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ON FILM

HISTORY

OF

THE

6994TH SECURITY SQUADRON

1 JULY 1970 - 31 DECEMBER 1970

RCS: USS-D3

Pages 20-24

1 APRIL 1970

[redacted]

6994 SECURITY SQUADRON, APO SAN FRANCISCO 96307

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USAFSS FORM 1 JUN 57 86-1

HISTORY OF THE 6994TH SECURITY SQUADRON

1 July 1970 through 31 December 1970

RCS: USS-D3

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Approved:

LEON S. INGE, Colonel, USAF
Commander

[redacted]

FOREWORD

This historical report covers the period 1 July 1970 through 31 December 1970 for those operations performed by the 6994 Security Squadron and staged from Tan Son Nhut Airfield, Republic of Vietnam.

The report concerns itself with the overall operational concepts of the 6994 Security Squadron in the day-to-day performance of a direct support mission for Tactical Field Commanders. This record has been compiled in an effort to provide a continuity of documentation of the Airborne Radio Direction Finding program in support of an armed conflict.

Historical accounts of Detachments 1, 2, and 3 of the 6994 Security Squadron have been documented individually by these units.

This history is subject to revision. Additional information or suggested corrections will be welcome.

This report was prepared and typed by Master Sergeant Buddy W. McGuire while fulfilling the position of Unit Historian as an additional duty.

[redacted]

THE TRAVIS TROPHY AWARD

On 22 September 1970, I received word from Colonel James S. Novy, Commander, Pacific Security Region, that Major General Carl W. Stapleton, Commander, United States Air Force Security Service (USAFSS), had directed that I be at San Antonio, Texas on 27 September 1970. No reason was given, but I was assured the 6994 Security Squadron was not in trouble. Upon arrival at Hq USAFSS, I learned that my presence was required to represent the 6994 Security Squadron as the USAFSS nominee for the annual Travis Trophy Award during ceremonies at Fort Meade, Maryland on 30 September 1970.

On 28 September 1970, the 6994 Security Squadron was presented the USAFSS Freedom Through Vigilance Award by General Stapleton in a ceremony at San Antonio, Texas, and the following day, General Stapleton and I flew to Washington, D. C. The Travis Trophy presentation ceremony on 30 September was extremely impressive. In attendance were several hundred dignitaries from the United States and Allied Intelligence Communities, along with the three Service Cryptologic Agency Chiefs, and the Commanders of the unit nominees. At the end of a very well done slide briefing on the accomplishments of the nominated units, Vice Admiral Noel Gayler, Director, National Security Agency, announced that the winner was the 6994 Security Squadron.

