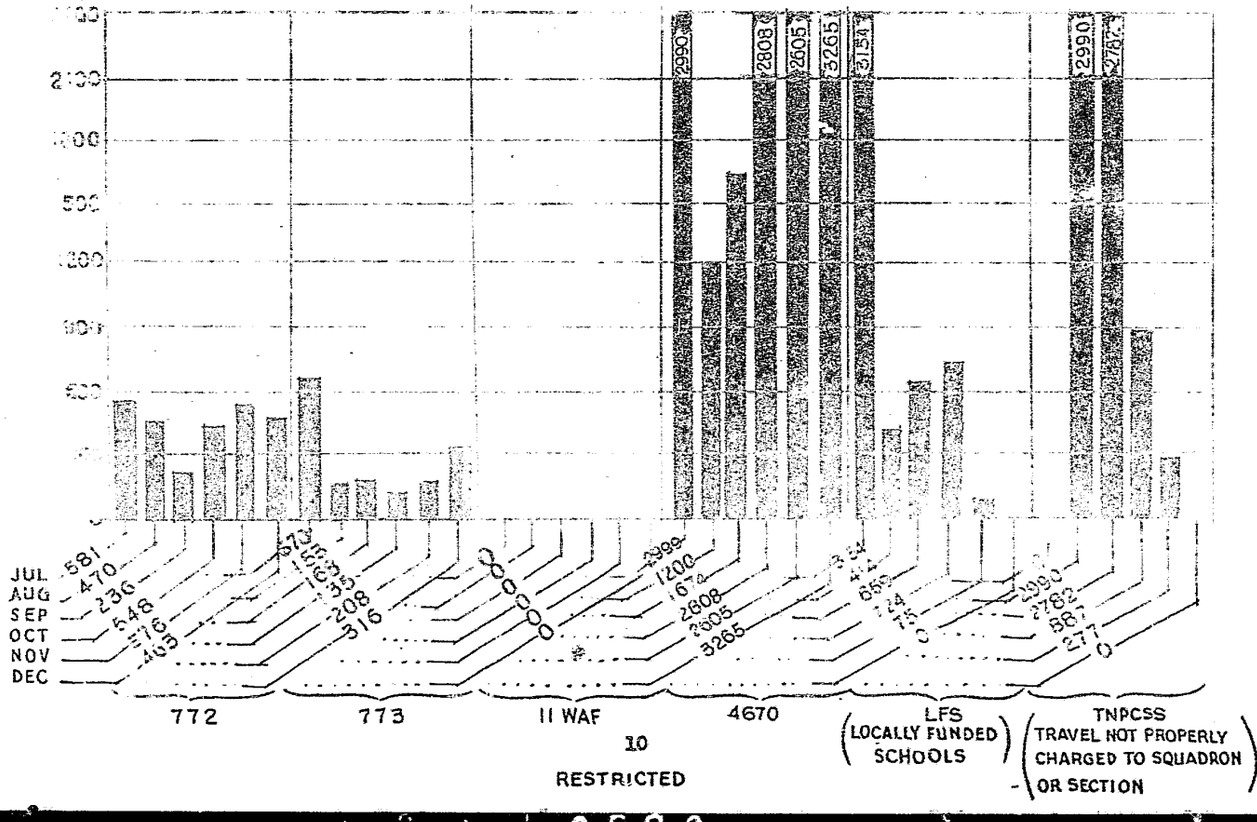
0519

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF ESTIMATED DAY TRAVEL COST BY SQUADRON
HQ 20TH AIR DIVISION (DEFENSE)
1 JUL THRU 31 DEC



RESTRICTED

0520

THIS PAGE DECLASSIFIED IAW EO 13526

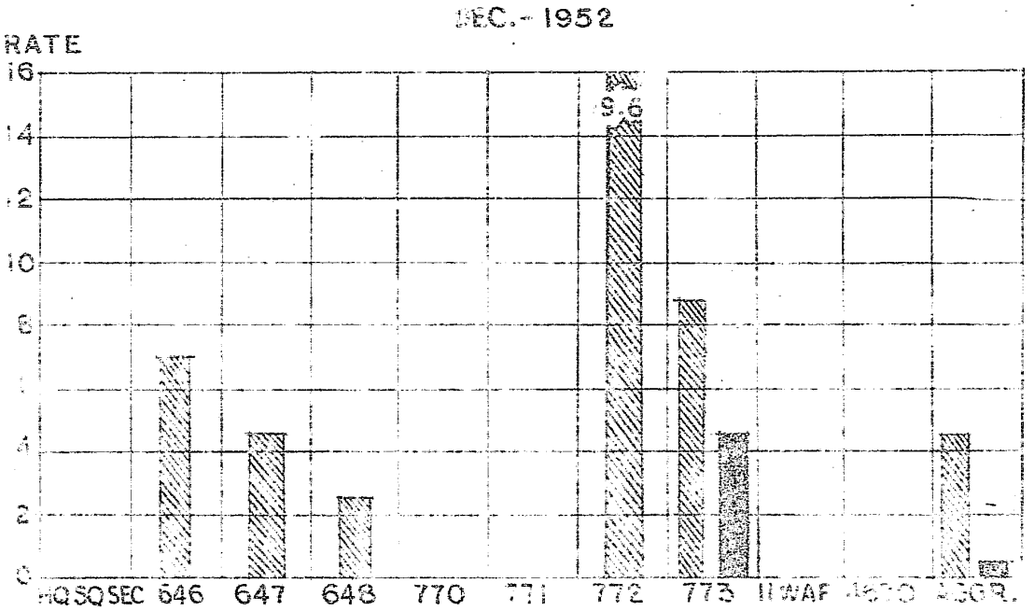
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

