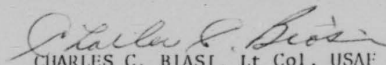


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 CHARLES C. BIASI, Lt Col, USAF
 Chief
 Technical Services Division
 Albert F. Simpson Historical
 Research Center

**HISTORY
OF THE**

RETURN TO
The Albert F. Simpson
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Maxwell AFB, AL 36112



20TH AIR DIVISION

1 JUL - 30 SEP 1973

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903251

K-DIV-20-HI
JUL-SEP 1973
RETURN TO
AFSHRC
MAXWELL AFB AL 36112

HISTORY
of the
TWENTIETH AIR DIVISION
FORT LEE AIR FORCE STATION, FORT LEE, VA
AEROSPACE DEFENSE COMMAND
UNITED STATES AIR FORCE

For the Period 1 July - 30 September 1973

Robert A. Coffin
ROBERT A. COFFIN, Colonel, USAF
Vice Commander

Alan C. Cucullu
ALAN C. CUCULLU, Major, USAF
Directorate of Intelligence

- Tracers
1. AMALGAM ARROW 73-8
 2. " " 74-2
 3. " FAIRPLAY 73-4
 4. FEDERAL HUNT 74-1

20 NOV 1979

CLASSIFIED BY _____
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652
AUTOMATICALLY DOWNGRADED AT TWO YEAR
INTERVALS DECLASSIFIED ON DECEMBER
31, 1981

3-8442-13
903259

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CHAPTER I
ORGANIZATION AND ADMINISTRATION

MISSION HIGHLIGHTS

(U) The Air Force Outstanding Unit Award was awarded to three Division units--the 671 Radar Squadron, Key West NAS, FL; the 678 Air Defense Group, Tyndall AFB, FL; and the 679 Radar Squadron, Jacksonville NAS, FL.

(U) A new radar was installed at two 20th units, the 792 Radar Squadron at North Charleston AFS, SC, and the 632 Radar Squadron, Roanoke Rapids AFS, NC, which will improve detection and tracking capabilities.

(U) A social actions office was opened at Fort Lee AFS to serve the human relations needs of Division personnel. It is the first office at Division level and will serve as a pilot program for ADC.

(U) General Seth J. McKee, NORAD commander who retired October 1, paid a farewell visit to the Division headquarters. Officers and area civic leaders paid tribute to General and Mrs. McKee during a dinner party given in their honor.

(U) ADMINISTRATION

Brief Statement of Mission Performance: To provide and manage an efficient administrative system; to insure compliance with Air Force administrative procedures established by higher headquarters;

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to provide manpower, facilities, and services in the areas of Administrative Communications, Publications/Forms Management, Publications Distribution, Documentation Management, and Reproduction.

Administrative Communications: There were 210 TDY orders and 17 other Special Orders processed during this quarter.

Publications/Forms Management:

Publications:

Drafts submitted: 41

Publications completed that remained from the previous report: 7

Forms:

20NR Forms: 5 revised, 6 rescinded

20AD Forms: 3 revised, 5 rescinded

4638ADSq: None

Reproduction:

Press Impressions: 314,500

Prepared masters: 3,050

Camera masters: 600

Job orders (844s): 1,049

Xerox units: 33,199

Documentation Management:

Publications reviewed: 41

Surveys conducted: 18

Supplements rewritten: 2

Documentation Orientation:

Thirteen personnel trained

3

On 17 September 1973, the Documentation Orientation film FRV 1228a was shown. The 3 films which comprise the FRV 1228 series have been ordered and will be shown in early November of this year. Everyone whose duties include the maintenance and disposition of documentation will be invited to view this series of films at that time.

During the period 27 through 31 August 1973, the Station Documentation Manager attended a Documentation Orientation Course to observe a new method of presenting the material contained in AFP 12-61. The DM was favorably impressed with the new method, and plans to introduce it soon to personnel of this station.

Other: Extensive personnel rotations continue throughout the Division with a significant number of vacancies remaining unfilled. Transition of four positions from military to civilian has been completed and those positions have been filled. SSgt Perkins has retired; AIC Baker will depart in November for Palace Chase; Sgt Miller has separated. The Division has been very fortunate in having well qualified and motivated civilians join our section. In addition, a new secretary, Ms. Hughes, has been assigned to fill the vacancy left by Miss Hailey. Although manning is reduced and funding more austere, the Division has received increased requests for guidance and TDY assistance from geographically separated units (GSUs). With the upgrading of newly assigned personnel continuing at an aggressive pace, the Division will continue to provide the best service possible within its resources to the Air Station, the GSUs, and newly acquired units.

(U) MANAGEMENT ANALYSIS/GRAPHICS

A directed special study of the PACE Program was initiated during this period and will be completed in the next period.

One hundred forty-three work order requests were completed consisting of 1860 slides, 147 charts and signs and 52 special projects.

(U) BUDGET

The first quarter operating budget consisted of the following:

Military Personnel Expenses	\$1,511,096
Civilian Personnel Expenses	145,672
Other Operation and Maintenance Expenses	18,635
Dining Hall Subsistence Expenses	178,224

(U) INFORMATION

The 20th Air Division Directorate of Information continued to perform its mission of providing information on Division activities to the command's internal and external publics during the reporting period.

One hundred five public news releases were produced by the Division Information staff and additional duty information representatives at Division units. Hometown News Releases forwarded for national distribution totaled 192.

Thirteen tours of the Region Control Center were conducted for 298 people ranging from students to civic leaders. Another 27 tours were conducted for 487 people at Division units.

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The long-vacant secretarial position was filled in July, but as the end of the quarter approached, it became apparent that the alleviation of administrative problems of the directorate was to be short-lived. On 21 September, the secretary-stenographer left for a higher paying government service (GS) position. The downgrading of the directorate position from a GS-4 to a GS-3 in January 1973 has created serious problems in recruiting and retaining a well qualified secretary which is so necessary for the effective conduct of the Division Information program.

News media representatives from 13 newspapers and radio-TV stations within the Division's area of responsibility toured the Cheyenne Mountain air defense complex and the Air Force Academy during a Division-sponsored press trip to Colorado Springs July 15-17. The trip was well received as evidenced by newspaper and radio-TV coverage that was generated.

A new brochure outlining the Division mission and how it is carried out was published by this directorate during the reporting period. It is being distributed to newcomers, tour groups, newsmen and others requesting information about the Division.

Plans for expansion of the Division public speaking program were formulated during the reporting period. Work has begun on an open end mission briefing for use by Division units who would insert material on their local activities at a designated point in the briefing. The addition of current, attractive visual aids to presentations made by

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unit personnel in the local community should add impact to the message and improve the effectiveness. A speaker's kit including various fact sheets on the Air Force and the command is also being prepared to assist speakers in answering questions which might arise during a speaking engagement.

The Division command section actively supported the public speaking program. The Commander addressed the Roanoke Rapids, N.C., Rotary Club August 6 on the air defense mission and the difficulty of arriving at accurate cost estimates for new weapons systems. The Vice Commander briefed the Wilmington, N.C., Kiwanis Club August 15 on the command mission and the Division's role in carrying out that mission. The command section also directed colonels assigned to the headquarters to make themselves available for speaking engagements.

Staff assistance visits were conducted at the 630 Radar Squadron, Houston, TX and the 634 Radar Squadron, Lake Charles, LA., July 9-13; at the 632 Radar Squadron, Roanoke Rapids, N.C., August 6-7; and at the 701 Air Defense Group, Fort Fisher, N.C.; Detachment 1, 48 Fighter Interceptor Squadron, Wilmington, N.C.; and the 792 Radar Squadron, North Charleston, S.C. August 15-19. No major discrepancies were noted during the visits.

Major news events during the period include:

The Air Force Outstanding Unit Award was awarded to three Division units--the 671 Radar Squadron, Key West NAS, FL; the 678 Air Defense Group, Tyndall AFB, FL; and the 679 Radar Squadron, Jacksonville NAS, FL.

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A new radar was installed at two 20th units, the 792 Radar Squadron at North Charleston AFS, S.C., and the 632 Radar Squadron, Roanoke Rapids, N.C., which will improve detection and tracking capabilities.

Lt Col Windrath assumed command of the Division's 48th Fighter Interceptor Squadron at Langley AFB, VA.

A social actions office was opened at Fort Lee AFS to serve the human relations needs of Division personnel. It is the first office at Division level and will serve as a pilot program for ADC.

General Seth J. McKee, NORAD Commander who retired October 1, paid a farewell visit to the Division headquarters. Officers and area civic leaders paid tribute to General and Mrs. McKee during a dinner party given in their honor.

The Interceptor Weapons School at Fort Lee AFS has the distinction of having four officers holding the title of Master of Air Defense. There are only 30 men on active duty with that title which represents the ultimate in air defense skill.

The 4638 Air Defense Squadron won the Division Fast Pitch Softball Tournament and placed second in the Fort Lee Fast Pitch Tournament. The squadron slow pitch team won the Fort Lee Slow Pitch Tournament.

The Division's 644 Radar Squadron won the Homestead AFB, FL Fast Pitch Softball Tournament.

Lt Col John Marcotte, who is assigned to Division headquarters, placed first in the senior division of the ADC Golf Tournament.

(U) SAFETY

Accidents:

Flight: On 30 September 1973 an F-102A assigned to the 125th Fighter Group (ANG) experienced a minor aircraft accident during landing at New Orleans NAS, LA.

Missile/Nuclear: None

Ground: There were 12 reportable accidents throughout the Division during this period. There were three government motor vehicle accidents, three private motor vehicle accidents, two industrial, three domestic accidents, and one recreational injury.

Inspection/Supervisory Visits: SE conducted safety supervisory visits to the following units: 630 Radar Sq, 9-13 Jul 73; 634 Radar Sq, 11-12 Jul 73; 702 Radar Sq, 5 Sep 73; 679 Radar Sq, 6 Sep 73; 645 Radar Sq, 11-12 Sep 73; 125FG, 5-10 Sep 73; 112FG, 27-30 Sep 73.

Personnel:

Capt John M. Bell completed course 30ZR4625X, AF Weapons Accident Prevention Management, 1-23 Aug 73, and course 30AR4611, Aerospace Munitions Staff Officer, 12 Sep - 2 Oct 73. Both courses were at Lowry AFB, Colorado.

SSgt Dennis C. Tidwell, 20AD Ground Safety NCO, arrived on 25 Jul 73 from Fuchu AB, Japan.

TSgt Marion R. Curling, 20AD Traffic Safety NCO, arrived on 17 Sep 73 from Clark AB, R.P.I.

TSgt Jesse O. Smith, 20AD Traffic Safety NCO, arrived on 7 Aug 73 from Clark AB, R.P.I. TSgt Smith is operating traffic safety training out of Tyndall AFB, FL, for units in the southern half of the 20th Air Division geographical region.

General: The Traffic Safety Education Mobile Training Instructor conducted training at the following units during this period: 649 Radar Sq, Bedford AFS, VA, 9-13 Jul 73; Det 1, 48FIS, New Hanover Aprt, NC, 4-8 Sep 73; 701 ADGp, Ft Fisher AFS, NC, 4-8 Sep 73; 702 Radar Sq, Savannah, GA, 10-14 Sep 73.

(U) JUDGE ADVOCATE

Operations and Training. The Judge Advocate Supervisory Authority of the 20th Air Division Staff Judge Advocate remained in the Air Defense Weapons Center, Tyndall AFB, FL. The special court-martial convening authority remained in the Commander, 4638 Air Defense Squadron, Fort Lee Air Force Station.

Three training sessions were conducted on the Uniform Code of Military Justice for enlisted personnel of Fort Lee Air Force Station, Roanoke Rapids AFS, and Fort Meade AFS. Drug abuse briefings were also held for personnel of the above units.

Mission: The Office of the Staff Judge Advocate, under the special court-martial convening authority of the Commander, 4638 Air Defense Squadron, accomplished the following during the 3d Quarter, CY 1973:

One Article 15, UCMJ (nonjudicial punishment) and three appeals of punishments under Article 15 were processed.

Legal assistance was given to 241 individuals

The Staff Judge Advocate traveled TDY to Bedford AFS, VA, Roanoke Rapids AFS, NC and Fort Meade AFS, MD making staff assistance visits and rendering legal assistance to military personnel and their dependents.

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Thirty-nine claims against the Government were paid in the amount of \$6153.67. Twenty carrier recovery claims were collected in the amount of \$2850.37.

Equipment: New court reporting equipment has been requisitioned and approved by HQ USAF/JAF. A new calculator has also been obtained for use in claims processing.

Facilities: There have been no changes in facilities during this reporting period.

Maintenance and Supply: Updating of the legal library is continuing.

Personnel Matters Affecting the Mission: Mrs. Sylvia J. Burroughs joined the office staff as secretary on 30 July 1973. Captain Richard F. Papcun was released from active duty on 14 August 1973. Captain Champney attended a Staff Judge Advocate Course at Maxwell AFB, Alabama 6-17 August 1973.

The authorized office strength of the office remains at one Captain, one NCO and one civilian.

Key personnel: The following individuals are presently assigned to this office:

Captain Richard K. Champney	Staff Judge Advocate
TSgt Zirl E. Rogers	NCOIC
SSgt Robert L. Penn	NCOIC, Claims
Mrs. Sylvia J. Burroughs	Secretary

CHAPTER II
PERSONNEL

(U) KEY PERSONNEL

Commander	Brig Gen James M. Fogle
Vice Commander	Col Lauren B. Hollenbeck
Director of Operations	Col Joseph F. Olshefski
Director of Communications-Electronics	Col James W. Stanley
Director of Region Control Center	Col Mack L. Bradshaw
Director of Training	Col Robert H. Davis
Director of Logistics	Col Joseph A. Mentecki
Director of Information	Lt Col Harold L. Davis
Director of Personnel	Lt Col Charles E. Anonsen
Director of Medical Services	Maj Raymond P. Conley
Director of Administration	Capt Robert T. Aldinger
Chaplain	Capt Richard J. Cathy
Judge Advocate	Capt Richard K. Champney
Commander, 4638 Air Defense Sq	Lt Col William P. Hullinger

(U) The 20th Air Division Directorate of Personnel processed 171 OERs/APPs during this quarter, including 15 Gold Nugget OERs and 44 Top Stars.

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DIVISION MANNING

As of 28 Aug 73/DP

UNIT	OFFICERS		AIRMEN	
	AUTH	ASGN	AUTH	ASGN
HQ 20 Air Div	22	20		
4638 AD Sq	88	92	8	7
AB	1		387	437
AD	1	1		
AE	1	1	1	1
AF	1		1	1
AG	1		1	1
48FIS	6	5	55	41
Det 1	41	42	437	480
Det 2	2	2	65	77
678 AD Gp	2	2	92	112
701 AD Gp	22	22	131	140
630 Rad Sq	9	9	147	164
AA	13	13	57	51
AB			7	5
AC			7	6
AD			1	1
AE			7	5
632 Rad Sq			7	6
AA	6	5	108	108
634 Rad Sq			12	11
635 Rad Sq	11	10	73	74
644 Rad Sq	11	11	73	68
645 Rad Sq	15	17	132	140
649 Rad Sq	3	4	60	68
660 Rad Sq	4	5	77	82
671 Rad Sq	3	3	64	66
679 Rad Sq	25	26	189	195
702 Rad Sq	5	6	81	87
770 Rad Sq	5	3	89	78
AA	5	4	61	59
AB			12	15
771 Rad Sq			12	13
792 Rad Sq	5	7	91	92
861 Rad Sq	5	4	113	113
	5	5	83	78
TOTAL	317	319	2747	2888

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Sports Tournaments: Fast Pitch Softball Championships were held at 792 Radar Sq, N. Charleston AFS, SC, 23-27 Jul 73; winner was 4638 Air Def Sq.

ADC Welfare Fund Special Allocations.

<u>UNIT</u>	<u>CY 72 TOTAL</u>	<u>JAN 73</u>	<u>APR 73</u>	<u>JUL 73</u>
632 Rad Sq	\$6,073.18	\$ 295.16	\$ 0	\$312.00
649 Rad Sq	6,073.18	742.50	0	0
701 Air Def Gp	5,571.12	0	0	0
771 Rad Sq	0	0	0	0
792 Rad Sq	1,372.00	1,297.50	0	0
861 Rad Sq	2,340.21	3,017.75	0	0
Det 1, 48FIS	944.00	0	0	0
635 Rad Sq	0	0	3,605.75	434.55

Awards and Decorations Statistics:

	<u>Approved</u>	<u>Disapproved</u>
AFCMs	72	1
MSMs	12	7
LOMs	1	

Lt Col John K. Maher departed PCS in September; Lt Col Charles E. Anonsen assumed duty as Director of Personnel on 15 September.

Social Actions Office began its existence, with 1LT Ronald C. Fimbel and TSgt Carter L. Rodgers manning it.

Board was held in July to determine Division nominations for the Air Force Outstanding Unit Award. Results are shown in the attached letter. See Document #1.

Staff assistance visits were conducted to 630 Rad Sq, 634 Rad Sq, 702 Rad Sq and 679 Rad Sq during this period.

CHAPTER III
OPERATIONS

(U) REGION CONTROL CENTER

During the period 1 July 1973 thru 30 September 1973, Region Control Center personnel participated in 2 live and 2 Region or higher simulated exercises. This included the live Federal Keynote 74-1 and Amalgam Arrow 74-2, and the simulated Federal Hunt 74-1. In addition, RCC personnel participated in twelve locally generated simulated exercises. A total of 6070 live intercepts were accomplished during the quarter.

Captain John German was upgraded to Expert Weapons Controller during the quarter. The following officers were upgraded to Skilled Weapons Controller: Captains Jeffrey Bosworth, Craig Eccard, Walter Green, Stuart Lange and James Morrison. MSgt William Showalter and SSgt Robert Kerlin were upgraded to Skilled Weapons Controller Technician. Two officers and 41 enlisted personnel completed their initial operationally ready training, and 10 officers and 47 enlisted personnel were in training status at the end of the quarter.

1LT James Fodrey and TSgt Jimmie Double departed for Radar Inputs and Countermeasures Officer School during the quarter; Captain Clifford Deslatte began Interceptor Weapons School; and Captain Lester Newton returned from Squadron Officers School.

During the quarter nine officers and 26 enlisted personnel reported in to the Region Control Center while six officers and 16 enlisted personnel were reassigned or separated from the Air Force. As of 30 September, there were 56 officers and 165 enlisted personnel

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available for duty.

(U) OPERATIONS AND TRAINING

Weapons Division (DOTW)

DOTW participated in one simulated and one live exercise during this quarter. One Staff Assistance Visit was made to the 112 FIGP, Gtr Pittsburgh IAP, PA, 27-30 September 1973, in preparation for a General Inspection scheduled for October 1973 by the ADC IG Team. Operational training and management was satisfactory with emphasis required in the Stan-Eval function. The 169 FIGP, McEntire ANGB, SC, underwent a USAF IG Unit Effectiveness Inspection, 10-14 September 1973. Lt Col G. W. Brindley reported in as Chief, Weapons Division in July and MSgt C. D. Douglas arrived in July as NCOIC, Weapons Division.

Operations Support Division (DOTS)

20th NORAD Region units supported four NORAD/ADC and two 20th NORAD Region conducted exercises by flying target support in T-33 and UE aircraft. One target was a weather cancellation. The 48FIS was scheduled for seven UE sorties and flew six as scheduled with one ground abort. The ANG flew six out of ten scheduled T-33 missions. Two were cancelled for lack of aircrew and two were weather cancellations. The ANG units also flew ten of 11 scheduled UE target missions with one weather cancellation. Flight checks were flown as part of the evaluation of Slidell, LA and Lake Charles, LA. Air Division pilots flew 36 sorties in support of these two evaluations.

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The Air Division utilized 65 percent of the T-29 time allocation due again to heavy use of the 21st NORAD Region T-39 to fulfill some of the Division commitments. The T-39 supported missions for the Commander as well as 48FIS aircrew exchanges at Det 2, 48FIS at Homestead AFB, FL. Maj Costain assumed the duties as OIC of Scheduling.

Control and Environment Division (DOTE)

Capt Joseph E. Whalen was assigned to DOTE 16 September 1973 to replace Capt Dennis W. Clark who has received a MAAG assignment to Lisbon, Portugal departing 15 November 1973. Staff Assistance Visits were conducted by DOTE/DOTE to the following units: 630 Radar Sq, Houston, TX, 8-10 July 1973; 635 Radar Sq, Lake Charles, LA 10-11 July 1973; 771 Radar Sq, Cape Charles AFS, VA, 4-7 September 1973; and 678 Air Defense Group, Tyndall AFB, FL, 17-21 September 1973.

(U) INTELLIGENCE

During the quarter, the Director of Intelligence, Lt Col Floyd A. Sooy, retired and the Directorate secretary, Mrs. Mary J. Russell, transferred to another job with a higher GS position. To date, the Directorate has been unable to obtain a replacement secretary, due in part to heavy hiring by other federal agencies in the area offering higher GS positions. Major Alan C. Cucullu arrived from PACAF in July as Lt Col Sooy's replacement.

(U) COMPUTER PROGRAMMING DIRECTORATE (DOPM)

During the quarter 1 July 1973 thru 30 September 1973, DOPM completed final checkouts and testing of SUOP Version 53. Region

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environmental testing exposed a critical problem with the version which delayed the operational date until 30 July. All console label changes and operations briefings were completed prior to this date. SUOP version updates became operational on the following dates:

<u>Update</u>	<u>Operational Date</u>
52.2C	3 Jul 73
53A	30 Jul 73
53B	8 Aug 73
53C	7 Sep 73

There were six Design Change Suggestions (DCS) considered at two 20AD DCS Review Committee Meetings. Four of the suggested changes were recommended for approval with normal priority.

Personnel actions during this reporting period included one programming officer departing for instructor duty at Keesler AFB, MS. Two new programming officers arrived in August, but their technical school training has been delayed until January.

(U) COMMUNICATIONS-ELECTRONICS

Backup power installation projects continue to be delayed. The installation at Palermo AFS, NJ GATR site was to have been given its final acceptance inspection during August 1973. Due to the lack of electrolyte for the diesel engine starting batteries and oil for the generator, the test was cancelled. Contractual interpretations were the basic cause for the delay. The final test date of 10 Oct 73 has been established by ADC. The power distribution for backup power at the 632 Radar Squadron, Roanoke Rapids AFS, NC, has been delayed

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due to lack of bidders. Contractors are reluctant to bid due to increasing cost of material from the time of awarding the contract to completion date. This HQ proposed to ADC to award a labor only contract with the Air Force furnishing necessary equipment.

ADC has requested Keesler AFB to prepare the engineering specifications for the backup power installation at the 635 Radar Sq, Dauphin Island, AL. Estimated completion date for design specifications is FY 274.

ADC requested that HQ 20 Air Div submit cost quotes for connecting commercial electrical power to the SAGE Complex which could be utilized as either prime or backup power. 4638DE has initially quoted \$175,000 for sub-station. This does not include the design cost.

Consolidation of Communications Centers: Members of the Fort Lee QMC and HQ 20 Air Div met on two occasions to formulate plans for the consolidation of the Fort Lee and HQ 20AD Communications Centers. All parties agreed with the selected location of Room 118, Bldg 1109. HQ 20 Air Div and Army Communications Engineers are scheduled to perform the initial engineering site survey during FY 274. Five Army personnel are being issued escort privileges to the SAGE Building in order to perform escort duty during the installation phase.

Telephone Service Requests have been issued to deactivate Air Force communications equipment at the 671 Radar Sq, Key West NAS, FL.

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The 671 will during FY 274 receive their record communications support through the Key West NAS Communications Center and the 671 Communications Center will be phased out.

A proposal to consolidate the 678 Air Def Group's communications center has been submitted to HQ ADC for final revision. HQ 20 Air Div recommended the Base Communications Center be moved to the 678th and operated from that location.

Support Requirement Letter for the installation of the AN/FYQ-49 and AN/GPA-125 at the 634 Radar Sq, Lake Charles, LA and 635 Radar Sq, Dauphin Island, AL have been received and endorsed to AFCS. The required operational date (ROD) for these installations is 31 Dec 73. Effective that date, both units will transmit radar surveillance data to the Houston Center and cease to operate as NMGCI stations.

The 4754th Radar Evaluation Squadron completed its evaluation of the AN/FPS-27A (SEED CLEAR) radar at Roanoke Rapids AFS, NC. A debriefing of flight performance was conducted at this Division on 23 July 1973.

The 4754th Radar Evaluation Squadron completed evaluations of the AN/FPS-90 radars at Slidell, LA, Lackland, TX and Odessa, TX. A station evaluation was completed at Lake Charles, LA.

Activation flights for the AN/GPA-124 at Cape Charles AFS, VA were completed 9 August 1973.

The AN/GPA-124 at the 649 Radar Squadron, Bedford AFS, VA was commissioned 20 September 1973.

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Special testing of PACE evaluation flights against the AN/FPS-27A (SEED CLEAR) radars at Roanoke Rapids AFS, NC and North Charleston AFS, SC has been completed.

This office is in the process of rewriting 20th Air Division Operations Order 3204. The new Operations Order will include PACE procedures for the Southern Defense sites.

Capt Gordon J. Mabus was assigned as Chief, Electronics Systems Division, Directorate of Communications-Electronics, in August 1973.

Equipment and Circuit Status: Circuit effectiveness averaged at 98% for the AUTODIN circuit and 99% for the ADC Eastern Loop Circuit.

Communications Operations. The Communications Center achieved a CIM rating of under one percent during this quarter. Net Control of the Eastern ADC Tactical Teletype Loop Circuit was transferred from this station to 23 Air Division, Duluth, Minnesota.

CEM 2110-Sup 2, Level V Ground/Air Voice Communications at the LRR/GATRs. Rates have been filed in FCC Tariff 260 and quotes have been made to DECCO. However, ADC message DTG 201815Z Sep 73 has put this project in a "hold in abeyance" status due to operational problems.

Modular Automatic Conference Arranger (MACA) bridges have been installed at Lyons and Mounds switches for NORAD conferencing. Training on MACA was conducted at the Region on 21 August 1973 by an AT&T Representative.

Orders have been issued for two each ground/air circuits between Houston MNCC-Lake Charles/Dauphin Island. Service date is 30 Nov 73.

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CEM 2067-Sup 7 and autovon network (AVN) Project 967. Orders were issued for additional features (automatic answering, tone detector, alert lamps, an audible buzzer and a monitor jack equipped with associated speaker cut-off) at all AADCPs, and for the addition of augmentation units (Oceana NAS and Beaufort MCAS) to the Weapons Alert System.

During this period Capt McDonough and TSgt Langlands conducted a COMSEC inspection and a communications center staff assistance visit at the 177 Fighter Group, Atlantic City, NJ.

SMSgt Hazelwood joined the 20th Air Division staff in an assistance visit to the 112 FIGp, Greater Pittsburgh AP, PA, from 27-30 September 1973.

(U) EXERCISE AND EVALUATION

This Directorate participated in, designed, and conducted nine exercises during this quarter. Six were live and three were synthetic exercises.

Live Exercises

Federal Keynote 74-1, 14 August 1973 - This exercise was used as a Defense Combat Evaluation (DCE) for the Pittsburgh ADA Defense. No report published.

Amalgam Arrow 74-2, 17 August 1973 - Used to provide Region-wide training. Report is appended as Document #2.

Federal Keynotes 74-3 and 74-4, conducted 29 August and 11 September 1973 respectively. These exercises were used to provide training for Miami/Homestead Defense prior to their Defense Combat Evaluation (DCE). No report published.

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Federal Keynotes 74-2 and 74-5, conducted 12 September and 17 September respectively. These exercises were used to conduct No-Notice penetrations against the Houston MNCC Complex. No report published.

Synthetic Exercises

Federal Indians 74-1 and 74-2, conducted 24 July and 29 August 1973 respectively. These region exercises were used to provide training for Tyndall BNCC and Ft Fisher BNCC in a Level IV configuration. No report published.

Federal Hunt 74-1, 18-20 September 1973. NORAD-wide exercise. This exercise was used to provide battle damage reporting training and reconstitution training. Report is appended as Document #3.

In addition, the reports for Exercises Amalgam Fairplay 73-4 conducted 25-28 June 1973 and Amalgam Arrow 73-8 conducted 20 June 1973, are appended as Documents #4 and 5.

CHAPTER IV

LOGISTICS

(U) Mission Statement. Advises the Commander on matters pertaining to materiel support of all air defense activities within the Air Division to include supply and materiel services support of aerospace vehicles and tactical/radar and early warning units. Exercises command surveillance over commissaries, base exchanges, food services, linen exchange, and fuels. Coordinates distribution and use of Air Division materiel resources. Reviews budgetary programs and evaluates the materiel support effort.

(U) Key personnel.

Director of Logistics	Col Joseph A. Mentecki
Supply Mgt Staff Officer	Lt Col John D. Hiers
Dir of Ground CEM Maint	Maj Jerry G. Smith
Aircraft Maint Staff Off	Maj Frank H. Matthes and Maj Ronald E. Guerrieri

(U) Significant Events

The quarterly Not Operationally Ready Supply rate on the F-106 for the 48FIS was 4.7%. This compares favorably to preceding quarterly rate of 7.8%. There were a total of 87 cannibalization actions during the quarter.

Capt David W. McVicker was assigned as RCC CEM Maint Supervisor eff 1 Jul 73.

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Lt Robert J. McGann was appointed additional duties as Staff Security Officer for the Directorate of Logistics and Ground Safety Officer for Fort Lee AFS.

Z-56, Cape Charles AFS, VA commissioned the GPA-124 in Sep.

Z-121, Bedford AFS, VA commissioned the GPA-124 in Sep.

Z-243, Andrews, TX commissioned the FPS-90 in Jul.

Z-242, Oilton, TX commissioned the FPS-90 in Jun.

CC-4 installed one card reader, one line printer and two keypunch machines as part of the IBM overhaul program.

Sixty-two technical inspections, 8 personnel evaluations and 3 activity inspections were performed.

Quality Control performed 5 activity inspections, 5 technical assists and 2 joint quality control inspections (FAA/AF).

There were 9 mechanical pre-IRANs, 9 electrical pre-IRANs, 2 emergency on-site maintenance assists, 3 radar evaluations, 10 outside plant visits and 3 lateral maintenance assists.

During this period, the Hamilton EACC was transferred to Peterson Field EACC which resulted in cessation of bench stock replenishment and caused a large increase in priority NORS status.

Division Antenna Maintenance Team performed one emergency maintenance request and five squadron assists for PMIs.

Crypto Maintenance performed two emergency maintenance trips to Ft Fisher for equipment repairs.

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The keypunch section of Admin processed 85,000 MDC documents, 1800 PMI cards and 1200 training cards.

Training quotas were received for FY 74. Allocations were cut by 50%; ADC emphasizes more utilization of AFETS personnel.

Three classes on AFM 66-1 initial and refresher training were conducted for LGKS.

Two officers and four NCOs attended the ADC Maintenance Management Course 3000 (AFM 66-1) at Ent AFB.

Nine technicians attended school at Keesler on the Rivet Switch Gear (GRT-22/GRR-24).

Two radar technicians received training at Keesler on the OA-1163C/RO-65 (RAPPI/Printer).

Two radar technicians received training at Keesler on the GPA-98.

One radio technician received training at Keesler on the GKA-5.

Computer Maintenance performed five in-house classes for assigned personnel in input/output, RAPPIs, Q-7 drums, RIMP and Q-7 SDGE class.

(U) Awards

SMSgt Basil Nosal received the Meritorious Service Medal for duties at his last assignment.

Two civilians received Sustained Superior Performance Awards and two civilians received Outstanding Performance Awards.

ATC Kevin C. McCall was selected as First Termer of the Quarter, Apr-Jun 73, and also was selected to participate in the ADC Project "Open Door."

CHAPTER V
4638 AIR DEFENSE SQUADRON

(U) The 4638 Air Defense Squadron (SAGE) continued to render administrative and logistical support to Hq, 20 NORAD/Air Division, Fort Lee AFS, VA throughout the period 1 July - 30 September 1973; Lt Col Hullinger commanding the squadron. There were many significant events which occurred during this period and are listed under the various 4638 Air Defense Squadron subsections.

(U) Orderly Room. The 4638 Air Defense Squadron had an average assigned strength of 539 personnel consisting of 93 officers and 446 enlisted personnel. The Orderly Room processed a total of 143 transfers, separations, retirements and 291 leaves. Total number of personnel billeted in four dormitories managed by the squadron was 189 airmen within 119 useable rooms. A total of 312 assigned personnel were placed on squadron details during the months of July, August and September 1973. Disciplinary actions during the quarter ending 30 September 1973 were as follows: One Article 15 administered, 62 letters of indebtedness processed, 61 unfavorable information files screened and 16 letters of reprimand administered. A total of 15 assigned personnel were entered into the Air Force Weight Control Program during this period. Average number of personnel selected for random testing under the Drug Abuse Testing Program was 28 per month, with no confirmed positives being detected. A total of three assigned personnel were carried in Absent Without Leave (AWOL) status

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during portions of Aug and Sep 1973. A new Fort Lee Air Force Station Regulation 35-2, titled "Dress and Personal Appearance of Air Force Personnel," was published on 20 September 1973, establishing policy and requirements for the proper wear of the Air Force uniform, prescribed organizational insignia, plus dress and appearance standards within certain facilities on Fort Lee AFS, Virginia. The squadron participated in four Fort Lee sport activities, capturing first place in Slow Pitch Softball and Golf, second in Fast Pitch Softball, and third place in Horse Shoes. The squadron sponsored the annual Labor Day Slow Pitch Softball Invitational Tournament, with a total of eight teams participating. The squadron Fast Pitch Softball Team captured the 20th Air Division Fast Pitch Championship by defeating the 632 Radar Sq, Roanoke Rapids AFS, North Carolina. Projects completed during the quarter which enhanced the overall morale and welfare of assigned personnel was the consolidation of all published minutes of committees and council meetings on one Bulletin Board within the squadron Orderly Room area, thus assigned personnel have one central location for the review of all minutes published over a period of one year. Cable television was installed in all dormitories, thus improving the reception and number of television programs available for viewing in the lounge area.

On 21-23 Sep 73 the Civil Air Patrol held their annual Drill Competition meet at Fort Lee under the 20th Air Division sponsorship. Several states were represented which included drill teams from Maryland, Washington, D. C., Virginia, North/South Carolina. Air Force

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Project Officer for the event was Major Rajcich (Chief Judge) with SMSgt Honeycutt, MSgt Hart, TSgt Scott, SSgt Holland, and Sgt Grounds acting as judges. A dinner was held following the event and the award (trophy) for the winning team, 111th Communications Squadron, North Carolina, was presented.

(U) Transportation. During the quarter, the 4638 Transportation Section made 764 trips compiling a total of 99,098 miles with no reportable accidents. There was no change in vehicle status. The following activities were supported by the Transportation Section: JOC sponsored tour of the aircraft carrier USS America at Norfolk Naval Base, Air National Guard training at Fort Lee AFS for trips to various sites within 20th Air Div, training program for Boeing Engineers at Ft Lee AFS, JOC sponsored picnic for mentally retarded children of Petersburg Training School and Hospital, team for Master Air Defense for OLAA, 4757 ADS (IWS), Ft Lee AFS, AMALGAM Arrow Team, Air Commodore Sismore (RAF) and party visit to Hq 20 NORAD Region, VCU Aerospace Workshop sponsored by Hq 20 Air Div, Gen McKee, ADC Commander and party visit to Hq 20 NORAD Region/Air Div, 20 Air Div Communication-Electronics Maintenance Management Conference, Re-registration of all vehicles owned by military and civilian members of Ft Lee AFS. Ft Lee Council of Catholic Men Poverty Program, Ft Lee Ceremonial parade, BUIC training program on two occasions. There was one gain and one loss of personnel.

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(U) Security. Capt Jonathan E. Miller was awarded the Meritorious Service Medal.

Five Security Program Tests were conducted on subordinate units. All of the units except one received satisfactory or excellent results. The one unit, 112FIGp, Pittsburgh, PA, was rated unsatisfactory.

Twelve staff assistance visits were conducted by the Directorate of Security Police to subordinate units during this period.

The Security Police Section during this quarter issued a total of 161 AF Forms 1199a, Restricted Area Badge. The Security Police Section also processed a total of 56 ID Cards, DD Forms 2AF. Two individuals, Amn Ronald A. Crouch and Amn Ronnie D. Peterson, were selected by Hq ADC and participated in the Security Police world wide Rifle and Pistol Matches held at Lackland AFB, TX 4-10 Sep 73. Personnel actions included: One new security policeman, Sgt Ellis Hargress. A1C Jerry W. Robertson was selected for promotion to the grade of Sgt during this period. Also during this quarter, the section participated in four retirement ceremonies.

(U) OJT/GMT Training. During this period the squadron had 9 officers and 53 enlisted personnel complete courses with ECI. There are presently 22 officers and 145 enlisted personnel enrolled in ECI courses. At this time we have 17 officers and 46 enlisted personnel attending college courses under the Tuition Assistance Program during Terminal Bootstrap Program. In the OJT Program, the squadron upgraded 33

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personnel this quarter, with an average in training of approximately 130. At this particular time, we have 132 personnel in training and no one in excessive training. In Aug and Sep, the 90-day OJT Staff Visit was conducted with numerous discrepancies observed in the annotation of the OJT Records. A follow-up inspection will be conducted in Oct 73. The Physical Fitness and Weight Control Program was conducted in Sep for those personnel who failed to show in April and June and for newly arrived personnel. A make-up period will be conducted again in Nov for newly arrived personnel and for those who did not show in April, June or September.

(U) Food Service. New personnel during this period included Ann Elroy G. Reese being assigned to the Dining Hall from Lackland AFB, TX. Personnel departing during this period - Sgt Michael Snell - assigned to Korea. Expenditures for feeding included:

Jul 73	\$6,414.14
Aug 73	5,798.75
Sep 73	<u>6,422.27</u>
Total for Qtr	\$18,635.16

Total number of weighted rations served during the period 1 Jul 73 - 30 Sep 73 - 7,854; average per day 85.

Personnel assigned as of the end of this reporting period:
 James C. Kidd, MSgt, NCOIC, Food Service; Thomas Small, TSgt, Dining Hall Supervisor; Volmon J. Rivette, SSgt, Storeroom Clerk; Joseph Goode, SSgt, Senior Cook; Richard Vanover, Sgt, Cook; Reuben Branham, Sgt, Cook; Liecester Broadhurst, AIC, Cook; Ronald Miott, Sgt, Baker;

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Elroy Reese, Amn, Baker; Steven L. Jones, A1C, Admin; Thomas Alderson, Civ, Cook; Wallace Hines, Civ, Food Service Worker; John Branch, Civ, Food Service Worker; John Goodrich, Civ, Food Service Worker; Elmer Nixon, Civ, Food Service Worker; Frank Stith, Civ, Food Service Worker; Viola Suber, Civ, Food Service Worker.

There is an extensive renovation program in progress which will be included on the next historical report.

(U) Personnel. The following personnel actions were accomplished during this quarter: 45 personnel were out-processed for CONUS/OS assignments; 68 personnel were in-processed; 13 personnel were processed for retirement; 8 personnel were processed for reenlistment; 17 personnel were separated or discharged; 5 personnel were processed under the HRP/PRP Program; 45 officer effectiveness and 141 airman performance reports were processed. Personnel presently assigned: 1LT Joseph D. Steiner, Personnel Officer; SMSgt Larry O. Smith, NCOIC, WAPS testing; TSgt William A. Decker, Assistant NCOIC; SSgt William H. C. Jarvis, OER/APR; Sgt Calvin Bey, Discharge/Retirement Transition; Sgt James R. Smith, Special Projects; A1C Robert W. Kleehamer, Assignments.

(U) Station Support (Supply). Station Support continued to contribute to the successful accomplishment of the 4638 Air Defense Squadron mission by rendering equipment, supply and local purchase procurement support to assigned activities during this reporting period. The supply and equipment budget was established for FY-74

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by Hq ADC at \$73,300. This is a reduction of almost 20% from FY-73 \$89,100. The practicing of stricter economy measures becomes absolutely essential. Accomplishments of each section were as follows:

Equipment Management - The entire Station has been re-inventoried to reconcile balances. This was due to the changing of alternate custodians for Account 680, 682 and 684.

Supplies Management - The self service store continued to offer support to the Ft Lee Air Force Station. Although under an austerity program of strict budgetary controls, this section has been able to continue an outstanding shelve fill rate. In addition, more controls have been placed in the area of local purchase to provide better service, and to eliminate non-local purchase requests.

Office Administration - The Station Support Facility has been involved in a self help program of office beautification along with changing operating hours to better fit the needs and demands of the station. Personnel changes occurring during this period were: Airman Leaetta Williams transferred to 20LGKQA/R. SSgt James A. Thompson arrived on Ft Lee on 18 July 1973 and assumed the position of NCOIC, Station Support.

(U) Utilities. Preliminary steps were initiated for consolidation of the U. S. Army Telecommunications Center at Fort Lee with Headquarters 20th Air Division Communications Center. The Joint Chiefs of Staff has directed the combined Army operated center be located in Bldg P-1109.

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Discussed at a preliminary meeting were the site location, requirement for air conditioning and power, message distribution, personnel clearance, space of approximately 1500 sq ft and a requirement for adequate lighting. U. S. Army representatives from Ft Lee noted that Army would provide funding, engineering and installation services for the consolidation. Changes would be required in the interservice agreement. A date for the engineering site survey was not available.

The contract for diesel fuel expired 31 July 1973 and U. S. Army Materiel Contracting Section has been unable to obtain another contract. Fuel oil is being purchased from Army and Navy supplies for the present.

An electrically operated vehicle gate was installed at the entrance to the fenced enclosure of Bldg P-1109 by personnel of the Air Force and the Army at Ft Lee, VA. The gate was obtained from Langley AFB after the closure of the missile site at that location. Structural work was performed by 4638 Utilities personnel, electrical work was performed by USA/DFAE personnel and the painting completed by the First Sergeant's work detail. Considerable funds were saved by self help installation.

A study has been performed by USA/DFAE personnel at Ft Lee, Virginia pertaining to methods and the approximate costs of installing commercial power to the power plant at the Direction Center, Fort Lee AFS, Virginia. This will require approximately \$175,000 for construction and \$12,000 to \$15,000 for design of the project. Hq ADC will evaluate the results of the study for possible implementation.

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A general overhaul of number 6 diesel engine was accomplished by personnel of the Utilities Section under the direction of the Maintenance Engineer. Most main and connecting rod bearings were replaced along with all piston rings. All cylinder heads were repaired including facing and reseating the valves. All major parts of the diesel were cleaned and checked. This represents 48,661 hours of operation time since the diesel was last overhauled in December 1962. The original cylinder liners and pistons are still in use.

Installation of shelving for the WAF's kitchen was accomplished by the AFS carpenter. The carpenter also constructed portable storage bins with shelving for use at the AFS support supply building. A wire cage was constructed on the second floor of Bldg P-1109 for storage of ready items required to be under lock and key for the computer supply section.

Eight corrosion resisting type suction screens were constructed by the Host Base, U. S. Army at Ft Lee, VA. The screens replaced corroded screens that had been in use since the opening of the SAGE site in 1957 at the cooling tower basins.

The 169 Civil Engineering Flight Section from McEntire ANG Base, Eastover, S. C. reported for two weeks of active duty to the Ft Lee AFS in July 1973. Personnel of various trades were utilized for performing tasks at several 20th Air Division units under the guidance of the 20th Air Division Civil Engineer. Power production and air conditioning personnel assisted with maintenance of the 4638 Air Def Sq SAGE Power Plant, Ft Lee AFS, VA.

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(U) Disaster Preparedness. Preliminary plans were made during this period to update Disaster Preparedness Procedures for the Exercise Evaluation Team (EET), and the Station Command Post which is used as a point of shelter, security, management and manpower coordination with the quarterly Disaster Preparedness Planning Board. The 4638 ADSq Recall Plan was reaccomplished on 5 Sep 73 with changes being made on the general format as they occur.

(U) Maintenance and Repair. The function of maintenance and repair, Mr. Trumbo, carpenter and technical advisor to self-help projects, has been placed under the responsibility of the 4638 Civil Engineering Section (DE). All historical reports hence, concerning these activities, will be consolidated with 4638DE.

(U) Social Actions Office. This office was established on 4 Sep 73, Building 1104, Fort Lee AFS, VA with two positions being authorized and filled as follows: Social Actions Staff Officer - 1st Lt Ronald C. Fimble and Social Actions Technician - TSgt Carter L. Rodgers. This office functions as command OPR for Drug Abuse Control, Alcohol Abuse Control and rehabilitation, Equal Opportunity and Treatment of Military Personnel, Education in Race Relations and Support of Domestic Actions Program. Functions as a liaison office with host installations in the implementation of required programs and support in accordance with command and Air Force directives.

DEPARTMENT OF THE AIR FORCE
 HEADQUARTERS 20TH AIR DIVISION (ADC)
 FORT LEE AIR FORCE STATION
 FORT LEE, VIRGINIA 23801



REPLY TO
 ATTN OF: CC

19 July 1973

SUBJECT: Recommendations for the Air Force Outstanding Unit Award

TO: HQ ADC/DPSP

1. The following units are recommended for award of the Air Force Outstanding Unit Award:

- Group 1: 644th Radar Squadron
- Group 2: 671st Radar Squadron
- Group 3: Preference: 1st: 632nd Radar Squadron
 2nd: 660th Radar Squadron
 3rd: 770th Radar Squadron
 4th: 679th Radar Squadron
 5th: 792nd Radar Squadron

2. The combat readiness of each recommended unit is of the highest order.

3. The following background information is furnished:

Type of Unit Recommended	Total Number In Division	Number Rec'd AFOUA During Last 3 Cycles	Number Previously Rec'd AFOUA
Radar Sq (ALCOP)	1	0	1
Radar Sq (MNCC)	2	1	2
Radar Sq	12	2	1

James M. Fogel
 JAMES M. FOGEL, Brigadier General, USAF
 Commander

- 7 Atch, Recommendations:
- 1. 644 Rad Sq
 - 2. 632 Rad Sq
 - 3. 660 Rad Sq
 - 4. 679 Rad Sq
 - 5. 792 Rad Sq
 - 6. 770 Rad Sq (C) (Under separate cover)
 - 7. 671 Rad Sq (S) (Under separate cover)

Cy to: (w/o atch)
 20AD Units/CC
 20AD Staff Sections

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HEADQUARTERS
20 NORAD REGION

EXERCISE & ANALYSIS REPORT



EXERCISE
AMALGAM ARROW 74-2

CLASSIFIED BY 20 NORAD REGION/NREA
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652;
AUTOMATICALLY DOWNGRADE AT TWO YEAR
INTERVALS, DECLASSIFY ON 31 DEC 79

OPR NREA

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13 SEP 73

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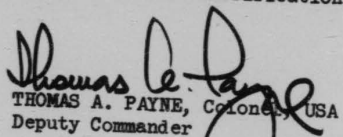
PREFACE

This document consists of post exercise analysis information for AMALGAM ARROW 74-2, which was conducted on 15-17 August 1973.

This report contains significant facts and statistics associated with the exercise. The primary purpose of this report is to determine if exercise objectives were met, analyze the training conducted, identify problem areas, and indicate where improvement is necessary.

Trouble tracks are summarized in Part III of this report. Subordinate units are encouraged to make a detailed analysis of specific factors noted in their area of responsibility.

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THOMAS A. PAYNE, Colonel, USA
Deputy Commander

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Tyndall BNCC Tyndall AFB	1
Key West MNCC Key West NAS	1
Richmond NGCI Homestead AFB	1
ARMY -	
31st Arty Bde Homestead	1
23 ADA Group Ft Meade	1
18 ADA Group Oakdale	1
1/65 ADA Key West	1
USAF -	
48th Ftr Intcp Sqdn Langley AFB	1
AIR NATIONAL GUARD -	
169th Ftr Gp McEntire ANGB	1
112th Ftr Gp Gtr Pittsburgh IAP	1
125th Ftr Gp Jacksonville IAP	1
20NR INTERNAL -	
NOFS	1
NREA	2
NADA	1
NOIN	4
NNPA	1
NOOP	1
20 AIR DIVISION -	
DOT	1
DOTE	1
DOC	1
DOK	1
LG	1
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PART I

EXERCISE DESIGN AND OBJECTIVES

1. (U) Exercise Design. AMALGAM ARROW 74-2 was a multi-region exercise designed for the 20th and 21st NORAD Regions. The 20th portion of the exercise was to exercise the RCC, Tyndall BNCC, and Key West MNCC. It consisted of 2 faker waves which included a Gulf threat. The first wave was run in a "Bravo" configuration, and the second wave in an "Alpha" configuration. Seventy-three high, medium and low faker routes materialized; 20 were ECM routes. A 24-hour weather delay was exercised with no apparent affect on the target force; however, weather at McEntire and weather in conjunction with runway conditions at Jacksonville reduced the interceptor force appreciably, since both the EHS and NKs had to stand down for the second wave.
2. (C)(U) Objectives. There were five exercise objectives. Four were Headquarters NORAD objectives and one was 20th NORAD Region objective.
 - a. (C) The first objective was to exercise the air defense components within the 20NR. This objective was met. For the RCC, even though ECM levels were low, there was good training in a live exercise environment. The RCC crews had 24% of weapons and 44% of surveillance and ID personnel either in training status or participating in their first live exercise, and the training was very beneficial to them. Key West MNCC felt that the exercise was poorly designed for maximum surveillance and weapons training. Details of exercise design will be discussed in Part V, the Problem Action Reports portion of this document.
 - b. (U) The second exercise objective was to exercise safe passage of interceptors through the ADA defended area. This objective was met and exercised in the Key West MNCC ADA area of responsibility.
 - c. (U) The third objective was to exercise the capability for passive detection, tracking and interception of targets. This objective was partially met. For the RCC, there was not sufficient ECM to necessitate passive tracking procedures. Mechanical ECM increased data count and the need for extra care in tracking through chaff areas, but overall ECM training benefits were low. Tyndall reported good passive tracking training in Sector II.
 - d. (C) The fourth objective was to exercise FIS flush procedures at Langley, Homestead, McEntire and Jacksonville. This objective was partially met.
 - (1) The flush at McEntire and Homestead went well. Six aircraft were flushed at McEntire. Three were off in 15 minutes and all were off in 17 minutes. At Homestead, 4 aircraft were flushed. Three were off in 15 minutes; the final one was off 3 minutes later.

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(2) An elephant walk was substituted for the Jacksonville flush since the main runway was not in use. The secondary runway was shorter, without a barrier, and did not provide adequate approach lighting. These conditions were further complicated by a wet runway.

(3) The flush at Langley was only partially successful. Of the 10 MGs and 6 NP aircraft at Langley, none were airborne within 15 minutes of the issued flush order. Two were off within 20 minutes, 6 within 30 minutes, 10 within 40 minutes. The remaining 5 aircraft were off 47 minutes after the flush was issued. The problems with the Langley flush will be further explored in Part V, the Problem Action Reports portion of this document.

e. (U) The final exercise objective was a 20th NORAD objective, to exercise the use of AEW&C for surveillance and early warning. This objective was not met due to a mission of higher priority for the AEW&C aircraft.

3. (U) Region Threat. Seventy-three fakers flew with 61 charged. There were 12 fakers not charged. Eight of the 12 fakers not charged were due to no fighters available at McEntire and Jacksonville during the second wave. Three no charges were made unsafe for weather at critical points during interception and one target not charged air aborted for lights immediately after IP.

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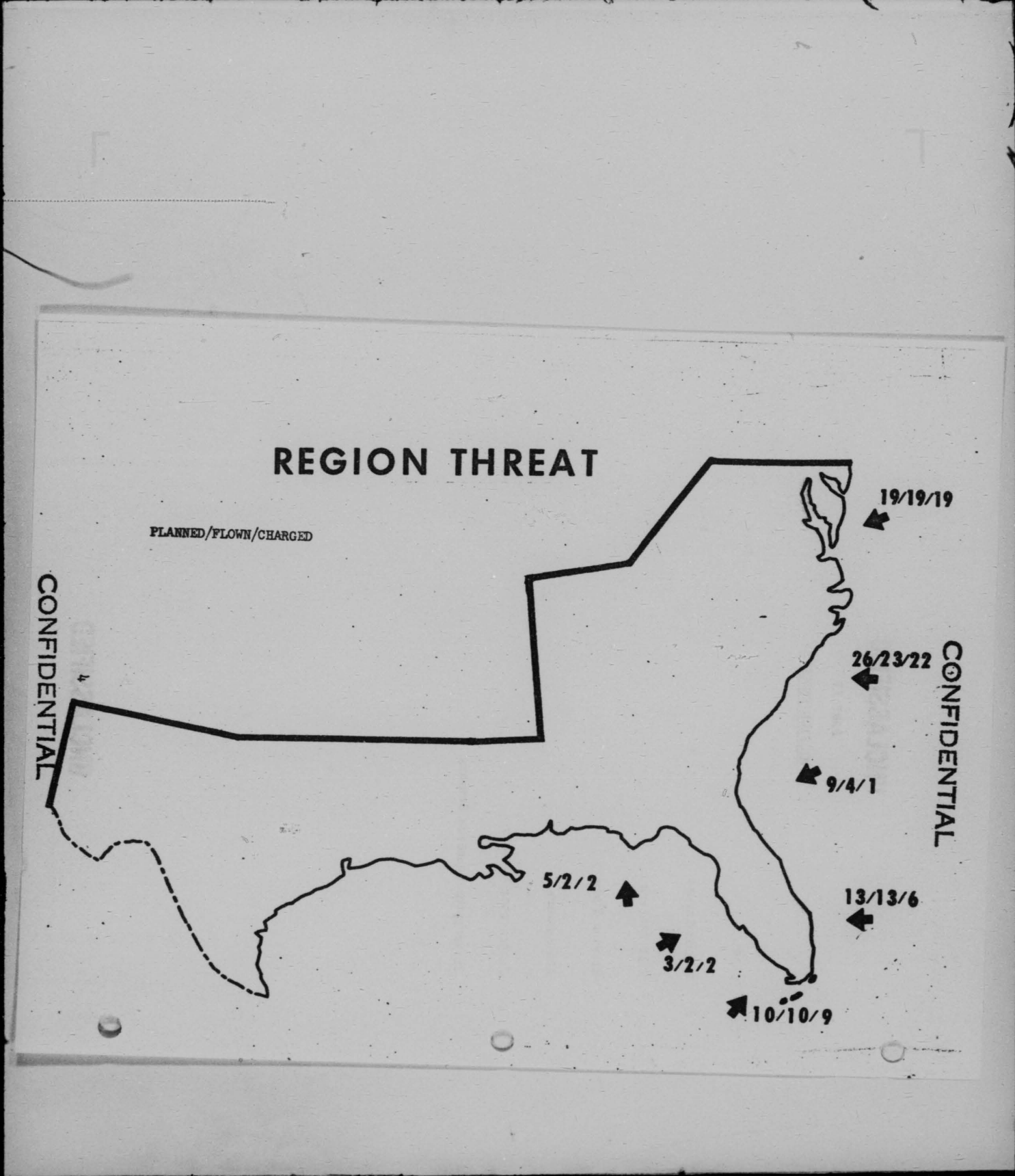
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PART II

MISSION RESULTS

CHART	PAGE
Region Threat	4
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Mission Summary	6
ADA Summary	7
Interceptor Summary	8
Interceptor Squadron Summary	9

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KILL PATTERN



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MISSION SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fakers Planned	43	20	22	85
Fakers Flown	39	14	20	73
Fakers Flown/ Not Charged	11	1	0	12
Fakers Detected	38	13	20	71
Fakers Identified	38	13	20	71
Fakers Charged	28	13	20	61
Fakers Engaged	25	12	18	55
Kills Prior to BRL	18	12	15	45
Neutralization Rate	64%*	92%	75%**	74%
Total Kills	29	14	15	58

*For the RCC, the late airborne times from the MG and NP aircraft out of LFI during the flush contributed substantially to its problems. As a result, handover of interceptors to Fertile control from the ARTCC was not complete when first targets appeared. Furthermore, some interceptors had to be returned to base immediately in order not to exceed close control capability. This delay and subsequent overflooding of control capability just as targets appeared, resulted in delayed commitments and failure to neutralize some fakers in order to maintain safe control of interceptors.

**Key West problem was with two fakers that came in the back door on the Gulf coast with unexpected BRLs in the water outside of Miami ~~and~~ effective range.

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ADA SUMMARY

<u>TACTICAL SUMMARY</u>	<u>2ORCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
ADA Fire Units	7	10	17
Fakers Engaged	16	13	29
Missiles Expended	21	17	38
MA/First Kill	7	13	20
Overkills	9	0	9
Kills	16	13	29
MIs	5*	0	5

*3 PK 2 Lost Target

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INTERCEPTOR SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fighters Available	24	12	4	40
Sorties Flown	44	12	7	63
Air Aborts	1			1
Ground Aborts	1			1
Faker Com'td On	21	12	2	35
No. of Pairings	39	21	2	62
Diverts	10	3		13
Intercept Attempts	29	18	2	49
MI	13	3		16
MA-NK PK	3	2		5
First Kill	11	12	2	25
Total Kills	13	14	2	29

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CONFIDENTIAL**INTERCEPTOR SQUADRON SUMMARY**

<u>BASE</u>	<u>CALL SIGN</u>	<u>SORTIES</u>	<u>MA</u>	<u>MA-NK</u>	<u>ARM</u>			<u>REASON FOR MI'S</u>
					<u>MI</u>	<u>P</u>	<u>S</u>	
LFI	MG	20	6	2	3	4	4	1 AEF 2 FS
LFI	NP	11	2	1	4	2	1	3 FS 1 Target Unsafe
NBC	VL	7	4			2	2	
MMT	NK	6			2			1 FS 1 ACP
JAX	EH	4	5	1	1	2	4	1 Unsafe Target
PAM	GP	8	10	1	6	7	4	1 FS 4 AEF 1 DE
HST	MG	7	2			2		
TOTALS		63	29	5	16	19	15	

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PART III

TROUBLE TRACKS

TRACK	PAGE
RCC -	
RAGE 405/H154	11
RAGE 406/H153	12
RAGE 216/H286	13
RAGE 220/H024	14
RAGE 316/	15
RAGE 210/H288	16
RAGE 218/H025	17
RAGE 222/H282	18
RAGE 422/H177	19
RAGE 423/H177	20
TYNDALL -	
RAGE 227/H420	21
KEY WEST -	
RAGE 237/H406	22
RAGE 429/H162	23
RAGE 255/H530	24
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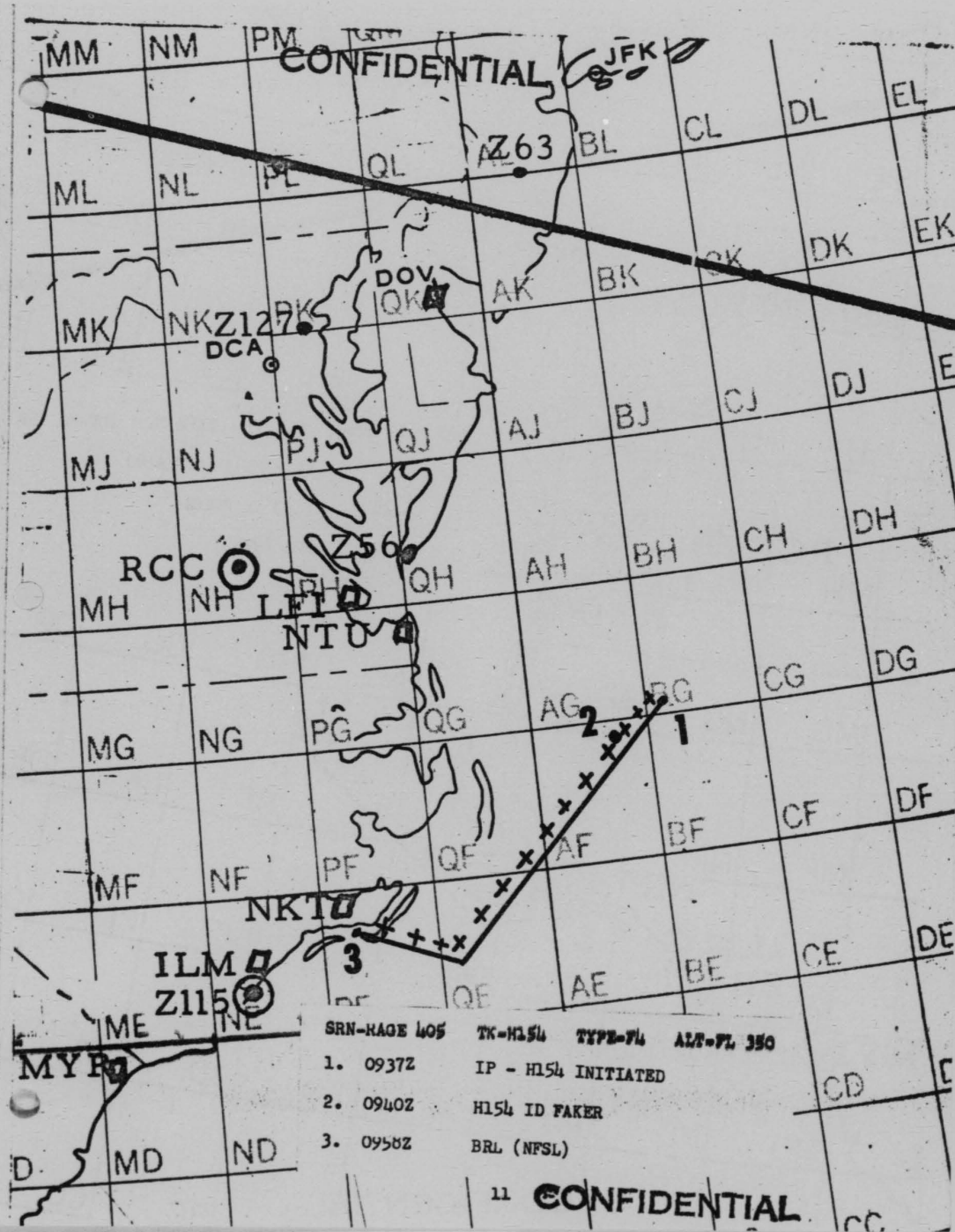
LEGEND

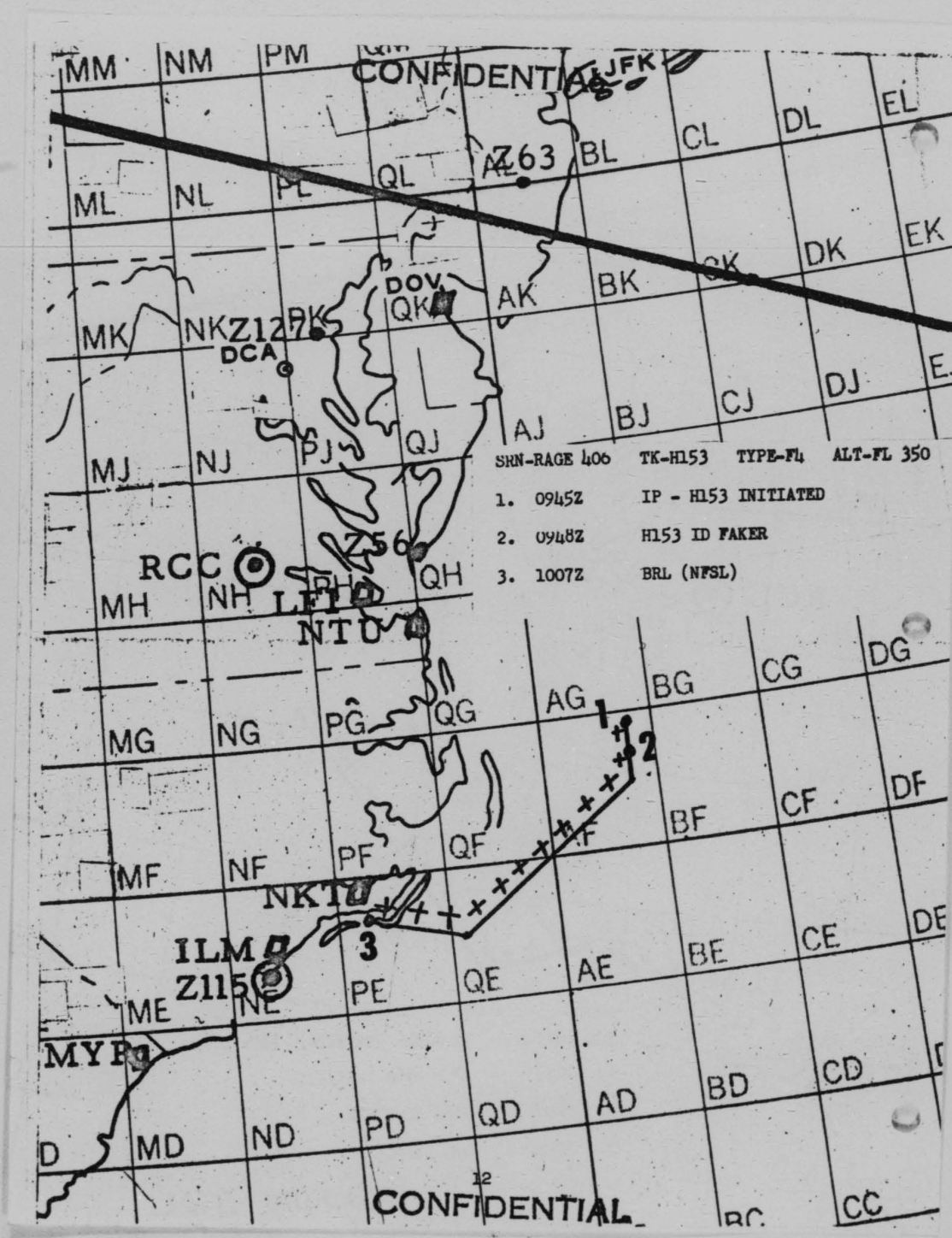
RELIABLE PTC TRACKING _____

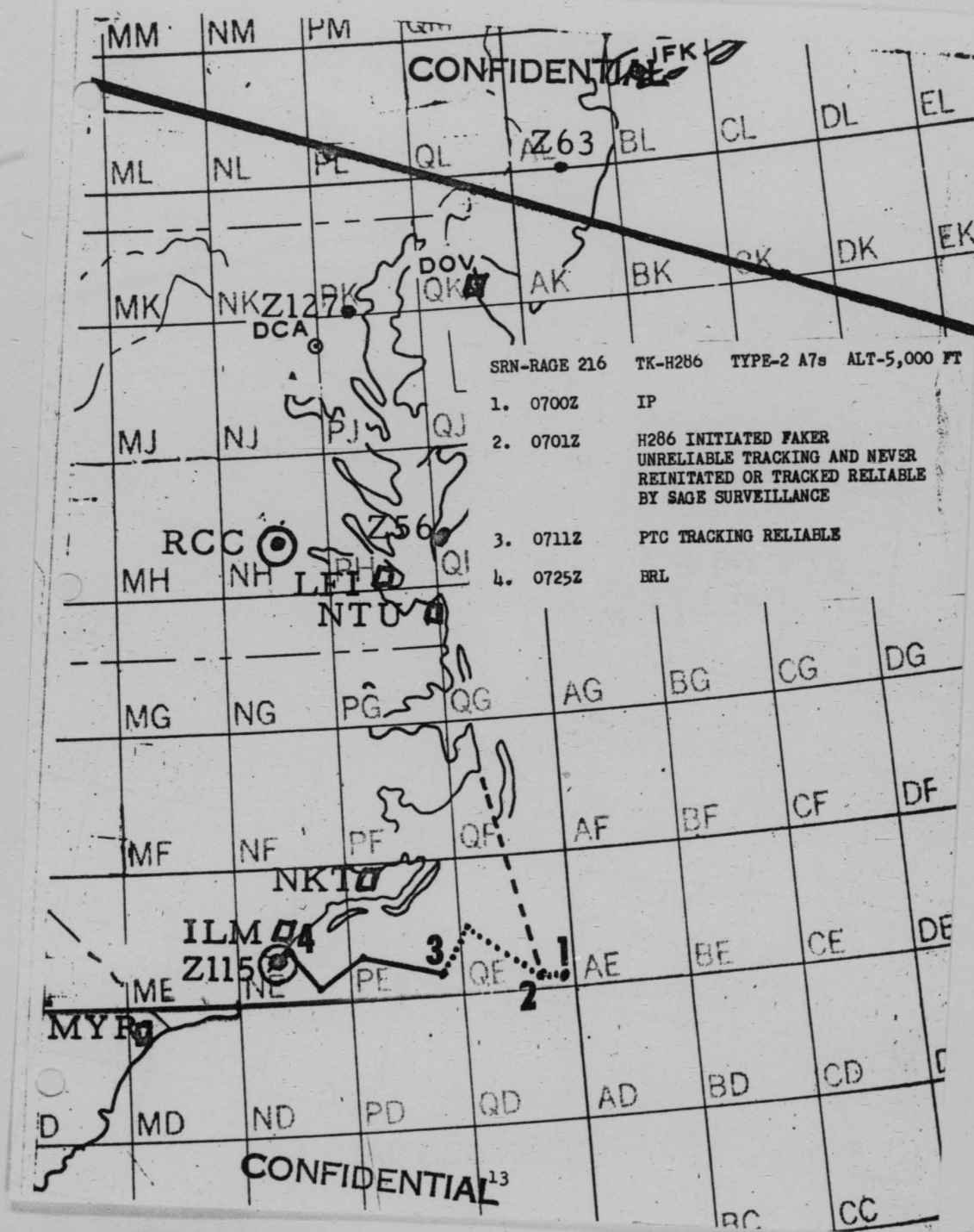
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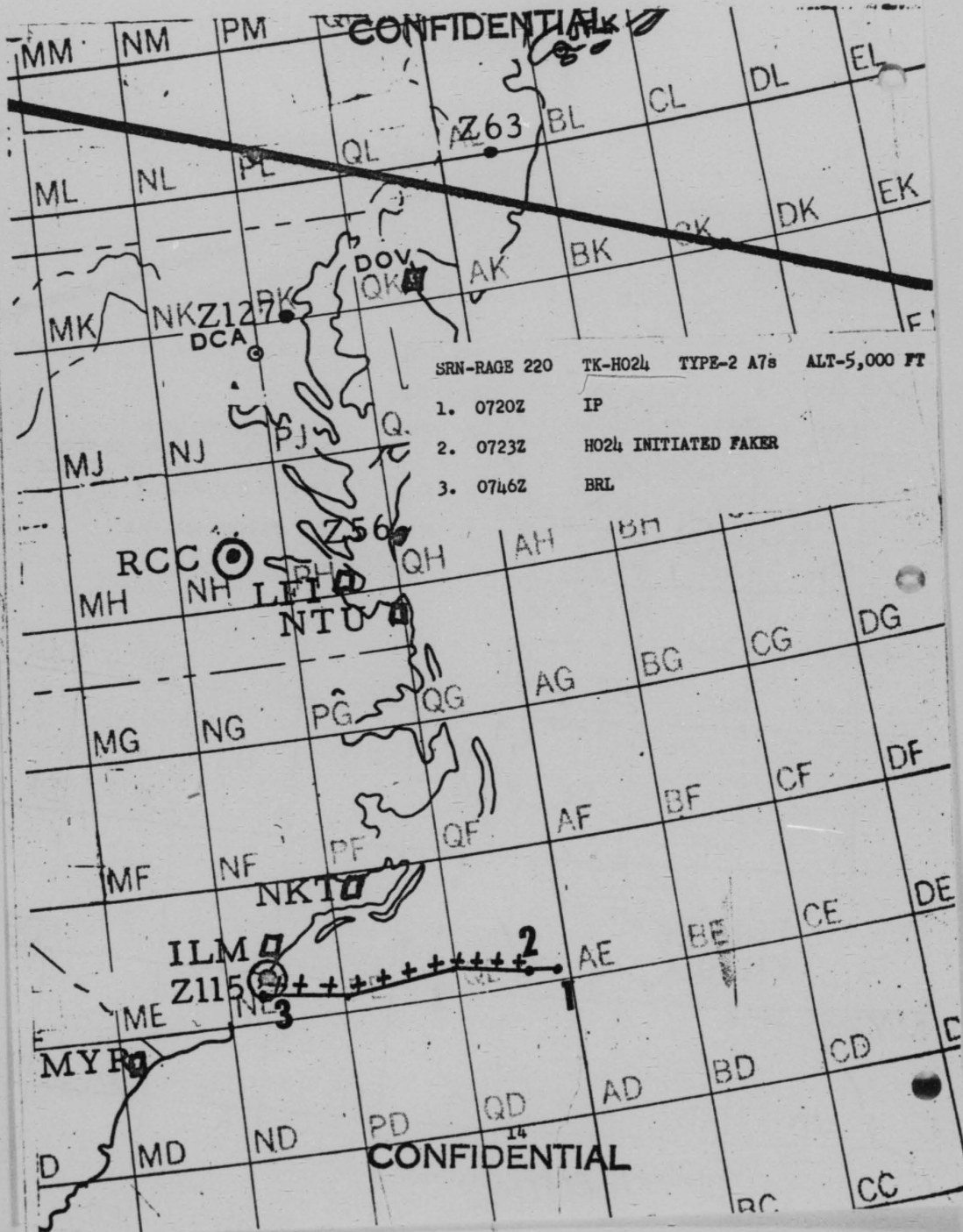
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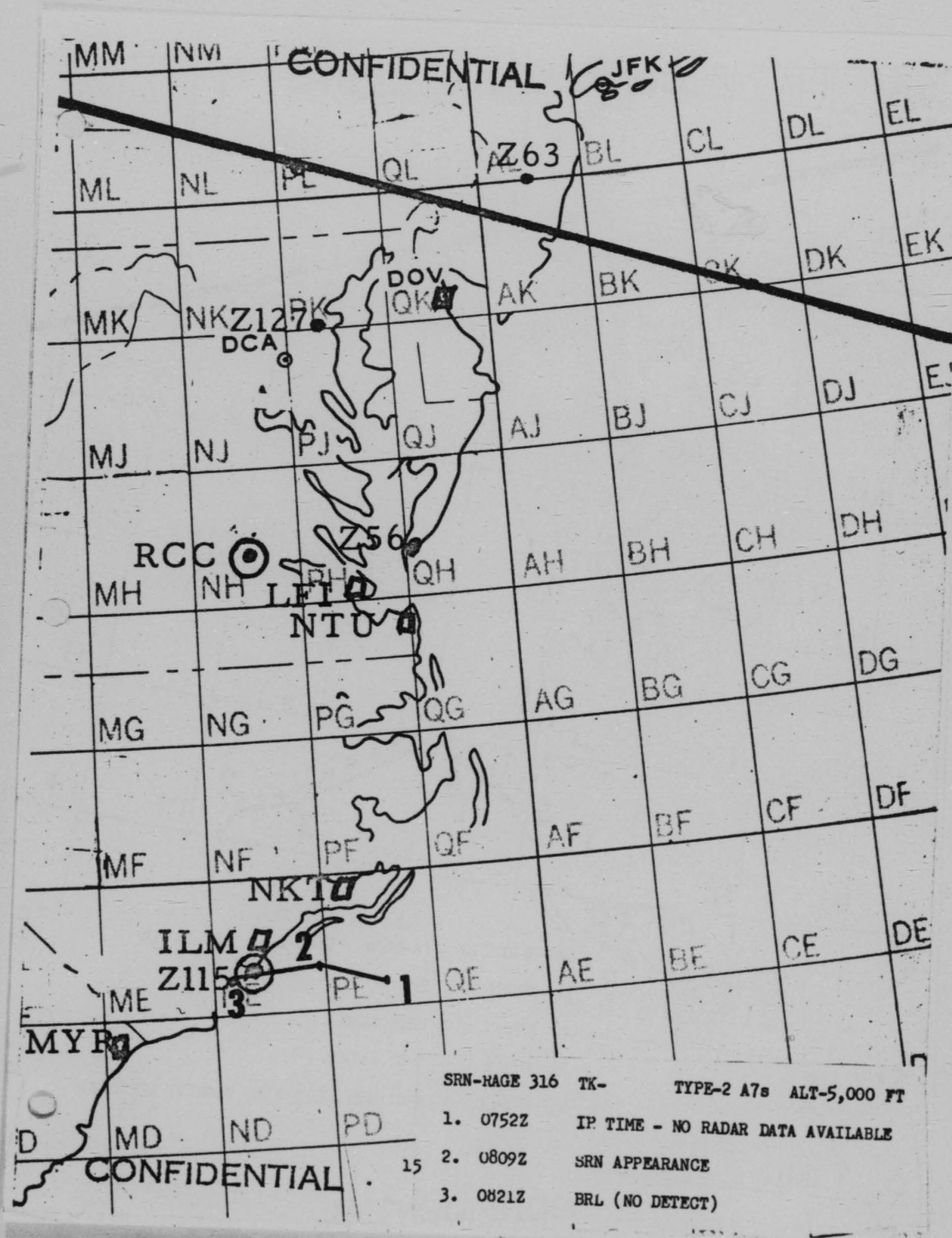
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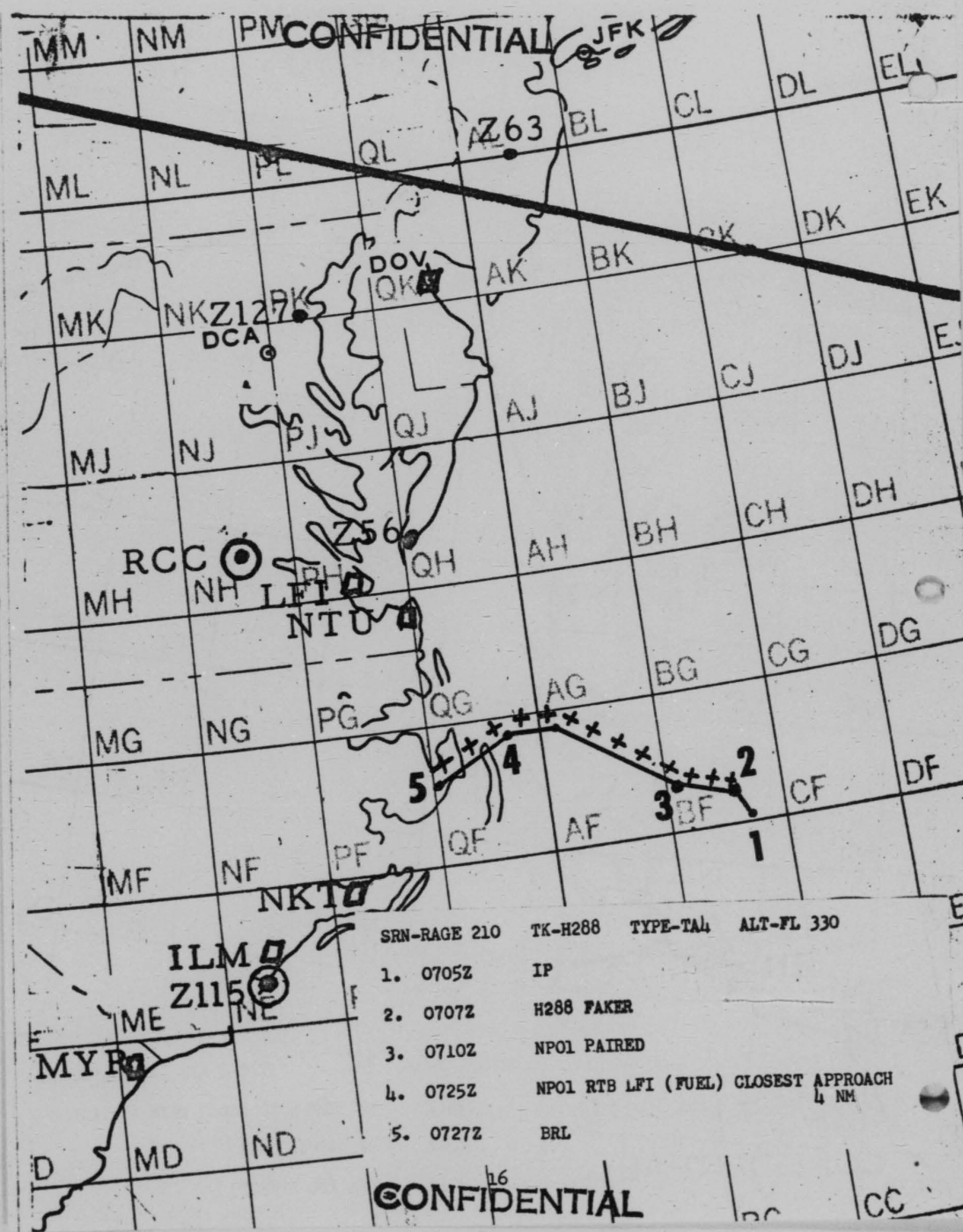