Leon S. Inge

LEON S. INGE, Colonel, USAF
Commander

Listing of Key Personnel

Commander - Lt. Col. Leon S. Inge

First Sergeant - MSgt Robert W. Loy

Operations Officer - Lt. Col. Jack Barnes

Assistant Operations Officer - Captain Gary D. Belcher

NCOIC Operations - CMSgt Ottis L. Livingston

OIC ACC - Major David A. Brigman

NCOIC ACC - CMSgt John H. Thompson

OIC Mission Management - Captain William J. Sayles

NCOIC Mission Management - MSgt Buddy W. McGuire

OIC Local Operations - Captain Edward J. Miller

NCOIC Local Operations - SMSgt Ardell R. Sjolander

OIC Communications Security - Captain Jon C. Bergstrom

NCOIC Communications Security - MSgt Billy D. Reece

OIC Material/Maintenance - Major Robert J. Cashatt

NCOIC Material/Maintenance - SMgt Jay A. Myers

OIC Supply - Captain Dennis J. Sheridan

NCOIC Supply - MSgt A.J. Edwards

NCOIC Communications - TSgt Martin V. Cameron

NCOIC Administration - MSgt Walter A. McDonald

NCOIC Security Police - TSgt C.J. Hinsey

NCOIC Personnel - SMSgt Kenneth L. Galloway

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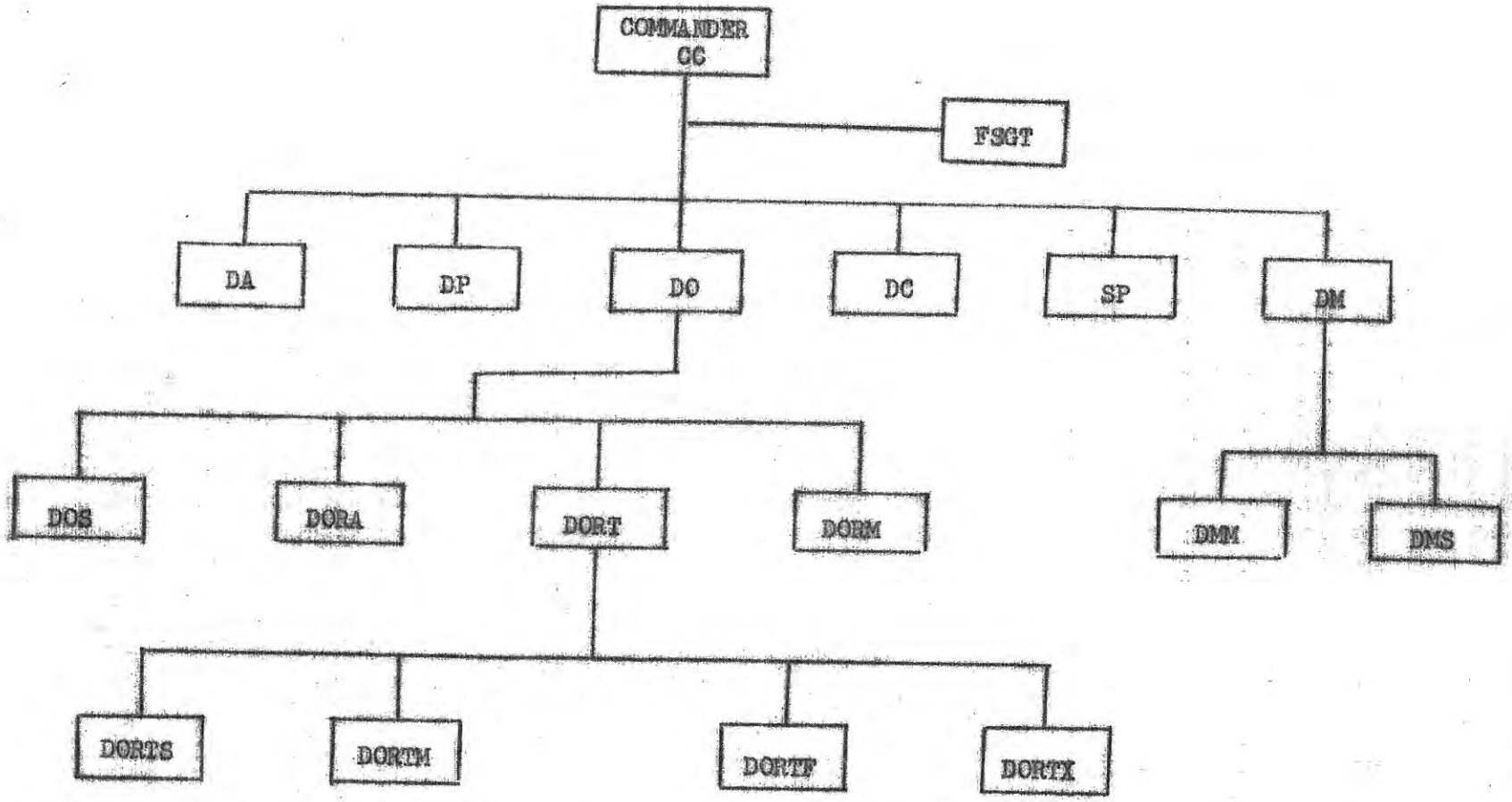
6994 SCTY SQ

ORGANIZATIONAL CHART



DA-Administration; DP-Personnel; DO-Operations; DC-Communications; SP-Security; DM-Material
DOS-COMSEC; DORA-ACC; DORT-Local Ops; DORM-Sq Man Mgt; DMM-Maintenance; DMS-Supply; DORTS-
Stan/Eval; DORTM-Abn Man Mgt; DORTF-Abn Sked'ng; DORTX-Anal/Reporting.

[redacted]

LIST OF ILLUSTRATIONS

[redacted]

[redacted]

[redacted]

I. MISSION AND ORGANIZATION

Mission

[redacted] Headquarters for the 6994 Security Squadron (Scty Sq) was located at Tan Son Nhut Airfield (AFLD, Republic of Vietnam (RVN). The operational mission of the 6994 Scty Sq was to conduct Airborne Radio Direction Finding (ARDF) and specified Communications Intelligence (COMINT) collection against enemy targets in the III and IV Corps Tactical Zones (CTZ), and Cambodia in direct support of the Military Assistance Command, Vietnam (MACV). Another mission of the 6994 Scty Sq was providing direct Communications Security (COMSEC) support to Tactical Commanders and 7th Air Force (7AF).[1]

(U) In addition to the mission performed in III and IV CTZ's, the 6994 Scty Sq provided Command, Operational, and Administrative control for the three subordinate units located at Phu Cat Air Base (AB), RVN, DaNang AB, RVN, and Nakhon Phanom Royal Thai Air Force Base (RTAFB), Thailand.[2]

[redacted] The Command, Administration, Personnel, Communications, and Operations functions were located in the Air Force Special Security Office (AFSSO) 7AF Compound within the 7AF Headquarters Compound at Tan Son Nhut AFLD, RVN. The Squadron Logistics function was located on the flight line

[redacted]

[redacted]