COURTS MARTIAL DATA

[illegible] DIVISION (DEFENSE)

DEC.- 1952



	HQ SQ SEC	646	647	648	770	771	772	773	WAF	ASGR.
SUMMARY CM	0	2	1	1	0	0	4	2	0	0
SPECIAL CM	0	0	0	0	0	0	0	1	0	0
GENERAL CM	0	0	0	0	0	0	0	0	0	0

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. CASES X 1,000}}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1,000 AMN}$$

RESTRICTED

0521

THIS PAGE DECLASSIFIED IAW EO 13526

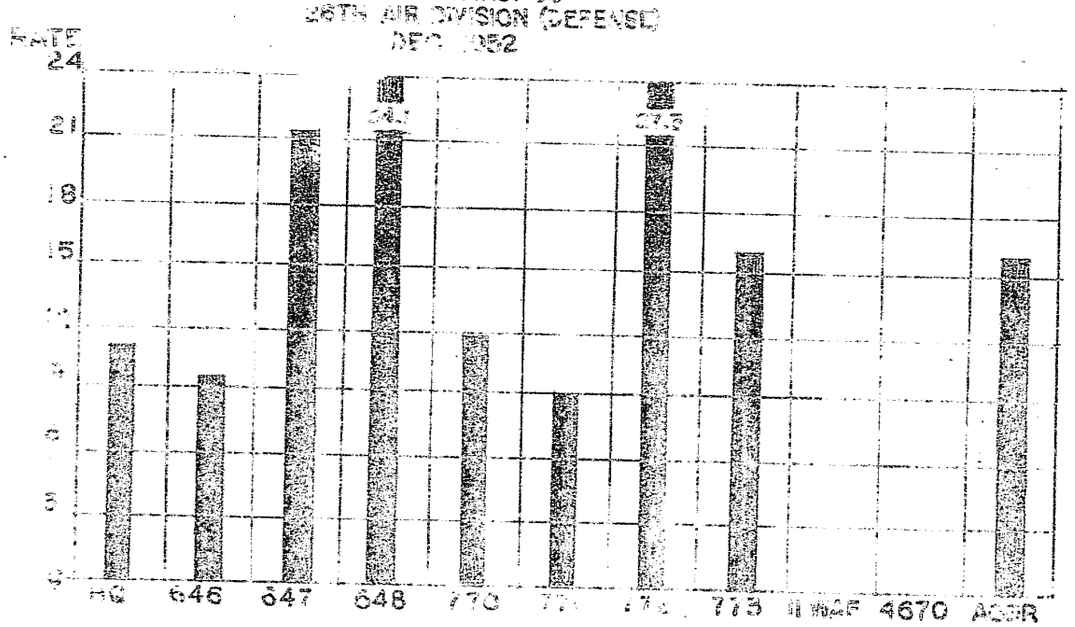
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

AWOL STATISTICS

26TH AIR DIVISION (DEFENSE)

DEC 1952



AWOL	5	3	5	10	4	2	6	4	0	0	38
RATE	11.0	9.4	21.2	34.1	12.0	9.0	27.3	16.0	.0	.0	16.0

SOURCE: APM RECORDS

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. AWOL} \times 1000}{\text{AVERAGE STRENGTH}} = \text{RATE PER 1000}$$

12

RESTRICTED

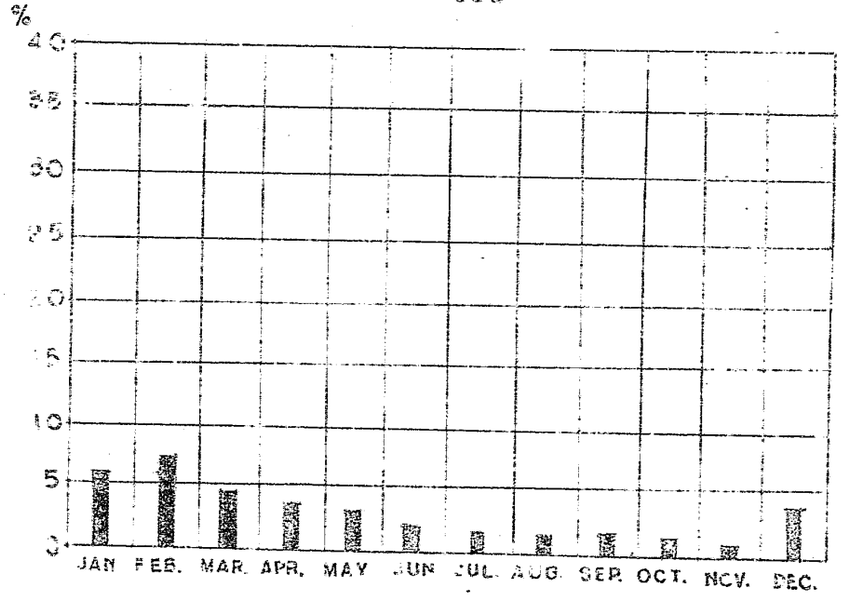
0522

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

...ATUS OF SQUADR ...PORTING
...AIR DIVISION (DEFENSE)
1952



REPTS SUBMD	310	250	360	312	314	409	305	294	294	346	297	326
REPTS LATE	19	18	17	12	0	9	6	5	5	5	3	13
% LATE	6.1	7.2	4.7	3.8	3.1	2.2	1.9	1.6	1.6	1.4	1.0	3.9