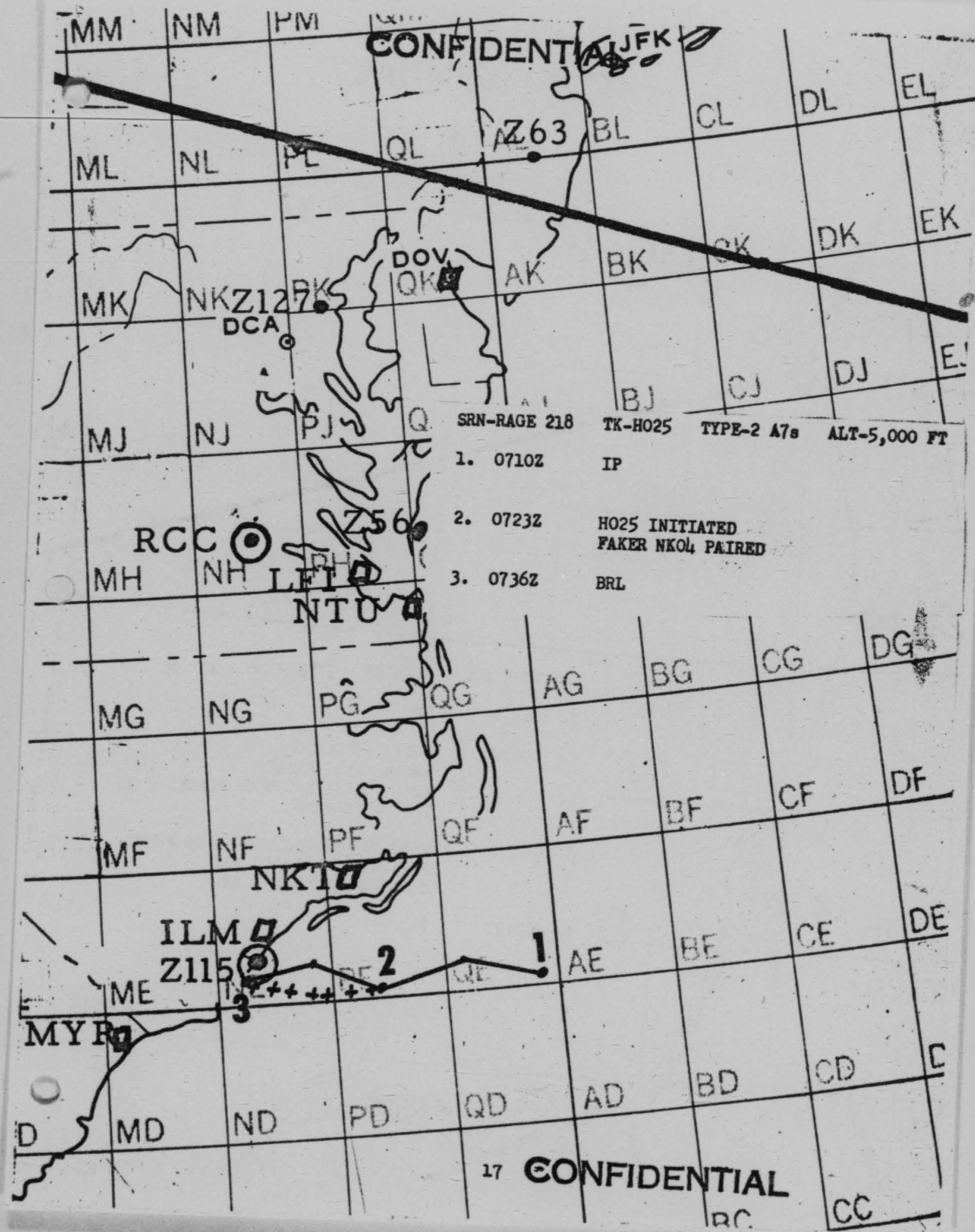


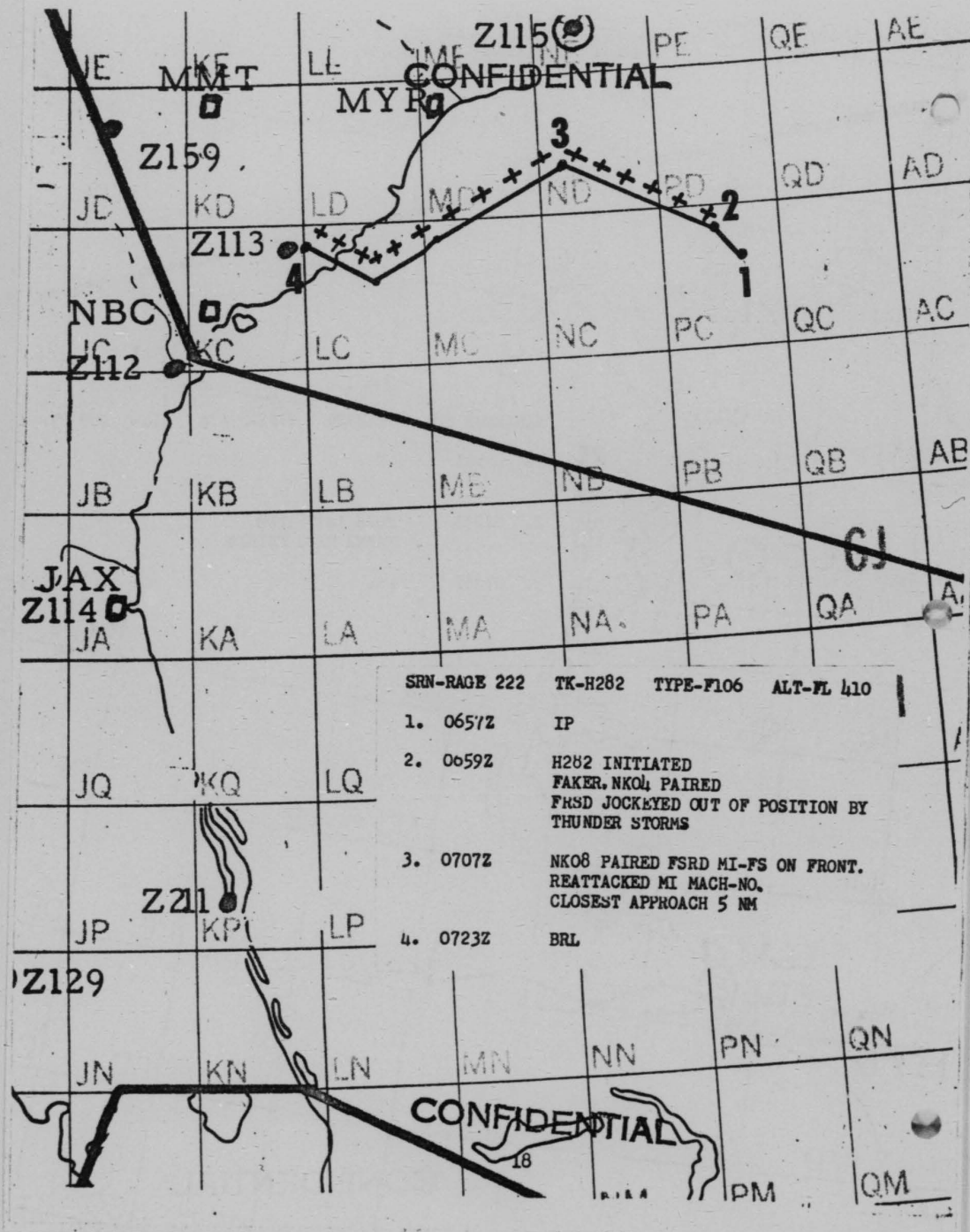


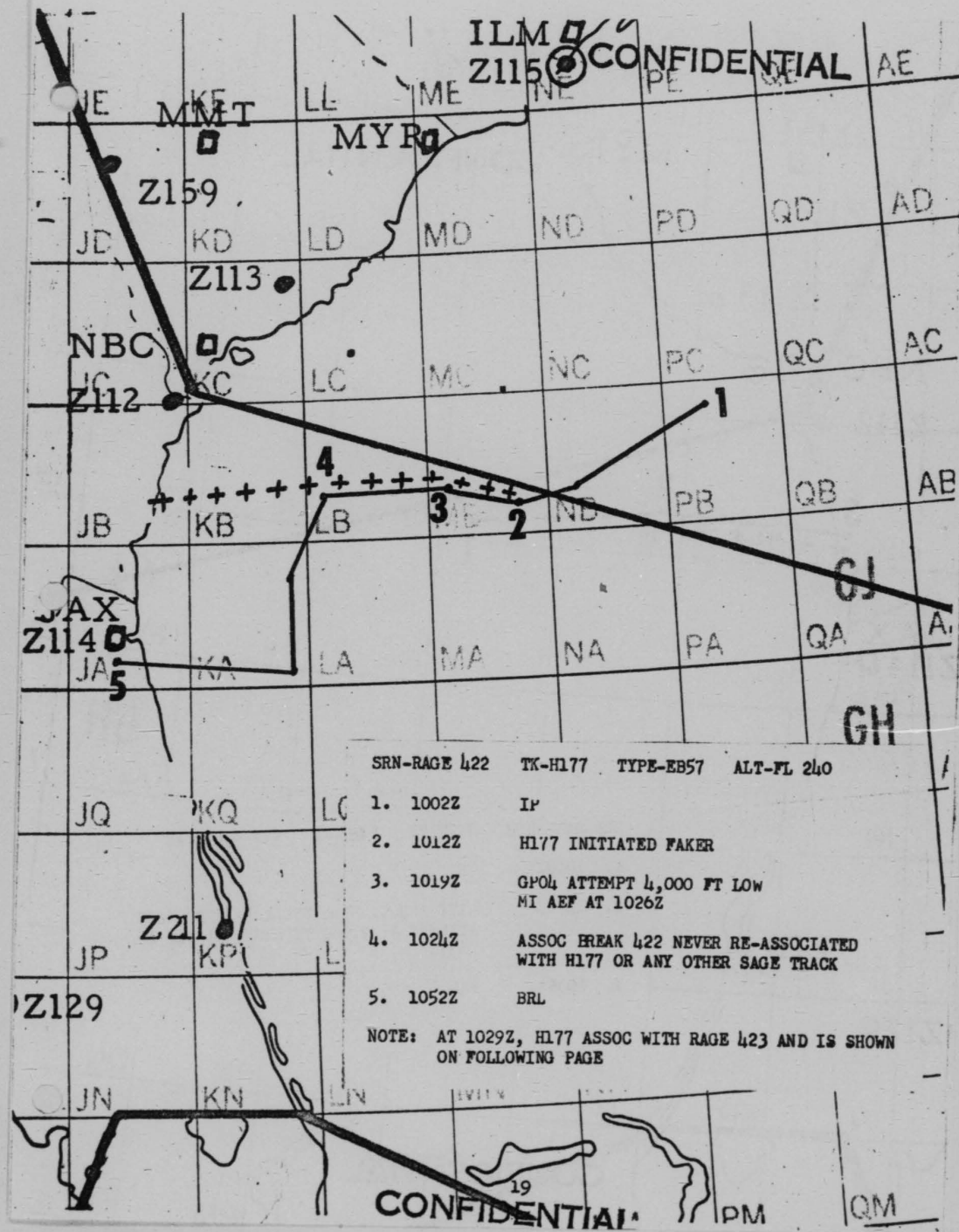


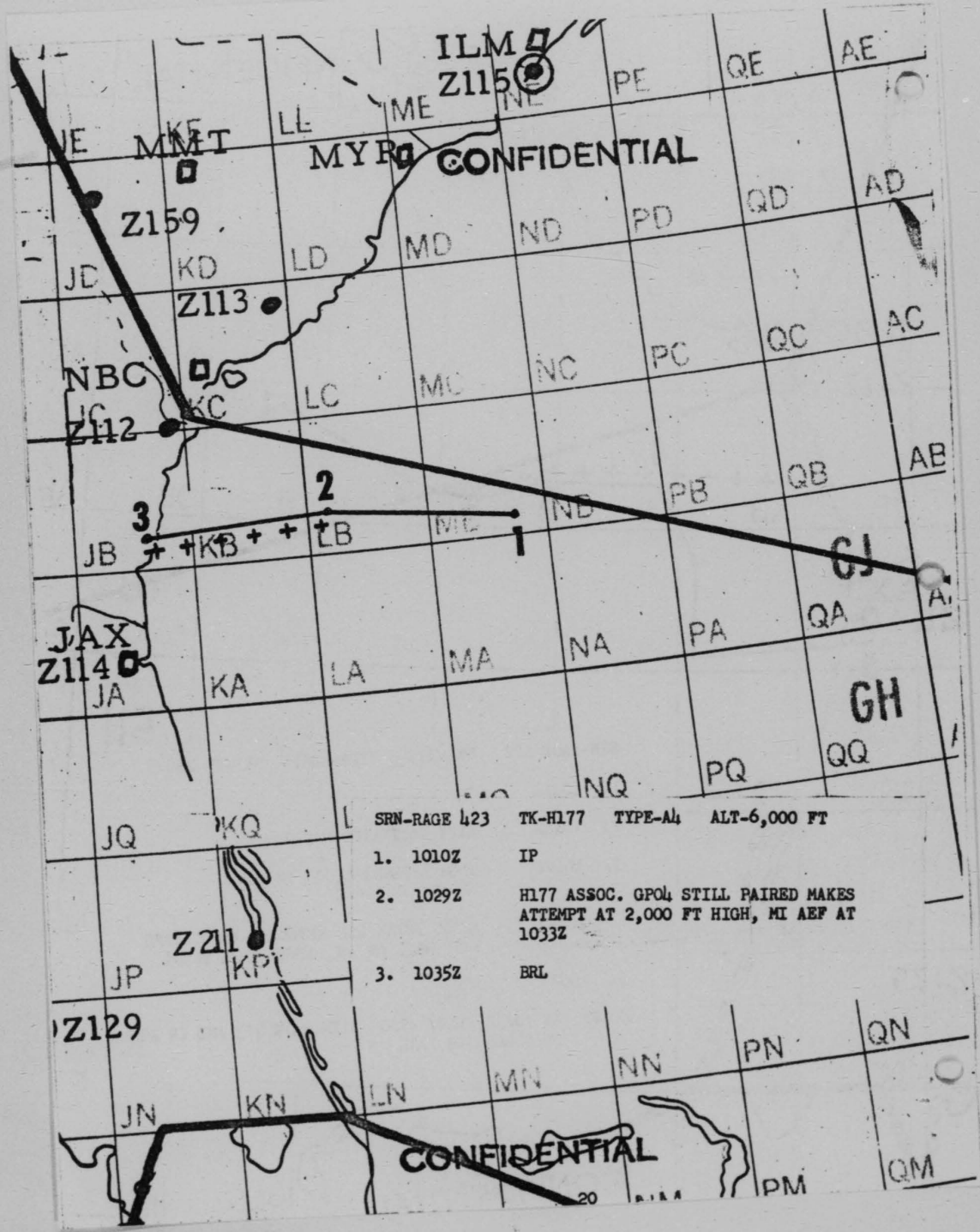


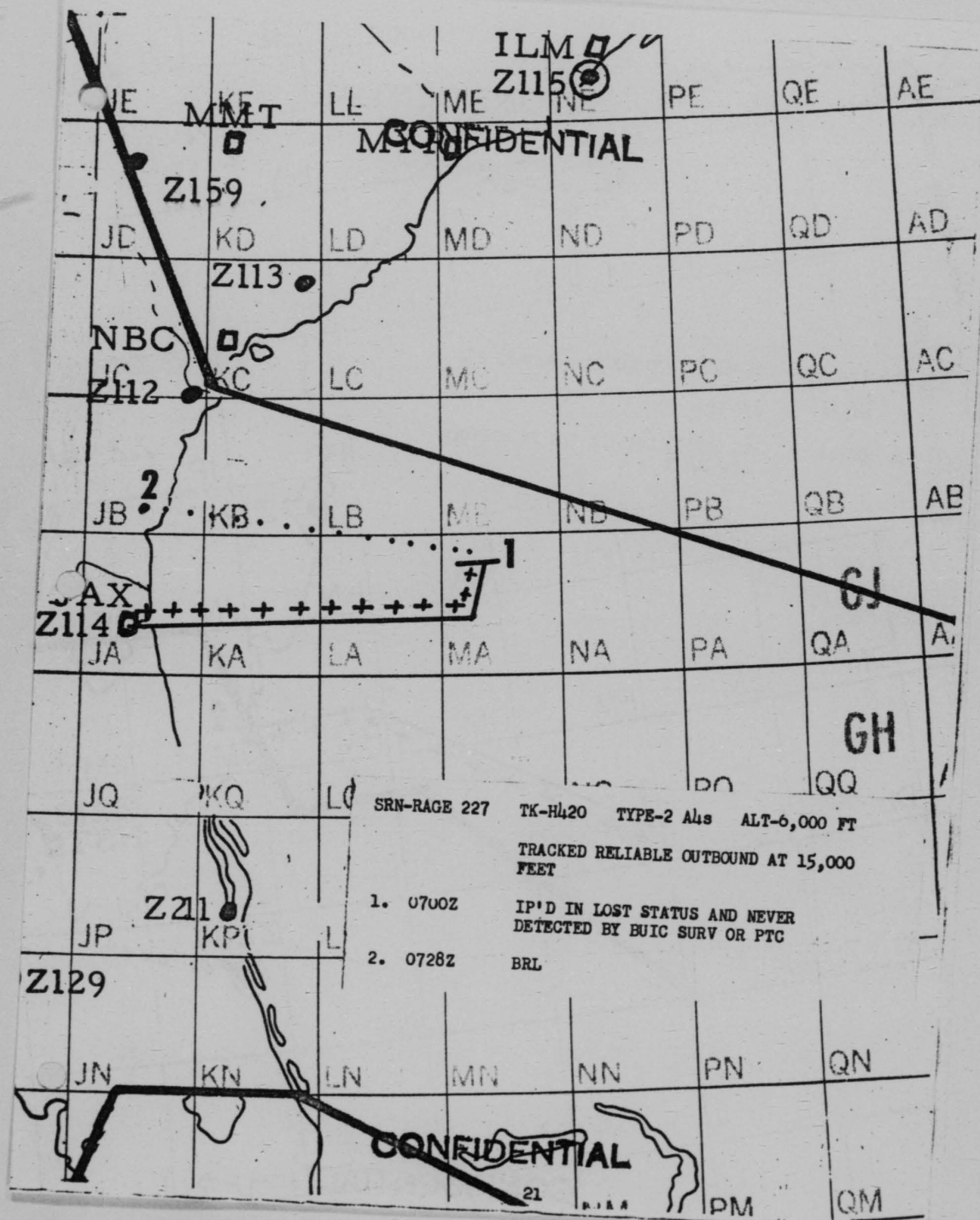


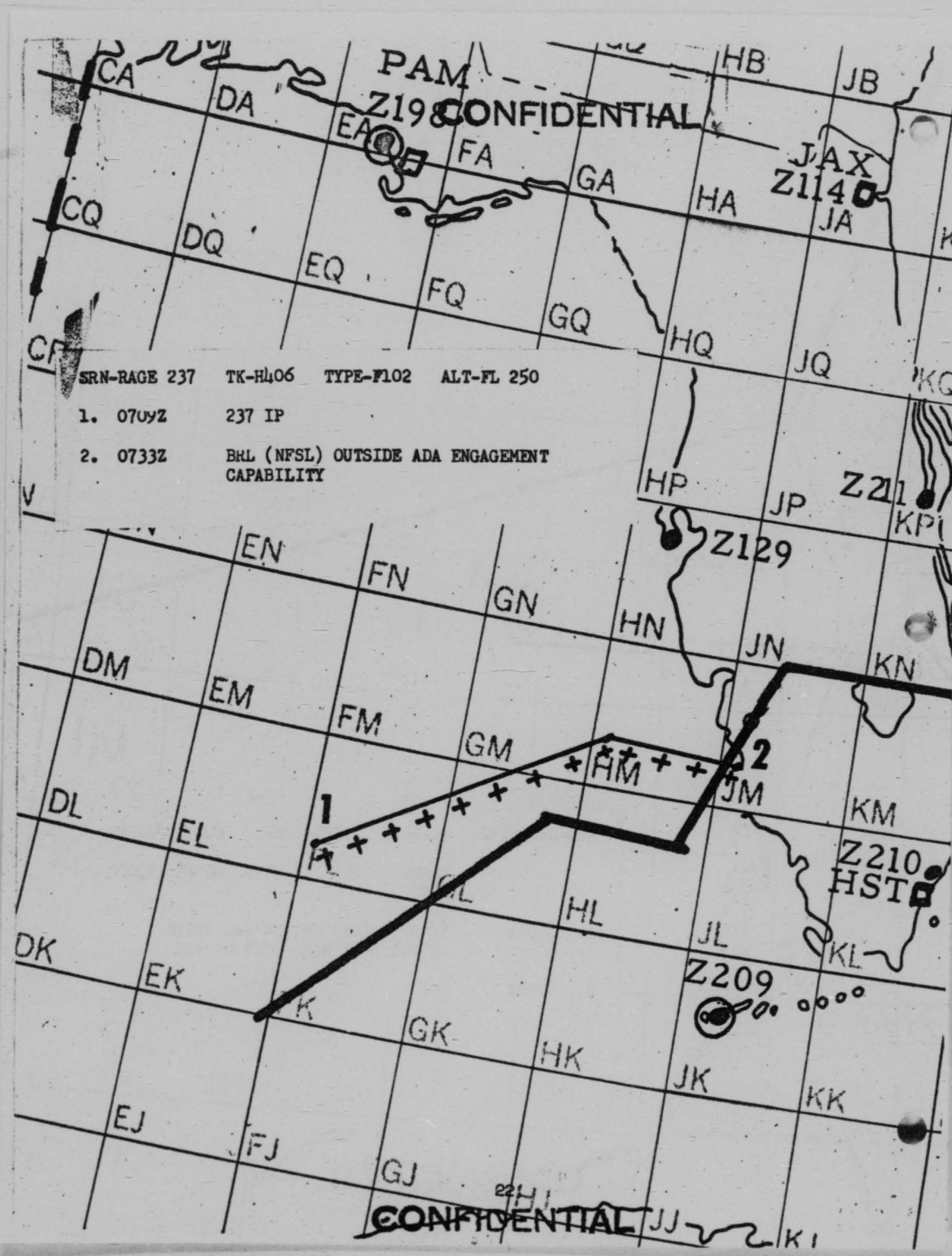


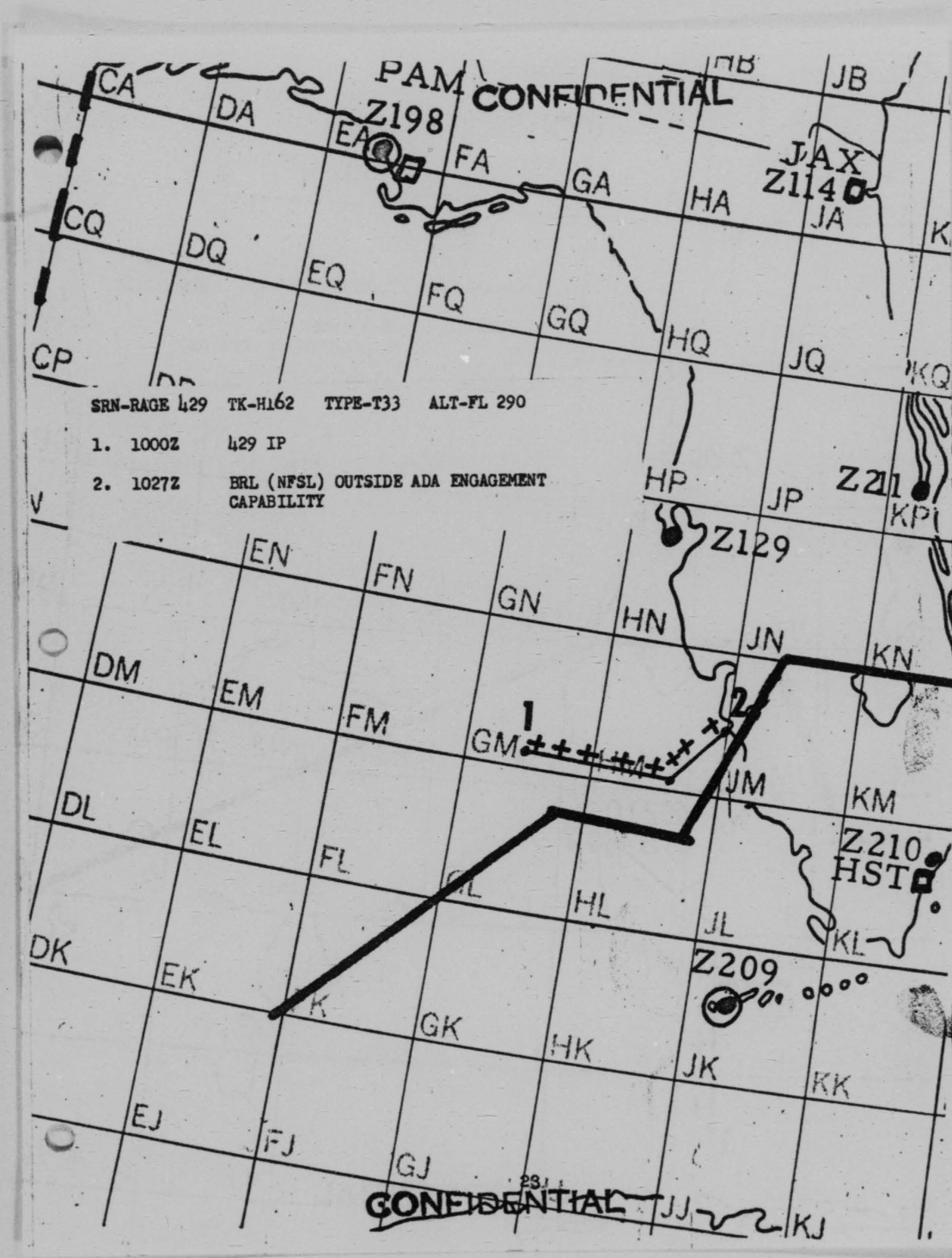


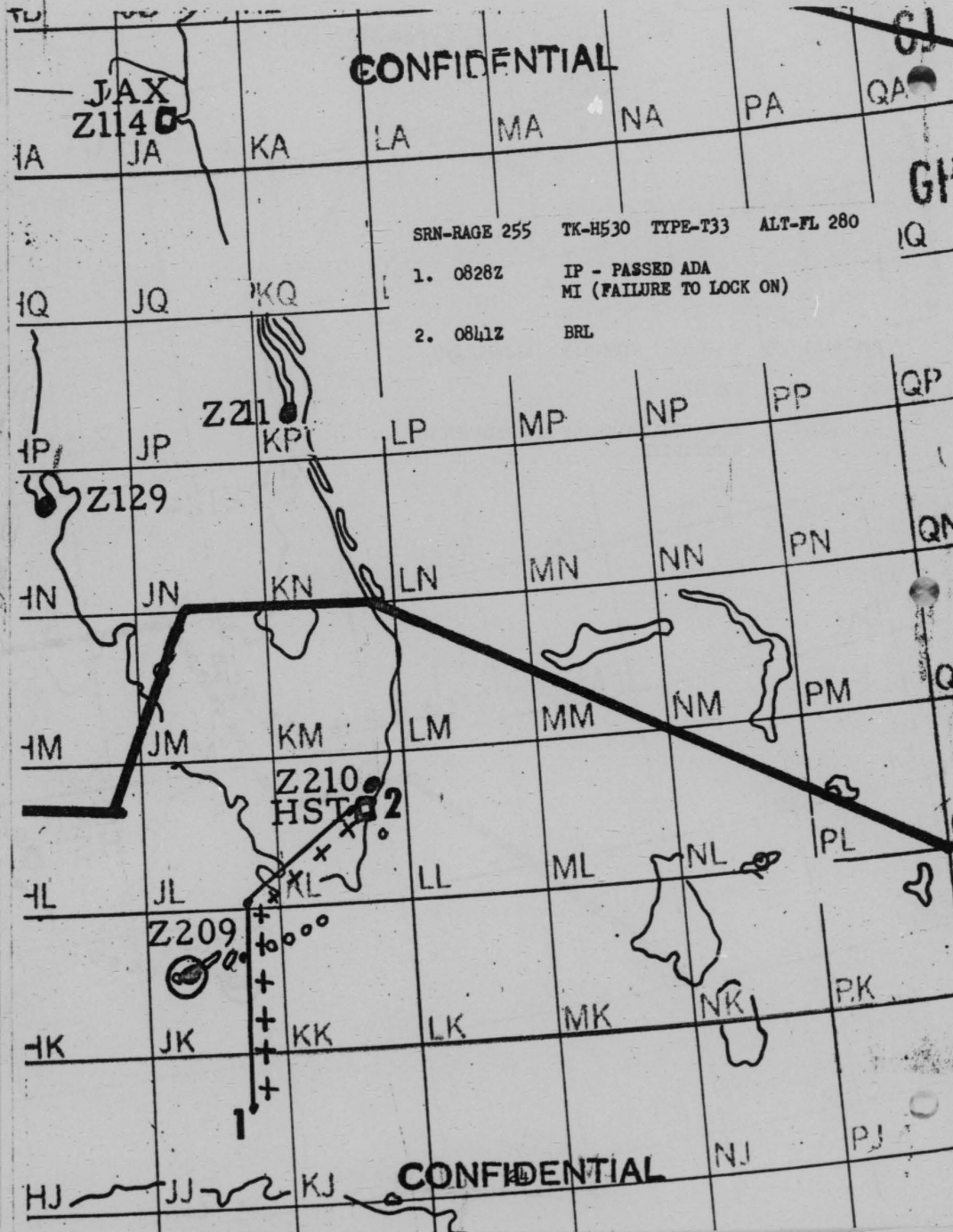


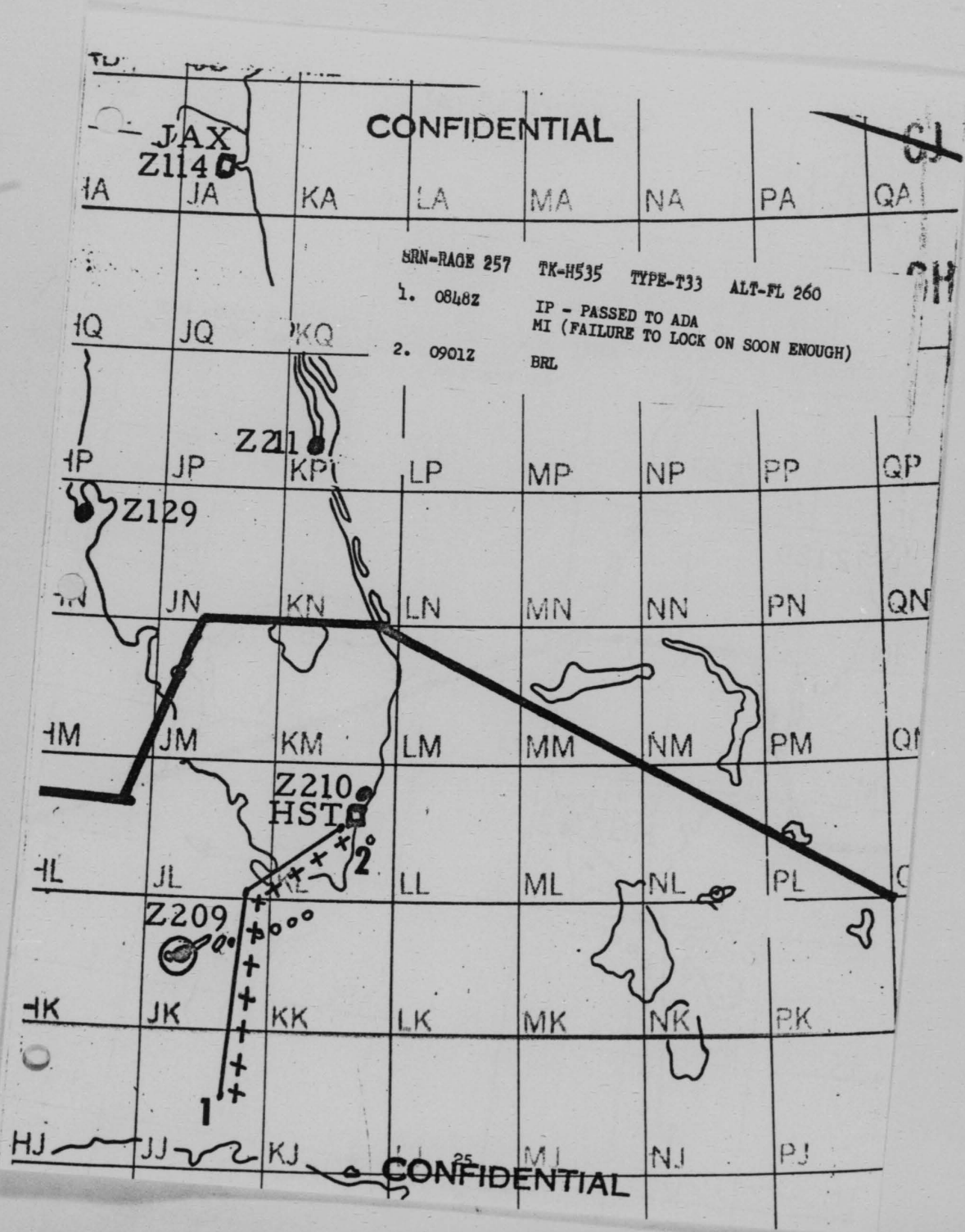


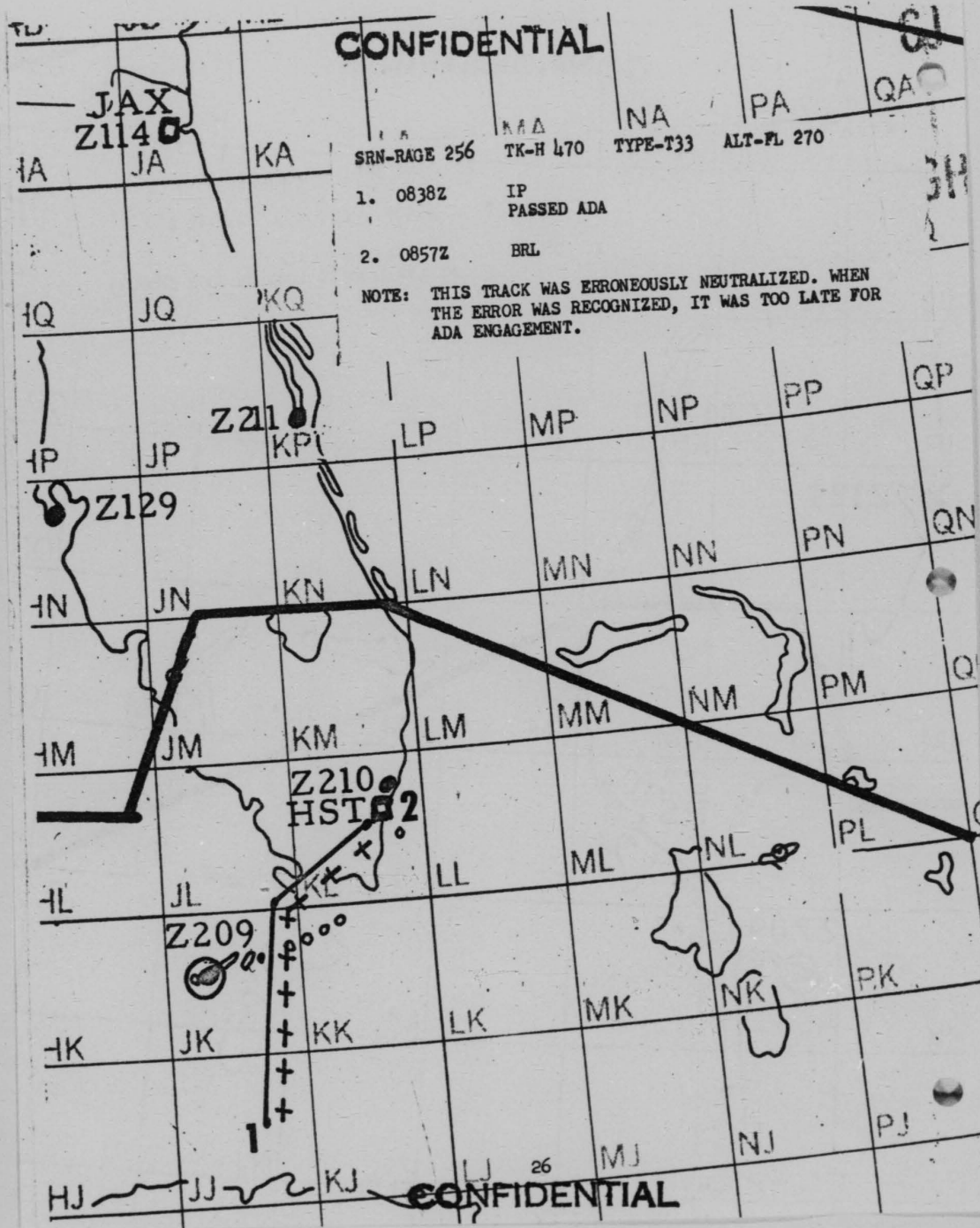












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PART IV

EXERCISE TREND CHARTS

	Page
2ORCC - Live Neutralization Rate	28
Tyndall - Live Neutralization Rate	29
Key West - Live Neutralization Rate	30

NOTE: The Neutralization Rate is based on the first kill prior to BRL/EEP either by interceptor or ADA, as appropriate.

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CONFIDENTIAL2ORCC - LIVE
NEUTRALIZATION RATE

	50	60	70	80	90
Federal Brave 73-2 30 Jan 73 14/17				82%	
Federal Brave 73-3 13 Apr 73 19/25				76%	
Federal Brave 73-4 16 May 73 43/51				84%	
Amalgam Arrow 73-8 20 Jun 73 13/15				87%	
Amalgam Arrow 74-2 16 Aug 73 18/28				64%	

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TYNDALL - LIVE
NEUTRALIZATION RATE

	50	60	70	80	90
Federal Keynote 73-3 17 Jan 73 20/23	Level IV Exercise				87%
Amalgam Mute 73-20 5-7 Feb 73 19/21	Re-Eval				91%
Federal Brave 73-3 13 Apr 73 16/20					80%
Amalgam Arrow 73-8 20 Jun 73 20/25					80%
Amalgam Arrow 74-2 16 Aug 73 12/13					92%

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KEY WEST - LIVE
NEUTRALIZATION RATE

	50	60	70	80	90
Amalgam Mute 73-3 6-10 Nov 72 15/15					100%
Federal Brave 73-3 13 Apr 73 12/12					100%
Federal Brave 73-4 16 Apr 73 15/16					94%
Amalgam Arrow 73-8 20 Jun 73 7/7					100%
Amalgam Arrow 74-2 16 Aug 73 15/20				75%	

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PART V

PROBLEM ACTION REPORTS
(Based on Commander's Summaries)

1. (C) Region Control Center.

Problem: A flush was issued at approximately 0604Z. Ten MG and 6 NP aircraft were to be flushed. The first MG was off at 0620Z and the last was off at 0650Z. The first NP was off at 0622Z, and the last one was off at 0651Z. The flush was not successful for several reasons. The flush was not passed in a timely manner to Norfolk approach or to Langley tower. Langley tower did not assign the flush orbit points as required.

DO OPR Action: There are three factors that caused a delay in flush aircraft becoming airborne. The Weapons Director and Tech were working their first live exercise and failed to notify Washington Center of receipt of the flush as required by checklist. The FIS ODC at Langley failed to notify Norfolk approach and Langley tower as required by the current letter of agreement. Further, the ODC does not have the proper telephone equipment to pass this information. Exercise target aircraft were on the runway ready for take off. This further delayed the flush. This is an exercise design discrepancy. A review of the current letters of agreements to insure compatibility with communication equipment is being conducted.

NREA Comment: One target aircraft was scheduled to take off from Langley during the liability period for the flush. It took off at 0615Z. A second target aircraft scheduled to take off at 0628Z became involved when the flush was delayed; however, it did not take off until the last interceptor was flushed. Exercise and Analysis Directorate will coordinate with Headquarters NORAD in future NORAD sponsored exercises to insure that faker take off times are not in conflict with the flush.

2. (U) Tyndall BNCC.

a. Problem: Fertile Weapons Team, controlling above Sector I and Sector II boundary line, was not lateral telling interceptors or faker tracks to Dunmore controlling below the line, resulting in confusion and potential flight safety problems. Recommended solution: Have weapon teams lateral tell all tracks approaching or entering adjacent air space.

DO OPR Action: RCC will insure that overlap tellers and weapons teams are briefed to tell all tracks to Tyndall as required during 2B exercises, with special attention to tracks approaching Sector II.

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b. Problem: Two PTC faker monitors sharing a single PTC frequency continues to pose serious problems. Recommended solution: Assign each PTC team, Gulf and Atlantic, a separate frequency.

DO OPR Action: Assignment of two separate frequencies for Tyndall PTC is a serious problem. However, technical limitations prevent using two PTC frequencies at the TENCC unless the number of active WCs is reduced by one. DOK is aware of the problem and is researching panel patching to allow 4 WCs and 2 FMs at Tyndall, all to have separate frequencies.

3. (C)(U) Key West MNCC:

a. (U) Problem: The exercise did not provide adequate training for weapons, surveillance or ADA personnel. Many faker routes were designed as "pop-up" tracks with extremely short distances between IP-BRL. However, target ALTRVs were inconsistent with pop-up criteria; i.e., high altitude (26,000-28,000).

NREA OPR Action: These targets were not necessarily designed as "pop-up" targets even though their target run was of short duration. In order to provide the maximum number of targets for HAWK batteries with available aircraft, these aircraft were flown at their most economical altitude. Had they been flown at a lower altitude, fewer targets would have been realized.

b. (U) Problem: Two faker routes had BRL over water with no specific target and were unrealistic.

NREA OPR Action: These targets were designed to stress battle management between Key West MNCC and Tyndall BNCC. Due to this design, the aircraft did not have sufficient range to target on the mainland and recover Key West NAS. They were not targeted against Key West due to a FAA preference of not targeting and recovering at the same location when flying in a high altitude strata.

c. (C) Problem: Voice formats passed by 20th were, for the most part, transmitted approximately 2 minutes later than the DTG. This resulted in backlog of formats, interruptions by COC/ALCOP and many retransmissions for corrections. Several actions were delayed awaiting corrections and retransmissions.

DO OPR Action: Key West statement of the problem is exactly right, and the results are exactly as they say. During this exercise, the ALCOP issued the formats. The ALCOP does not at this time have the capability to reach "all weapons" as the NCOC can. As a result, in the RCC we had to receive the format on PVAS and copy it fully before we could pass it to subordinate units on the weapons circuit. Two minute delay is about as good as we can do. It takes 35-40 seconds to receive

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and copy a format from the PVAS loop. Then we must bring up the WAS loop, losing a few seconds, and then retransmit the entire format to the 20NR units on the loop, which takes another 35-40 seconds. Given errorless copying and retransmission, the delay approaches 2 minutes to the receiving unit. Given any error or request for retransmission, the delay will be at least 2 minutes. NORAD ALCOP will soon have WAS capability, however, and this problem should not recur. For formats initiated and issued by 20NR, the format team will prepare and hold at immediate readiness formats likely to be needed, lacking only DTG, so in the future there should be little delay in passing these to 20NR units.

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PART VI

EXERCISE FRAG ORDER

Following are pages 01 - 12 of Message DTG 24/1430Z July 1973,
Subject: 20NR Frag Order No. 1 for AMALGAM ARROW 74-2; and
pages 01 - 02 of Message DTG 07/1730Z August 1973, Subject:
Change 1 to 20NR Frag Order No. 1 for AMALGAM ARROW 74-2.

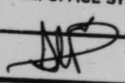
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01 of 12		RR	RR		UUUU		DATE - TIME	MONTH	YR
BOOK YES	MESSAGE HANDLING INSTRUCTIONS						24/1430Z	JUL	73
<p>FROM: 20 NORAD RGN FT LEE AFS VA</p> <p>TO: AIG 8750/DO/ADM-SC</p> <p>644 RADRON HOMESTEAD AFB FLA/DOK</p> <p>671 RADRON KEY WEST NAS FLA/DOT</p> <p>678 ADGP TYNDALL AFB FLA/DO-X</p> <p>701 ADGP FT FISHER AFS NC/DO-X</p> <p>4757 ADS TYNDALL AFB FLA/CC</p> <p>ADWC TYNDALL AFB FLA/OTV</p> <p>79 AEW&C SQDN (AFRES) HOMESTEAD AFB FLA/DO</p> <p>ATLANTA ARTCC HAMPTON GA</p> <p>NEW YORK ARTCC RONKONKOMA NY</p> <p>WASHINGTON ARTCC LEESBURG VA</p> <p>JACKSONVILLE ARTCC HILLIARD FLA</p> <p>MIAMI ARTCC MIAMI FLA</p> <p>CLEVELAND ARTCC OBERLAN OHIO</p> <p>INDIANAPOLIS ARTCC INDIANAPOLIS IND</p> <p>CARF WASHINGTON DC</p> <p>CMDR 2 MAW MCAS CHERRY POINT NC</p>									
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FREDERICK A. HELLE, LCDR, USN NREA-L, EXT 701, 23 JULY 1973									
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THOMAS A. PAYNE, COL, USA, NHDC, 712					<i>Thomas A. Payne</i>				
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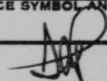
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<p>FROM:</p> <p>INFO: ADTG EGLIN AFB FLA/ADCLO-S CINCNORAD ENT AFB COLO/NOET-L ADC ENT AFB COLO/DOTSE/DOCCX 21NR HANCOCK FLD NY/NREA 23NR DULUTH IAP MINN/NREA CMDR 1ST RGN ARADCOM STEWART AFB NY/ADAGC-P 630 RADAR SQDN HOUSTON FAA TEXAS/DOT DET 1/48FIS NEW HANOVER CO APRT NC/OPS (MAIL) 632 RADRON ROANOKE RAPIDS AFS NC/DOT (MAIL) 649 RADRON BEDFORD AFS VA/DOT (MAIL) 702 RADRON SAVANNAH AFS GA/DOT (MAIL) 771 RADRON CAPE CHARLES AFS VA/DOK (MAIL) 861 RADRON AIKEN AFS SC/DOT (MAIL) XMT 702 RADRON SAVANNAH AFS GA</p> <p>UNCLAS FOUO 20NREA-L</p> <p>SUBJ: 20NR FRAG ORDER NO. 1 FOR AMALGAM ARROW 74-2</p> <p>1. REF:</p>							
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
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<p>FROM:</p> <p>TO:</p> <p>A. CINCNORAD UNCLAS MSG NOET-L, 12/1930Z JUL 73, SUBJ: FRAG ORDER NO. 8 TO CINCNORAD OPOD 3720 (NOTAL).</p> <p>B. 20NR OPOD 370N-71 (LADEX).</p> <p>2. SITUATION: HQ NORAD WILL CONDUCT A LIVE AIR DEF EXERCISE AMALGAM ARROW 74-2, INVOLVING BOTH 20TH AND 21ST NORAD RGNS, DURING THE LIABILITY PERIOD 15/1800Z TO 17/1800Z AUG 73. ONE 24-HR DELAY MAY BE REQUIRED IN EVENT OF INCLEMENT WEATHER.</p> <p>3. NORAD OBJECTIVES:</p> <p>A. EXERCISE NORAD AIR DEF COMPONENTS WITHIN THE 20TH NORAD RGN.</p> <p>B. EXERCISE SAFE PASSAGE OF INTCPs THRU ADA DEF.</p> <p>C. EXERCISE THE CAPABILITY FOR PASSIVE DETECTION, TRACKING AND INTERCEPTION OF ECM TGTS.</p> <p>D. EXERCISE FIS FLUSH PROCEDURES AT LANGLEY AFB, HOMESTEAD AFB, MCENTIRE ANGB, AND JACKSONVILLE IAP.</p> <p>4. 20 NORAD RGN OBJECTIVE: EXERCISE USE OF AEW&C ACFT FOR SURVEILLANCE AND EARLY WARNING.</p>								
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
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<p>FROM:</p> <p>TO:</p> <p>5. PARTICIPANTS:</p> <p>A. 20 AND 21 NR, AND SUBORDINATE UNITS (SOUTHERN AIR DEF COMPLEX WILL PARTICIPATE BY RECEIVING, ACKNOWLEDGING AND AUTHENTICATING VOICE ALERT FORMATS AND RESPOND TO RECALL.)</p> <p>B. 22 AND 23 NR WILL PROVIDE THREAT WARNING TELL AND/OR OTHER SERVICES AS REQUIRED BY 20 AND 21 NR.</p> <p>C. NCOC/ALCOP WILL PASS VOICE ALERT FORMATS AS REQUESTED BY NOET-L.</p> <p>D. 20NR BSSC WILL PROVIDE INPUTS AND FUNCTIONAL STATUS REPORTING AS REQUIRED.</p> <p>E. NCOC/ALCOP PASS ALERT STATUS AND OTHER SERVICES AS REQUESTED BY NOET-L.</p> <p>F. 146 FIS WILL NOT PARTICIPATE AT PITTSBURGH EXCEPT AS DIRECTED BY 20DOT.</p> <p>G. 18 ARTY GP AT PITTSBURGH WILL NOT PARTICIPATE; HOWEVER, THE 18 ARTY GP WILL RECEIVE AND ACKNOWLEDGE VOICE ALERT FORMATS.</p>								
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<p>FROM:</p> <p>TO:</p> <p>6. THE PLANNED STRIKE FORCE (FAKERS) WILL CONSIST OF USAF, USMC, USN, TAC AND CF ADC ACFT.</p> <p>7. GROUND RULES:</p> <p>A. RECALL WORD IS "AMALGAM LEADER".</p> <p>B. 22 AND 23 NR WILL BE REQUIRED TO PROVIDE LIMITED PTC FUNCTIONS AS NECESSARY. 20NR WILL COORDINATE DIRECTLY WITH 21 AND 23 NR TO ESTABLISH FREQUENCIES, HAND-OFF POINTS, ETC.</p> <p>C. WEATHER INTCPs ARE NOT AUTHORIZED. FAKER ACFT ENCOUNTERING IFR CONDITIONS WILL SELECT IFF/SIF MODE 3 CODE 5000, AND SO ADVISE THE FAKER MONITOR.</p> <p>D. "KILLED" FAKERS WILL BE RECLASSIFIED "NEUTRALIZED FAKERS".</p> <p>E. "KILLED" ECM FAKERS WILL BE GIVEN "CROW CRACK" BY THE FAKER MONITOR AND ALL ECM/CHAFF WILL CEASE. IF FURTHER ECM TNG IS DESIRED, THE SD/SWD MAY DIRECT THE FAKER MONITOR TO REINITIATE ECM/CHAFF. EXCEPTIONS TO THE "CROW CRACK" RULE: "CROW CRACK" WILL NOT BE ISSUED TO RAGE 140, 152, 153, 201, 204, 212 AND 403.</p>								
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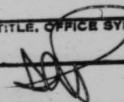
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<p>FROM:</p> <p>TO:</p> <p>F. STOP BUZZER PROCEDURES. THE AFFECTED ARTCC WILL CALL THE APPROPRIATE FAKER MONITOR CHIEF FOR ACTION. THE REQUEST WILL INCLUDE THE GEOGRAPHICAL AREA, THE FREQ BAND AFFECTED, AND THE TIME DURATION FOR THE STOP BUZZER TO REMAIN IN EFFECT. THE FAKER MONITOR CHIEF WILL INSURE THAT IMMEDIATE APPROPRIATE ACTION IS TAKEN. STOP/START TIMES WILL BE ENTERED ON FAKER MONITOR LOG (NORAD FORM 48).</p> <p>G. MULTIPLE INTCPs ARE AUTHORIZED AT THE DISCRETION OF THE SD/SWD IN THE INTEREST OF MAXIMUM TNG; HOWEVER, FIRST KILL ONLY WILL BE USED FOR ANALYSIS AND ARMAMENT EXPENDITURE PURPOSES.</p> <p>H. ALL FAKERS ENTERING ADA DEFENDED AREAS WILL BE PASSED TO ADA BY FAKER SYMBOLOGY FOR ENGAGEMENT REGARDLESS OF PREVIOUS TACTICAL ACTION. ECM AIRCREWS HAVE BEEN INSTRUCTED TO REINITIATE ECM/CHAFF AT A PREDETERMINED POINT PRIOR TO ENTERING THE ADA RING.</p> <p>I. A GENERAL RECALL IS NOT REQUIRED. IN PLACE TIME FOR EXERCISE PLAYERS WILL BE FURNISHED BY SEPARATE MSG FROM 20NREA.</p>							
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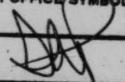
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<p>FROM:</p> <p>TO:</p> <p>J. AUTOMATIC UMPIRING (NORADR 55-25) WILL BE USED. HOWEVER, IF THIS FEATURE IS NOT FUNCTIONING, UMPIRING WILL REVERT TO MANUAL PK TABLES. THE KEY WEST COMPLEX WILL UTILIZE MANUAL UMPIRING THROUGHOUT AND LOCAL TA WILL SELECT ENTRY POINT AND DIRECTION OF TRAVEL ON PK TABLES.</p> <p>K. ATC (FTR/INTCP) ASSIGNED AIRSPACE WILL BE COORDINATED WITH AFFECTED ARTCCS BY 20 DOTST AND DISSEMINATED AS NECESSARY.</p> <p>L. ALL NIKE/HERCULES FIRE UNITS WILL OPERATE WITH THE FOLLOWING RADAR RESTRICTIONS:</p> <ol style="list-style-type: none"> (1) ABAR - AT LOW END OF FREQ. (2) HIPAR - CHANNEL 5. (3) LOPAR - 50 PERCENT (CNTR OF FREQ BAND). (4) TTR - 25 PERCENT (ON TUNING METER). <p>M. AUTHORIZED FREQ FOR RADARS FROM ROUND HOUSE UNTIL FADEOUT (ADD 24 HRS SHOULD WX DELAY BE IMPLEMENTED) WILL BE BY SEPARATE MSG.</p> <p>N. RICMOS/AJOS WILL NOT MONITOR MODE 3 INPUTS DURING FLYING</p>						
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
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<p>FROM:</p> <p>TO:</p> <p>PHASE OF EXERCISE.</p> <p>O. AIRBORNE/STRIP ALERT RESCUE ACFT HAVE BEEN REQUESTED. STATION LOCATIONS, TYPE ACFT, ALTITUDES, CALL SIGNS, ETC., WILL BE DISSEMINATED BY 20NREA. KEY WEST TA WILL ESTABLISH RESCUE PROCEDURES FOR KW COMPLEX.</p> <p>P. BTL DMG WILL NOT BE PLAYED. 20RCC BSSC IS REQUIRED TO PROVIDE INPUTS AND FUNCTIONAL STATUS REPORTING.</p> <p>Q. A LIVE FLUSH OF ALL OPERATIONAL READY ACFT WILL BE CONDUCTED AT LANGLEY, MCENTIRE, HOMESTEAD AND JACKSONVILLE. A FLUSH IS NOT REQUIRED OF AUGMENTATION INTCPs.</p> <p>R. ACTIVE PTC FUNCTIONS WILL BE PERFORMED BY 20NRCC, TYNDALL BNCC, KW MNCC AND RICHMOND NGCI.</p> <p>S. THE REAL WORLD 5 MIN ID ALERT ACFT WILL BE REPORTED ON THE EXERCISE V-3 BUT WILL NOT BE UTILIZED DURING THE EXERCISE. "EX" ACTIVITY CODE AND "ALPHA" ALERT COMMITMENTS WILL BE DIRECTED BY 20DOTW VIA SEPARATE MSG.</p>								
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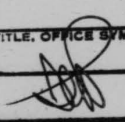
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<p>FROM:</p> <p>TO:</p> <p>T. AEW&C INSTRUCTIONS WILL BE PASSED SEPARATELY BY 20 NOOP. 20NREA WILL FURNISH AN ON STATION TIME TO INSURE TIMELY STATION ARRIVAL.</p> <p>U. FAKERS FLYING IN CLOSE FORMATION WILL BE CONSIDERED AS ONE TRACK. SINGLE KILL WILL NEUTRALIZE BOTH ACFT IN THE FORMATION.</p> <p>V. 20NR WILL OPERATE IN LEVELS 2B AND 2A.</p> <p>8. REPORTS:</p> <p>A. NORAD REQUIREMENTS - 1 CY OF FOLLOWING RPTS WILL BE MAILED TO HQ NORAD/NOET-L ENT AFB COLO 80912, WITHIN 5 WORKING DAYS AFTER EXERCISE FADEOUT.</p> <p>(1) RGN (CC) REQUIREMENTS WILL BE BRIEFED SEPARATELY BY 20NREA.</p> <p>(2) BNCC REQUIREMENTS.</p> <p>(A) OPERATIONAL PROCESSOR: RSS, MIS (10 MIN INTERVALS), SWS, WAS (10 MIN INTERVALS), TOT (5 MIN INTERVALS), ID-WBPKI, TEH (NIN-INT).</p>							
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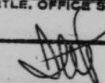
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<p>FROM:</p> <p>TO:</p> <p>(B) EXERCISE PROCESSORS: OSC-EXS, AFT, INT.</p> <p>(C) NORM.</p> <p>(3) LRR REQUIREMENTS. PFI SCOPE PHOTOGRAPHY IS REQUIRED FROM UNITS STARTING AT THE FIRST INDICATION OF ECM FOLLOWING BIG NOISE AND CONTINUING DURING ALL ACM ACTIVITY UNTIL FADEOUT. CAMERAS WILL BE SET FOR EVERY FIFTH SWEEP. RAW RADAR, NO IFF, RANGE MARKERS ON AND 200 MILE RANGE WILL BE SELECTED ON PFI'S. A COVER LTR GIVING ON AND OFF TIMES, OPERATING FREQ AND FILM TYPE WILL BE MAILED WITH THE FILM AS PRESCRIBED ABOVE. THOSE UNITS WITH THE CAPABILITY TO HAVE THEIR FILM DEVELOPED ARE REQUESTED TO DO SO. UNITS WILL INSURE THAT FILM CANS ARE MARKED TO INDICATE IF FILM IS DEVELOPED OR UNDEVELOPED.</p> <p>B. 20 NORAD RGN REQUIREMENTS -</p> <p>(1) IN ADDITION TO THE INDIV CONTROL FACILITY RPT REQUIREMENTS LISTED BELOW, AND IAW PARA 4, 20NR OPORD 370N-71, CMDRS SUMMARIES WILL INCLUDE SPECIFIC COMMENTS ON EACH EXERCISE OBJECTIVE.</p>							
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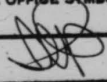
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<p>FROM:</p> <p>TO:</p> <p>(2) 20RCC WILL SUBMIT NORAD FORMS 48 AND 49, WD LOGS, DEBRIEFED IND LOGS, AND CMDRS SUMMARY RPTS TO 20NREA IAW 20NR OPORD 370N-71.</p> <p>(3) TBNCC AND KWMNCC WILL SUBMIT INFO REQUIRED BY ADCR 50-15 TO 20ADIV/DOCT ASAP BUT NLT 12 HRS AFTER FADEOUT. EACH WILL SUBMIT NORAD FMS 48, 49 AND CMDRS SUMMARY RPTS, AS REQUIRED BY 20 NR OPORD 370N-71. SUBMIT CALL SIGNS AND TRACK NUMBERS OF ALL TROUBLE TRACKS WITH BRIEF SUMMARY OF EVENTS THAT LED TO BRL. ADDITIONALLY, TBNCC WILL SUBMIT A LEGIBLE CY OF BUIC DATA REDUCTION SYSTEM (BARS) COMPUTER PRINTOUT IAW PARA 2, APPENDIX 4, ANNEX E, 20NR OPORD 370N-71.</p> <p>(4) PARTICIPATING FTR INTCP SQDNS WILL SUBMIT DEBRIEFED NORAD FM 35 IAW 20NR OPORD 370N-71 AND WILL ELECTRICALLY TRANSMIT WITHIN 2 WORKING DAYS AFTER FADEOUT, COLUMNS C, G, H, I, P, Q, R AND S EXTRACTED FROM FM 35 TO 20NREA.</p> <p>(5) PARTICIPATING AADCPS WILL SUBMIT NORAD FM 16 IAW</p>									
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<p>FROM:</p> <p>TO:</p> <p>20NR OPORD 370N-71 AND WILL ELECTRICALLY TRANSMIT WITHIN 2 WORKING DAYS AFTER FADEOUT COLUMNS 2, 5, 6, 8, 10 AND 11 EXTRACTED FROM FM 16.</p> <table border="0"> <tr> <td>9. EXERCISE CONTROL TEAM:</td> <td></td> <td>OFF</td> <td>EXER</td> </tr> <tr> <td>NORAD EXERCISE DIR</td> <td>COL H. C. HANCOCK</td> <td>701</td> <td>772</td> </tr> <tr> <td>NORAD PROJ OFF</td> <td>MAJ C. E. NESBITT</td> <td>701</td> <td>772</td> </tr> <tr> <td>NORAD INTEL</td> <td>MAJ L.C. MARTING (ENT)</td> <td>530-2887</td> <td></td> </tr> <tr> <td>20NR EXERCISE DIR</td> <td>LT COL R.E. ROSS</td> <td>701</td> <td>772</td> </tr> <tr> <td>20NR PROJ OFF</td> <td>LCDR F. A. HELLE</td> <td>701</td> <td>770</td> </tr> <tr> <td>20NR FAKER COORD</td> <td>TSGT G. W. JOHNSON</td> <td>701</td> <td>770</td> </tr> </table> <p>EXERCISE AMALGAM ARROW 74-2</p>											9. EXERCISE CONTROL TEAM:		OFF	EXER	NORAD EXERCISE DIR	COL H. C. HANCOCK	701	772	NORAD PROJ OFF	MAJ C. E. NESBITT	701	772	NORAD INTEL	MAJ L.C. MARTING (ENT)	530-2887		20NR EXERCISE DIR	LT COL R.E. ROSS	701	772	20NR PROJ OFF	LCDR F. A. HELLE	701	770	20NR FAKER COORD	TSGT G. W. JOHNSON	701	770
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<p>FROM: 20 NORAD REGION FT LEE AFS VA</p> <p>TO: AIG 8750/DO/OPS</p> <p>644 RADRON HOMESTEAD AFB FLA/DOK</p> <p>671 RADRON KEY WEST NAS FLA/DOT</p> <p>678 ADGP TYNDALL AFB FLA/DO-X</p> <p>701 ADGP FT FISHER AFS NC/DO-X</p> <p>4757 ADS TYNDALL AFB FLA/CC</p> <p>ADWC TYNDALL AFB FLA/OTV</p> <p>79 AEW&C SQDN (AFRES) HOMESTEAD AFB FLA/DO</p> <p>CMDR 2 MAW MCAS CHERRY POINT NC</p> <p>INFO: CINCNORAD ENT AFB COLO/NOET-L</p> <p>ADC ENT AFB COLO/DOTSE/DOCCX</p> <p>CMDR 1ST RGN ARADCOM STEWART AFB NY/ADAGC-P</p> <p>630 RADAR SQDN HOUSTON FAA TEXAS/DOT</p> <p>DET 1/48FIS NEW HANOVER CO APRT NC/OPS (MAIL)</p> <p>632 RADRON ROANOKE RAPIDS AFB NC/DOT (MAIL)</p> <p>649 RADRON BEDFORD AFS VA/DOT (MAIL)</p> <p>702 RADRON SAVANNAH AFS GA/DOT (MAIL)</p>									
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ROBERT E. ROSS, LT COL, USAF, NREA, 701					UNCLASSIFIED FOUO				
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<p>FROM:</p> <p>INFO: 771 RADRON CAPE CHARLES AFS VA/DOK (MAIL) 861 RADRON AIKEN AFS SC/DOT (MAIL) XMT 702 RADRON SAVANNAH AFS GA</p> <p>UNCLAS FOUO 20RREA-L</p> <p>SUBJ: CHANGE 1 TO 20NR FRAG ORDER NO. 1 FOR AMALGAM ARROW 74-2</p> <p>REF: 20 NORAD RGN MSG DTG 24/1430Z JUL 73, UNCLAS FOUO, SUBJ: 20NR FRAG ORDER NO. 1 FOR AMALGAM ARROW 74-2</p> <p>1. CHANGE PARA 5A TO READ: "20NR AND SUBORDINATE UNITS (SOUTH-ERN AIR DEF COMPLEX WILL PARTICIPATE BY RECEIVING, ACKNOWLEDGING AND AUTHENTICATING VOICE ALERT FORMATS.)"</p> <p>2. CHANGE PARA 7I TO READ: "A GENERAL RECALL IS NOT REQUIRED. IN PLACE TIME FOR EXERCISE PLAYERS IS 16/0445Z AUG 73 WITH BRIEFINGS COMPLETE."</p> <p>3. ADD PARA 8A(4) TO READ: "20NR FIS WILL SUBMIT NORAD FORM 35 TO NORAD IN ADDITION TO COPY SENT 20RREA." AMALGAM ARROW 74-2</p>							
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HEADQUARTERS
20 NORAD REGION

EXERCISE & ANALYSIS REPORT



EXERCISE
FEDERAL HUNT 74-1 (U)

CLASSIFIED BY 20 NORAD REGION/NREA
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652;
AUTOMATICALLY DOWNGRADE AT TWO YEAR
INTERVALS, DECLASSIFY ON 31 DEC 81

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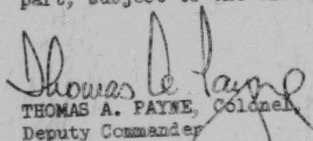
PREFACE

This document consists of post exercise analysis information for FEDERAL HUNT 74-1, which was conducted on 18-20 September 1973.

This report contains significant facts and statistics associated with the exercise. The primary purpose of this report is to determine if exercise objectives were met, analyze the training conducted, identify problem areas, and indicate where improvement is necessary.

Trouble tracks are summarized in Part III of this report. Subordinate units are encouraged to make a detailed analysis of specific factors noted in their areas of responsibility.

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THOMAS A. PAYNE, Colonel, USA
Deputy Commander

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125 Ftr Group Jacksonville IAP FL	1
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NOPS	1
NREA	2
NADA	1
NOIN	4
NNPA	1
NOOP	1
20 AIR DIVISION -	
DOT	1
DOE	1
DOC	1
DOK	1
LG/LGK	2
TOTAL	28

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PART I

EXERCISE DESIGN AND OBJECTIVES

1. (U) Design: FEDERAL HUNT 74-1 was a multi-region Automated Systems Training Mission (ASTM) designed to exercise the NORAD system in a degraded and ECM environment. It consisted of both static and dynamic damage being inflicted by ICBMs, SLBMs, bombers, and ASMs. Static damage to the defensive forces was heavy in the pre-air battle phase to allow for reconstitution of the defensive capability. Random impacts were programmed throughout to preclude an all clear. Dynamic damage was primarily programmed to be inflicted by bombers and ASMs. For this region, BUIC did not participate in the air battle phase; however, TBNCC was thoroughly exercised as region ALCOP in the build-up phase.

2. (C) Objectives:

a. The exercise objectives were accomplished with good results. The first objective was to simulate battle situations to exercise battle staffs, BSSCs, operational crews, and support facilities. This objective was met. However, since many of the BSSC pre-air battle actions and coordinations were accomplished by the ALCOP, there was little value for the region BSSC training during the build-up phase. In addition, the exercise provided useful training for the RCC operational crews. Substantial number of personnel in training status received their first exposure to multi-region simulated air battles.

b. The second objective was to exercise interaction between elements of NORAD in its current configuration. This objective was met. The NORAD ALCOP worked with 20th NORAD Region ALCOP during the build-up phase, and subsequently with the RCC during the battle phase. Coordination between the 20th and the 21st NORAD Region was exercised. They were able to kill three fakers with BRLs in our area of responsibility, and we did the same for them. In addition, a hijacked aircraft crossed the border between the two regions and there was inter-region coordination.

c. The third objective was to exercise battle tactics under an ECM environment. This objective was met. The RCC reported that ECM caused target detection and tracking difficulty and proved beneficial in training for surveillance and weapons personnel. ECM caused some problems in positioning interceptors and thoroughly exercised weapons, both from a supervisory and intercept control standpoint.

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d. The fourth objective was to effect coordination of weapons and forces, NUDET and battle damage reporting, and implementation of contingency plans for air defense. This objective, along with the fifth objective to exercise functional status reporting, was met and exercised by both the ALCOP and Headquarters, resulting in excellent training.

e. The final objective was our region objective to exercise Tyndall BNCC as ALCOP. This objective was met. The Tyndall Commander's Summary Report stated that the exercise provided excellent training in the ALCOP configuration, and all applicable NORAD objectives were satisfactorily accomplished. However, some problems were encountered with failure of units to pass completion/attainment times. Details will be covered in the Commanders Summary portion of this document.

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PART II

MISSION RESULTS

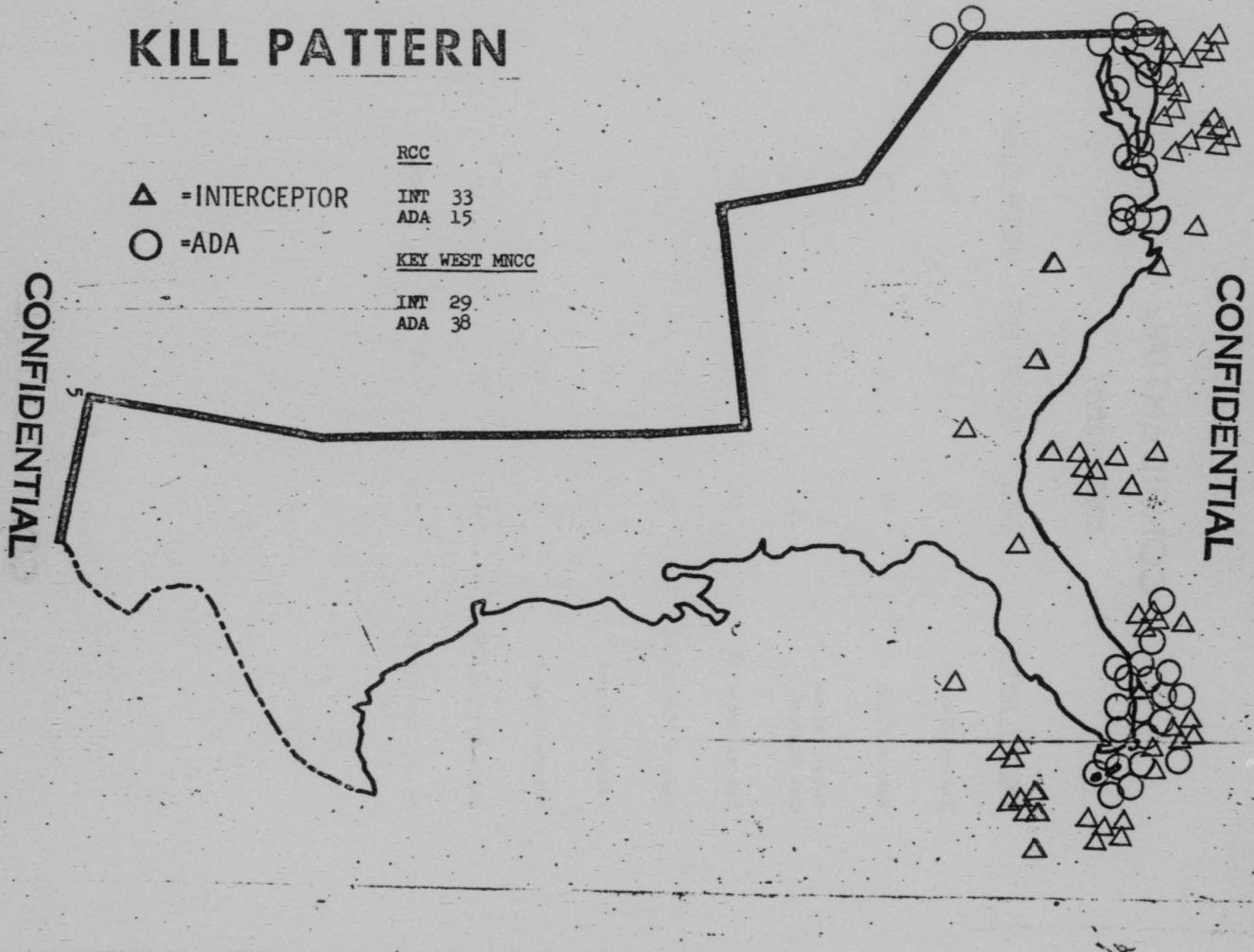
CHART	PAGE
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Kill Pattern	5
Mission Summary	6
ADA Summary	7
Interceptor Summary	8
Interceptor Squadron Summary	9

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<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fakers Planned	56	68	124
Fakers Flown	57	68	125
Fakers Flown Not Charged	0	0	0
Fakers Detected	56	68	124
Fakers Identified	56	68	124
Fakers Charged	57	68	125
Fakers Engaged	54	68	122
Kills Prior to BRL	48	67	115
Neutralization Rate	84%	99%	92%

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CONFIDENTIALADA SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
ADA Fire Units	14	12	26
Missiles Available HAWK/HERC	*	*	*
Fakers Engaged	25	49	74
Missiles Expended	28	57	85
MA/First Kill	15	38	53
Overkills	0	0	0
Kills	15	38	53
MIs	3 PK	0	3 PK

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<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fighers Available	102	11	113
Sorties Flown	175	27	202
Air Aborts	0	0	0
Ground Aborts	3	1	4
Faker Com'td On	43	33	76
Number of Pairings	134	34	168
Diverts	65	1	66
Intercept Attempts	69	33	102
MI	27	4	31
MA-NK PK	9	0	9
First Kill	33	29	62

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CONFIDENTIALINTERCEPTOR SQUADRON SUMMARY

<u>BASE</u>	<u>CALL SIGN</u>	<u>SORTIES</u>	<u>MA</u>	<u>MA-NK</u>	<u>MI</u>	<u>ARM</u>		<u>REASON FOR MI'S</u>
						<u>P</u>	<u>S</u>	
ACY	NP	12	1		2	1		3 KPI
ACY	EL	27	9	2	8	8	3	6 DE, 2 KPI
LFI	MG	12	2	1	2	2	1	2 DE
LFI	NP	8	2	2			4	
MMT	NP/NK	23						
ILM	MG	12	1				1	
JAX	EH	35	4	1	2	4	2	1 DE, 1 FPI
NTV	UN	24	7	1	5	4	3	4 KPI, 1 FPI
PAM	GP	37	7	2	7	6	3	3 DE, 3 KPI, 1 FPI
HST	GP	7	8		2	4	4	2 DE
HST	MG	20	21		2	12	10	1 DE, 1 AEF
TOTALS		217	62	9	30	46	26	

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PART III

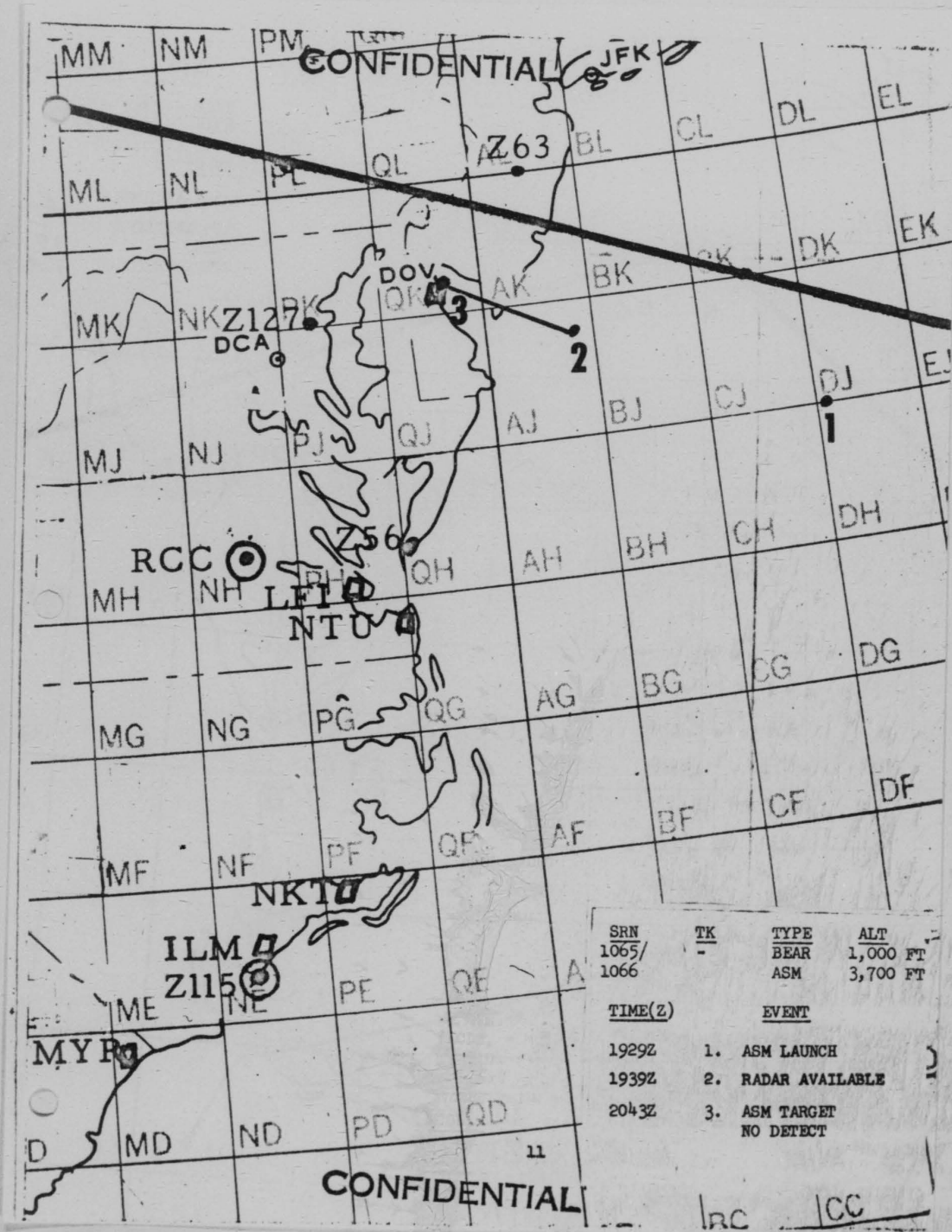
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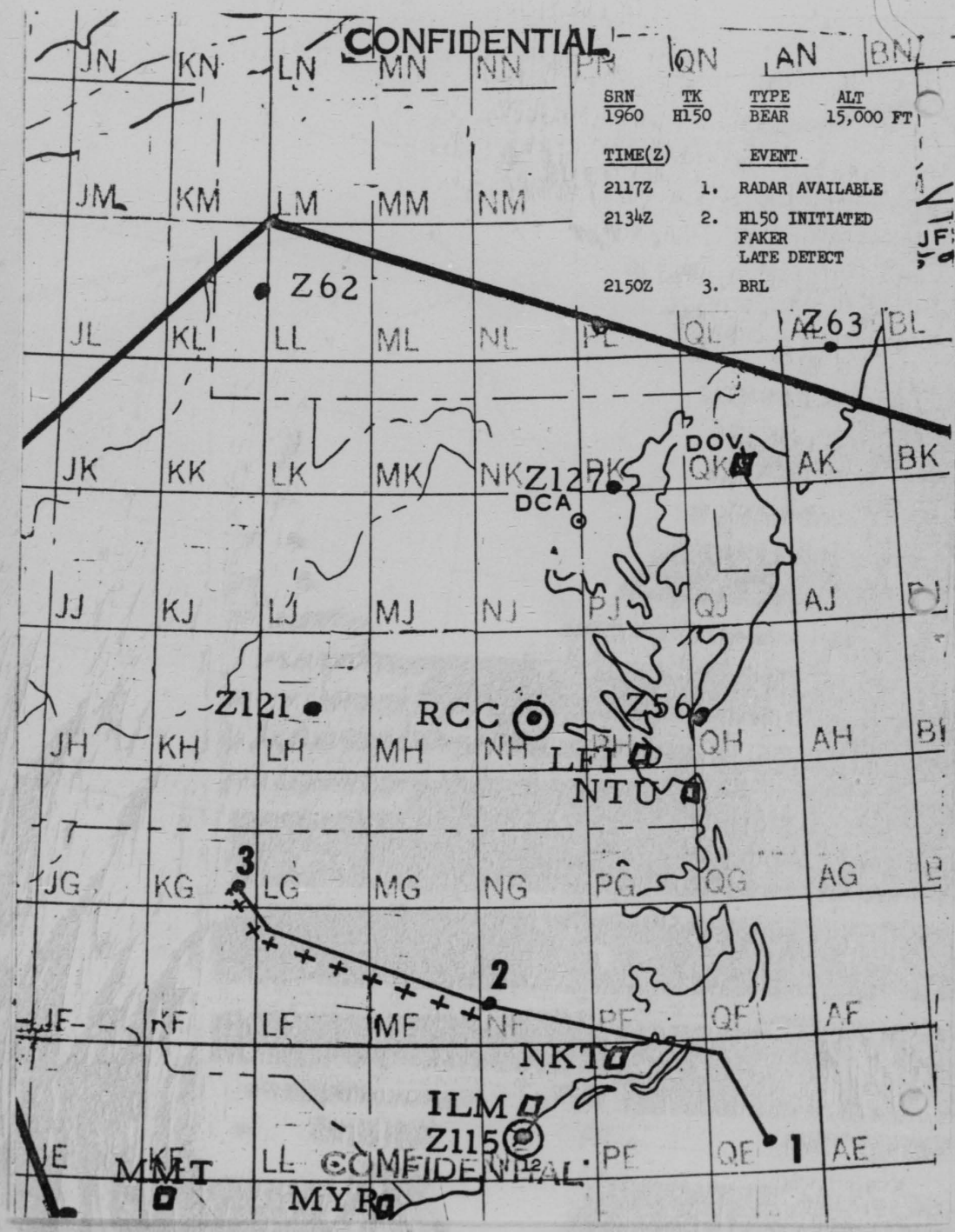
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	SRN 1958/H129	13
	SRN 1963/1964/H107/H102	14
	SRN 1961/H157	15
	SRN 1965/1966/H053/H061	16
	SRN 1979/1980/H106/H111	17
	SRN 1981/1982/H085/H082	18
	SRN 1975/1976/H095/H093	19
KEY WEST -	SRN 1996/1997/H481	20