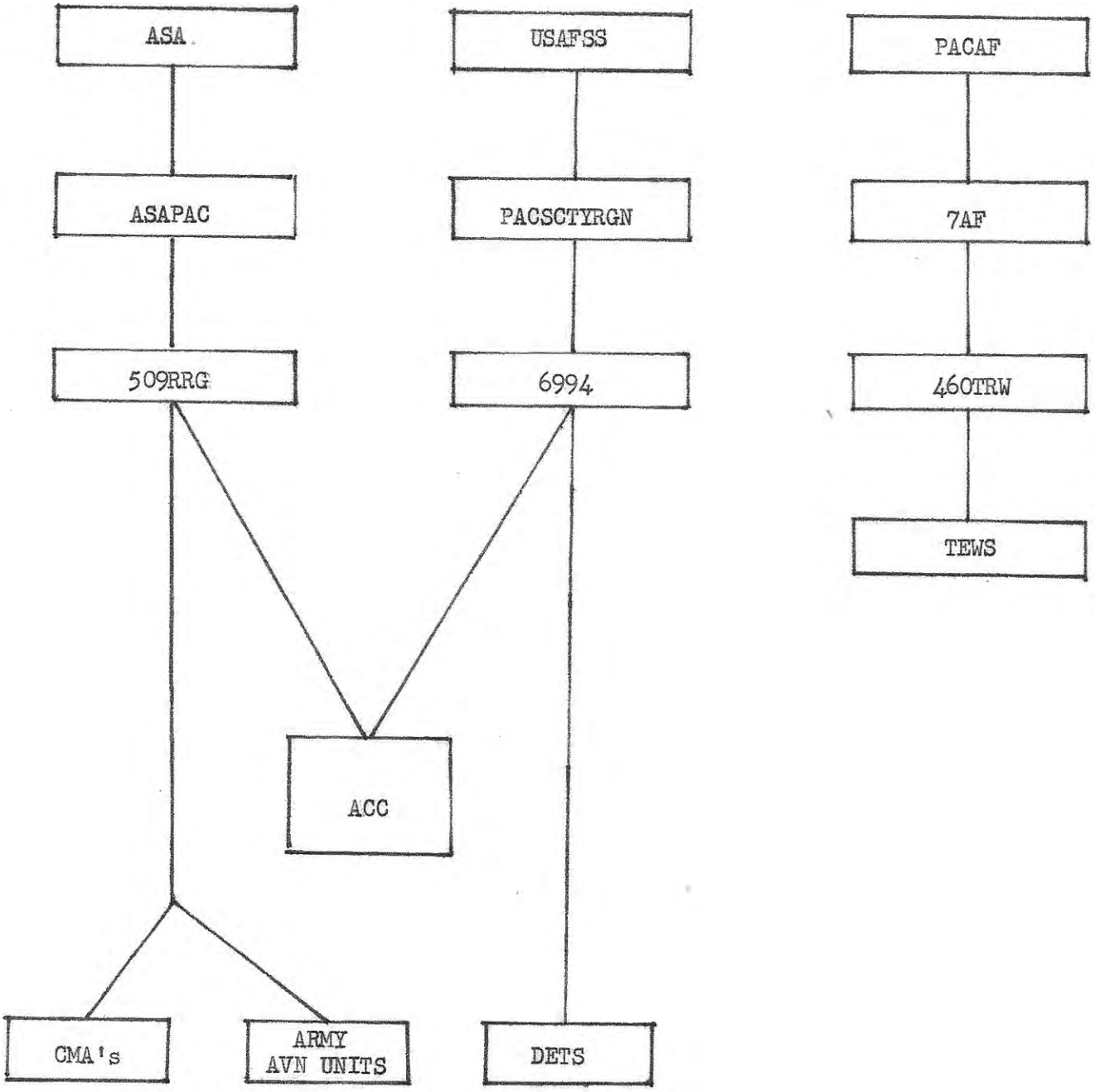


CHART #1

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ARDF

OPERATIONAL CONTROL

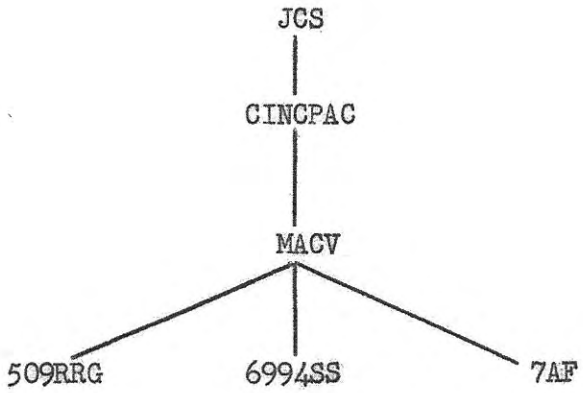

CHART #2

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ORGANIZATIONAL CHART

6994 SCTY SQ

COMMAND RELATIONSHIP

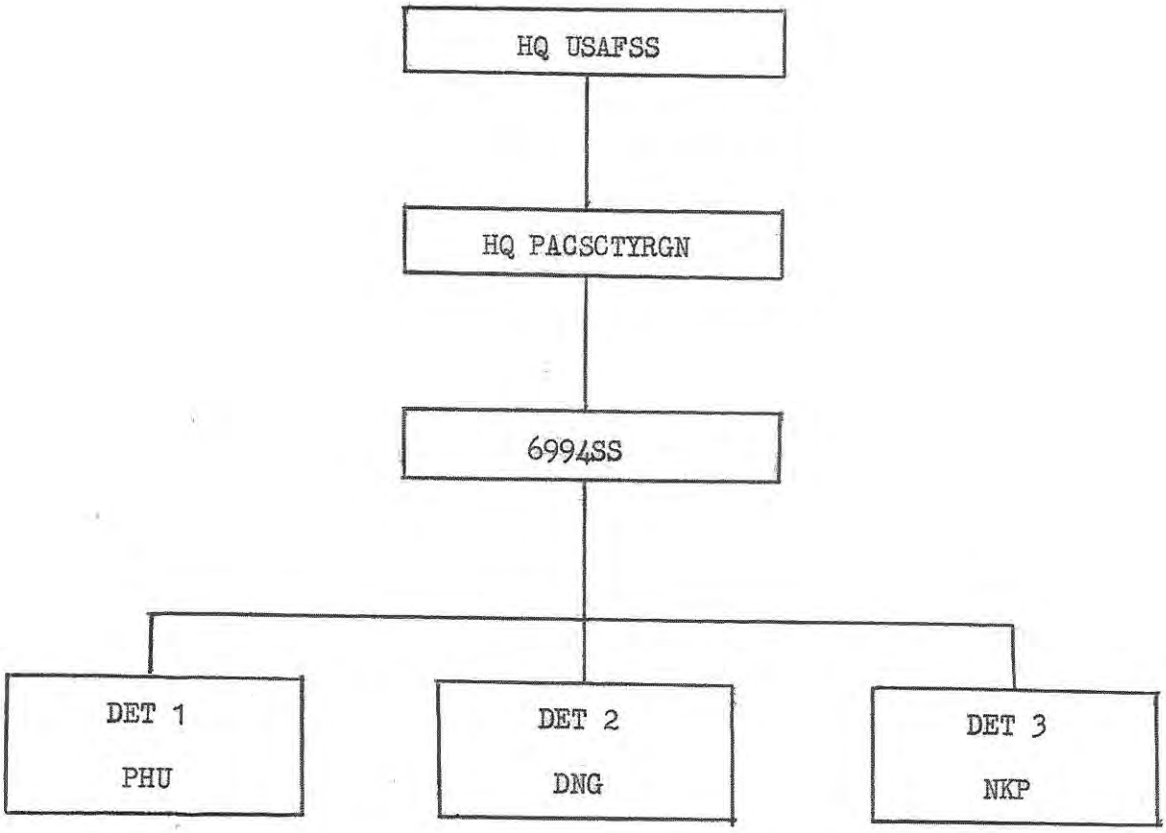


CHART #3

[redacted] adjacent to the 360 Tactical Electronic Warfare Squadron (TEWS). The 360 TEWS directly supported the 6994 Scty Sq by providing the necessary aircraft and front end crews. The 360 TEWS was subordinate to the 460 Tactical Reconnaissance Wing (TRW) whose detached units, 361 TEWS, 362 TEWS, and Detachment 1, 360 TEWS supported the United States Air Force Security Service (USAFSS) operations at Phu Cat AB, DaNang AB, and Nakhon Phanom RTAFB, Thailand, respectively.[3]

[redacted] The 6994 Scty Sq performed the ARDF mission in South Vietnam and Cambodia aboard EC-47 platforms throughout the entire reporting period and were tasked with the completion of any of three types of missions utilizing two separate position/equipment configurations: COMBAT CROSS (CC) and COMBAT CROSS ZULU (CCZ). In subsequent portions of this historical account the specific tasking for each of these positions and configurations is outlined in further detail.[4]

Organizational Structure

(U) The 6994 Scty Sq was subordinate to Pacific Security Region (PacSctyRgn) located at Wheeler Air Force Base, Hawaii.[5]

[redacted] In view of the daily inter-service involvement through out the entire ARDF program in Southeast Asia (i.e. Army, Navy, Air Force, Australian, Vietnamese), the general

[redacted]

operational control of the entire ARDF effort was exercised by the Commander, United States Military Assistance Command, Vietnam (COMUSMACV).[6]

Internal Organizational Structure

(U) The 6994 Scty Sq integral support functions consisted of Administration, Personnel, Airborne Equipment Maintenance, Operations Supply, Communications, and Security and Law Enforcement.[7]