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26 AD

13

RESTRICTED

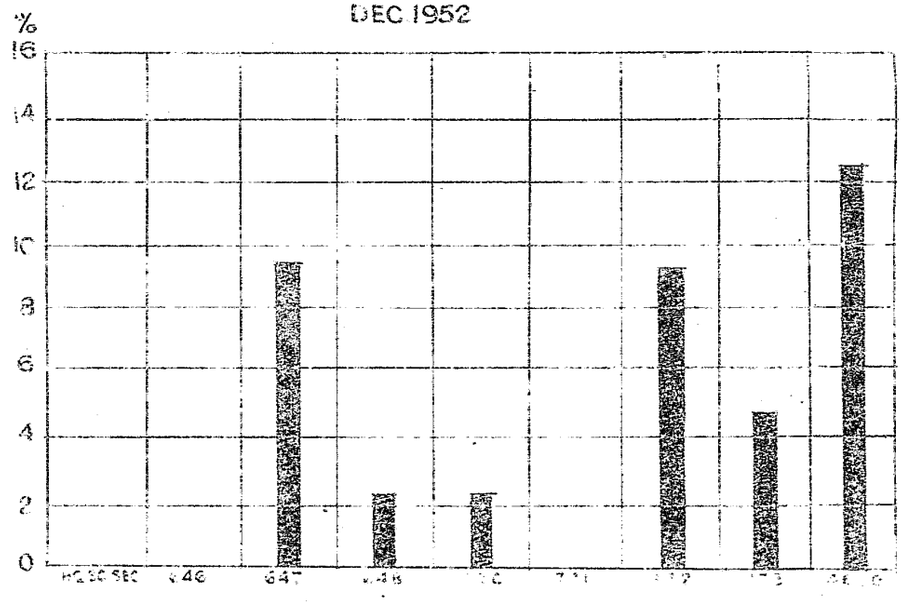
0523

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF REPORTS
BY SQUADRON
[illegible] AIR DIVISION (DEFENSE)
DEC 1952



REPTS SUBMD	22	42	42	42	43	42	43	42	8
REPTS LATE	0	0	4	1	1	0	4	2	1
% REPTS LATE	.0	.0	9.5	2.3	2.3	.0	9.3	4.7	12.5

RESTRICTED

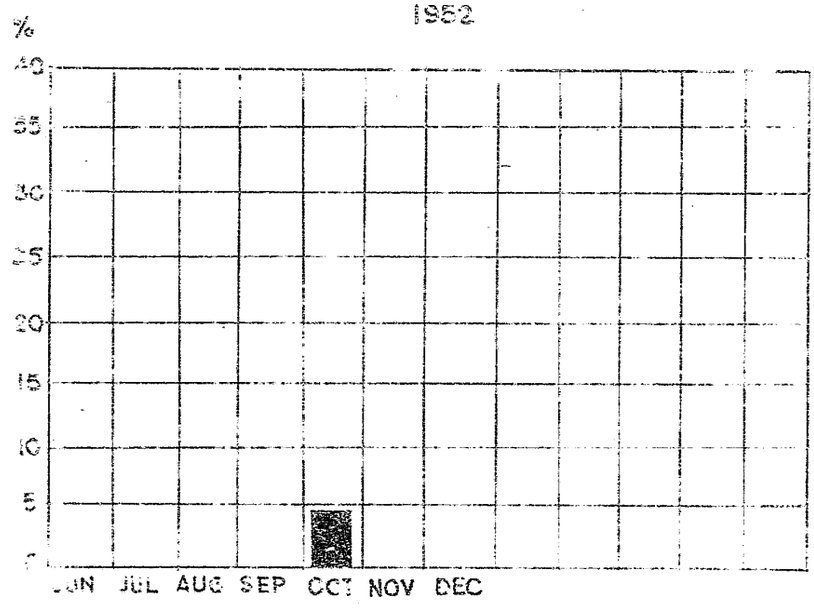
0524

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STAT [redacted] OF SQUADRON REPORTING
HQ. [redacted] SECTION (26 AD)
1952



	JUN	JUL	AUG	SEP	OCT	NOV	DEC
REPTS SUBMD	13	19	15	16	21	16	22
REPTS LATE	0	0	0	0	1	0	0
% LATE	.0	.0	.0	.0	4.7	0	.0

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

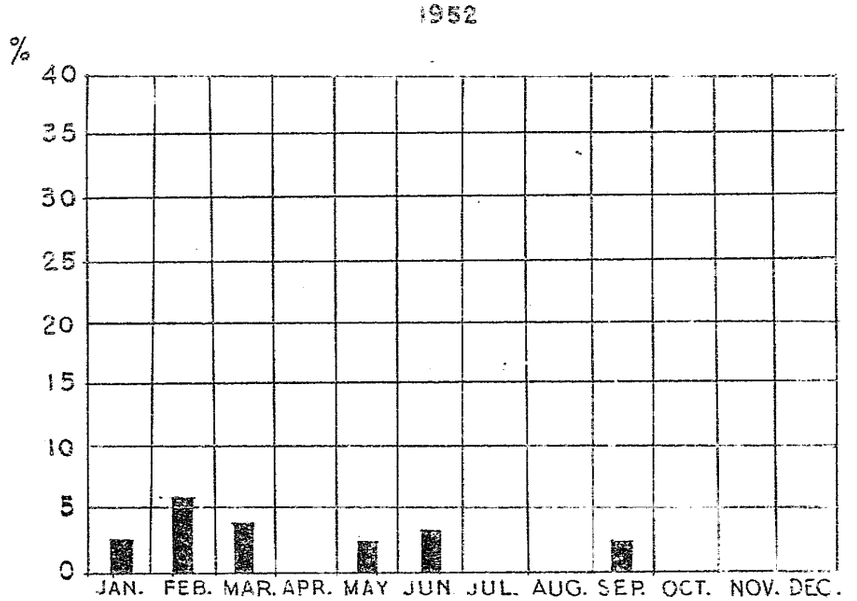
0525

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
[redacted] A.C. & W. SQUADRON
1952