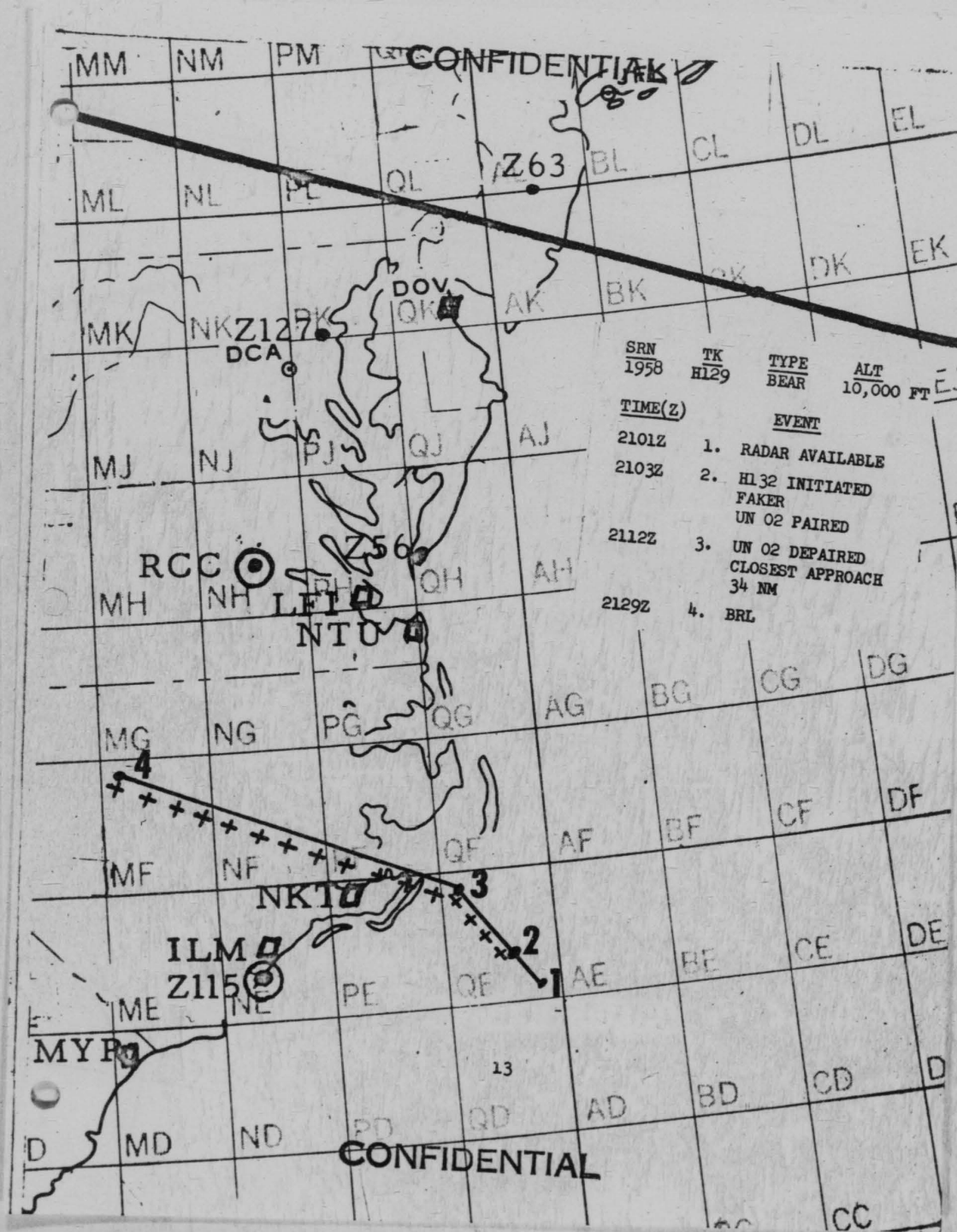
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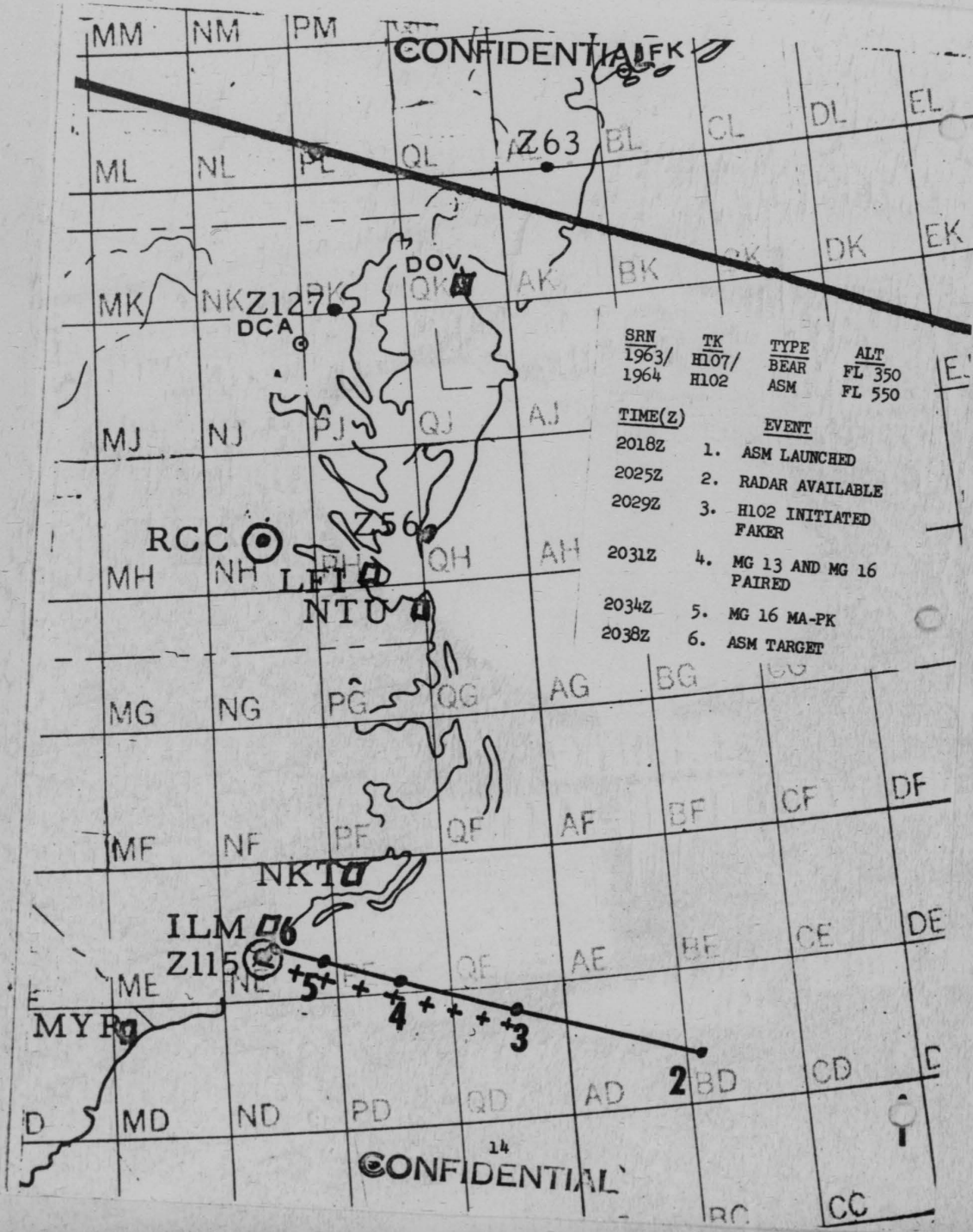
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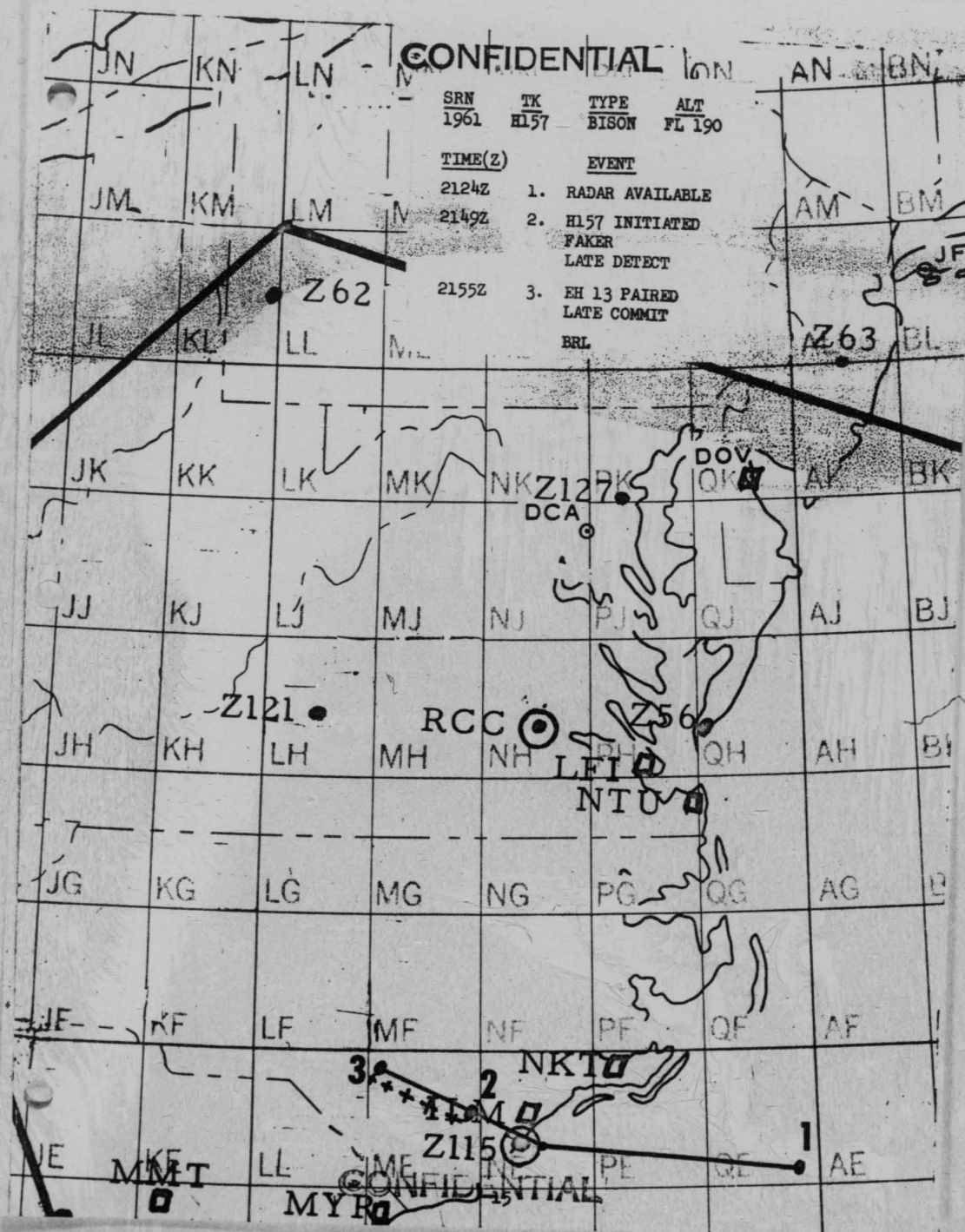
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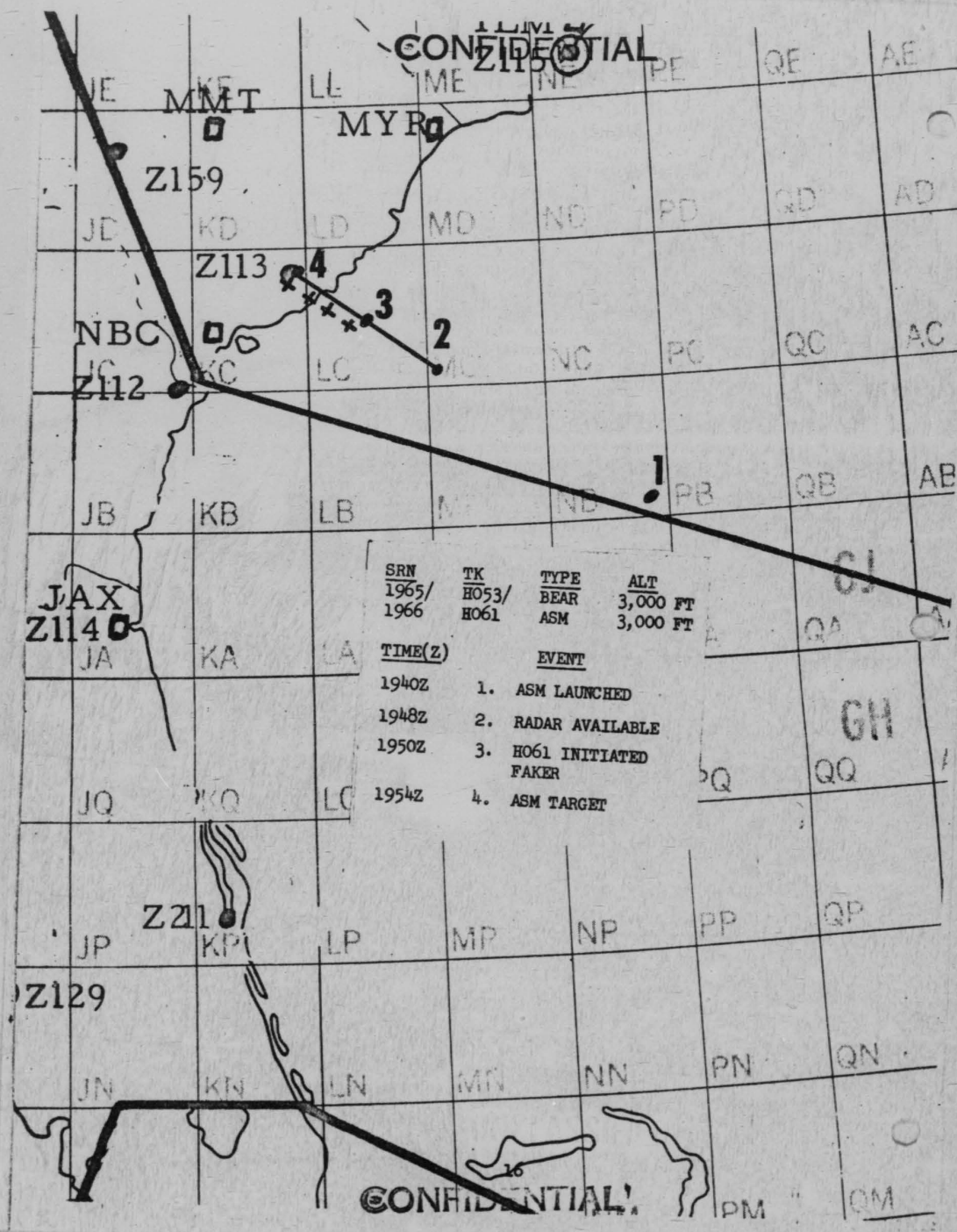


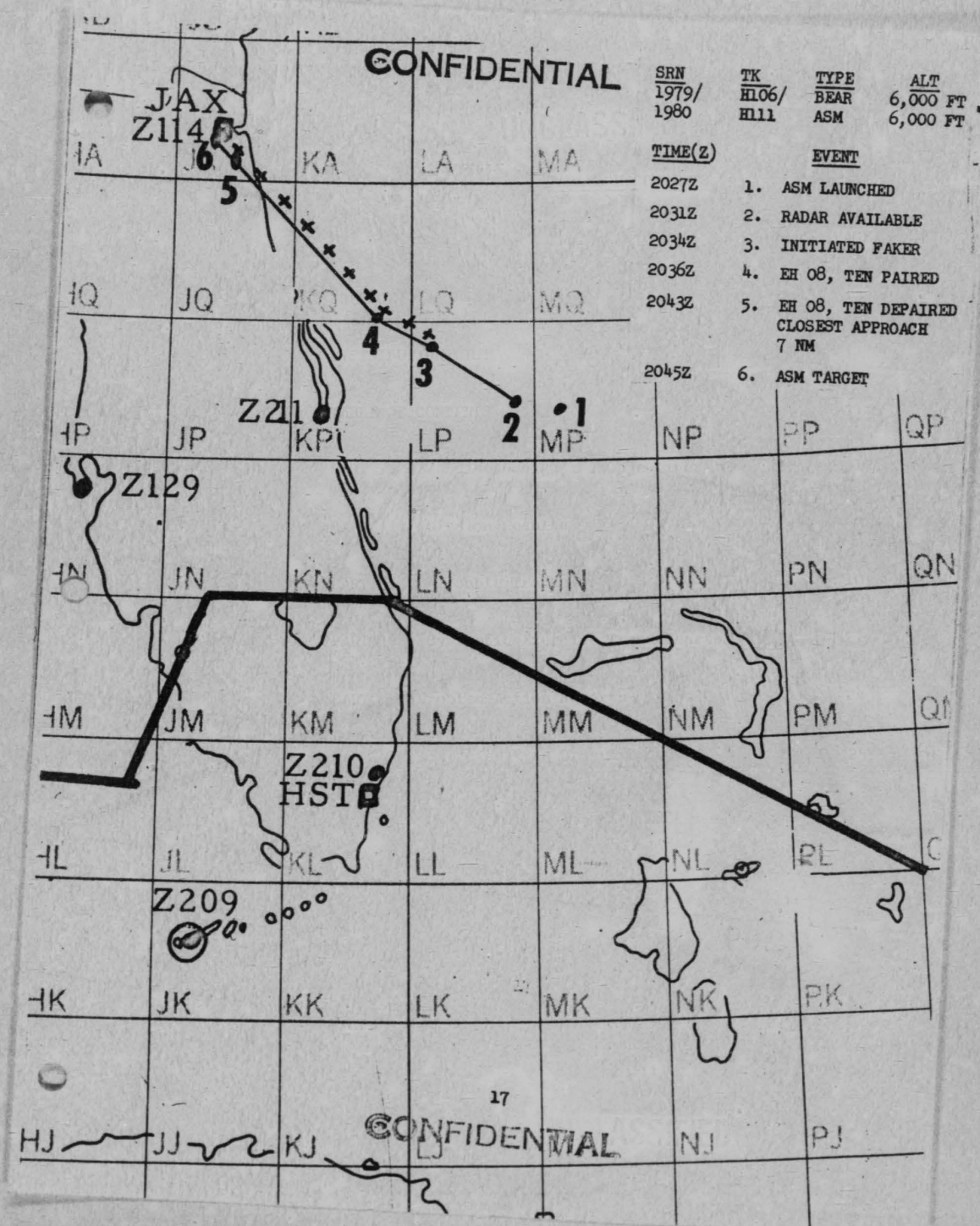


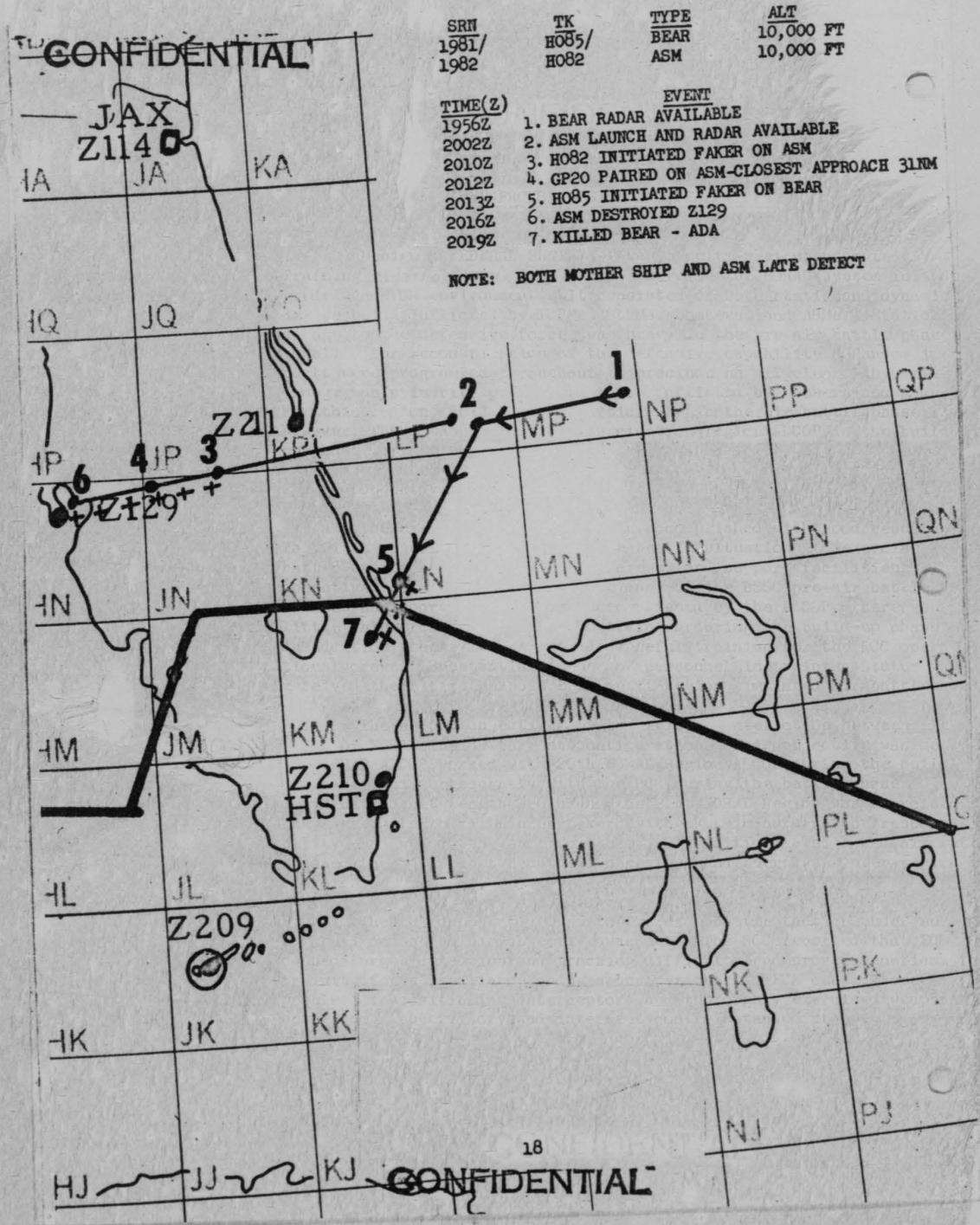


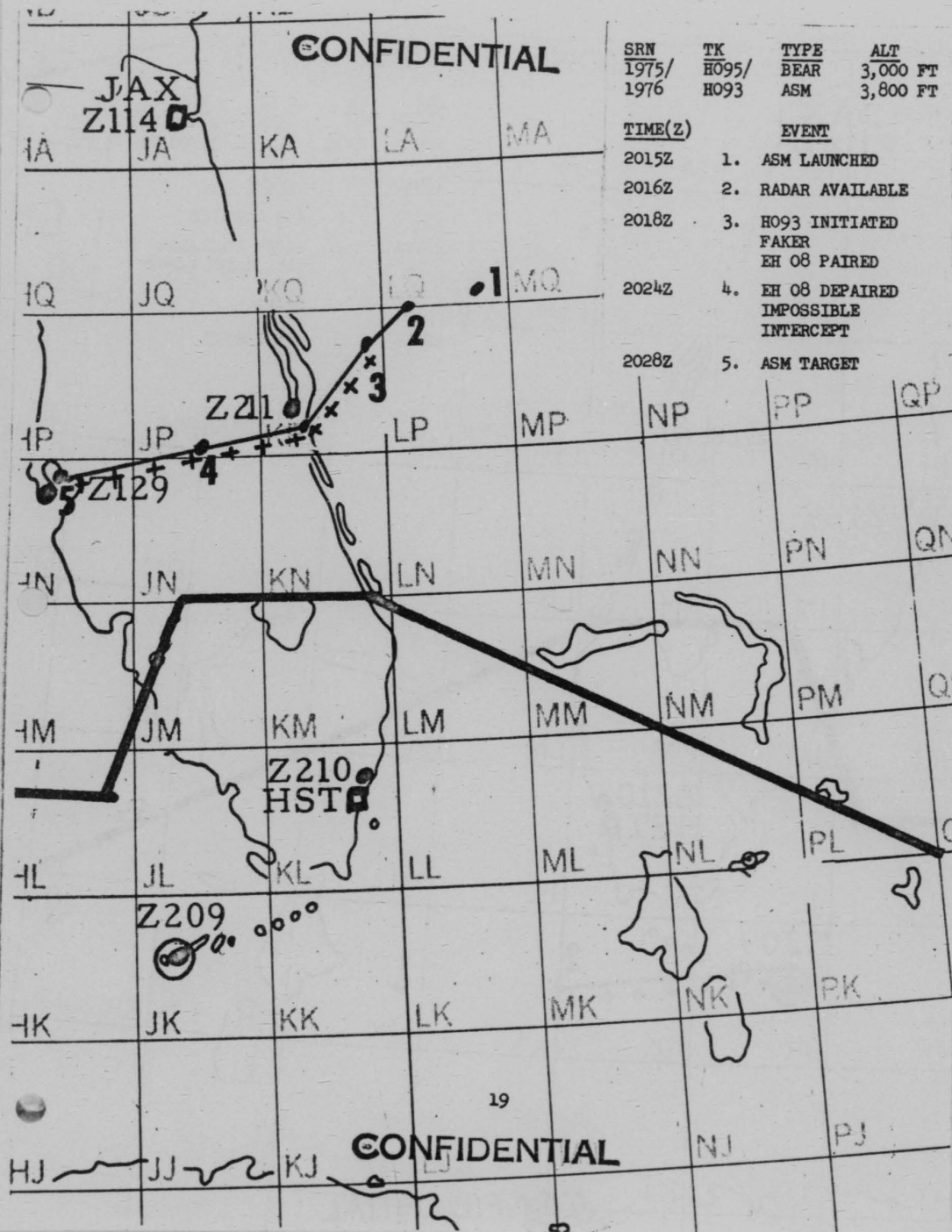


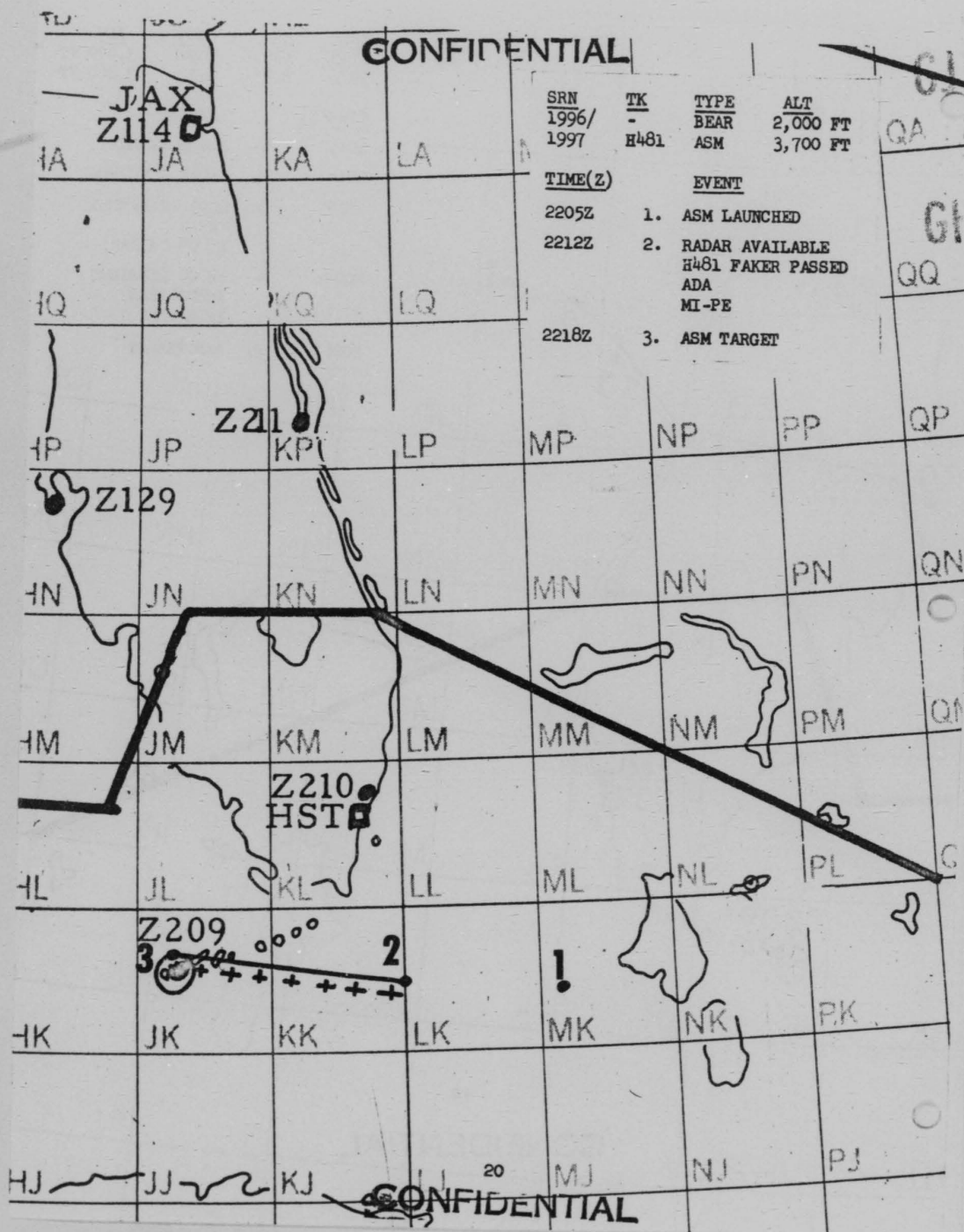












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PART IV

SYNTHETIC EXERCISE TREND CHARTS

	PAGE
RCC Neutralization Rate	22
KWMNCC Neutralization Rate	23

NOTE: The Neutralization Rate is based on the first kill prior to BRL/EEP either by interceptor or ADA, as appropriate.

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CONFIDENTIALRCC SYNTHETIC EXERCISE NEUTRALIZATION RATE

	50	60	70	80	90
FAIRPLAY 73-2 18-22 NOV 72 32/38*					84%
AMALGAM FAIRPLAY/ HIGH HEELS 73-3 7-18 MAR 73 5/6*					83%
AMALGAM HUNT 73-3 3-4 APR 73 28/28*					100%
FAIRPLAY 73-4 25-28 JUN 73 35/41*					85%
FEDERAL HUNT 74-1 18-20 SEP 73 48/57*					84%

*Neutralized/Charged

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CONFIDENTIALKWMNCC SYNTHETIC EXERCISE NEUTRALIZATION RATE

	50	60	70	80	90
FAIRPLAY 73-2 18-22 NOV 73 24/33*	_____ 73%				
FAIRPLAY 73-3 7-18 MAR 73 29/30*	_____ 97%				
AMALGAM HUNT 73-3 3-4 APR 73 46/48*	_____ 96%				
FAIRPLAY 73-4 25-28 JUN 73 56/61*	_____ 92%				
FEDERAL HUNT 74-1 18-20 SEP 73 67/68*	_____ 99%				

*Neutralized/Charged

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PART V

PROBLEM ACTION REPORTS
(Based on Commander's Summaries)

1. RCC

Problem: A TBS flush was ordered at 1545Z. The first interceptor was off 5 minutes later; however, 41 minutes lapsed before all flushed aircraft were airborne. The flush delay was caused by a combination of factors. The first factor was personnel error. It resulted in the automatic flush not being implemented at two bases. When the problem was recognized and an alternative flush method was implemented, personnel and supervisors in training status in TBS and working their first synthetic exercise, were not quick enough or innovative enough to effect the alternative flush action in a timely manner.

Recommended Solution: First, Weapons Directors and Technicians must become thoroughly familiar with the Automatic Flush Switch Action and associated Automatic Flush Action Digital Information Displays to insure that they can accurately tell which bases and which squadrons at those bases are available for automatic flush. Second, should an alternate method of flushing simulated aircraft become desirable, the Weapons Directors and Technicians, Training Battle Simulation Supervisors, and Interceptor Pilot Simulators should become thoroughly familiar with and be able to effectively execute, the alternate method within an acceptable time frame. (DOC OPR)

2. Tyndall

Problem: All FIS Operations Dispatch Centers and Army Air Defense Command Posts initially failed to pass completion and attainment times for message formats. After specific requests for these times, the Army Air Defense Command Posts did pass this information; but FIS Operations Dispatch Centers responded intermittently, which caused considerable delays in forwarding weapons availability to NORAD ALCOP.

ADPS OPR Action: Message was sent to all FISs, detachments and ADA units reminding them of the requirements for reporting completion/attainment times.

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PART VI

EXERCISE FRAG ORDER

Following are pages 01 through 08 of Message DTG 4/1330Z September 1973,
Subj: 2ONR Frag Order for Exercise FEDERAL HUNT 74-1.

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							4/ 1330Z	SEP	73
MESSAGE HANDLING INSTRUCTIONS									
<p>FROM: 20 NORAD RGN FT LEE AFS VA/NREA</p> <p>TO: AIG 8750/DO/CC</p> <p>31 ARTY BDE HOMESTEAD AFB FLA/ADM-SC</p> <p>644 RADRON HOMESTEAD AFB FLA/DO</p> <p>671 RADRON SQDN KEY WEST NAS FLA/DOT</p> <p>678 AIR DEF GP TYNDALL AFB FLA/DO-X</p> <p>701 AIR DEF GP FT FISHER AFS NC/DO-X</p> <p>DET 2/552 AEW&C SQDN HOMESTEAD AFB FLA/DOR</p> <p>20 SURV SQDN EGLIN AFB FLA/DOV</p> <p>INFO: CINCNORAD ENT AFB COLO/NOET-S</p> <p>21 NORAD RGN HANCOCK FLD NY/NREA</p> <p>22 NORAD RGN NORTH BAY CANADA/22EEV</p> <p>23 NORAD RGN DULUTH IAP MINN/NREA</p> <p>24 NORAD RGN MALMSTROM AFB MONT/NREA</p> <p>25 NORAD RGN MCCORD AFB WASH/NREA</p> <p>26 NORAD RGN LUKE AFB ARIZ/NREA</p> <p>NORAD ALCOP MALMSTROM AFB MONT/BSSC</p> <p>1ST RGN ARADCOM STEWART AFB NY/ADAGC-P</p>									
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TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE ROBERT E. ROSS, LT COL, USAF, NREA/701						SECURITY CLASSIFICATION CONFIDENTIAL			
SIGNATURE <i>Robert E. Ross</i>									

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
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<p>FROM:</p> <p>XMT: NOR 702 RADRON SAVANNAH AFS GA</p> <p>CONFIDENTIAL FOR CMDRS, OPNS AND TRUSTED AGENTS</p> <p>SUBJ: 20NR FRAG ORDER FOR EXERCISE FEDERAL HUNT 74-1 (U)</p> <p>REF: CINCNORAD OPORD 3700</p> <p>1. (C) FEDERAL HUNT 74-1 IS A MULTI-RGN ASTM HOSTED BY 20NR. THE LIABILITY PERIOD IS 18/0001Z-20/2400Z SEP 73.</p> <p>2. (U) OBJECTIVES:</p> <p>A. NORAD OBJECTIVES</p> <p>(1) SIMULATE BATTLE SITUATIONS THAT EXERCISE BATTLE STAFFS, BSSC'S, OPERATIONS CREWS AND SUPPORT FACILITIES.</p> <p>(2) EXERCISE INTERACTION BETWEEN ELEMENTS OF NORAD IN ITS CURRENT CONFIGURATION.</p> <p>(3) EFFECT COORDINATION OF WEAPONS AND FORCES, NUDET/ BATTLE DMG REPORTING AND IMPLEMENTATION OF CONTINGENCY PLANS FOR AIR DEF.</p> <p>(4) EXERCISE COMMAND AND CONTROL RELATIONSHIP AND INTER-ACTIONS BETWEEN SPACE AND MISSILE WARNING UNITS AND THE ASDC</p>							
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
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<p style="text-align: center;">FROM:</p> <p style="text-align: center;">TO:</p> <p>AND ALCOP.</p> <p>(5) EXERCISE FUNCTIONAL STATUS REPORTING.</p> <p>(6) EXERCISE BATTLE TACTICS UNDER AN ECM ENVIRONMENT.</p> <p>B. 20NR OBJECTIVE. TO EXERCISE TYNDALL BNCC AS 20NR ALCOP.</p> <p>3. (U) PARTICIPANTS</p> <p>A. 20NRCC, TYNDALL BNCC, KEY WEST MNCC, RICHMOND NGCI, WASH/BAL/NOR, PITT, MIAMI/HOMESTEAD AND KEY WEST ADA DEF WILL BE FULLY ACTIVE PARTICIPANTS TO INCLUDE BATTLE STAFF AND BSSC.</p> <p>B. FT FISHER BNCC, DET 2/552 AEW&C, FIS (INCLUDING ANG) AND RADAR SQDNS WILL BE LIMITED PARTICIPANTS. SUFFICIENT PLAYER PERSONNEL WILL BE ASSEMBLED TO RESPOND TO VAS FORMATS, REACT TO TA SCRIPTED INPUTS AND MAKE REPORTS IAW CURRENT DIRECTIVES.</p> <p>C. HOUSTON MNCC WILL PARTICIPATE BY RECEIVING, ACKNOWLEDGING AND AUTHENTICATING VAS FORMATS.</p> <p>D. NORAD ALCOP WILL PARTICIPATE.</p> <p>E. THE NORAD SIM TEAM WILL INTRODUCE INPUTS AND RESPOND TO</p>								
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<p>FROM:</p> <p>TO:</p> <p>MESSAGES/QUERIES AS HIGHER AUTHORITIES IN THE UNITED STATES AND CANADA AND AGENCIES THAT INTERACT WITH NORAD. THE 20NR SIM TEAM WILL RESPOND TO MESSAGES/QUERIES FOR THOSE NON-PARTICIPATING UNITS/AGENCIES THAT INTERACT WITH 20NR.</p> <p>4. (U) GROUND RULES</p> <p>A. THE EXERCISE WILL TAKE PLACE OVER A 3 DAY PERIOD WITH A STAND DOWN EMPLOYED AT THE END OF ACTIVE PLAY ON THE FIRST AND SECOND DAY.</p> <p>(1) PLAYER PERSONNEL WILL RESPOND DYNAMICALLY TO THE FIRST INCREASE IN SIMULATED DEFCON ON THE FIRST DAY.</p> <p>(2) STAND DOWN ON THE FIRST DAY WILL BE DETERMINED BY THE EXERCISE DIR. FOR PLANNING PURPOSES THE STAND DOWN SHOULD OCCUR AT APPROXIMATELY 18/2200Z SEP 73.</p> <p>(3) IN PLACE TIME FOR THE SECOND DAY WILL BE 19/1300Z SEP 73.</p> <p>(4) SECOND DAY STAND DOWN WILL BE AUTHORIZED AFTER THE</p>								
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<p>FROM:</p> <p>TO:</p> <p>RECONSTITUTION SUMMARY HAS BEEN TRANSMITTED TO THE NORAD ALCOP.</p> <p>(5) IN PLACE TIME FOR THE THIRD DAY WILL BE 20/1400Z SEP 73.</p> <p>B. BNCC'S DO NOT HAVE A COMPATIBLE TAPE BECAUSE OF A BUIC PROGRAM PROBLEM. THE AIR BATTLE PORTION WILL BE CONDUCTED IN LEVEL 3A.</p> <p>C. TYNDALL BNCC WILL FUNCTION AS 20NR ALCOP DURING THE ENTIRE BUILD-UP PHASE. 20NRCC WILL BE SCRIPTED OUT DURING THIS PHASE BUT WILL ASSUME CONTROL PRIOR TO THE NUDET LAYDOWN AND AIR BATTLE.</p> <p>D. AEW&C RESOURCES WILL NOT BE AVAILABLE TO 20NR.</p> <p>E. BATTLE DAMAGE WILL BE PLAYED.</p> <p>F. FRIENDLY AIR TRAFFIC WILL NOT BE PLAYED.</p> <p>G. WEAPONS DATA BASE WILL BE ESTABLISHED FROM THE LIVE FORSTAT REPORT SUBMITTED 24 HRS PRIOR TO THE EXERCISE LIABILITY PERIOD.</p>							
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
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<p>FROM:</p> <p>TO:</p> <p>H. THE EXERCISE TAPE WILL BE CYCLED ON THE RCC STAND BY COMPUTER. LIVE AIR WILL BE MAINTAINED IN LEVEL 4A FROM 19/1500Z THRU 19/2300Z SEP 73.</p> <p>I. A TBS FLUSH WILL BE REQUIRED.</p> <p>J. ALL AIRLIFT, GROUND SUPPORT MOVEMENTS, AND TACTICAL DEPLOYED (AUGMENTATION) INTCPs WHICH ARE ENROUTE AT STAND DOWN ON THE FIRST DAY WILL BE CONSIDERED IN PLACE AT THEIR DESTINATION BY IN PLACE TIME ON THE SECOND DAY.</p> <p>K. A GENERAL RECALL IS NOT REQUIRED.</p> <p>5. (U) LOGS/REPORTS. THE FOLLOWING WILL BE SUBMITTED TO 20MREA MLT 2 WORKING DAYS AFTER FADEOUT.</p> <p>A. CMDRS SUMMARY SLIDE INFO WILL BE SUBMITTED FROM 20RCC AND KEY WEST MNCC.</p> <p>B. CMDRS SUMMARY REPORT IS REQUIRED FROM 20MRCC, KEY WEST MNCC AND TYNDALL BNCC. CMDRS SUMMARIES WILL INCLUDE SPECIFIC COMMENTS ON EACH EXERCISE OBJECTIVE. ALL CMDRS UNDER OPCON 20MR</p>							
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<p>FROM:</p> <p>TO:</p> <p>ARE INVITED TO SUBMIT COMMENTS.</p> <p>C. ALL AADCPS WILL FORWARD DATA EXTRACTED FROM COLUMNS 2, 5, 8, 10 AND 11 OF NORAD FM 16. THE SRN WILL BE INCLUDED WITH THE SAGE TRACK NUMBER.</p> <p>D. THE RCC WILL PROVIDE WD AND IND LOGS UPON CONCLUSION OF THE AIR BATTLE PHASE.</p> <p>E. KEY WEST MNCC WILL SUBMIT TROUBLE TRACK REPORT AND ASSOCIATED RECORDERS LOGS.</p> <p>6. (U) EXERCISE CONTROL GROUP -DUTY- -EXER-</p> <table border="0"> <tr> <td>A. 20NR</td> <td>SAGE 332-1XXX</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>EXERCISE DIR</td> <td>LT COL ROSS</td> <td>701</td> <td>337/772</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>UMPIRE/PROJ OFF</td> <td>MAJ DOLAN</td> <td>701</td> <td>279</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>BTL DMG COORD</td> <td>SSGT CARPENTER</td> <td>701</td> <td>237/279</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>SIM SWITCH</td> <td></td> <td></td> <td>280</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>AIR BASE SIM</td> <td></td> <td></td> <td>246/249/256/276</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>								A. 20NR	SAGE 332-1XXX							EXERCISE DIR	LT COL ROSS	701	337/772					UMPIRE/PROJ OFF	MAJ DOLAN	701	279					BTL DMG COORD	SSGT CARPENTER	701	237/279					SIM SWITCH			280					AIR BASE SIM			246/249/256/276				
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<p>FROM:</p> <p>TO:</p> <p style="text-align: right;">-DUTY- -EXER-</p> <p>B. TYNDALL BNCC SAGE 645-OXXX</p> <p>EXERCISE DIR CAPT BLANCHARD 344 397</p> <p>TRUSTED AGENT MSGT TANNER 338 319</p> <p>C. KEY WEST MNCC SAGE 641-1XXX</p> <p>TRUSTED AGENT TSGT MURRAY 280 281</p> <p>EXERCISE FEDERAL HUNT 74-1</p> <p>ADS 23 SEP 73</p>										
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**HEADQUARTERS
20 NORAD REGION**

EXERCISE & ANALYSIS REPORT



4

**EXERCISE
AMALGAM FAIRPLAY 73-4 (U)**

CLASSIFIED BY 20 NORAD REGION/NREA
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652;
AUTOMATICALLY DOWNGRADE AT TWO YEAR
INTERVALS, DECLASSIFY ON 31 DEC 81

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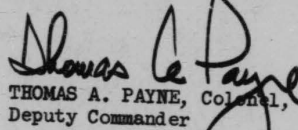
PREFACE

This document consists of post exercise analysis information for AMALGAM FAIRPLAY 73-4, which was conducted on 25-28 June 1973.

This report contains significant facts and statistics associated with the exercise. The primary purpose of this report is to determine if exercise objectives were met, analyze the training conducted, identify problem areas, and indicate where improvement is necessary.

Subordinate units are encouraged to make a detailed analysis of specific factors noted in their areas of responsibility. Trouble tracks are summarized in Part III of this report.

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THOMAS A. PAYNE, Colonel, USA
Deputy Commander

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DOE	1
DOC	1
DOK	1
LG/LGK	2
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PART I

EXERCISE DESIGN AND OBJECTIVES

1. (U) Design: AMALGAM FAIRPLAY 73-4 was a multi-region simulation exercise. The threat to NORAD consisted primarily of ballistic missiles and air breathing bomber vehicles. Of the total NORAD threat, 1 FOBS, 32 ICBMs, 9 SLEMs, and 100 air breathing vehicles were targeted within the 20th NORAD Region.

a. The missile war commenced at 1220Z on "A" Day with an erroneous early SLEM launch destroying Barksdale AFB. One hour later, FOBS impacted followed by ICBMs. The only SLEM attack occurred at 1549Z and lasted 50 minutes.

b. The NORAD bomber attack occurred on the same day. The first wave used the over-Arctic penetration route east of Iceland. It appeared on the east coast at 1732Z. The second wave, a southern threat, developed 25 minutes later at 1758Z, and consisted of fighter bombers targeted exclusively in the 20th NORAD Region. A quarter of the air breathing vehicles targeted within 20th were ASMs.

2. (S)(U) Objectives and Results: In addition to the Headquarters NORAD objective of exercising the BSSC at the NORAD ALCOP, there were two objectives for the 20th NORAD Region.

a. (S) The first objective was to exercise Commanders and their staffs in determining reconstitution priorities. This was accomplished. At fadeout, in order to meet a follow-on threat, 53 O/R interceptor aircraft with armament were located at 7 airfields disbursed throughout the Region. The airfields included NHK, RIC, GSB, CHS, PAM, NQX and NBG. Of the three control facilities participating in the exercise, the RCC and Key West remained operational throughout. Tyndall BNCC's computer malfunctioned near the end of the air battle at 1930Z, and was down for the remainder of the exercise. In addition to the weapons and control facilities available, one-half of the LRRs remained operational at fadeout.

b. (C) The second objective was to exercise 20NR BSSC and subordinate unit BSSCs in maintaining and reporting an accurate and current account of operations affecting the Region while Region facilities were under varying degrees of degradation. This objective was met, and the training objectives of the 20th NORAD Region BSSC were generally realized. The two problems encountered follow:

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(1) There was no back tell of support airlift to the ALCOP.
(This problem will be discussed later in the Commander's Summary,
Problem Action Reports portion of this publication.)

(2) Another problem existed in timely receipt of data requested from the Key West BSSC. Upon the Region's BSSC request for armament update for HST AFB, excessive time lapsed while Key West transmitted this classified information by message. A much faster method was suggested, using the AKAP 29 to encode this information for voice transmission. A request has been submitted to ADC to establish a requirement for this encryption device at Key West. In the interim, the AKAP 29 possessed by the 31st Battery of the 65th Air Defense Artillery Brigade can be used.

c. (U) In addition to meeting the specific stated objectives of this exercise, Tyndall reported that the exercise was an excellent training vehicle for surveillance personnel. Key West found the exercise adequate for surveillance, weapons and ADA, and noted that coordination with Tyndall during Level 2B was much improved over AMALGAM ARROW 73-8.

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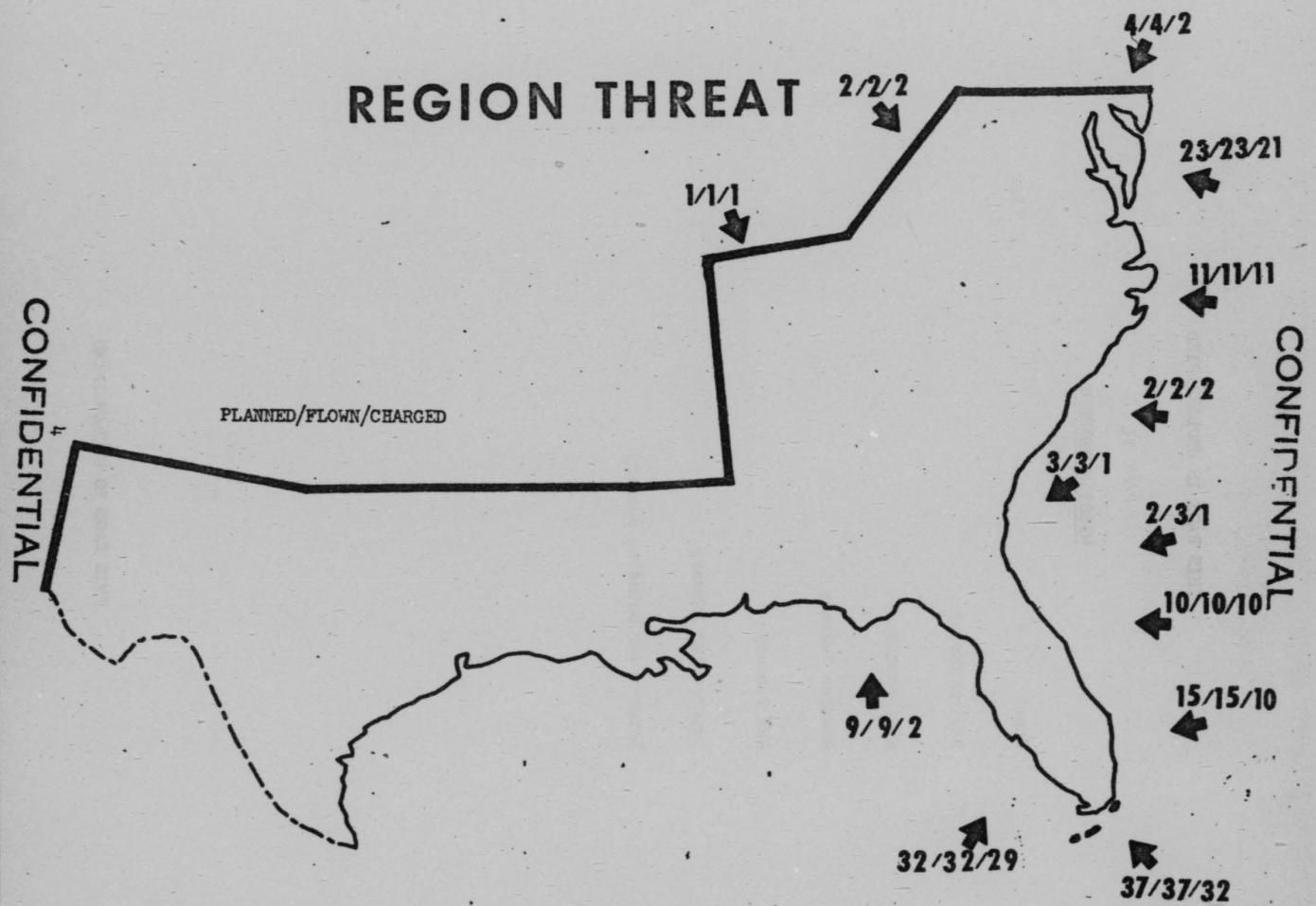
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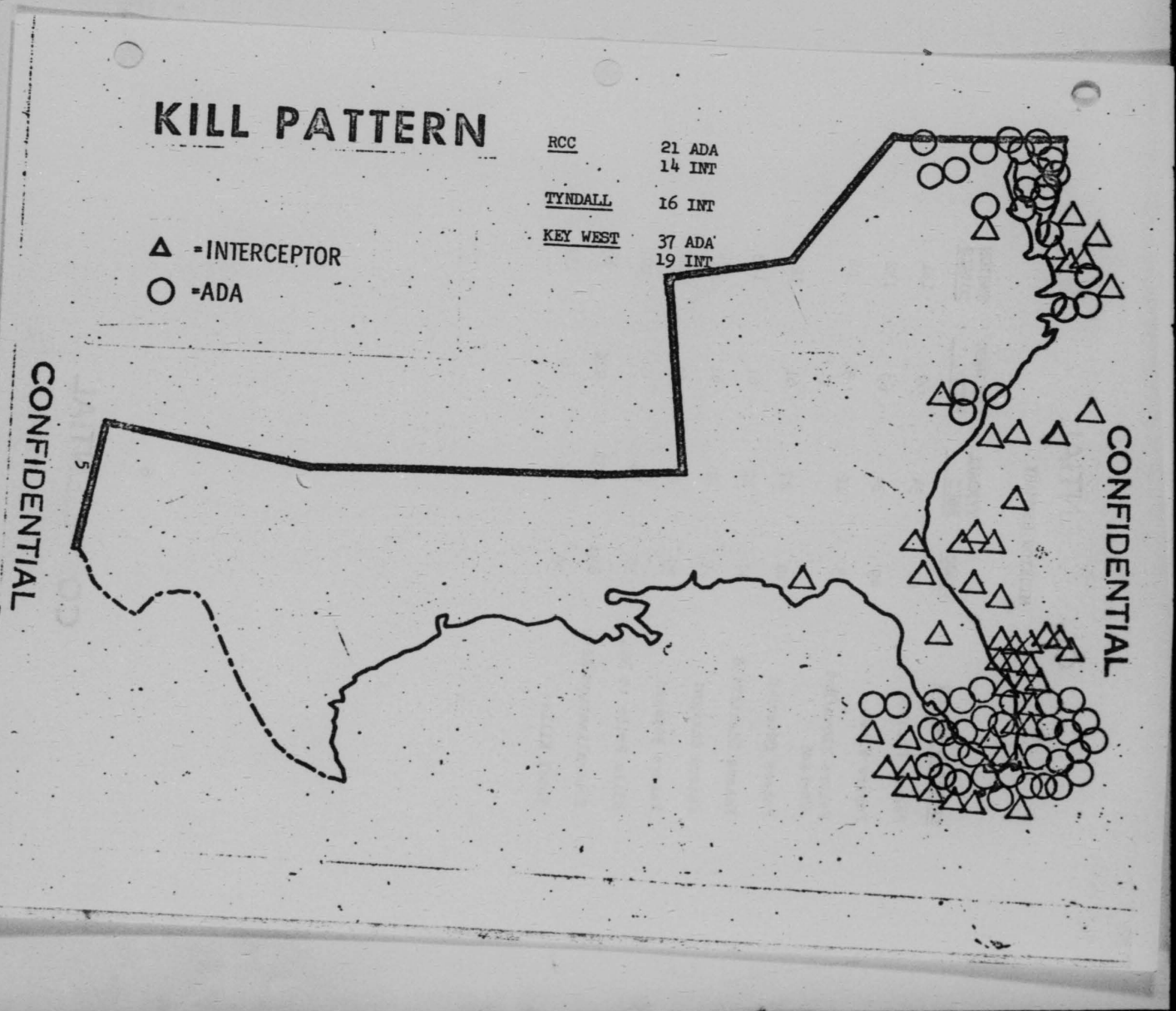
PART II

MISSION RESULTS

Chart	Page
Region Threat	4
Kill Pattern	5
Mission Summary	6
ADA Summary	7
Interceptor Summary	8
Interceptor Squadron Summary	9

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MISSION SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fakers Planned	48	34	69	151
Fakers Flown	49	34	69	152
Fakers Flown/Not Charged	8	12	8	28
Fakers Detected	40	22	61	123
Fakers Identified	40	22	61	123
Fakers Charged	41	22	61	124
Fakers Engaged	39	22	61	122
Kills Prior to BRL	35	16	56	107
Neutralization Rate	85%	73%	92%	85%
Total Kills	38	16	60	114

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ADA SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
ADA Fire Units	14	12	26
Missiles Available HAWK/HERC	*	*	*
Fakers Engaged	55	47	102
Missiles Expended	55	59	114
MA/First Kill	21	37	58
Overkills			
Kills	21	37	58
MI's	2	3	5
MI REASONS	1 PK 1 TGT FADE	3 PK	

*Intentionally left blank; available upon request from 2ONREA

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INTERCEPTOR SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fighters Available	82	45	11	138
Sorties Flown	158	118	39	315
Air Aborts	-	8	2	10
Ground Aborts	3	0	2	5
Faker Com'td On	39	25	25	89
No. of Pairings	83	56	29	168
Diverts	61	32	3	96
Intercept Attempts	22	24	26	72
MI	1	4	1	6
MA-NK PK	4	4	2	10
First Kill	14	16	19	49
Total Kills	17	16	23	56

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INTERCEPTOR SQUADRON SUMMARY

<u>BASE</u>	<u>CALL SIGN</u>	<u>SORTIES</u>	<u>MA</u>	<u>MA-NK</u>	<u>MI</u>	<u>ARM</u>		<u>MI REASONS</u>
						<u>P</u>	<u>S</u>	
LFI/ILM	MG	2 - 21*	5	1	1	4	2	1 - DE
LFI/ACY/PIT	NP	9 - 38*	4	2		3	3	
JAX/COF/SAV	EH	43- 13*	8	2	1	5	5	1 - AEF
ACY	EL	18 - 6*	1			1		
MMT	NK	10 - 9*						
PAM/MCF	GP	26- 36*	11	2	3	10	4	3 - AEF
NKT	VL	6 - 4*	2	1		3		
NTU	UN	14- 21*	2			1	1	
HST	MG	17- 12*	7		1	6	2	1 - PE
NQX	KG	2 - 18*	16	2		11	7	
NBG	AG	6*						
TOTALS		331	56	10	6	44	24	

*FLUSH

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PART III

TROUBLE TRACKS

		Page
RCC -	SRN 0942/H038	11
	SRN 0964/H048	12
	SRN 0966/ -	13
	SRN 0968/H416	14
	SRN 0969/H434	15
	SRN 1509/H123	16
TEBNC -	SRN 0972/H422	17
	SRN 0976/H423	18
	SRN 0978/H433	19
	SRN 0980/H428	20
	SRN 0982/H412	21
	SRN 0984/ -	22
KEY WEST -	SRN 1505/H473	23
	SRN 1523/H470 1524	24
	SRN 0993/H522	25
	SRN 0996/H521	26

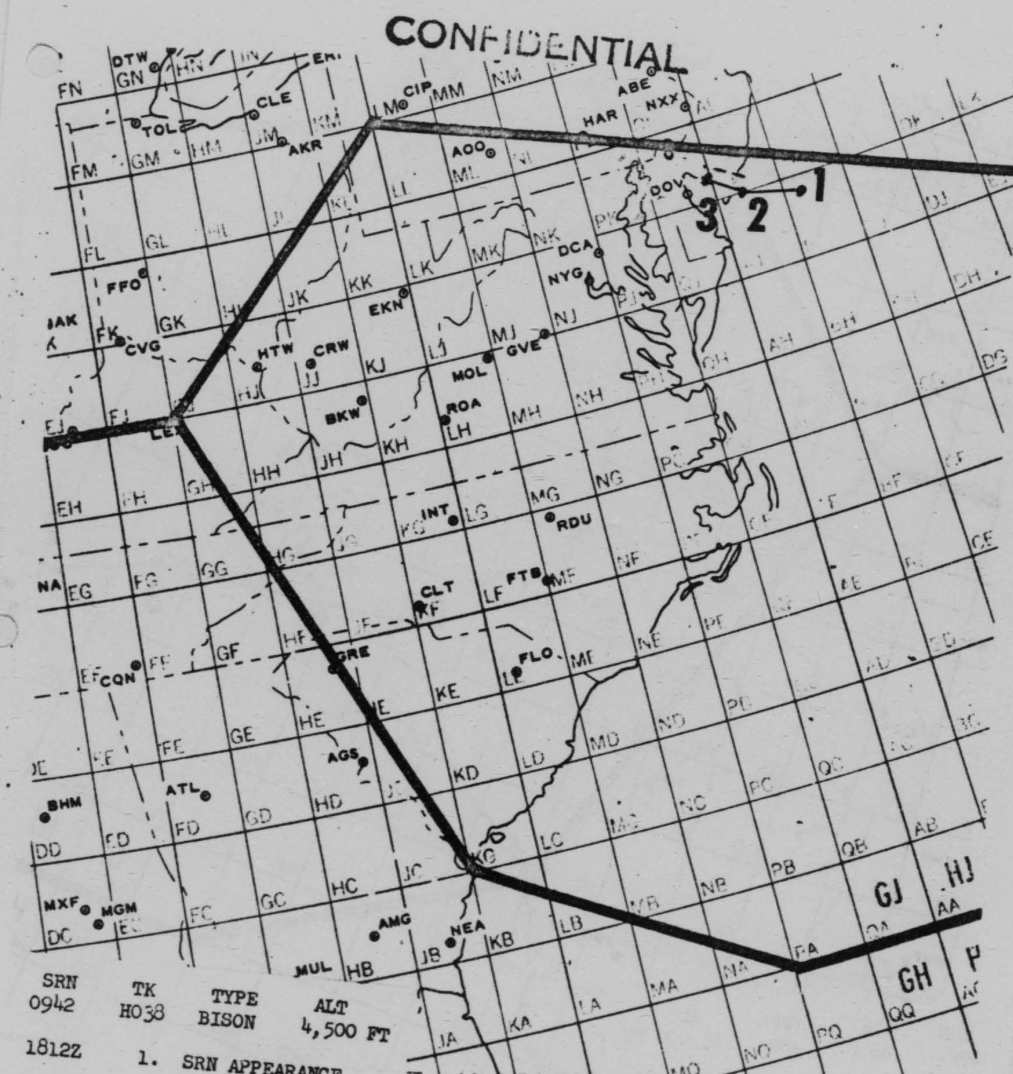
TROUBLE TRACK LEGEND

_____ SRN Route

- - - - - SAGE Track

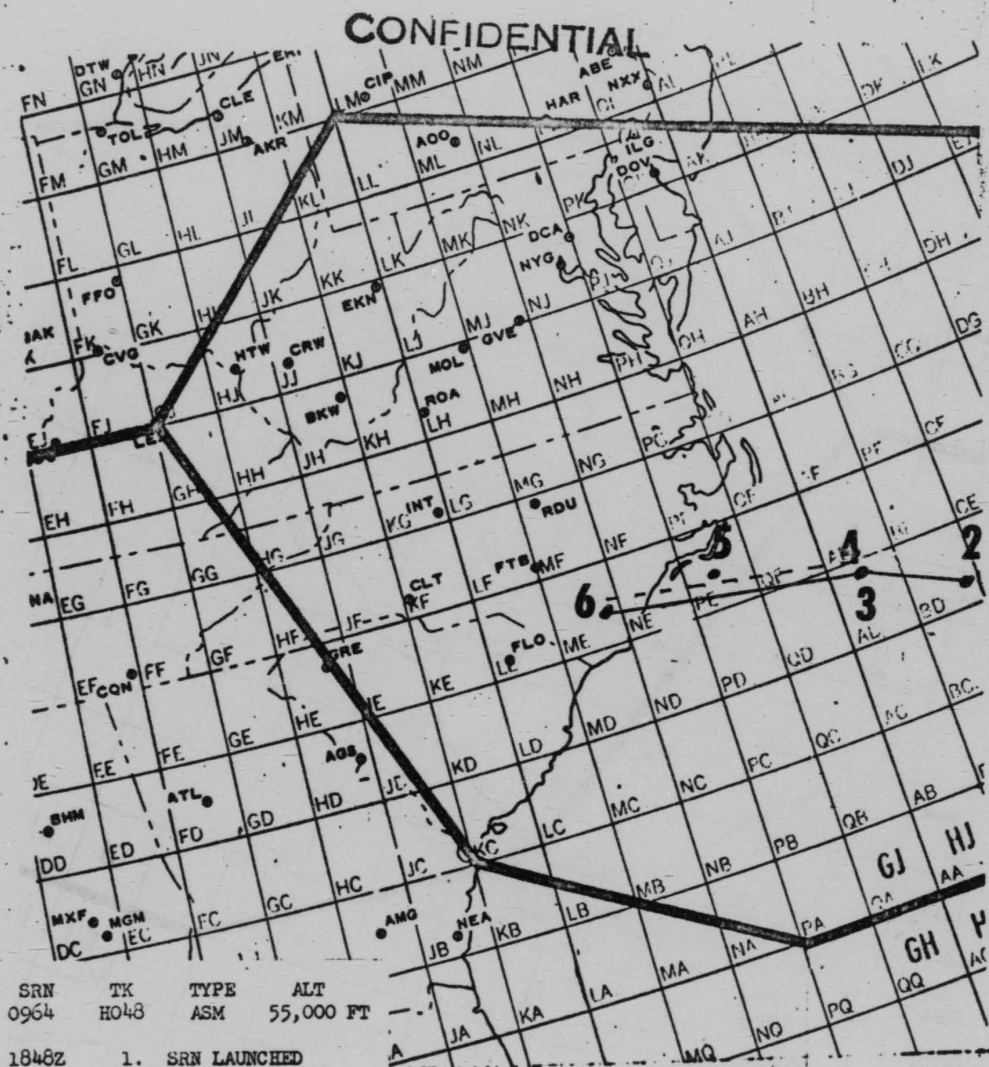
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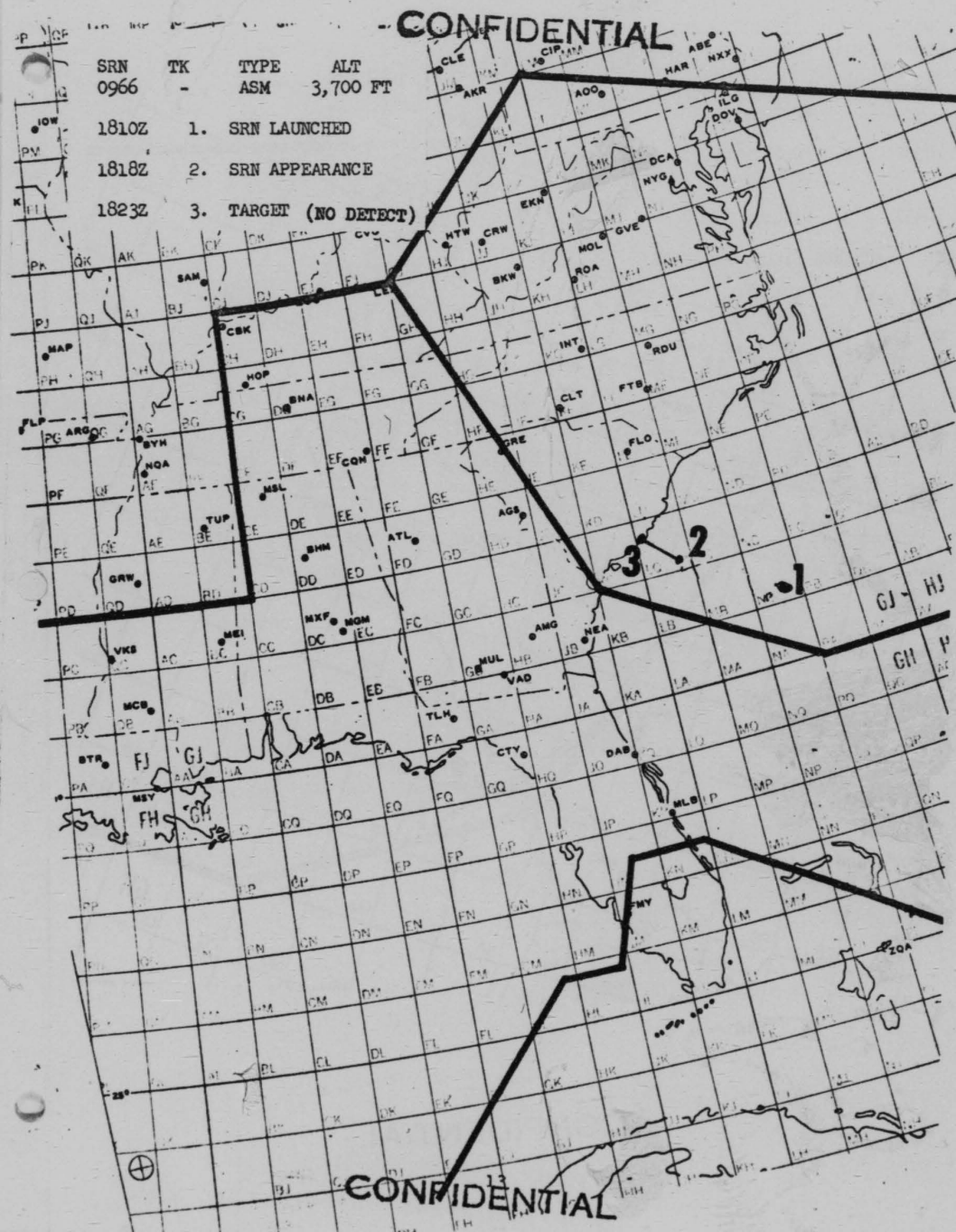
SRN	TK	TYPE	ALT
0942	H038	BISON	4,500 FT
1812Z	1. SRN APPEARANCE		
1818Z	2. H038 INITIATED PASSED ADA		
1819Z	3. BRL		

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NOTE: LAUNCHER KILLED AT 1908Z

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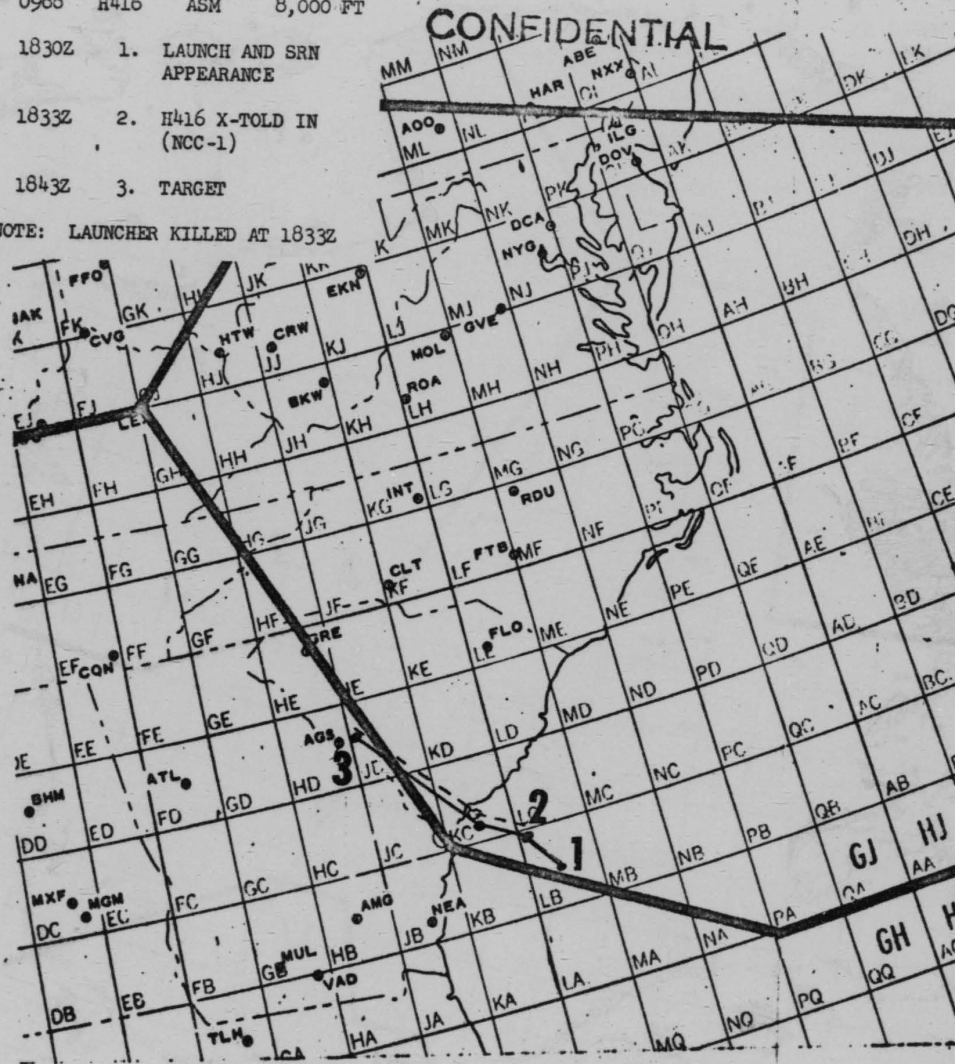
SRN	TK	TYPE	ALT
0968	H416	ASM	8,000 FT

1830Z 1. LAUNCH AND SRN APPEARANCE

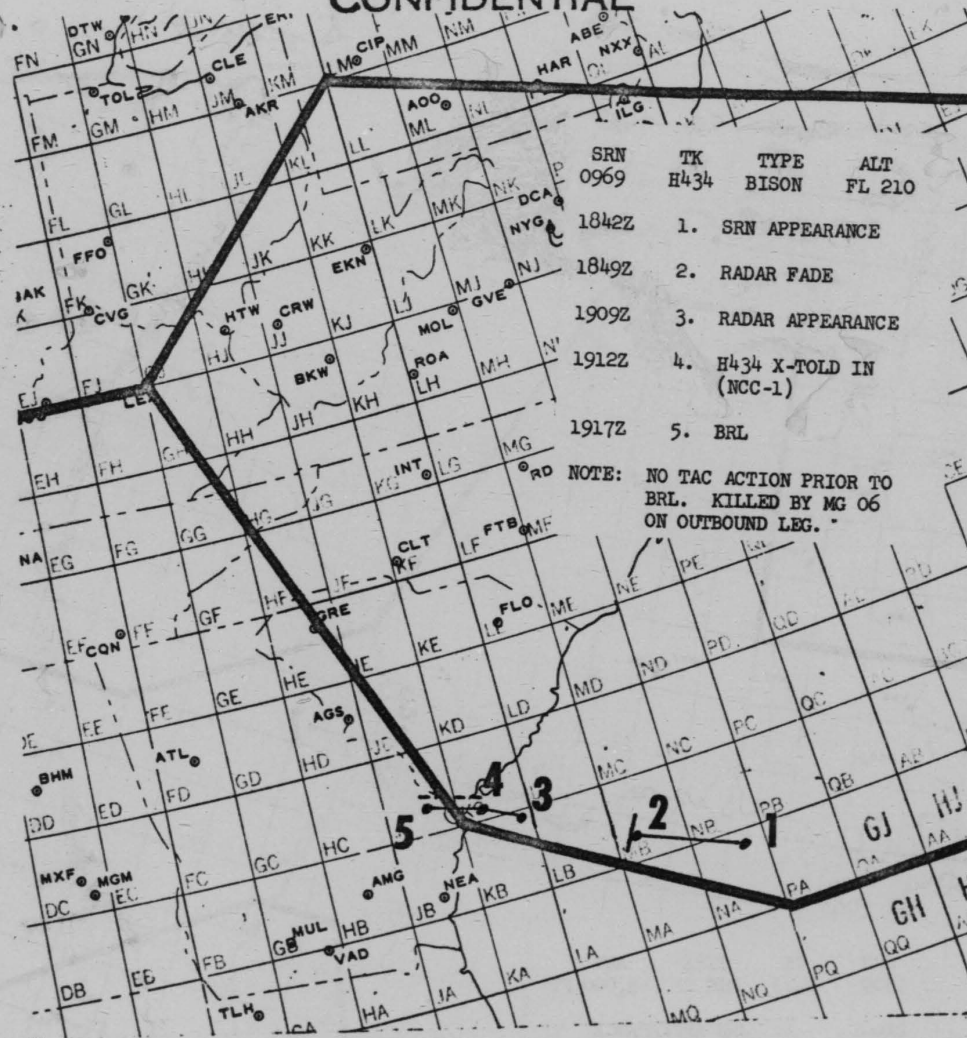
1833Z 2. H416 X-TOLD IN (NCC-1)

1843Z 3. TARGET

NOTE: LAUNCHER KILLED AT 1833Z



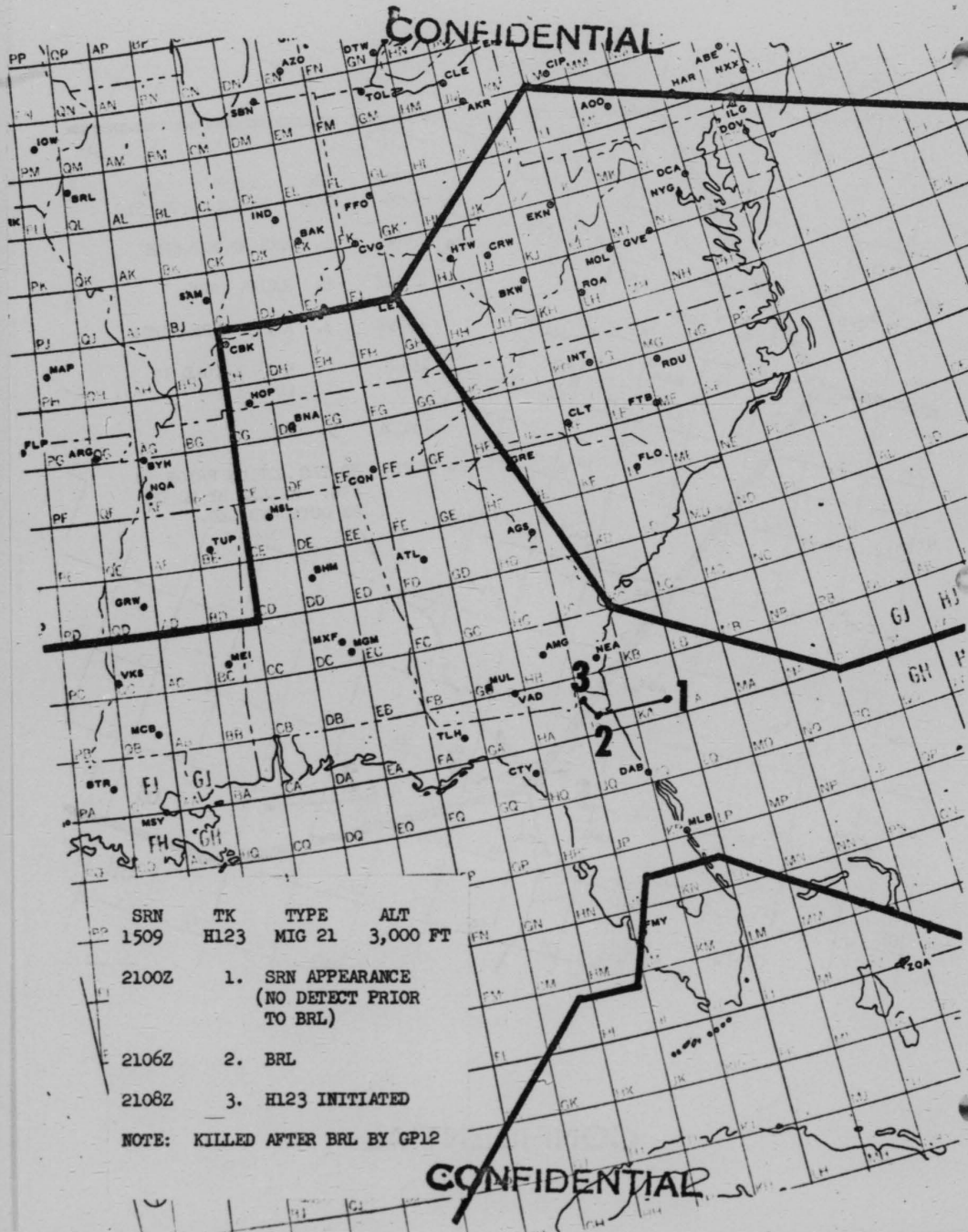
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SRN	TK	TYPE	ALT
0969	H434	BISON	FL 210
1842Z	1.	SRN APPEARANCE	
1849Z	2.	RADAR FADE	
1909Z	3.	RADAR APPEARANCE	
1912Z	4.	H434 X-TOLD IN (NCC-1)	
1917Z	5.	BRL	

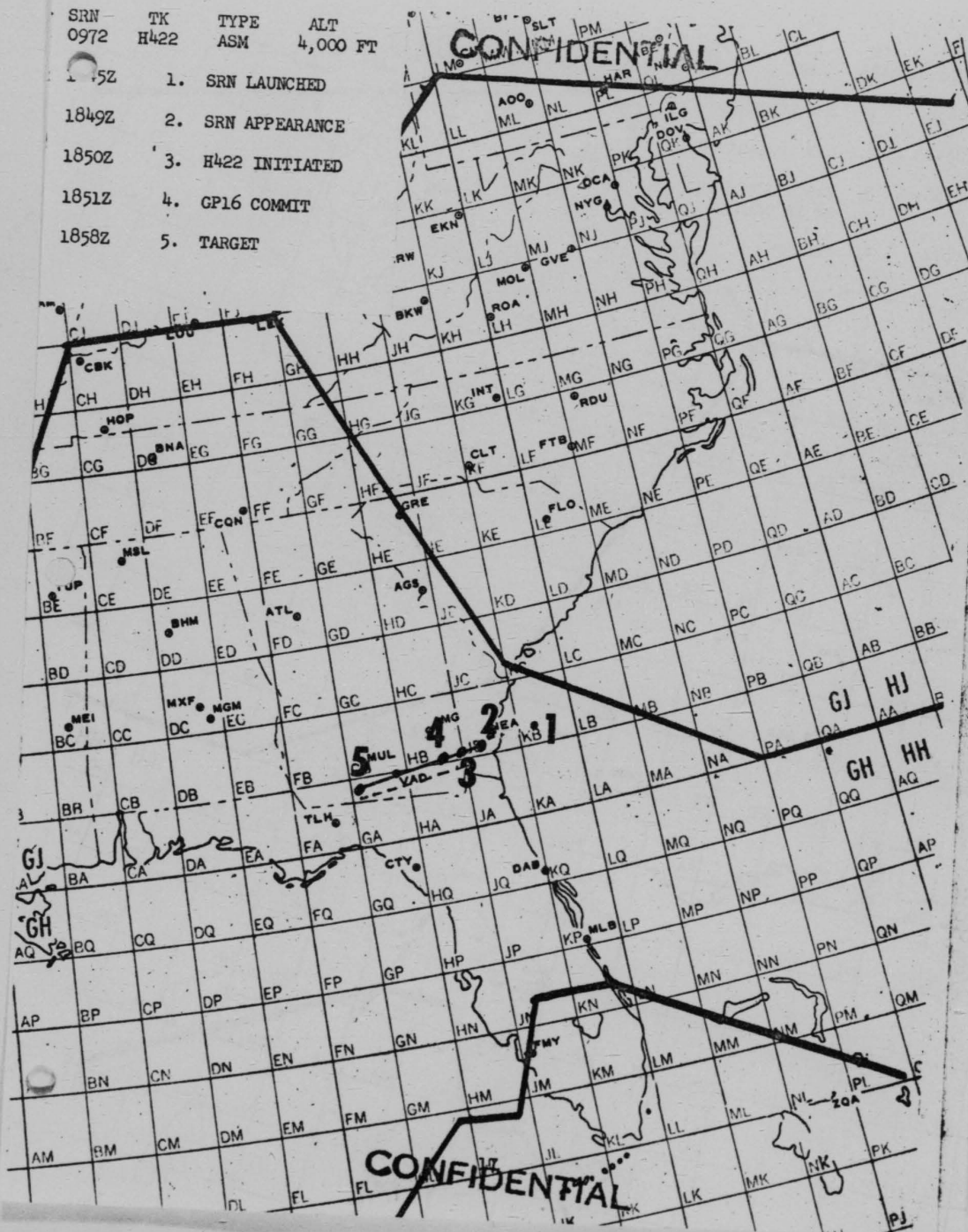
NOTE: NO TAC ACTION PRIOR TO BRL. KILLED BY MG 06 ON OUTBOUND LEG.