(U) The Operations functions consisted of Local Operations, Squadron Mission Management, COMSEC, and Airborne Coordination Center (ACC).[8]

[redacted] Local Operations was responsible for the management of airborne mission resources located at Tan Son Nhut AFLD. This function directed, coordinated, and controlled personnel and mission equipment toward achieving maximum mission effectiveness. They provided for all operational missions and were responsible for scheduling and training newly assigned airborne personnel. They coordinated with ACC and 360 TEWS on all changes to mission tasking and published daily flying schedules of all fragged mission areas. They performed analysis and reporting on all ARDF and COMINT Intercept collected, prepared daily/weekly evaluations and reports on the Squadron's ARDF/

[redacted]

Collection accomplishments.[9]

[redacted] The Squadron Mission Management function was responsible for the staff supervision of all ARDF and COMINT Collection missions at the 6994 Scty Sq and subordinate detachments.[10]

[redacted] The COMSEC function was orginally established at Tan Son Nhut AFLD, RVN, on 1 July 1965 as Detachment 5, 6922 Security Wing (Scty Wg). When the 6922 Scty Wg was deactivated on 1 April 1970, the COMSEC function was absorbed into the 6994 Scty Sq. The mission of the 6994 Scty Sq COMSEC element was unique for an USAFSS unit. This was the only USAFSS COMSEC unit providing full time direct COMSEC support to a tactical commander. This support consisted of providing timely information concerning probable or possible intelligence losses and COMSEC weaknesses on which the tactical commander could base operational decisions. This was accomplished by continual 24-hour monitoring of telephone/radio communications, conducting analysis, and reporting the results directly to 7AF.[11]