REPTS SUBMD	39	36	52	44	45	55	41	39	41	47	41	42
REPTS LATE	1	2	2	0	1	2	0	0	1	0	0	0
% LATE	2.6	5.5	3.8	.0	2.2	3.5	.0	.0	2.4	.0	.0	.0

SOURCE: SUSPENSE CARDS PREPARED BY: STAT SV 26AD

RESTRICTED

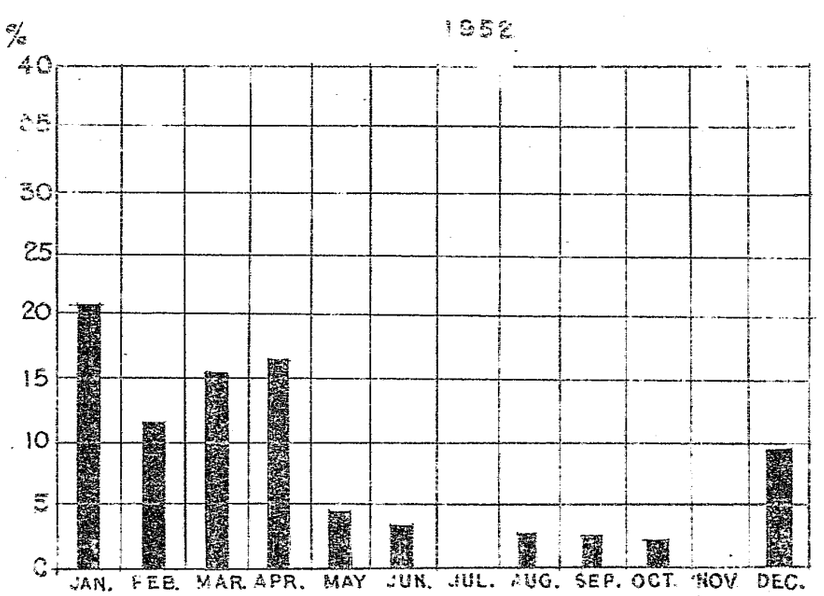
0526

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
(47th AC & W SQUADRON)



	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV	DEC.
REPTS SUBMD	38	35	51	43	46	56	41	39	41	45	38	42
REPTS LATE	4	4	8	7	2	2	0	1	1	1	0	4
% LATE	21.0	11.4	15.7	16.8	4.3	3.5	0	2.5	2.4	2.2	.0	9.5

SOURCE: SUSPENSE CARDS PREPARED BY: STAT. SV. 26AD

RESTRICTED

0527

THIS PAGE DECLASSIFIED IAW EO 13526

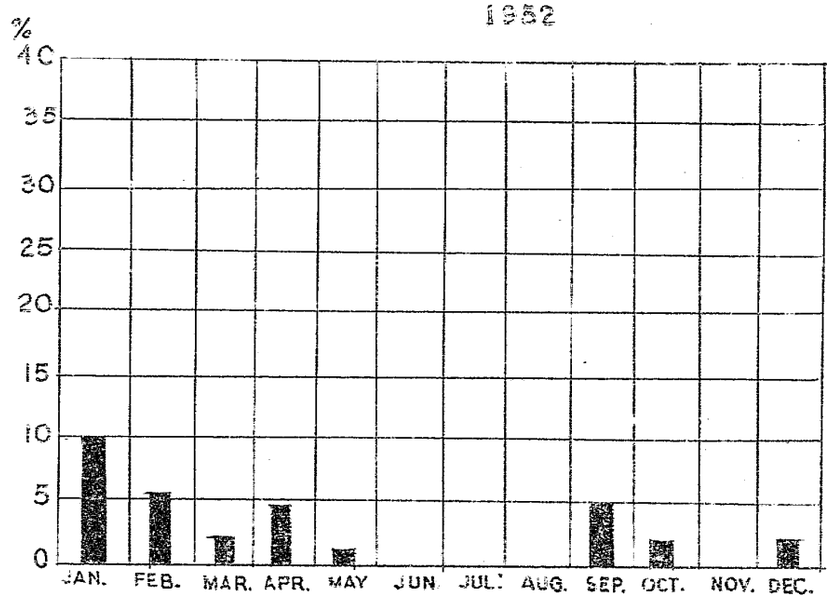
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

618th AC & W SQUADRON

1952



	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
REPTS SUBMD	40	36	51	44	45	56	41	40	40	46	38	42
REPTS LATE	4	2	1	2	1	0	0	0	2	1	0	1
% LATE	10.0	5.5	1.9	4.5	2.2	.0	.0	0	5.0	2.1	.0	2.3