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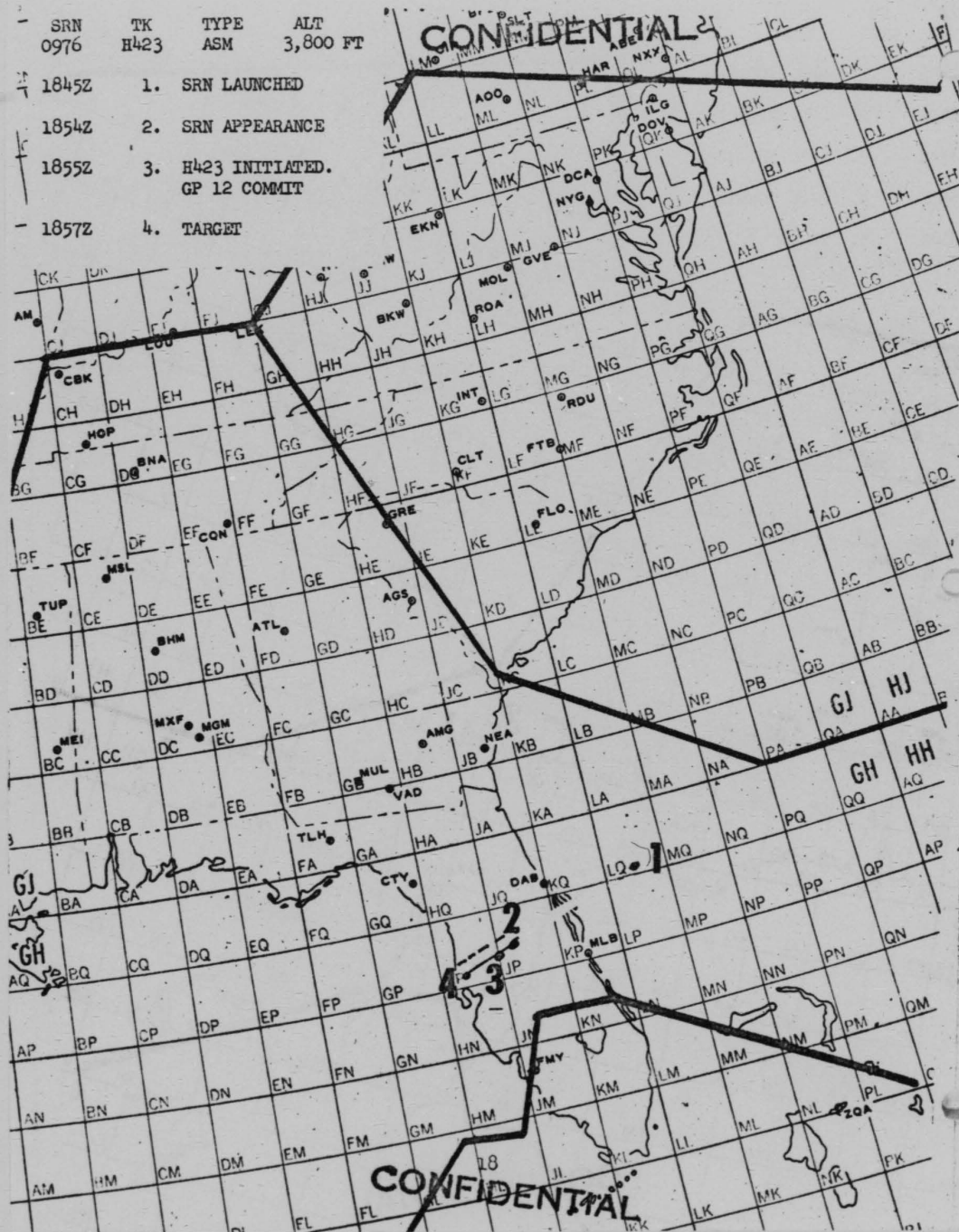


SRN	TK	TYPE	ALT
0972	H422	ASM	4,000 FT

1. 15Z 1. SRN LAUNCHED
- 1849Z 2. SRN APPEARANCE
- 1850Z 3. H422 INITIATED
- 1851Z 4. GP16 COMMIT
- 1858Z 5. TARGET

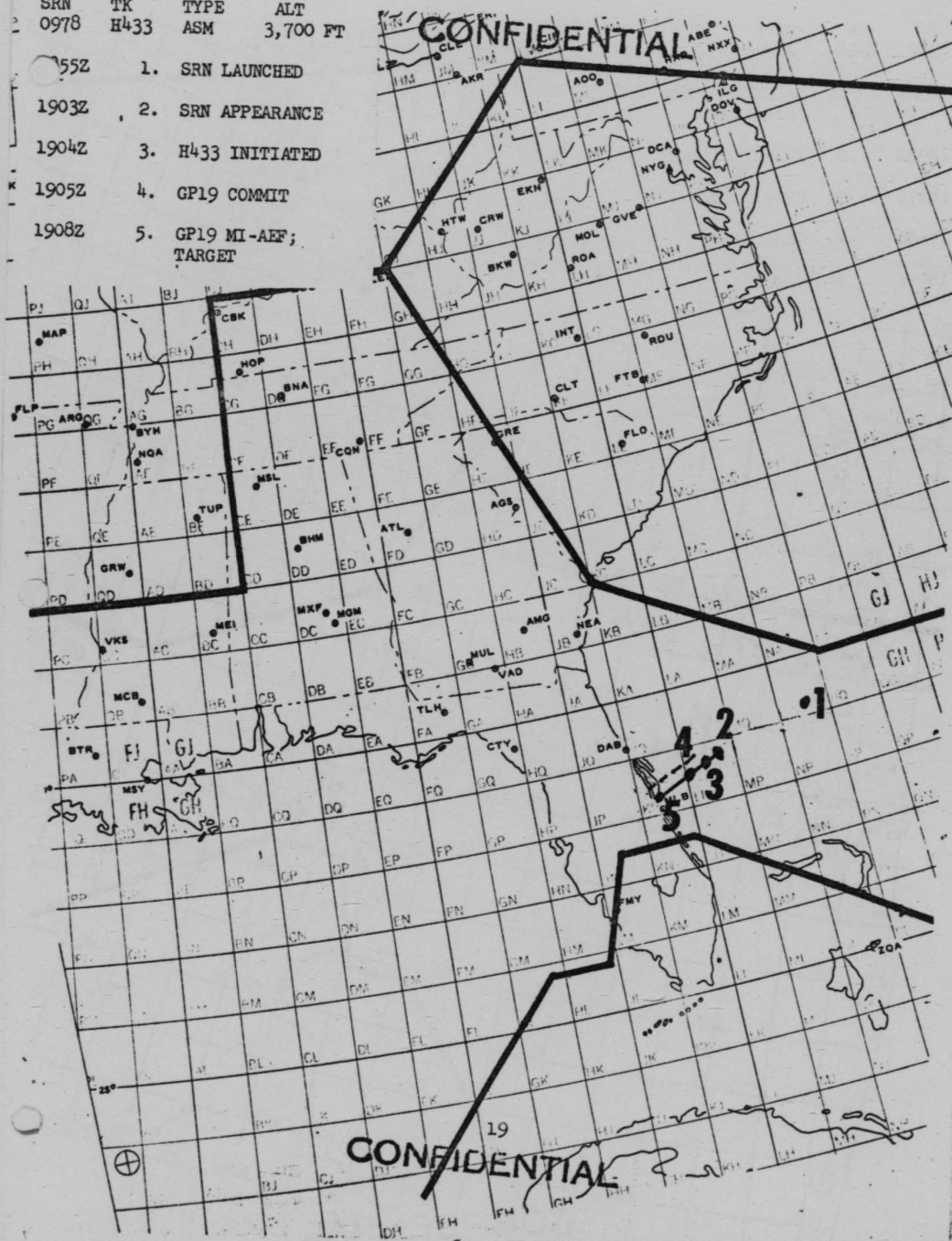


SRN	TK	TYPE	ALT
0976	H423	ASM	3,800 FT
1845Z	1.	SRN LAUNCHED	
1854Z	2.	SRN APPEARANCE	
1855Z	3.	H423 INITIATED. GP 12 COMMIT	
1857Z	4.	TARGET	

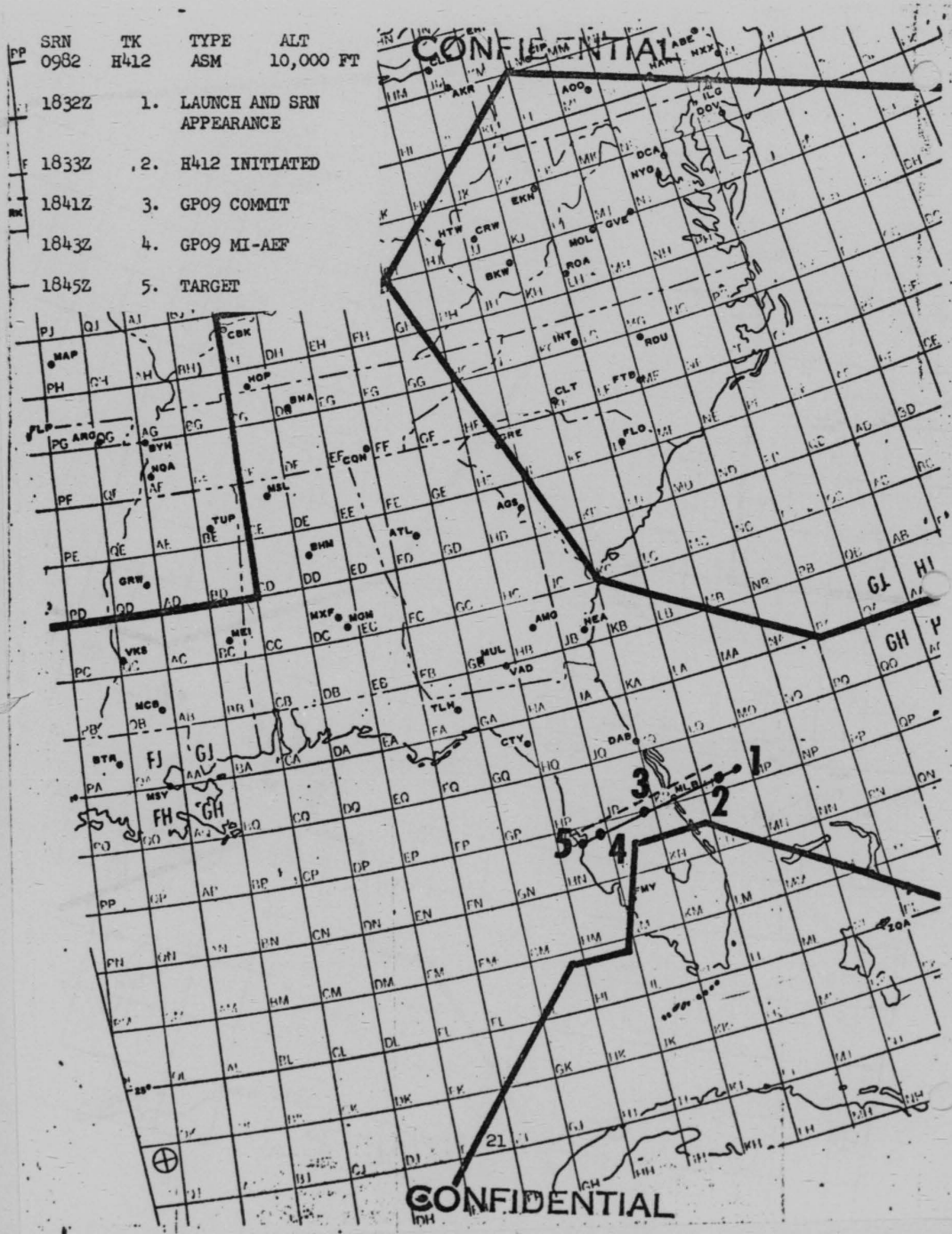


SRN	TK	TYPE	ALT
0978	H433	ASM	3,700 FT

- | | | |
|-------|----|------------------------|
| 1905Z | 1. | SRN LAUNCHED |
| 1903Z | 2. | SRN APPEARANCE |
| 1904Z | 3. | H433 INITIATED |
| 1905Z | 4. | GP19 COMMIT |
| 1908Z | 5. | GP19 MI-AEF;
TARGET |

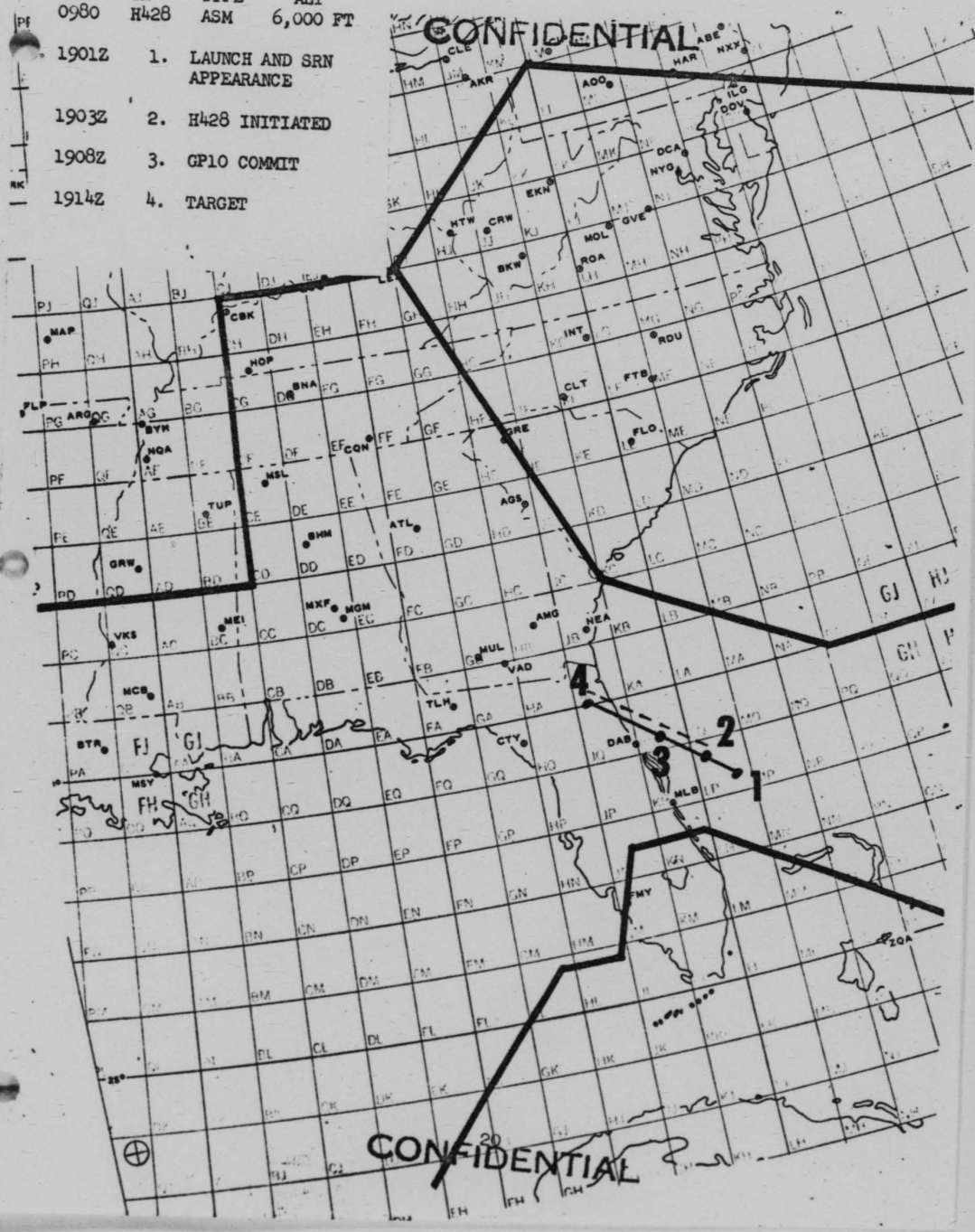


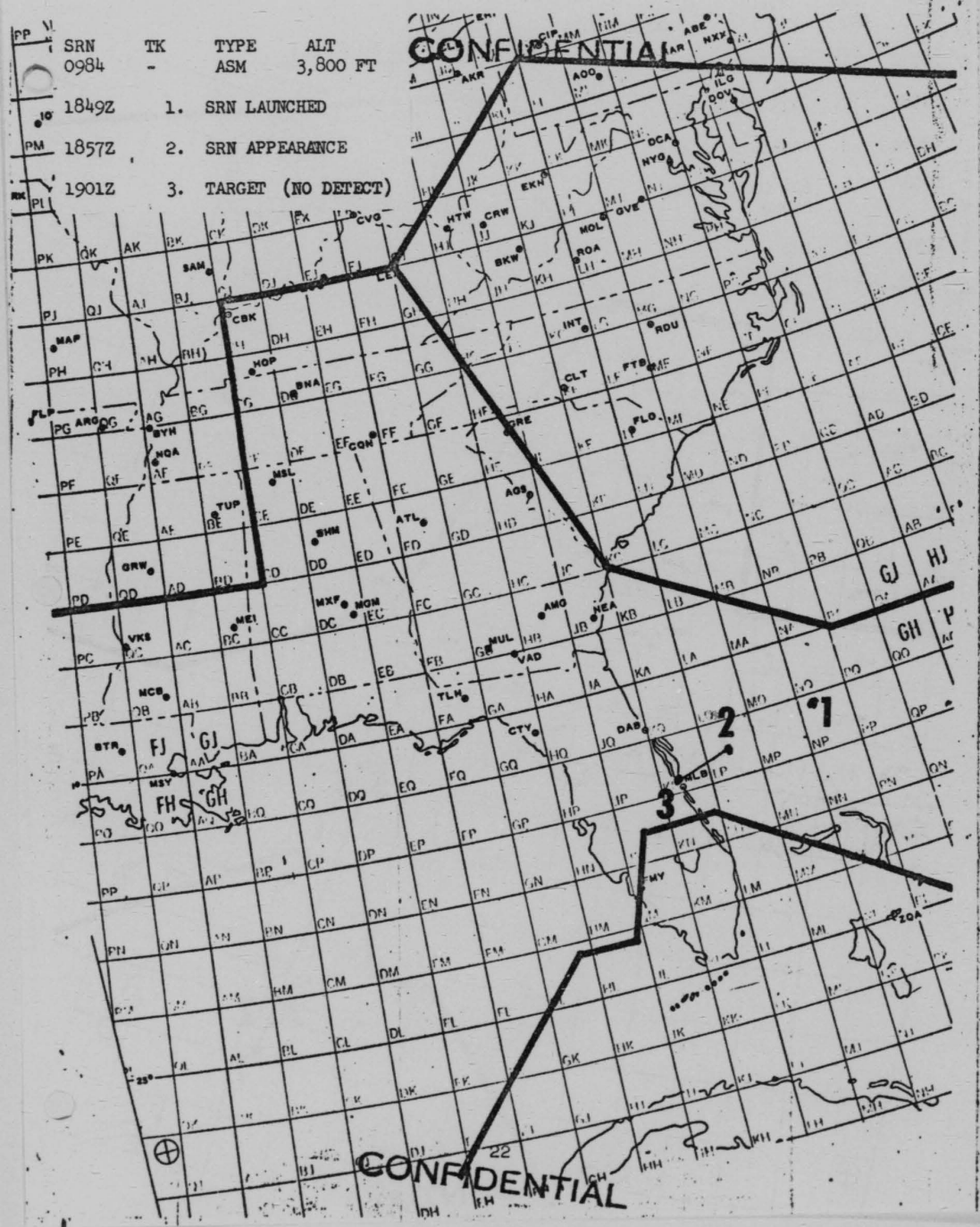
PP	SRN	TK	TYPE	ALT
	0982	H412	ASM	10,000 FT
	1832Z	1.	LAUNCH AND SRN APPEARANCE	
	1833Z	2.	H412 INITIATED	
	1841Z	3.	GPO9 COMMIT	
	1843Z	4.	GPO9 MI-AEF	
	1845Z	5.	TARGET	



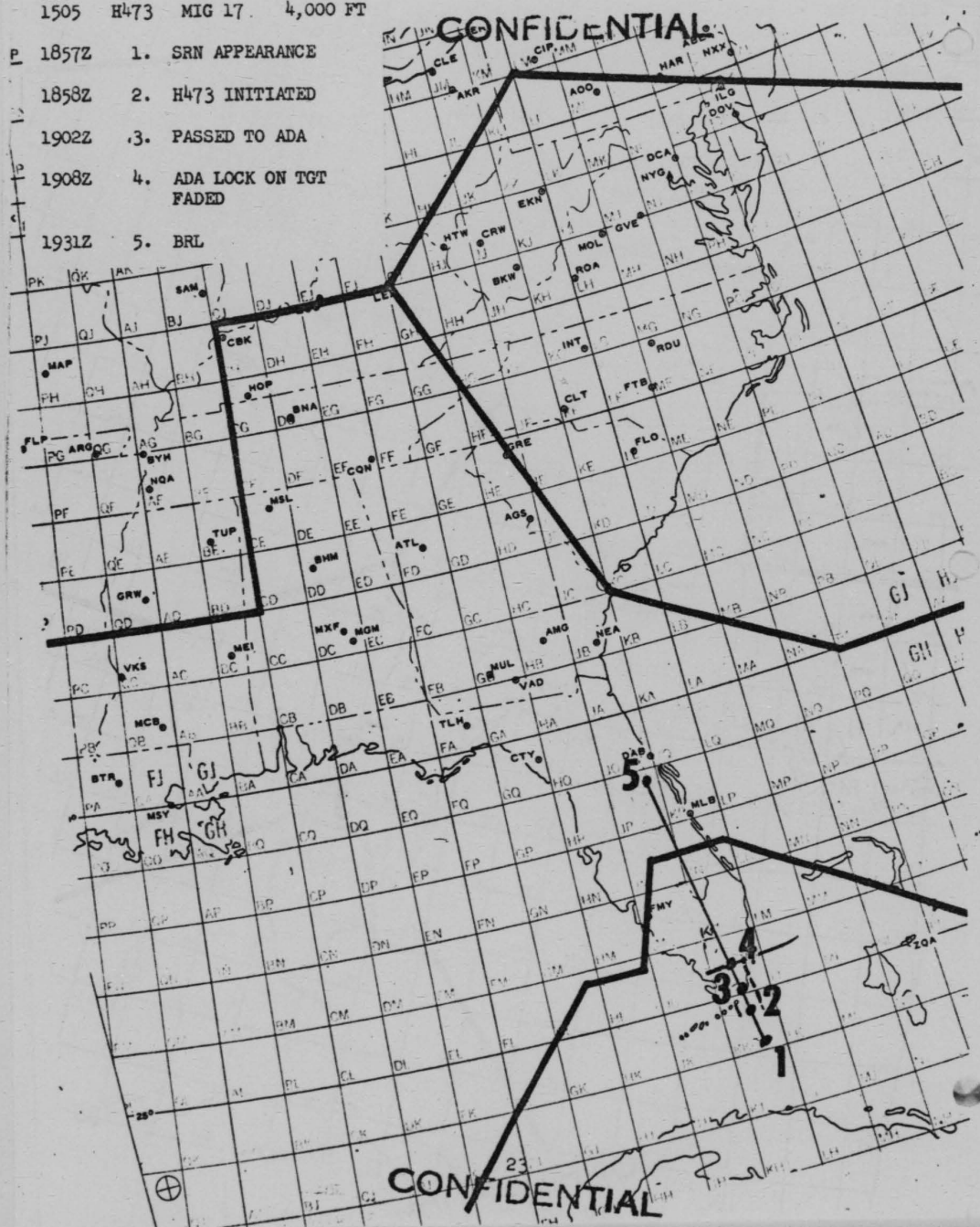
SRN	TK	TYPE	ALT
0980	H428	ASM	6,000 FT

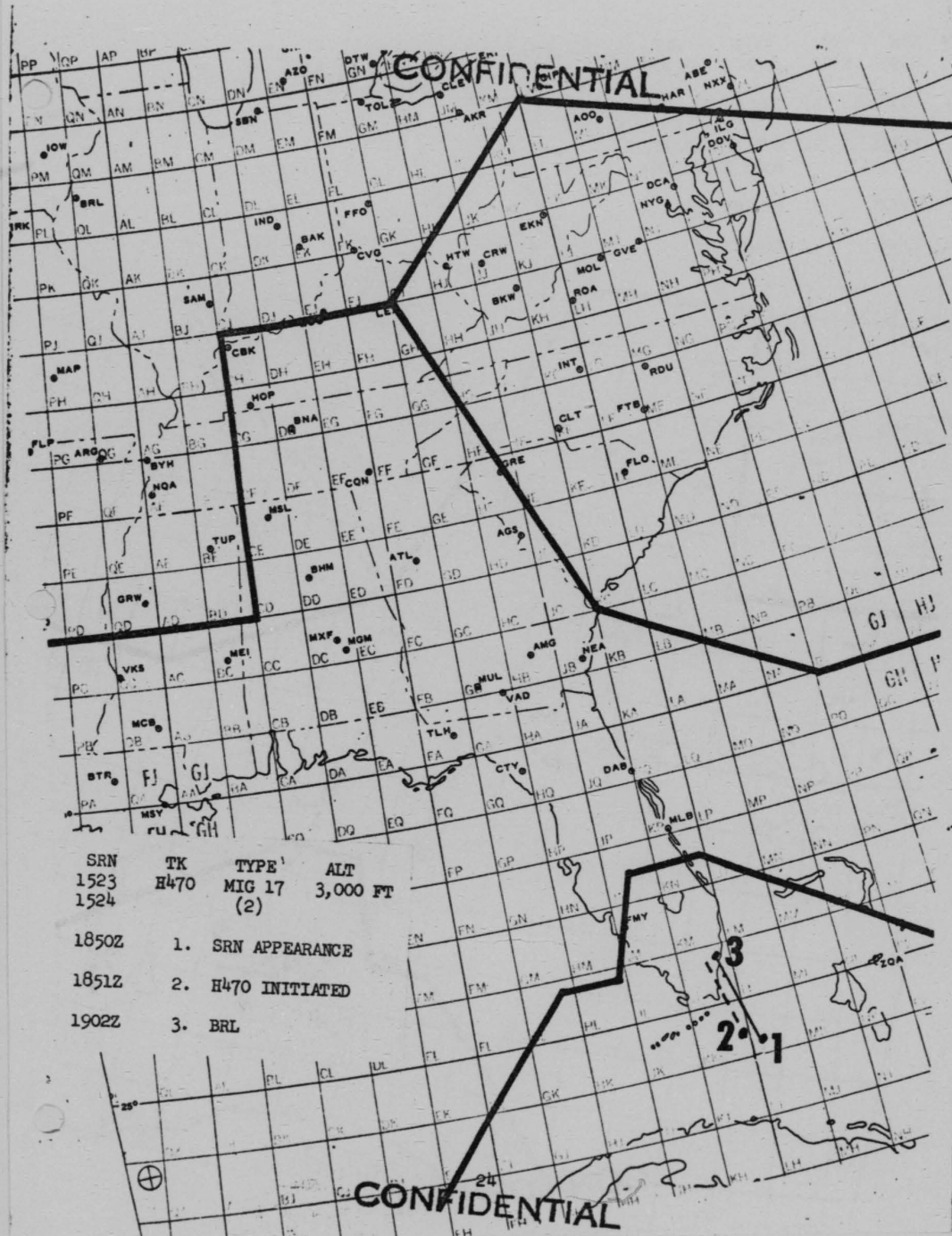
- | | | |
|-------|----|---------------------------|
| 1901Z | 1. | LAUNCH AND SRN APPEARANCE |
| 1903Z | 2. | H428 INITIATED |
| 1908Z | 3. | GP10 COMMIT |
| 1914Z | 4. | TARGET |



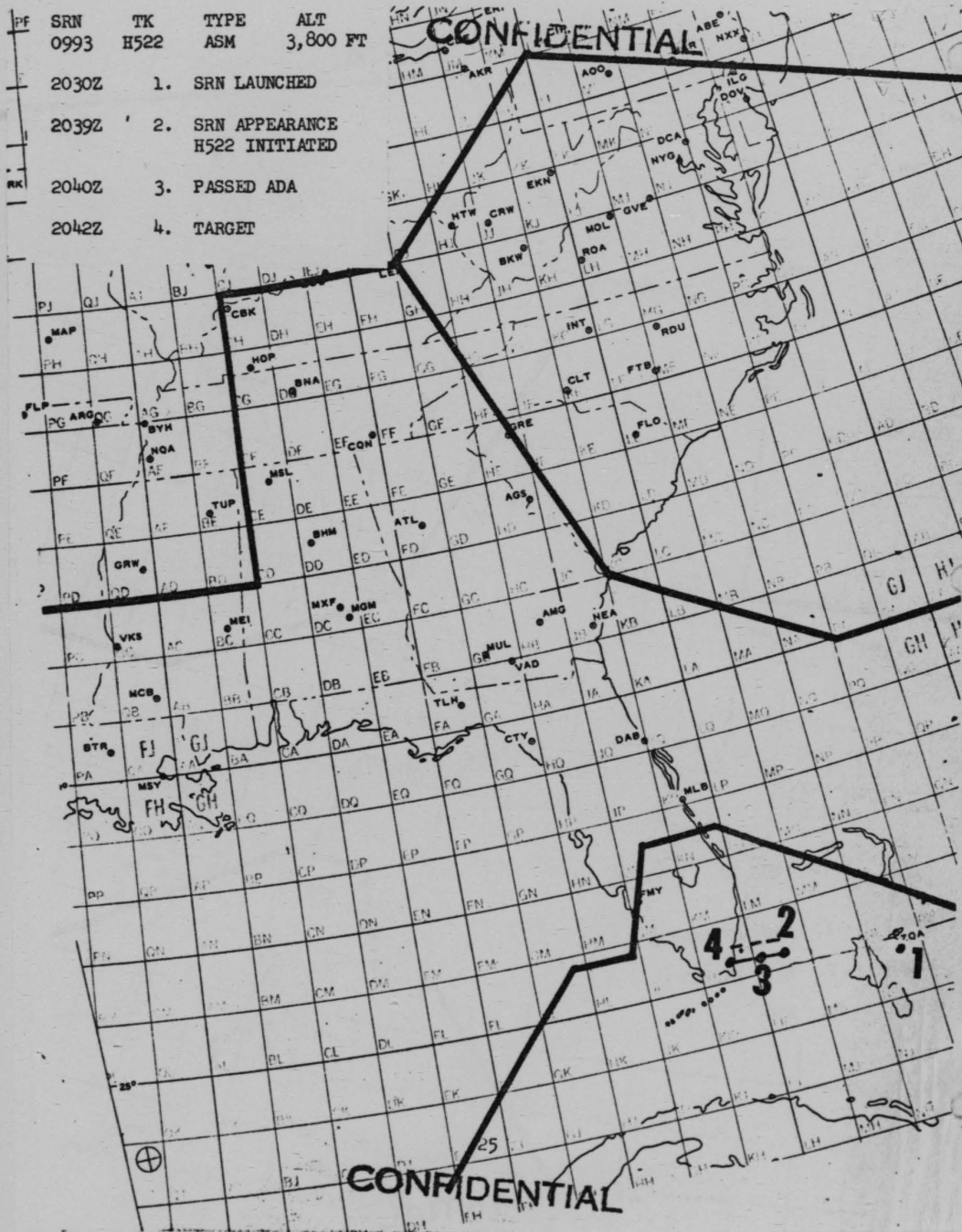


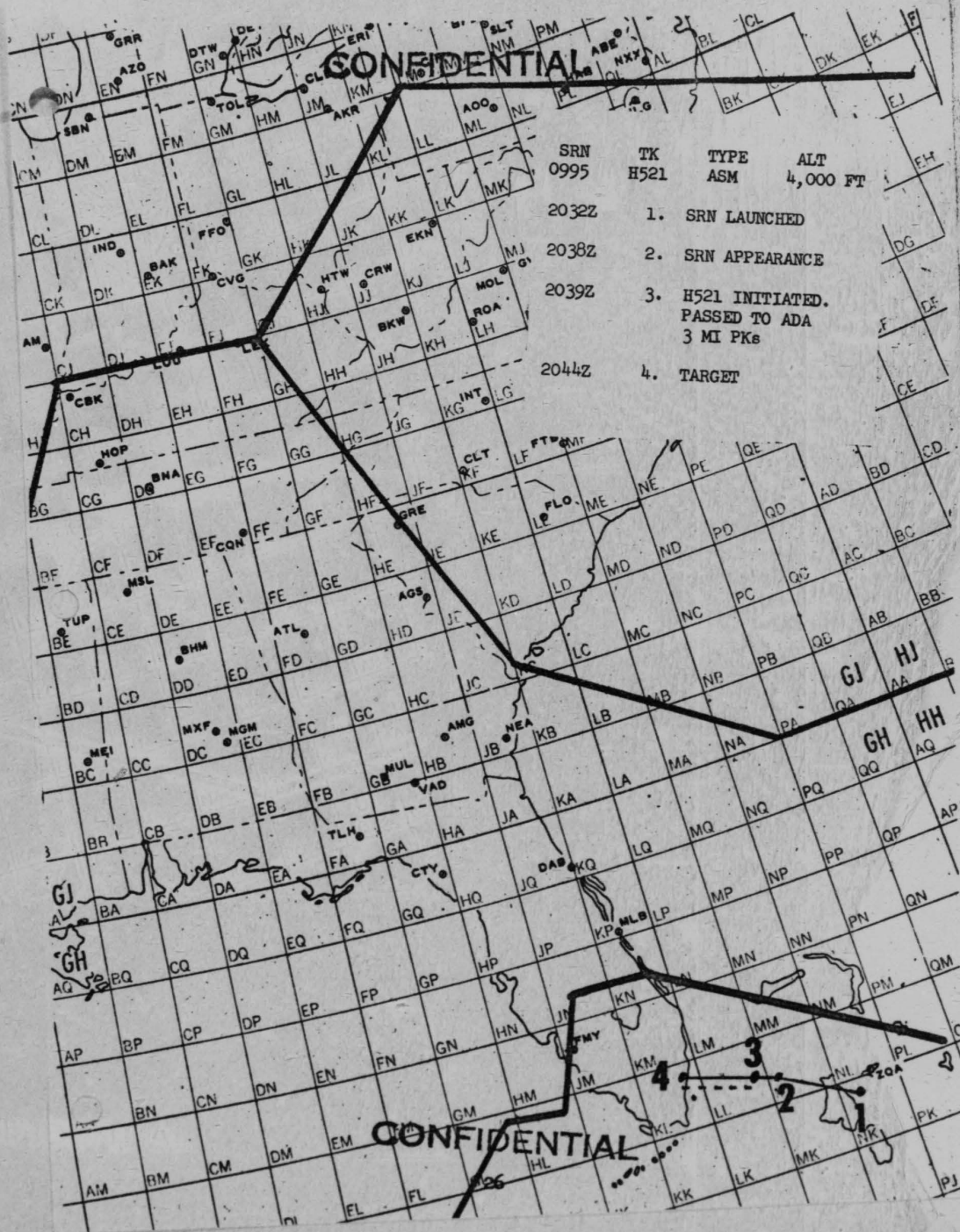
SRN	TK	TYPE	ALT
1505	H473	MIG 17	4,000 FT
P 1857Z	1.	SRN APPEARANCE	
1858Z	2.	H473 INITIATED	
1902Z	3.	PASSED TO ADA	
1908Z	4.	ADA LOCK ON TGT FADED	
1931Z	5.	BRL	





PF	SRN	TK	TYPE	ALT
	0993	H522	ASM	3,800 FT
	2030Z	1.	SRN LAUNCHED	
	2039Z	2.	SRN APPEARANCE H522 INITIATED	
RR	2040Z	3.	PASSED ADA	
	2042Z	4.	TARGET	





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PART IV

TREND ANALYSIS

RCC

Page

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TYNDALL

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KEY WEST

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RCC - Simulated

	20	30	40	50	60	70	80	90	100
Fairplay 72-4 24-30 June 1972 27/31									87%
Fairplay 73-1 6-8 Sep 72 24/46				52%					
Fairplay 73-2 18-22 Nov 72 32/38									84%
Fairplay 73-3/High Heels 7-18 March 1973 5/6									83%
Fairplay 73-4 25-28 Jun 73 35/41									85%

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TYNDALL - Simulated

		20	30	40	50	60	70	80	90	100
Fairplay 72-3 18-24 Mar 72	8/26	31% No radar available until raid was inland								
Fairplay 72-4 24-30 Jun 72	3/7	43% Three of four escapees were ASMs								
Fairplay 73-2 18-22 Nov 72	10/13	77%								
Fairplay 73-3/High Heels 7-18 Mar 73	19/20	95%								
Fairplay 73-4 25-28 Jun 73	16/22	73% All escapees were ASMs								

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KEY WEST - Simulated

	20	30	40	50	60	70	80	90	100
Fairplay 72-4 24-30 Jun 72 7/7									100%
Fairplay 73-1 6-8 Sep 72 68/69									98%
Fairplay 73-2 18-22 Nov 72 24/33							73%		
Fairplay 73-3/High Heels 7-18 Mar 73 29/30									97%
Fairplay 73-4 25-28 Jun 73 56/61									92%

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SECRET

PART V

PROBLEM ACTION REPORTS
(Based on Commander's Summaries)

1. TYNDALL

a. Problem: (S) "Some airlift replies between 2ORCC and NORAD did not info TBNCC. This precluded TBNCC BSSC in keeping abreast of movements of personnel/material within the Region, and restricts the TBNCC if required to assume ALCOP operations. Proposed solution: Info TBNCC BSSC on all movements requested and/or approvals pertaining to Region resources."

NOLOG OPR Action: (C) This comment is accurate. Action by the BSSC Transportation Section was incomplete in that the ALCOP was not notified of moves approved by NORAD and the departure-arrival times of the moves. All messages requesting airlift support reflect the 678th Air Defense Group/BSSC as info addressee.

b. Problem: (S) "The lack of turnaround capability at dispersal bases restricted the flow of interceptors to conduct the air battle. Proposed solution: Deploy weapons and load crews to bases IAW 2ONR OPORD 3000 in advance of the air battle phase to allow flexibility in turnaround capability."

NOLOG OPR Action: (C) Preplanned deployments are established by applicable contingency plan. Support of deployments/dispersals resulting from situations created by exercise scripting are handled as soon as the BSSC becomes aware of the need for support.

DOTW OPR Action: (U) Concur with NOLOG.

c. Problem: (S) "Simulation Problems, inherent to the program, caused difficulty in obtaining realistic responses from interceptors in relation to command headings. Speed and altitude - inability of the controller to order other than standard rates of climb/descent caused difficulties not normally experienced in real world missions. Proposed solution: Programming personnel observed the malfunctions and PIRs were submitted. Evaluation and recommended corrections should come from Programming."

DOPM OPR Action: (U) The program maintenance team at Tyndall has researched this problem and found the Air Defense Program (ADP) was working according to specifications. The ADP uses, according to TM (ADC) 2385/105/01AD, "maximum climb or the dive rate for the interceptor type is used to acquire the required command altitude".

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The dive rates are specified by ADC in TM (ADC) 2385/205 for each individual interceptor type being used. The rate of climb is gate for any climb over 5,000 feet, but there is only one rate of descent. The operations personnel at Tyndall should submit a Design Change Suggestion if they want to change these standard descent rates to include a more rapid descent.

NREA Comment: (U) In SAGE the standard climb rate may be changed manually by the interceptor pilot simulator (IPS) by activating an "expedite" altitude switch action on the TBS console. This gives a gate climb for the particular type interceptor involved. The descent on the other hand, is instantaneous, based on the command altitude inserted by the weapons controller or IPS.

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PART VI

FRAG ORDER

Following are pages 01 through 09 of Exercise Frag Order on AMALGAM FAIRPLAY 73-4 (U), Message DTG 12/1830Z June 1973, Subject: 20NR Frag Order for AMALGAM FAIRPLAY 73-4 (U), UNCLASSIFIED FOUO.

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JOINT MESSAGEFORM					SECURITY CLASSIFICATION	
PAGE	DRAFTER OR RELEASER TIME	PRECEDENCE ACT	LMF INFO	CLASS	CIC	FOR MESSAGE CENTER/COMMUNICATIONS CENTER ONLY
01 of 09		RR RR		CCCC		UNCLASSIFIED
BOOK YES	MESSAGE HANDLING INSTRUCTIONS				DATE - TIME	MONTH YR
					12/18/30Z	JUN 73

FROM: 20 NORAD RGN FT LEE AFS VA

TO: AIG 8750

XMT 702 RADRON SAVANNAH AFS GA

31 ARTY BDE HOMESTEAD AFB FLA ADM-SC

644 RADRON HOMESTEAD AFB FLA DOK

671 RADRON KEY WEST NAS FLA DOT

678 ADGP TYNDALL AFB FLA DO-X

701 ADGP FT FISHER AFS NC DO-X

630 RADAR SQDN HOUSTON FAA TEXAS DOT

ARNOLD ENG DEV CNTR (AFSC) ARNOLD AFS TENN DEP

HQ 2 CMBT SPT GP (SAC) BARKSDALE AFB LA 2CSGP/OTXD

14 FLY TNG WG (ATC) COLUMBUS AFB MISS DOOXD

29 FLY TNG WG (ATC) CRAIG AFB ALA DOOXD

ARMAMENT DEV & TEST CNTR EGLIN AFB FLA ADTC/DO

2578 AIR BASE GP (AFRES) ELLINGTON AFB TEXAS DOZ

23 CMBT SPT GP (TAC) ENGLAND AFB LA OT

HQ 101 AIRBORNE DIV FT CAMPBELL KY AJCGC-PO

US ARMY ARMOR CNTR FT KNOX KY AHBADPT-PO-C


DISTR:

DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE & DATE	SPECIAL INSTRUCTIONS
EDWARD DOLAN, MAJOR, USA NREA, EXT 701, 12 JUN 73	ADS 29 JUN 73
TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE	UNCLASSIFIED
FRED O. HAYWARD JR., COL, USA, NHDC	CONFIDENTIAL
SIGNATURE Edward Dolan Major USA	

DD FORM 1300 173


REPLACES PREVIOUS EDITION WHICH WILL BE USED.

WFO 1973-400-200

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		ACT	INFO				DATE - TIME	MONTH	YR	
02 of 09										
BOOK	MESSAGE HANDLING INSTRUCTIONS									
<p>FROM:</p> <p>TO: HQ USA SCH/TNG CNTR FT MCCLELLAN ALA AJMGT-S HQ FT MCPHERSON/FT MCPHERSON GA AJXPT HQ FT POLK/FT POLK LA ABLE-DT (NBC) US ARMY AVIATION CNTR FT RUCKER ALA AJRDPTS-PO NAS GLYNCO/GLYNCO GA SED NAS MERIDIAN/MERIDIAN MISS AOE-120 US ARMY MSL CMD REDSTONE ARSENAL ALA ANSMI-KFE RED RIVER ARMY DEPOT TEXARKANA TEXAS AMXRR-AM NAS SAUFLEY PENSACOLA FLA CODE SED NAS WHITING MILTON FLA CODE AODP 702 RADRON SAVANNAH AFS GA DOT (MAIL) 632 RADRON ROANOKE RAPIDS AFS NC DOT (MAIL) 649 RADRON BEDFORD AFS VA DOT (MAIL) 771 RADRON CAPE CHARLES AFS VA DOK (MAIL) 861 RADRON AIKEN AFS SC DOT (MAIL)</p> <p>INFO: CINCORAD ENT AFB COLO NOOT-TE/NOET-S ADC ENT AFB COLO DOTXE/DOCCX</p>										
DISTR:										
DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE & DATE						SPECIAL INSTRUCTIONS				
						<p>ADS 29 JUN 73</p> <p>UNCLASSIFIED</p>				
RELEASER TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE										
SIGNATURE 						CONFIDENTIAL				

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		ACT	INFO				DATE - TIME	MONTH	YR	
03 of 09										
BOOK	MESSAGE HANDLING INSTRUCTIONS									
<p>FROM:</p> <p>TO: COMASWFORLANT NORFOLK VA</p> <p>20 SURV SQDN EGLIN AFB FLA DOV</p> <p>DET 5/14 MSL WNG SQDN FT FISHER AFS NC CC</p> <p>DET 7/14 MSL WNG SQDN MACDILL AFB FLA CC</p> <p>CMDR 1ST RGN ARADCOM STEWART AFB NY ADAGC-P</p> <p>21NR HANCOCK FLD NY NREA</p> <p>22NR NORTH BAY ONTARIO CANADA EXE</p> <p>23NR DULUTH IAP MINN NREA</p> <p>24NR MALMSTROM AFB MONT NREA</p> <p>25NR MCCHORD AFB WASHINGTON NREA</p> <p>26NR LUKE AFB ARIZ NREA</p> <p>ALASKAN NORAD RGN ELMENDORF AFB ALASKA NREA</p> <p>CONFIDENTIAL 20NREA FOR CMDRS, OPERATIONS AND TRUSTED AGENTS</p> <p>SUBJ: 20NR FRAG ORDER FOR AMALGAM FAIRPLAY 73-4 (U)</p> <p>REF: CINCNORAD OPOD 3700</p> <p>1. (C) SITUATION. 20NR WILL PARTICIPATE IN AMALGAM FAIRPLAY 73-4 DURING THE LIABILITY PERIOD 25/1200Z-29/2300Z JUN 73.</p>										
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TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE						ADS 29 JUN 73				
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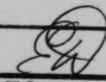
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04 of 09						DATE - TIME MONTH YR
BOOK MESSAGE HANDLING INSTRUCTIONS						
<p style="text-align: center;">FROM:</p> <p style="text-align: center;">TO:</p> <p>2. (U) OBJECTIVES.</p> <p style="margin-left: 40px;">A. TO EXERCISE CMDRS AND THEIR STAFFS IN DETERMINING RECONSTITUTION PRIORITIES.</p> <p style="margin-left: 40px;">B. TO EXERCISE THE BSSC AT THE NORAD ALCOP IN MAINTAINING AN ACCURATE, CURRENT ACCOUNT OF OPERATIONS AFFECTING NORAD FACILITIES.</p> <p style="margin-left: 40px;">C. TO EXERCISE 20NR BSSC AND SUBORDINATE UNIT BSSCS IN MAINTAINING AND REPORTING AN ACCURATE, CURRENT ACCOUNT OF OPERATIONS AFFECTING RGN FACILITIES WHEN THE RGN RESOURCES ARE SUBJECTED TO VARYING DEGREES OF DEGRADATION.</p> <p>3. (U) PARTICIPANTS.</p> <p style="margin-left: 40px;">A. THE FOLLOWING 20NR UNITS WILL BE FULLY ACTIVE PARTICIPANTS INCLUDING BATTLE STAFF AND BSSC: 20NRCC, TYNDALL BNCC, KWMNCC, RICHMOND NGCI AND ALL ADA DEFENSES. (THE EXTENT OF ADA FIRE UNIT PARTICIPATION WILL BE DETERMINED BY DEFENSE COMMANDERS.)</p> <p style="margin-left: 40px;">B. THE FOLLOWING UNITS WILL BE LIMITED PARTICIPANTS AND WILL ASSEMBLE SUFFICIENT QUALIFIED PERSONNEL (INCLUDING NECESSARY</p>						
DISTR:						
DRAFTER TYPED NAME, TITLE, OFFICE SYMBOL, PHONE & DATE				SPECIAL INSTRUCTIONS UNCLASSIFIED ADS 29 JUN 73		
RELEASER TYPED NAME, TITLE, OFFICE SYMBOL AND PHONE						
SIGNATURE						

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BOOK	UNCLASSIFIED								
MESSAGE HANDLING INSTRUCTIONS									
<p style="text-align: center;">FROM:</p> <p style="text-align: center;">TO:</p> <p>BATTLE STAFF AND BSSC PERSONNEL) TO RECEIVE, ACKNOWLEDGE AND AUTHENTICATE VOICE ALERT FORMATS, RESPOND TO TRUSTED AGENT SCRIPTED INPUTS AND MAKE APPROPRIATE REPORTS IAW CURRENT DIRECTIVES: FT FISHER BNCC, 48FIS, DET 2/552 AEW&C, ANG FIS AND RADAR SQDNS.</p> <p>C. HOUSTON MNCC WILL PARTICIPATE BY RECEIVING, ACKNOWLEDGING AND AUTHENTICATING VOICE ALERT FORMATS ONLY.</p> <p>D. NUDET SIGHTINGS AND BATTLE DAMAGE SCRIPTS FOR STATIC MISSILE IMPACTS WILL BE INPUT AS APPROPRIATE FROM NON-NORAD UNITS.</p> <p>E. THE NORAD ALCOP WILL PARTICIPATE INSTEAD OF THE NCMC.</p> <p>4. (C)(U) GROUND RULES ARE AS STATED IN APPENDIX 5 TO ANNEX C TO CINCNORAD OPORD 3700 EXCEPT AS ADDED, DELETED OR AMPLIFIED BELOW:</p> <p>A. (U) SIMULATED AEW&C WILL BE AVAILABLE FOR MANNING NORMAL WAR TIME STATIONS AND PROVIDING THREAT TELL INFORMATION ONLY. ALL FUNCTIONS WILL BE SIMULATED AT THE RCC.</p> <p>B. (U) EXERCISE FORSTAT REPORTS WILL BE AS OF 1200Z DAILY SO</p>									
DISTR:									
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						ADS 29 JUN 73			
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06 OF 09		ACT INFO				UNCLASSIFIED
BOOK	MESSAGE HANDLING INSTRUCTIONS					DATE - TIME MONTH YR
<p>FROM:</p> <p>TO:</p> <p>AS TO ARRIVE MLT 3 HRS FOLLOWING THE "AS OF" TIME. REAL WORLD FORSTAT REPORTING PROCEDURES WILL NOT CHANGE.</p> <p>C. (C) REAL WORLD ARMAMENT WILL BE PLAYED. THIS INCLUDES ARMAMENT TO SUPPORT ALL INTCP FORCES, SUCH AS REGULAR AND NATIONAL GUARD UNITS, CAT II FORCES, COLLEGE TAP (3319) AND COLLEGE TANG (OPLAN 3320). ADDITIONAL ARMAMENT WILL NOT BE SIMULATED INTO PLAY UNLESS OBTAINED THROUGH THE NORAD/ALCOP BSSC. NUCAV AND NUREP WILL NOT BE PLAYED.</p> <p>D. (U) THE CURRENT S-1 PRINTOUT WILL BE IN EFFECT.</p> <p>E. (U) THE REGION WILL OPERATE IN LVL 2 "B" FROM THE TIME OF FLUSH UNTIL THE END OF THE AIR BATTLE.</p> <p>F. (U) FRIENDLY AIR TRAFFIC WILL BE PLAYED.</p> <p>G. (U) A GENERAL RECALL IS NOT REQUIRED. BATTLE STAFFS AND BSSCS WILL ASSEMBLE AT THE APPROPRIATE DEFCON OR ON INSTRUCTIONS OF THE BATTLE CMDR. WEAPONS CREWS AT 2ORCC, TYNDALL BNCC AND KWMNCC WILL BE GIVEN AN IN PLACE TIME BY THE UNIT TA.</p>						
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07 of 09						DATE - TIME MONTH YR
BOOK	MESSAGE HANDLING INSTRUCTIONS					
<p>FROM:</p> <p>TO:</p> <p>H. (U) ALL PARTICIPANTS WILL ADHERE TO SOUND OPERATIONS SECURITY (OPSEC) PRACTICES.</p> <p>5. (U) LOGS AND REPORTS. THE FOLLOWING WILL BE SUBMITTED TO 20 NREA AS INDICATED BELOW:</p> <p>A. CMDRS DEBRIEFING SLIDE INFO WILL BE FORWARDED SO AS TO ARRIVE NLT 2 WORKING DAYS AFTER FADEOUT.</p> <p>B. CMDRS SUMMARY REPORT WILL BE SUBMITTED WITHIN 2 WORKING DAYS AFTER FADEOUT FROM TYNDALL BNCC AND KWMNCC. FORMAT IS AS SHOWN IN PARA 4A, ANNEX M, 20NR OPORD 3202 (SIMEX). ANY CMDR UNDER OPCON 20NR IS INVITED TO SUBMIT COMMENTS.</p> <p>C. PARTICIPATING AADCPS WILL FORWARD DATA EXTRACTED FROM COLUMNS 2, 5, 8, 10 AND 11 OF NORAD FORM 16 NLT 2 WORKING DAYS AFTER FADEOUT. THE SRN WILL BE INCLUDED WITH THE SAGE/BUIC TRACK NUMBERS.</p> <p>D. THE RCC WILL PROVIDE WD AND IND LOGS IMMEDIATELY AFTER FADEOUT.</p>						
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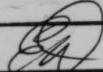
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BOOK		MESSAGE HANDLING INSTRUCTIONS																																													
<p>FROM:</p> <p>TO:</p> <p>6. (U) SPECIAL FAIRPLAY DATA COLLECTION FORMS HAVE BEEN DISTRIBUTED THROUGH TA CHANNELS. PROPER COMPLETION LAW FURNISHED INSTRUCTIONS IS A MATTER OF COMMAND INTEREST.</p> <p>7. (U) EXERCISE CONTROL GROUP</p> <table border="0"> <tr> <td></td> <td>DUTY</td> <td>EXER</td> </tr> <tr> <td colspan="3">A. 20NR SAGE 332-LXXX/GP 687-4008</td> </tr> <tr> <td>EXERCISE DIR/UMPIRE</td> <td>MAJ DOLAN</td> <td>701 337/772</td> </tr> <tr> <td>ASST EXERCISE DIRECTOR</td> <td>MAJ CYR</td> <td>701 337/772</td> </tr> <tr> <td>ARMAMENT COORD</td> <td>SSGT CARPENTER</td> <td>701 237</td> </tr> <tr> <td>BATTLE DAMAGE COORD</td> <td>SSGT SHAFFER</td> <td>701 279.</td> </tr> <tr> <td>SIM SWITCH</td> <td></td> <td>280</td> </tr> <tr> <td>AIR BASE SIM</td> <td></td> <td>246/249/256/276</td> </tr> <tr> <td colspan="3">B. TYNDALL BNCC SAGE 645-OXXX</td> </tr> <tr> <td>EXERCISE DIRECTOR</td> <td>LT BLANCHARD</td> <td>344 397</td> </tr> <tr> <td>BATTLE DAMAGE COORD</td> <td>SSGT WYANT</td> <td>338 397</td> </tr> <tr> <td>TRUSTED AGENT</td> <td>MSGT TANNER</td> <td>344 319</td> </tr> </table>													DUTY	EXER	A. 20NR SAGE 332-LXXX/GP 687-4008			EXERCISE DIR/UMPIRE	MAJ DOLAN	701 337/772	ASST EXERCISE DIRECTOR	MAJ CYR	701 337/772	ARMAMENT COORD	SSGT CARPENTER	701 237	BATTLE DAMAGE COORD	SSGT SHAFFER	701 279.	SIM SWITCH		280	AIR BASE SIM		246/249/256/276	B. TYNDALL BNCC SAGE 645-OXXX			EXERCISE DIRECTOR	LT BLANCHARD	344 397	BATTLE DAMAGE COORD	SSGT WYANT	338 397	TRUSTED AGENT	MSGT TANNER	344 319
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09 of 09							DATE - TIME MONTH YR
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<p>FROM:</p> <p>TO:</p> <p style="text-align: right;">DUTY EXER</p> <p>C. KEY WEST MNCC SAGE 641-LXXX</p> <p>TRUSTED AGENT TSGT MURRAY 280 302</p> <p>EXERCISE AMALGAM FAIRPLAY 73-4</p> <p>ADS 29 JUNE 1973</p>							
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						ADS 29 JUNE 1973	
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**HEADQUARTERS
20 NORAD REGION**

EXERCISE & ANALYSIS REPORT



**EXERCISE
AMALGAM ARROW 73-8**

CLASSIFIED BY 20 NORAD REGION/NREA
SUBJECT TO GENERAL DECLASSIFICATION
SCHEDULE OF EXECUTIVE ORDER 11652;
AUTOMATICALLY DOWNGRADE AT TWO YEAR
INTERVALS, DECLASSIFY ON 31 DEC 81

OPR NREA

SECRET

20 JUL 73

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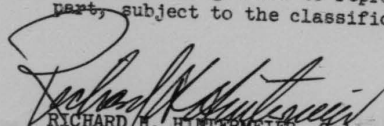
PREFACE

This document consists of post exercise analysis information for AMALGAM ARROW 73-8, which was conducted on 20 June 1973.

This report contains significant facts and statistics associated with the exercise. The primary purpose of this report is to determine if exercise objectives were met, analyze the training conducted, identify problem areas, and indicate where improvement is necessary.

Subordinate units are encouraged to make a detailed analysis of specific factors noted in their area of responsibility. Trouble tracks are summarized in Part III of this report.

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RICHARD H. WINTERMEIER, Colonel, USAF
DCS/Operations

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18 Arty Gp Oakdale	1
1/65 ADA Key West	1
USAF	
48 Ftr Intcp Sqdn	1
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112 Ftr Gp	1
125 Ftr Gp	1
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NOPS	1
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TOTAL	28

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PART I

EXERCISE DESIGN AND OBJECTIVES

1. Exercise Design:

a. Amalgam Arrow 73-8 was designed as a multi-region exercise with a large attacking force employing intensive ECM/Chaff. Weather drastically reduced eligible targets for Key West. Weather, air/ground aborts, reduced the target force for the region.

b. Ninety-two aircraft were scheduled to fly during the exercise with the heaviest concentration in Tyndall's area. Sixty-seven aircraft, 69 faker targets, actually flew. The 20th practiced flush procedures at LFI and PIT. Level I and IV were practiced.

c. No AEW&C participation was required.

d. Houston MNCC acknowledged voice alert formats only.

e. Amalgam Arrow 73-8 was the first exercise in three years where a Gulf threat was executed.

f. Twenty-five of the 69 faker's routes employed ECM and Chaff.

2. Objectives: (NORAD Objectives)

a. Exercise NORAD air defense components within the 20th and 21st NORAD Regions.

b. Exercise safe passage of interceptors through ADA Defense within both regions. This was accomplished. No problems have been received regarding safe passage.

c. Exercise the capability for passive detection, tracking and interception of ECM targets. Very little passive tracking was possible in Sector I. Some strobes from the 21NR were available, but very little ECM was observed in Sector I for the RCC. Tyndall reported good passive tracking training in Sector II.

d. Exercise FIS flush procedures at Pittsburgh IAP, Langley AFB and Jacksonville IAP. No flush was attempted at Jacksonville due to mandatory weather conditions. The flush (6 aircraft) at Pittsburgh was without problem. The flush at Langley (7 aircraft) was delayed several minutes, but otherwise was good. Pittsburgh aircraft were all airborne in 13 minutes. The runway construction at Langley caused approximately 20 to 30 minutes of delay on some aircraft. The first Langley MG was airborne at 0230Z, the last at 0248Z.

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e. Exercise general recall of 20 personnel. The recall at the AFS was much better than some in the past. Most previous problems were corrected. Two problems were noted:

- (1) NCOD was rather slow with his calls.
- (2) Overall, more hustle is required.

f. To annotate and evaluate interceptor and ADA kill patterns. A good kill pattern was achieved. The absence of kills in the Key West area reflect the lack of targets as all six T-33s scheduled aborted for weather.

3. Region Threat: Sixty-nine routes were flown by 67 aircraft. Ten target routes were multiple aircraft "holding hands". Some aircraft had multiple IPs. Of the 69 routes, 51 were charged (18 flew and were not charged): 13 RCC, 6 Fort Fisher, 25 Tyndall and 7 Key West. Those not charged included 2 RCC, 2 Fort Fisher and 14 for Tyndall.

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PART II

MISSION RESULTS

CHART

Region Threat

PAGE

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Kill Pattern

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Mission Summary

6

ADA Summary

7

Interceptor Summary

8

Interceptor Squadron Summary

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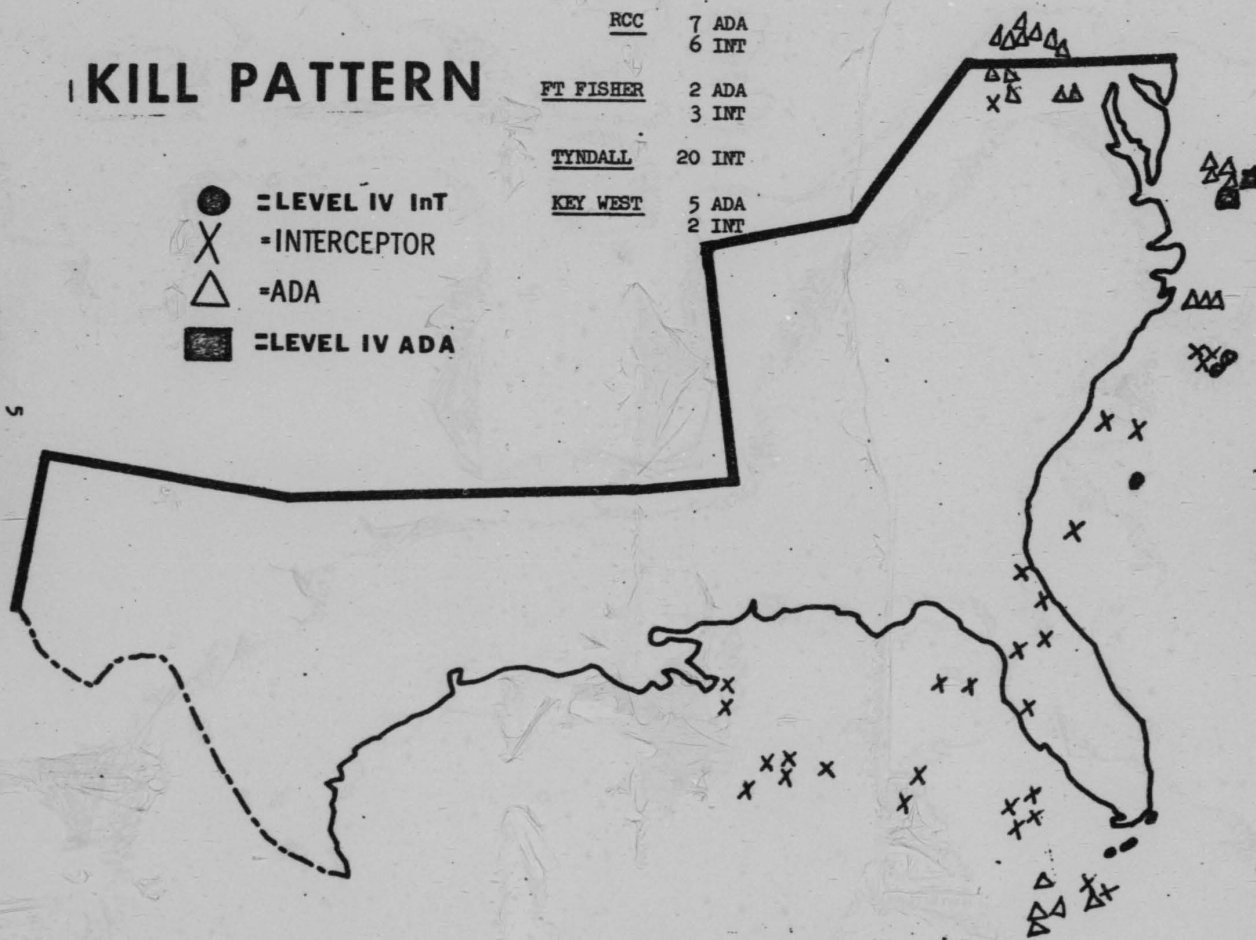
KILL PATTERN

- = LEVEL IV InT
- X = INTERCEPTOR
- △ = ADA
- = LEVEL IV ADA

<u>RCC</u>	7 ADA
	6 INT
<u>FT FISHER</u>	2 ADA
	3 INT
<u>TYNDALL</u>	20 INT
<u>KEY WEST</u>	5 ADA
	2 INT

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CONFIDENTIALMISSION SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>FT FISHER BNCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fakers Planned	18	9	47	15	89
Fakers Flown	15	8	39	7	69
Fakers Flown/ Not Charged	2	2	14	-	18
Fakers Detected	15	8	39	7	69
Fakers Identified	15	8	39	7	69
Fakers Charged	15	6	25	7	53
Fakers Engaged	13	5	20	7	45
Kills Prior to BRL	13	5	20	7	45
Neutralization Rate	87%	83%	80%	100%	88%

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ADA SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>FT FISHER BNCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
ADA Fire Units	11	11	-	11	33
Missiles Available HAWK/HERC	*	*	*	*	*
Fakers Engaged	45	8	-	7	60
Missiles Expended	45	8	-	7	60
MA/First Kill	7	2	-	5	14
Overkills	38	5	-	-	43
Kills	45	7	-	5	57
MIs	-	1	-	2	3**

*Intentionally left blank

**1 Hold Fire; 2 PK

7

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CONFIDENTIALINTERCEPTOR SUMMARY

<u>TACTICAL ACTION</u>	<u>2ORCC</u>	<u>FT FISHER BNCC</u>	<u>TYNDALL BNCC</u>	<u>KEY WEST MNCC</u>	<u>REGION TOTALS</u>
Fighters Available	24	14	15	2	55
Sorties Flown	27	13	18	2	60
Air Aborts	1	-	-	-	1
Ground Aborts	1	-	1	1	3
Faker Com'td On	17	4	27	2	50
No. of Pairings	17	7	40	2	66
Diverts	8	3	15	-	26
Intercept Attempts	9	4	25	2	40
MI	3	-	3	-	6
MA-NK PK	-	-	-	-	-
First Kill	6	3	20	2	31
Total Kills	6	4	22	2	34

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CONFIDENTIALINTERCEPTOR SQUADRON SUMMARY

<u>BASE</u>	<u>CALL SIGN</u>	<u>SORTIES</u>	<u>MA</u>	<u>MA-NK</u>	<u>MI</u>	<u>ARM</u>		<u>REASON FOR MIs</u>
						<u>P</u>	<u>S</u>	
PIT	NP	2 - 6*	1	3	-	3	1	
LFI	MG	2 - 7*	6	-	2	3	3	2 - FS
ILM	MG	2	2	-	-	1	1	
MMT	NK	6	1-1**	-	1	2	-	1 ACP
NKT	VL	2	-	-	-	-	-	
NBC	VL	3	2-1**	-	-	2	1	
PAM	GP	5	8	-	-	8	-	
JAX	FH	10	10-1**	-	3	9	5	2 ECM 1 FS
HST	MG	2	2	-	-	2	-	

* FLUSH

**Overkills

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PART III

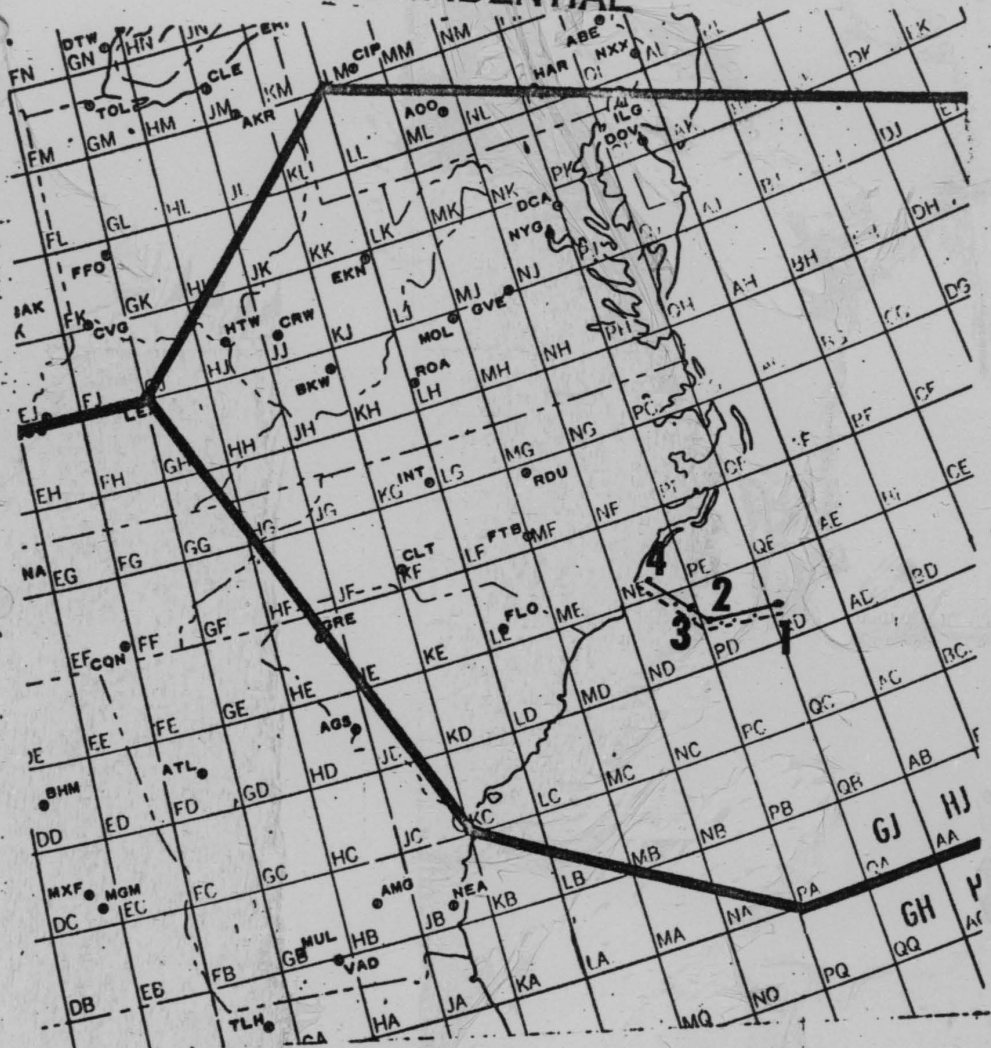
TROUBLE TRACKS

TRACK		PAGE
RCC -	T-221/H026	11
	T-222/H091	12
FT FISHER -	T-420/H312	13
TYNDALL -	T-245/H455 246	14
	T-260/H283	15
	T-261/H389	16
	T-426/H432	17
	T-424/H424	18

_____ PTC TRK
- SAGE TRK

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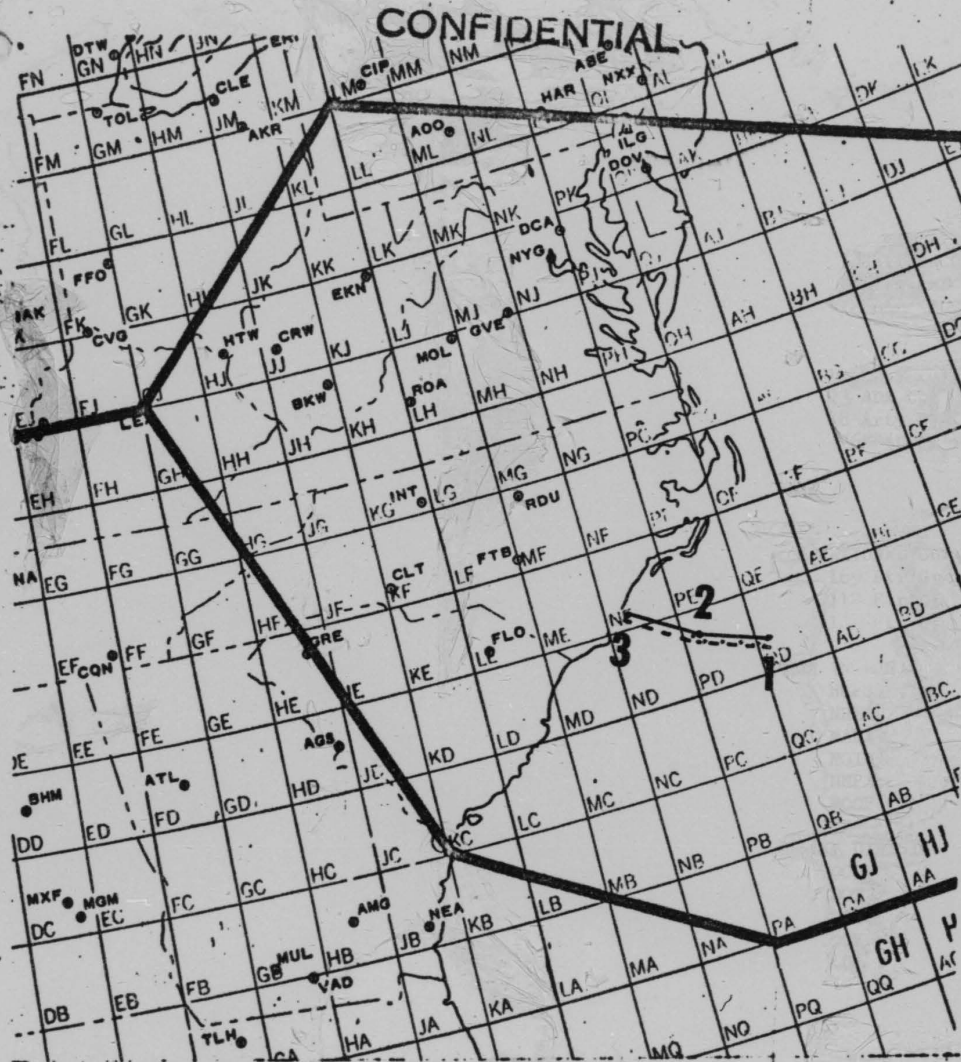
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SRN 221 TK H026 TYPE F4 ALT FL 410

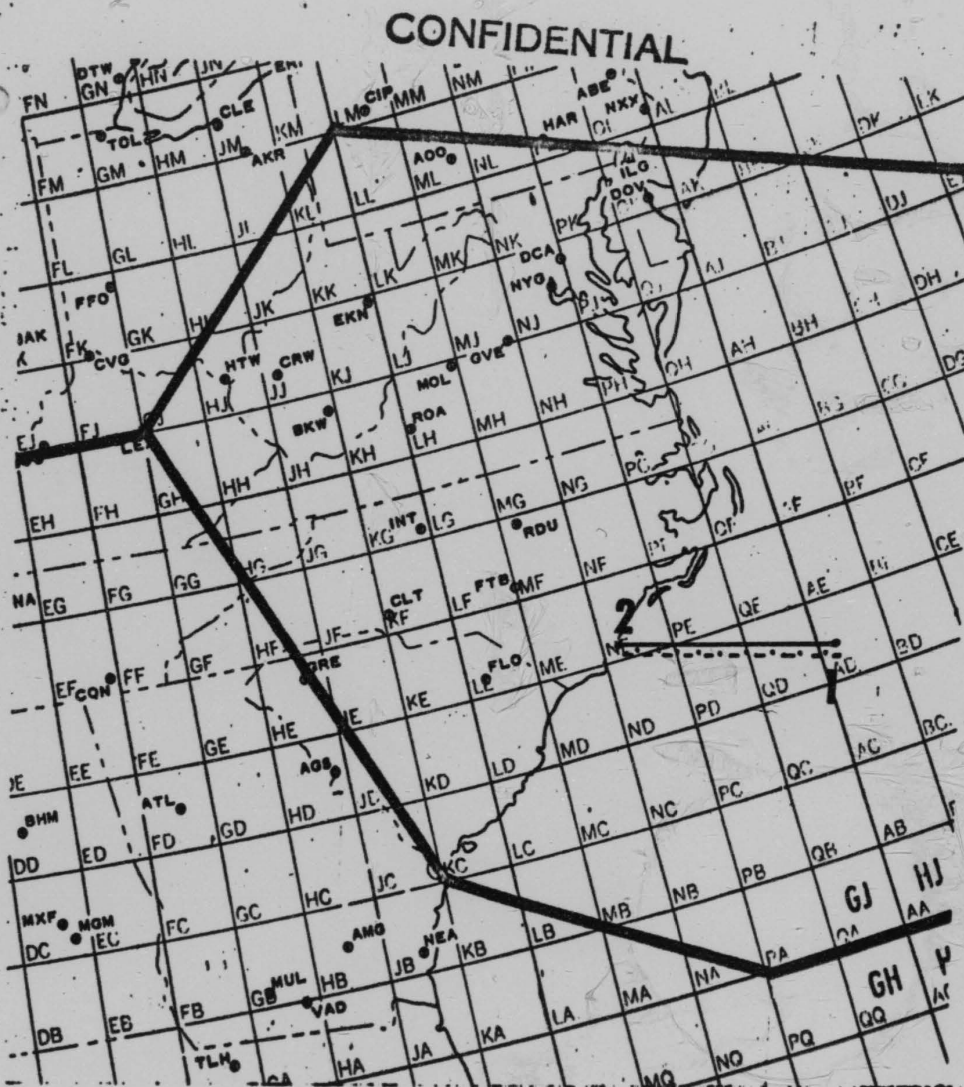
- | | | |
|----|-------|-------------------|
| 1. | 0349Z | RAGE 221 IP, H026 |
| 2. | 0351Z | ID FAKER |
| 3. | 0353Z | DEFER ACTION |
| 4. | 0357Z | BRL |

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SRN 222 TK H091 TYPE F4 ALT FL 410

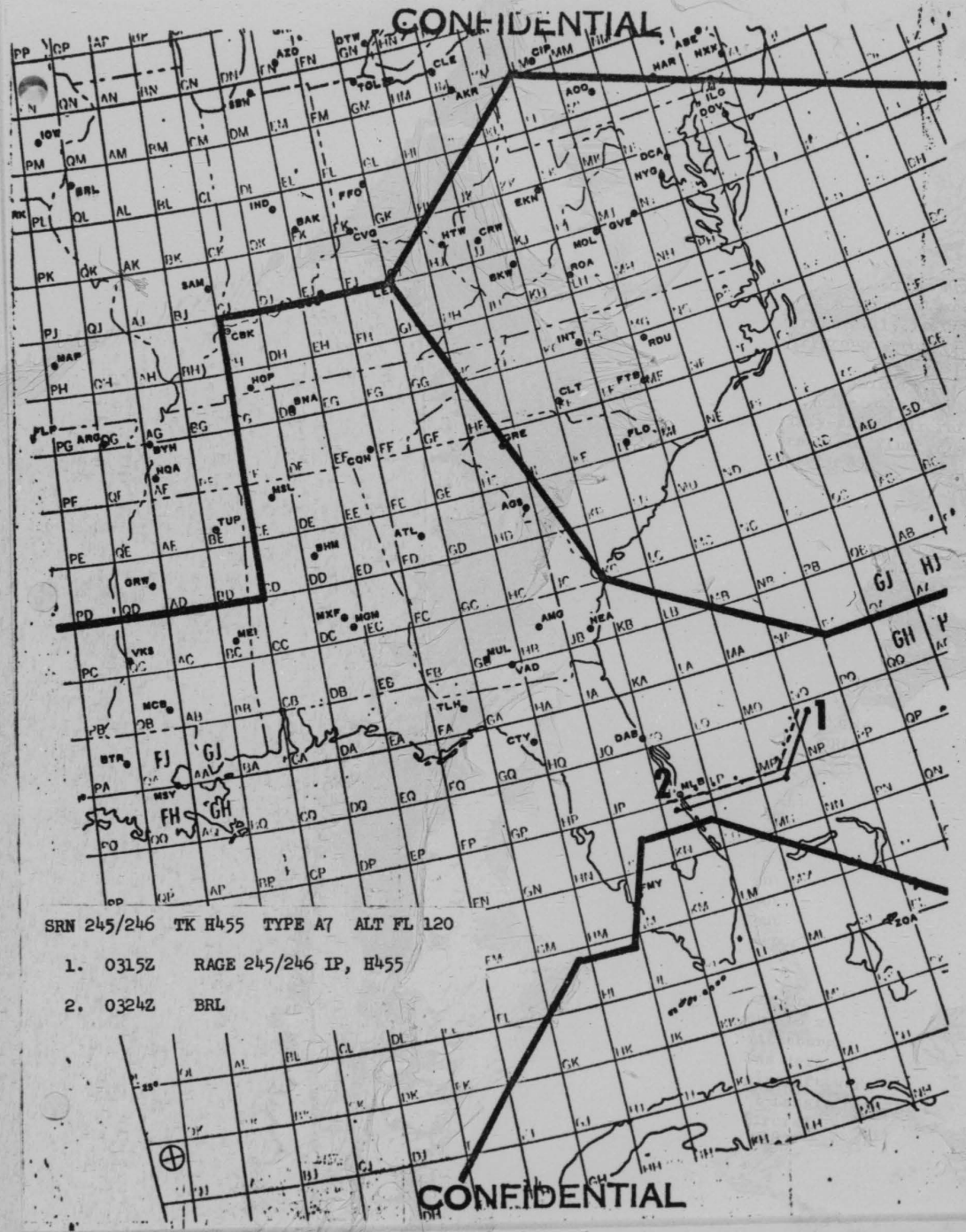
1. 0400Z RAGE 222 IP, H091
2. 0406Z DEFER ACTION
3. 0411Z BRL