[redacted] The ACC function was manned and operated jointly by members of the 509 Radio Research Group (RRG) and 6994 Scty Sq. The mission of ACC was to provide for the coordination of all functions connected with the ARDF program. This included

[redacted]

the scheduling of ARDF and Airborne Intercept Collection (AIC) missions throughout all of Southeast Asia as directed by COMUSMACV.[12]

[redacted](GP 1) The 6994 Scty Sq also provided administrative support to the Security Service Liaison Officer, (SSLO), Electronic Welfare Liaison Officer (EWLO) to 7AF, and USAFSS personnel assigned to Operating Location Delta-Delta (OL-DD), 6970 Support Group. Tasked with separate missions, these activities functioned independently of the 6994 Scty Sq.[13]

[redacted]

[redacted]

Personnel Authorizations

Officers

AFSC	Authorizes	Assigned
H0026/1	1	1
E1516/1	1	1
E3024	1	1
E3234	1	1
E6424	1	1
E8035	4	4
G8035	1	1

Enlisted

A202X0	13	7
R202X0	21	23
U202X0	26	23
A203X1MD	23	19
A291X0	1	6
A29292	1	1
A292X1	105	103
A301X3	18	7
R301X3	9	9
R645X0	5	5
R702X0	10	13
R732X0	1	1
R732X3	1	1
R811X0	1	1

[redacted]

[redacted]

II. SIGINT TASKING AND COLLECTION

Sigint Tasking

[redacted] The Commander, MACV exercised operational control of the ARDF/Collection activities performed by the 6994 Scty Sq. Technical Control of assigned ARDF/Collection-Production activities was exercised by the Director, National Security Agency (DIRNSA).[1]

[redacted] The 6994 Scty Sq was tasked ARDF, Collection, Processing and Reporting of the following entities: (1) Southeast Asia (SEA) Communist High Frequency (HF)/Very High Frequency (VHF) tactical voice, single-channel communications, (2) SEA Communist HF/VHF manual morse communications, and (3) All other entities that may be assigned by applicable authorities.[2]

Basic Missions

[redacted] For the period of this report the 6994 Scty Sq, staging from Tan Son Nhut AFLD, RVN, was tasked with flying fmissions in SEA Areas, 01, 02, 03, 04, and 20 (Cambodia). The primary objective of these missions was to obtain accurate locations through ARDF, of Viet Cong (VC) and North Vietnamese Army (NVA) forces operating in South Vietnam and Cambodia. In addition, the secondary mission was to collect target commun-

[redacted]

ications data in order to derive exploitable intelligence. The 6994 Scty Sq utilized two basic methods of operation in accomplishing this assigned mission.[3]

1. COMBAT CROSS (CC) - The primary objective of CC missions was to fix enemy target transmitters deemed priority targets by MACV. CC aircraft were configured with two individual Sigint positions: the "X" Console and the "Y" Console. The "X" Console was designated the ARDF Acquisition position and was capable of fixing targets within a frequency range of .2 to .16 Megahertz (MHZ). During fix operation, the "Y" Console provided supporting intercept copy of ARDF targets and when time permitted, performed a COMINT collection mission directed toward maximum continuity and development of all hostile target transmitters. The "Y" Console operated within a frequency range of .5 to 30 MHZ.[4]

2. COMBAT CROSS ZULU (CCZ) - This platform differed from the CC configuration in that besides the "X" and "Y" Consoles, a "Z1" and Z2" Console was also an integral part of the overall platform configuration. In normal operation the "Z1" Console was configured for both HF/VHF operation and the "Z2" Console was configured for strictly HF operation. This enabled the "Z1" operator to exploit voice targets from .2 to 300 MHZ and

[redacted]

the "Z2" to be used for manual morse targets from .2 to 30 MHZ. CCZ configured aircraft were responsible for and tasked with the completion of two different types of missions, Primary Collection and Primary ARDF. On those missions tasked with primary ARDF operations, a collection mission was immediately undertaken whenever equipment failure precluded fix operations against enemy target transmitters. The tables on the following pages are provided for further amplification of these two configurations of the aircraft operated by the 6994 Scty Sq during this period.[5]