SOURCE : SUSPENSE CARDS

PREPARED BY: STAT SV 26AD

RESTRICTED

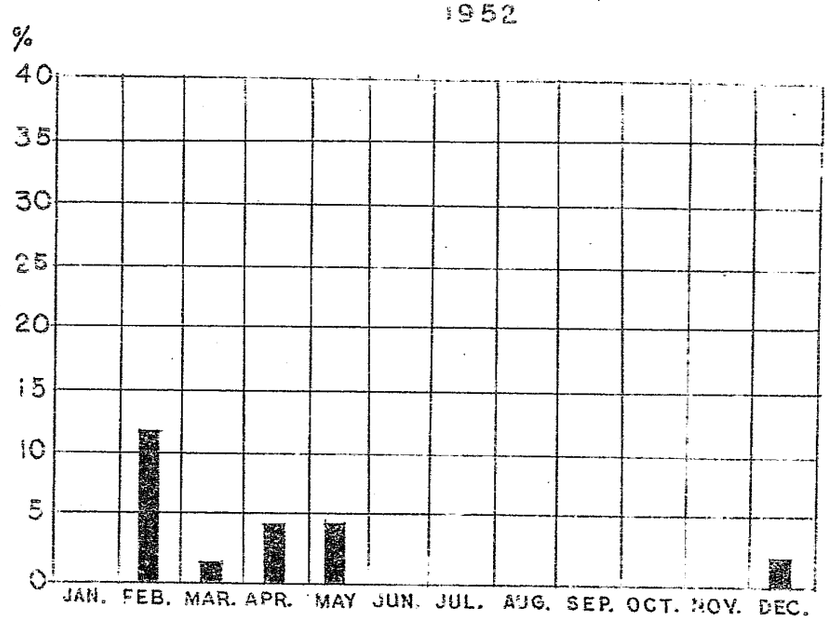
0528

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
776th AC & W SQUADRON
1952



	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
REPTS. SUBMD.	39	35	51	44	44	54	39	37	40	44	39	43
REPTS LATE	0	4	1	2	2	0	0	0	0	0	0	1
% LATE	.0	11.4	1.9	4.5	4.5	.0	.0	.0	.0	.0	.0	2.3

SOURCE: SUSPENSE CARDS PREPARED BY STAT. SV 26 AD

RESTRICTED

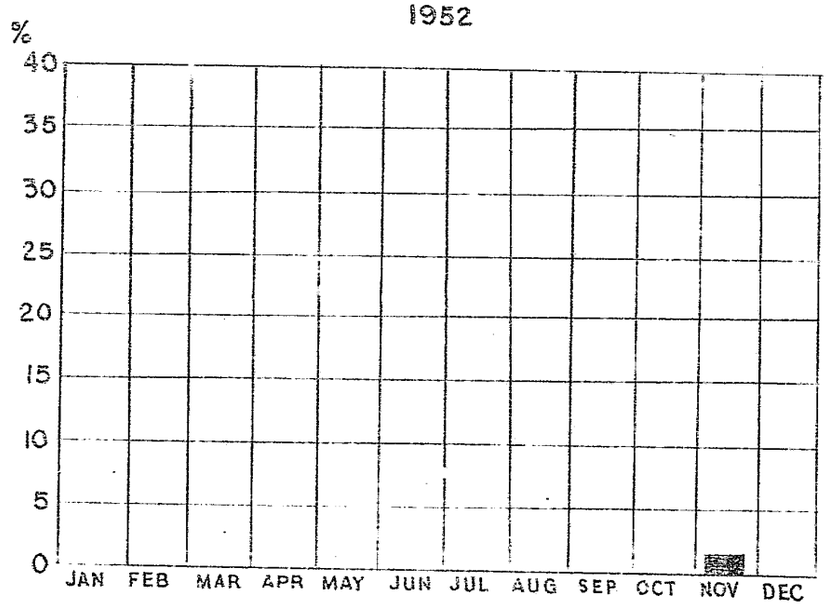
0529

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTS
771st AC&W SQUADRON
1952



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
REPTS SUBMD	40	32	32	45	44	55	39	39	41	44	38	42
REPTS LATE	0	0	0	0	0	0	0	0	0	0	1	0
% LATE	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.5	.0

SOURCE: SUSPENSE CARDS

PREPARED BY: STAT. SV. 26 AD

RESTRICTED

0530

THIS PAGE DECLASSIFIED IAW EO 13526

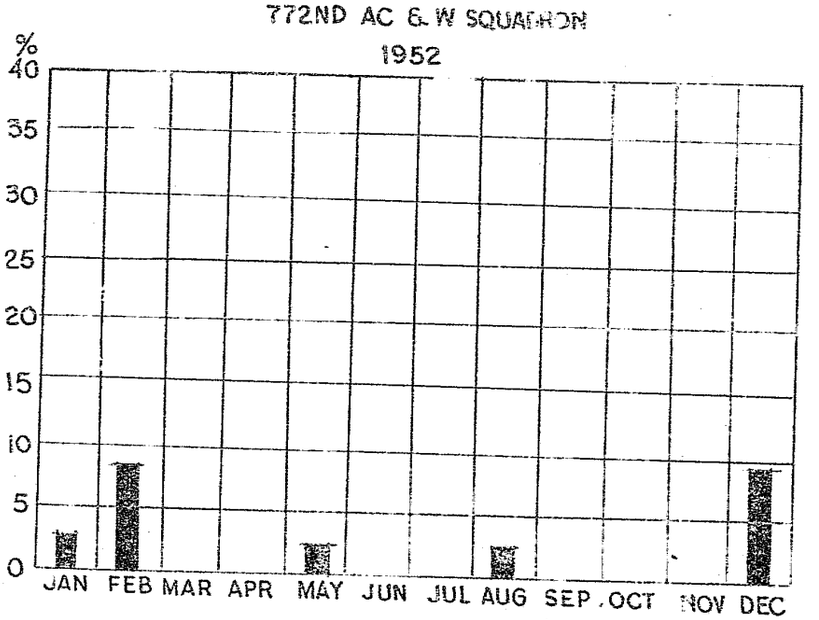
THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING

772ND AC & W SQUADRON

1952



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
REPTS SUBMD	40	36	51	45	45	57	40	39	39	46	42	43
REPTS LATE	1	3	0	0	1	0	0	1	0	0	0	4
% LATE	2.5	8.3	.0	.0	2.2	.0	.0	2.5	0	.0	.0	9.3

SOURCE: SUSPENSE CARDS

PREPARED BY STAT SV 26 AD

RESTRICTED

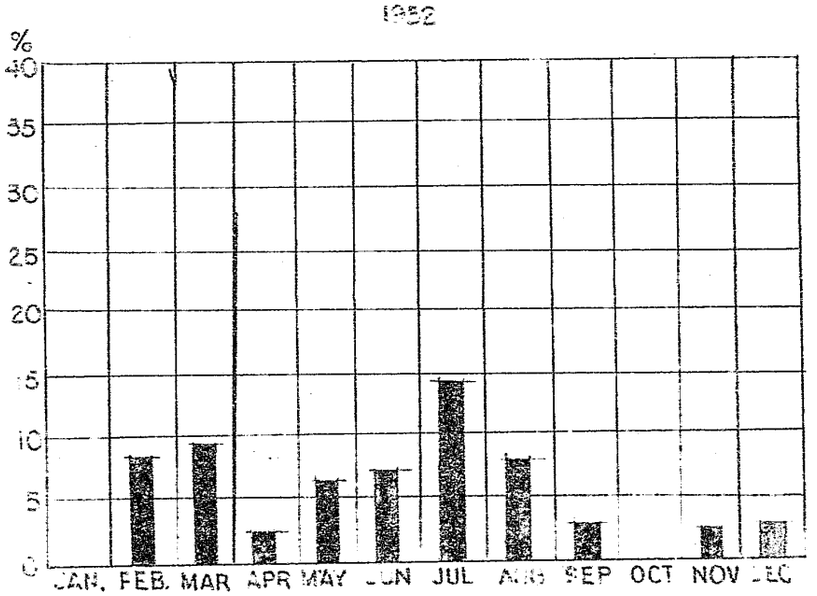
0531

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

STATUS OF SQUADRON REPORTING
[illegible] U.S. S-W SQUADRON
1952



REPTS SUBMD	59	56	52	47	45	56	41	39	41	48	39	42
REPTS LATE	0	3	5	1	3	4	6	3	1	0	1	2
% LATE	.0	8.3	9.6	2.1	6.6	7.1	14.6	7.6	2.4	.0	2.5	2.7