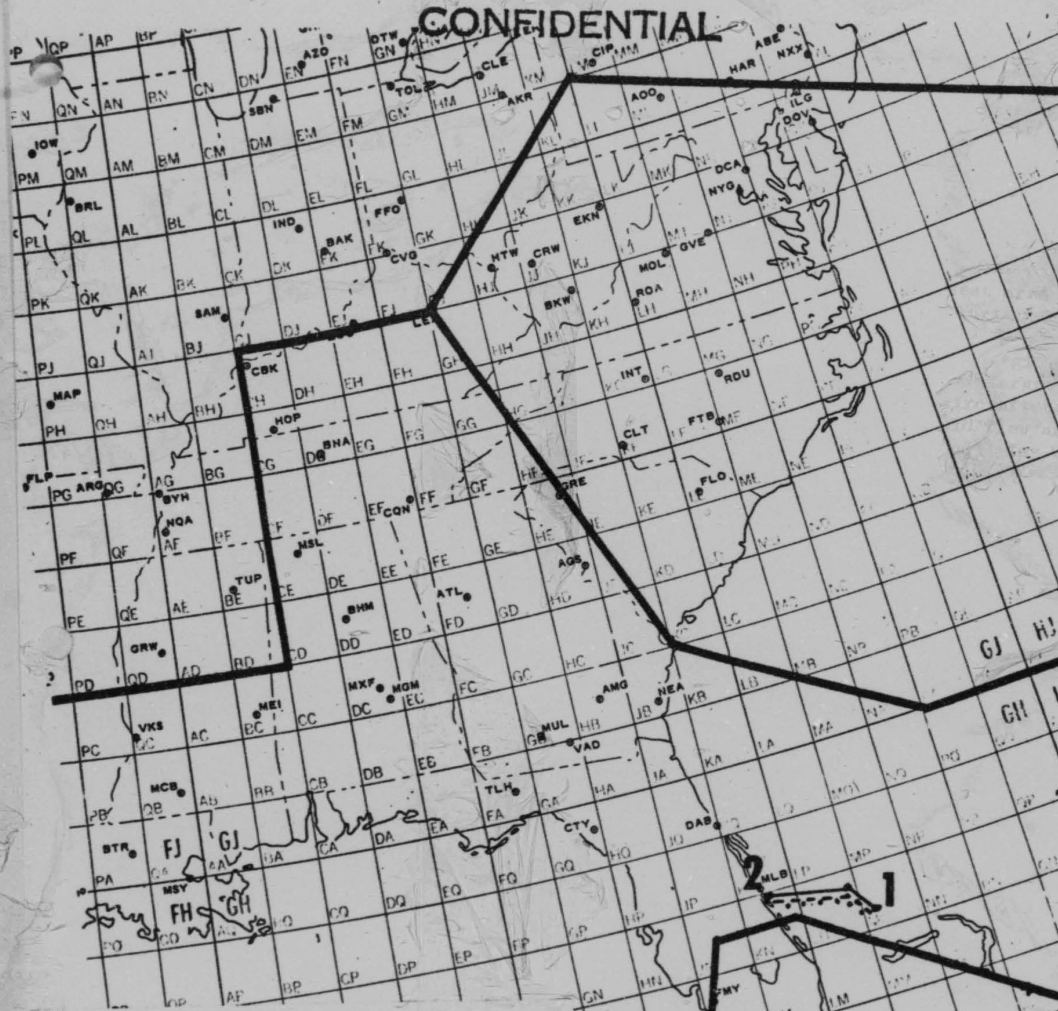


SRN 420 TK H312 TYPE F4 ALT FL 410

1. 0519Z RAGE 420 IP, H312
2. 0533Z BRL

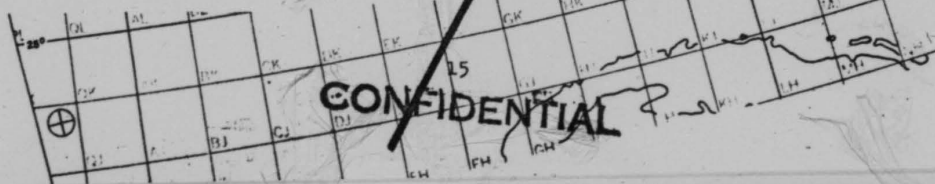
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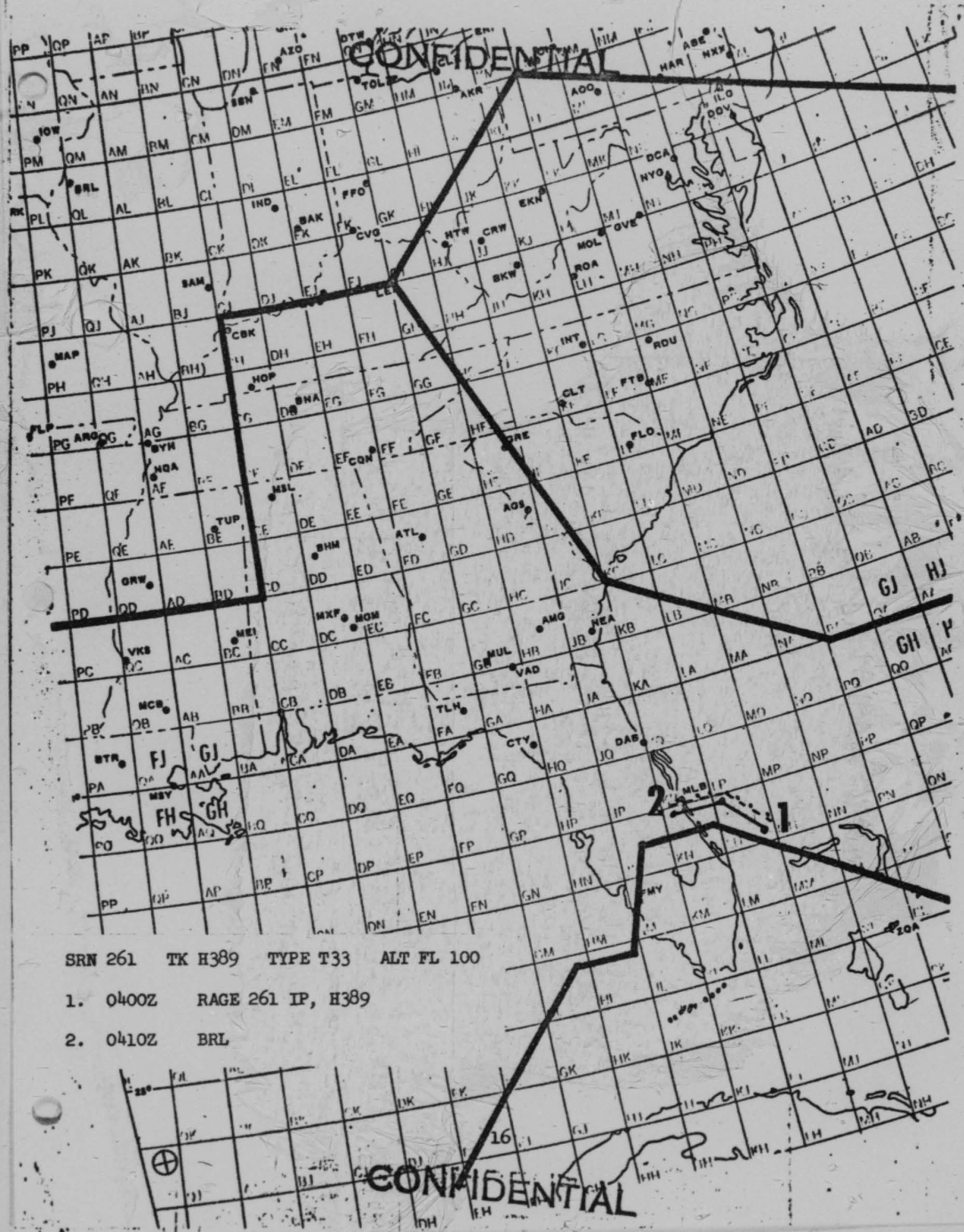


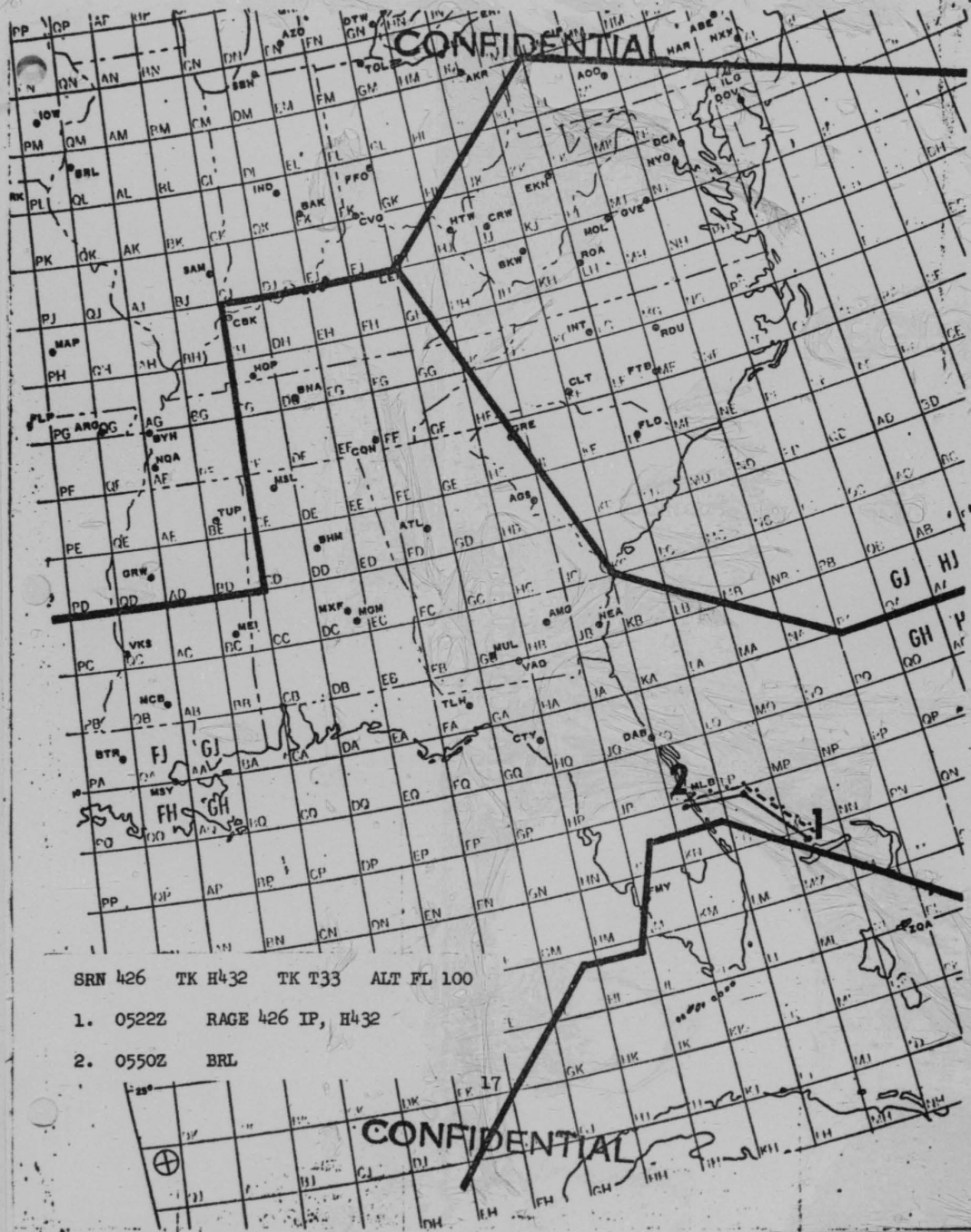


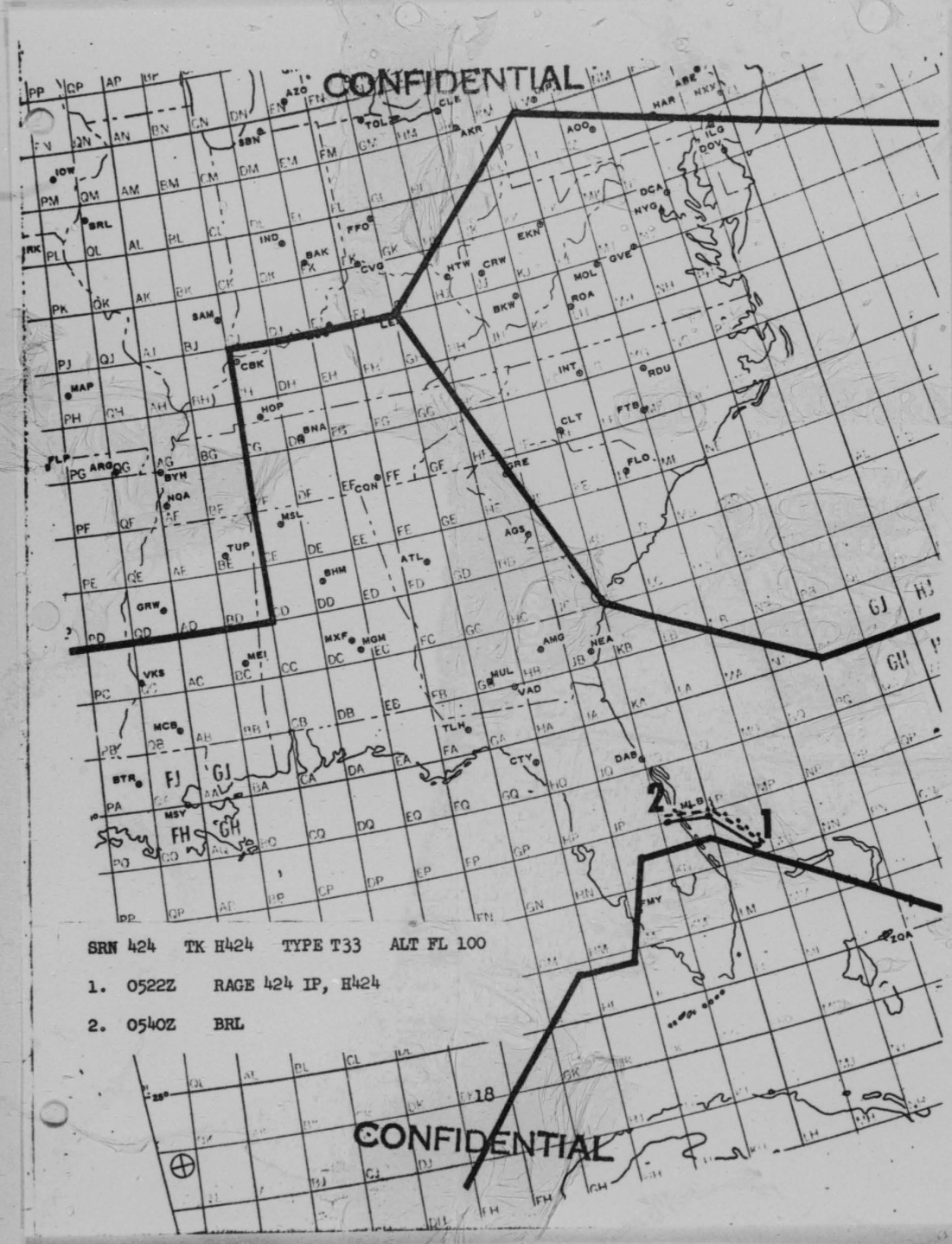
SRN 260 TK H283 TYPE T33 ALT FL 100

1. 0338Z RAGE 260 IP's H283 Initiated
2. 0410Z BRL









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2ORCC - LIVE

	50	60	70	80	90
Amalgam Mute 73-3 6-10 Nov 72 34/40					85%
Federal Brave 73-2 30 Jan 73 14/17					82%
Federal Brave 73-3 13 Apr 73 19/25					76%
Federal Brave 73-4 16 May 73 43/51					84%
Amalgam Arrow 73-8 20 Jun 73 13/15					87%

FT FISHER - LIVE

	50	60	70	80	90
Federal Keynote 73-2 18-20 Dec 72 20/22					Level IV Exercise 91%
Federal Keynote 73-3 17 Jan 73 11/14					Level IV Exercise 79%
Federal Brave 73-2 30 Jan 73 11/13					85%
Federal Brave 73-3 13 Apr 73 17/17					100%
Amalgam Arrow 73-8 20 Jun 73 5/6					83%

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	50	60	70	80	90
Federal Keynote 73-2 18-20 Dec 72 21/22	Level IV Exercise				96%
Federal Keynote 73-3 17 Jan 73 20/23	Level IV Exercise				87%
Amalgam Mute 73-20 5-7 Feb 73 19/21	Re-Eval				91%
Federal Brave 73-3 13 Apr 73 16/20					80%
Amalgam Arrow 73-8 20 Jun 73 20/25					80%

KEY WEST-LIVE

	50	60	70	80	90
Federal Brave 73-1 24 Aug 72 10/11					91%
Amalgam Mute 73-3 6-10 Nov 72 15/15					100%
Federal Brave 73-3 13 Apr 73 12/12					100%
Federal Brave 73-4 16 Apr 73 16/15					94%
Amalgam Arrow 73-8 20 Jun 73 7/7					100%

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PART V

PROBLEM ACTION REPORTS
(Based on Commander's Summaries)

1. Key West:

a. **Problem:** "Inadequate procedures from Tyndall BNCC during Levels 1B and 4, and lack of information from PTC personnel on faker tracks penetrating the complex from the north."

DOTE OPR Action: Due to the unusually large number of target tracks, Tyndall BNCC Surveillance and PTC personnel were completely saturated. This problem can be expected to continually recur as long as TBNCC is scheduled for an overwhelming number of targets. There is no action appropriate to this office.

b. **Problem:** "The six T-33 aircraft staged at NQX cancelled their ALTRVs at about 20/2000L. The pilots notified the strike force target monitor at the 21st NR. These cancellations were not passed to the 20th NR for about two hours. At about 20/2220L, the trusted agent at Key West called the trusted agent at 20NR and advised him that they had talked to one of the target pilots who stated they had cancelled their ALTRVs."

NREA OPR Action: The Arrow Project Officer at 20NR eventually received a call from the Target Force Monitor at 21NR concerning the cancellations. Two errors caused the problem at Key West. First, the target force commander cancelled his six target routes too early. Second, the notification to 20NR should have been to the trusted agent and not the project officer.

c. **Problem:** "Level IV Transition: Recommend increased emphasis on Level IV/ALCOP training to establish adequate procedures for all personnel."

DOTE OPR Action: DOTE will develop a regularly scheduled program of Level IV/ALCOP training for Tyndall BNCC.

2. Fort Fisher:

Problem: "A problem with lateral tell between Ft Fisher and TBNCC was experienced. Our maintenance and programmer along with TBNCC personnel were unable to find the cause of the problem. Ft Fisher will coordinate with TBNCC and conduct a special test and attempt to resolve the problem."

SECRETDOPM OPR Action:

a. Two lateral tell tests were conducted the week of 25 June between Tyndall BNCC and the on-site programmer at Ft Fisher BNCC. The first test conducted on 27 June resulted in a failure to establish lateral tell between the units. There were numerous attempts made to bring-up the lines, but to no avail. The second test on 28 June found the entire system working perfectly. Operational status message and track symbology information was successfully passed between the two units. The lines remained operating properly for the entire 1½ hour duration of the test.

b. The same procedures were used in the conduct of both of these tests. The primary difference between them was that the 27 June test was a transition with both BUICs cycling, while the 28 June test began with an initiate startup after the BUIC Test Switch was taken at the RCC. This means there could be a problem associated with the transition procedures.

c. The most logical explanation in my opinion is that there was an operational procedure breakdown somewhere along the line. The transition procedures are no longer familiar to the personnel remaining at Ft Fisher or to the deployment teams going there. There are many variables which enter into the successful completion of the lateral tell line. Checklists should be devised to guard against future procedural oversights.

3. Tyndall:

a. Problem: "The south RICMO loop was dropped and re-established approximately ten times because of feedback noise. Tyndall and Patrick LRRs were blocked from access to the loop, thus impeding RICMO coordination. The problem was apparently due to unauthorized persons dialing into the loop using incompatible equipment."

DOK OPR Action: The conference bridge used for the southern RICMO loop is a 10 leg "Meet Me". (See ADC Gray Book, General Information, Page 5, Conferencing). Conference bridge troubles will be handled IAW 20NRR 100-1, Atch 6. Tyndall BNCC should provide this HQ/NOCE-C a complete list of conferees and the type of line/equipment used at each location.

NOTE OPR Action: 20th Air Division (NOTE) will insure that the RCC/BNCC RICMOs and radar site anti-jam operators are aware of the necessity to maintain strict loop discipline. They will insure that no more than one instrument at each location is used, and that no unauthorized individuals are dialed into the loop. In addition, all personnel will be educated in the correct problem notification procedures.

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b. Problem: "From 0500Z to 0616Z, while the 20th NR was in Level 4A, there was no automatic lateral tell between TBNCC and FFBNCC. TBNCC showed FFBNCC as being in the 'active mode', but FFBNCC reported they were showing us as 'out of action'. Manual tell was used during the Level 4 operations. The TBNCC manual inputs read into the computer the level 4A PCAM card deck twice to start tell to FFBNCC. The 20th NR Senior Director reported that the 'BUIC training' switch action had been taken. TBNCC computer maintenance checked their message processor switch setting and reported that they were all properly set. The message processors were checked thoroughly prior to the mission and functioned properly in all levels used in Amalgam Arrow 73-8. Telco reported that the TBNCC-FFBNCC tell lines were properly dialed-up and were operational. The 678 ADGp programmers asked FFBNCCs programmers to reduce their tape to determine if tell data were received from TBNCC during Level 4A. Proposed Solution: The TBNCC and FFBNCC programmers and related personnel establish a time to check the tell equipment between the two agencies."

DOPM OPR Action: See DOPMs response to Fort Fisher's lateral tell problem on page 23.

c. Problem: "TBNCC Weapons Controllers experienced radio difficulties throughout the mission from Jacksonville and Savannah. TAC Channel 4 at Jacksonville had a weak receiver and transmitter. ESR Number 172002 was opened at 0350Z and closed at 0350Z. TAC Channel 6 at Savannah also had a weak receiver and transmitter. ESR Number L100699 was opened at 0116Z and closed at 0150Z. The problem was reopened at 0343Z and closed at 0425Z under ESR Number L100700. These radio problems created confusion and potential flight safety degradation due to lack of alternate frequencies. Proposed Solution: Both Telco and Radio Maintenance Personnel have assured TBNCC that their equipment was working properly. The problem appears to be the interface."

DOK OPR Action: At the present time, Dunmore controls PACE 02 once each month. As it is not feasible to increase the number of PACE flights for Dunmore, they should take the following actions:

- (1) Check radios with available aircraft (ex Det 2, 48th FISq aircraft rotation).
- (2) Check radios/lines site to site (BUIC console to Site GATR), within 24 hours of all scheduled missions.

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d. Problem: "Amalgam Arrow 73-8 introduced a Gulf threat for the TBNCC. That threat, plus the unusually heavy Eastern threat in Level 1B, caused the ID Oper, Surveillance (Height, Overlap Tell and Tracking) function to exceed the saturation point. The Surveillance Supervisor could not provide adequate supervision for the various functions. The ID Oper position was saturated to the point where times two was the only workable expansion resulting in time consuming scope repositioning. Proposed Solution: The TBNCC exercise director should be consulted in reference to PTC functions for any live missions involving the 20th NR and Tyndall. Recommend reconfiguring the BUIC comm panels to allow eight air to ground frequencies and assign two PTC frequencies. An alternative would be for the 20th NR to consider assuming the PTC function for the entire East Coast, but keep TBNCC PTC active in the Gulf. TBNCC PTC consists of two teams with only one UHF frequency. The problem experienced by the ID Oper and Surveillance Teams will be corrected through internal procedures and practice."

DOTE OPR Action: At the present time, it is not feasible to reconfigure the Tyndall BUIC ground/air comm panels.

RCC OPR Action: Communications are not available under the present configuration; however, if lines were released to the RCC PTC program, we would prefer not to perform the PTC function for another control facility, but rather prefer to operate in an "Alpha" configuration excluding the Gulf.

NREA OPR Action: Tyndall PTC has been invited to attend subsequent Arrow conferences. TBNCC had the exercise package 14 days in advance and the NORAD Exercise Director was made aware of their potential overload problem on the day of the exercise.

e. Problem: "The use of interceptors at MacDill would improve defense of the Gulf and the Southeastern portion of TBNCC area of responsibility."

DOTW OPR Action: The use of interceptors at MacDill is not feasible for the following reasons:

- (1) Previous target threat analysis has not indicated a need.
- (2) Sufficient interceptor forces are not available for deployment to MacDill.

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4. RCC:

a. Problem: "No low altitude airspace had been obtained in control areas (channels). INDs were required to coordinate at the time for use of these areas at low altitudes. Low altitudes in these areas should be obtained in advance, to preclude delays during the exercise which can cause INDs to break off interceptors in pursuit."

DOTST OPR Action: This item involves ALTRVs and questions concerning them. An in depth study will be made in concert with the August Arrow exercise, plus a joint 20NR/ARTCC workshop planning conference is scheduled for September 1973.

b. Problem: "Norfolk tower (and approach) was not manned to handle full interceptor traffic generated from Langley. At one time, for 15 minutes, they were unable to handle other than emergency air defense interceptors. FAA facilities should receive advance information on known increased workloads."

DOTST OPR Action: Increased workload was due to military aircraft, other than aircraft participating in the Amalgam Arrow exercise. Workload activity of 20NR was briefed and manned for by FAA.

c. Problem: "It took 18 minutes from time of decision to scramble before Cherry Point interceptors became airborne. GP AUTOVON to the base operator had to be connected to the 'IFR room' and then the scramble order was somehow relayed from there to the pilots before they could take off."

DOTW OPR Action: Although the time is excessive, it is due to communications limitations existing at Cherry Point, and long taxi times involved. More consideration should be given to airborne orders rather than scrambles at Cherry Point. Staff Visit is scheduled for 18-19 July 1973.

d. Problem: "Interceptor turnaround at Pittsburgh was slow. For example, three recoveries from flush were at 0317, 0326, and 0327. First three back on 5 status were at 0401, 0405, and 0405."

DOTW OPR Action: Turnaround times were necessarily long due to runway construction and delays for commercial IFR traffic. Greater Pittsburgh AP layout will cause excessive taxi times, depending on active runway and landing traffic.

e. Problem: "No BUIC coordinator was assigned at Tyndall."

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DOTE OPR Action:

(1) Tyndall BNCC normally uses Weapons Director 4, who is also assigned the Gulf area for intercept activity, as the BUIC coordinator. This has posed no problem in past exercises, primarily because there has been very little intercept activity in the Gulf. During this exercise, due to the high number of targets in the Gulf, WD-4 had no time to act as a BUIC coordinator.

(2) Suggest that TBNCC assign a weapons qualified individual to act as the BUIC coordinator. He could be positioned at a table between consoles #1 and #11 with the logs and the necessary communications equipment. This position, to the immediate right of the Senior Director/Technician, would be an expeditious location to coordinate between the TBNCC SD and the RCC.

f. Problem: "Faker Monitors at the southern portion of Sector I experienced difficulties with radio equipment. Radios at Site Z113 did not function throughout the exercise, and the radios at Z115 were erratic. Part of the problem at Z115 may be attributed to the few lines available to this site, and its increased usage due to the problems with Z113."

DOK OPR Action: Radios at Sites Z113 and Z115 were checked on 11 June 1973 (PACE 05B). PACE 05A was cancelled 18 June 1973 due to air abort. Problem Action Report does not contain sufficient information for this office or maintenance to determine what facilities caused this problem. ESRs were not opened against either site. Request RCC personnel in the future comply with RCC 01 55-1 and MCC 66-44.

g. Problem: "Two target aircraft (RAGE 201, 202) were not cleared to fly their ALTRVs until they had been diverted 80-100 NM off their proposed route. There seemed to be some confusion at both Washington and New York Centers as to what an ALTRV is. A potential flying safety problem arose later with these same aircraft when the sector controller at New York Center had another aircraft at the same altitude at the target area. Despite the delay of these target aircraft in Washington Center, their arrival at the target area (Kenton, Delaware) was within the prescribed time limits, and additionally, was the same time as the expected arrival of later target aircraft at the same altitude and position. In general, ARTCC sector controllers seemed to be only vaguely aware of what takes place in an exercise."

DOTST OPR Action: This item and similar items will be discussed at 20NR joint workshop conference scheduled for September.

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h. Problem: "Two target aircraft were scheduled to use Mode III/2400 as their PTC codes. This code is normally used as an FAA "enroute" code. Assurances were given by the FAA representatives at the exercise planning meeting in Washington that the ARTCCs would not use this code the night of the exercise. However, this code was used extensively by the ARTCCs, and as a result, created excessive clutter on the PTC scopes. This problem was resolved during the exercise and will be brought to the attention of the NORAD exercise planners so that we will not again have the problem."

DOTST OPR Action: This was an error on the part of HQ NORAD (NOET-L). Action taken to preclude recurrence.

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PART VI

EXERCISE FRAG ORDER

(Following are pages 1 through 11 of Exercise Frag Order on AMALGAM ARROW 73-8, DTG 05/1905Z June 1973; also pages 01 through 03 of UNCLASSIFIED FOUO Message DTG 11/1440Z June 1973, Subj: Change One to 20NR Frag Order One for AMALGAM ARROW 73-8.)

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
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<p>FROM:</p> <p>TO:</p> <p>INFO: ADTG EGLIN AFB FL/ADCLO-S CINCNORAD ENT AFB CO/NOET-L ADC ENT AFB CO/DOTSE/DOCCX 21NR HANCOCK FLD NY/NREA 23NR DULUTH IAP MINN/NREA CMDR 1ST RGN ARADCOM STEWART AFB NY/ADAGC-P 630 RADAR SQ HOUSTON TEXAS/DOT DET 1 48FIS NEW HANOVER CO APRT NC/OPS (MAIL) 632 RADRON ROANOKE RAPIDS AFS NC/DOT (MAIL) 649 RADRON BEDFORD AFS VA/DOT (MAIL) 702 RADRON SAVANNAH AFS GA/DOT (MAIL) 771 RADRON CAPE CHARLES AFS VA/DOK (MAIL) 861 RADRON AIKEN AFS SC/DOT (MAIL)</p> <p>UNCLAS FOUO 20NREA-L</p> <p>SUBJECT: 20NR FRAG ORDER NO. 1 FOR AMALGAM ARROW 73-8</p> <p>1. REF:</p>								
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<p>FROM:</p> <p>TO:</p> <p>A. CINCNORAD UNCLAS MSG NOET-L 251500Z MAY 73, SUBJ: FRAG ORDER NO. 6 TO CINCNORAD OPOD 3720 (NOTAL).</p> <p>B. 20NR OPOD 370N-71 (LADEX).</p> <p>2. SITUATION: HQ NORAD WILL CONDUCT A LIVE AIR DEF EXERCISE AMALGAM ARROW 73-8, INVOLVING 20TH AND 21ST NORAD RGNS, DURING THE LIABILITY PERIOD 201800Z TO 221800Z JUN 73. ONE 24-HR DELAY MAY BE REQUIRED IN EVENT OF INCLEMENT WEATHER.</p> <p>3. NORAD OBJECTIVES:</p> <p>A. EXERCISE NORAD AIR DEF COMPONENTS WITHIN THE 20TH AND 21ST NORAD RGNS.</p> <p>B. EXERCISE SAFE PASSAGE OF INTCPS THRU ADA DEF WITHIN BOTH RGNS.</p> <p>C. EXERCISE THE CAPABILITY FOR PASSIVE DETECTION, TRACKING AND INTERCEPTION OF ECM TGTS.</p> <p>D. EXERCISE FIS FLUSH PROCEDURES AT PITTSBURGH IAP, LANGLEY AFB AND JACKSONVILLE IAP IN THE 20NR. NO FLUSH WILL BE CONDUCTED WITHIN 21NR.</p> <p>E. EXERCISE GENERAL RECALL OF 20 AND 21NR PERSONNEL.</p>								
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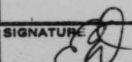
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<p>FROM:</p> <p>TO:</p> <p>F. A DCE WILL BE CONDUCTED IN THE NY/PHIL ADA DEF AREA.</p> <p>4. 20 NORAD RGN OBJECTIVES:</p> <p>A. EXERCISE USE OF AEW&C ACFT FOR SURVEILLANCE AND EARLY WARNING.</p> <p>B. TO EXERCISE IN LEVELS IIA, IIB AND LEVEL IV.</p> <p>C. TO ANNOTATE AND EVALUATE INTERCEPTOR AND ADA KILL PATTERNS.</p> <p>5. PARTICIPANTS:</p> <p>A. 20 AND 21 NR AND SUBORDINATE UNITS (SOUTHERN AIR DEFENSE COMPLEX WILL PARTICIPATE BY RECEIVING, ACKNOWLEDGING AND AUTHENTICATING VOICE ALERT FORMATS AND RESPOND TO RECALL).</p> <p>B. 22 AND 23NR WILL PROVIDE THREAT WARNING TELL AND/OR OTHER SERVICES AS REQUIRED BY 20 AND 21NR.</p> <p>C. NCOC/ALCOP WILL PASS VOICE ALERT FORMATS AS REQUESTED BY, NOET-L.</p> <p>6. THE PLANNED STRIKE FORCE (FAKERS) WILL CONSIST OF USAF, USMC, USN, TAC AND CF ADC ACFT.</p> <p>7. GROUND RULES:</p>										
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<p>FROM:</p> <p>TO:</p> <p>A. RECALL WORD IS AMALGAM LEADER.</p> <p>B. 22 AND 23NR WILL BE REQUIRED TO PROVIDE LIMITED PTC FUNCTIONS AS NECESSARY. 20 WILL COORDINATE DIRECTLY WITH 21 AND 23NR TO ESTABLISH FREQUENCIES, HANDOFF POINTS, ETC.</p> <p>C. WX INTCPs ARE NOT AUTHORIZED. FAKER ACFT ENCOUNTERING IFR CONDITIONS WILL SELECT IFF/SIF MODE 3 CODE 5000 AND SO ADVISE THE FAKER MONITOR.</p> <p>D. TO FACILITATE BATTLE MANAGEMENT, ATTRITION MAY BE PLAYED AT THE DISCRETION OF THE RGN CMDR. "KILLED" FAKERS WILL BE RECLASSIFIED "BRAVO."</p> <p>E. "KILLED" ECM FAKERS WILL BE GIVEN "CROW CRACK" BY THE FAKER MONITOR AND ALL ECM/CHAFF WILL CEASE. IF FURTHER ECM TNG IS DESIRED, THE SD/SWD MAY DIRECT THE FAKER MONITOR TO REINITIATE ECM/CHAFF. EXCEPTIONS TO THE "CROW CRACK" RULE: "CROW CRACK" WILL NOT BE ISSUED TO RAGE 140, 160, 165, 166 AND 435.</p> <p>F. STOP BUZZER PROCEDURES. THE AFFECTED ARTCC WILL CALL THE APPROPRIATE FAKER MONITOR CHIEF FOR ACTION. THE REQUEST WILL</p>										
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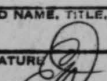
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<p>FROM:</p> <p>TO:</p> <p>INCLUDE THE GEOGRAPHICAL AREA, THE FREQ BAND AFFECTED AND THE TIME DURATION FOR THE STOP BUZZER TO REMAIN IN EFFECT. THE FAKER MONITOR CHIEF WILL INSURE THAT IMMEDIATE APPROPRIATE ACTION IS TAKEN. STOP/ START TIMES WILL BE ENTERED ON FAKER MONITOR LOG (NORAD FORM 48).</p> <p>G. MULTIPLE INTCPs ARE AUTHORIZED AT THE DISCRETION OF THE SWD IN THE INTEREST OF MAXIMUM TNG; HOWEVER, FIRST KILL ONLY WILL BE USED FOR ANALYSIS AND ARMAMENT EXPENDITURE PURPOSES.</p> <p>H. ALL FAKERS ENTERING ADA DEFENDED AREAS WILL BE PASSED TO ADA BY FAKER SYMBOLOGY FOR ENGAGEMENT REGARDLESS OF PREVIOUS TACTICAL ACTION. ECM AIRCREWS HAVE BEEN INSTRUCTED TO REINITIATE ECM/CHAFF AT A PREDETERMINED POINT PRIOR TO ENTERING THE ADA RING.</p> <p>I. THE ENTIRE 20NR INCLUDING SOUTHERN AIR DEFENSE COMPLEX WILL RESPOND TO GENERAL RECALL EXCEPT FOR ARNG, ANG AND AUGMENTATION FORCES. AFTER COMPLETION OF RECALL, RELEASE OF NON-ESSENTIAL PERSONNEL WILL BE AT THE DISCRETION OF THE UNIT COMDR. ALL ARNG, ANG AND AUGMENTATION FORCES WILL BE FURNISHED AN IN-PLACE TIME BY SEPARATE MSG.</p>									
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
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<p>FROM:</p> <p>TO:</p> <p>J. AUTOMATIC UMPIRING (NORADR 55-25) WILL BE USED. HOWEVER, IF THIS FEATURE IS NOT FUNCTIONING, UMPIRING WILL REVERT TO MANUAL PK TABLES. THE KEY WEST COMPLEX WILL UTILIZE MANUAL UMPIRING THROUGHOUT AND LOCAL TA WILL SELECT ENTRY POINT AND DIRECTION OF TRAVEL ON PK TABLES.</p> <p>K. ATC (FTR/INTCP) ASSIGNED AIRSPACE WILL BE COORDINATED WITH AFFECTED ARTCCS BY 20NREA AND DISSEMINATED AS NECESSARY.</p> <p>L. ALL NIKE/HERCULES FIRE UNITS WILL OPERATE WITH THE FOLLOWING RESTRICTIONS:</p> <ul style="list-style-type: none"> (1) ABAR - AT LOW END OF FREQ. (2) HIPAR - CHANNEL FIVE. (3) LOPAR - 50 PERCENT (CENTER OF FREQ BAND). (4) TTR - 25 PERCENT (ON TUNING METER). <p>M. AUTHORIZED FREQ FOR RADARS FROM ROUND HOUSE UNTIL FADE OUT (ADD 24 HRS SHOULD WX DELAY BE IMPLEMENTED) WILL BE BY SEPARATE MSG.</p> <p>N. RICMOS/AJOS WILL NOT MONITOR MODE 3 INPUTS DURING FLYING</p>										
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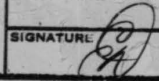
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<p>FROM:</p> <p>TO:</p> <p>PHASE OF EXERCISE.</p> <p>O. AIRBORNE/STRIP ALERT RESCUE ACFT HAVE BEEN REQUESTED. STATION LOCATIONS, TYPE ACFT, ALTITUDES, CALL SIGNS, ETC., WILL BE DISSEMINATED BY 2ONREA. KEY WEST TA WILL ESTABLISH RESCUE PROCEDURES FOR KW COMPLEX.</p> <p>P. BATTLE DAMAGE WILL NOT BE PLAYED, THUS BSSC MANNING IS NOT REQUIRED OTHER THAN REACTION TO RECALL.</p> <p>Q. A LIVE FLUSH OF ALL OPERATIONAL READY AIRCRAFT WILL BE CONDUCTED AT PITTSBURGH, LANGLEY AND JACKSONVILLE. A FLUSH IS NOT REQUIRED OF AUGMENTATION INTERCEPTORS.</p> <p>R. ACTIVE PTC FUNCTIONS WILL BE PERFORMED BY 2ONRCC, TYNDALL BNCC, KW MNCC AND RICHMOND NGCI.</p> <p>S. THE REAL WORLD 5 MIN ID ALERT ACFT WILL BE REPORTED ON THE EXERCISE V-3 BUT WILL NOT BE UTILIZED DURING THE EXERCISE. "EX" ACTIVITY CODE AND "ALPHA" ALERT COMMITMENTS WILL BE DIRECTED BY 20DOTW VIA SEPARATE MSG.</p> <p>T. AEW&C INSTRUCTIONS FOR DET 2, 552 AEW&C WILL BE PASSED</p>								
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
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<p>FROM:</p> <p>TO:</p> <p>SEPARATELY BY 20NOOP. 20NREA WILL FURNISH AN ON STATION TIME TO INSURE TIMELY STATION ARRIVAL.</p> <p>8. REPORTS:</p> <p>A. NORAD REQUIREMENTS - ONE CY OF THE FOLLOWING RPTS WILL BE MAILED TO HQ NORAD (NOET-L) ENT AFB CO 80912 WITHIN 5 WORKING DAYS AFTER EXERCISE FADEOUT.</p> <p>(1) RGN (CC) REQUIREMENTS WILL BE BRIEFED SEPARATELY BY 20NREA.</p> <p>(2) BNCC REQUIREMENTS:</p> <p>(A) OPERATIONAL PROCESSOR: RSS, MIS (10 MIN INTERVALS), SWS, WAS (10 MIN INTERVALS), TOT (5 MIN INTERVALS), ID-WBPKI, TEH (NIN-INT).</p> <p>(B) EXERCISE PROCESSORS: OSC-EXS, AFT, INT.</p> <p>(C) NORM.</p> <p>(3) LRR REQUIREMENTS: PPI SCOPE PHOTOGRAPHY IS REQUIRED FROM UNITS STARTING AT THE FIRST INDICATION OF ECM FOLLOWING BIG NOISE AND CONTINUING DURING ALL ACM ACTIVITY UNTIL FADEOUT. CAMERAS</p>								
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
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<p>FROM:</p> <p>TO:</p> <p>WILL BE SET FOR EVERY FIFTH SWEEP. RAW RADAR, NO IFF, RANGE MARKERS ON AND 200 MILE RANGE WILL BE SELECTED ON PPI'S. A COVER LTR GIVING ON AND OFF TIMES, OPERATING FREQ AND FILM TYPE WILL BE MAILED WITH THE FILM AS PRESCRIBED ABOVE. THOSE UNITS WITH THE CAPABILITY TO HAVE THEIR FILM DEVELOPED ARE REQUESTED TO DO SO. UNITS WILL INSURE THAT FILM CANS ARE MARKED TO INDICATE IF FILM IS DEVELOPED OR UNDEVELOPED.</p> <p>B. 20 NORAD RGN REQUIREMENTS -</p> <p>(1) 20RCC WILL SUBMIT NORAD FMS 48, 49, WD LOGS, DEBRIEFED IND LOGS, AND CMDRS SUMMARY RPTS TO 20NREA IAW 20NR OPORD 370N-71.</p> <p>(2) FFBNCC, TBNCC AND KWMNCC WILL SUBMIT INFORMATION REQUIRED BY ADCR 50-15 TO 20ADIV (DOCT) ASAP BUT NLT 12 HRS AFTER FADEOUT. ADDITIONALLY, NORAD FMS 48, 49 AND CMDRS SUMMARY RPTS AS REQUIRED BY 20NR OPORD 370N-71 WILL BE SUBMITTED TO 20NR (NREA).</p> <p>(3) PARTICIPATING FTR INTCP SQS WILL SUBMIT DEBRIEFED NORAD FM 35 IAW 20NR OPORD 370N-71 AND WILL ELECTRICALLY TRANSMIT</p>										
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<p>FROM:</p> <p>TO:</p> <p>WITHIN 2 WORKING DAYS AFTER FADEOUT COLUMNS C, G, H, I, P, Q, R AND S EXTRACTED FROM FM 35 to 20NREA.</p> <p>(4) PARTICIPATING AADCPS WILL SUBMIT NORAD FM 16 IAW 20NR OPORD 370N-71 AND WILL ELECTRICALLY TRANSMIT WITHIN 2 WORKING DAYS AFTER FADEOUT COLUMNS 2, 5, 6, 8, 10 AND 11 EXTRACTED FROM FM 16.</p> <p>(5) COMMANDERS SUMMARY REPORTS MAY BE SUBMITTED BY OTHER CMDRS AT THEIR DISCRETION.</p> <table border="0"> <tr> <td>9.</td> <td>EXERCISE CONTROL TEAM</td> <td></td> <td></td> <td>OFF</td> <td>EXER</td> <td></td> <td></td> </tr> <tr> <td></td> <td>NORAD EXERCISE DIR</td> <td>COL H.C. HANCOCK</td> <td></td> <td>701</td> <td></td> <td>772</td> <td></td> </tr> <tr> <td></td> <td>NORAD INTEL</td> <td>MAJ L.C. MARTIN (ENT)</td> <td>530-2887</td> <td></td> <td></td> <td>-</td> <td></td> </tr> <tr> <td></td> <td>20NR EXERCISE DIR</td> <td>MAJ E. DOLAN</td> <td></td> <td>701</td> <td></td> <td>772</td> <td></td> </tr> <tr> <td></td> <td>20NR PROJ OFF</td> <td>LCDR F. HELLE</td> <td></td> <td>701</td> <td></td> <td>770</td> <td></td> </tr> <tr> <td></td> <td>20NR FAKER COORD</td> <td>TSGT G. JOHNSON</td> <td></td> <td>701</td> <td></td> <td>770</td> <td></td> </tr> </table> <p>EXERCISE AMALGAM ARROW 73-8</p>								9.	EXERCISE CONTROL TEAM			OFF	EXER				NORAD EXERCISE DIR	COL H.C. HANCOCK		701		772			NORAD INTEL	MAJ L.C. MARTIN (ENT)	530-2887			-			20NR EXERCISE DIR	MAJ E. DOLAN		701		772			20NR PROJ OFF	LCDR F. HELLE		701		770			20NR FAKER COORD	TSGT G. JOHNSON		701		770	
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<p>FROM: 20 NORAD RGN FT LEE AFS VA</p> <p>TO: AIG 8750</p> <p>XMT 702 RADRON SAVANNAH AFS GA</p> <p>31 ARTY BDE HOMESTEAD AFB FLA ADM-SC</p> <p>644 RADRON HOMESTEAD AFB FLA DOK</p> <p>671 RADRON KEY WEST NAS FLA DOT</p> <p>678 ADGP TYNDALL AFB FLA DO-X</p> <p>701 ADGP FT FISHER AFS NC DO-X</p> <p>ADWC TYNDALL AFB FLA OTV</p> <p>ATLANTA ARTCC HAMPTON GA</p> <p>NEW YORK ARTCC RONKONKOMA NY</p> <p>WASHINGTON ARTCC LEESBURG VA</p> <p>JACKSONVILLE ARTCC HILLIARD FLA</p> <p>MIAMI ARTCC MIAMI FLA</p> <p>CLEVELAND ARTCC OBERLAN OHIO</p> <p>INDIANAPOLIS ARTCC INDIANAPOLIS IND</p> <p>CARF WASHINGTON DC</p> <p>CMDR 2 MAW MCAS CHERRY POINT NC</p>								
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
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<p>FROM:</p> <p>TO:</p> <p>INFO: ADTG EGLIN AFB FLA ADCLO-S</p> <p>CINCNORAD ENT AFB COLO NOET-L</p> <p>ADC ENT AFB COLO DOTSE/DOCCX</p> <p>21NR HANCOCK FLD NY NREA</p> <p>23NR DULUTH IAP MINN NREA</p> <p>CMDR 1ST RGN ARADCOM STEWART AFB NY ADAGC-P</p> <p>630 RADAR SQDN HOUSTON TEXAS DOT</p> <p>DET 1 48FIS NEW HANOVER CO APRT NC OPS (MAIL)</p> <p>632 RADAR SQDN ROANOKE RAPIDS AFS NC DOT (MAIL)</p> <p>649 RADAR SQDN BEDFORD AFS VA DOT (MAIL)</p> <p>702 RADAR SQDN SAVANNAH AFS GA DOT (MAIL)</p> <p>771 RADAR SQDN CAPE CHARLES AFS VA DOK (MAIL)</p> <p>861 RADAR SQDN AIKEN AFS SC DOT (MAIL)</p> <p>UNCLAS FOUO 20NREA-L</p> <p>SUBJ: CHANGE ONE TO 20NR FRAG ORDER ONE FOR AMALGAM ARROW 73-8</p> <p>1. REF 20NR UNCLAS MSG DTG 05/1905Z JUN 73.</p>								
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<p>FROM:</p> <p>TO:</p> <p>2. MAKE THE FOLLOWING CHANGES TO REF MSG.</p> <p>A. DELETE PARA 4A.</p> <p>B. CHANGE PARA 4B TO 4A, AND CHANGE TO READ: TO EXERCISE AEROSPACE DEFENSE OPERATIONS IN LEVELS IA, IB AND IVA.</p> <p>C. CHANGE PARA 4C TO 4B.</p> <p>D. DELETE FIRST SENTENCE OF PARA 7D; CHANGE SECOND SENTENCE TO READ: "KILLED" FAKERS WILL BE RECLASSIFIED AS "NEUTRALIZED FAKERS".</p> <p>E. DELETE ALL REF TO AEW&C IN PARA 7T. CHANGE PARA 7T TO READ: FAKERS FLYING IN CLOSE FORMATION WILL BE CONSIDERED AS ONE TRACK. SINGLE KILL WILL NEUTRALIZE BOTH AIRCRAFT IN THE FORMATION.</p> <p>EXERCISE AMALGAM ARROW 73-8</p>									
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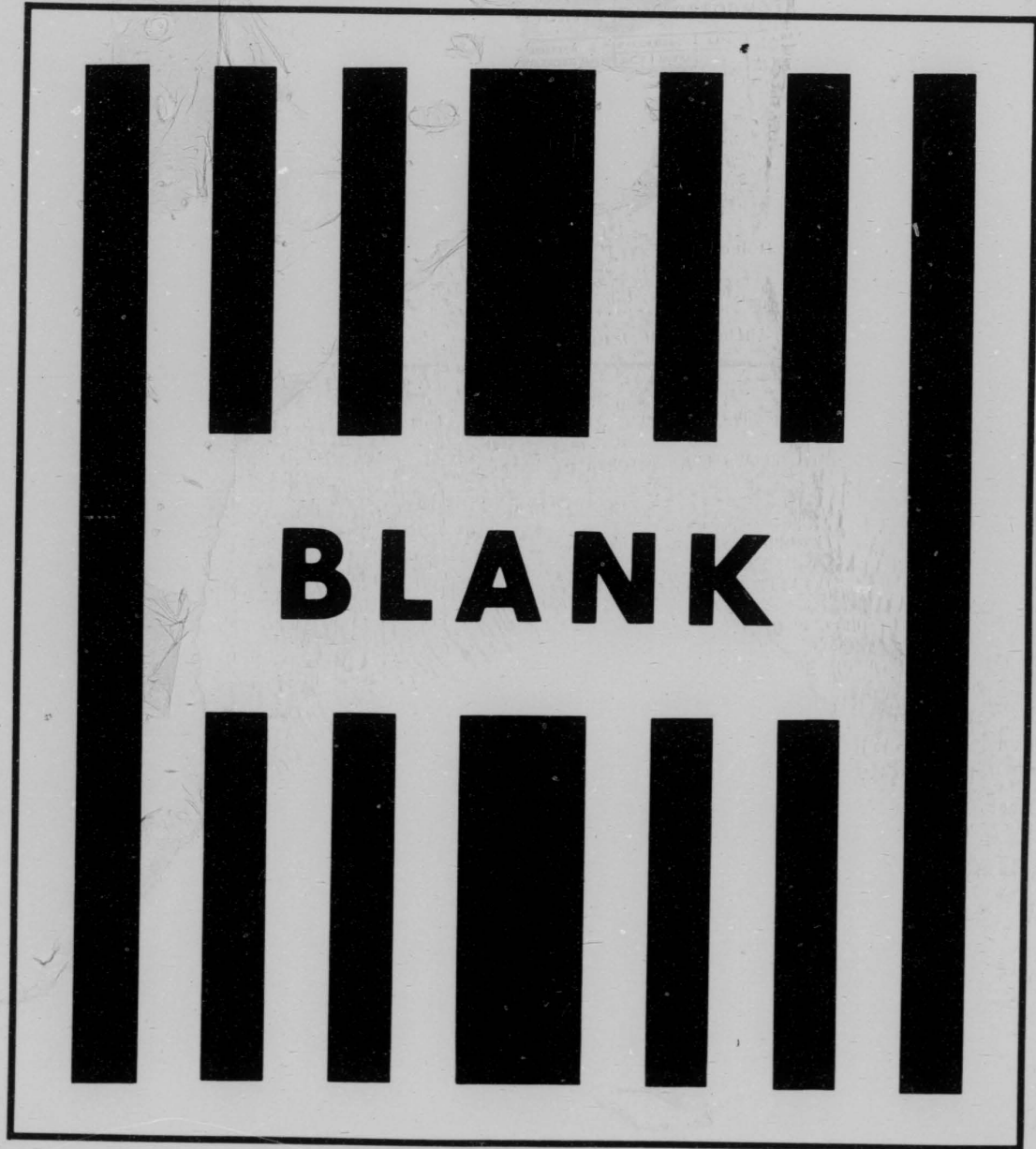
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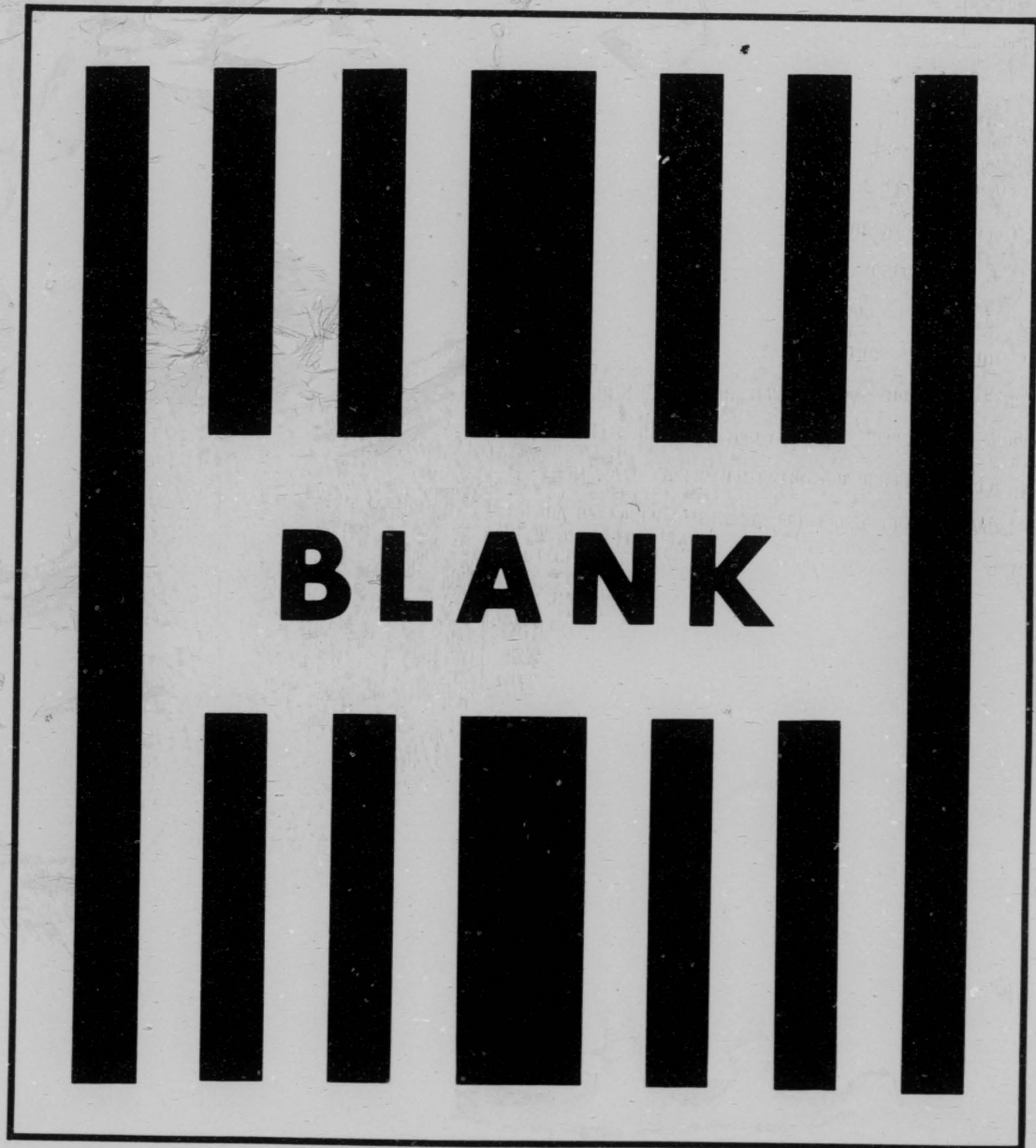
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21ST AIR DIVISION HISTORY

PERIOD OF 1 Jan 72 - 31 Mar 72

PREPARED BY
THE DIVISION HISTORICAL OFFICE
HANCOCK FIELD N.Y.

Group 3
Downgraded at 3 year
intervals; declassified
after 12 years

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31, 1980

AEROSPACE DEFENSE COMMAND,
UNITED STATES AIR FORCE

903262

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HISTORY OF THE 21ST AIR DIVISION
1 January 1972 - 31 March 1972

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31, 1980
By

SSgt Michael J. Corbett
Division Historian

Approved

James L. Price
JAMES L. PRICE, Maj Gen, USAF
Commander

Group 4
Downgraded at 3 year intervals;
declassified after 12 years

20 NOV 1973

31 May 1972

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I. COMMAND AND CONTROL

Division Change of Command

General Williams Retires

Maj Gen George V. Williams, Commander of the 21st Air Division since 1969, retired February 4 during ceremonies held at Division Headquarters, Hancock Field, N.Y.¹

In conjunction with his retirement, General Williams hosted a Division Commander's Conference on February 3.

That evening, a dining-in was held at the Hancock Officers' Club. Guest speaker for the occasion was Parker T. Hart, former U.S. Ambassador to Turkey and an expert of Middle Eastern Affairs.

On Thursday morning, February 4, General Williams' retirement ceremony was held in the base gymnasium. Among guests attending the ceremony were Lt Gen Thomas J. McGehee, ADC Commander; Lt Gen Arthur Agan (Ret), former ADC Commander, the Commanders of the Division's units and local Syracuse dignitaries.²

General Williams was born in New York City and was graduated from Hyde Park High School in Chicago.³ He entered the aviation cadet program at Randolph Field, Texas in 1940 and received his pilot wings and a commission as a second lieutenant.



ant in the Army Air Corps in May 1941.

During World War II, General Williams served in the European-African-Middle Eastern and Asiatic-Pacific Theaters of Operations as a fighter pilot, squadron commander and deputy group commander. He flew Spitfires in North Africa, Sicily and Italy on 150 combat missions for a total of 200 combat hours. He was awarded the Silver Star and the Distinguished Flying Cross for his action in the Mediterranean area. Later, he flew 50 missions in P-47 aircraft totaling 200 combat hours in the Western Pacific area.

After World War II, General Williams served in a number of assignments in the United States, including Commander of two fighter squadrons. From 1951 to 1953 he was Director of Training and Operations and later Deputy Commander of the 12th Strategic Fighter Wing at Bergstrom Air Force Base, Texas. In 1953 he assumed command of the 58th Fighter Bomber Group at Osan Air Base, Korea and the following year assumed command of the 51st Fighter Interceptor Group on Okinawa.

General Williams returned to the United States in 1956 to become Deputy for Operations at the 37th Air Division at Truax Field, Wisconsin. In 1959 he became Director of Tactics, Training and Evaluation, Eastern Air Defense Force, Stewart Air Force Base, N.Y.

He was assigned to Ent Air Force Base, Colorado in 1961 as Director of Operations, Headquarters ADC and in 1963 became Deputy Chief of Staff for Operations. He assumed command of the Detroit Air Defense Sector in 1964.

General Williams became Vice Commander of the Northern North American Air Defense Command (NORAD) Region in 1966 and assumed command of the United States Logistics Group (TUSLOG) in Ankara, Turkey in 1967. He returned to Headquarters ADC as Deputy Chief of Staff, Plans, in 1969, assuming command of the 21st later that year.

His military decorations include the Silver Star with one oak leaf cluster, Distinguished Service Medal, Legion of Merit with three oak leaf clusters, Distinguished Flying Cross, Air Medal with 17 oak leaf clusters, and the Air Force Commendation Medal. He is a command pilot with more than 7,500 flying hours.

Married to the former Kitty Touchberry of Florence, S.C., the general plans to make his home on Hilton Head Island, S.C.

General Price Assumes Command

As a howling wind whipped snow over the vast expanses of Hancock Field, the sounds of "Ruffles and Flourishes" echoed from the NORAD Band contingent. Lt Gen Thomas K. McGehee and Maj Gens Arthur G. Salisbury, George V. Williams and James L. Price entered the base gymnasium.



The occasion: The change of command of the 21st NORAD Region/Air Division from General Williams to General Price and the retirement of General Williams after 32 years of service. General McGehee, the ADC Commander, presided over the ceremony as General Salisbury, the ADC Chief of Staff, looked on.

Upon his retirement, General Williams was presented the Distinguished Service Medal for his outstanding achievements as Division Commander. Especially noted in the citation for the award was the general's direct involvement in people programs.

These projects ranged from dormitory improvements to middle management programs for junior NCOs to guest tour programs for first term airmen.

Maj Gen James L. Price, new Commander of the Division, began his military career in 1940 with the Army Air Force.⁴ Since then, the general has had tours in Germany, Taiwan, Guam and Vietnam, as well as several bases in the continental United States. Commissioned in 1943, the general served in the European Theater of Operation in 1944-45. Returning to Europe three years later, he was a Flight Commander during the Berlin Airlift.

In 1951, General Price began his association with air defense while with the 33rd Fighter Interceptor Wing at Otis AFB, Mass. His involvement with ADC continued with breaks for schooling until 1957 when he became Assistant Chief, Plans and Programs for the 13th Air Force in Taiwan.

Returning to the United States in 1959, he resumed his ADC association at Hamilton AFB, California. Other ADC posts followed until his Vietnam tour in 1966 as Commander of the 505th Tactical Control Group.

General Price again was assigned to ADC upon his return from Vietnam. His next three assignments took him to Paine Field, Washington, Tyndall AFB, Florida and Ent AFB, Colorado. At Headquarters ADC, the general held the position of Deputy Chief of Staff, Operations, since July 1971.

His decorations include the Silver Star, Legion of Merit with two oak leaf clusters, Distinguished Flying Cross, Air Medal with four oak leaf clusters and the Purple Heart.

General Price received his bachelor of science degree from the University of Maryland with a masters in business administration from Syracuse University and one in international affairs from George Washington University.

The general is married and has three children.

Inactivations and Realignment

On March 23, 1972, Headquarters ADC announced that six 21st Air Division units will be inactivated, relocated or transferred to the Air National Guard over the next 17 months.⁵

At the end of quarter, no actions were completed. Target dates vary from the second week of May as the earliest until the end of FY 73 as the latest.

The units to be inactivated are the 83rd FIS at Loring AFB, Maine and its dispersed operating base (DOB) at Bangor IAP, Maine, the 26th Air Defense Missile Squadron (ADMS) at Otis AFB, Mass., the 46th ADMS at McGuire AFB, N.J., and the 4784th Air Base Group at Otis.

Relocating as part of the defense forces shift will be Detachment 1, 49th FIS, which will move its DOB function to Loring AFB from Otis and the 4713th Defense Systems Evaluation Squadron (DSES) from Otis to Westover AFB, Mass.

Additionally, with the inactivation of the 4784th Air Base Group, Otis will be turned over to the Massachusetts Air National Guard.

Loring's 83rd FIS inactivation will involve a loss of 595 military personnel this spring. The squadron's F-106 fighter-interceptors will be transferred to the ANG at Otis. Its DOB at Bangor is also being shut down, involving the loss of 25 personnel.

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The 26th ADMS at Otis is scheduled to be put out of service by the beginning of the summer. The BOMARC Squadron employs 200 military members. McGuire's 46th ADMS will also be inactivated this fall, involving a 202 man loss.

The final inactivation is of the 4784th ABGp, Otis' host unit. As they transition from active Air Force to ANG, 1168 military slots will be done away with. The 102nd Fighter Group (ANG) will pick up 167 drill spaces as they change from F-100 to F-106 aircraft.

By the end of spring, Det 1 of the 49th FIS will have moved from Otis to Loring with a switch of 25 men. Among the last to leave Otis will be the men of the 4713th DSES which is slated to shift all of its operations to Westover AFB by the summer of 1973.

These announced realignments and reorganizations of defense forces will require increased reliance on the combat capabilities of the ANG units. Aircraft transferred from the active Air Force to the guard units are considered part of the total force. The ANG already provides day-to-day defense alert capability and supports national strategy in meeting the threat.

The BOMARC squadrons have contributed to the continental United States defense against penetration by long-range bombers.

However, recent analysis indicates that an acceptable defense against surprise attacks can be accomplished by the fighter interceptor forces.

Ninety-seven civil service job reductions are involved in the ADC reorganization. Career and career-conditional civilian personnel affected by these realignment actions will be afforded the full advantage of the Department of Defense program for stability of civilian employment.

Operations

Region Control Center

C Control Center manning decreased by 2 personnel during this reporting period.

	<u>Authorized</u>	<u>Assigned</u>
OFFICERS	64	58
ENLISTED	166	143
TOTAL	230	201

Intercept Directors at Division headquarters accomplished 2,948 live intercepts, 4,835 simulated intercepts and 1,850 BOMARC⁶ intercepts for a total of 9,663 intercepts during the quarter.

Seventeen Fertile Gain simulated Region-level exercises were used to develop individual and crew proficiency in aerospace defense techniques. The Control Center also participated in three live exercises, two Fertile Keynotes and one Fertile Brave, locally developed to train personnel in all areas of intercept employment in an ECM environment. Amalgam Hunt and Amalgam Fairplay 72-3,

simulated NORAD-wide exercises, were conducted to train personnel in all aspects of aerospace defense techniques. The Control Center, one of several, participated in the General Frederic H. Smith Competition on March 5 through 18, 1972.

The Control Center provided control for four practice ORIs during the quarter. The 49th FIS had an ORI on January 11 and February 8; the 134th FIS on February 5; and the 132nd FIS on March 4.

The Control Center, in conjunction with the 132nd FIS, received an Alert Force Capability Test on January 18. The overall rating was satisfactory.

Exercise and Analysis

Live exercises scheduled during the quarter were as follows:

- (1) Fertile Keynote 72-8, January 9, 1972
- (2) Fertile Keynote 72-9, January 28, 1972
- (3) Fertile Keynote 72-10, February 1, 1972
- (4) Fertile Brave 72-3, March 9, 1972
- (5) Amalgam Arrow 72-4, February 16-18, 1972

Simulated exercises scheduled during the quarter were as follows:

- (1) Amalgam Hunt 72-2, January 25, 1972
- (2) Amalgam Fairplay 72-3, March 18-23, 1972

A series of 13 Fertile Gain simulated exercises were conducted during the period of February 7 through March 10 to

prepare the Control Center operations crews for the General Frederic H. Smith Trophy competition on March 13, 1972.

General Frederic Smith Competition

The 21st Air Division came in second this year in the annual General Frederic H. Smith, Jr., trophy competition.

Garnering a total of 8,175 points out of a possible 10,000, the 21st finished second behind the 24th Air Division at Malmstrom AFB, Montana. The 24th had a total of 8,233 points.

Established as an Air Force award in 1963, the General Smith trophy recognizes the command and control element of the aerospace defense team which makes all-weather supersonic air-to-air intercepts possible.

The hammered silver trophy cup, presented annually on a rotating basis, is named for General Frederic Smith (USAF Ret) who once served as Vice Commander of ADC and Air Force vice Chief of Staff.

The Smith trophy competition is limited to Air Defense Ground Environment Control units possessing an interceptor control capability. The top unit, selected in competition with units from throughout ADC, is determined by the results of operational evaluations, maintenance management and academic testing.

Personnel

Organizational Changes at AFI

By order of the Secretary of the Air Force, the organizational structure of Air Forces Iceland was amended on March 9, 1972.

The changes provided the commander, Air Forces Iceland, with an organizational structure capable of discharging the assigned mission with a minimum expenditure of resources. Also, the changes were designed to promote organizational stability, improve communications and streamline the decision-making process. No changes in command or control arrangements were effected by the reorganization. Headquarters Air Forces Iceland is assigned to the 21st Air Division for administrative control purposes.

Transfer of Iceland Defense Force Manpower Authorizations

On 1 January 1972, Headquarters USAF/DPM approved the deletion of the 12 manpower authorizations reflected under functional code 7323, Iceland Defense Force (Navy) of the Headquarters Air Forces Iceland Unit Detail listing. Concurrent with this approval, the following actions were taken:

- (1) Manpower authorizations were transferred to Headquarters Command, USAF, for accountability and reflected on the NORAD Joint Table of Distribution.
- (2) Western European ceilings for commands affected were adjusted.

(3) The Personnel Accounting Symbol was changed from HFCBDP (Air Forces Iceland) to FMVWR7 (Det AA 14, 1137 USAF Special Activity Squadron).

(4) Unit will be manned by USAF and assignments classified as Special Category (SPECAT).

(5) Manpower authorizations are as follows:

<u># AUTH</u>	<u>GRADE</u>	<u>AFSC</u>
1	Col	0036
1	LTC	0036
1	LTC	3076
1	Maj	5516
1	Maj	6616
1	Maj	8016
1	Capt	8824
1	TSgt	70570
1	SSgt	70250
1	Sgt	60350
1	Sgt	70250
1	Sgt	71150

Transfer of Manpower Authorization

Effective February 1, 1972, OL AG, 4785 AB Squadron, Sondrestrom AB, Greenland, was inactivated and the authorization for the one officer transferred to the 4684th Air Base Group Unit Detail Listing for accounting purposes only. Mission and responsibilities of the incumbent remain unchanged and operational control was retained by the commander, 4785th Air Base Squadron, Stewart Field, N.Y.

This action was taken by ADC on January 10, 1972 to comply with the USAF Chief of Staff's directive to reduce the number of detachments and operating locations throughout the Air Force.

Change of Command Actions

The following Change of Command Actions occurred during this reporting period:

<u>DATE</u>	<u>UNIT</u>	<u>INCUMBENT</u>	<u>NEW COMMANDER</u>
21 Mar 72	4624 Spt Sq Hancock Fld	LtCol Alfred C. Petersen	LtCol Edward L. Garrison

NCO/Airman Advisory Council of the Year

During this reporting period, Headquarters ADC selected a 21st Air Division NCO/Airman Advisory Council as the Council of the Year for 1971. The 907th Radar Squadron NCO/Airman Advisory Council at Bucks Harbor AFS, Maine, was recipient of the award. The 907th competed against all other councils in ADC for the honor.

Safety

Flight Safety

Aircraft of the 21st Air Division flew a total of 5846.6 hours during the period of January 1 - March 31. There was one major accident, one minor accident and six incidents during this quarter.¹⁴

The major accident involved an F-101B assigned to the 101st Fighter Group (ANG) at Bangor IAP, Maine. The fighter sustained major structural damage on March 18 during a cross-wind landing. It was declared beyond economical repair after it left the runway on the upwind side and struck a snow bank.

The minor accident occurred on January 13 and involved an F-101B assigned to the 107th Fighter Group (ANG) at Niagara Falls IAP, N.Y. during a cross-wind landing. The aircraft left the runway on the downwind side causing the nose gear to fail.

Missile/Nuclear Safety

The Division experienced no missile/nuclear accidents or incidents during the quarter. ¹⁵ There was one nuclear deficiency reported by the 46th Air Defense Missile Squadron, McGuire AFB, N.J. A deficiency was discovered in the IPA system alarm panel. The alarm panel indicated the shelter was closed and locked when it was not.

Ground Safety

On February 11, 1972, the Division Safety Office proposed to ADC/SE that the mobile concept of traffic safety education be eliminated and students receive the training at their support ¹⁶ base while attending in a TDY status. On March 24 ADC rejected this proposal.

The subject is not yet closed and there have been several telephone conversations with ADC Safety on the subject.

During March a Ground Safety Technician was assigned to Headquarters Air Forces Iceland. The position had been authorized by ADC Manpower and Organization in 1971. The incumbent

will provide ground safety coverage for all USAF units stationed in Iceland.

Headquarters Air Forces Iceland has exerted strong pressure on Headquarters ADC over the last two or three years for the position to be authorized. The approval was primarily based on failure of the U.S. Navy (host) to provide safety services.

January 1972 was one of the worst months on record for ground safety. Conversely, February showed considerable improvement and congratulations were extended to all long range radar squadrons, air defense missile squadrons and Otis AFB for their efforts to make February an accident free month.

I. NOTES

1. For a complete set of Retirement/Change of Command pictures see Appendix I to this report.
2. Information supplied by Directorate of Information, Hqs 21st Air Division. In Division Historical Files.
3. For a complete biography on General Williams, see Doc. 1, Appendix II to this report.
4. For a complete biography on General Price, see Doc. 2, Appendix II to this report.
5. Msg (U), Subj: Announcement of ADC Program Actions, 231705Z Mar 72. (Doc 3)
6. Information supplied by DCS/Operations, Hqs 21st Air Division. In Division Historical Files.
7. Ibid.
8. Information supplied by Directorate of Information, Hqs 21st Air Division. In Division Historical files.
9. DAF/DPM I-079, 14 April 1971.
10. For the new organizational structure chart, see Doc. 4 in Appendix II to this report.
11. For manpower authorizations by grade, AFSC, functional code, quantity, etc., see Doc. 5 in Appendix II to this report.
12. Information supplied by DCS/Personnel, Hqs 21st Air Division. In Division Historical files.
13. For the new organizational structure for numbered Air Divisions, see Doc. 6 in Appendix II to this report.
14. Information supplied by Directorate of Safety, Hqs 21st Air Division. In Division Historical Files.
15. Ibid.
16. Ibid.

II. LOGISTICS

Maintenance

Installation of Common Digitizers

During the last quarter, the major concern of the Chief of Maintenance and his staff was the continued installation and activation of the AN/FYQ-47 Common Digitizer at the various radar stations in the Division. Allied with this was the deactivation of the old tube type message processor, the AN/FST-2.

AN/FYQ-47s were installed at Watertown AFS, N.Y., Barrington AS, Nova Scotia, Gibbsboro AFS, N.J., Charleston AFS, Maine, Bucks Harbor AFS, Maine, and Lockport AFS, N.Y., during the quarter.

AN/FST-2s were decommissioned at St. Albans, Montauk, Watertown, Gibbsboro, Charleston and Bucks Harbor.

Radar Modification

Also of interest to the Chief of Maintenance during this period was the modification to AN/FPS-7 radars. This modification was intended to convert the AN/FPS-7 from a seven beam radar to a single beam radar known as the AN/FPS-107.³

The result of this modification reduced life cycle costs of the system, increased system reliability and improved both system maintainability and performance. The life of the radar is also increased.

Thus far, three sites within the 21st Air Division have had their radars converted. They are the 764th Radar Squadron, St. Albans AFS, Vt., the 766th Radar Squadron, Caswell AFS, Maine, and the 762nd Air Defense Group, North Truro AFS, Mass.

Procurement

O&M North Country Contracts

A technical evaluation review board convened at 21st Air Division Headquarters on February 17 through 24, 1972, to evaluate the technical proposal submitted by Danish Arctic Contractors for FY 73 Base O&M Services at Thule and Sondrestrom Air Bases, Greenland.⁴ It was the board's conclusion that Danish Arctic Contractors possessed the technical capability to satisfactorily accomplish the ADC, MAC, OL-5 and Coast Guard requirements contained in the request for proposal. This automatically authorized further negotiations.

Mr. Henry F. Martinelly, Division Director of Procurement, participated in the technical and price negotiations on the FY 73 Base O&M service requirements in Copenhagen, Denmark, during the period of March 14 through 28, 1972. At that time it was determined that Danish Arctic Contractors also possessed the technical capabilities to perform the AFCS Non-sensitive Communication services.

At the end of this reporting period, however, award of the contract had not been made. It is anticipated that Danish Arctic Contractors will receive the contract for FY 73. This will include certain new AFCS requirements for Thule and Sondrestrom as well as certain services for the Coast Guard at Cape Atholl. The total contract amount is \$13,386,040.00.

Construction at Ice Cap Station

One major construction contract was awarded during this quarter on February 15, 1972. The contract specifications called for extending the operational life of DYE 3, Ice Cap Station, Greenland. Danish Arctic Contractors submitted the low bid of \$1,295,867. The project is to be completed by November 30, 1972.

II. NOTES

1. For further information concerning the AF/FYQ-47 Common Digitizer, see History of the 21st Air Division 1 Oct - 31 Dec 1971 (S), Chapter II.
2. Information supplied by DCS/Logistics, Hqs 21st Air Division. In Division Historical Files.
3. Ibid.
4. Interview (U) by SSgt M.J. Corbett, Division Historian, with Mr. Henry F. Martinelly, Director of Procurement, Hqs 21st Air Division, 12 Apr 72.

III. DIVISION HONORS¹

Division Outstanding First Term Reenlistee Award

During this reporting period, a first term staff sergeant was selected as the Division Outstanding First Term Reenlistee for 1971.²

SSgt Glenn E. Prescott, a Radar Repairman assigned to the 765th Air Defense Group, Charleston AFS, Maine was chosen for the honor over nominees from 14 other Division units.

Since entering the Air Force, Sergeant Prescott has amassed 31 semester hours of college credit towards an electrical engineering degree. He has applied and been accepted for the Airman's Education and Commissioning Program.

Completing courses in advanced mathematics, physics, chemistry, computer programming and other fields at the University of Maine, the sergeant maintained a 3.5 grade average.

Besides his desire to advance his education, Sergeant Prescott has distinguished himself on the job, not only in his main field of Radar Repair, but also while working on equipment beyond the scope of his grade skill level.

While at Charleston, he has repaired equipment, tested the AN/FSS-7 cyrongenic parametric amplifior prior to its acceptance, trouble shot various components of the radar and computer systems and conducted classes on a number of different pieces of the station's equipment.

In the community Sergeant Prescott has been a member of the Dover-Foxcroft Volunteer Fire Department and is active in the affairs of the St. John's Episcopal Church in Milo, Maine.

He and his wife, Jacqueline, live in Dover-Foxcroft and have a two year old daughter, Wendy Marie.

Enlisted Wife of the Year

Mrs. David O. Killmer represented the Aerospace Defense Command's enlisted wives in the 1972 Military Wife of the Year Program. Her husband is a weapons control technician with the 83rd FIS, a 21st Air Division unit.

Mrs. Killmer is a native of Hinesburg, Vt. She graduated from Cathedral High School in Burlington, Vt., and attended the University of Vermont at Burlington. She was awarded a Certified Teacher Aid diploma from the University of Maine at Orono.



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Sergeant Prescott and family



MRS. DAVID O. KILLMER, wife of an 83rd FIS weapons control technician, represented the ADC Enlisted Men's Wives in the Air Force Wife of the Year contest. (U.S. Air Force Photo)

During her husband's assignments to bases in Vermont, Germany, Colorado, Massachusetts and California, Mrs. Killmer has been active in civic and military functions on and off the bases. She has participated as a Cub Scout Den Mother, and as an active leader in the Little League Mothers' Group, United Fund and Cancer drives, Rotary activities and the Limestone, Maine centennial.

Donald M. Goughan, president of the Cerebral Palsy Association of Central Aroostook County in Caribou, Maine, cited Mrs. Killmer as being the "motivating force in the early organizational days" of the group.

"Through the four years, she has very actively continued to direct and support the group," Mr. Goughan said. "Conducting summer programs for the children, giving speeches to various interested groups, and seeking information and support for our school are activities that she can be counted on to do."

The five service finalists for Military Wife of the Year participated in a host of activities that culminated in the gala annual awards banquet held in May in Washington, D.C.

Senior Airman Advisor Retires

CMSgt Neil J. Grant, Jr., retired from the Air Force on March 31. As Senior Airman Advisor to the commander under

Maj Gen George V. Williams, the chief held a position of importance during his tenure here.

His job included inspecting division units with regard to discipline, dormitory conditions, dining halls, recreational facilities, NCO Open Messes and personal appearance. Additionally, he heard complaints and recommended solutions to them.

The chief entered the service on March 18, 1942 in Syracuse, N.Y. He saw duty during WW II as the master of a crash boat and as first sergeant of an Army Rescue Boat Company.

Since then, he has been a club manager, personnel superintendent at Hqs USAFE and Senior Airman Advisor to USFORAZ in the Azores before his assignment to the 21st.

Chief Grant has been awarded the Meritoribus Service Medal with one oak leaf cluster and the Air Force Commendation Medal with two oak leaf clusters. He is married to the former Brigitte Boese of Wiesbaden, Germany.

Two Units Named "Outstanding"

The 27th FIS (Later renamed the 83rd FIS), Loring AFB, Maine, and the 26th Air Defense Missile Squadron, Otis AFB, Mass., were awarded the Air Force Outstanding Unit Award during this quarter.

The 27th was named for the honor for its final 13 months at Loring. During this time, the unit was rated outstanding

by an ADC ORI, performed an extensive alert commitment and successful deployed to Tyndall AFB, Fla., for annual firing.

The coveted award was presented to the 26th ADMS in recognition of "sustained superior performance and outstanding professional ability contributing greatly to the defense posture of the United States.

The 26th was cited for its activities during the period January 1, 1970 through June 30, 1971. The 26th won the same award three years ago.

III. NOTES

1. All information used in this section was supplied by the Directorate of Information, Hqs 21st Air Division. In Division Historical Files.
2. Word was received from ADCOI on 17 May 1972 that SSgt. Prescott finished second in Command-Wide competition.

APPENDIX I

1. List of G-Series Orders

- S.O. G-1, Hqs 21st Air Div, 6 Jan 72
- S.O. G-2, Hqs 21st Air Div, 14 Jan 72
- S.O. G-3, Hqs 21st Air Div, 21 Jan 72
- S.O. G-4, Hqs 21st Air Div, 27 Jan 72
- S.O. G-5, Hqs 21st Air Div, 28 Jan 72
- S.O. G-6, Hqs 21st Air Div, 2 Feb 72
- S.O. G-7, Hqs 21st Air Div, 11 Feb 72
- S.O. G-8, Hqs 21st Air Div, 25 Feb 72
- S.O. G-9, Hqs 21st Air Div, 25 Feb 72
- S.O. G-10, Hqs 21st Air Div, 6 Mar 72
- S.O. G-11, Hqs 21st Air Div, 14 Mar 72
- S.O. G-12, Hqs 21st Air Div, 14 Mar 72
- S.O. G-13, Hqs 21st Air Div, 16 Mar 72
- S.O. G-14, Hqs 21st Air Div, 20 Mar 72
- S.O. G-15, Hqs 21st Air Div, 21 Mar 72
- S.O. G-16, Hqs 21st Air Div, 22 Mar 72

2. Retirement Pictures



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OFFICIAL
U. S. AIR FORCE PHOTO
3 FEB 1972
HANCOCK FIELD, N. Y.



OFFICIAL
U. S. AIR FORCE PHOTO
7 FEB 1972
HANCOCK FIELD, N. Y.



OFFICIAL
U. S. AIR FORCE PHOTO
7 FEB 1972
HANCOCK FIELD, N. Y.



OFFICIAL
U. S. AIR FORCE PHOTO
4 FEB 1972.
HANCOCK FIELD, N. Y.