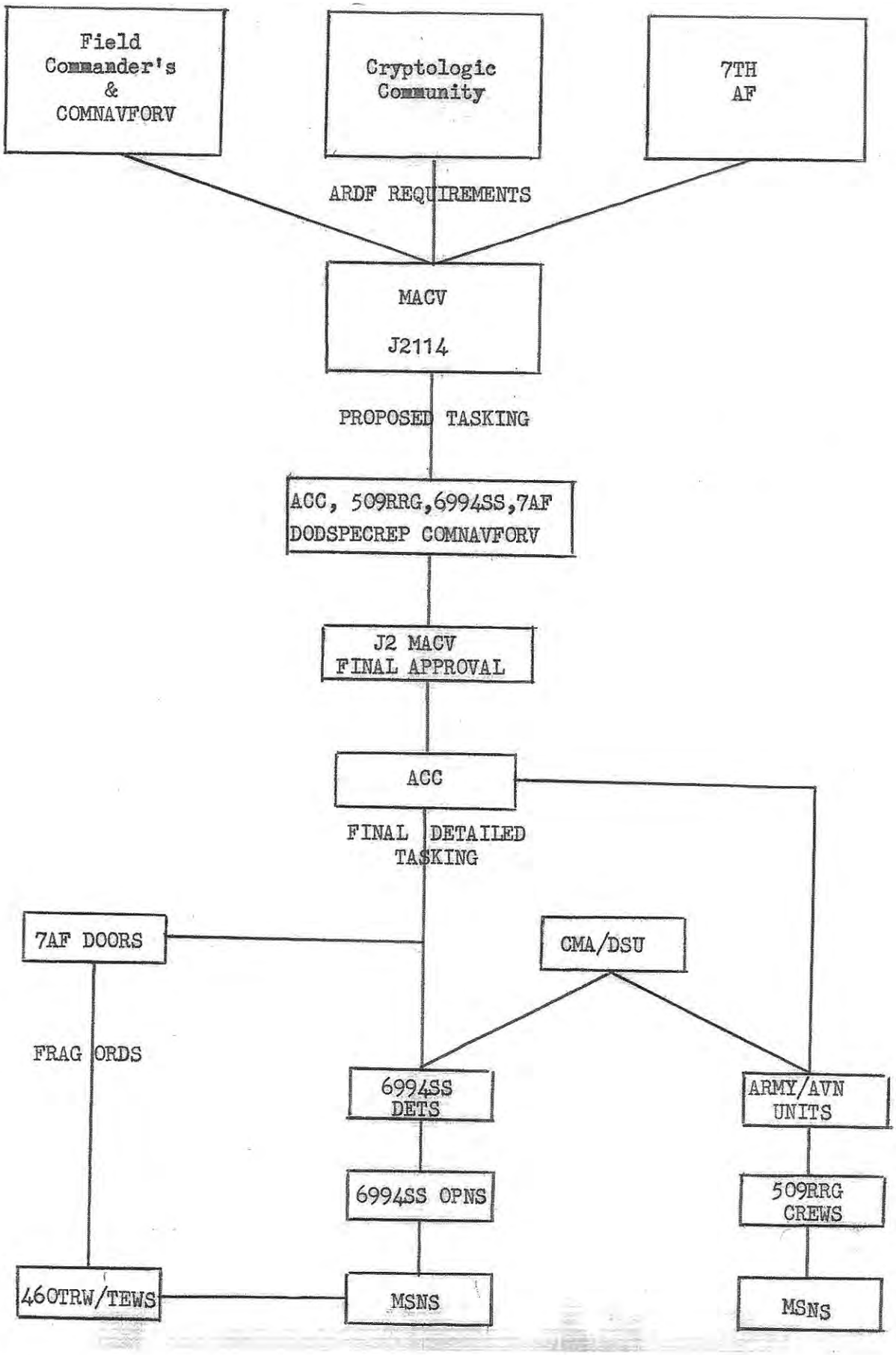
Tasking Cycle

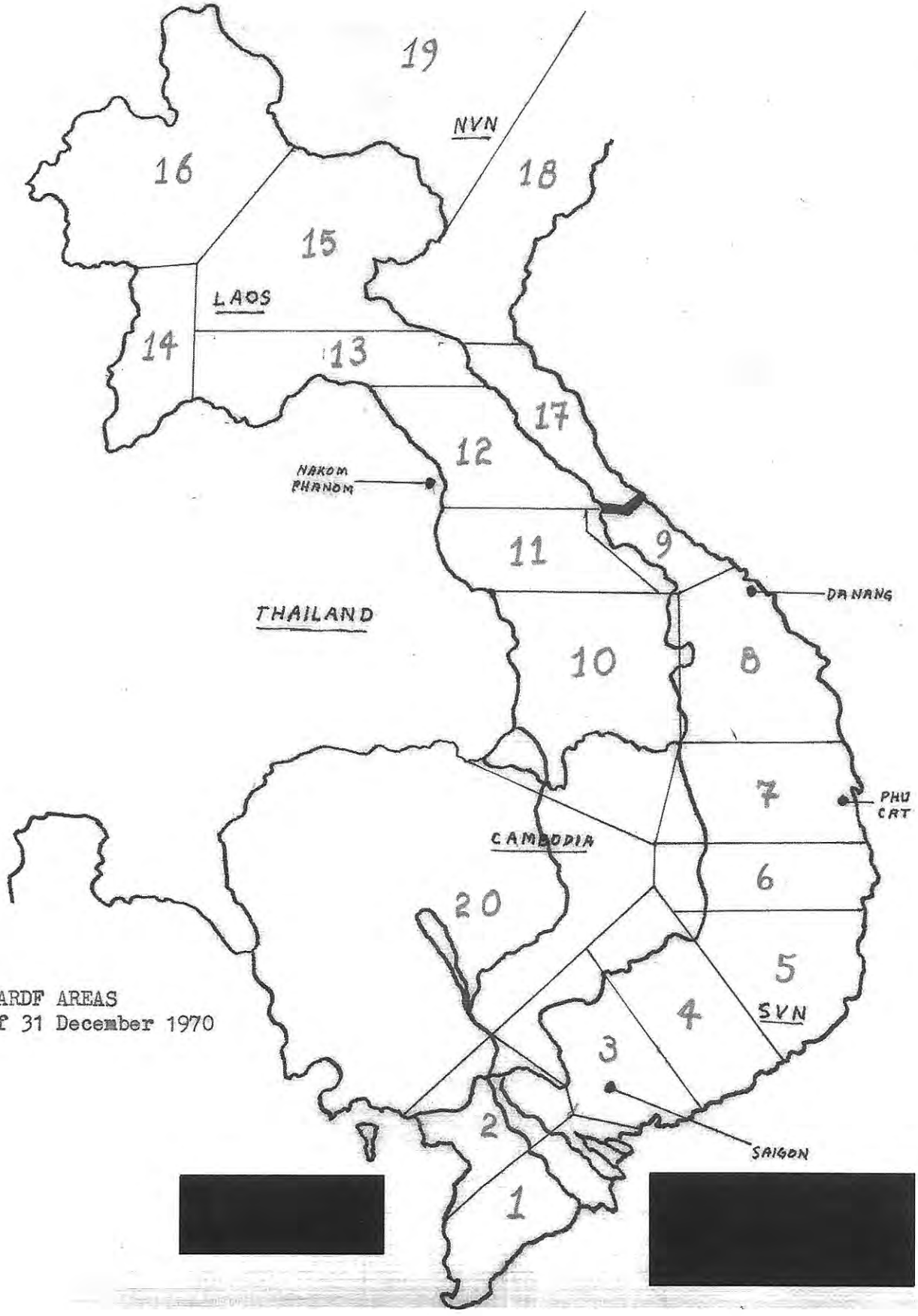
[redacted] The tasking cycle for the ARDF/Collection missions flown by the 6994 Scty Sq was unigue for a USAFSS unit in that the tasks were designed to provide constant tactical support in a highly fluid armed conflict.[6]

[redacted] ARDF/Collection tasking originated with Army and Navy Field Commanders, the Cryptologic Community and 7AF submission of requirements for the coming week. These requests were submitted to MACV (J2-114). On Wednesday of each week, MACV (J2-114) submitted the proposed tasking to the ARDF Coordinating Committee. This committee consisted of representatives (usually Operations Officers) of the 509RRG, 6994 Scty Sq, ACC, MACV (J2), 7AF, Department of Defense Special Representative (DODSPECREP), Controlled American Source (CAS), Saigon,

[redacted]

TASKING CYCLE





SEA ARDF AREAS
as of 31 December 1970

[redacted]

BASIC COMBAT CROSS CONFIGURATION

G-133 HF
RECEIVER
.5-30MHz

AIR-34 or AIR-35
2-16 MHz
C-12 COMPASS
PAN SCOPE

G-133 RCVR

TAPE RECORDER

"X" POSITION

SPECTRUM
DISPLAY UNIT

"Y" POSITION

Capability: "X" Position=ARDF, "Y" Position=Target Acquisition.

Flight Time: 7 Hours

Cruise Speed: 120 Knots

Crew: Pilot, Copilot, Navigator, Flight Mechanic, and 2 Operators.

Communications Radios: 1 VHF Radio, 1 FM Radio, 1 HF Radio and 1 UHF Radio.

Navigation Equipment: TACAN, Weather Radar, and Doppler.