SOURCE: SUSPENSE CARDS PREPARED BY STAT SV 26AD

RESTRICTED

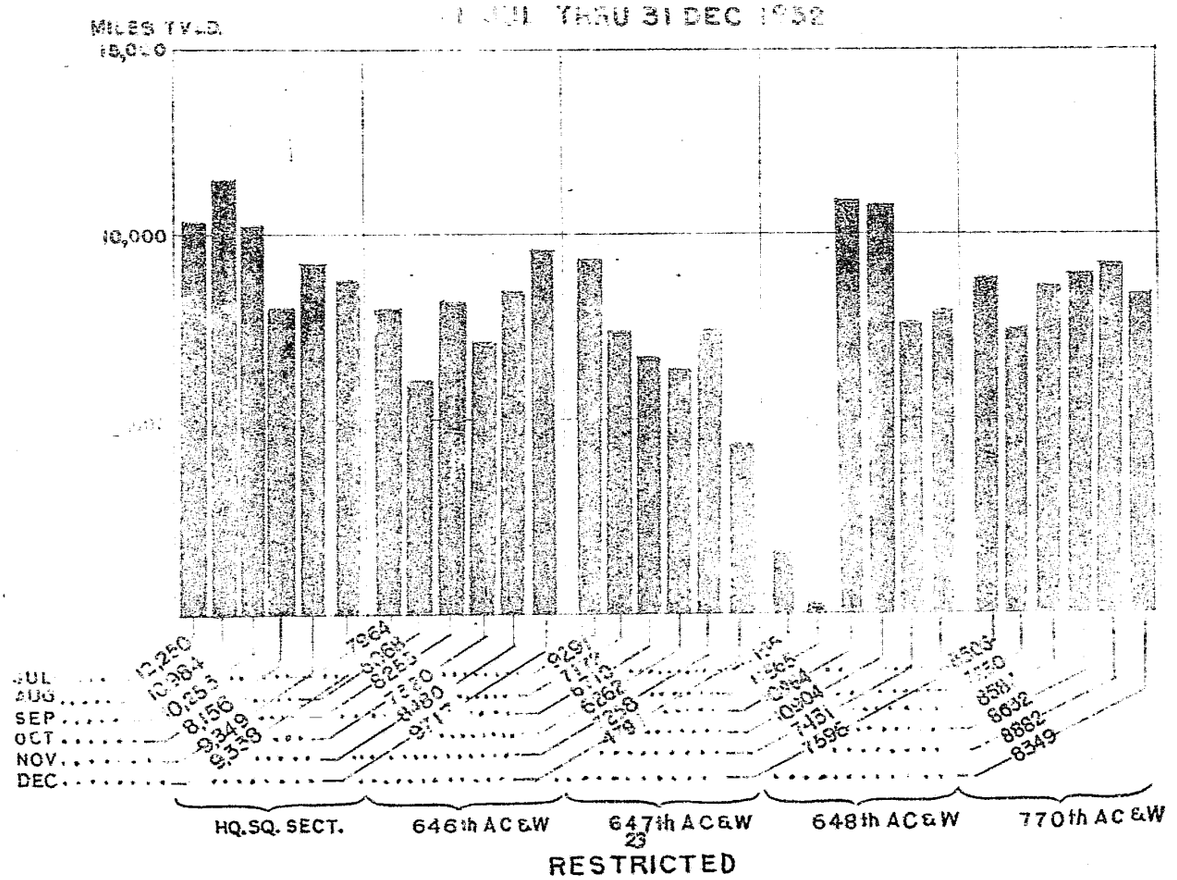
0532

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF [illegible] MILES TRAVEL [illegible] QUARTERS
26TH AIR DIVISION (DEFENSE)
1 JUL THRU 31 DEC 1952



RESTRICTED

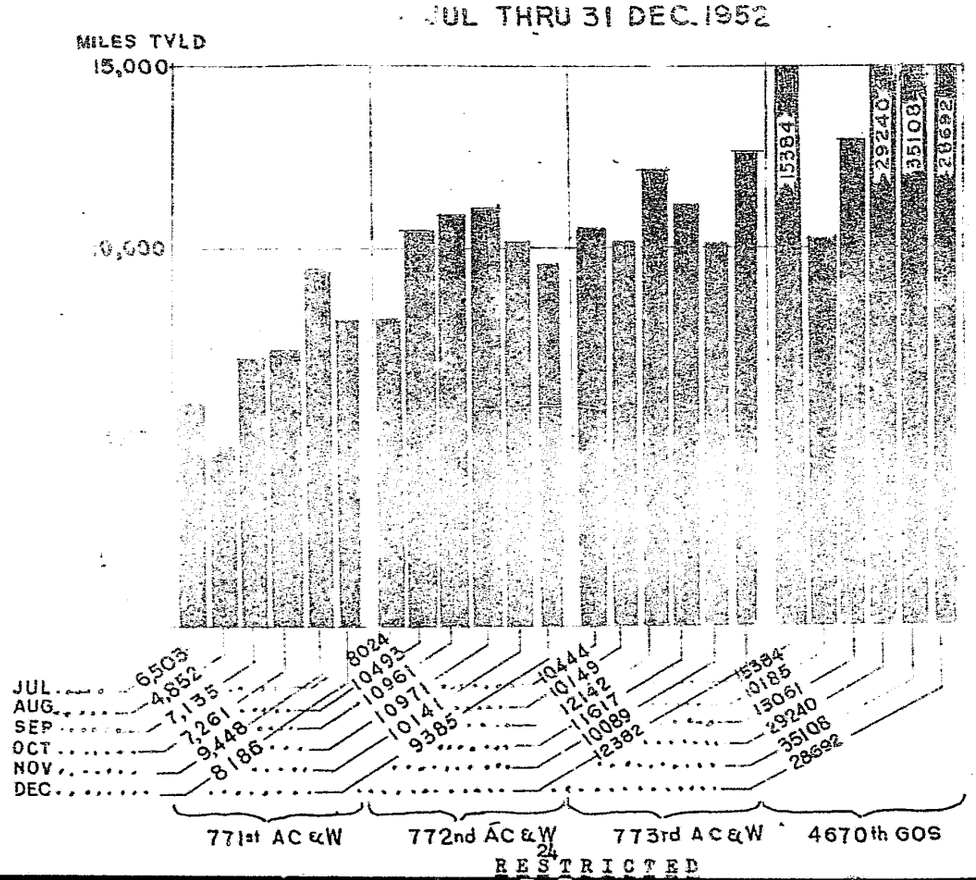
0533

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TREND OF MOTOR MILES TRAVELED BY SQUADRON
26TH AIR DIVISION (DEFENSE)
JUL THRU 31 DEC. 1952



RESTRICTED

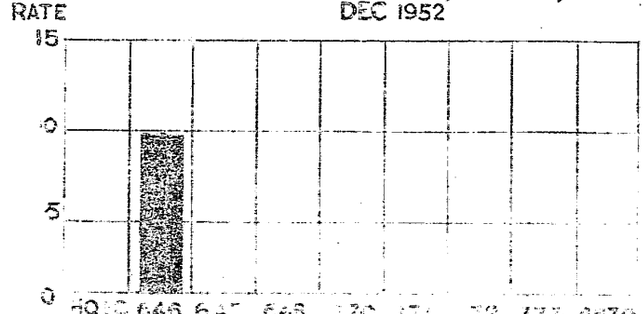
0534

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT
RATE BY SQUADRON
26TH AIR DIVISION (DEFENSE)
DEC 1952



MOTOR VEHICLES—	HQ 10	646	647	648	770	771	772	773	8870
NO. ACCIDENTS	0	1	0	0	0	0	0	0	0
MI TVLD	2338	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
DAYS O/SV		0							

TOTAL NO GRD ACCDS									
ON DUTY	1	0	1	1	2	5	4	10	0
OFF DUTY	3	0	1	2	3	10	7	15	0
MAN DAYS LOST	5	0	120	0	60	21	0	0	0

SOURCE: AF FORM 122A PREPARED BY STAT SV 26AD

$$\frac{\text{NO. ACCIDENTS} \times 100{,}000}{\text{MI. TVLD}} = \text{RATE PER 100,000 MI.}$$