APPENDIX II

List of Supporting Documents

1. Biography, (U), Maj Gen George V. Williams (current as of 1 February 1971)
2. Biography, (U), Maj Gen James L. Price (current as of 15 November 1971)
3. Msg (U), Subj: Announcement of ADC Program Actions, 231705Z Mar 72
4. Chart (U), Standard Organizational Structure, Hq Air Forces Iceland
5. Chart (U), Manpower Authorizations, Hq Air Forces Iceland
6. Chart (U), Standard Organization Structure, ADC Air Divisions

Subordinate Unit Histories

1. Hqs AFI, (U)
2. 26th Air Defense Missile Sq (U)
3. 46th Air Defense Missile Sq (U)
4. 49th FIS (S)
5. 57th FIS (C)
6. 83rd FIS (U)
7. 648th Radar Sq (U)
8. 655th Radar Sq (U)
9. 667 AC&W Sq (U)
10. 762nd Air Defense Group (U)
11. 764th Radar Sq (U)

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12. 765th Air Defense Group (U)
13. 772nd Radar Sq (U)
14. 773rd Radar Sq (U)
15. 766th Radar Sq (U)
16. 907th Radar Sq (U)
17. 932nd AC&W Sq (U)
18. 4683rd Air Base Group (U)
19. 4684th Air Base Group (U)
20. 4784th Air Base Group (U)
21. 4785th Air Base Group (U)



Biography

UNITED STATES AIR FORCE

MAJOR GENERAL GEORGE V. WILLIAMS

Major General George Vincent Williams is Commander of the 21st North American Air Defense Command Region, Hancock Field, Syracuse, N. Y.; with additional duties as Commander, 21st Air Division.

General Williams was born in New York City on June 6, 1919, and was graduated from Hyde Park High School in Chicago, Ill. He entered the aviation cadet program at Randolph Field, Tex., in 1940 and received his pilot wings and a commission as a second lieutenant in the Army Air Corps in May 1941.

During World War II, General Williams served in the European-African-Middle Eastern and Asiatic-Pacific Theaters of Operations as a fighter pilot, squadron commander and finally, deputy group commander. He flew Spitfires in North Africa, Sicily and Italy on 150 missions for a total of 200 combat hours. He was awarded the Silver Star and the Distinguished Flying Cross for action in the Mediterranean area. Later, he flew 50 missions in P-47 aircraft totaling 200 combat hours in the Western Pacific area.

After World War II, General Williams served in a number of assignments in the United States, including Commander of two fighter squadrons. From 1951 to 1953 he was Director of Training and Operations and later Deputy Commander of the 12th Strategic Fighter Wing at Bergstrom Air Force Base, Texas. In 1953 he assumed command of the 58th Fighter Bomber Group at Osan Air Base, Korea, and the following year assumed command of the 51st Fighter Interceptor Group on Okinawa.

General Williams returned to the United States in 1956 to become Deputy for Operations on the 37th Air Division at Truax Field, Wis. In January 1959 he became Director of Tactics, Training and Evaluation, Eastern Air Defense Force, Stewart Air Force Base, N. Y., and in August became Assistant Deputy for Operations. He next was assigned to Dobbins Air Force Base, Ga., as Deputy for Operations of the 32nd Air Division and in May 1961 became Vice Commander of the Division.

O V E R

(Current as of February 1, 1971)

(Local reproduction authorized)

He was assigned to Ent Air Force Base, Colo., in August 1961 as Director of Operations, Headquarters Air Defense Command (ADC), and in August 1963 became Assistant Deputy Chief of Staff for Operations. He assumed command of the Detroit Air Defense Sector in July 1964.

General Williams became Vice Commander of the Northern North American Air Defense Command (NORAD) Region in January 1966 and assumed command of The United States Logistics Group (TUSLOG), with headquarters in Ankara, Turkey, in July 1967. He returned to Headquarters Aerospace Defense Command as Deputy Chief of Staff, Plans, in August 1969. He assumed command of the 21st North American Air Defense Command Region with headquarters at Hancock Field, Syracuse, N. Y., in November 1969. He has additional duties as Commander, 21st Air Division.

His military decorations include the Silver Star with one oak leaf cluster, Legion of Merit with three oak leaf clusters, Distinguished Flying Cross, Air Medal with 17 oak leaf clusters and Air Force Commendation Medal. He is a command pilot with more than 8,550 hours flying time in conventional and jet aircraft.

General Williams is married to the former Kitty Touchberry of Florence, S.C. They have one son, George. His hometown is Chicago, Illinois.

He was promoted to the temporary grade of major general effective February 1, 1969, with date of rank of October 27, 1964.

- 30 -

(NOTE: General Williams retired at Hancock Field on Feb 4, 1972)



Biography

UNITED STATES AIR FORCE

SECRETARY OF THE AIR FORCE
OFFICE OF INFORMATION
COMMAND SERVICES UNIT
BOLLING AFB, D.C. 20332

AV 991-4291
AREA CODE 202/574-4291

MAJOR GENERAL JAMES L. PRICE

Major General James L. Price is Deputy Chief of Staff, Operations, Headquarters Aerospace Defense Command, (ADC), Ent Air Force Base, Colo.

General Price was born on Nov. 23, 1921, in Hornersville, Mo., and was graduated from high school in Bakersfield, Calif., in 1940. He earned a bachelor of science degree in military science from the University of Maryland in 1952; a master of business administration degree from Syracuse University in 1957; and a master of arts degree in international affairs from George Washington University in 1964.



His military career began with his enlistment in the Army Air Forces in 1940. He was graduated from flying school at Yuma Field, Ariz., and received his pilot wings and commission as second lieutenant in July 1943. From April 1944 to June 1945 he served in the European Theater of Operations as pilot and operations officer with the 721st Bombardment Squadron.

In June 1945 he returned to the United States and went to Hensley Field, Tex., where he served as operations officer and base air inspector. He was assigned to Bolling Field, Washington, D.C., in February 1947, as pilot and later served as base operations officer.

General Price went to Germany in September 1948 and was assigned to the 61st Troop Carrier Group, U.S. Air Forces in Europe, as operations and training officer and was flight commander in the Berlin Airlift. From July 1949 to October 1951 he served with the 86th Fighter Bomber Group as pilot and then group adjutant.

His association with Aerospace Defense Command (ADC) began in October 1951 when he was assigned as assistant operations officer and later wing operations staff officer with the 33d Fighter Interceptor Wing at Otis Air Force Base, Mass. He attended the University of Maryland from January 1952 to August 1952 and then returned to Otis Air Force Base as assistant operations officer, 4707th Defense Wing (ADC).

In May 1953 he went to Brunswick, Maine, as Commander, 654th Aircraft Control and Warning Squadron (ADC). In March 1955 he was assigned as Commander, 47th Fighter Interceptor Squadron (ADC), 15th Fighter Group, at Niagara Falls, N.Y. He attended Syracuse University from September 1956 to November 1957.

O V E R

(Current as of November 15, 1971)

(Local reproduction authorized)

General Price next went to Taiwan and served as Assistant Chief, Plans and Programs, Thirteenth Air Force, until July 1958, when he went to Guam as operations staff officer with the 327th Air Division and then as Commander, 41st Fighter Interceptor Squadron.

He returned to the United States in September 1959 and was assigned as Director of Operations and Training, 28th Air Division (ADC) at Hamilton Air Force Base, Calif. He was appointed Commander of the 456th Fighter Interceptor Squadron at Castle Air Force Base, Calif., in July 1960. In August 1963 he entered the National War College, Washington, D.C.

In August 1964 General Price was assigned to Headquarters Air Defense Command, Ent Air Force Base, Colo., as Chief, Weapons Division, Deputy Chief of Staff, Operations. He went to the Republic of Vietnam in May 1966 and served for a year as Commander, 505th Tactical Control Group. His next assignment was as Vice Commander, 57th Fighter Group (ADC), Paine Field, Wash., and in July 1967 he became Commander.

General Price was assigned to the Air Defense Weapons Center, Tyndall Air Force Base, Fla., in January 1968 as Vice Commander. He became Commander in June 1968.

He became Deputy Chief of Staff, Operations, Headquarters Aerospace Defense Command in July 1971.

His military decorations and awards include the Silver Star, Legion of Merit with two oak leaf clusters, Distinguished Flying Cross, Air Medal with four oak leaf clusters, Air Force Commendation Medal, Purple Heart, Good Conduct Medal, and Air Force Outstanding Unit Award Ribbon.

General Price is married to the former Ellen Mae Harris of Dallas, Tex. They have three children: Jean Ann, James L. and Margaret Lee. His hometown is Dallas, Tex.

He was promoted to the temporary grade of major general effective November 1, 1971, with date of rank January 23, 1968.

MAR 29 02 07 '72

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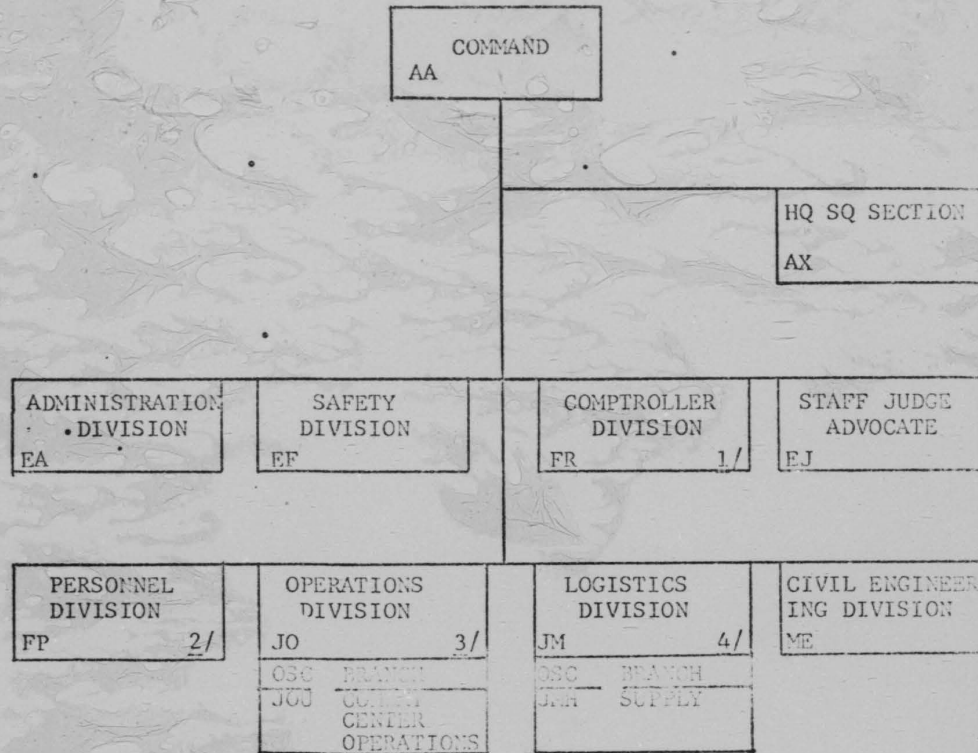
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Send copy to
all staff heads
Accomplished
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- 2/. Includes Social Actions functions.
- 3/. Includes Communications & Electronics, Disaster Preparedness, Interceptor-Operations, and Ground Environment functions.
- 4/. Includes Logistics Plans and Transportation functions.

STANDARD ORGANIZATION STRUCTURE
HQ AIR FORCES ICELAND

Attach 1

45

MANPOWER AUTHORIZATIONS

<u>OSC</u>	<u>FUNCTION CODE</u>	<u>GRADE</u>	<u>AFSC</u>	<u>QUANTITY</u>
AA	1010	COL	E0066	1
		UNK	70450	1
AZ	1012	CPT	A7024	1
		MSG	10090	1
		TSG	75172	1
		SGT	70250	2
		CPT	7034	1
EA	1105	MSG	70270A	1
		SSG	70250A	2
		SGT	70250A	4
		UNK	70250A	1
		CPT	X1125D	1
EF	1061	CPT	X1125D	1
		MSG	24170	1
EJ	1021	CPT	8824	1
		TSG	70570	1
FP	1665	MAJ	7316	1
		SMS	73293	1
		MSG	73270	1
		TSG	73270	1
		SSG	73250	2
		SGT	73250	1
		UNK	70450	1
		CPT	6724	1
		MSG	67170	1
FR	1510	TSG	67170	1
		SSG	67153	1
		SSG	67151	2
		SGT	67151	3
		SGT	70250	1
		SSG	67153	1
		TSG	67270	1
		LTC	0046	1
		MAJ	6616	1
		MSG	S43171C	1
JM	1200	MSG	47371	1
		SSG	70250	1
		LTC	0046	1
		MAJ	6616	1

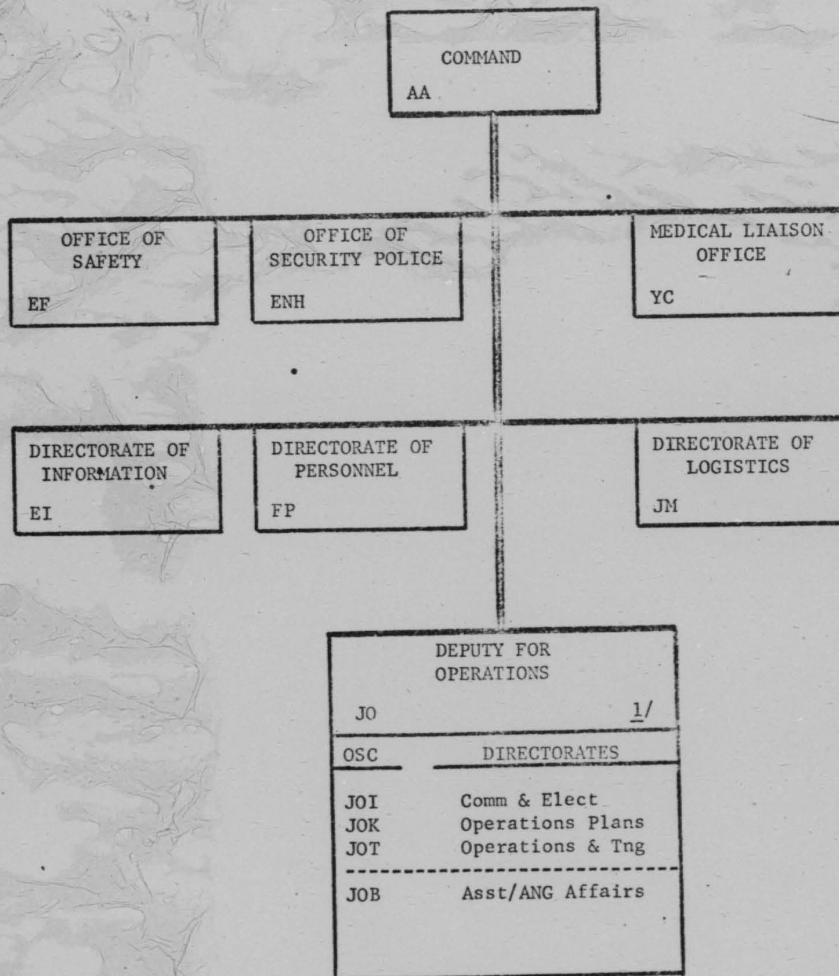
Atch 2

<u>OSC</u>	<u>FUNCTION CODE</u>	<u>GRADE</u>	<u>AFSC</u>	<u>QUANTITY</u>
JMH	4100	MAJ	6416	1
		TSG	64570	1
	4130	SGT	70250	1
		CPT	6424A	1
	4131	MSG	64570	1
		SGT	70250	1
		TSG	64570	1
	4133	SSG	64550	1
		A1C	64530	1
		MSG	D64870A	1
	4135	TSG	64570	1
		SSG	70250	1
	4132	SGT	70250	1
		MSG	64570	1
	4120	SMS	64790	1
		SGT	70250	1
	4121	MSG	64770	1
		SSG	64750	1
	4122	MSG	64770	1
		SSG	64750	2
		SGT	64750	1
		A1C	64730	1
	4123	MSG	64770	1
		SSG	64750	2
		SGT	64750	3
	4124	A1C	64730	1
		TSG	64770	1
	4126	SGT	64550	1
		TSG	64770	1
		SSG	64750	1
SGT		64750	1	
4150	A1C	64730	2	
	CPT	6424A	1	
415101	SSG	70250	1	
	MSG	64570	1	
	SSG	64550	1	
	SGT	64550	1	
415102	A1C	64530	1	
	SSG	64550	1	
		A1C	64590	1

<u>OSC</u>	<u>FUNCTION CODE</u>	<u>GRADE</u>	<u>AFSC</u>	<u>QUANTITY</u>
JMH	4100	MAJ	6416	1
		TSG	64570	1
	4130	SGT	70250	1
		CPT	6424A	1
	4131	MSG	64570	1
		SGT	70250	1
		TSG	64570	1
	4133	SSG	64550	1
		A1C	64530	1
		MSG	D64870A	1
	4135	TSG	64570	1
		SSG	70250	1
	4132	SGT	70250	1
		MSG	64570	1
	4120	SMS	64790	1
		SGT	70250	1
	4121	MSG	64770	1
		SSG	64750	1
	4122	MSG	64770	1
		SSG	64750	2
		SGT	64750	1
		A1C	64730	1
		MSG	64770	1
	4123	SSG	64750	2
		SGT	64750	3
		A1C	64730	1
	4124	TSG	64770	1
		SGT	64550	1
	4126	TSG	64770	1
		SSG	64750	1
		SGT	64750	1
		A1C	64730	2
	4150	CPT	6424A	1
SSG		70250	1	
415101	MSG	64570	1	
	SSG	64550	1	
	SGT	64550	1	
415102	A1C	64530	1	
	SSG	64550	1	
		A1C	64590	1

<u>OSC</u>	<u>FUNCTION CODE</u>	<u>GRADE</u>	<u>AFSC</u>	<u>QUANTITY</u>
	4152	SMS	64590	1
	415201	SSG	64550	1
	415202	SSG	64550	1
	415203	TSG	64570	1
		SSG	64550	1
		A1C	64530	1
	415204	SSG	64550	1
		SGT	64550	1
	4140	CPT	6424A	1
	4141	MSG	64570	1
		SGT	70250	1
	414101	SSG	64550	2
		SGT	64550	1
	414110	TSG	64570	1
		SGT	64550	1
	414111	TSG	64570	1
		SGT	64550	1
	414120	SSG	64550	1
	414121	SSG	64550	1
	414130	SGT	64550	1
	4142	CPT	6424A	1
		SGT	70250	1
	414201	TSG	64570	1
		SGT	64550	1
		A1C	64530	1
	414102	TSG	64570	1
		SGT	64550	2
		A1C	64530	1
	4143	TSG	64570	1
	416102	TSG	64870A	1
		SSG	64850A	2
		SGT	64850A	2
	416101	TSG	64570	1
		SGT	64550	1
		A1C	64530	1
	4162	TSG	64570	1
		SSG	64550	1
		SGT	64550	1
		A1C	64530	1
	4163	TSG	64570	1
		SGT	64550	1
		A1C	64530	1

<u>OSC</u>	<u>FUNCTION CODE</u>	<u>GRADE</u>	<u>AFSC</u>	<u>QUANTITY</u>
	4160	CPT	D6424A	1
		SGT	70250	1
JO	1300	LTC	0036	1
		MAJ	1716	1
		CPT	1435E	1
		TSG	24270	1
		SSG	70250	2
	1820	MAJ	3076	1
		TSG	29170	1
JOU	1350	CPT	1744A	4
		LT	1744A	1
		TSG	27670	1
		SGT	27650	4
ME	1700	CPT	5525C	1
		SMS	55590	1



1/. This function is reflected on NORAD JTD.

STANDARD ORGANIZATION STRUCTURE
ADC AIR DIVISIONS

Attachment 3



HISTORICAL RECORD

of the

HEADQUARTERS AIR FORCES ICELAND

for the period ending

31 MARCH 1972

ADC FORM
JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION Headquarters, Air Forces Iceland (ADC) Keflavik NS, FPO New York 09571		2. NAME AND GRADE OF COMMANDER BUDD H. BUTCHER, Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons) Headquarters, Iceland Defense Force (IDF) Commander-in-Chief, Atlantic (CINCLANT) Opn Control by Unified Command Headquarters, 21st Air Division (ADC) Headquarters, Aerospace Defense Command (ADC)				
4. SUBORDINATE UNITS (Down to and including squadrons) 57th Fighter Interceptor Squadron 932nd Aircraft Control and Warning Squadron 667th Aircraft Control and Warning Squadron				
5. MISSION (Give authority and brief statement of primary mission) Establish and maintain the function necessary to provide the Commander-in-Chief Atlantic (CINCLANT) with an operational combat force responsible to the Commander, Iceland Defense Force, for the defense of Iceland within the capability of assigned aircraft and personnel. Maintain a level of operational effectiveness and alert posture as required by CINCLANT. Provide continuous radar surveillance and timely, accurate reporting of observed air activity including early warning to appropriate air defense agencies.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	30	133	3	166
ASSIGNED	24	124	3	151
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) NONE (See historical records of subordinate units).				

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. DIRECTOR OF LOGISTICS:

a. IGS, Chief of Supply:

(1) Major Accomplishments:

(a) An after duty support unit was implemented 9 February 1972, to furnish better response to the various maintenance activities supported by the Chief of Supply.

(b) A program was established to control special levels. Deletion of over 5000 special levels was the result of this program during the first quarter of 1972.

(c) Action was taken to declare and report (if applicable) all excesses in the account. All possible precautions are being taken to insure that only true excesses are shipped.

(d) The Operational Support Section of the Equipment Management Officer was rewarehoused to provide better support to our customers.

(e) New lighting has been installed in part of the Equipment Management area.

(f) A complete realignment of the Receiving and Inspection Sections was accomplished to allow for better working conditions.

(g) All items within the supply account with "NO NOMENCLATURE" were researched and applicable nouns were established. This consisted of 1825 item records.

(i) The Document Control Section was relocated to provide a larger working area.

(j) The Research Section was expanded about 50% to provide a better working area.

(k) TSgt Charles R. Buckland of the Management Procedures Branch and SSgt James Dinsmore, of the Materiel Facilities Branch were presented the Air Force Commendation Medal during February Commander's Call for outstanding performance at their previous assignments.

(1) Quarterly ratings of supply effectiveness are as follows:

Recoverable- 84.51%

EQQ - 73.92%

Equipment - 19.02%

Total - 75.66%

If necessary to facilitate typing, separate by tearing along fold . reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

(m) The total transactions processes within the account during the first quarter was 98,139; total line items maintained is 18093.

(2) Inspections:

(a) Logistics Staff Assistance Visit, 17 March 1972, resulted in a very favorable rating.

(b) The first quarter surveillance visit of the Chief of Supply complex was conducted from 10 January to 24 March 1972.

b. DE, Staff Civil Engineer:

(1) Programming:

(a) The facility utilization study in support of the 57th FISq interim facility position was finalized and forwarded to ADC. Three projects were approved, all providing for alterations for hangers 830 and 832. Hq ADC is accomplishing design and expects completion in June 1972.

(b) In keeping with the overall Project Volunteer program, custodial contract drawings and specifications were delivered to the ROICC office and programming documents were forwarded to Hq ADC for barracks improvement projects under the Civil Engineering Service Dorm Program. The custodial contract is being held in abeyance by the Naval Station; no action will be taken on the Service Dorm Project package by ADC until they decide whether Air Force or Navy standards will be utilized in Iceland. Total project value under Service Dorm is \$546,100.

(c) The following projects were submitted for funding:

KEF 73-122, Alt Vent System, Dye 5.

KEF 73-124, Inst Power Line, Base Supply.

KEF 73-125, Inst Gym Floor, Site H-3.

(d) Funds were received for one project, KEF 72-111, Const Chaplain Offices. This is in support of the two Air Force Chaplains.

(2) Current MCP: Three projects were approved by Hq, USAF and forwarded to the Congress for approval. All others included in the FY 73 MCP will slip to the FY 74 Program. The three projects proposed for Keflavik are:

Engine Test Stand.

Engine Run-up Facility.

Avionics Shop.

(If more space is needed, continue on blank sheets, size 8 x 10, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

MICHAEL D. AHLBERG, Captain, USAF

SIGNATURE

SIGNATURE

APPROVED BY (Typed name and grade of Commander)

BUDD H. BUTCHER, Colonel, USAF

(3) Visitors: An engineering team from Hq ADC came to gather sufficient information to accomplish project design for the interim facility position in support of the 57th FISq. Accompanying the team was the engineer manager responsible for validating projects for Iceland and answering questions concerning civil engineering problems in Iceland as they come up at the Headquarters. He visited both radar sites as well as the Public Works Offices at Keflavik.

(4) Construction Projects:

(a) The ROICC office began negotiations on the hanger alterations to support Det 14's Squadron Operations function. Project award is expected in April.

(b) Material was received to install two BAK-12 barriers on runways 03 and 30. Public Works is accomplishing the design and project award is expected in April.

(c) The Rockville dining hall project experienced another job stoppage, this time due to a shortage in the government furnished floor tile. This tile was ordered and lost in shipment. Tracer action has been initiated by the vendor.

c. LGT, Transportation:

(1) New tires were installed on all Aircraft Towing Tractors.

(2) Snow tires were installed on all Air Force vehicles during this period.

(3) Request forwarded to ADC requesting replacements for all H Coded AGE Tractors and other Air Force assigned vehicles.

d. Personnel: During the period of this history report, the following losses and gains have been experienced:

<u>BRANCH</u>	<u>LOSSES</u>	<u>GAINS</u>
Supplies Management	5	7
Equipment Management	3	5
Item Accounting	2	4
Management and Procedures	1	5
Materiel Facilities	<u>6</u>	<u>12</u>
	17	33

2. CHAPLAIN:

a. Chaplain, Captain John F. Mahoney, Catholic Chaplain, arrived from Sondrestrom, Greenland, 28 February to serve as the first Catholic site Chaplain assigned to Air Forces Iceland. His major responsibilities will include monthly visitations to Rockville and Hofn.

b. Work has begun on two new Chaplain offices and an administration office for the AFI Chaplains in building 740. With anticipated completion in May, the Air Force Chaplains will be more centrally located for service to AFI units.

3. SAFETY: There were no serious accidents or incidents during the period of this story.

1 COMPTROLLER:

a. Accounting and Finance:

(1) ACF continued to operate under a manual accounting and reporting system. The new system has proven to be less effective than the previous mechanized system due primarily to the increased chance for human error inherent in a manual operation. Personnel are becoming more familiar with the system as time passes and no major problems are expected in the future.

(2) The Military Pay and Travel section was notified that the servicing Accounting and Finance Office for Keflavik leave accounting processing would be transferred from Loring AFB, Maine to Ent AFB, Colorado effective 1 April 1972. Revised leave processing instructions received from Ent shifted a substantial portion of leave accounting administrative processing from this office to the units. No major problems have been encountered in this change.

(3) ACF was informed by ADC/ACFS that effective 1 April 1972 this office would no longer be an agent of the Sondestrom AFO and would become an agent of the Ent AFB Accounting and Finance Office, ADSN 6761. Our ADSN was changed to 676102 because of this.

(4) SSgt Jerry E. Harris arrived this station 11 February 1972.

b. Budget:

(1) The 2nd Revision to the FY 72 Budget was prepared and forwarded to ADC/ACB. Numerous critical areas remain unfunded at the present time.

(2) The FY 73 Initial Financial Plan was prepared and forwarded to ADC/ACB.

(3) The budget office was the subject of a 21st Air Division staff assistance visit in January. The financial management program was found to be satisfactory and Mr. Murphy, 21st AD/ACB will visit the budget office again in May 1972.

5. DIRECTOR OF OPERATIONS:

a. Communications and Electronics, DOK:

(1) Efforts were concentrated to initiate planning for the overall communications improvement in AFE-OPCON and 57 FISq. Mr. Crockett, 21st Air Division (DOKA), visited Keflavik during this quarter to formulate planning procedures and provide guidance.

(2) The 57 FISq Automatic Electric two-digit system underwent emergency maintenance by an AFCS team from Griffis AFB, NY.

(3) A draft copy of Expert Vehicle communications validation was forwarded to Hq ADC for review and concurrence. The validation is necessary to insure continuity of support provided by the Naval Station Communications Station, Keflavik.

b. Air Force Element-Operations Control Center (AFE-OPCON), DOC:

- (1) During the period of this history there was a very significant increase in Soviet air activity. Most of this activity was in support of a Soviet Hotel Class submarine which became disabled southwest of Iceland. The submarine was put under tow and returned to the North Fleet.
- (2) In addition to monitoring all SAR flights the AFE-OPCON played a prime roll in lifesaving efforts. The Duty Controller is responsible for initial reaction until relieved by the SAR Mission Coordinator, in addition the AFE-OPCON acts as the Joint Rescue Coordination Center (JRCC) for a major portion of the North Atlantic.
- (3) Due to quick reaction and immediate launch an Icelandic man was rescued when his one-engine aircraft ditched in Reykjavik Harbor. A HH-3 Helo. was launched and picked up the man less than 25 minutes after he landed in the water. This effort received a great deal of local press coverage. This occurred on 4 January.
- (4) On 16 March a heart patient was transferred from Reykjavik to a hospital in England. The AFE-OPCON acted as coordinator on this mission after receiving the request from the Icelandic Lifesaving Association.
- (5) On 30 March a scientist conducting research on one of Iceland's largest glaciers was pulled from a crevice by one of the HH-3s. The individual had fallen and efforts of the local rescue team were not successful. AFE-OPCON maintains effective liaison with Icelandic national rescue agencies.
- (6) On 31 March both the HC-130 and HH-3 were scrambled on a two-engine aircraft with two persons on board. The aircraft was low on fuel and the pilot feared he would have to ditch. The HC-130 dropped flares and the HH-3 was able to remain in trail of the aircraft in distress. Again Icelandic press sources gave great credit from the SAR efforts and coordination with the Icelandic Lifesaving Association.
- (7) Due to the low flying activity because of the winter months only twenty-three emergency requests were processed. Notification of the IDF Chief of Staff along with staff personnel were notified.
- (8) Four Helping-Hand notifications were processed during the period.
- (9) A test of local operations instructions was conducted with a crash drill conducted on 27 March.

c. Ground Environment, DOTE; Fighter Officer, DOTWO:

- (1) The 21 Air Div Ground Environment Staff Assistance Team visited AFI and subordinate units during the period 15-18 Feb 72 for the purpose of reviewing and evaluating the operations functions at each ground environment unit. Discrepancies noted were corrected at each unit prior to 31 March 72 with continued follow-up required through the 21 Air Div MIDS Index.
- (2) ADC is providing funds to System Development Corporation (SDC) for production of two Manual System Training Missions. This section coordinated the request with the appropriate agencies.

- (3) AFI contracted with an ITT Artic Services' unsolicited contract proposal civilianize the two AFI AC&W Squadrons provided selected operations and security spaces are manned with USAF personnel.
- (4) The first Operation Charabang was conducted on 18 Feb with two additional training missions in March. This effort culminates three years of planning and coordinating this joint operation.
- (5) College Watch 1-72, 2-72 and 3-72 exercises were conducted by this office during the period with additional Mini-Watches scheduled to give the ground environment air battle training due to a heavy turnover of personnel. College Watch 1-72 was as near an ORI as resources would permit with testing of aircrews and ground environment personnel, flush, armament turnaround, AWST and an air battle. Numerous additional involving the 57th FISq were conducted to train personnel in massload, turnaround, flush, and AWST procedures.
- (6) A new agreement was signed with the Icelandic Civil Aviation Agency (ICAA) which allowed flushing of aircraft for survival purposes. This agreement was considered a major breakthrough in USAF dealings with the ICAA.
- (7) Procedures were developed with ICAA which allow random radar recoveries of interceptor aircraft. This was considered as the first step in improving the air traffic environment and an essential part of the interface with ICAA and H-1. After interface, it is expected that random recoveries will be conducted routinely by H-1 and Keflavik GCA. These recoveries will be monitored by ICAA on their scopes.
- (8) The 21 Air Division conducted a Staff Assistance Visit involving AFI agencies and the 57 FISq beginning 7 March. Operations procedures and concepts were inspected and found satisfactory. Many kudos were received from the team. The AFI Flight Examiner was also given a no-notice standardization flight check.
- (9) During this period MSSgt Arnold R. Davis arrived at this station and started this units Disaster Preparedness Program.
- (10) Soviet air activity within the Icelandic MADIZ during this quarter was extensive. Sixty-six aircraft were intercepted.
- (11) The following staff assistance visits were performed by this headquarters during this period:
 - (a) Lt Col J. J. Bayer, Jr. performed a visit to the 932 AC&W Sq on 7 January. The purpose of the visit was to review and evaluate the effectiveness of the Operations and Communications-Electronics classified security in accordance with appropriate Air Force Manuals and Regulations. Also the Operations management of the CDIF was inspected. Minor discrepancies were noted in both areas and corrective action was taken and corrected at that time.
 - (b) Capt D.W. Pedersen performed a visit to the 57 FISq on 11 January. The purpose of the visit was to identify communication problem areas at the Command Post activity.
 - (c) Lt Col J.J. Bayer, Jr., and MSgt Showalter, 932 AC&W Sq, performed a visit to the 667 AC&W Sq on 12-13 January. The purpose of the visit was to review and evaluate the effectiveness of the operations training and the administration of the CDIF in accordance with AFIR 55-8. Classified security was also inspected during this visit.

(d) Lt Col J.J. Bayer Jr., and Lt Col W.D. Norris along with Maj F.T. [redacted] performed a visit to the 932 AC&W Sq and the 57 FISq during the period 2-7 February. The purpose of the visit was the evaluation of the unit's participation in a College Watch Exercise.

VISITORS LOG

Jan-Mar 1972

<u>TEAM</u>	<u>DATES</u>	<u>PURPOSE</u>
Lt Col Fulcher + 3	11-18 Jan	Admin Assist Visit
Mr. Tompkins	26-29 Jan	Mil Const Survey
Col John Carey	19 Jan	JAG
BGen Everest + 5	7-8 Feb	Det 14, Staff Visit
Mr. Curtis Smothers (GS-16)	23-26 Jan 72	Equal Opportunity
Cmdr Taylor	"	" "
1st Lt Hinton	1 Feb	Site Orientation
Maj Trombley	3-4 Feb	Orient. Visit (Dye 5)
Capt Lovering + 1	8-9 Feb	Site Investigation
Capt Washington + 2	8-9 Feb	Operations Visit
pt Rock & CMS Greer	28 Feb - 8 Mar	Orientation Visit
Maj Mark Smith + 2	6-10 Mar	Maint/Sup Gnd Elec SAV
Col M. Duncan + 35	"	Staff Assistance Visit
MSgt George Carnes	28 Feb- 7 Mar	Personnel Staff Visit
Mr. Irby & Mr. Blink	23 Feb	Rockville
Mr. Thomas Carlsson	3 Mar	Political Editor of Morganbladid
Iceland Foreign Misister	10 Mar	Visit to Rockville
Col Ewing + 15	7-11 Mar	Staff Visit to Det 3
Mr. Crockett	5-12 Mar	Communications
SMS Wortman		Det 3
Brig Gen Frank Everest	29-30 Mar	Det 14, Staff Visit
MSgt Baker & TSgt McCrossn	10 Mar	Photo Coverage

HISTORICAL RECORD

of the

26TH AIR DEFENSE MISSILE SQUADRON (BOMARC) (ADC)

for the period ending

1 JANUARY THROUGH 31 MARCH 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

REQUIRED DATA				
1. UNIT AND LOCATION 26 Air Defense Missile Squadron (ADC) Otis Air Force Base, Massachusetts 02542		2. NAME AND GRADE OF COMMANDER LARRY L. KING, Major, USAF		
3. CHAIN OF COMMAND (Superior echelons) Aerospace Defense Command 21st NORAD Region 21st Air Division				
4. SUBORDINATE UNITS (Down to and including squadrons) None				
5. MISSION (Give authority and brief statement of primary mission) AUTHORITY: AFR 210-3/ADC Sup 1, dated 1 June 1970 MISSION: The mission of the 26th Air Defense Missile Squadron is to provide the Commander, 21st NORAD Region/21st Air Division with the maximum number of operationally-ready BOMARC missiles for the interception and destruction of hostile aircraft or aerial objects within the control area of the 21st NORAD Region and/or adjacent NORAD Divisions.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	12	113	5	130
ASSIGNED	13	107	5	125
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) CIM-10B Missile Launch Shelters - Twenty-eight (28)				

ii.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

- 12 Jan - Visit of General Williams (21CC) and Colonel Dunaway (21CV)
- 17 & 18 Jan - Visit of 21SE Staff Assistance Team
- 31 Jan - Visit of Lt Col Stephen Flanagan, 46th ADMS/CC
- 2 - 4 Feb - The unit commander attended the 21st Air Division Commanders Conference and the retirement ceremonies for General Williams at Syracuse, New York
- 16 & 17 Feb - The unit commander attended the ADC Commanders Conference at Tyndall Air Force Base, Florida
- 2 Feb - Visit of Major General Horace A Hanes, Hq ADC/CV
- 6 - 10 Mar - The unit commander and chief of maintenance spent the week at Hq ADC. Purpose: unit inactivation procedures
- 15 Mar - Visit of Lt Colonel Thomas L Hattaway, CC of 773rd Radar Sq at Montauk AFS, New York

* * *

Items of interest occurring within the sections are as follows:

Command Section (CC)

Commander: Major Larry L King
 First Sergeant: CMSgt Douglas Anderson
 Secretary: Mrs Evangelyn A V Handerson
 Significant Events: as listed above

Administration Section (DA)

OIC: 2nd Lt William A Balagna
 NCOIC: SSgt Edward A Welch
 Personnel:
 Arrivals: Sgt John D Francisco
 Departures: Sgt Leon M Barros - to ATC, Lowry AFB, Colorado
 Upgradings: SSgt Edward A Welch - Base-Level Management School, Otis AFB
 February 1972

Lt Balagna attended school for the 30BR7031 Course at Keesler AFB, Mississippi from 5 January to 22 February 1972.

Significant Events: A1C Mary E LaCasse was elected/selected Squadron Airman of the Quarter in March

Operations Section (DO)

OIC: Capt William A Ottewill
 NCOIC: Sgt Salvatore Aluia
 Personnel:
 Departures: Capt Philip S Walter - discharged 15 Feb 72
 Capt Stephen P Judd - discharged 29 Feb 72

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II.

COMMENTARY (Continued)

Operations Section (continued)

Upgradings: Capt David A Engle is attending Squadron Officer School.
Will graduate 15 April 1972.

Significant Events: Capt Philip S Walter, Jr was awarded the Air Force
Commendation Medal upon discharge.

Missile/Nuclear Safety (SE)

OIC: Capt Dominic J Ottavi

NCOIC: MSgt Robert W Sawig (as an additional duty)

Weapon System Supply Section (LCS)

SUPPLY SUPERINTENDENT: SMS Emmett C Warren

NCOIC: TSgt Frank G Carothers

Personnel:

Arrivals: SMS Emmett C Warren - from Eglin AFB, Florida

BOMARC Engineer Section (DE)

NCOIC: SMS John E Teegarden

Personnel:

Promotions: Gerald J Dee to TSgt effective 1 Feb 72

Charles L Giddens to Sgt effective 1 Mar 72

Arrivals: Sgt Jeffrey P Hayward - from Charleston AFB, S C

Sgt Frederick R Scott - from SEA

Sgt John B Shaw - from SEA

AIC Dennis C Bergeron - from Sheppard AFB, Tex

SMS John E Teegarden - from SEA

Departures: Ann Daniel A Langner - to the Azores

Sgt Robert E Rudasill - PCS to England

TSgt James H Rose - retired

Edmund Barker (CIV) - retired

Sgt William P Whiting - separated

Upgradings: AIC Ivan D Heon is attending the MB -Teen and Barrier
School at Sheppard AFB, Tex

Chief of Maintenance Section (LGM)

OIC: Capt Marlowe E Ubl

NCOIC: MSgt Losey J Winslow, Jr

Significant Events: On 6 to 10 March, Major King and Capt Ubl TDY to
Hq ADC to coordinate final approval of PAD 72-7, Inactivation of
the 26th Air Defense Missile Squadron (BOMARC).

Maintenance Control (LGM)

OIC: Capt Ralph N Trost

NCOIC: MSgt Losey J Winslow, Jr

(If more space is needed, continue on blank sheets, size 8 x 10½, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

WILLIAM F BARNES
MSgt, USAF

SIGNATURE

APPROVED BY (Typed name and grade of Commander)

LARRY L KING
Major, USAF

SIGNATURE

Electronics Section (LCME)

NCOIC: SMS Dana R Hughes

Personnel:

Departures: SSgt Edward H Caron - discharged

Launch Area Maintenance (LGMEN)

OIC: Capt Marlowe E Ubl

NCOIC: MSgt Arthur A Lohr

Personnel:

Upgradings: A1C Paul E Gustafson, 54150J OJT
A1C Jerome S Csarny, 54150J OJT

TSgt Roger D Webster and A1C Paul E Gustafson attended the BOC School at Tyndall AFB, Florida

Significant Events: A1C Paul E Gustafson was selected as Base Airman of the Quarter for the period 1 January through 31 March 1972.

Motor Pool (DMT)

OIC: Capt Ralph M Trost

NCOIC: TSgt Roy L Baudoin

Personnel:

Promotions: Dennis M Sheehan to Sgt

Upgradings: SSgt Robert R Bellemore and Sgt Dennis M Sheehan: OJT
Administrative Supervisor School

Communications Maintenance (DMK)

OIC: Capt William A Ottewill

NCOIC: MSgt Gaylen W Ordway

Personnel:

Arrivals: TSgt Gaylen W Ordway - from Keesler AFB, after attending the Electronic Computer Systems Supervisor/Technician Course.

Departures: Sgt Robert C MacLeod - PCS to 37th ADMS
Sgt Frank P Conti - discharged

Sgt Randall J Bauden - discharged

Upgradings: TSgt Douglas R Byrge graduated from Disaster Preparedness Course 3AZR24230 at Lowry AFB, Colorado

Missile Maintenance (LGMW)

OIC: Capt Ubl

NCOIC: TSgt Richard H Wentworth

Personnel:

Promotions: None

Armament Section (LCMS)

OIC: 1st Lt Richard R Mayer

NCOIC: TSgt Max E Niesar

Personnel:

Promotions: Richard R Mayer to 1st Lt

Armament Section (continued)

Arrivals: Sgt Peter F Burdett - from Det 1, 2nd FIS, Phelps-Collins
Airport, Alpena, Michigan

MSGT Robert J Borders - from Det 2, 425 Munitions Maintenance Squadron, CFS LaMacaza, Quebec, Canada

Departures: TSgt Wilfredo Aviles-Figueroa - transferred back to DMSOC

Upgradings: AIC Barry J Faucett to 70230

Quality Control (LCMD)

NCOIC: CMS George R Smithwick

Personnel:

Arrivals: TSgt Joseph E Kuras - from SEA

Upgradings: TSgt Paul M Winston, Jr completed the course at the ADC
NCO Academy in February

RCS: AU ~~XXXX~~ ^{A d.} ^{Co.M.} ~~XXXX~~

HAF-D48



HISTORICAL RECORD

of the

46TH AIR DEFENSE MISSILE SQUADRON (BOMARC)

for the period ending

31 March 1972

ADC FORM
NOV. 68 102

JUL 66 EDITION WILL BE USED UNTIL STOCK IS EXHAUSTED

Section I.		REQUIRED DATA			
1. UNIT AND LOCATION 46 Air Defense Missile Squadron (ADC) McGuire AFB, New Jersey		2. NAME AND GRADE OF COMMANDER Lt Col Stephen M. Flanagan			
3. CHAIN OF COMMAND (Superior Echelons) ADC, 21st Air Division, 46 Air Defense Missile Squadron					
4. SUBORDINATE UNITS (Down to and including squadrons) None					
5. MISSION (Give authority and brief statement of primary mission) a. To equip, administer, and train personnel in order to provide operational air defense operations as directed. b. To operate and maintain all assigned equipment and facilities as part of the integrated air defense system.					
6. PERSONNEL					
	OFFICERS	AIRMEN	CIVILIANS	TOTAL	
AUTHORIZED	13	134	9	156	
ASSIGNED	13	130	9	152	
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) 100% operational capability of a CIM-10B (28) missile squadron.					

Section II.

COMMENTARY

(See ADC Supplement I to AFR 210-3 for additional guidance)

PART A. This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes in primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance.

COMMAND AND SUPERVISION

A message was received 26 March advising us that as a result of the ADC realignment, the 46th ADMS is scheduled for inactivation in the second quarter of FY 73. As a result, several actions have been taken to ready the squadron for its closure. A letter was sent to the Base Civil Engineer listing projects and work orders that may be cancelled, continued support requirements and required contract services needed until complete phasedown procedures are completed.

The Program Action Document (PAD) has not been received but it is expected within the next few weeks.

To date, two inquiries have been received from agencies interested in the site facilities after unit inactivation. The New Jersey Army National Guard has expressed a desire to use it for an armored vehicle unit and a helicopter unit, and a message was received from ADC advising us of a forthcoming visit to this unit by an FCDNA representative to assess site facilities.

21 Air Division conducted a Supply and Administration Staff Assistance Visit. Lt Col Harada, Mr. Murphy, and CMSgt Semmel arrived at the unit on 22 February. Results of the visit were satisfactory.

SAFETY

The Safety Officer, Lt Robert B. Gammill, separated from the Air Force. Capt Albert Spencer has been appointed Safety Officer as an additional duty.

There were no reportable accidents this quarter.

CIVIL ENGINEERING

Manning in the utilities plant has been critical this quarter. Both the air conditioning and power plants are short, while the heating plant shortage is so severe as to necessitate implementation of twelve hour shifts.

UPS Generator #2 is currently deadlined for a magnetic clutch assembly and coupling assembly. ADC has deferred this work due to lack of funds. This action is being contested since the lack of this UPS unit limits site capability.

A complete review of all EAID equipment assigned to the Civil Engineer function was accomplished. All excess property was identified and turned in to Base Supply.

Overhaul of Joy Compressor #2 and Chiller #3 was necessary but was deferred by CEMIRT due to lack of funds.

(If more space is needed, continue on blank sheets, size 8 x 10½, numbered and securely attached hereto.)

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

Section II.

COMMENTARY (Continued)

PART B: This part should include a list of key personnel and information on: (1) community relations; (2) awards and decorations; (3) morale; (4) any other subjects the commander may wish to include.

AWARDS AND DECORATIONS

The Air Force Commendation Medal was presented to SSgt Walter Zamkotowicz for meritorious service while assigned to the 22 Air Def Msl Sq, Langley AFB, Va., for the period 30 Aug 1964 to 17 Dec 1971.

Sgt William A. Barca was presented the Air Force Commendation Medal for meritorious service while assigned to the 823 and 554 Civil Engineering Squadrons in Vietnam for the period 6 Oct 1970 to 5 Oct 1971.

On retirement from the Air Force, TSgt Charles H. Winslow was awarded the Air Force Commendation Medal for meritorious service at this unit from 23 Apr 1969 to 29 Feb 1972.

MSgt Johnny L. Griffin was presented the Air Force Commendation Medal for meritorious service while assigned to the 460 Fighter Interceptor Squadron Kingsley Field, Oregon, for the period December 1968 to 15 April 1971.

The Air Force Commendation Medal was presented to TSgt Boyce N. Ray for meritorious service while assigned to the 4751 Air Def Sq, Eglin AF Auxiliary Field 9, Florida, for the period 10 Nov 1966 to 26 Jul 1971.

Sgt Steven E. McPherson was awarded the Air Force Commendation Medal for meritorious service.

NCO of the Quarter was TSgt Francis Kaminski of the Power Production Section.

The following personnel were selected as Airman of the Month:

Sgt Gary Rose for January
Sgt Alexander Lazzari for February
Sgt Douglas W. Allen for March

The following personnel were selected for promotion to Senior Master Sergeant:

MSgt William D. Birkett
MSgt Dale R. Blase
MSgt Baltazar Castillo
MSgt Joseph G. Herman
MSgt Marion F. Robertson

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)
ALICE E. PRESCOTT, Civ, GS-5

SIGNATURE

SIGNATURE

APPROVED BY (Typed name and grade of Commander)
STEPHEN M. FLANAGAN, Lt Col, USAF
Commander

PART A. Cont'd

During a wind storm in late February, severe damage was sustained to roof covering on one side of the roof of Shelter 3-28. The shelter was removed from alert status and a contract let to repair the roof.

Among the many accomplishments this quarter:

- a. Badly deteriorated sentry shacks in the launch area were replaced by new ones built by the Base Civil Engineer Section.
- b. Well Pump #2 has been rebuilt by Base Civil Engineer and should be reinstalled shortly.
- c. Extensive interior painting and repairing of floor tile has been accomplished throughout the site.
- d. Internal maintenance of site boilers was completed by the base heating shop.
- e. All "A" missile shelters have been reduced to category four, excess to mission, and have been secured.

SECURITY

The Security Section underwent a MAC ORI. Excellent comments were made by the inspectors concerning the readiness of the security personnel.

Security Police personnel remodeled and repainted the alarm room improving its appearance appreciably.

MAINTENANCE

Major Alexander, CMSgt Jenkins, and MSgt Carter of the 21 Air Division conducted a Weapons Maintenance Staff Assistance Visit 21 through 23 March 1972. The unit was rated Satisfactory.

Three TCTO's were accomplished this period: TCTO 35E4-14-529 on Shelter 3-18 and TCTO 35-1-525 on each of our two MCLA Generator Sets.

Because of proposed squadron deactivation, future time changes and TCTO requirements for missile and shelter equipment have been suspended.

PART A. Cont'd

Periodic inspection intervals for the BOMARC missile and shelter have been changed from 90 to 120 days.

Aerospace vehicle status (RCS: 1-HAF-A1, AFM 65-110) for the period was:

	NORM	NORS	OR
January	3.1	0.0	96.9
February	3.0	0.1	96.9
March	3.7	0.6	95.7
Average	3.3	0.2	96.5

Status factors are all well within the Air Force standards of 5.0 NORS, 24.0 NORM and 71.0 OR. These factors reflect no significant trend when compared with previous data.

Technical inspections were as follows:

	Total Inspections	Inspections Without Discrepancies	Rate
January	118	94	80%
February	94	81	86%
March	119	96	81%
Overall	331	271	82%

The ratio of no discrepancy inspections, four of five, is highly satisfactory.

The Air Force Auditor General visited the squadron in January with satisfactory results. Major purpose of the inspection was to determine what elements of maintenance data are auditable.

The Maintenance Documentation Error Rate was:

	Documents (AFTO 349)	Errors	Rate (%)
January	1018	8	0.8
February	819	11	1.3
March	836	19	2.3
Total	2673	38	1.4

PART A. Cont'd

The overall documentation error rate is well within Air Force standards of 2.0%. The apparent upward trend was caused by one case of misnumbering an inspection package. It was determined to be a numerical transposition which will not likely recur.

MSgt Robert Cole was TDY to Randolph AFB, Texas, for 56 days to participate in writing a new 316XIJ specialty knowledge test.

OPERATIONS

A major problem in IMSOC technician manning developed. The situation has been relieved temporarily by the assignment of two electronics technicians.

Because of scheduled unit deactivation, the annual Missile Launch Officer training program has been discontinued.

On 10 January 1972, the ADC Tactical Teletype Network was reconfigured and expanded from four to fifteen circuits on the Eastern loop. The modification changed our Net Control Station from Hancock Field, New York, to Fort Lee, Virginia.

SUPPLY

The USAF Auditor General performed an audit (#1345-45) of the squadron during January. The examination consisted of a review of operating procedures and internal controls, and limited tests of accounting records in each of the squadron activities. It was found that procedures and controls were adequate and effectively applied.

The Supply NORS rate taken from the RCS: HAF-S52 report is as follows: January - 1.35; February - .475; March - .46.

Squadron budget expenditures through 31 March amounted to \$158,000.00.

Supply received a Satisfactory rating from the 21 Air Division Staff Assistance Team. The Supply representative, Mr. Murphy, conducted a thorough review of the Supply activity.

Action is being taken to turn the Project 703 (Niagara) equipment in to salvage. A request has been sent to OOAMA for their permission.

PART A. Cont'd

TRAINING

The report for an OJT Staff Assistance Visit by the 438 ABG, McGuire AFB, conducted in December 1971, was received in February. The overall rating was unsatisfactory. Action was taken to correct the deficiencies noted and the report answered.

In February, AIC David Ayers of the Maintenance Administration Section went to an Administrative School conducted at Ent AFB, Colorado. He gained a great deal of knowledge from this TDY and it was felt that he could be upgraded.

During the quarter the following individuals were upgraded to the skill level indicated:

<u>Name</u>	<u>Month</u>	<u>Skill Level</u>
AIC Allen L. Moore	January	54750A
AIC Darrell L. Umberger	January	29150
AIC Ricardo E. Bacallao	January	54150J
AIC Frederick D. Boone	February	70250
AIC Richard C. Pollitt	February	29150
AIC George M. Vance	March	54750A
AIC Herbert H. Andrae	March	54550
AIC David M. Ayers	March	70250
Ann Robert A. Loria	March	06330

The following named individuals completed CDC Courses indicated:

AIC Allen L. Moore	547X0A
AIC Darrell L. Umberger	29150
AIC Ricardo E. Bacallao	54150
AIC Frederick D. Boone	70250
AIC Richard C. Pollitt	29150
AIC George M. Vance	547X0A
AIC Herbert H. Andrae	54550

PART B. Cont'd

The following personnel were promoted this quarter:

Michael Ciurczak to TSgt
Larry A. Burchett to SSgt
Brigitte Schilling to SSgt
Terrence P. Westcott to Sgt
George P. Mulry to Sgt

TSgt James Diven of the Operations Section was awarded \$325.00 for a military suggestion he submitted concerning frayed wires on critical operations equipment. His suggestion isolated the cause and suggested an economical solution that saved the Air Force approximately \$5,400.00.

KEY PERSONNEL

Lt Col Stephen M. Flanagan, Commander
Capt Robert F. Sherman, Chief of Maintenance
Capt Richard H. Roessler, Chief of Operations
Capt Gary W. Dooley, Administration Officer
Capt Albert Spencer, Safety Officer, Information Officer, Intelligence Officer
Capt John J. Ruffe, Security Officer
1st Lt Ferdinand C. Haase, Disaster Preparedness Officer
2d Lt Michael Hartman, Civil Engineering Officer
SMSgt Paul W. Gorman, Supply Superintendent
MSgt Dale R. Blase, First Sergeant

ATHLETICS

The Squadron Basketball Team participated in the 21st Air Division tournament and came in fourth. They won the league and base championships. The team was unbeaten in league play. In the playoffs for the base championships, they had to fight their way through the losers bracket.

Sgt Bradley Hill won the Base Pocket Billiard championship and went to McChord AFB to represent McGuire AFB in the MAC tournament.

MSgt Anthony Deluise entered and won the base Ping Pong Championship.

The squadron volleyball team was unbeaten and untied. In winning the league and base championship they were never challenged.

PART B. Cont'd

COMMUNITY RELATIONS

Cub Scout Pack 199 from McGuire AFB utilized the squadron picnic area for their annual kite flying contest.

The Binghampton High School ROTC toured the squadron in March. They were briefed by Capt Desrosiers and Capt Spencer and were shown a missile erection, maintenance control, and operations.

46CC

7 January 1972

Monthly Letter, Host Base Support

438 ABG/CC

1. This letter updates previous monthly letters on the same subject.
2. We experienced one reportable ground accident over the holiday period, a newly-assigned airman who was critically injured in his PCV near Liberty, New York, on Christmas Day.
3. Unit holiday observances included a squadron party on 9 December, a party for the Brisbane Children's Home (Allair, New Jersey) on 22 December, and a "Pie Night" on 21 December. The latter is a project in which the squadron wives donate home-cooked treats and distribute them at the barracks and to the personnel on duty at the site.
4. Our site medic, SSgt Wirzburger, has been reassigned to the USAF Dispensary, and has been replaced by Sgt Monmarquet. Hopefully this will stabilize this manning area as Sgt Monmarquet is the fourth technician assigned to the site dispensary since it was reopened on 1 Jul 1971.
5. SSgt Loges has been assigned as Site Security NCOIC to replace MSgt McCollum who retires in March.
6. In August 1971 we submitted a work request to 438 CES for construction of new sentry shacks for the launch area. This is a relatively unsophisticated project, but we seem to be getting nowhere in getting the project completed, with repeated delays for lack of materials; i. e. . plywood, 2 x 4's, windows, etc. Both Col Stator and I have repeatedly urged completion of these shacks - from his standpoint, they are vitally necessary for the health and welfare of his security police personnel; from my standpoint, new sentry shacks would serve to eliminate the unsightly appearance of the existing ones. I personally inspected the existing shacks during one of our recent cold spells, and consider them totally inadequate. Request your assistance in getting this project completed without further delay.

7. A similar delay has been encountered in the base project for renovation of dormitory showers. One of the two shower facilities in our barracks (Bldg 24-13) has been long in need of repair, and was supposedly included in the base project which was to be completed in December. To date, there has been no work accomplished in Bldg 24-13.

8. The unit safety program was evaluated by a Headquarters, 21 Air Division Staff Assistance Team during the week of 13 December, and was found satisfactory.

9. Thank you for your approval and prompt action on our two recent requests (Capt Errico, SSgt Chew) for priority housing assignments.

10. With the recent cutback in providing Air Force buses from the motor pool in support of dependent-oriented programs such as scouts, youth center, I have received several requests to support these programs with 46 ADMS buses, many of these requests originating from base agencies. Please advise all concerned that I am honoring the limitations imposed by the base motor pool, and will not be able to support such requests.

11. Under the recently announced early release program for officers, I anticipate the loss of one Lieutenant (Lt Gammill), the Squadron Safety Officer, until replacement is obtained. I anticipate no additional problems for base support as I will assign the safety duties temporarily to another officer.

12. The USAF Dispensary has granted our request to provide treatment by the Flight Surgeon, rather than through the out-patient clinic, for our missile combat crew personnel.

STEPHEN M. FLANAGAN, Lt Colonel, USAF
Commander

46CC

6 February 1972

Monthly Letter, Host Base Support

438 ABG/CC

1. This letter updates previous monthly letters on the same subject.
2. The USAF Resident Auditor's Office completed its audit of this unit on 1 February. The formal report is not yet published; however, I was briefed by the audit team, and no major deficiencies were identified.
3. The sentry shack replacement problem discussed last month has been resolved. New structures have been received and are in service. These are a vast improvement, both for appearance and for health/welfare of security personnel. Thank you for the prompt response to this problem. Also, new fire symbol signs have been received from 438 CES, and are now being affixed to our structures. This will clear a long-standing deficiency identified in a series of inspection reports.
4. Lt Robert B. Gammill, squadron Safety Officer, departed the unit 31 January 1972 under the early release program. He has been replaced by Captain Albert L. Spencer, who previously was a Quality Assurance Officer.
5. I have separately provided your office an information copy of a letter sent to the Commander of the 204 Weather Flight (ANG) at East Orange, New Jersey, concerning standards of personal appearance. This resulted from a recent encounter with a member of his unit whose uniformed appearance was incredibly lousy. I contacted Col Haaf on the propriety of such correspondence, and he concurred in sending the letter. I don't know how else to attack this problem, but it seems that something positive - perhaps refusal to let uniform violators through the main gate - is necessary to counteract the uniform violations that can be observed on almost any weekend when the ANG and reserve people are on base.
6. Colonel Staton of the 438 SPS is conducting an investigation to determine pecuniary liability in an incident involving misuse of a government vehicle by security personnel at the site. This unit is conducting a corollary investigation of the same incident.

46CC

3 March 1970

Monthly Letter, Host Base Support

438 ABG/CC

1. This letter updates previous monthly letters on the same subject.
2. The roof of one missile shelter sustained severe damage from high winds during the period 19 - 21 February. The support received from 438 CES and the base contracting office to expedite repairs was excellent; repairs were completed 2 March, and the shelter restored to service today.
3. The formal report by the USAF Resident Auditor has been received and answered. No major problems were identified.
4. Investigation concerning mis-use of government vehicle which was mentioned in our February letter is still in progress, but should be complete in the next few days. We will make a final comment on this subject in our April letter.
5. We are still awaiting receipt of the new 11-4 agreement. As indicated in our February letter, this should now be at Hq 21 Air Force for signature.
6. The repair of barracks showers in Building 24-13 continues to be an aggravating problem with no work accomplished to date. We would appreciate prompt action to obtain the two remaining material items (water proofing and emulsion compounds) to enable completion of these repairs; we are not at maximum occupancy in the barracks, and the need is obvious.
7. A recent issue of the daily bulletin carried an item concerning a fire in family housing unit 40-33 (17 February). Coincidentally, these are the quarters formerly occupied by an NCO of this unit; he had expressed his concern for the hazardous electrical wiring in that building to our Accident Prevention Council in August. The deficiency was subsequently discussed at the October Wing Accident Prevention Council, and summarized in a memo attached to our October monthly letter. May we offer a further suggestion - could an in-depth inspection of electrical wiring be

included as part of the regularly conducted housing unit inspection by the Base Fire Department, and/or with the Civil Engineering Inspection which is made with each quarters termination?

8. We supported the MAC/ADC joint evaluation of EOD functions on site during the past week. We were briefed only by the ADC evaluator; however, he indicated that the demonstration was highly satisfactory. We also supported security operations, with satisfactory results.

9. If you will forgive our justifiable gloating, we wish to add a reminder that the 46 ADMS (who else?) clobbered the opposition in taking the Base Basketball Championship.

10. Congratulations on the outstanding results thus far reported on your ORI!

STEPHEN M. FLANAGAN, Lt Colonel, USAF
Commander

Copy to: 438 MAW/C
21 Atr Div/CS

SECRET

3

8

HISTORICAL RECORD

of the

49TH FIGHTER INTERCEPTOR SQUADRON (ADC), GRIFFISS AFB, NY

for the period ending

31 MARCH 1972

Cy 1 of 2 Cys

3

DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

ADC FORM 102
JUL 69

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

SECRET

I. REQUIRED DATA		SECRET		
1. UNIT AND LOCATION 49th Ftr Intep Sq (ADC) Griffiss AFB, NY 13440		2. NAME AND GRADE OF COMMANDER DOUGLAS D. BRENNER, Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons) Aerospace Defense Command 21st Air Division 49th Ftr Intep Sq (ADC)				
4. SUBORDINATE UNITS (Down to and including squadrons) N/A				
5. MISSION (Give authority and brief statement of primary mission) The primary mission is to destroy enemy airborne objects under all conditions of weather during daylight or darkness. The secondary mission is to destroy enemy sea and surface forces.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	40	458	11	498
ASSIGNED	47	462	9	518
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) F-106A (18), F-106B (2), T-33 (3), MA3M Air Cond (8), MA3 Air Cond (6), NF-2 Lite Cart (11), MC11 Air Comp (17), MD-3 Generator (2), MD-3A Generator (1), MC-1A Generator (1), MD-1 Heater (4), MC-1 Heater (3), MK-3A Hyd Test Stand (2), MK-3 Hyd Test Stand (1), MJ2A Hyd Test Stand (3), MB15W Generator (3), D-5 Hyd Test Stand (1), AFM24T-2 Cabin Leakage Tester (1), MC2A Air Comp (3), MB2 Air Comp (2), MB9 Air Comp (1), MB-1 Cabin Press Tester (1), M32A/13 Generator (6), ECU 10-M Generator (13), LS440A Load Bank (3), M24M1 Generator (1), ETM 12076 Tester (1), MC-3 Load Bank (1), PU365 Generator (1), T227-2 Load Bank (1).				

SECRET

II.

COMMENTARY

SECRET

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement 1 to AFR 210-3 for additional guidance.

ORGANIZATION - The 49th Fighter Interceptor Squadron is authorized under ADC General Order Number 197 dated 4 Nov 1960 and effective 1 Dec 1960. Special Order G-64 posted 30 March 1971 and effective 15 April 1971 designates and organizes Det #1 of the 49th FIS at Otis AFB, MA.

MATERIEL - Shown below are primary statistics for the period of this history:

	JAN	FEB	MAR
Avg No. Acft Possessed	18.8	18.0	17.8
Unsched Maint in %	19.4	20.7	15.6
P. E. in %	4.4	4.3	4.9
Hourly Post Flt in %	3.6	3.4	3.5
TCTO in %	0.0	0.2	0.0
NORS in %	6.3	8.0	5.1
O/R in %	66.3	63.4	70.9
Sorties Flown	216	212	274
Hours Flown	439.4	439.3	489.3
Hours Flown per Acft	23.4	24.4	27.5
Avg Turnaround Time	13.7	18.2	13.7

OPERATIONS - At the end of the quarter, the squadron had 21 primary duty pilots and 9 overhead pilots. The squadron retained its C-2 rating, keeping 4 aircraft on 15-minute alert and 2 aircraft on 5 minute alert at Griffiss AFB. Two new F-106 pilots arrived during the period, one having completed his local checkout, and the other at CCTS presently, after a local checkout in the T-33. The squadron deployed to Tyndall AFB during the quarter for the annual Combat Pike program, with most pilots firing the ATR and one firing the AIM-4. Incidentally, the one pilot firing the AIM-4 missile scored a direct hit on the target drone on the first attempt. The deployment mission was accomplished rather smoothly despite inclement weather at times, and in and out scoring equipment on the firing range. NORAD directives once again dispersed two of our fighters to Otis AFB to stand 1-hour alert. Two of the 49th aircraft were also brought up on 15-minute alert while deployed at Tyndall AFB. The end of the quarter saw the squadron back together at Griffiss and preparing for a new round of ACT, in anticipation of hosting the VF-21 Naval Fighter Squadron in the College Dart program early in the summer.

MAINTENANCE - Maintenance was kept unusually busy during the quarter with the various squadron deployments, and yet still provided their typical production of mission worthy aircraft.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

SECRET

II.

COMMENTARY (Continued)

SECRET

KEY PERSONNEL - NAME

Colonel Douglas D. Brenner	Commander
Capt Charles A. Nickelman	Det #1, Commander
Lt Col John P. Kelly	Operations Officer
Maj Frank H. Matthes	Chief of Maintenance
Maj Jack L. Spearman	Asst Ops Officer
Maj Jacques A. Suzanne	Chief, Stan/Eval
Capt Bernard P. Harpole, Jr.	Flight Surgeon
Capt Peter Kozlowicz	Security Officer
Maj Raymond C. Yaeger	Avionics Officer
Capt John R. Fuhrmann	Safety Officer
Maj William L. Parker	Crew Trng Officer
Capt Gary VanBemmel	Materiel Control Officer
1/Lt Stephen H. Farish	Special Weapons Officer

MORALE - Maintained average for the quarter.

EVENTS - POW-MIA Week of Concern was highlighted at Griffiss AFB by a Missing-Man Formation fly-by with 4 of the 49FIS pilots. A well-attended Easter party was given by 49FIS wives (with husbands attending) to a number of boys at the Rome State School. The social calendar was highlighted by a giant promotion party which saw, among other promotees, our Squadron Commander promoted to full Colonel.

AWARDS AND DECORATIONS - Again, numerous Air Force Commendation Medals were presented to squadron personnel during the quarter.

(If more space is needed, continue on blank sheets, size 8 x 10½, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

CHARLES R. SPARROW, 1/Lt, USAF

SIGNATURE

Charles R. Sparrow

APPROVED BY (Typed name and grade of Commander)

DOUGLAS D. BRENNER, Colonel, USAF

SIGNATURE

Douglas D. Brenner

SECRET

CONFIDENTIAL

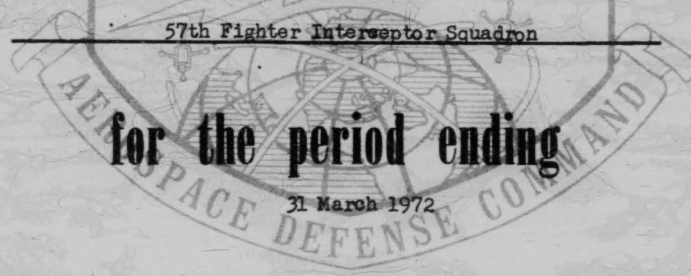
HISTORICAL RECORD

of the

57th Fighter Interceptor Squadron

for the period ending

31 March 1972



GROUP 4
Downgrade at 3 year intervals;
Declassified after 12 years.
DOD DIR 5200.10

CONFIDENTIAL

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 57th Fighter Interceptor Squadron Keflavik International Airport, Iceland		2. NAME AND GRADE OF COMMANDER THOMAS W. SAWYER, Lt Col, USAF		
3. CHAIN OF COMMAND (Superior echelons) Air Forces Iceland (ADC) 21st Air Division Aerospace Defense Command				
4. SUBORDINATE UNITS (Down to and including squadrons) None				
5. MISSION (Give authority and brief statement of primary mission) The 57th FIS is in Keflavik to support Air Forces Iceland. The squadron is an operational interceptor force which also maintains facilities and equipment necessary for commitment of it's forces.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	34	400	3	437
ASSIGNED	27	415	3	445
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) F-102A All weather interceptors - 12 TF-102A All weather interceptors - 2 T-33 Support Aircraft - 3				

CONFIDENTIAL

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

OPERATIONS AND TRAINING

(C) The quarter ending 31 Mar 72 was a busy one for alert pilots. 57th pilots launched 125 times on active air missions. 70 of these missions resulted in intercepts of Soviet aircraft. Besides the active air normal daily training continued. Many practice intercepts were flown against other F-102 aircraft and ECM and chaff equipped T-33's. These practice intercepts were flown during both scheduled flying and Air Forces Iceland exercises.

(C) Hack rates for January, February and March were 86, 84 and 83%. Hours flown vs hours allocated are shown below:

	Allocated	January	Flown
F-102	335		283
T-33	75		70

	Allocated	February	Flown
F-102	274		392
T-33	94		118

	Allocated	March	Flown
F-102	345		309
T-33	88		68

(U) The weather generally improved during the last quarter. Cancellation rates have gone down some compared to the winter months. The cancellation rate for Jan was 43.8%, 22.6% for Feb and 41.0% for March.

SAFETY

(U) The 57th, again last quarter, continued its excellent safety record. The most persistent and common problem was cut tires. The 57th experienced 26 cut tires last quarter. The wind blows so hard and so often that FOD is just about always a problem.

(U) Another problem last quarter was six drag chute failures. Most of these were caused by allowing the chute to get wet while the aircraft was on the ground. Then once at altitude the chute would freeze, and then not work during landing. During the quarter the squadron had one precautionary landing and one ground aircraft incident. The incident involved an aircraft being run up for a test. The aircraft ingested a nylon strap and the engine had to be sent to the States for repair.

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II. COMMENTARY (Continued)

AWARDS

(U) At a recent Commander's Call ten 57th FIS personnel were honored at an awards ceremony. Receiving Air Medals were Maj Raymond Kruckner, Maj Barton Lynn, Maj James Fullerton, Capt John Boles, Capt Lionel Boudreaux and Capt David Godsey. Receiving Air Force Commendation Medals were Capt Samuel D. Smith, MSgt Howard Dixon, TSgt Ronald Marcos, and SSgt Vern Jeffries.

PERSONNEL

(U) This last quarter was one of many personnel changes. Leaving were Lt Cols Joseph Smith and Carroll Cooley. Also leaving were Capts Donald Echleberger, Eugene Smigelski and Ernie Uber a Hughes Technical Representative. Lt Col Smith, Lt Col Cooley and Capt Echleberger all three got assignments to Southeast Asia. Capt Smigelski received orders for Hamilton AFB, California. Six new officers arrived. They are Maj Harvey Dodge, and George Calkins, Capts Samuel Smith, John Maier, and David Sapsin. The 57th also welcomed Curt Miller a Hughes Technical Representative.

MAINTENANCE AND SUPPLY

(C) Maj Dodge who came to the 57th from Richards Gebauer AFB has replaced Lt Col Smith as Chief of Maintenance. Good maintenance has continued as shown by the OR and NORS rates. For January the NORS rate was 0% and the OR rate was 75.1%. The NORS and OR rates for Feb were 2.0% and 71.4% and for Mar 0% and 78.7%. The greatest problem seems to be with supply. If parts have to be shipped from the States, aircraft are sometimes down awaiting these parts.

21ST AIR DIVISION INSPECTION

(U) During this last quarter 21st Air Division sent an inspection team to help the 57th prepare for future inspections; they inspected throughout operations and maintenance. The team turned in a report that made both the inspectors and especially the 57th happy. They found only one area that they felt was unsatisfactory.

COMBAT PIKE AND WILLIAM TELL

(C) The 57th FIS has two important and interesting events to look forward to. Starting 11 June 72 and continuing through 3 Jul 72, the 57th will be at Tyndall AFB for Combat Pike, a firing deployment. Many squadron personnel will get a chance for an interesting TDY and a welcome break in Florida.

(C) The second event is William Tell starting 18 Sep 72 and ending on 29 Sep 72. The 57th FIS is preparing for the meet now and is looking forward to the competition. This squadron has only one goal at William Tell and that is to come away a winner.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)	SIGNATURE
MARK E. SHAW, 1/Lt, USAF	<i>Mark E. Shaw</i>
APPROVED BY (Typed name and grade of Commander)	SIGNATURE
THOMAS W. SAWYER, Lt Col, USAF	<i>Thomas W. Sawyer</i>

CONFIDENTIAL

II.

COMMENTARY (Continued)

RECREATION

(U) The Whiff, Whifferdill, Whifferdill Bar or whatever your preferred name, the Whiff is an honored 57th tradition. The members of the Whiff through self help have moved it to a bigger and better location in the Air Force BOQ. It is complete with new bar, paneling, acoustical tile, and decorations to put patrons in the right frame of mind.



HISTORICAL RECORD

of the

83RD FIGHTER INTERCEPTOR SQUADRON

for the period ending

1 JANUARY - 31 MARCH 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 83 Fighter Interceptor Squadron Loring Air Force Base Maine 04750		2. NAME AND GRADE OF COMMANDER ROBERT W. WILSON, Lt Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons) Headquarters, 21st NORAD Region, Hancock Field, New York Aerospace Defense Command, Ent Air Force Base, Colorado North American Air Defense Command (NORAD), Ent Air Force Base, Colorado				
4. SUBORDINATE UNITS (Down to and including squadrons) Detachment 1, 83rd Fighter Interceptor Squadron, Bangor IAP, Maine				
5. MISSION (Give authority and brief statement of primary mission) To provide, by those means prescribed in appropriate publications, the Commander of 21st Air Division (ADC) with combat ready aircrews capable of intercepting, identifying, and, if need be, destroying aerial objects which come within the range of the interceptor aircraft, regardless of weather conditions. To conduct air defense operations and training in accordance with USAF and Air Defense manuals pertaining to interceptor operations.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	40	469	8	517
ASSIGNED	38	429	6	473
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
F-106A	18 each			
F-106B	2 each			
T-33	3 each			

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

EVENTS

Announcement of squadron closure by 30 June 1972.

OPERATIONS AND TRAINING

The squadron received the 21st Air Division Missile/Nuclear Safety Award for a superior safety program and accident-free operation in 1971.

EQUIPMENT PERFORMANCE

During this quarter, our F-106 aircraft flew 552 sorties for a total of 1228.9 flying hours. This figure represents 100% of our total allocated for the quarter. To produce these flying hours, 58,098.3 maintenance manhours were expended for a rate of 47.2 manhours per flying hour.

PERSONNEL CHANGESGAINS

Capt James E. Sidebottom

LOSSES

Capt Ronald D. Sykes

AWARDS

Air Force Commendation Medal

TSgt Harold R. Franks

TSgt Herbert J. Wark, Jr. (IOLC)

Sgt Carmine Rizzo

Sgt Edward C. Mendicino

Load Crew of the Quarter

Sgt Ronald D. King

Sgt John W. Walther

A1C Allen S. Zwolinski

Airmen of the Month

A1C Louis W. Edwards

A1C William S. Avery

NCO of the Month

SSgt Michael L. Keller

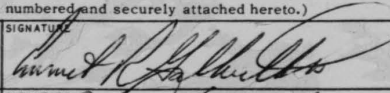
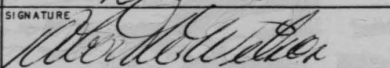
TSgt Eugene C. Swoboda

Crew Chief of the Month

SSgt Norman N. Caron, Jr.

SSgt Victor P. Mills

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

II. COMMENTARY (Continued)	
<u>FINAL COMMENTARY</u>	
As of 30 June 1972, the 83rd FIS becomes inactive in accordance with inclosed ADC Programmed Action Directive (U) 72-3, dated April 1972.	
The aircraft of the 83FIS have been sent to the 95FIS at Dover AFB, Delaware. The 95FIS will be inactivated in January 1973 and the original 83FIS aircraft will be turned over to the New Jersey Air National Guard at Atlantic City, New Jersey.	
This report will be the final historical report for the 83FIS.	
(If more space is needed, continue on blank sheets, size 8 x 10½, numbered and securely attached hereto.)	
PREPARED BY (Typed name and grade of Historian)	SIGNATURE
EMMET R. GALBRETH, Captain, USAF	
APPROVED BY (Typed name and grade of Commander)	SIGNATURE
ROBERT W. WILSON, Lt Colonel, USAF	



HISTORICAL RECORD

of the

640TH RADAR SQUADRON, BERTON AFS, PENNSYLVANIA

for the period ending

31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 648 Radar Squadron (ADC) Benton AFS, Pa 17814		2. NAME AND GRADE OF COMMANDER NEIL FISHER, Major, USAF		
3. CHAIN OF COMMAND (Superior echelons) 21st Air Division, Hancock Field, NY Aerospace Defense Command, Ent AFB, Colorado United States Air Force				
4. SUBORDINATE UNITS (Down to and including squadrons)				
5. MISSION (Give authority and brief statement of primary mission) Auth: ADC Reg 23-30 a. To provide search, SIP and height data to the 21st NORAD Region during Level I operations. b. To provide search, SIP and height data to North Truro AFS or Charleston AFS during Level IV operations. c. As a joint use facility, radar surveillance and identification data is sent to FAA Traffic Control Center in New York for use in controlling air traffic in the New York Terminal area.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	5	98	22	125
ASSIGNED	5	98	21	124
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
FPS-35	1 ea	SG-296/FPS-7	1 ea	
FPS-26A	1 ea	OA-2325A/FPS-6	1 ea	
FPS-6	1 ea	AN/GRT-3	24 ea	
FST-2B	1 ea	AN/GRR-7	24 ea	
		AN/GRC-27	2 ea	
		AN/GKA-5	1 ea	
		AN/GPA-127	5 ea	
		AN/GPA-98	1 ea	

ii.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

Operations and Training:

a. The squadron participated in the following missions during this quarter:

9 Jan	Fertile Keynote	72-8
25 Jan	Amalgam Hunt	72-2
1 Feb	Fertile Keynote	72-10
9 Mar	Fertile Brave	72-3
18-24 Mar	Fairplay	72-3

b. The following were administered and successfully passed their qualification examinations:

ANTI-JAM OPERATORS

SSgt Rice	Jan 72	Initial Qualification
TSgt Laubach	Mar 72	Initial

HEIGHT OPERATORS

SSgt Rawls	Jan 72	Annual
Sgt Bonham	Jan 72	Annual
Sgt E Brown	Feb 72	Initial

Maintenance:

a. A mechanical pre-IRAN inspection was conducted this quarter on the AN/FPS-35.

b. Civil Engineering was visited by Mr Hodgekins, an ADC Management Engineer on 22 Mar 72, and Mr Jackson of ADC for a Ground Chemical test on 24 Mar 72.

Personnel:

a. Two new officers arrived on the site during this quarter. 2ND LTS HARRY YEE and DAVID TURNER the new Personnel and CEM officers respectively, joined the squadron during the month of February. Leaving the site were 1ST LT PAT LOEHR and CAPT LAWRENCE SCHEURICH, both of whom were separated.

b. CAPT MARK C. FERIS was awarded the Air Force Commendation Medal for his performance as Administration/Personnel Officer at this unit. Capt Feris was presented the decoration on 22 Mar at formal ceremonies by Major Neil Fisher, Commander of the 648th Radar Squadron.

c. The following personnel were promoted during this quarter:

To Captain: 1ST LT MARK C. FERIS; To SSgt: SGT STEVE ALLEN and SGT THOMAS GR ENWALD; To Sgt; AIC MARTIN MCLEAN, AIC CLINTON GOSS, and AIC JOSEPH RICE

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

II. COMMENTARY (Continued)

Miscellaneous:

a. The following staff visits were made by the 21st Air Division during this quarter:

17-21 Jan	Supply
24 Jan	Personnel
9 Feb	Services
23-29 Feb	Administration/Budget
1-3 Mar	Disaster Preparedness

b. The Office of the ADC Inspector General conducted a No-Notice General Inspection during the period 26-31 March. Because of numerous recurring discrepancies, an influx of inexperienced personnel, and the absence of some key personnel, the functional areas Command and Supervision, Civil Engineering, Disaster Preparedness, Ground Safety, and Security were noted as unsatisfactory. The overall rating of the Squadron was Unsatisfactory.

c. Orderly Room personnel effected the planned move of the Orderly Room functions from Building 17 to Building 4, a remodeled barracks, during 1-2 Feb 72. All administrative support functions have now been consolidated and are functioning smoothly at the new location.

d. The following is a list of key personnel:

Major Neil Fisher	Commander
2Lt David Turner	CEM Officer
2Lt Harry Yee	Personnel/Admin Officer
2Lt Allen F Jackson	Supply Officer
SMSgt Charles F Quinn	NCOIC CEM
MSgt John Harris	First Sergeant
TSgt Charles E McBride	Food Serv. Supervisor
Mr Leopold Wodaski	Chief, CE
MSgt Joseph MA LaBonte	NCOIC Training
TSgt Ernest R Moore	NCOIC Operations
TSgt Harry E Reichner	NCOIC T-2
Mr Rittner E Will	Commissary Supervisor
MSgt Albert T Burckhard	NCOIC GATR
TSgt Frank Yantorn	NCOIC Materiel Control Unit Supply
TSgt Gerald T Ishler	NCOIC Personnel
Sgt Eddie B Boaz	NCOIC Security and Law Enforcement
MSgt Ralph DeVaul	Senior Medical Tech.

(If more space is needed, continue on blank sheets, size 8 x 10, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)	SIGNATURE
HARRY YEE, 2nd Lt, USAF	<i>Harry Yee</i>
APPROVED BY (Typed name and grade of Commander)	SIGNATURE
NEIL FISHER, Major, USAF	<i>Neil Fisher</i>



HISTORICAL RECORD

of the

640TH RADAR SQUADRON, BERTON AFB, PENNSYLVANIA

for the period ending
31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

REQUIRED DATA

1. UNIT AND LOCATION
648 Radar Squadron (ADC)
Benton AFS, Pa 17814

2. NAME AND GRADE OF COMMANDER
NEIL FISHER, Major, USAF

3. CHAIN OF COMMAND (Superior echelons)
21st Air Division, Hancock Field, NY
Aerospace Defense Command, Ent AFB, Colorado
United States Air Force

4. SUBORDINATE UNITS (Down to and including squadrons)

5. MISSION (Give authority and brief statement of primary mission)
 Auth: ADC Reg 23-30
a. To provide search, SIP and height data to the 21st NORAD Region during Level I operations.
b. To provide search, SIP and height data to North Truro AFS or Charleston AFS during Level IV operations.
c. As a joint use facility, radar surveillance and identification data is sent to FAA Traffic Control Center in New York for use in controlling air traffic in the New York Terminal area.

6. PERSONNEL

	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	5	98	22	125
ASSIGNED	5	98	21	124

7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)

FPS-35	1 ea	SO-296/FPS-7	1 ea
FPS-26A	1 ea	OA-2325A/FPS-6	1 ea
FPS-6	1 ea	AN/ORT-3	24 ea
FST-2B	1 ea	AN/ORT-7	24 ea
		AN/GRC-27	2 ea
		AN/GKA-5	1 ea
		AN/GPA-127	5 ea
		AN/GPA-98	1 ea

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

Operations and Training:

a. The squadron participated in the following missions during this quarter:

9 Jan	Fertile Keynote	72-8
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TSgt Laubach	Mar 72	Initial

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Sgt Bonham	Jan 72	Annual
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a. A mechanical pre-IRAN inspection was conducted this quarter on the AN/FPS-35.

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b. CAPT MARK C. PERIS was awarded the Air Force Commendation Medal for his performance as Administration/Personnel Officer at this unit. Capt Peris was presented the decoration on 22 Mar at formal ceremonies by Major Neil Fisher, Commander of the 648th Radar Squadron.

c. The following personnel were promoted during this quarter:

To Captains: 1ST LT MARK C. PERIS; To SSgt: SGT STEVE ALLEN and SGT THOMAS GR. ENWALD; To Sgt: AIC MARTIN MCLAN, AIC CLINTON GOSS, and AIC JOSEPH RICE

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

ii. COMMENTARY (Continued)	
Miscellaneous:	
a. The following staff visits were made by the 21st Air Division during this quarter:	
17-21 Jan	Supply
24 Jan	Personnel
9 Feb	Services
28-29 Feb	Administration/Budget
1-3 Mar	Disaster Preparedness
b. The Office of the ADC Inspector General conducted a No-Notice General Inspection during the period 26-31 March. Because of numerous recurring discrepancies, an influx of inexperienced personnel, and the absence of some key personnel, the functional areas Command and Supervision, Civil Engineering, Disaster Preparedness, Ground Safety, and Security were noted as unsatisfactory. The overall rating of the Squadron was Unsatisfactory.	
c. Orderly Room personnel effected the planned move of the Orderly Room functions from Building 17 to Building 4, a remodeled barracks, during 1-2 Feb 72. All administrative support functions have now been consolidated and are functioning smoothly at the new location.	
d. The following is a list of key personnel:	
Major Neil Fisher	Commander
2Lt David Turner	CEM Officer
2Lt Harry Yee	Personnel/Admin Officer
2Lt Allen F Jackson	Supply Officer
SMSGT Charles F Quinn	NCOIC CEM
MSGT John Harris	First Sergeant
TSgt Charles E McBride	Food Serv. Supervisor
Mr Leopold Wodaski	Chief, CE
MSGT Joseph MA LaBonte	NCOIC Training
TSgt Ernest R Moore	NCOIC Operations
TSgt Harry E Reichner	NCOIC T-2
Mr Rittner E Will	Commissary Supervisor
MSGT Albert T Burckhard	NCOIC GATR
TSgt Frank Yantorn	NCOIC Materiel Control
TSgt Gerald T Ishler	Unit Supply
Sgt Eddie B Boaz	NCOIC Personnel
MSGT Ralph DeVaul	NCOIC Security and Law Enforcement
	Senior Medical Tech.
(If more space is needed, continue on blank sheets, size 8 x 10 1/2, numbered and securely attached hereto.)	
PREPARED BY (Typed name and grade of Historian)	SIGNATURE
HARRY YEE, 2nd Lt, USAF	<i>Harry Yee</i>
APPROVED BY (Typed name and grade of Commander)	SIGNATURE
NEIL FISHER, Major, USAF	<i>Neil Fisher</i>



HISTORICAL RECORD

of the

655th Radar Squadron (SAGE) (ADC)
Watertown AFS,
Watertown, New York 13601

for the period ending

31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION		2. NAME AND GRADE OF COMMANDER		
655th Radar Squadron (SAGE)(ADC) Watertown AFS, New York 13601		Gordon C. Waddle, Maj., USAF		
3. CHAIN OF COMMAND (Superior echelons)				
655 Radar Squadron (SAGE)(ADC), Watertown AFS, New York 13601 21st Air Division, Hancock Field, Syracuse, New York 13225 Headquarters ADC, Ent AFB, Colorado 80912				
4. SUBORDINATE UNITS (Down to and including squadrons)				
None				
5. MISSION (Give authority and brief statement of primary mission)				
Per 21NR Operation Order No. 300-70, 1 Feb 1970, the mission of the 655th Radar Squadron is:				
a. To provide surveillance and communications functions as directed by the Commander 21NR.				
b. Train, maintain and equip unit to a maximum state of readiness for sustained air defence operations.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	6	116	27	149
ASSIGNED	6	110	24	140
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
AN/FRT-49	(2)	AN/FIS-26A		(1)
AN/GPA-127	(4)	AN/FPS-27		(1)
OA/GPX-7A	(1)	AN/GPA98-A		(1)
OA/3751	(1)	AN/UPX-14		(1)
AN/GPX-27	(1)	AN/GPA-124		(1)
AN/GRT-3	(24)	AN/FYC-47		(1)
AN/CRC-27	(2)	AN/UPX-21		(1)

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. OPERATIONS

A. This squadron participated in the following missions during this reporting period.

(1) Fertile Keynote 72-8	7-9 Jan 72
(2) Amalgam Hunt 72-2	25-26 Jan 72
(3) Fertile Keynote 72-10	31 Jan - 1 Feb 72
(4) Fertile Brave 72-3	7-9 Mar 72
(5) Amalgam Fairplay 72-3	18-24 Mar 72

2. GROUND SAFETY

A. The Ground Safety office received a staff assistance visit by TSgt James Bowie from 21st Air Division. Sgt Bowie was on site to conduct formal traffic safety training. Six people attended Standard Traffic Safety Course I, 13 attended Advanced Traffic Safety Course IV and five attended Course VI.

3. EQUIPMENT PERFORMANCE

A. As of 2400 hrs., 31 March 1972, high power tube ZM-3167, Serial # 2192, had completed 38,508 hours of operation. The tube, which is part of the AN/FPS-26A radar set, reached 256.7% of the ADC Goal.

B. The AN/FYQ-47, (see report ending 31 Dec 71), was accepted by the Air Force and Commissioned at this site on 12 January 1972. The AN/FST-2B was de-commissioned on 8 March 1972.

4. PERSONNEL

A. A manning overage was created during this quarter by the assignment of the first WAF to the squadron. A1C Mary Ann Hemmingway joined her husband who works here at our GATR site.

5. TRAINING

A. The training Control section administered 36 initial/annual proficiency tests during this reporting period.

B. During this quarter, 1st Lt. David Fenner and TSgt James Thornburg attended Dasister Preparedness School at Lowery AFB, Co. 1st Lt. Martin Bowidowicz attended Ground Safety Officers School at Lowery.

6. Maintenance

A. The contract for permanent repair of the Radome leak on the AN/FPS-27 Tower has been slipped into FY 73 because of a lack of funds at Hq. ADC. There is no firm date for starting the action. Water leaks continue to create safety hazards and corrosion problems. (See report ending 31 March 71)

During this quarter in the computer maintenance section, the AN/FYQ-47 was activated and put on the line to division and the FST-2B was completely shut down. A team from the 485th E-I Squadron, Griffiss AFB, N.Y. arrived to

If necessary to facilitate typing, separate by tearing along fold. Reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

install the Beacon Data Monitor modification on the OA-1163. A wall was built outside the computer room to facilitate the proper storing of new test equipment and to make the section more secure.

C. A PRE-IRAN was conducted on the AN/FPS-26 tower equipment on 24 Jan 72 thru 9 Feb 72. The inspection was conducted by the 485th E-I Squadron at Griffiss AFB, N.Y. The inspection revealed the need for an IRAN and it will be scheduled in the near future.

D. The CEM complex received a Command visit from Col Glendon Dunaway, Vice Commander, 21st Air Division, on 16 March 1972. Col Dunaway was favorably impressed with the squadron.

E. The klystron output cavity on the AN/FRT-49 at GATR arced during Feb 72 in both A and B channels. GATR personnel with the aid of the site dentist repaired both cavities at a savings of over \$3000.00 to the AF.

7. COMMUNITY RELATIONS

A. Several NCO's and airman in this squadron are active in local Boy Scout affairs. The squadron was visited by the Region II USAF Liaison Officer, Capt. McLaughlin, from McGuire AFB, N.J. Capt McLaughlin was briefed on the support provided by this squadron to the Jeff-Lewis Boy Scout Council, i.e. transportation, volunteers working with the council, attempts being made at organization of a special interest Explorer Post and tours that have been conducted for the Scouts.

B. The squadron has agreed to sponsor a special interest Explorer Post for area youths interested in electronics. The stipulation was made that the Explorer Advisor not be a military member because of the rapid turnover of military personnel and resultant instability in the leadership of the Post. Contacts have been made with several potential advisors but none have accepted the post as of this date.

8. MORALE/RECREATION

A. Special Services reports that in January ten YMCA passes were purchased through Unit Fund for use by all squadron personnel assigned. A tape recording studio was opened on the 10th of February and participation has been very favorable.

B. On 18 Feb 72 the theater operation was moved from the Special Services building to the NCO Club. Theater attendance all time high for this squadron was set in March when 51 people attended one program. Prior to this switch average attendance at theater programs was 8.6.

C. March sported another first for the squadron when a ski meet was held with the 655th vs. Camp Drum at the Dry Hill Ski Area. The 655th came in second but a good time was had by all.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

EARLE C. EDWARDS, SSGT, USAF

SIGNATURE

Earle C. Edwards

APPROVED BY (Typed name and grade of Commander)

GORDON C. WADDLE, MAJ., USAF

SIGNATURE

Gordon C. Waddle



HISTORICAL RECORD

of the

667th AC&W Sq

31 March 1972

for the period ending

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA					
1. UNIT AND LOCATION 667 AC&W Squadron (H-3) (ADC) FPO New York 09571	2. NAME AND GRADE OF COMMANDER DOUGLAS A. HARPER, Lt Colonel, USAF				
3. CHAIN OF COMMAND (Superior echelons)					
Administrative 667 AC&W Squadron Air Forces Iceland 21st Air Division Aerospace Defense Command U.S. Air Force	Operational 667 AC&W Squadron 932 AC&W Squadron Air Forces Iceland Iceland Defense Force CINCLANT JCS				
4. SUBORDINATE UNITS (Down to and including squadrons)					
None					
5. MISSION (Give authority and brief statement of primary mission)					
To provide air defense warning and direct defensive intercept operations.					
6. PERSONNEL					
	OFFICERS	AIRMEN	CIVILIANS	TOTAL	
AUTHORIZED	10	115	12	137	
ASSIGNED	10	104	12	126	
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)					
DWT-6	2	AN/FPS-6A	1	BC-639	2
ANTA	1	AN/UPS-35	8	BC-638	1
X-Y Dial	1	AN/UPS-30	1	AN/GRT-3	5
AN/FPS-93A	1	O-15	1	AN/GRT-7	5
AN/GPX-7A	1	5CA	2	AN/GRT-27	2
AN/UPX-14	1	BC-640	2	AN/GPS-98	1
AN/GPA-127	1				

ii.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. There were 70 training sorties resulting in 305 training intercepts. 107 active air sorties were flown with 47 active air intercepts credited to the 667th. Communication & Electronics Proficiency training for the quarter was 525 hours out of the 629 hours scheduled.
2. There were no changes to primary equipment.
3. Simplex O/R Rates for the quarter: Search - 99.8%; Height - 95.6%; SIF/IFF - 99.8%. Of 15 PACE flights, there were three ground/air failures and the causes were found and repaired.
4. Civil Engineering Facility jacket folders have been established for all buildings on the site. In Jan the causeway was washed out by high tides and the primary pump house was damaged by a rock slide. The causeway was repaired to usable condition in three days. The pump house was back in commission in approximately three hours.
5. In Jan there was an average of two support flights and in Mar there was very good support with almost three flights per week. The good support in Mar followed very poor support in Feb of only seven flights during the month. Boat support has been generally good. Project Better Living: Carpets, rugs, mattresses and mirrors were received during the quarter. There was one reportable L-NORS item this quarter. Bench stock areas were being established by Search and Height. Estimated completion date is 20 Apr.
6. A serious problem exists in our 276XX manning. During this quarter 19 of our 27 enlisted personnel were rotated. TDY manning assistance was required from the 932nd to maintain C-2 status. Five men were involuntarily extended from Jan to Feb. As the replacement for departing NCOs were mostly airmen (E-3), a lack of experience is expected which may have a major impact on operational effectiveness. The Supply Services Specialist (61150) position has not been filled for months but the assignment of SSgt Thompson is expected in Apr. Special Services was actively supporting morale of site personnel by arranging for USO shows and other entertainment. A basketball league was formed with four teams participating and there is an active bowling league. Insulation has been installed in the gym and the thermostatically controlled heating system was re-wired. The contract is ready to be signed for the fishing lake and the owner has reportedly agreed to lease us the lake. The site personnel are anxiously awaiting the opening of the lake and as always the morale will improve even more with this event. The 667th was the recipient of the ADC First Term Airman Competition Reenlistment Award with a 75% retention rate for Jan - Mar 72.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.



HISTORICAL RECORD

of the

762D AIR DEFENSE GROUP (ADC), NORTH TRURO AFS, MASSACHUSETTS

for the period ending

31 MARCH 1972

FOR OFFICIAL USE
ONLY

ADC FORM
JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 762nd Air Defense Group (ADC) North Truro AFS, MA 02652		2. NAME AND GRADE OF COMMANDER ROBERT E. PRINCE, Lt Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons) ADC, 21 Air Division, 762 Air Defense Group				
4. SUBORDINATE UNITS (Down to and including squadrons) None				
5. MISSION (Give authority and brief statement of primary mission) 1. To defend the assigned areas of responsibility, utilizing a BUIC III system against air attack, in accordance with the procedures and policies of ADC and Commander, 21st Air Division. 2. Maintain and operate assigned equipment and facilities; train and administer personnel for the purpose of providing Aerospace Defense data to applicable SAGE Division and provide an automatic backup intercept control capability (BUIC) when so directed.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	24	208	30	262
ASSIGNED	24	190	30	244
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
AN/FPS 90 (1)	AN/GRT (26)	GPA 127 (5)		
AN/FPS 107V2 (1)	AN/GRR 7 (26)	AN/GPA 50 (3)		
AN/FPS 26A (1)	AN/GYK-19 (1)	RO 65 (2)		
AN/FST 2A (1)	TSEC/KW-7 (2)	DRP (1)		
AN/FRT 49 (1)	AN/UPX 14 (2)	AN/FYQ 47 (1)		
AN/GKA 5 (1)	AN/UPX 21 (1)	AN/GPA 124 (1)		
AN/GRC 27 (2)	QA 1163 (3)	AN/GPA 98 (1)		
	TSEC/KWX-11 (1)			

<i>If necessary to facilitate typing, separate by tearing along fold. and reassemble securely by stapling in upper left-hand corner.</i>	<p style="text-align: center;">II. COMMENTARY</p> <p>This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement 1 to AFR 210-3 for additional guidance.</p>
	<p style="text-align: center;">COMMAND SECTION</p> <p>In February the 762nd Air Defense Group witnessed a change of command at the division level, as Major General Price replaced the retiring Major General Williams. General Williams made a farewell visit to the station in January. Concurrent with this visit Colonel Dunaway, incoming 21st Air Division Vice Commander, undertook an orientation visit.</p> <p>Other distinguished visitors during this quarter were General Haynes, ADC Vice Commander; Colonel Armstrong, ADC DCS/CE; Major Jackson, ADC Social Relations Problems Officer; and Captain Rock, ADC JOC Advisor. Captain Rock met with Lieutenants Laing and Perkins to discuss various aspects involved in establishing a Junior Officers Council.</p> <p>SMSgt Farino, Hq ADC Conducted a test security visit on 27 January. Mr Karnegy, also from ADC, visited in March to conduct an explosive safety inspection.</p> <p>The station Commander, Colonel Prince, attended a 21st Region Conference during February. His Executive Officer, Major Mello, attended the Disaster Preparedness Course for senior staff members at Lowry AFB, Colorado from 28 February to 3 March.</p> <p>Chaplain Haley was on the site for two weeks during the quarter. ADC Chaplain Boardman visited the station on 24 March.</p> <p>Sergeants Clauser and Brukelmeyer participated in the Career Motivation and Air Force Activity Orientation Program at Homestead AFB, Florida during February.</p> <p style="text-align: center;">OPERATIONS</p> <p>Operation personnel spent much time in preparation for Freddie H. Smith competition. The numerous simulated exercises were geared toward this competition, which is used to rate the best BNCC in ADC. Although the computer was down for three weeks in February, this time was utilized for numerous cross-training trips and academic training.</p> <p>In January no live exercises occurred, while the simulated exercises Amalgam Hunt 72-2 and Fertile Magic 72-1 through 5 were conducted. One live exercise, Fertile Keynote 72-10, and four simulated, Fertile Magic 72-6 through 9 took place in February. The live exercise Fertile Brave 72-3 occurred during March. Simulated exercises for this month included Amalgam Fairplay 72-3; Fertile Magic 72-9A, 10, 11 and 12; and finally the Freddie Smith Competition.</p> <p>The Operations Section made an outstanding showing in the Freddie Smith Competition as evidenced by its overall average score of 94.29 on academic testing, and its good "Kill" rate. Final results are pending validation by Hq ADC.</p>

II.

COMMENTARY (Continued)

OPERATIONS (CONTINUED)

Personnel gains for the quarter were three officers and five enlisted men; losses were three officers and four enlisted men. Upgradings to qualified occurred as follows: Four officers to Weapons Director, one to RICMO, and one to Target Monitor; two enlisted men to HRIO, one to WDT, and one to IDOPER.

The following TDY's occurred: Two officers to BUIC School at Keesler AFB, Mississippi; four to BOMARC School at Tyndall AFB, Florida; five enlisted men to BOMARC School; one to BMEWS School at Keesler AFB, three officers to the 132nd FIS at Bangor, Maine and to the Charleston BNCC. In addition, most of the Operations Section went TDY on cross-training trips to the 49th FIS at Griffiss AFB, New York; to the SAGE Center at Hancock Field, New York; and to the 26th Air Defense Missile Squadron, Otis AFB, Massachusetts. Selected Weapons personnel also visited the 24th Artillery Group, Coventry, Rhode Island as well as the Boston ARTCC facility at Nashua, New Hampshire.

A classification and testing team from the 21st Air Division paid a staff assistance visit to the training office to analyze records and testing functions.

At the conclusion of the quarter Major Richard Cox, Chief of the Operations Section, left PCS on an assignment to Rome, Italy. Captain Fredric B. Pickford assumed command of the section.

OFFICE OF PROGRAM MAINTENANCE

The Office of Program Maintenance continued to provide outstanding support to Operations throughout the quarter by effectively responding to reported problems, implementing environmental data changes, and maintaining all BUIC III systems software packages, including the Freddie H. Smith, Jr. Competition tapes.

Several office improvement projects were initiated during the quarter.

a. The programmer training program was completely reorganized. All training tests were revised to improve their quality, and an automated test generator was established.

b. All Division geography was reviewed for accuracy, and additional points were inserted to close gaps in vectors displayed in the X8 expansion mode. A new geography master was constructed in the office using Operational Navigation Charts to provide a more effective tool for processing and analyzing geography change requests.

c. A new management tool was developed to more effectively monitor the status and insure proper processing of Documentation Requests/Changes, Clarification Requests, and Analysis Reports.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

RICHARD DAMMER, 1st Lt

SIGNATURE

Richard Dammer

APPROVED BY (Typed name and grade of Commander)

R.E. PRINCE, Lt Colonel

SIGNATURE

R. E. Prince

OFFICE OF PROGRAM MAINTENANCE (Continued)

d. A complete review of OOI's was initiated in February. By the end of the quarter, eight OOI's had been rewritten, one was deleted, and one was approved with no changes.

Programming duty assignments were realigned during the quarter due to receipt of PCS assignments for two programmers. A manning assistance request was initiated to preclude a 67% manning situation, however, no relief was obtained by the end of the quarter.

CEM MAINTENANCE

Maintenance notes of interest for the quarter are as follows:

a. The Pre-Iran of the AN/FRT-49 and the AN/GKA-5 was completed by members of the 1829 Engineering Installation Squadron on 17 Jan 72.

b. The following Time Compliance Technical Orders were completed on the BUIC Computer:

(1) TCTO 31S5-2GSA51-519, redesignates the AN/GSA-51A to the AN/GYK-19.

(2) TCTO 31S5-2GSA51-513, provides for an override of data display interlock.

c. The Air Conditioning System for BUIC was expanded and work accomplished during Feb-Mar 72. Final system checkout is scheduled for May 1972.

d. The mechanical Iran of the AN/FPS-90 was completed by member of the 1829 Engineering Installation Squadron on 10 Mar 72.

e. The AN/FPS-7 Radar was modified to an AN/FPS-107V2. The inflatable radome was replaced with a Rigid Radome during the same period.

f. Feeder number one was rewired and split to accommodate the BUIC air conditioning. Since this rehab we have experienced 21 power failures on the AN/GYK-19 Mainframe and Processor.

CEM gained 9 enlisted men and lost 10 during the past quarter.

PERSONNEL/ADMINISTRATION

A heavy turnover of personnel occurred on this station with twenty-four arrivals and forty-five departures during this period. The manning situation did not look favorable at the conclusion of the quarter, and several sections had to request manning assistance.

PERSONNEL/ADMINISTRATION (Continued)

Civilian personnel from Otis AFB conducted a management and civilian personnel record review in March. A meeting with civilian supervisors was held and the supervisory appraisal system was explained.

Three enlisted men retired and ten men reenlisted, one a first term airman.

CIVIL ENGINEERS

The Civil Engineer Section is authorized sixteen civilians and seventeen military personnel. At present we are down one (1) AFSC 543XX. During February Civil Engineers from the 21st Air Division paid a Staff Assistance Visit to this section.

During this period the following major maintenance work has been completed:

- a. Installed new shower and repaired flooring facility #16.
- b. Repaired by replacement hot water heaters in the following facilities: GATR #2, #29, #34, #108 and #204.
- c. Repaired shower fixtures in facilities #12, #38, & #39.
- d. Repaired by replacement high pressure steam safety relief valve, Central Heating Plant, #19.
- e. Repaired by replacement storage shed for facility #104.
- f. Repaired by replacement latrine fixtures facility #T-5, NCO Club.
- g. Major repairs were completed to primary electrical feeders #1 & #4.
- h. Maintenance was completed on all electrical switches, circuit breakers and motor controls for facilities #29 and GATR.

Four (4) O&M projects have been completed by contract:

- a. Repaired BUIC III air conditioning.
- b. Repaired electrical feeder to BUIC III air conditioning system.
- c. Maintenance underground primary distribution system.
- d. Paint interior facility #31 Power Plant.

O&M Contract still under construction: Repair family housing unit, facility #205 - 85% completed.

CIVIL ENGINEERS (Continued)

Power Plant report is as follows:

Total engine hours operated	5463
Total power produced	1,367,000 kwh
Diesel plant cost - labor and parts	\$24,722.13
Diesel fuel consumed	101,400 gal
Diesel fuel cost	\$12,168.00
Lube oil cost	\$813.00
Total plant operating cost	\$38,461.80
Diesel power cost per kwh	.02813¢
Commercial power purchased	1,058,300 kwh
Commercial power cost	\$21,569.97
Commercial power cost per kwh	.02038¢

Power Plant operation for the quarter:

a. January: All engines excluding #7 continued to have oil sludging problems. The #6 engine bedplate was found out of alignment; this was corrected by retorquing and shimming the bedplate. Number 1 and 2 radiators were sent to contract maintenance for repairs.

b. February: The oil problem mentioned above continued, although slight improvement was obtained by repeated filter changes and by switching to a different manufacturer of 9000f oil. CEMIRT replaced main bearings and rear oil seal in engine #4. The plant was secured for ten days during which all circuit breakers were removed, checked, cleaned and tested by CEMIRT and plant personnel. The #2 engine 8,000 hour inspection was completed during the scheduled outage, however, a leaky liner was discovered the 18th of Feb. The liner was removed, seals replaced and re-installed. Oil analysis failed to show glycol in the oil before and after the liner and oil changes were done. The radiators sent to contract maintenance were beyond economical repair so the cores were replaced. Both radiators were received and re-installed.

c. March: The oil problem continued, although slight progress also continued. Filter life has increased to approximately 500 hours depending on particular engine conditions. The #1 engine had a new pedestal bearing and slip rings installed. A front end overhaul of #1 is also in progress. An 8000 hour inspection is in progress on #7 engine. The #1 engine's alternator was cleaned completely by site personnel. The alternator had a deep scratch in the stator windings, which was repaired with several coats of spray glyptol.

STATION SUPPORT

The four day work week continued to be implemented and results looked favorable. Project Better Living progressed with the installation of carpeting in the barracks, leaving only the BOQ to be completed. The civil engineer's bench stock was completely rearranged and revalidated during this period.

In March Lieutenant Spicer attended a Supply Convention at Lowry AFB, Colorado.

A cross-training and self-study program was instituted to improve the quality of support and material control. Although this section continued to function undermanned, no degradation in station support occurred.

DISPENSARY

A preventative dentistry team from Otis AFB treated and examined military personnel for five days during the quarter. Otis AFB also sent a Veterinary Inspection team to inspect all foodservice facilities and to conduct a zoonosis clinic.

With the increase in authorized medical technicians to three, the dispensary gained two new men.

GROUND SAFETY

Two incidents of note took place during this quarter. One involved an injury to a civilian employee in the station commissary. The cost of this accident was two lost workdays and two hundred dollars in medical expenses. The other incident involved a fire in base housing which resulted in an estimated loss of seven thousand two hundred dollars in Air Force property.

On 19 January a safety team from the 21st Region conducted a safety survey of this site.

RCS: AU-D5

HISTORICAL RECORD

of the

764TH RADAR SQUADRON

for the period ending

31 March 1972

ADC FORM NOV 68 102

JUL 66 EDITION WILL BE USED UNTIL STOCK IS EXHAUSTED

Section I. REQUIRED DATA				
1. UNIT AND LOCATION 764TH RADAR SQUADRON (SAGE)(ADC) ST ALBANS AIR FORCE STATION, VT 05478		2. NAME AND GRADE OF COMMANDER ROBERT J. TRZCINSKI, MAJOR		
3. CHAIN OF COMMAND (Superior Echelons) HEADQUARTERS, UNITED STATES AIR FORCE AEROSPACE DEFENSE COMMAND 21ST AIR DIVISION				
4. SUBORDINATE UNITS (Down to and including squadrons) NONE				
5. MISSION (Give authority and brief statement of primary mission) TO PROVIDE SEARCH AND HEIGHT FINDER SURVEILLANCE RADAR COVERAGE WITHIN ITS AREA OF RESPONSIBILITY AND TO PROVIDE THIS DATA TO THE 21ST AIR DIVISION DIRECTION CENTER.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	5	105	26	131
ASSIGNED	6	108	26	140
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) AN/FST-2B COMPUTER AN/FYQ-47 COMPUTER AN/FPS-107 SEARCH RADAR AN/FPS-26 HEIGHT FINDER RADAR AN/UPX-14 INTERROGATOR RESPONDER AN/FRT-49 HIGH POWER UHF AMPLIFIER AN/GKA-5 FLIGHT CONTROL GROUP AN/GRT-3 UHF RADIO TRANSMITTER AN/GRB-7 UHF RADIO RECEIVER AN/GRC-27 UHF MULTI CHANNEL TRANSMITTER/RECEIVER				

Section II.

COMMENTARY

(See ADC Supplement I to AFR 210-3 for additional guidance)

PART A. This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes in primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance.

1. OPERATIONS AND ELECTRONIC WARFARE - The Height Operations Section attained 100% manning while the Electronics Warfare Section remained at 80%. Two Level V exercises were conducted with good results, although the locally improvised phone patch arrangement proved too weak to be usable.
2. CHANGES IN PRIMARY EQUIPMENT - The Search Radar underwent considerable modification during the period of 17 Jan 72 through 4 Feb 72, which changed the "7" Beam AN/FPS-7 to the Single Beam AN/FPS-107. The modification was accomplished by Westinghouse Electric Company, with the help of personnel from the Search Radar Section. Authorization has been received to shut AN/FST-2B off.
3. EQUIPMENT PERFORMANCE - All mission type equipment operated at or above SAGE specifications during this period. The following areas of significance were noted
 - a. AN/FPS-107 - Klystron Type L-3250, Serial Number RC 128-1 had 55,190 hours radiate and 59,526 hours filament which is far above the current ADC record for this type Klystron. The following TCTO's were complied with during this quarter: 31P6-2FPS7-571B 14 Mar 72, 31P6-2FPS-107-501 17 Mar 72.
 - b. AN/UPX-14 - Modification 31P4-2UPX14-511 was completed 29 Mar 72. This modification is to improve the maintainability/reliability of the Interrogator.
 - c. AN/FPS-26 - The following major items were replaced during the reporting period: Azimuth Hydraulic Pump, Pulse Transformer, Waveguide Switch, Elevation Hydraulic Pump, and 2 Klystrons type SAC-42A.
 - d. GATR - Klystron, type 3KM50, Serial #K9-447R2 in "A" Channel of the AN/FRT 49 failed on 10 Feb 72 after 6,403 hours of operation. New transmitters have been received for the AN/GKA5's and are awaiting installation approval.
4. FACILITIES - The repair work to the NCO Club is progressing and is about $\frac{1}{2}$ completed. A contract has been awarded for remodeling the barracks and is due to start during the next quarter.
5. MAINTENANCE AND SUPPLY - No major maintenance or supply problems were encountered this quarter.
6. OFFICIAL VISITS - 21AD Staff Assistance visits this quarter were in the fields of Ground Safety, Services, 22-25 Mar, 25 Feb Commercial Communications, 8 Feb Civil Engineers, 8 Feb Special Services, 7 Jan Administration.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

If necessary to facilitate typing, separate by tearing along top edge and reassemble securely by stapling in upper left-hand corner.

Section II.

COMMENTARY (Continued)

PART B: This part should include a list of key personnel and information on: (1) community relations; (2) awards and decorations; (3) morale; (4) any other subjects the commander may wish to include.

1. COMMUNITY RELATIONS - The Boy Scouts of St Albans held their annual Klondike Derby on St Albans Air Force Station, 4 March 72.
2. AWARDS AND DECORATIONS - The following awards and decorations were received:
 DECORATIONS - TSgt Malcolm L. Rice - Air Force Commendation
 AWARDS - 1st Lt Donald H. Stuhlman - Certificate of training Personnel Officer Course and ADC Administration.
 TSgt Malcolm L. Rice - ADC NCO Academy diploma
3. MORALE - Morale within the squadron is on the increase. Continuous efforts and new ideas are being used to keep morale on the rise.
4. SPECIAL SERVICES - The Squadron ski passes were used extensively during the quarter, with the skiing conditions being good. The Hobby Shops on station received much support from assigned personnel.
5. LIST OF KEY PERSONNEL:
 MAJOR ROBERT J. TRZCINSKI, Commander
 CAPT GERALD L. GREENWOOD, Maintenance Officer
 CAPT ALVIN E. GOODNO, Administration Officer
 1LT JOHN E. ROSS, Communications Officer
 1LT DONALD H. STUHLMAN, Personnel Officer
 2LT RICHARD L. SEIBERT, Station Support Officer
 MSGT WILLIAM H. DIMICK, Operations Officer
 MSGT EDWARD H. DIXON, JR, NCOIC Medical Aid Station
 MSGT RICHARD E. COUGHLIN, First Sergeant
 Mr R. ALLEN BROOKS, Base Civil Engineer Supervisor

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

RICHARD H. DE WOLF, SSgt

SIGNATURE

Richard H. De Wolf

APPROVED BY (Typed name and grade of Commander)

ROBERT J. TRZCINSKI, Major

SIGNATURE

Robert J. Trzcinski

HISTORICAL RECORD

of the

765th AIR DEFENSE GROUP (SAGE) (ADC)
CHARLESTON AIR FORCE STATION

for the period ending

31 MARCH 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION		2. NAME AND GRADE OF COMMANDER		
765th AIR DEFENSE GROUP (ADC) CHARLESTON AFB, MAINE 04426		William A. Evans, Jr., Lt. Col., USAF		
3. CHAIN OF COMMAND (Superior echelons)				
21st Norad Region, Hancock Field, New York ADC HQ, Ent AFB, Colorado NCRAD HQ, Cheyenne Mountain, Colorado Springs, Colorado				
4. SUBORDINATE UNITS (Down to and including squadrons)				
NONE				
5. MISSION (Give authority and brief statement of primary mission)				
The mission of the 765th Air Defense Group is to provide ground/air communications, search, SIP, and height finder radar to the 21st Norad Region (Level 1 Operations) and is a Norad Control Center, CNCC, (Level 4 Operations) and has the additional responsibility for maintenance and operation of the co-located BUIC NCC. The authority for the group revised mission is 21 NCRAD Region Regulation 55-15. The Charleston BNCC mission is cited in 21 NR CP Order 300NYR, and is classified Secret.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	32	245	61	348
ASSIGNED	31	238	52	321
(Canadian Officers Auth/Assign: 2/2)				
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
<u>Equipment</u>	<u>Quantity</u>	<u>Equipment</u>	<u>Quantity</u>	
AN/FPS-6A	1	AN/GRT-3	22	
AN/FSS-7	1	AN/UPX-14	1	
AN/FPS-27	1	AN/GPA-127	4	
AN/FST-2B	1	OA-2325/FPS-6	1	
AN/GKA-5	1	TR1510/TP1510	1	
AN/GLA-8	1	AN/GPA-98A	1	
AN/GRC-27	2	AN/GSA-51A	1	
AN/GRR-7	24	AN/FYQ-47	1	
		AN/GPA-124	1	

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

Section II. Part A. Station Support:

1. During this reporting there occurred what I think is a first for the Medical Aid Station. SSgt. Jesse L. Brown, Medical Technician assigned, was called on to assist a civilian woman who was in labor. SSgt. Brown transported the lady by ambulance to a local civilian hospital. The stork arrived at the ambulance before the ambulance arrived at the hospital. SSgt. Brown delivered a healthy baby boy unassisted in the back of the ambulance.

For this reporting period the Medical Aid Station saw 1070 patients, filled 1021 prescriptions, and gave 119 immunizations.

Further improvements made this quarter to both the Medical Aid Station and the services rendered:

- a. The walls of the entire clinic with the exception of the patients waiting room were painted white on a self help basis. The over all appearance is much improved.
- b. Adequate lighting has been installed in the physician's office-exam room.
- c. The microscope and light requested for the laboratory is still on back-order.
- d. Support from our host base been greatly improved in all areas.

2. One item of primary significance during this reporting period pertains to the assignment of another WAF to Charleston AFS. A1C Peggy Parlette arrived 20 March 1972 and will be working in the Personnel Section. She is the second WAF to be assigned under the test program being conducted at Charleston AFS. Two additional WAF are projected for assignment in May.

3. During this period, action has been taken by the Group First Sergeant (TSgt Senay) to reinstate the First Term Airmen/NCO of the Quarter program. Much effort has been put forth, and this program should be very beneficial to site personnel.

4. The Intramural Basketball League started 27 Jan. 72, to be completed 13 April 72. Six teams are participating in the league.

Furthermore the Base Bowling Roll-Offs were held 24-27 March. A four man team was selected to compete in the 21st AD Bowling tournament in April 72.

Further the NAF equipment was inventoried during this reporting period.

Section II. Part B. Operations:

1. BUIC III operations participated in one live and twelve simulated air defense missions during this quarter.

2. Only one item remains open from the 21st Air Division SAV. This is the replacement of cable trough covers between operations and the M/FPS-6 tower. This work will be done after snow and ice melt.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

3. On 14 Feb 72, an Emergency Unsatisfactory Material Report was sent to 21 Air Division on the 7289 tubes used in the AN/UPX-14 1FF set. These tubes have been failing after a few hours of operation, or have not been working at all, resulting in multiple equipment failures and loss of 1FF/SIF capability. The applicable AMA is investigating and corrective action is underway by them.
4. On 18 Feb 72, the AN/FYQ-47 and AN/GPA-124 equipment were commissioned and placed on line in place of the AN/FST-2, which was placed in standby. Since that time, all data processing and transmission has been performed by these new units. The AN/FST-2 is expected to be de-commissioned about 1-10 April 1972.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

Floyd D. Gonzales, 2Lt., USAF

SIGNATURE

Floyd D. Gonzales

APPROVED BY (Typed name and grade of Commander)

William A. Evans, Jr., Lt. Col., USAF

SIGNATURE

William A. Evans

HISTORICAL RECORD

of the

766 Radar Squadron (SAGE) (ADC)
Caswell Air Force Station, Maine 04750

for the period ending

1 January 1972 - 31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA																
1. UNIT AND LOCATION 766 Radar Squadron (SAGE) (ADC) Caswell Air Force Station, Maine 04750	2. NAME AND GRADE OF COMMANDER JAMES E. MARTIN, Captain, USAF Commander															
3. CHAIN OF COMMAND (Superior echelons) 766 Radar Squadron, Caswell AFS, Maine 04750 21 Air Division, Hancock Field, New York 13225 Aerospace Defense Command, Ent AFB, Colorado 80912 United States Air Force, Washington, D.C. 20305																
4. SUBORDINATE UNITS (Down to and including squadrons) None																
5. MISSION (Give authority and brief statement of primary mission) To provide Ground/Air Communications, IFF, Search and Height Finder Radar data to the 22 NORAD Region for SAGE Air Defense Operations, and to adjacent divisions backup control centers for other levels of operations as required.																
6. PERSONNEL																
	<table border="1"> <thead> <tr> <th></th> <th>OFFICERS</th> <th>AIRMEN</th> <th>CIVILIANS</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>AUTHORIZED</td> <td>5</td> <td>115</td> <td>20</td> <td>140</td> </tr> <tr> <td>ASSIGNED</td> <td>5</td> <td>102</td> <td>20</td> <td>127</td> </tr> </tbody> </table>		OFFICERS	AIRMEN	CIVILIANS	TOTAL	AUTHORIZED	5	115	20	140	ASSIGNED	5	102	20	127
	OFFICERS	AIRMEN	CIVILIANS	TOTAL												
AUTHORIZED	5	115	20	140												
ASSIGNED	5	102	20	127												
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)																
AN/FPS-6A	1	AN/FPS-107 (V2)	1													
AN/UPX-14	2	AN/GRC-27	2													
AN/GRR-7	26	AN/FYQ-47	1													
AN/FPS-26	1	AN-FST-2	1													
AN/GKA-5	1	AN/GRT-3	26													
CU-547	7	AN/GPA-124	1													

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

COMMUNICATIONS-ELECTRONICS:

HEIGHT RADAR: No major problems occurred in the AN/FPS-6 work center this quarter. Two NORS actions were processed. One "K" and one "L". Both items were received on a timely basis. There was one PACE failure. The PACE program is being closely monitored by this work center to prevent the high failure rate of the past from recurring. In December 1971 an ADC Class I modification to allow collant flow to pass through the head of the magnetron was installed in the transmitter cabinet. Since installation, no tube failures have occurred. The presently installed tube has accumulated more radiate hours than the past four tubes combined. The elevation drive motor was replaced in January 1972.

HEIGHT RADAR: On 10 January 1972 the AN/FPS-26 inner and outer towers were separated by cutting a two inch piece from the inner tower on the first and second decks. However, the towers still touch each other on the antenna deck. This problem is in the process of being corrected. The elevation hydraulic pump was replaced on 14 February. Both RHI's were overhauled during February and March. At this same time numerous discrepancies noted during the December 1971 Pre-IRAN were cleared.

SEARCH RADAR: Beginning 7 February and ending 28 February TCTO 31PG-2FPS7-567 was installed. This modification converted the AN/FPS-7 horizontally polarized, seven beam radar to a single beam system with both horizontal and circular polarization. The equipment nomenclature has been redesignated the AN/FPS-107(V2). TCTO 31PG-2FPS7-565 was also installed. This modification replaced tube type diode rectifiers with semi conductor module assemblies. In March TCTO 31PG-2FPS7-S71 was installed on the HD-884 Waveguide pressurizer. This modification makes the HD-884 compatible with the AN/FPS-107 and allows for disposal of the old HD-287 pressurizer. Numerous problems with the HD-288 heat exchanger glycol pump arose during this quarter. Two unserviceable pumps were received from SMAMA and a third was installed with a slight oil leak. One pump drive motor was also replaced.

DATA TRANSMISSION: No major problems occurred in this work center. A class IC modification to allow automatic switching of phone lines was installed. Also the AN/FYQ-47 shake-down test had to be curtailed due to equipment malfunction and team commitments elsewhere.

RADIO: A major water problem, caused by the spring run-off, occurred in this work center on 19-20 March. Fire exits had to be sand bagged and a gasoline driven sump pump was needed to remove the water. Local Civil Engineers are taking steps to prevent recurrence. There were no major equipment problems. One "L" NORS action was processed.

GENERAL COMMENTS: All work centers underwent a command IG inspection during 27-31 March. All training areas continue to progress at a normal rate. Supply support is good.

OPERATIONS: The following missions were conducted:

<u>MISSION</u>	<u>DATE</u>	<u>HOURS</u>	<u>TIME</u>	<u>SIM</u>	<u>LIVE</u>
GPA 98	1-31 Jan	56+00	11+00	11+00	
LIVE	1-31 Jan	45+00	5+00		5+00
TOTALS	14 Missions/21 days	101+00/16+00/11+00/5+00			
GPA 98	1-29 Feb	108+00	37+00	37+00	
LIVE	(None)				
TOTALS	12 Missions/21 days	108+00/37+00/37+00/None			

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

MISSION	DATE	HOURS	TIME	SIM	LIVE
GP 98	1-31 Mar	72+00	107+00	107+00	
LIVE	None				

TOTALS 12 Missions/21 days/72+00/107+00/107+00/None

GRAND TOTALS: 38 Missions/63 days/281+00/160+00/149+00/5+00

1. KEY PERSONNEL

Captain James E. Martin, Commander
 Captain Delvin A. Hilkemeier, Supply Officer
 1Lt Roger W. Helbig, Communications-Electronics Maintenance Officer
 2Lt William E. Caffall, Administration Officer

2. Officer Departures:

1Lt Gerald L. Klein, Communications Maintenance Officer, 9 April 1972

3. Morale is good.

4. Community relations are good.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)
 PREPARED BY (Typed name and grade of Historian)

WILLIAM E. CAFFALL, 2Lt, USAF

APPROVED BY (Typed name and grade of Commander)

JAMES E. MARTIN, Captain, USAF

SIGNATURE

SIGNATURE



HISTORICAL RECORD

of the

772 Radar Squadron

for the period ending

March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 772 Radar Squadron (SAGE)(ADC) Gibbsboro AFS, NJ 08026		2. NAME AND GRADE OF COMMANDER CONSTANTINE J. PAPPADAKIS, Capt, USAF		
3. CHAIN OF COMMAND (Superior echelons) ADC NORAD 21st Air Division 772nd Radar Squadron (SAGE)(ADC)				
4. SUBORDINATE UNITS (Down to and including squadrons)				
5. MISSION (Give authority and brief statement of primary mission) To execute Air Defense operations in the sector of responsibility as outlined in 21st Air Division Regulations and to provide surveillance within the area of responsibility.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	6	111	20	138
ASSIGNED	6	105	20	131
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
OA-8646/FPS-27(1)	AN/GPA-50 (1)	OA-2325 (1)		GPA-127(v) 4
HD 85/CPS6(1)	AN/GKA-5 (1)	OA-3751 (1)		
ANFPS-6A (1)	ID-642FSA (28)	MD-141 (26)		
ANFST-2B (1)	CN-396A/GPS (1)	HD86CPS-6 (2)		
R278B/GR (2)	T-282/GR (26)	AT309/GPX (1)		
MD-129A (1)	OA-174 (1)	AN/UPX-21 (1)		
AN/FPS-26A (1)	R-361A (26)	AT914/UPX-14 (1)		
AN/FPS-27 (1)	T-217A (2)	OA 1163/FST-2(2)		
AN/UPX-14 (1)	CU-547 (8)	CV601-FPS-68 (2)		
AN/FYQ-47 (1)				

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. Operations:

a. Operations Section: During the months of January, February, March, operations participated in the following exercises.

(1) Fertile Keynote	72-8	21NR Live Exercise	9 Jan 72
(2) Amalgam Hunt	72-2	Norad SSTM	25 Jan 72
(3) Fertile Keynote	72-10	21NR Live Exercise	1 Feb 72
(4) Amalgam Libel	72-3	Norad Format Exercise	14 Feb 72
(5) Amalgam Libel	72-4	Norad Format Exercise	14 Feb 72
(6) Fertile Brave	72-3	21NR Live Exercise	9 Mar 72
(7) Federal Brave	72-4	20NR Live Exercise	10 Mar 72
(8) Amalgam Fairplay	72-3	Norad SSTN	20 Mar 72

2. Communications Electronics:

a. CEM office - A Staff Assistance from 21AD was conducted 14-18 February 1972

b. AN/FPS-27: On 31 January 1972 TOTO3151-2GLA8-518 was completed changing the nomenclature of the AN/GLA-8 to OA-8646/FPS-27. On 2 February 1972 the Klystron in Channel #1 was changed due to low power.

c. AN/FPS-26: No major equipment changes or modifications were made during this period.

d. AN/FPS-6: No major equipment changes or modifications were made during this period.

e. GATR: No major equipment changes or modifications were made during this period.

f. AN/FYQ-47: 20 January 1972 the FYQ-47 was activated. A channel FST-2B was turned off while B channel remained active (back-up for FYQ-47). 8 March 1972 B channel of the FST-2B was turned off and the FYQ-47 became the only operational prime equipment.

3. Support Activities:

a. Installation Engineers: 8 February 1972, Mr Gordon, Civilian Personnel classifier from McGuire AFB reviewed all civilian personnel positions for the 772nd Radar Squadron. 24 February 1972 received a Staff Assistance Visit from 21AD Civil Engineers with the following results; work control outstanding and all other areas satisfactory. 23 March 1972, Mr Huddleston from ADC Civil Engineers visited the site and reviewed all Civil Engineering projects with Mr Dion and Mr Krupp from McGuire AFB Civil Engineers and representatives from this Squadron. 24 March 1972, Mr Berg Architectural Engineer from McGuire AFB, NJ visited the Squadron to discuss remodeling of the NCO Club.

b. Administration: 24-25 February 1972, an Administrative Staff Assistance Visit was conducted by 21 Air Division and the Squadron Administration was found to be satisfactory.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

c. All other Staff Agencies did not have any significant historical data to report during this period.

4. Essential personnel as of 31 March 1972:

Constantine J. Pappadakis	Capt	Commander
Peter E. Jones	1st Lt	CEM Officer
Dale R. Fillmore	1st Lt	Station Support Officer
David J. Ashton	2nd Lt	Personnel/Administration Officer
Donald R. Mutz	2nd Lt	Radar Officer
Milton J. Rankin	CMS	NCOIC Maint Control
Edgebert Alford	TSgt	NCOIC Station Support
Richard D. Beers	MSgt	NCOIC Operations
Edward L. Rhodes	MSgt	NCOIC FYQ-47
James N. DeDear	SMS	NCOIC, Maintenance Quality Control
Donald G. Gamble	MSgt	First Sergeant
Howard L. Guthrie	MSgt	NCOIC Height Finders
Alfred C. Harris	MSgt	NCOIC FPS-27
David Gilbert	Civ	Food Services Supervisor
Ronald L. Scherich	TSgt	NCOIC Administration
William S. Eng	SSgt	NCOIC Personnel
Edward A. Matthews	TSgt	NCOIC Leased Housing
Norman P. Hammerle	Sgt	NCOIC Power Production
Joseph S. Brown	TSgt	NCOIC Civil Engineers
Alfred Schramm	Civ	Civil Engineer Foreman
George J. Shelton	Civ	Power Production Supervisor

5. Other Significant Events:

a. On 25 March 1972 a tour of GAFS was conducted by men of the 772d Radar Squadron for the Gibbsboro Elementary School, Grades 4 thru 8, their Teachers and Parents. Approximately 70 people took part in this event.

b. During this period MSgt Tatum, TSgt Lacker and SSgt Raymond retired from the USAF.

c. The Air Force Commendation Medal was presented to the following personnel: MSgt Tatum, TSgt Lacker and SSgt Raymond.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

RICHARD D. BEERS, MSgt, USAF
Unit Historical Officer

SIGNATURE

Richard D Beers

APPROVED BY (Typed name and grade of Commander)

CONSTANTINE J. PAPPADAKIS, Captain, USAF
Commander

SIGNATURE

Constantine J. Pappadakis

HISTORICAL RECORD

of the

773rd Radar Squadron (SAGE)

for the period ending

31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 773 Radar Sq (SAGE) Montauk, New York 11954		2. NAME AND GRADE OF COMMANDER THOMAS L. HATTAWAY LtCol		
3. CHAIN OF COMMAND (Superior echelons) 773 Radar Squadron (SAGE) Montauk AFS, NY, THOMAS L. HATTAWAY, LtCol Commander, 21 Air Div, Hancock Fld NY, JAMES L. PRICE, Major General Commander, ADC, Ent AFB, Colo, Thomas K. MC GEHEE, Lt General Commander, Hq NORAD, Colorado Springs, Colo, SETH J. MC KEE, General Commander, Hq USAF, Wash DC, JOHN D. RYAN, General Secretary of the Air Force, ROBERT C. SEAMAN Jr. President of the United States, RICHARD M. NIXON				
4. SUBORDINATE UNITS (Down to and including squadrons) None				
5. MISSION (Give authority and brief statement of primary mission) Authority: ADCR 23-30 To equip, administer and train all assigned personnel in order to provide surveillance data, height determination, MARK X, IFF/SIF data, and accomplishing radar mapping prior to transmittal of such data to the Air Defense Direction Center at 21st Air Division.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	5	128	32	165
ASSIGNED	5	114	30	149
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
1. AN/FPS-6 (1)	6. AN/FRT-49 (1)	11. AN/UPX-14 (1)		
2. AN/FPS-26 (1)	7. GPA-98A (1)	12. GPA-127 (5)		
3. AN/FST-2 (1)	8. AN/GRC-27 (1)	13. KW-7 (1)		
4. AN/FPS-35 (1)	9. AN/GRT-3 (26)	14. AN/FYQ-47 (1)		
5. AN/GKA-5 (1)	10. AN/GRR-7 (26)	15. AN/GPA-124 (1)		

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

OPERATION AND TRAINING

1. During the period 1 January - 31 March 1972, the Operation Section participated in numerous exercises. These exercises provided training for Height personnel in ECM recognition and reporting, receiving and disseminating formats, and wartime conditions.
2. A Staff Assistance visit was conducted by 21st Air Division on 23-24 Feb 1972 and the results were satisfactory.
3. The reassignment of SSgt Burdick on 26 February 1972 has caused an extremely critical manning situation in the 276X1 career field. Several requests for manning assistance have been submitted to 21st Air Division to provide sufficient personnel for adequate manning; assistance could not be provided because of the critical 276X1 manning situation throughout ADC. A request for waiver of the 24-hour manning requirements was also denied. At this time, the NCOIC of the Operations Section, MSgt Meyer, is working shifts to provide adequate scheduling of personnel. The Height Section manning during this quarter has been sufficient. On 7 March 1972, Sgt Chase was assigned to B-Crew and on 28 February 1972, Sgt Goodman was assigned to A-Crew.
4. Personnel losses during this quarter were TSgt Tortorici, SSgt Burdick, SSgt Stahl, and Sgt Nahnibida.
5. The three projected gains for the next quarter are TSgt Chandler (276X1,) SSgt Buchanan (276X0,) and Sgt Spink (276Xo.)

COMMUNICATIONS - ELECTRONICS

1. During 10-13 January 1972, the 21st Air Division/LGK Staff Assistance Team conducted an inspection of the 773 LGK and rated Ground CEM satisfactory.
2. On 15 February 1972, a 21st Air Division Staff Assistance Team conducted a follow-up inspection of the 773 COMSEC account. No discrepancies were noted and a satisfactory rating was given.
3. Changes in primary equipment were as follows:
 - a. One of the main antenna motors on the AN/FPS-35 was changed on 20 January 1972 by a GEELIA Team from Griffiss AFB, NY.
 - b. One of the AN/FRT-49 antennas was changed on 17 January 1972 by a GEELIA Team from Griffiss AFB, NY.
4. On 23 March 1972, 1Lt Edward D. Nicastrì was assigned to the 773d as the assistant CEM Officer.
5. Effective 22 February 1972, Capt John C. Deprato, the 773 assistant CEM Officer, was separated from the active duty Air Force.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

ii.

COMMENTARY (Continued)

OTHER COMMENTS

1. Effective 1 February 1972, the 773CC, Thomas L. Hattaway, was promoted to the grade of Lieutenant Colonel, USAF.

KEY PERSONNEL

LtCol Thomas L. Hattaway, Commander
 Capt Dwane K. Williams, CEM Officer
 1st Lt Edward D. Nicastrì, Asst CEM Officer
 2d Lt Nicholas A. Amadorì, Personnel Officer
 1st Lt Gary N. Welschenbach, Supply Officer
 2d Lt Robert C. Perry, Asst Supply Officer
 TSgt Reginald R. Owens, First Sergeant
 TSgt Teddy H. Martin, Chief Medical Technician
 Mr. Robert H. Horner, Chief Civil Engineers

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

NICHOLAS A. AMADORI, 2d Lt, USAF

SIGNATURE

Nicholas A. Amadori

APPROVED BY (Typed name and grade of Commander)

THOMAS L. HATTAWAY, LtCol, USAF

SIGNATURE

Thomas L. Hattaway



HISTORICAL RECORD

of the

907 Radar Squadron (SAGE) (ADC) Bucks Harbor AFS, Me

for the period ending

31 March 1972

AEROSPACE DEFENSE COMMAND

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA					
1. UNIT AND LOCATION 907 Radar Squadron (SAGE) (ADC) Bucks Harbor AFS, Maine 04618		2. NAME AND GRADE OF COMMANDER Joseph R Elder, Major, USAF			
3. CHAIN OF COMMAND (Superior echelons) HEADQUARTERS UNITED STATES AIR FORCE HEADQUARTERS AEROSPACE DEFENSE COMMAND HEADQUARTERS 21st AIR DIVISION					
4. SUBORDINATE UNITS (Down to and including squadrons) NO SUBORDINATE UNITS					
5. MISSION (Give authority and brief statement of primary mission) AUTHORITY: AFR 210-3 To provide ground to air communications, search, SIF, and height finder radar data to 21st Air Division (Mode I), and/or adjacent division (Mode II or B) or to the 21st Air Division NORAD Control Center (DNCC, Mode III).					
6. PERSONNEL					
	OFFICERS	AIRMEN	CIVILIANS	TOTAL	
AUTHORIZED	5	97	16	118	
ASSIGNED	5	92	16	113	
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)					
AN/FPS-90	(1)	UHF TX/RX	(1)	FYQ-47	(1)
AN/FPS-26	(1)	AN/GKA-5	(1)	UPX-14	(1)
AN/FPS-66	(1)	FRT-49	(1)	GPA-124	(1)

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. Operations and training. Operations had 5 personnel gained and 2 personnel losses during this period. They participated in the following missions: Fertile Keynote 72-8, Amalgam Hunt 72-2, Fertile Keynote 72-10, Amalgam Arrow 72-4, Fertile Brave 72-3, and Amalgam Fairplay 72-3. Academic training- 19 hours per individual. ECM academic training- 3 hours per individual. ECM simulator (GPA-98A) training- 5 hours per individual.
2. The AN/FST-2B was de-activated on 24 February 1972. The equipment is still in place on station awaiting final disposition.
3. The FYQ-47 was commissioned on 24 February 1972. It takes the place of the AN/FST-2B, and is being operated by the Federal Aeronautics Administration.
4. The GPA-124 was installed and commissioned on 24 February 1972. This set, an improved Selective Identification Feature system, is also operated by the FAA.
5. Realignment of squadron Work Centers resulted in the combining of the FPS-90 Work Center and the FPS-26 Work Center into one section, the Height Radar Work Center.
6. After a long period of malfunction, the GPA-98A ECM simulator was fully operational as of 10 February 1972.
7. A klystron Electro-magnet was replaced in the FPS-26A on Feb. 11, 1972.
8. The SLC TR current was repaired in the FPS-90 on Feb 16, 1972.
9. A pre-IRAN was conducted on the FPS-26A during January 1972. No IRAN is required, all work to be accomplished in house.
10. A pre-IRAN was conducted on the FPS-90 during March 1972. An annual Operational Readiness Inspection was conducted during the same period.
11. AServo Valve Assembly was ordered K-NORS on the FPS-26A during March.
12. Six of the 11 reportable tubes in socket have exceeded the ADC goals as defined in ADCM 66-4.
13. The squadron Dining Hall was the 21st Air Division's nominee for the Hennessey Award.

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

COMMENTARY (Continued)

II.

14. The Squadron NCO/Airmans Advisory Council was chosen during February to represent the 21st Air Division at the ADC competition.

15. An additional Airman's Dorm dayroom was constructed and the recreation building was refurbished, tiled and painted during January. Both of these projects were completed on a self-help basis.

16. A commercial janitorial service was instituted during March 1972 in a continuing effort to reduce career irritants.

(If more space is needed, continue on blank sheets, size 8 x 10½, numbered and securely attached hereto.)

PREPARED BY (Typed name and grade of Historian)

RICHARD C KOCH, TSGT, USAF

SIGNATURE

Richard C. Koch

APPROVED BY (Typed name and grade of Commander)

JOSEPH R ELDER, MAJOR, USAF

SIGNATURE

Joseph R Elder



HISTORICAL RECORD

of the

~~932nd Aircraft Control Warning Squadron, I. O. New York 09571~~

for the period ending

AEROSPACE DEFENSE COMMAND

31 March 1972

ADC FORM
JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION		2. NAME AND GRADE OF COMMANDER		
932 ACGM Squadron (ADC) Rockville HI, Iceland		JAMES H. WALLACE, Lt Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons)				
Hq USAF Aerospace Defense Command 21st Air Division Air Forces Iceland				
4. SUBORDINATE UNITS (Down to and including squadrons)				
None				
5. MISSION (Give authority and brief statement of primary mission)				
AUTHORITY: Hq Air Forces Iceland, GO #26, Para 1, 1 Sep 60: To establish and maintain the functions necessary to provide the Commander, Air Forces Iceland with an Operational Combat Control Force, to exercise operational control over all Air Defense Forces assigned and to function as a Master Direction Center.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	13	147	7	169
ASSIGNED	13	148	7	168
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
AN/FPS-93A-1	AN/GFA-30-1	MD-129A-2	OA-2325-1	
AN/FPS-6-1	T-217A-2	XY Dial Sys-1	Teletype-4	
AN/GPK-7A-1	TA-182-8	SB-239/GTA-1	AN/UPA-35-11	
R-361-9	RD-142-4	AN/GPS-T4-1	T-282/GR-8	
AN/GPA-98-1	AN-447-4	AN/GPS-T2-1	AN/GPA-125-1	
AN/GPA-30-1	MD-141A-8	AN/GPA-127-2	R-278A-2	
AN/FRR-75-1	AN/UPK-14-1	AN/FRT-502-2	Model 28 SURTAC-1	
	AN/FTA-13-1	AN/URG-60-3	AN/GPA-122-1	
			O-15 SCOPS Camera-1	

ii.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

1. OPERATIONS AND TRAINING:

Increased proficiency training in a threat environment, along with the weather, highlighted this quarter. Activity was limited at the first of the quarter due to snow, low ceilings and reduced visibility. However, operations personnel managed to conduct a total of 991 live intercepts plus 673 synthetic intercepts. Academic training completed totaled 2181 manhours. The live training was highlighted by the successful completion of four full-scale College matches, plus four mini-College matches and two synthetic exercises. European NATO radar stations reported 105 Non-NATO tracks containing 224 aircraft to 932 Operations. Eighty-four tracks were declared unknown after penetrating the Icelandic ADIZ. A total of 67 aircraft were intercepted, identified, and forward-told to higher headquarters. The remaining tracks either never penetrated the ADIZ or departed radar coverage or departed coverage before an intercept could take place.

2. MAINTENANCE AND REPAIR:

During the first quarter of 1972 M&R established and implemented an effective program of Preventive Maintenance on all site buildings. Repairs to the gasoline standby emergency engine were completed. A bench stock of necessary parts and materials has been established. At present a manning and fund shortage is a limiting factor of M&R's operation.

3. POWER PRODUCTION:

The 700 hour preventive maintenance inspection was completed during this reporting period. The additional air receiver tank was tested, repaired, and placed in service during this time. Injectors in units #4 and #6 were replaced. Painting of all plant equipment was completed. Repairs to radiators #1, 2, and 4 have not yet been completed. Storm damage to plant roof during this period has not been repaired. As yet the work request to provide the plant with heat has not been accomplished.

4. SUPPLY:

Three (3) each AN/UPA-35 scopes were received for cyclic exchange, and one (1) each was received to replace a AN/GPA-127. In January Supply Training Classes were conducted by the AFM Supply Management and Procedures (M&P) Branch for all property custodians and work center supervisors. Topics discussed were Standard Base Supply (1050) machine products and their use. In February and March Custodian training classes were given by M&P and EO personnel to all Supply personnel and equipment account custodians. Excess equipment items are being removed from the barracks and turned in to AFM Supply as time permits. Materiel Control Completed a bench stock review and purification project on 30 March 1972. In March the Supply section received a Staff Assistance Visit from 21 EGS. All discrepancies have been corrected.

5. TRANSPORTATION:

The distance driven for the quarter amounted to 12,030 miles. Total Vehicle Out of Commission time was 4,463 hours or 41%. For the quarter. This high rate is attributed to the age of the vehicles and to the poor quality maintenance provided

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II.

COMMENTARY (Continued)

by the Navy motor pool.

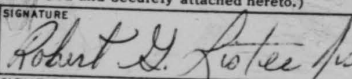
6. COMMUNICATIONS AND ELECTRONICS:

The main base cable (CA01) was a major problem area during January, causing considerable troubles with the X-Y Dial System. We were forced to request emergency outside plant maintenance assistance to make necessary repairs on the cable. Team arrived on 26 Jan 72. As of the 31st, over 200 pair of the new cable were spliced in. The team has experienced considerable delays because of weather conditions and flooding of the manhole. As soon as the splice was completed in the manhole in front of operations, additional work was required on the cable coming out of the ground in front of the NCO Club. Team completed the entire project by the end of the first week in February. However, the main base cable continued to be a major problem area during February. The two splices (in front of the Operations building that were repaired by the GMEA emergency assistance team) had cracked (lead shielding) and taken water. Assistance was requested to AFI and the Icelandic telephone crew arrived on site 21 Feb 72. Both splices were opened, cable dried out, and the splices resealed. All cable pairs checked good and the X-Y Dial System to perform satisfactorily. The message concentrator located in the wire maintenance frame room was relocated by our M&R activity to support expansion of the new X-Y Dial System under scheme number 0501A2B9. Estimated completion date for the expansion is May 1974. A doorway was cut between the wire maintenance shop area and the frame room to facilitate maintenance in this area. This work was accomplished by our M&R activity. Two AN/UFA-35 PPI scopes were received from Newfoundland and were installed in scope positions one (1) and three (3) to replace AN/GPA-127's. This action was completed on 11 Feb 72. This brings the total to eleven (11) AN/UFA-35's installed. Only two (2) AN/GPA-127 scopes are left on site. These are the two maintenance scopes in the Search tower. TC10 31PA-2UPK1A-511 was completed on the AN/UPX-1A 20 Jan. This modification increases maintainability/reliability of the set by replacing some vacuum tubes with solid state devices, replacing tubes sockets in the Power Amplifier, making changes to the cooling system, etc. Wire maintenance installed a Public Address Speaker Box on the telephone in the Officers' MORO Club to facilitate debriefings from 57th FIS after a mission. A training class was held on 17 Jan for all work center supervisors on how to read the listings put out by the 1050 computer. This class was held by an ARC instructor from Lowry and a Sergeant from AFI base supply. A work order was submitted on 9 Feb 72 for installation of a Sump Pump in the manhole outside of operations. This will help protect our main base cable for the X-Y Dial System from water damage. Review and update of all Plant-in-Place Record Drawings was completed in March. This gives us an accurate set of drawings for all installed facilities. Wire maintenance completed installation of an alarm system in the squadron gun room on 6 Mar 72. This installation required the local design and procurement of parts and now provides increased security for this facility. Search Radar maintenance completed corrosion control on "A" channel of the AN/FPS-93A during March. This entailed complete removal and cleaning thoroughly all components, painting of the air ducts and rehab of the water cooling system. In conjunction with corrosion control of "A" channel all ducts in the FPS-93A, the water tower in "B" channel

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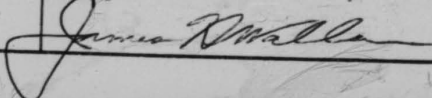
PREPARED BY (Typed name and grade of Historian)
ROBERT C. LISTER, 1LT

SIGNATURE



APPROVED BY (Typed name and grade of Commander)
JAMES H. WALLACE, Lt Colonel

SIGNATURE



the floor under both water pumps were painted in March. Wire maintenance completely rehabed all telephone cabling to include the 10 line unit on the LC console within the G-3 administrative section during the month of March. This action not only improved operations, but appearance of the facility. A message was received in Jan from 21st Air Division indicating that instead of receiving the new AN/GPA-78 to replace the AN/GPA-7 we are getting the AN/GPA-122. This is a solid state device which will provide 10 control positions. Equipment is available and is being held by SAMA for use, pending processing of required programming documents. Numerous spare parts were received during January from DYE 5 for the DEE MAST system. Action was taken on 11 Jan to correct an OOI write-up concerning the security of the front door in operations. Action was also taken requesting two new electronic locks, one for the Gate Shack and the other for Operations. Money is available for procurement as a self help project. A new door (steel) has been funded for the operations building and is awaiting scheduling for installation. No estimated completion date. Completed setting up the 1972 files and screening of the 1971 files on 10 Jan 72. Completed Annual Report of Documentation Holdings and Disposition on 11 Jan 72 and forwarded to the orderly room for consolidation. Grounding of the SIF Control boxes was completed on 24 Jan. This was from a write-up noted during the 21 AD Consolidated Staff visit. Revised the Organizational/Functional Charts for Wire Maintenance and made a Chart for Material Control. This action was completed on 18 Jan 72. Except for a few record drawings in wire, the review and update of all PIP records was completed in January. The few remaining drawings are being worked on by SSG Winter. A lighting survey was completed at the main base hospital and AFI 03 in regards to our request for replacement of all incandescent lamp fixtures with fluorescent fixtures. Their survey was very conclusive that we have a severe lighting problem in the maintenance work centers. The job was started on 28 Feb and by early March all incandescent fixtures have been replaced with fluorescent fixtures in both radar towers. Public Works completed a project in operations to provide improved ventilation as per a work request that was nearly two years old. The 437L Maintenance Assistance Team (GEMA) from Kessler AFB, Mississippi (Mr. Erba and Mr. Blink) arrived on station 23 Feb 72. They are still on site working on the 437L System. As yet we have not received the final report on conclusions drawn from their visit. Action was initiated on 14 Feb 72 to delete the BC-610 HF transmitter and associated equipment from the GATR section. This was approved by Air Forces Iceland. Disposition instructions were received in March and the equipment turned in as per instructions. Installed ceiling tile in the Search radar ceiling system enclosure during March. 21st Air Division Staff assistance visit was completed on 9 Mar 72. Thirteen minor discrepancies were noted of which have either been corrected or corrective action has been initiated. Northern Comm Area (Griffis AFB) completed a survey of the telephone main distribution frame on 14 March to determine if it should be replaced or updated so proper maintenance support can be made. To date no feed-back has been received. 21st Air Division completed a Disaster Preparedness Inspection on 15 March. Action has been started to correct some of the discrepancies noted. 21st Air Division completed a Security Inspection of G-3 on 14 Mar 72. No discrepancies were noted. GATR completed a rehab of their wire screen room during March, laying a new tile floor, redone all work benches and repainted numerous cable boards and test equipment racks. Action was taken in March by TR to remove an old test equipment rack and prepare the area for acceptance of the new TR-1510 Recorder due to arrive in July 72. The FY 73 IRAN Schedule was received which includes our AN/FPS-93A and ancillary equipment and the AN/

C-6 and ancillary equipment. Pre-IRAN inspections are due as follows: FFS-92A - 5 Dec 72 with IRAN scheduled for 4 April 73. The FFS-6 is due Pre-IRAN on 10 Jan 73 with IRAN scheduled for 5 May 73. All Disaster Preparedness Equipment has been centrally located now in the Air Lock of the AN/FPB-6 Radar tower. This provides increased security for this equipment as well as much improved storage facilities. The new PCSP workbook format was received and reviewed. This new workbook contained numerous discrepancies and action has been taken to make necessary corrections. The new format is computer run and will become a monthly product. As soon as the bugs are worked out, this will be much improved over the old system. DLI 5 personnel installed new lamps in the DLI EAST Message Concentrator which has been a long standing discrepancy. The Site Concurrence Letter for installation of the new AN/GPA-122 to replace the AN/GPA-7 SIF Equipment was received and reviewed. Necessary coordination was made and forwarded on to ANI for their review. Efforts were made by NAVCOMSTA personnel and our wire maintenance section to improve the quality of service on the ADOLA circuit. It was determined the problem was not in the line amps however a severe feedback problem involving the type microphone used was discovered and corrected by removal of the line amp. Additional tests performed have eliminated all input line amps as well and the quality of reception appears to be improved. Continued efforts will be made in this area. The classified safe #87, located in C-3 was inventoried and reviewed for declassification/downgrading by Capt. Lize and S/E Pearce 21 March 1972. Considerable emphasis was placed on RECON within C-3 during this month and savings netting in excess of \$18,000.00 were documented and given to Lt Paslay for appropriate action. A letter was forwarded to Stromberg-Carlson on 17 Mar requesting assistance in obtaining needed drawings for the X-Y Dial Telephone System. To date no reply has been received. A test on the SLFGS System (LS7L) was completed on 15 March and the results forwarded by operations. This was a daily test tape type of test and the results were questionable on the HAMES Circuit. No feedback has been received. Quality Control completed 21 un-announced inspections, two annual, one activity (GATR) and one ORI (FFS-92A). Thirty-five technician evaluations were completed. The AN/FPB-6 Maggie failed on 22 Mar 72 after having exceeded its ADC goal of 4600 hours. A new Maggie was installed on this date and failed on 30 Mar, having only achieved 117.0 hours of its expected goal of 4600 hours.

HISTORICAL RECORD

of the

4683rd Air Base Group (ADC)

for the period ending

31 March 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 4683 Air Base Group (ADC) Thule Air Base, Greenland		2. NAME AND GRADE OF COMMANDER MICHAEL NAVARRO, COLONEL, USAF		
3. CHAIN OF COMMAND (Superior echelons)				
A. HQ U. S. AIR FORCE, WASHINGTON D. C.				
B. HQ ADC, ENT AIR FORCE BASE, COLORADO				
C. HQ 21ST AIR DIVISION, HANCOCK FIELD, NEW YORK				
4. SUBORDINATE UNITS (Down to and including squadrons)				
A. HQ SQUADRON SECTION, 4683RD AIR BASE GROUP				
B. 4683 USAF DISPENSARY				
5. MISSION (Give authority and brief statement of primary mission) (Authority: TAB Manual 23-1) To train a force capable of performing those functions and services with requirements to support ADC emergency plans and tactical training operations; to provide for facilities and services support as specified in the "ADC Statement of Work" for SITE BMEWS. The primary mission of USAF aircraft assigned to the 4683 Air Base Group is air search and rescue in accordance with Danish/U.S. Agreement of 1961.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	30	144	0	174
ASSIGNED	29	137	0	166
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
two (2) HH-3E Helicopters				

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

A. Command

Colonel Michael Navarro is the Air Base Group Commander and as well, the Base Commander. Colonel Navarro arrived and assumed command on 16 December 1971.

B. Key Personnel:

1. Commander, Michael Navarro, Colonel
2. Executive Officer, John L. Austin, Major
3. Director of Material, Wayne M. Pyles, Lt Colonel
4. Comptroller, Carl S. Vierck, Captain
5. Chief, Civil Engineering, Edwin L. Greenwood, Major
6. Staff Judge Advocate, Charles E. Rains, Captain
7. Chief, Operations and Training, Robert R. Brown, Lt Colonel
8. Chief, Personnel, Terry L. Childers, Captain
9. Director, Medical Services, Charles E. Signorino, Major
10. Chief, Administration, Steven H. Lowdermilk, Captain
11. Installation Chaplain, John F. Berry, Major
12. Chief, Security Police, Dennis F. Poindexter, Captain
13. Chief, Information, Daniel T. Davis, Captain
14. Chief, Personnel Services, John L. Holcomb, Captain
15. Commander, Hq Sq Section, John L. Austin, Major
16. Danish Liaison Officer, Johan M. Kilt, Commander

C. Contractors, Tenant Air Force Units, and Agencies

1. Tenant Air Force Units:

- a. USAF Postal Courier Region, TFO, Hq Command
- b. 622nd Military Airlift Sq (MAC)
- c. 1983 Communications Sq (AFCS)
- d. Det 48, 12th Weather Sq (AWS) (MAC)
- e. 12 Missile Warning Sq (BMEWS) (ADC)
- f. Det 220, USAF
- g. OL-5 (AFCS)
- h. Det 4, 39th Aerospace Rescue and Recovery Wing

2. U. S. Coast Guard

3. Danish Military

4. Civilians:

- a. Tranet Station 018 and 895
- b. Non Appropriated Funds (Clubs)
- c. GEOPOLE (Off Base)
- d. Federal Electric Co.
- e. Danish Construction Corp.
- f. Danish Arctic Construction
- g. Base Exchange
- h. Technical Representatives (IBM 7 Burroughs)
- i. United Dairy Co.
- j. OL-5
- k. Danish Police

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II.

COMMENTARY (Continued)

1. STORNO
- m. SAS
- n. Danish Postmaster

5. Miscellaneous:
 - a. NORD (Off Base)
 - b. EUREKA (Off Base)
 - c. ALERT (Off Base)
 - d. Danish dependents (Off Base)
 - e. Dundas Village

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PREPARED BY (Typed name and grade of Historian)

JOHN L. AUSTIN, MAJOR, USAF

SIGNATURE

John L. Austin

APPROVED BY (Typed name and grade of Commander)

MICHAEL NAVARRO, COLONEL, USAF

SIGNATURE

Michael Navarro

1. PERSONNEL DIVISION:

a. Captain Terry L. Childers served as the Chief of the Personnel Division during this period.

b. Total strength authorized for Air Base Group/Dispensary: 224.
Total strength assigned to Air Base Group/Dispensary: 219.

c. The total number of officers, airmen, and civilians attached to Air Base Group as of 31 March 1972 was 1750.

d. Captain Russell, the Dispensary Administrator, identified a problem of too many people being assigned/projected in three (3) AFSC's, 981X0, 903X0, and 904X0. A letter was sent to Headquarters ADC through the servicing CBPO on the problem and action was taken to cancel/divert the excess projected gains.

e. A cumulative retention rate of 25% was maintained for ADC units. Tenant units increased to 22%, a 3% gain over the last quarter.

f. The OJT program remains under the Headquarters Squadron Section.

g. There were 139 officer and airmen arrivals and 121 departures during this period of report.

h. Major accomplishments of this division were:

(1) 10 Air Force Commendation Medals were presented.

(2) Recommendations for two (2) Meritorious Service Medals were forwarded and approved.

(3) Thirty recommendations for the Air Force Commendation were forwarded for approval by 21st Air Division.

(4) Eight Air Force Commendation Medals are still pending approval on Danish and American Civilians.

i. No major problems were encountered.

2. OPERATIONS AND TRAINING DIVISION:

a. Lt Colonel Robert R. Brown held the position of Chief, Operations and Training during this period of report.

b. The functions of the division are: To support ADC and SAC contingency plans and tactical training operations, provide support to and coordinate with all activities using the airfield facilities, to manage and conduct the Base Disaster Preparedness program, to monitor those portions of the Danish Arctic Contractors contract pertaining to base operation dispatch and life support.

c. Major Accomplishments:

(1) Disaster Preparedness: TSgt Richard L. Strickland assumed the duties of the Base Disaster Preparedness NCOIC on a temporary basis. He was assigned to the unit TDY from the Base Civil Engineer Division for a period of 89 days. During the first quarter 169 military and 80 civilian personnel received Arctic Indoctrination Training upon their initial arrival at Thule Air Base. The Branch also provided this training to approximately 115 Canadian Air Force personnel prior to their Boxtop Operation begun in March. Refresher trackmaster training was given to the Ground Rescue Teams. During this quarter waivers were requested from higher headquarters to eliminate training requirements for the Disaster Response Force. The waivers were denied with a letter from headquarters stating they would help provide the training during their staff assistance visit in the near future.

(2) Base Operations: Lt Colonel Robert R. Brown, as the Chief, Operations and Training Division had the responsibility for the Base Operations function. The actual operations of the dispatch function is under DAC contract.

The following is a quarterly activity report for Thule Air Base:

Inbound Aircraft	164
Outbound Aircraft	152
Local Fixed Wing	14
Local Helicopters	72
Emergencies	3

The Canadian resupply of Alert commenced on 30 March 1972.

(3) Personal and Survival Equipment: Lt Colonel Robert R. Brown is the Life Support Officer (additional duty). This section is presently under DAC contract. In March the Dansih Life Support Technician in conjunction with the Ground Rescue Unit provided an Arctic Survival School on the ice cap. Trackmaster drivers training and Arctic shelter construction were stressed during the training.

3. LOGISTICS DIVISION:

a. The Director of Logistics during this period was Lt Colonel Wayne M. Pyles.

b. Summary of functions of Logistics Division: Monitorship of International Telephone and Telegraph/Arctic Services Inc. (ITT/ASI) Contract pertaining to supply, equipment, transportation, aircraft maintenance, and fuels. Responsible to Base Commander for overall surveillance and assistance in monitorship of base support contracts of the DAC and ITT/ASI.

c. Summary of Accomplishments:

(1) Transportation Branch:

(a) Conversion of the first Oshkosh Model WT-2206, Reg No 65C1717, was completed and the truck is in operation. A caterpillar Diesel Engine Model 1693 was installed in place of a Hercules 10900E Gasolene Engine.

(b) A Cost Reduction (RECON) submission in excess of \$12,000 was submitted by Motor Pool resulting from a deletion of vehicle authorizations (Trailers).

(c) Engines from the LCM's have been removed and are being overhauled by Vehicle Maintenance.

(d) DAC was given a letter of appreciation from the Base Commander for the notable improvement in the VDP and VDM rates. The rates are the lowest in several recent years.

(e) A new passenger reservation and forecasting system was initiated in January. Many procedures have been eliminated and a more streamlined confirmation process is now in effect.

Total Base Assigned General Purpose Passenger Carrying

Vehicles: 163.

Ambulances	4	Snowplows	15
Trailers	52	Snowblowers	7
Stake/Platform	30	Dozers	18
2 $\frac{1}{2}$ T Cargo Trucks	1	Graders	8
Dump Trucks	17	Front-end Loaders	5
Farm Tractors	3	Cranes	6
Road Rollers	2	Sweepers	8
Truck Tractors	27	Whse Tractors	6
Wreckers	2	Whse Cranes	1
Towing Tractors	4	Forklifts	20
Refuse Trucks	3	Misc CE Equip	14
Water Trucks	4	Refueling Units	21
Vans	2	Station Nord Veh	18
Line Trucks	4	Fire Trucks	9
High Lift	2	Landing Craft	3
Trackmasters	14	Total Base Support Veh:	529
		Total All Veh Supported:	709

Transportation Branch Statistics:

Vehicle Maintenance:

Vehicle Gains:	5
Vehicle Losses:	5
Work Orders Completed:	3348
Service Sta Checks:	7176
LTI's Performed:	22

No Veh Refueled: 16,509
 No Gallons Gas Delivered: 222,989
 VDP/VDM Rates: Jan: 6.0/5.9; Feb: 4.5/5.2; Mar: 3.3/5.2
 Total Overall Rate: 4.6/5.4
 No Accidents: 1
 Total Mileage, Motor Pool: 214,280
 Total Veh Assist Trips: 1,638
 Bus Service: No Passengers: 132,067; No Bus Runs: 9,453
 Government Operator Permits Issued: 164

(2) Traffic Management Branch:

Total Cargo/Baggage Handled: 12,016 PCS
 1,771,035 Lbs
 81,307 Cuft

Pack/Crating: 3,069 PCS
 769,235 Lbs
 34,312 Cuft

Hold Baggage: 458 PCS
 41,846 Lbs
 3,634 Cuft

MTA's Issued: 509

Members Counseled on Entitlements: 575

(3) Aircraft Maintenance: The assigned 53450 - Airframe Repair

Specialist departed PCS during this period. At the present time the organizations have no means of airframe repair. There is a 53450 scheduled in during the month of June 1972. Until that time, should a need arise, TDY assistance will be required.