RESTRICTED

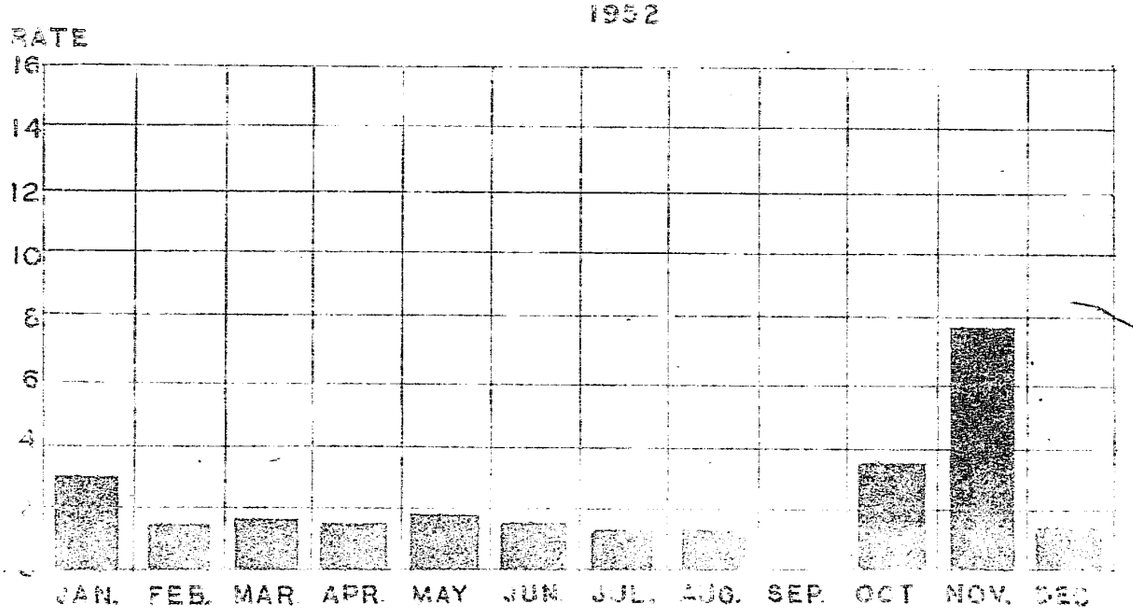
0535

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

MOTOR VEHICLE ACCIDENT RATE
26TH AIR DIVISION (DEFENSE)
1952



NO. ACCDS	2	1	1	1	1	1	1	1	0	4	2	1
MILES	81545	94280	88554	95280	89972	66206	79361	78718	88058	100364	106486	98436
DAYS O/SV	8	16	0	1	0	14	1/2	SALVAGED	0	11	84	0

SOURCE AF FORM 122A

PREPARED BY STAT SV 26 AD

$$\frac{\text{NO. ACCDS. X 100,000}}{\text{MILES TRAVELED}_{26}} = \text{RATE PER 100,000}$$

RESTRICTED

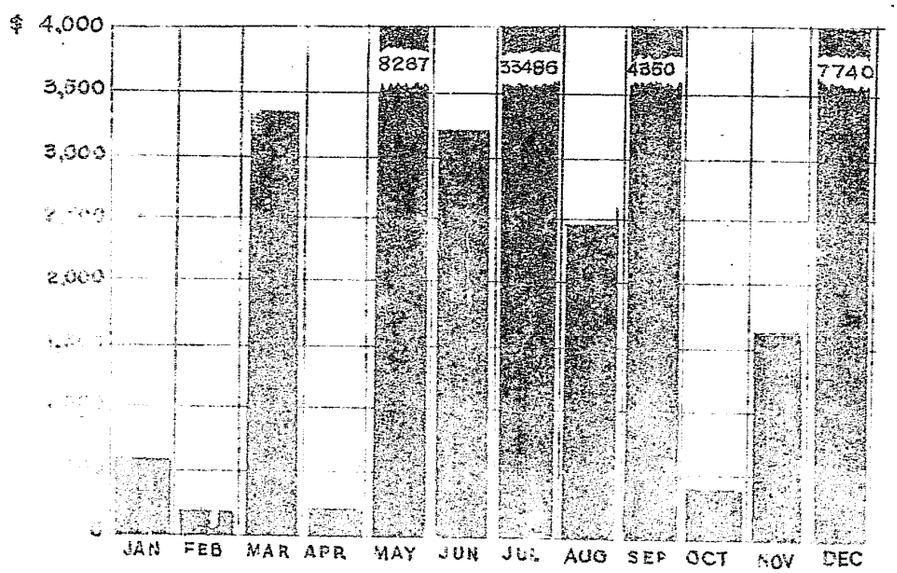
0536

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

RESTRICTED

TOTAL GROUND ACCIDENT COSTS
6th AIR DIVISION (SEF)
1952



COSTS $	630	183	3384	195	8287	3217	33486	2475	4350	380	1620	7440

SOURCE: AF FORM 122 A

PREPARED BY: STAT. SV. 26AD

RESTRICTED

0537

THIS PAGE DECLASSIFIED IAW EO 13526

THIS PAGE DECLASSIFIED IAW EO 13526

DOCUMENT TO ROLL INDEX

Frame Number	Classification Number	Date Period	Vol.	Pt.	Title	Security Classification	Remarks
4	K-Div-26-Hi	Jul-Dec52			26th Air Division	S	
538	Index				Index		
	Some unreadable pages	Poor original					

3825 FORM NOV 71 0 - 23

PREV EDIT WILL BE USED

Page 1 Of 1 Roll Number P0485-A

0538

THIS PAGE DECLASSIFIED IAW EO 13526