(4) Supply Operations Branch: The ITT/ASI Contract was rated

satisfactory in all areas of Base Supply, Property Control, and Fuels Management during this period. The Base Equipment Review and Authorization

Activity (ERAA) convened once during this quarter and reviewed all outstanding AF Forms 601a, Allowance/Authorization Change Requests, and AF Form 601b, Custodian Request/Receipt. Final actions were taken as follows: AF Forms 601a approved: 0; AF Form 601a disapproved: 0; AF Form 601b approved: 62; AF Form 601b disapproved: 21; AF Form 601b suspended: 1. Total AF Forms 601a/b reviewed: 84. Obligation Authorities (O/A's) were prepared and released to UPOC and ITT/ASI Headquarters for the third quarter FY 72. The O/A;s identified \$80,000 (O/A S-72-9) for purchase of project Pacer Goose Supplies in Copenhagen (UPOC), AFLC Depot (Base Funded) supplies, GSA, DSA, and OSSF. The Resource Conservation (RECON) Panel met four times this quarter. A Real Property Management Submission (C-72-0622) for \$12.2 thousand was forwarded to 21st Air Division, 15 Feb 72. Although the FY 72 RECON goal has been exceeded, resource conservation remains an item of prime interest.

Activity (ERAA) convened once during this quarter and reviewed all outstanding AF Forms 601a, Allowance/Authorization Change Requests, and AF Form 601b, Custodian Request/Receipt. Final actions were taken as follows: AF Forms 601a approved: 0; AF Form 601a disapproved: 0; AF Form 601b approved: 62; AF Form 601b disapproved: 21; AF Form 601b suspended: 1. Total AF Forms 601a/b reviewed: 84. Obligation Authorities (O/A's) were prepared and released to UPOC and ITT/ASI Headquarters for the third quarter FY 72. The O/A;s identified \$80,000 (O/A S-72-9) for purchase of project Pacer Goose Supplies in Copenhagen (UPOC), AFLC Depot (Base Funded) supplies, GSA, DSA, and OSSF. The Resource Conservation (RECON) Panel met four times this quarter. A Real Property Management Submission (C-72-0622) for \$12.2 thousand was forwarded to 21st Air Division, 15 Feb 72. Although the FY 72 RECON goal has been exceeded, resource conservation remains an item of prime interest.

4. ADMINISTRATION:

a. The Chief of Administration for this period was Captain Steven H. Lowdermilk.

b. Functions of the Administration Division:

(1) The Administrative Communications Branch operates the base-wide Correspondence Distribution Center serving approximately fifty offices/activities.

(2) The Documentation program of DA covers creation, retention, preservation, disposition and transfer of records. Also within this function is Records Management Training which does the formal training of personnel engaged in records management work, regardless of AFSC.

(3) The Publications Branch is responsible for all Air Base Group forms, regulations, manuals and other official USAF printed media for this service.

(4) Danish Arctic Contractors perform the following functions which the Chief of Administration monitors:

(a) Master Publications Library with nearly 1,900 publications backed-up by supporting supplements.

(b) Publications Distribution Office which distributes publications and forms as well as trains Thule office personnel and instructs customers in the proper methods of requisitioning.

(c) Reproduction which is responsible for publishing and printing needed for the 4683 Air Base Group and tenant units that do not have their own duplicating equipment.

c. MSgt Charlie Miller assumed the duties of Chief of Administration which has been changed to an NCO position.

d. 702XO and 704XO AFSC has been slightly critical during this period of report. No other major problems existed.

5. CHAPLAIN SERVICES:

a. Major John F. Berry served as Installation Chaplain during this reporting period.

b. Major Accomplishments:

- (1) 7 January - CMOC Dinner was held at the NCO Club.
- (2) 25 January - Appreciation Dinner was held at the Officer's Club to recognize the individuals and organizations that helped to make Operation Julemand such a success.
- (3) 27 January - PMOC Dinner was held at the NCO Club, guest speaker was Ron Kurr, his main topic was the Dye 3 on the Southern Ice Cap of Greenland. Also new PMOC officers were elected. Inducted were: Bob Klink, President; Gerald Quick, Vice-President; and Johnnie McDowell, Program Chairman.
- (4) 3 February - Presidential Prayer Breakfast was held at the Mess Hall, President Nixon was presented on a tape recording.
- (5) 8 February - Chaplain John Morrisson arrived for a spiritual retreat for all Catholic personnel. He is from Fordham University.
- (6) 9 - 22 February - Chaplain Robert B. Lantz was here TDY from Niagara Falls Air Station to help out while Chaplain Berry was on leave.

c. Personnel changes are as follows: Chaplain Joseph R. Haffly arrived 28 February to replace Father Lugo who departed 8 March. Sgt Jensen departed for Goodfellow AFB. To replace him, Sgt Frank Ciarleglio arrived from Seymour Johnson AFB, North Carolina on 7 March.

6. CIVIL ENGINEERING:

a. Major Edwin L. Greenwood served as Base Civil Engineer for this report. Major Greenwood departed on leave 18 December 1971 and returned from leave 8 January 1972, while Captain Walter R. Davis was serving as Acting Base Civil Engineer. Major Greenwood was TDY from the period of 16 February 1972 to 26 February 1972 as Captain Gary R. Worrall served as Acting Base Civil Engineer for this period.

b. The following are narratives of some events from individual branches assigned to this division:

(1) OPERATIONS AND MAINTENANCE BRANCH:

(a) Routine job orders, service calls, equipment maintenance, and other routine maintenance was performed. Utilities maintenance, Roads and Grounds, and the Carpenter Shop have all had to delay scheduled maintenance in order to complete priority work. These areas are being closely watched to determine if adequate personnel strength is provided.

(b) Twenty-nine barracks have been completed under Project Better Living. Nineteen of these barracks still require installation of 220 volt and three prong outlets, which will be accomplished as material becomes available.

(c) A new diesel generator has been received and is to replace unserviceable unit used for Command Post stand-by used to house unit will also be repaired.

(d) Paul Hansen completed the Multi-Amp course and inspection of relays can now be accomplished in order to comply with two-year requirements. About one year will be required to complete the coordination study and the required maintenance.

(e) The wannigan to be used by Communication is now in place on South Mountain TACAN site.

(f) Extensive phase damage has been experienced, especially the roofs on hangars 3 and 4, and fire station number 2. Repairs were made quickly and thoroughly.

(g) Heavy snow accumulation was experienced as a result of phases both on base and the flight line. Priority one removal was quickly accomplished. However, priority two and three removal was slow and excessive accumulation resulted during a series of phases.

(h) Excessive damage to phase markers was also experienced during the phases and replacement difficulties occurred due to non-availability of reflectors. Priority requisition was initiated through supply channels and emergency replacement was accomplished with green reflective tape.

(i) Water samples indicated recoating was necessary on interior of one demineralized water tank. Extensive research through 21st AD, Hq AEC, and Hq SAC was required to determine what coating material and testers were necessary and proper procedures of application. Tank is used for SAC support.

(j) Lumber supply is depleted causing a substitution situation. Supply is taking action to airlift plywood.

(k) Specific dimensions of lumber cannot always be obtained due to low supply level, thus requiring substitution in some cases. Contractor was instructed to survey future needs and determine if airlift is required.

(2) FIRE PROTECTION BRANCH:

(a) Fire protection equipment now consists of two O11-B's, two P-2's, two water tankers, one foam trailer, one R-2A, two P-6 pick-up's, two pick-up's, one crew cab and one track vehicle.

(b) During this reporting period 8 evacuation drills were conducted. A total of 259 military and civilian personnel attended 11 fire prevention lectures and demonstrations.

(c) No fires occurred during this quarter.

(d) The Fire Department responded to one emergency landing, 56 refuels and defuels, one fuel spill, 446 welding heater standbys, 52 false alarms, 129 hours of flight line inspections and 2,504 nightly inspections conducted by on duty Fire Fighters.

(e) The Fire Department Technical Service Inspectors conducted 1,386 inspections and follow-up inspections as required. They also conducted 3,946 special hazard "NO SMOKING" night inspections. A total of 719 fire extinguishers were serviced.

(3) INDUSTRIAL ENGINEERING BRANCH:

(a) An analysis of first half and second quarter In-Service Work Plan versus actual work received was completed.

(b) Tasks of the Base Utilities Conservation Officer were assigned to the Industrial Engineer.

(c) A \$12,200 RECON submission was presented to the RECON Board and forwarded to higher headquarters for approval. A short title for the submission was "Cancellation of Work Orders".

(d) Material and scheduling backlogs were formulated and analyzed to the labor force work effort.

(4) PROGRAMS BRANCH:

(a) On 3 February 1972, Captain Todd I. Stewart replaced Captain Walter R. Davis as Chief of Programs.

(b) A Real Property Resources Review Board meeting was held on 22 February 1972. At that time, projects THU 6-2 (maintenance of the Bowling Alley) and THU 9-2 (maintenance of the 1200 feet tower) were approved for submission to ADC. In addition, the FY-73 In-Service Work Plan, previously reviewed by the RPRRB, was approved by the Base Commander.

(c) DD Forms 1391 were submitted to Hq ADC for approval and/or funding on the following projects: THU 7-2 (repair of kitchen exhaust system #107), THU 9-2 (maintenance of 1200 feet tower), THU 10-2 (repair of kitchen exhaust system #362), THU 11-2 (repair of kitchen exhaust system #732), THU 12-2 (repair of kitchen exhaust system #236) and THU 13-2 (repair of kitchen exhaust system #2146).

(5) ENGINEERING AND CONSTRUCTION BRANCH:

(a) This section is presently conducting a literary search into the uses of sprayed-in-place urethane foam. Assistance in this effort has been obtained from the U. S. Army Cold Region Research and Engineering Lab (CRREL) at Hanover, New Hampshire, through Mr. Wayne Tobiasson. He has provided numerous magazine and technical articles on the various uses of urethane foam along with manufacturing information. The primary uses of urethane foam here at Thule are: as an interior vapor barrier for high humidity atmosphere in building 970 (Swimming Pool) and as an interior sealant against snow infiltration in building 1824 (OL-5 Operations). The two problems to be solved are cost the foam and the foam may be a high potential fire hazard.

(b) A pollution control contingency plan for oil and hazardous material spills was initiated during March 1972. The plan is now being coordinated and publication is anticipated in April 1972.

(6) ADMINISTRATIVE BRANCH:

(a) All publication requirements were reviewed and updated in the Administrative Section.

(b) Files for the Civil Engineering Division were brought up to standards in accordance with AFM 12-50.

7. COMPTROLLER DIVISION:

a. Acting Comptrollers during this period: Capt Carl Vierck (1 Jan - 22 Mar 72) and 1Lt Gary D. Bray (23 Mar - 31 Mar 72).

b. Summarized functions of Comptroller Division:

- (1) Accounting and Finance - Receives, disburses and safeguards public funds as an agent of the U. S. Treasury. Maintains principal financial accounting records and prepares associated financial reports. Provides prior certification of fund availability under approved financial plans and within scope of governing statutes and directives. Provides advice to the Commander and other staff agencies relating to accounting and finance. Provides prompt and regular payment of military personnel, travel claims, and other vouchers.
- (2) Budget - Develops in cooperation with various staff agencies, estimates in support of requirements for formulation with the President's budget. Develop in accordance with higher headquarters guidance of annual financial plans. Provides budget service for tenants. Monitors execution of approved financial plans. Makes analyses of financial plans and advises staff agencies of necessary revisions/changes.
- (3) Fiscal Control Office - Responsible for the uniform accounting of nonappropriated funds (NAF) at base level, i.e., Officer's Open Mess, etc. Maintains general ledger of central accounts and detail subsidiary records which are balanced to ledgers or records in each NAF activity. Prepares month-end financial statements and briefs respective advisory councils of the activity's financial condition. Reviews internal control and operating procedures of each activity to determine compliance with governing directives.

c. Major accomplishments of each section during this quarter:

(1) Accounting and Finance:

(a) Manning changes were minimal during this period. 1Lt Kennedy was replaced as Deputy Accounting and Finance Officer by 2Lt Elvin R. Tibbetts in early January. MSgt Orson Williams arrived and was appointed NCOIC of the entire Accounting and Finance Office.

(b) 2Lt Tibbetts, Staff Sergeants Danny Hodges and Daniel Kollars performed TDY at Ent AFB, Colorado. This trip was aimed at coordinating details of scheduled transfer of the Thule accounting function to Ent AFB on 1 April 72. Among decisions reached while at Ent AFB were: transfer of Thule's leave accounting support from Loring to Ent, Thule would continue to process local billings such as telephone bills and commissary billings, and all possible comptrollers service would be provided to Thule by Ent to assure maximum customer service.

(2) Budget:

(a) 1 - 14 Jan 72: Preparation of FY 73 Operations Operating Budget. All Resource Advisors submitted their requirements to Budget Office, totaling \$15,813,400. The budget was consolidated and submitted to ADC in the required format on 14 Jan 72.

(b) 25 Jan 72: An error in paying travel payments for the DAC Contract employees was discovered by Lt Bray. When vouchers were computed by the Travel Section, they were also being paid by the cashier at Accounting and Finance; furthermore, the contractor was being paid a fixed amount by the AF. A claim for \$3,100 has been submitted to the contractor for the overpayment. The employees are now being paid by the DAC office after the travel voucher has been computed by Accounting and Finance.

(c) 6 Feb 72: A study of the Reimbursement Program revealed that the Canadian government was not buying POL in quantities that had been purchased in FY 70 and FY 71. A request was made to ADC Budget to transfer \$100,000 from the Reimbursement Program to the Direct Expense Program. With this authority granted, the Reimbursement Program appears to be correct.

(d) 14 Mar 72: A programming change in Transportation area made available \$139,000 in EEIC 454. Authority was requested and granted to move \$137,000 into the Supply area to cover a shortage in the Pacer Goose Program. The remaining \$2,000 was reprogrammed to cover ADC directed TDY expenses.

(e) 20 Mar 72: According to AFM 172-1, Vol 1, para 9-90, an individual's unit of assignment at the time that a suggestion is submitted should pay the cash award. However it was discovered that 4683 Air Base Group had been paying for the awards approved for personnel assigned to other units at Thule. DEP at 21st Air Division was contacted and the problem explained. DEP, Mrs Patricia Fanning confirmed that personnel had been paid as stated, and agreed to follow regulation procedures.

(3) Fiscal Control Office:

(a) A full time Danish National is employed to work in the FCO.

(b) A semiannual review of the accounting and internal controls of Nonappropriated Funds supported by FCO was conducted in February and controls were found satisfactory overall.

8. SPECIAL SERVICES DIVISION:

a. During this quarter the Chief of Special Services was Captain John L. Holcomb.

b. Function of Special Services: provide services, equipment, and organize and supervise programs for the health, morale and welfare of all military and civilian personnel of this station.

c. Major accomplishments and problem areas are as follows.

(1) Administrative: No major problems.

(2) Photo Hobby Shop: Now has the facilities and capability for processing color film. Work has begun to establish facilities for processing 8MM movie film.

(3) Officers Open Mess: No major problems.

(4) NCO Open Mess: No major problems.

(5) Recreation Center: During this period a Stereo Tape Center was installed in the Recreation Center, consisting of three stations. Master tapes of approximately three hundred records have been cut for patron use. A reception for the USO Show personnel was held in early March with approximately one hundred attendants. Pizza was served.

(6) Swimming Pool: The swimming pool was reopened in early March after several weeks of inoperation due to lack of replacement parts for the filter system.

(7) Consolidated Hobby Shop: During this period a Silversmith Shop was installed in which personnel can construct several different items of jewelry. A new Kiln was installed in the Ceramics Shop.

(8) Recreation Services Supply: A disinterested inventory of Central Base Fund property was accomplished in early March.

(9) Library: During this period a library account was established for the Coast Guard at Cape Atholl.

(10) Theater: Two matinees, one Tuesdays and one Thursdays, have been incorporated into the Base Theater program.

(11) Gymnasium: A paddleball tournament in which approximately thirty five individuals participated was conducted. The tournament consisted of both singles and doubles to determine the Base Champions. Approximately sixty individuals participated in the 1972 Intramural Basketball League with the Weather Squadron winning the Base Championship. Thule Air Base hosted Sondrestrom Air Base in a varsity basketball game on 8 March 1972, with Thule defeating Sondrestrom.

(12) Bowling Alley: An American Bowling Congress sanctioned tournament was held in early March with approximately forty participants. Also, \$6,000.00 worth of replacement parts for the automatic pin setters were ordered and most have arrived and are being installed on the machines as required.

(13) Education Center: During this period, Educational Services personnel have visited Cape Atholl to explain the educational opportunities available to the personnel stationed there.

9. SAFETY DIVISION:

a. The Chief of Safety for this period of report was MSgt Ralph E. Newman. MSgt Newman departed PCS on 1 March 1972. A replacement is due in during the month of April 1972.

b. Newcomers' indoctrinations were held monthly. All newcomers were advised of the hazards peculiar to Thule Air Base.

c. A reviewed edition of the Thule Air Base Accident Prevention Plan has been issued.

d. The following accidents were experienced during this period:

(1) AF Motor Vehicle - DAC Contractor operated. Loss: \$623.00

(2) AF Motor Vehicle - DAC Contractor operated. Loss: \$6,010.00

(3) AF Motor Vehicle - Driver Unknown. Loss: \$155.00

e. In addition to the above, three "Act of God" accidents were experienced. During high winds, buildings #605, 621 and "J" Site building #8, received damage to roofs. Total loss: \$14,310.00

f. No major problems were encountered during this period.

10. SECURITY POLICE DIVISION:

a. The new Chief, Security Police Division is Captain Dennis F. Poindexter. He was assigned 1 February 1972, replacing Keith R. Gronquist.

b. The mission of the 4683 Air Base Group Security Police Division is to provide for priority resources at "J" Site and to maintain law and order on Thule Air Base. Additionally, to administer the detention facility as well as safeguarding classified information and material in the custody of military units and DOD contractors.

c. Specific Accomplishments:

(1) ALC Winford C. Faires II, was selected as Base Airman of the Month for the month of January 1972.

(2) ALC David J. Koenig was selected as Base Airman of the Month for the month of February 1972.

(3) SSgt Ruffin, Nathaniel J., was selected as Headquarters Squadron Career NCO of the Month for March 1972. SSgt Ruffin was unable to compete in the Base competition due to emergency leave.

d. There were no major problems encountered during this reporting period.

11. STAFF JUDGE ADVOCATE DIVISION:

a. Captain Charles E. Rains served as Staff Judge Advocate from 1 January 1972 - 31 March 1972.

b. The Staff Judge Advocate performs all duties required by law, executive order and regulation as Staff Judge Advocate to the Thule Air Base Commander, who exercises special court-martial jurisdiction for Thule and Sondrestrom Air Bases. He monitors the administration of military justice, including the convening of courts-martial, processing of Article 15, UCMJ actions, and related matters. He advises the Commanders, Thule and Sondrestrom Air Bases, their staff, and the Commanders of tenant organizations on legal policies and interpretation of laws, regulations, and directives in all phases of military affairs, civil law, procurement, taxation, contracts, claims, and board proceedings. Investigates and adjudicates or recommends disposition of claims for and against the government under the provisions of AFM 112-1. He also administers the Legal Assistance program in accordance with AFR 110-4.

c.	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>
GENERAL CM	0	0	0
SPECIAL CM	0	0	0
SUMMARY CM	0	0	0
ARTICLE 15	1	3	3

d. The accomplishments of this activity during this period were routine in nature.

e. No major problems were encountered this period.

12. SERVICES DIVISION:

a. Captain William S. Heaton served as the Chief of Services during this reporting period.

b. Summary of functions of this division: Monitorship of Danish Arctic Contractors pertaining to services in housing, billeting, laundry, dry cleaning, and food services. Planning, organizing and coordinating Host-Tenant and Interservice Support Agreements and Memorandums of Understanding. Monitors annual site resupply.

c. Major Accomplishments:

(1) Housing and Billeting:

(a) Total number of transient visitors, Officer and Civilian: 775; Enlisted: 673. Number of bednights: Officer and Civilian: 2,876; Enlisted: 1,442. The total services charge collected and deposited during this period: \$13,518.42.

(b) Exercise Box Top I began 30 March 1972. Base Housing assigned quarters for 28 Officers and 85 Enlisted.

(2) Laundry and Dry Cleaning:

(a) Plant production (pieces processed) bulk organizational laundry: 111,672; dry cleaning: 4,804. Individual laundry: 12,052; dry cleaning: 7,464.

(b) During the reporting period, 90 dozen sheets and 20 dozen pillowcases were turned in to R&M.

(c) The laundry and dry cleaning equipment has been in operation with few breakdowns from 1 January - 31 March 1972. Lubrication and maintenance has been carried out in accordance with standard procedures. No discrepancies were noted.

(3) Food Services:

- (a) Average number of personnel assigned: 70
- (b) Dining Hall #2 prepared and served 235,112 meals during this period. In-flight meals were: 7,025.
- (c) The value of subsistence drawn from Commissary was: \$143,394.
- (d) Sanitation reports for the period showed overall "Excellent" though in a few instances "Satisfactory".
- (e) Equipment received this quarter: One rotating oven and one juice dispenser for Dining Hall #2. One mixing machine for "J" Site.

(4) Commissary:

- (a) Total dollar value of subsistence received during this quarter: \$111,802.
- (b) Total dollar value of subsistence issued: \$196,372.
- (c) Outstanding orders as of 31 March 72: \$497,878.
- (d) Ending inventory as of 31 March 72: \$469,225.

(5) R&M:

- (a) No sales this period.
- (b) No problems encountered.

(6) Logistic Agreements: Host-Tenant Support and Interservice Agreements reviewed and revised during this reporting period:

- (a) National Ocean Survey.
- (b) OL-5.
- (c) 1983 Communications Squadron.
- (d) Post Office.
- (e) Alaskan Air Command.

(7) Site Resupply: Exercise Box Top I began 30 March 72.

13. INFORMATION DIVISION:

a. During the period of report, Captain Daniel T. Davis served as Chief of the Information Office.

b. Sgt John A. Huffman and AlC Robert E. Walker departed PCS. Neither were replaced, thus bringing OI manning level into line with UDL authorizations. AFRTS now is at an acceptable manning level.

c. Major Accomplishments:

(1) The Thule Times reverted into the 8x10 format again, but this time in four columns instead of the previous three columns. Using a new photographic process, the reproduction quality of the newspaper was greatly improved.

(2) AFRTS conducted a comprehensive listener/viewer survey of all assigned personnel.

(3) New audio control consoles were installed in both radio studios at AFRTS.

(4) Work was completed on the new AFRTS production studio.

(5) Maximum publicity was given to the POW/MIA "WEEK OF CONCERN".

(6) Toward the end of the reporting period, two Norwegian newsmen arrived at Thule for a week's stay.

d. There were no major problems during this period.

11. HEADQUARTERS SQUADRON SECTION:

a. Captain Marvin A. Mazer served as Commander of the Headquarters Squadron from 1 January - 21 March 1972. Major John L. Austin assumed command upon Captain Mazer's departure from this station.

b. SMSgt Gilbert L. Taylor remained the First Sergeant during this period of report. MSgt Johnnie M. McDowell performed the duties of First Sergeant during SMSgt Taylor's absence.

c. Function of the Squadron Section: Responsible for the welfare, discipline and morale of personnel assigned to the squadron.

d. Major Accomplishments of this office:

(1) The leave accounting procedures were adjusted slightly to resolve problems encountered because of this unit's isolated location from the Accounting and Finance at Peterson Field Colorado.

(2) Seven Article 15 actions were processed during this period of report.

(3) SSgt Willis M. Jones was assigned the additional duty of On-the-Job Training NCO. The program is working with a high degree of efficiency.

(4) The General Military Training program was assigned to the First Sergeant upon departure of TSgt Forrest Hite.

e. No major problems existed during this reporting period.



HISTORICAL RECORD

of the

4684TH AIR BASE GROUP

for the period ending

31 MARCH 1972

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION 4684th Air Base Group Sondrestrom Air Base, Greenland		2. NAME AND GRADE OF COMMANDER CLARENCE E. WILSON, Colonel, USAF		
3. CHAIN OF COMMAND (Superior echelons) Headquarters USAF, Aerospace Defense Command, 21st Air Division				
4. SUBORDINATE UNITS (Down to and including squadrons) none				
5. MISSION (Give authority and brief statement of primary mission) ADC Regulation 23-84, 22 October 1971: Equip, administer, train and furnish personnel to: operate and maintain Sondrestrom Air Base, Greenland; provide administrative and logistic support to units or agencies as specified in applicable support agreements; and provide contract monitorship for contractual operation at Sondrestrom Air Base, Greenland.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	11	67	0	78
ASSIGNED	11	67	0	78
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment) None				

II. COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

I. MATERIEL:

Resupply: DYE 4, Kulusuk, has experienced difficulty with resupply during this quarter due to severe weather conditions which often prevented aircraft from landing there. Six landings were made at the site during the quarter with the last landing on February 23. Since then, the 17th Tactical Airlift Squadron has made two LAPES drops to the site with sufficient provisions to tide personnel over until the weather broke, which occurred at the end of this reporting period.

Billeting: Funds had not been provided in FY 72 to support Project Better Living, an effort to procure additional furniture for dormitories. The funds requested then amounted to \$149,972.00. A new request has been submitted for FY 73 under Project Volunteer in the amount of \$164,979.00.

Transportation: The Maintenance and Transportation Section experienced temporary difficulty in achieving its mission during the period January 15 through January 22 because of sickness. During this time, seven or eight persons were absent from work daily because of flu. During the last week of January, however, only one or two persons were absent for this reason.

This section has also had difficulty in keeping the water and the waste trucks running. The trucks are completely worn out and an inordinate amount of work has to be performed on them. Action has been initiated to have these trucks replaced sooner than scheduled.

In anticipation of summertime port activities, overhaul of diesel motors for the LCM boats, cranes, bulldozers and trailers has been initiated.

II OPERATIONS:

During this quarter there were 151 military aircraft landings, 343 civil aircraft landings and 33 contract carrier landings at Sondrestrom. Due to lack of aircraft assigned here, there were no flying hours allocated nor proficiency or instrument checks made during this period.

III CIVIL ENGINEER:

Programming and Work Control: A total of 54 Work Requests (AF Form 332) were received and all but four have been processed. A total of 60 Work Orders and 196 Job Orders were prepared during the quarter. The updating of all facility jacket files was completed. An inspection was performed by the Auditor from Goose AB during March. A total of 926 service calls were processed.

Engineering and Construction: A total of 704 as-built drawings for 28 facilities have been completed.

Operations and Maintenance: A new scotch-lite machine was installed in Bldg 530. The overhaul of a compressor for the cold storage plant was completed. During the first month of the quarter, the water main that services Bldg 472 ruptured. Immediate action was taken by contract personnel to isolate the leak and restore water to the base. Also during the month of January, the main sewer line from Bldgs 385, 462, 466, 468, and 491 froze which caused the sewage to be pumped to the roof of Bldg 385. Immediate action was taken by contract personnel and the sewer line was thawed and afterwards all of the frozen sewage removed from the roof of Bldg 385.

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II. COMMENTARY (Continued)	
<p>Fire Protection: During this quarter, the Fire Department responded to four aircraft emergencies, 57 fuel spills, seven smoke investigations, five false alarms, 2,491 fire inspections and five fire prevention indoctrination classes with 94 individuals attending.</p>	
IV PERSONNEL:	
<p>Preparations were made for the implementation of the Greenland Feasibility Study, a manpower study done in 1970 to determine which functions should be carried out by Air Force personnel and which should be assigned to civilian contracts or eliminated. The Accounting and Finance Office was deactivated March 31 with loss of six military authorizations, including one of the two officers previously authorized. Curtailments and cancellations of inbound personnel have been requested as appropriate.</p> <p>Under this same Study, Personnel and Command Unit Administration each have lost one military authorization, effective 1 July 1972. No manning action has been necessary as yet.</p> <p>Security Police Section investigated two serious incidents during the quarter: an attempted suicide and a death from natural causes. Casualty reporting for the latter incident was accomplished with minimal difficulty.</p> <p>Colonel Clarence E. Wilson, base commander, applied for and was granted an extension of his tour at Sondrestrom for July 1972 to July 1973.</p> <p>Captain Maxine A. Shafer, chief of administration, arrived in January of this quarter and was the first WAF to begin a tour of duty at this remote station.</p> <p>The Social Actions Council was organized according to available guidance and additional instructions from the commander.</p>	
V SPECIAL SERVICES:	
<p>The Special Services Division here received approval from 21st Air Division to operate the Base Bowling Alley under the Danish Artic Contract. A qualified Danish civilian began managing the Bowling Alley on February 15. It has been estimated that this change will save the Sondrestrom Central Base Fund a minimum of \$4,000.00 per year in part-time salary expenditures, according to Captain Joseph C. Justice, director of Special Services.</p> <p>Reduction of military manning for the 2004th Communications Squadron may result in monetary problems for the Special Services Section. The 2004th will be reduced by approximately 100 men beginning in July. The reduction is expected to be completed by October. The special services director has estimated that the section will lose about \$2500.00 per year in funds because of this reduction in military strength. Even so, Special Services is obligated to provide recreation activities for the ITT and DAC people assigned here if feasible. Special Services may therefore be required to provide services for as many people with reduction in funds. Various possibilities have been suggested as a solution to this problem, but no solution has been agreed upon as of this report. One method of compensation for this projected loss however, was begun on March 31: Moonlight Bowling. The services director has decided to continue this program</p>	
(If more space is needed, continue on blank sheets, size 8 x 10 1/2, numbered and securely attached hereto.)	
PREPARED BY (Typed name and grade of Historian)	SIGNATURE
GEORGE B. KUEHNE, Captain	<i>George B. Kuehne</i>
APPROVED BY (Typed name and grade of Commander)	SIGNATURE
CLARENCE E. WILSON, Colonel	<i>Clarence E. Wilson</i>

ADC FORM 102, II COMMENTARY, continued

as a means of providing extra revenue. A summer league has also been planned at the bowling alley with this same objective in mind.

VI ACCOUNTING AND FINANCE:

On March 31, the accounting and finance office was deactivated. Preparations have been made for a disbursing agent to take its place. Under this arrangement, the Accounting and Finance Office at Peterson Field, Colo., will have become the principal office for all accounting functions as of April 1. Services within the Military Pay and Travel areas have not been altered due to this change.

During this quarter, the Fiscal Control Office attained first place in the 1971 command-wide competition for timely submission of all non-appropriated fund financial statements.

VII ADMINISTRATION:

The USAF Auditor General Inspection Team from Goose Air Base visited Sondrestrom from February 29 through March 8. At the end of this reporting period, the report from the team had not yet been received.

VIII CHAPLAIN PROGRAM:

The Catholic Chaplain departed Sondrestrom February 23 to serve at Keflavik, Iceland, as a result of an ADC command decision. Sondrestrom's Catholic religious needs will be partially fulfilled by the Chaplain from Thule AB once each month.

IX ARMED FORCES RADIO AND TELEVISION:

Sergeant Joseph K. Hollingsworth was named winner of Category G in the Air Force Thomas Jefferson "What is an American?" contest. He has been invited to attend the awards banquet and Media Internship program in Washington, D.C., April 9 through 21.

Discussion with technicians responsible for maintaining electronic equipment at the AFRTS facility revealed several problems. The wiring had been installed haphazardly when the original equipment was installed, apparently in haste to begin broadcasting again after the fire which destroyed the old station in 1965. Since that time, new equipment has been installed by extending that same wiring system. The technicians have begun to correct this where they can, but they may need help to do a thorough job.

After discussion with the Communications Maintenance Officer and the commander of the 2004th Comm Squadron, it was decided to wait until the FY-73 funding decisions regarding the AFRTS facility had been received. The Facility has requested funds for new equipment. If this equipment is funded, AFRTS will request qualified technicians from Television Audio Support Agency (TASA) to correct the problems at the time the new equipment is installed. If no funds are available for new equipment, TASA will be contacted immediately to attempt to arrange a date for corrective help by an engineer.

HISTORICAL RECORD

of the

4784th Air Base Group

for the period ending

31 March 1972

(1 January - 31 March 1972)

FORM
ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

I. REQUIRED DATA				
1. UNIT AND LOCATION		2. NAME AND GRADE OF COMMANDER		
Otis AFB, Mass		Colonel A. J. Roberson		
3. CHAIN OF COMMAND (Superior echelons)				
4. SUBORDINATE UNITS (Down to and including squadrons)				
4784th ABGp Headquarters Squadron				
4784th Materiel Squadron				
4784th Civil Engineering Squadron				
4784th Security Police Squadron				
USAF Dispensary				
5. MISSION (Give authority and brief statement of primary mission)				
Mission directive of ADC Air Base Groups as contained in ADC Regulation 23-65 dated 6 July 1971: To equip, administer, train and furnish personnel in order to operate and maintain Otis AFB and provide administrative and logistic support to units or agencies as specified in applicable support agreements.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	86	991	679	1855
ASSIGNED	99	1097	639	1837
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
N/A				

II.

COMMENTARY

This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes to primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance. See ADC Supplement I to AFR 210-3 for additional guidance.

THE HIGHLIGHTS OF THIS REPORTING PERIOD (1 Jan - 31 Mar 1972) included the visits of ADC Inspector General Team, 20-27 March, the ADC Personnel Assistance Team, 13-17 March, Major General Williams, retiring 21st Air Division Commander, 11-13 January, ADC Vice-Commander Major General Hanes, 2-3 March, and Major General Price, new 21st Air Division Commander, on 10 April. Also, on 24 March, word was received of the transfer of Otis Air Force Base to the Massachusetts Air National Guard, beginning with the phase-down of the 26th Aerospace Defense Missile Squadron. Effective closure date of the 4784th Air Base Group is September 1972. The 7th Special Operations Flight (TAC) is already in the process of moving to Hurlburt Field, Florida, and the 4713th Defense Systems Evaluation Squadron is scheduled to move to Westover Air Force Base, Massachusetts.

The 4784th Air Base Group was rated Satisfactory by the ADC Inspector General Team in all 22 Major functional areas. There were two Unsatisfactory subfunctional areas and 8 Outstanding subfunctional areas. The remaining subfunctional areas were rated Satisfactory. Noteworthy were the Commander's effective application of programs, the performance and operation of the Safety Division, and the outstanding appearance of the WAF Squadron dormitory and Transcient Airmen Quarters.

THE SECURITY POLICE SQUADRON continued normal operation despite a shortage of personnel. At the close of the reporting period 149 personnel were present for duty with the squadron being authorized 204. Programmed inputs of personnel should alleviate this problem. The military dog program is in a transition stage of replacing the sentry dogs with patrol dogs. Four patrol dogs and seven sentry dogs are presently assigned. During the quarter, one medium post-trial prisoner, one pre-trial prisoner, and five casual prisoners were confined in the consolidated detention facility. In addition, twelve correctional custody personnel were placed in the facility during this period. Traffic violations consisted of 122 moving violations and 86 non-moving violations. The majority of moving violations were for speeding, disobeying stop signs, failure to yield right-of-way, improper turns, operating a privately owned vehicle in a prohibited area, and inattentive driving. The majority of non-moving violations were for unauthorized parking, defective vehicles, invalid inspection stickers, and improper base registration. Operation Crime Stop continued with numerous reports received. The investigations section solved an exceptionally large number of breaking and entering reports, particularly in the base schools and hospital areas, with large amounts of both personal and government property recovered. Maintenance of Security Police vehicles continues to be a problem with many vehicles remaining

If necessary to facilitate typing, separate by tearing along fold. Reassemble securely by stapling in upper left-hand corner.

II.

COMMENTARY (Continued)

in the motor pool for long periods of time. The Security Police Squadron received an overall satisfactory rating during the ADC IG team visit.

THE MATERIEL SQUADRON TRANSPORTATION BRANCH provided transportation support to visiting dignitaries and inspection teams. The Transportation Branch also provided the ADMET office with cost data for determining the cost of the base shuttle bus system versus the cost of operation by a commercial contractor. Traffic Management section reduced the average transit time of NORS items from 25.85 hours to 24.21 hours due to the fact that all NORS items are now taken directly to Logan International Airport, Boston, instead of flying them via Hyannis, Mass. Overtime payments to civilians performing handling and packaging of dangerous articles were eliminated by training three airmen in this specialty. In anticipation of transfer of assigned/attached units, the Traffic Management Office foresees a shortage of personnel in the freight and packing units. Assistance will be requested upon receipt of more detailed information regarding the transfer and deactivation activities.

The Base Procurement Office negotiated, the architectural and engineering contracts for the repair and upgrading of airmen dormitories at eleven Air Force installations from North Carolina to Maine, including Otis AFB. The final price of \$80,000 represented a \$36,000 reduction in the contractor's original estimate due to intensive planning and negotiation by Base Procurement. Work commenced on 2 February 1972 and was 25% complete as of 15 March 1972. Another major project, the renovation of the Recreation Center, is nearing completion.

The Base Supply Office conducted a study to determine the feasibility of converting a jet bulk fuel tank for storage of fuel oil. The proposed conversion of the base heating plant from coal to fuel oil operation precipitated the study. The Explosive Ordnance Disposal team received over 883 hours of training in accordance with Air Force and ADC directives, and a total of 3,328 non-duty man-hours were expended in maintaining a 24-hour EOD capability. Two on-base bomb threats were received during this period. No bombs or devices were located. The Equipment Management Branch maintained a high data bank accuracy of 98.6%, while equipment in stock not in use continues to remain at a low of \$81,447. Total dollar value of equipment in use is \$30,897,444.56. Project Better Living was 90% complete at the close of the period. Active support of four radar sites in the 23rd Air Division transferred to Otis AFB from Richards-Gebaur AFB,

(If more space is needed, continue on blank sheets, size 8 x 10, numbered and securely attached hereto)

PREPARED BY (Typed name and grade of Historian)

ROBERT R DREW, AIC, USAF

SIGNATURE

Robert R Drew

APPROVED BY (Typed name and grade of Commander)

A. J. ROBERSON, Colonel, USAF

SIGNATURE

A J Roberson

COMMENTARY (Continued)

MO. A total of 26,217 supply requests were processed through the Demand Processing unit with 17,905 requests issued. The UNIVAC 1050-II Computer processed 115,107 transactions in January, 131,858 in February, and 162,552 in March. Otis AFB hosted a Radar Site Level Supply Training Course on 7-9 March 1972 with 20 officers and NCO's from supported radar sites attending.

IN THE CIVIL ENGINEERING SQUADRON, maintenance and services were hindered by manpower shortages, although the housing maintenance section added five more personnel, resulting in somewhat improved service to family housing. Vehicular support for Civil Engineering activities has remained unsatisfactory. Excessive downtime and age of vehicles contribute to this problem. Inadequate funding has reduced the maintenance program to the level of breakdown maintenance only.

The Programs Division won the Utilities Conservation Program Award for top honors in ADC competition. A financial resource manager position was authorized for Programs, but no applicant has yet been selected. The Real Property Branch was the OPR for the ADC Leased Family Housing Conference held 15-16 March 1972. Operations Maintenance has effected the training of a keypunch operator and the addition of a part-time clerk in the Industrial Engineering Branch. The Engineering and Construction Branch contracted for custodial services in the airmen dormitories.

There were no reportable fires during the quarter. The Fire Department had 75 of 78 authorized personnel assigned. A total of 2908 fire inspections were performed, including 2 inspections at North Truro AFS. Fire Prevention Training was conducted for 777 personnel and total of 868 man-hours of training was provided to firefighters.

THE OPERATIONS AND TRAINING DIVISION of the Air Base Group handled a total of 2053 landings and takeoffs. A NOTAM systems evaluation was conducted by the Air Force Communications Service on 6 March 1972 with a rating of Satisfactory received. The Air Base Group conducted a self-evaluated Major Accident Response Exercise on 10 February 1972. On 23 February 1972 21st Air Division monitored an Attack Response Exercise and a Major Response Exercise, both of which were rated Satisfactory. The Base Disaster Preparedness program was rated Satisfactory by the ADC IG Team. The Base Photo Lab processed 440 work orders.

One C-54M, one VT-29A, and one VT-29B were assigned to the 4784th Air Base Group as of the end of March. On 22 March 1972, VC-54D number 42-72642 was transferred to Saudi Arabia and delivered by a ferry crew from Otis. The quarterly flying hour allocation was 290 hours for C-54 and 90 hours for T-29.

COMMENTARY (Continued)

Two DEWLINE support missions were scheduled and flown on 1-10 Feb and 14-23 Mar.

The Film Library conducted two projectionist classes with seven Air Force personnel and eight Coast Guard personnel attending. The Management School conducted three MGT 1, Part 1 courses (60 hours ea.), which included the newly added topics of race relations and equal opportunity.

THE MILITARY PERSONNEL BRANCH processed 204 personnel in and 85 out during the quarter. Personnel shortages still exist in certain areas. The out-processing of 7th Special Operations Flight personnel has progressed smoothly due to early planning by CBPO personnel who have had previous experience with phase-out actions. Twenty-four personnel were discharged under the provisions of AFM 39-10, and 13 personnel were discharged under the provisions of AFM 39-12. This represents no significant increase or decrease over last quarter's statistics. Casualty Services reported 12 active cases at the close of the period, five MIA/POW and seven deceased. Eighty-eight awards were approved for military personnel. Participation in Annual records reviews reached 100% this quarter due to efforts of records section personnel. Reenlistment rates for January, February, and March were 10%, 22.2%, and 25%, respectively. A total of 10 personnel of 54 eligible reenlisted. The Transition Office reported 39 personnel entering the Transition Program. Two early release programs, Palace Chase and Involuntary Discharge of First Term Airmen Denied Reenlistment, were instituted this quarter.

The ADC Personnel Assistant Team (PAT) visited the Consolidated Base Personnel Office on 13-17 March 1972. Four sections received Satisfactory ratings and one section received an Excellent rating. Personnel Affairs was rated Excellent by the PAT, with Casualty Services, Awards and Decorations, and Family Services functions receiving Excellent ratings. The Data Control Section was rated Satisfactory overall with In and Out Processing improving from a previous Unsatisfactory rating to an Excellent rating.

IN THE COMPTROLLER DIVISION, the Accounting and Finance Office received word on March 2, 1972 that Otis AFB would participate in the JUMPS program beginning 1 September 1972. A new disbursing Officer assumed control of the Accounting and Finance Office on 1 February 1972. The USAF Auditor inspected the cash count related assets and documents comprising the Accounting and Finance Officer's Accountability as of 18 January 1972, with satisfactory results. The Accounting and Finance Branch received the Superior Performance Award certificate for the period 1 July - 31 Dec 1971.

COMMENTARY (Continued)

Accounting and Finance representatives attended the Leased Family Housing Conference held by the Civil Engineers in March. The Management Analysis Branch assumed responsibility for the Base Historical Program during this quarter. The Cost Center Performance Summary went "live" on 1 January 1972, with Management Analysis and the Budget Office conducting the local program as well as support for North Truro AFS and Montauk AFS. The Otis Zero Defects Program was discontinued by order of HQ ADC. The Comptroller Division was given an overall Satisfactory rating by the IG team with Management Analysis receiving an Outstanding.

IN SAFETY DIVISION OPERATIONS, the 4784th Air Base Group Accident Prevention Council convened on three occasions, and three flying safety meetings were held. On 16 February 1972 an additional duty Ground Safety Officer/NCO Seminar was conducted with 26 officers and NCOs attending. A total of 414 personnel were trained in Traffic Safety. Five ground accidents were reported, four resulting from industrial functions and one from the operation of a USAF motor vehicle. Seventy-seven military and eight civilian employees incurred non-disabling injuries either on or off the job. One precautionary landing involving a 4784th Air Base Group aircraft occurred at Hancock Field, N. Y., on 9 February 1972. As recorded in the ADC Inspector General's report of 20-27 March 1972, the Safety function rated Satisfactory overall with Outstanding ratings in the subfunctions of Commander's participation, Safety Program Management, Ground Safety, and Safety Program Documentation.

IN THE SPECIAL SERVICES DIVISION, a stereo cassette system is in the process of installation in the Base Library. The Golf Course facility remained open through January and February, with 140 personnel using the course in January and 75 in February. The quarterly total of golfers was 503. Various maintenance actions took place to prepare the course and equipment for the coming season. The Bowling Lanes held two tournaments in January, one roll-off for the base team in February, and two in March. The Child Care Center received some new equipment. The Ceramic shop is increasing operations with the addition of a new employee. The Youth Center recorded an average daily attendance of 32 for the quarter. The Sports Arena hosted the 21st Air Division Basketball Tournament in January with seven teams participating. Otis won the tournament and advanced to the ADC tournament, also hosted by Otis AFB. The Otis team placed third out of eight ADC teams. The Auto Hobby Shop experienced manpower and maintenance problems. The Wood Hobby Shop had excellent attendance and use of facilities. The Commissary Store replaced frozen food cases and added shelving, increasing the capacity and selection of items. The Site Branch Commissary stores at North Truro AFS also received new equipment for improvement of customer services.

HISTORICAL RECORD

of the

4785th Air Base Squadron (ADC)

for the period ending

31 March 1972

SHIELD OF FREEDOM

ADC FORM
JUL 66 102

REPLACES ADC FORM 102, FEB 64, WHICH WILL BE USED
UNTIL STOCKS ARE EXHAUSTED. MAY 58 EDITION IS OBSOLETE.

No ADC Field Printing Plant
Est AFB, Colorado

Section I.		REQUIRED DATA			
1. UNIT AND LOCATION 4785th Air Base Squadron (ADC) Stewart Field, New York 12550		2. NAME AND GRADE OF COMMANDER William R. Menzie Colonel, USAF			
3. CHAIN OF COMMAND (Superior Echelons) Headquarters, United States Air Force North American Air Defense Command Aerospace Defense Command 21st Air Division					
4. SUBORDINATE UNITS (Down to and including squadrons)					
5. MISSION (Give authority and brief statement of primary mission) To discharge all contractual administration responsibilities of the United States Air Force with the ITT Arctic Services, Inc., concerning the operation, maintenance, and support of the Distant Early Warning (DEW) System from Point Lay, Alaska, to Kulusuk Island, Greenland. To insure adequate support of the contractor in all areas by all military agencies.					
6. PERSONNEL					
	OFFICERS	AIRMEN	CIVILIANS	TOTAL	
AUTHORIZED	34	17	14	65	
ASSIGNED	35	18	14	67	
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)					

Mr. Enright visited Alaskan Air Command for the purpose of viewing their drum crusher in action. Findings from this inspection will assist in the procurement of a crusher for the DEWLine.

Captain Martini was the civil engineering representative on the February Arctic Star staff assistance visit.

An oil spill contingency plan for DYE-1 and DYE-4 is being prepared by ASI in order to provide definite procedures for containment and collection of POL spills in coastal waters.

The O&M project for repair of BAR-M DLM floor (\$43,470) was accepted and payment in full made to the contractor (ASI).

The heated auto storage facilities at FOX-3 and FOX-4 were physically completed but final inspection will not be performed until summer.

Major Smith was the civil engineering representative on the March Arctic Star staff assistance visit.

The FY 73 MCP program for sewage treatment and POL diking at all Alaska DEWLine stations has been approved by the Office of the Secretary of Defense and now goes to Congress for funding.

Option B, "Airfield Lighting," was added to the contract for FY 70 MCP. This option will locate airfield lighting controls in the heated auto storage facilities at BAR-4 and FOX-4.

The leased housing program for this organization was concluded with the cancellation of the lease at 57 Haight Drive, Vails Gate, NY on 20 March 72.

COMMUNICATIONS & ELECTRONICS

DEWLine Visitation. The first quarter of calendar year 1972 exhibited moderate visitation of a routine nature. Approximately 120 visit requests were approved by this office for visits to the Alaskan, Canadian and Greenland DEWLine. Some of the organizations supported were:

- Department of Defense agencies
- Canadian Forces
- U. S. and Canadian Government organizations
- U. S. and Canadian Research organizations
- Danish Arctic Contractors
- RCMP
- Anglican Church of Canada
- U. S. and Canadian commercial concerns
- Various universities

Staff Visitation

Two Arctic Star staff visits were conducted during the quarter. The 1 through 10 February trip provided an opportunity for 4785th AB Sq and DEWLine contractor personnel to discuss active projects with Line personnel. This trip also served as orientation to those who had not visited the Arctic before.

The 14 through 23 March trip was a VIP trip with Colonel W. R. Menzie, Commander, 4785th AB Sq; and Mr. R. E. Bowman, Manager, Logistics, ITT/ASI on board. The main purpose of the trip was the annual COMSEC inspection. Several other projects including Polar Cap III, a radar project at FOX-M, were observed.

CEM Projects

The first volumes of the DEWLine Instructions for the AN/FSA-14 and AN/FSA-26 consoles were submitted by the contractor to the 4785th during the quarter. The contents of these volumes were approved. Work continued on the remainder of the documents throughout the quarter.

The update of the DEWLine portion of the ECAC data file continued this quarter. The expected completion date for the update is still in the second quarter of CY 1972.

This office is working with the DEWLine contractor to determine whether or not Cushman CE-21/23A spectrum analyzing equipment would be valuable on the DEWLine. Inquiries were made into using the Maintenance Evaluation Program (AFR 66-8) for this purpose.

Efforts to implement the contractor's plan to replace critical test equipment with newer state-of-the-art items were continued this quarter. Requests for support and funding went out to concerned air materiel areas.

A joint Canadian-USAF meeting was held at Stewart Field to coordinate Canadian National Telecommunications (CNT) expansion plans with support available from the USAF. Personnel from the 4785th, ITT/ASI and CNT were in attendance.

Preliminary information on the feasibility of providing a 10 KHz program channel from Sondrestrom to DYE-4 was provided to Hq ADC. Two possible circuit configurations with a budget estimate of \$25,000 were included in the information.

A scheme was initiated to remove the 487L antenna and EMP suppressor from the deactivated SAGE building at Stewart. This antenna will be reinstalled at Hancock Field. Present plans call for a 15 May 72 removal date.

Activity on Polar Cap III continued throughout the quarter. Meetings were held to discuss construction problems and action was initiated to provide communications for the facility.

Additional changes to 4785th AB Sq Regulation 55-1, Atch 1, Station Evaluation Checklist Report, were received during the quarter. The attachment is scheduled for publication in late April 1972.

Soundproofing enclosures to reduce the noise level in the DEWLine data centers were shipped from the vendor. The equipment will be tested at CAM-M to determine its effectiveness.

The first printout of the PCSP in the new format was received during the quarter. Since all remarks cards were dropped in the conversion from the old format, the contractor was requested to initiate a 2-ADC-V24 report to reinstate necessary remarks.

ADMINISTRATIVE CONTRACTING OFFICE

FY-73/74/75 DEWLine O&M Contract. Step 1 of the two-step procurement, technical proposal evaluation, was completed in February. Both ITT, Arctic Services, Inc. (ASI) and the Radio Corporation of America (RCA) were found to be qualified to perform the O&M functions of the DEWLine. A request for price proposal was issued to both potential contractors on 1 March (step 11) by Hq ADC (LGPSA). A review of the forthcoming proposals will be accomplished next quarter, resulting in the award of a contract for the next three-year period.

DD 1594 close-out action form was signed off by the PCO, thus closing out DEWLine O&M Contract AF04(606)-15943 (FY-67).

All required actions to close out the FY-68 DEWLine O&M contract (FO4606-67-C-1425) have been taken from initiation of audit through payment of final bureau voucher. Upon receipt of copy of final payment voucher from the disbursing office, action will be taken to remove excess funding balances from contract and preparation of a DD 1594 close-out action form. Final closeout date for all required actions is on or about 31 May 1972.

The FY-69 DEWLine contract for all intents and purposes is physically complete. Minor MCP deficiency corrections are practically complete. Submission of the final FPIF billing is expected prior to 30 June 1972. DCAA is currently involved in reviewing and validating accrued vacation expense which appears allocable to this contract, although paid out under the FY-70 FP DEWLine contract. Upon resolution of this item and subsequent submission of the final billing, action will be taken to request final audit review action by DCAA.

Danish Arctic Contractors, Inc., Contract F30665-72-C-0002 for the Life Extension of DYE-3 was negotiated and issued during this time period. This contract was issued by the PCO at 21st Air Division and was forwarded to this office for contract administration. Actions have been taken to coordinate required support needed by DAC to implement its construction schedule. Such support includes Government-furnished equipment, furnishing of food and lodging, airlift of material, etc.

Two CY-72 sealift contracts were issued during this time period: Northern Transportation Co., Ltd, Contract FO5604-72-C-0001 and Canadian Commercial Corp Contract FO5604-72-C-0003.

The final billing has been received relating to the CY-71 sealift contract (Canadian Commercial Corp Contract FO5604-71-C-0003). Action is being taken to validate an overrun in the approximate magnitude of \$326,808.60 (Canadian). It appears that excessive ship charter and insurance premium expense factors have contributed to this final unsatisfactory cost position. Necessary requests for additional funding are being considered.

Lt Col John C. Zotz, Administrative Contracting Officer and Deputy for Procurement; and Captain Harvey D. Mullis II, Procurement Officer, left this organization during this quarter.

Lt Col Dale A. Johnston arrived to replace Lt Col John C. Zotz.

Two meetings were held with Nordair, 6 January and 13 March. Two items were the ACO disapproved bills—Nordair accidents and DC-3 substitution, were finalized to close out FY-71 contract. FY-73 airlift request for proposals were reviewed and comments forwarded to MAC.

PERSONNEL

Gains:

- Capt Harold A. Paraghamian - 9 Jan 72
- Capt Francisco A. Muniz - 27 Feb 72
- 2d Lt James C. Harden - 27 Feb 72
- 1st Lt Robert T. Hill - 28 Feb 72
- SSgt Charles F. Henley - 1 Mar 72
- 2d Lt John T. Guinn - 16 Mar 72
- TSgt Bobby G. Barnett - 19 Mar 72
- Lt Col Dale A. Johnston - 22 Mar 72
- 2d Lt Robert R. Bacon - 24 Mar 72
- Maj Melvin P. Edwards - 29 Mar 72

Losses:

1st Lt Gregory S. Heinz - 7 Jan 72
SSgt Rudolph A. Aaron - 28 Jan 72
Capt John W. Foltz - 17 Feb 72
TSgt David K. Elliott - 17 Feb 72
TSgt Victor Capozzi - 24 Feb 72
Lt Col John C. Zotz - 28 Feb 72
Capt Harvey D. Mullis II - 31 Mar 72

Section II.**COMMENTARY***(See ADC Supplement I to AFR 210-3 for additional guidance)*

PART A. This part should contain significant information relating to your unit's mission performance. Some basic subjects to include are: (1) operations and training; (2) changes in primary equipment such as radars, aircraft, etc.; (3) equipment performance; (4) facilities; (5) maintenance and supply problems; (6) personnel matters affecting the mission; (7) any other subjects bearing on mission performance.

MATERIEL

Materiel activities of historical note during the period 1 January through 31 March 1972 are as follows:

During subject period the supply section acquired \$3,800 worth of computer management products.

Captain Joseph A. Garcia represented LGS on the Arctic Star trip of 1-10 February.

For his winning entry in the Freedoms Foundation yearly contest, an essay titled "What is an American", Captain Garcia received an award of \$100 and a George Washington Honor Medal.

The Cool Barge/Pacer Alaska Pre-Sealift Conference was held 14-15 March 72 at the Naval Supply Depot, Pier 91, Seattle, Washington. 1Lt William J. Weilemann attended from the Transportation Section.

2d Lt John T. Guinn arrived on station 16 March 1972. He was recently commissioned through the ROTC program at Tennessee State and will take on duties of Assistant Transportation Officer.

COMPTROLLER

Effective with the close of business 31 March, the Accounting function was deactivated. Both UDL positions were also deleted at that time. Accounting responsibility has been assumed by the 4600th AB Wing, Ent AFB.

In March, MSgt Runyan attended meetings and training sessions in connection with the conversion of supply accounting to the Honeywell computer system and conversion of all accounting records to the B3500 computer system. Representatives of Sondrestrom and Thule were also present at the ADC Headquarters for these meetings.

The RECON program, through March, totals eight individual submissions for a total savings of \$1,855,500. Of this total amount, \$1,149,000 is applicable to the FY 72 program goal of \$148,800.

CIVIL ENGINEERING

POW-3 DEWLine station was physically closed 21 January 1972. This closure marks the second auxiliary station to be deactivated within one year.

The Alaskan Air Command real property at Point Barrow will be turned over to the U.S. Navy on 1 July 1972. The Navy will now provide support to POW-M per Host-Tenant Support Agreement.

(If more space is needed, continue on blank sheets, size 8 x 10%, numbered and securely attached hereto.)

If necessary to facilitate typing, separate by tearing along fold and reassemble securely by stapling in upper left-hand corner.

Section II.

COMMENTARY (Continued)

PART B: This part should include a list of key personnel and information on: (1) community relations; (2) awards and decorations; (3) morale; (4) any other subjects the commander may wish to include.

(If more space is needed, continue on blank sheets, size 8 x 10 $\frac{1}{2}$, numbered and securely attached hereto.)

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Allan F. Appel, 1st Lt, USAF

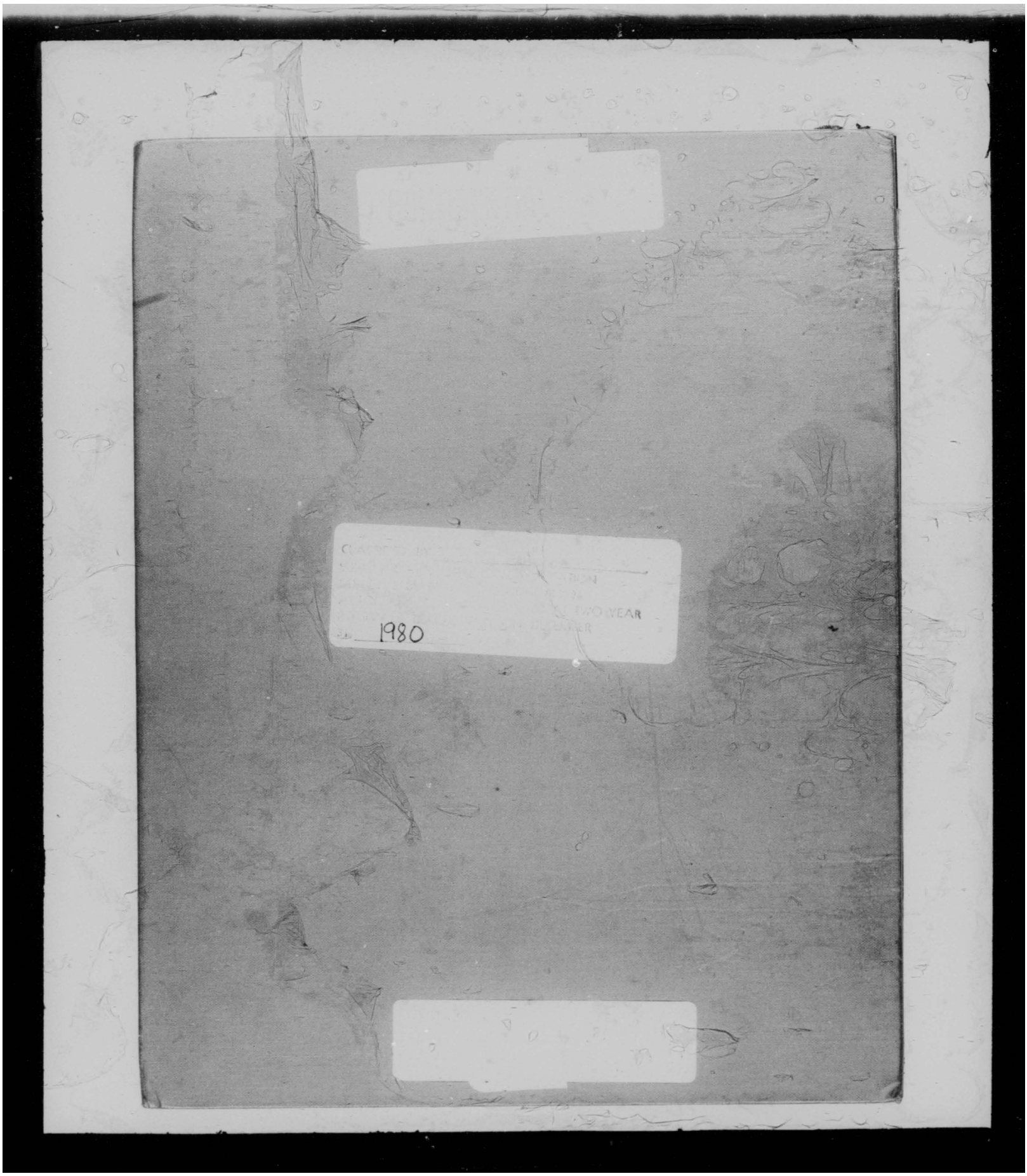
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Allan F. Appel

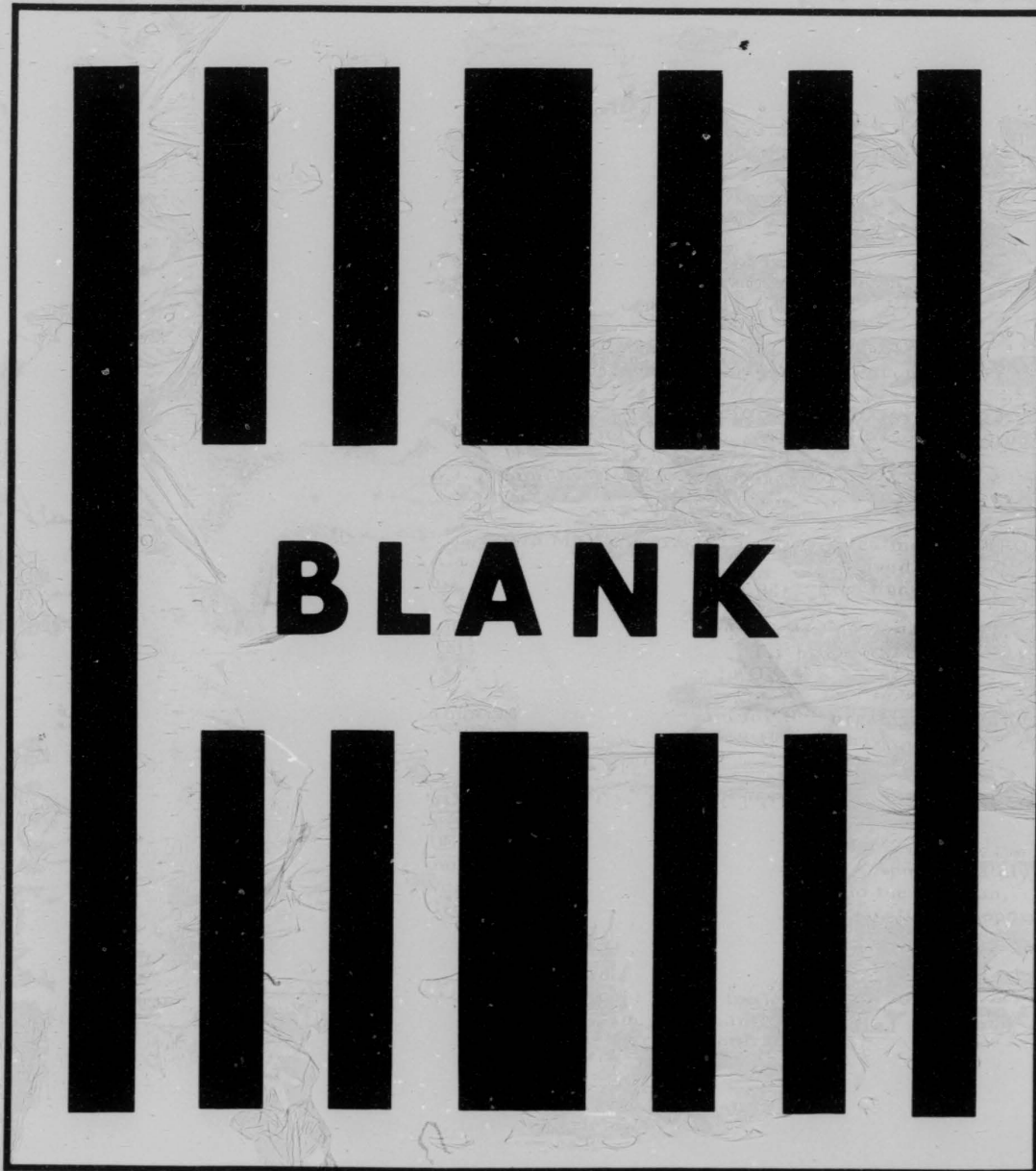
APPROVED BY (Typed name and grade of Commander)
William R. Menzie, Col, USAF

SIGNATURE

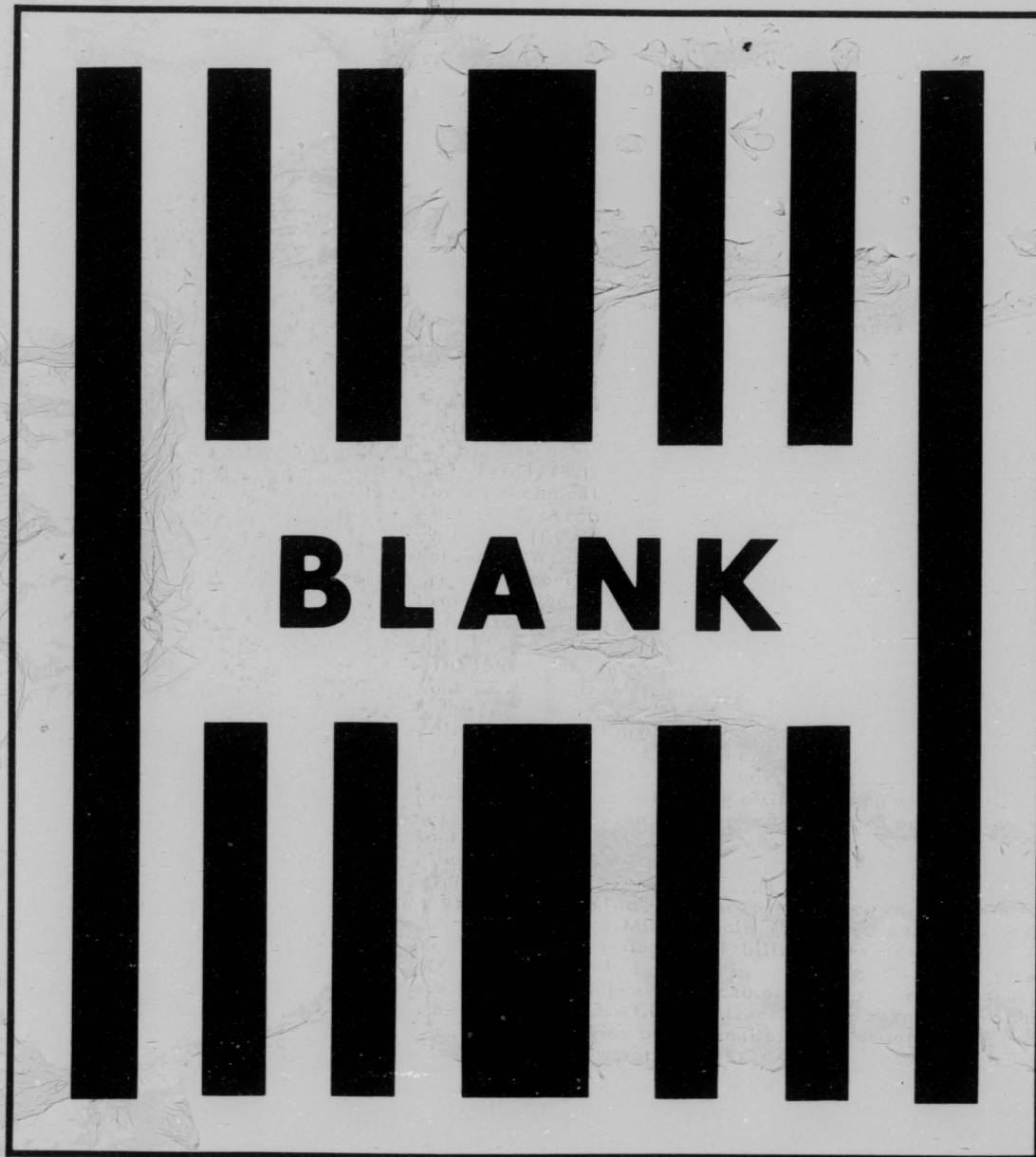
William R. Menzie











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Director Aerospace Studies Inst AFTR, Aerospace Branch Maxwell AFB, Alabama	RETURN TO: V-1 APR JUN 1972 X-DIV-21/4 HT X
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*Quarterly Report
 21 Air Division
 1 Apr - 30 Jun 72*

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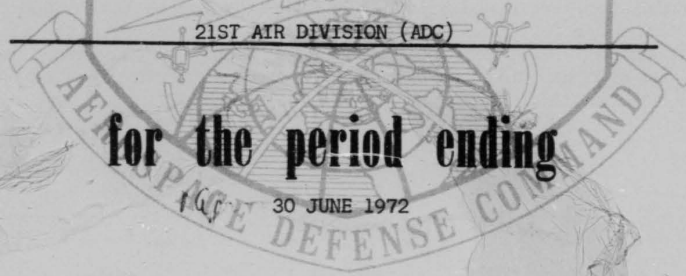
HISTORICAL RECORD

of the

21ST AIR DIVISION (ADC)

for the period ending

30 JUNE 1972



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20 NOV 1979

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903263

FORM ADC JUL 69 102

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

Oct 1

I. REQUIRED DATA				
1. UNIT AND LOCATION		2. NAME AND GRADE OF COMMANDER		
21st Air Division Hancock Field, N.Y. 13225		JAMES L. PRICE, Maj Gen, USAF		
3. CHAIN OF COMMAND (Superior echelons)				
Hqs Aerospace Defense Command Hqs North American Air Defense Command Hqs United States Air Force				
4. SUBORDINATE UNITS (Down to and including squadrons)				
648 Rdr Sq, Benton AFS, PA		49FIS, Griffiss AFB, NY		
655 Rdr Sq, Watertown AFS, NY		57FIS, Keflavik, Iceland		
656 Rdr Sq, Saratoga AFS, NY		Det 1, 49FIS, Niagara Falls, NY		
763 Rdr Sq, Lockport AFS, NY		4784ABGp, Otis AFB, MA		
764 Rdr Sq, St Albans AFS, VT		4624 Spt Sq, Hancock Fld, NY		
766 Rdr Sq, Caswell AFS, ME		4785ABSq, Stewart Field, NY		
772 Rdr Sq, Gibbsboro AFS, NJ		Hqs Air Forces Iceland, Keflavik, Iceland		
773 Rdr Sq, Montauk AFS, NY		667AC&W, Rockville, Iceland		
907 Rdr Sq, Bucks Harbor AFS, ME		932 AC&W, Rockville, Iceland		
762 ADGp, N Truro AFS, MA		4683ABGp, Thule AB, Greenland		
765 ADGp, Charleston AFS, ME		4684ABGp, Sondrestrom AB, Greenland		
46ADMS, McGuire AFB, NJ				
5. MISSION (Give authority and brief statement of primary mission)				
To equip, administer, train and provide combat-ready forces to the appropriate NORAD/CONAD Commander for the Air Defense of the northeastern United States; to exercise command jurisdiction over all assigned units, activities, installations and attached units as directed by competent authority and to support other forces as directed.				
6. PERSONNEL				
	OFFICERS	AIRMEN	CIVILIANS	TOTAL
AUTHORIZED	533	4591	1271	6395
ASSIGNED	578	4640	1239	6457
7. EQUIPMENT (Give official nomenclature and quantity of mission-type equipment)				
ANFSQ-7 Computers, Two (2), plus component consoles and equipment. (For additional information concerning equipment, see Historical Reports of subordinate units listed above).				

I. COMMAND AND CONTROL

Personnel Changes

New Division Chief of Staff

Two key personnel changes in the 21st Air Division staff occurred during May. Coming in as the new Chief of Staff was Colonel Donald E. Ewing and as Deputy Chief of Staff for Operations and Training was Colonel Oscar Bayer.

Prior to his assignment to the 21st, Colonel Ewing was Vice Wing Commander of the 552nd AEW&C Wing at McClellan AFB, California. A 29-year Air Force veteran, the Colonel has flown 20 different aircraft, from the B-17 through the AT-7 to the C-130. Colonel Ewing replaced Colonel Charles Bergeson in the post.

Change of Command Actions

There were two command changes at subordinate units during this reporting period.

Lt Col James W. Vorhies, former Chief of Maintenance of the 319th FIS, Malmstrom AFB, Montana, assumed command of the 49FIS, Griffiss AFB, New York, from Colonel Douglas Brenner on June 30, 1972.

Distinguished guests attending the ceremony included Maj Gen James L. Price, Division Commander, Major General Franklin A. Nichols (USAF Ret), and local civic and community leaders. The ceremony was

highlighted by a flyover of F-106 aircraft of the 49FIS.

In another action, Major Larry King replaced retiring Major Robert Hall as Commander of the 763rd Radar Squadron, Lockport AFS, New York, on April 20, 1972. General Price presided over the ceremony.

Prior to assuming command of the Lockport site, Major King commanded the 26th Air Defense Missile Squadron, Otis AFB, Massachusetts until its recent closure.

II. OPERATIONS

Control Center

Manning

Control Center manning decreased by 19 personnel during this reporting period. The current manning totals are:

	<u>Authorized</u>	<u>Assigned</u>
Officers	64	56
Enlisted	<u>162</u>	<u>126</u>
Total	226	182

Intercepts

Control Center Intercept Directors accomplished 3,500 live intercepts, 4,184 simulated intercepts and 1,633 BOMARC intercepts during the quarter for a total of 9,317 intercepts.

Exercises

Six Fertile Gain exercises and one Fertile Indian simulated Region-level exercise were used to develop individual and crew proficiency in Aerospace Defense techniques during the period of April through June.

The Control Center also participated in four live exercises, three Fertile Keynotes and one Fertile Brave, locally developed to train personnel in Level IV and Level V procedures. Amalgam Hunt and Amalgam Fairplay 72-4 simulated NORAD-wide exercises, were conducted to train personnel in all aspects of Aerospace Defense techniques.

The Control Center also provided control for four practice ORIs, the 132nd FIS on April 8, the 134th on May 23, May 27 and June 3, and an ORI for the 132nd FIS on May 6. The positioning results were satisfactory.

William Tell Competition

Trials for the William Tell competition were held on May 4 for the 49th FIS, May 5 for the 134th FIS and May 9 for the 132nd FIS. The 132nd FIS shot a perfect round for a total of 1,800 points and is scheduled to be in the William Tell competition in September at Tyndall AFB, Florida, along with the 134th.

Exercise and Analysis

Live exercises scheduled during the quarter were as follows:

Fertile Keynote 72-12	April 8
Snowtime 72-5	April 19 (cancelled)
Fertile Keynote 72-13	May 6
Fertile Brave 72-4	May 24
Fertile Keynote 72-14	June 7
Amalgam Arrow	June 22

Simulated exercises scheduled during the quarter were as follows:

Amazon Hunt 72-3	April 12
Fertile Indian 72-8	May 10
Fairplay 72-4	June 24-30

Communications and Electronics

On June 6, 1972, a request was submitted to Headquarters Aerospace Defense Command for approval to obtain an AN/GSA-33 group amplifier to support the ADOLA ground to air communications system at Rockville, Iceland. This amplifier group is used to drive speakers off the MICRO-WAVE system. The system has an ALTEC 453A telephone repeater to drive a set of speakers which is designed for a low voltage application. The amplifiers are not adequate to drive speakers without adding excessive distortion to the signal. Required operational date for this installation is the third quarter of FY 73.

Rockville is currently using an AN/GSA-33 on loan from the Navy.

During this quarter, two LRRs, Saratoga AFS, New York, and North Truro AFS, Massachusetts, commissioned their AIMS/Common Digitizers. Two more sites, Caswell AFS and Benton AFS, are due to receive this equipment and are programmed for commissioning during August.

Aircraft Transfers

Support aircraft transfers affecting the 21st Air Division during this reporting period were:

- (1) T29 #500188 was transferred from the 4784th ABGp to the 102nd Ftr Gp (ANG) on June 9.
- (2) C54 #449044 was transferred from the 4784th ABGp to ATC on June 23.
- (3) T29 #515137 was transferred from the 4784ABGp to 4789ABGp on June 30.

Aid to Flood Victims

During the recent flooding of New York and Pennsylvania, the Air Force pitched in to assist in rescue efforts and aid in evacuations, shelter, supply and communications.

The heavy rains due to Hurricane Agnes caused severe flooding of northern Pennsylvania and southern New York. Hardest hit were the cities of Elmira and Corning, New York, Wilkes Barre, Pennsylvania and their surrounding areas.

In Pennsylvania, the Susquehanna River reached a height of more than 40 feet in the Scranton Wilkes-Barre area. Pennsylvania's only active Air Force unit, the 648th Radar Squadron at Benton AFS, was quick to step in and offer their help.

During the crisis, telephone communications with the heavily populated Wilkes-Barre area were completely lost and Benton became the focal point for information. Through the Benton switchboard, information on flood conditions was disseminated to anxious relatives, friends and news sources. Intermittent weather reports were received from the

21st Air Division and relayed for broadcast on local radio stations.

Two citizen band radios were brought in and put to use for transmitting messages when telephone lines became too congested. Military families were evacuated to the base and housed in base quarters. Civilians were given supplies including cots, mattresses and blankets. Site personnel also made emergency pick-ups and deliveries of medical supplies to stricken areas. Throughout the crisis, civilian authorities and the military combined forces in an effort to combat the rising waters.

In New York, the badly hit Southern Tier cities of Elmira and Corning were inundated with volunteers after the water receded. Air Force volunteers from Hancock Field trucked donated supplies, food and clothing to the flood area during the first crucial days.

In addition, money was collected for flood relief at Hancock. The money was turned over to the Red Cross fund drive.

At the same time, Lake Oneida spilled over its banks and heavily damaged the shore area in Cicero, New York. Hancock Field personnel and vehicles helped evacuate residents and aided flood control work.

III. PERSONNEL

Reductions in Force

As a result of the reorganization and realignment of the 21st Air Division (see History of the 21st Air Division, 1 Jan 1972 - 31 March 1972), civilian authorizations in the Division were reduced by 20 spaces effective June 30.

The Supply and Services function, Maintenance Staff, Civil Engineering and Procurement function at Hancock Field, New York and Stewart Field,

New York, were absorbed by Headquarters ADC.

Reduction-in-force procedures were used in the transfer of spaces to ADC. Seven employees declined offers to transfer with their functions. Six of the seven employees accepted offers to fill vacancies within the Division group and support functions. One employee declined placement assistance and was separated.

Division Airman of the Year Award

SMSgt Billy Grant, NCOIC, Processing Section, CBPO, Hancock Field, New York was selected as the 21st Air Division Outstanding Airman of the Year for 1971 during April of this year.

Sergeant Grant was chosen for the honor over nominees from ten other Division units. He was selected on the basis of his duty performance, community and base activities, appearance and bearing and service to his unit and the Air Force.

As Airman of the Year, Sergeant Grant received an Air Force Commendation Medal for outstanding achievement and a \$100 savings bond. His unit of assignment also presented him with several awards.

Other nominees to the Division were:

SSgt Francis X. Dean, 772 Radar Squadron, Gibbsboro AFS, NJ
MSgt Lowell T. Grant, 655th Radar Squadron, Watertown AFS, NY
A1C Paul E. Gustafson, 26ADMS, Otis AFB, MA
SSgt Robert T. Locastro, 49FIS, Griffiss AFB, NY

SMSgt Richard C. Buxton, 57FIS, Keflavik, Iceland
MSgt Odies J. Whitley, 656th Radar Squadron, Saratoga AFS, NY
TSgt Leroy M. Gray, 4624 Spt Squadron, Hancock Field, NY
MSgt Larry A. Berberick, 4784th Air Base Group, Otis AFB, MA
MSgt Monte J. Forney, 765ADGp, Charleston AFS, ME
MSgt Lloyd A. Ford, 907th Radar Squadron, Bucks Harbor AFS, ME

IV. SAFETY

The Safety Office consisted of three divisions: Flight, Missile/
Nuclear and Ground. During this period, the office was manned by the
following personnel:

Lt Col Richard W. Holm, Chief of Safety
Major Robert Atwater, Flight Safety Officer
Capt Joseph E. Custis, Missile Safety Officer
Capt Gerald L. Isaac, Nuclear Safety Officer
Mr. Carl F. Pommer, GS-12, Ground Safety Officer
MSgt Stanley R. Bates, Safety Superintendent
TSgt James H. Bowie, Traffic Safety Education Instructor

Major Atwater arrived June 26 to replace Major John McMahon as
Flight Safety Officer. Captain Isaac arrived on April 19 to fill the
authorized X4625A positions.

Flight Safety

There were no major or minor aircraft accidents during this quarter.

Missile/Nuclear Safety

The Division experienced no missile/nuclear accidents or nuclear incidents during this quarter. There was, however, one missile incident. It involved a download of munitions on an F-106. After the aircraft was loaded and bay doors closed, the rails holding the weapons extended and when the bay doors were opened they struck the rear weapons breaking them in two. There were no personnel injuries or explosions. The cause factor is unknown.

Ground Safety

During this reporting period, the Division experienced the following ground accidents:

Government Vehicle - 10

Private Vehicle - 9

Sports - 1

Industrial - 1

Domestic - 1

Fatalities - 1 (Swimming)

APPENDIX I

G-Series Special Orders - 1 April - 30 June 1972

S.O. G-18, Hqs 21st	4 April 1972
S.O. G-19, Hqs 21st	5 April 1972
S.O. G-20, Hqs 21st	11 April 1972
S.O. G-21, Hqs 21st	17 April 1972
S.O. G-22, Hqs 21st	25 April 1972
S.O. G-23, Hqs 21st	25 April 1972
S.O. G-24, Hqs 21st	26 April 1972
S.O. G-25, Hqs 21st	3 May 1972
S.O. G-26, Hqs 21st	3 May 1972
S.O. G-27, Hqs 21st	11 May 1972
S.O. G-28, Hqs 21st	18 May 1972
S.O. G-29, Hqs 21st	19 May 1972
S.O. G-30, Hqs 21st	5 June 1972
S.O. G-31, Hqs 21st	6 June 1972
S.O. G-32, Hqs 21st	12 June 1972
S.O. G-33, Hqs 21st	12 June 1972
S.O. G-34, Hqs 21st	12 June 1972
S.O. G-35, Hqs 21st	14 June 1972
S.O. G-36, Hqs 21st	14 June 1972
S.O. G-37, Hqs 21st	26 June 1972
S.O. G-38, Hqs 21st	30 June 1972