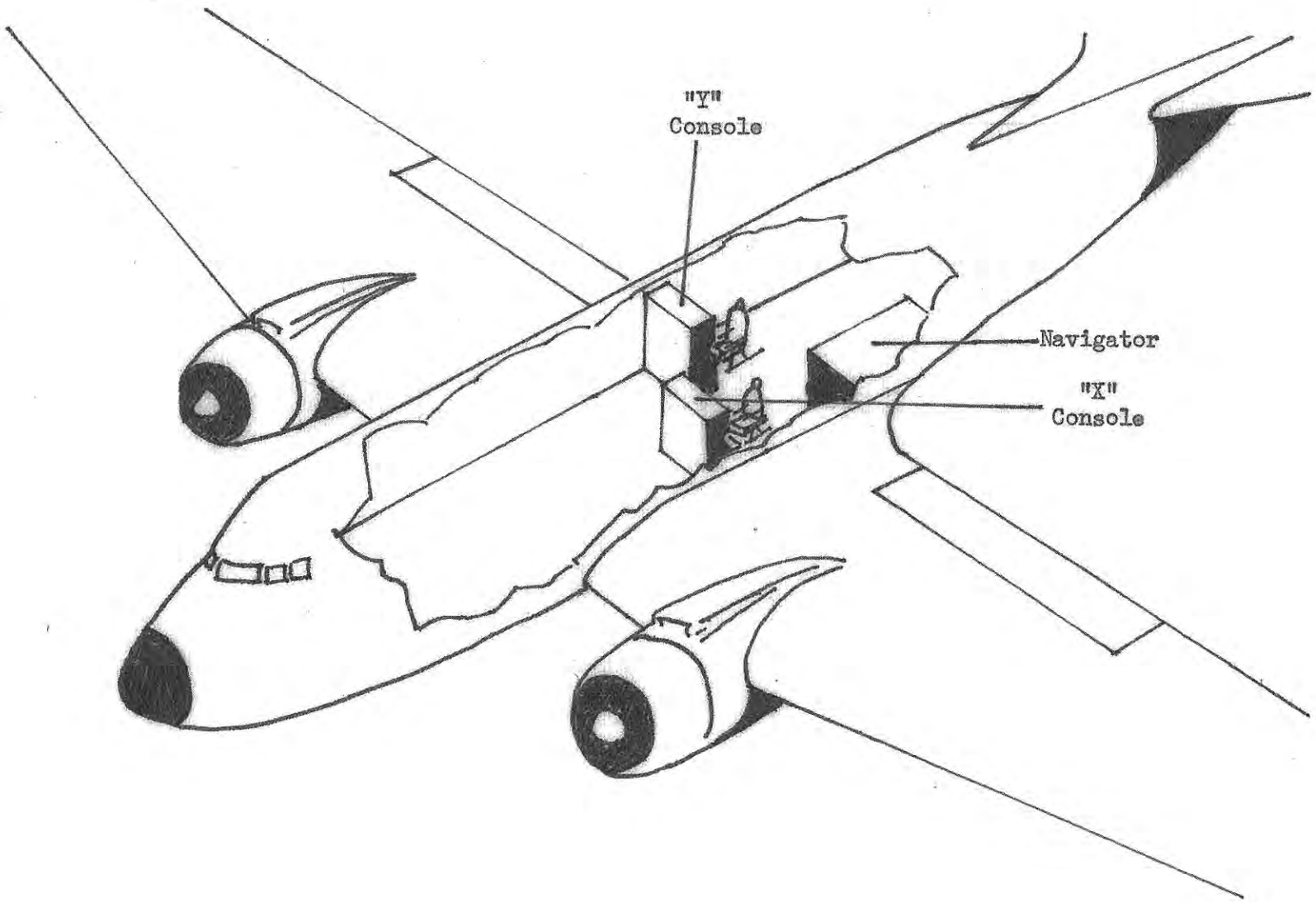
Navigator's Position Includes: Plotting table and Franklin Printer that provides fix data readout.

The AIR-35 system differs from the AIR-34 in that it is coupled with a data processor. The processor converts the target magnetic bearings to true bearings, calculates target location relative to the selected doppler set point and determines the circular error of the fix. In the AIR-34 system these functions are performed manually by the navigator.

TABLE 1

[redacted]

COMBAT CROSS (CC)



[redacted]

COMBAT CROSS ZULU CONFIGURATION

G-133 HF RECEIVER .5-30 MHz	G-133 HF RECEIVER .5-30 MHz	G-133 HF RECEIVER .5-30 MHz	AIR-34 or AIR-35 2-16 MHz C-12 COMPASS PAN SCOPE
G175J VHF 10-260 MHz	G-133 REC	G-133	"X" POSITION
TAPE RECORDER	TAPE RECORDER	TAPE RECORDER	
		SPECTRUM DISPLAY UNIT	
"Z1" POSITION	"Z2" POSITION	"Y" POSITION	

Capability: "X" Position=ARDF, "Y" Position=Target Acquisition/ Intercept, "Z1" Position=Intercept, "Z2" Position=Intercept.

Flight Time: 5 Hours.

Cruise Speed: 120 Knots.

Crew: Pilot, Copilot, Navigator, Flight Mechanic, 4 Operators and 1 Airborne Analyst.

Communications Radios: 1 VHF Radio, 1 FM Radio, and 1 UHF Radio.

Navigation Equipment: TACAN, Weather Radar and Doppler.

The AIR-35 system differs from the AIR-34 in that it is coupled with a data processor. The processor converts the target magnetic bearings to true bearings, calculates target location relative to the selected doppler set point and determines the circular error of the fix. In the AIR-34 system these functions are performed manually by the navigator.

TABLE 2

[redacted]

[redacted]

COMBAT CROSS ZULU

G-133 HF RECEIVER .5-30 MHz	G-133 HF RECEIVER .5-30 MHz	G-133 HF RECEIVER .5-30 MHz	AIR-38 2-50 MHz C-12 COMPASS PAN SCOPE
G175J VHF 10-260 MHz	G-133 REC	G-133 REC	"X" POSITION
TAPE RECORDER	TAPE RECORDER	TAPE RECORDER	
			SPECTRUM DISPLAY UNIT
"Z1" POSITION	"Z2" POSITION	"Y" POSITION	

Capability: "X" Position=ARDF, "Y" Position=Target Acquisition/ Intercept, "Z1" Position=Intercept, "Z2" Position=Intercept.

Flight Time: 7 Hours.

Cruise Speed: 140 Knots.

Crew: Pilot, Copilot, Navigator, Flight Mechanic, 4 Operators and 1 Airborne Analyst.

Communications Radios: 1 VHF Radio, 1 FM Radio, 1 HF Radio, and 1 UHF Radio.

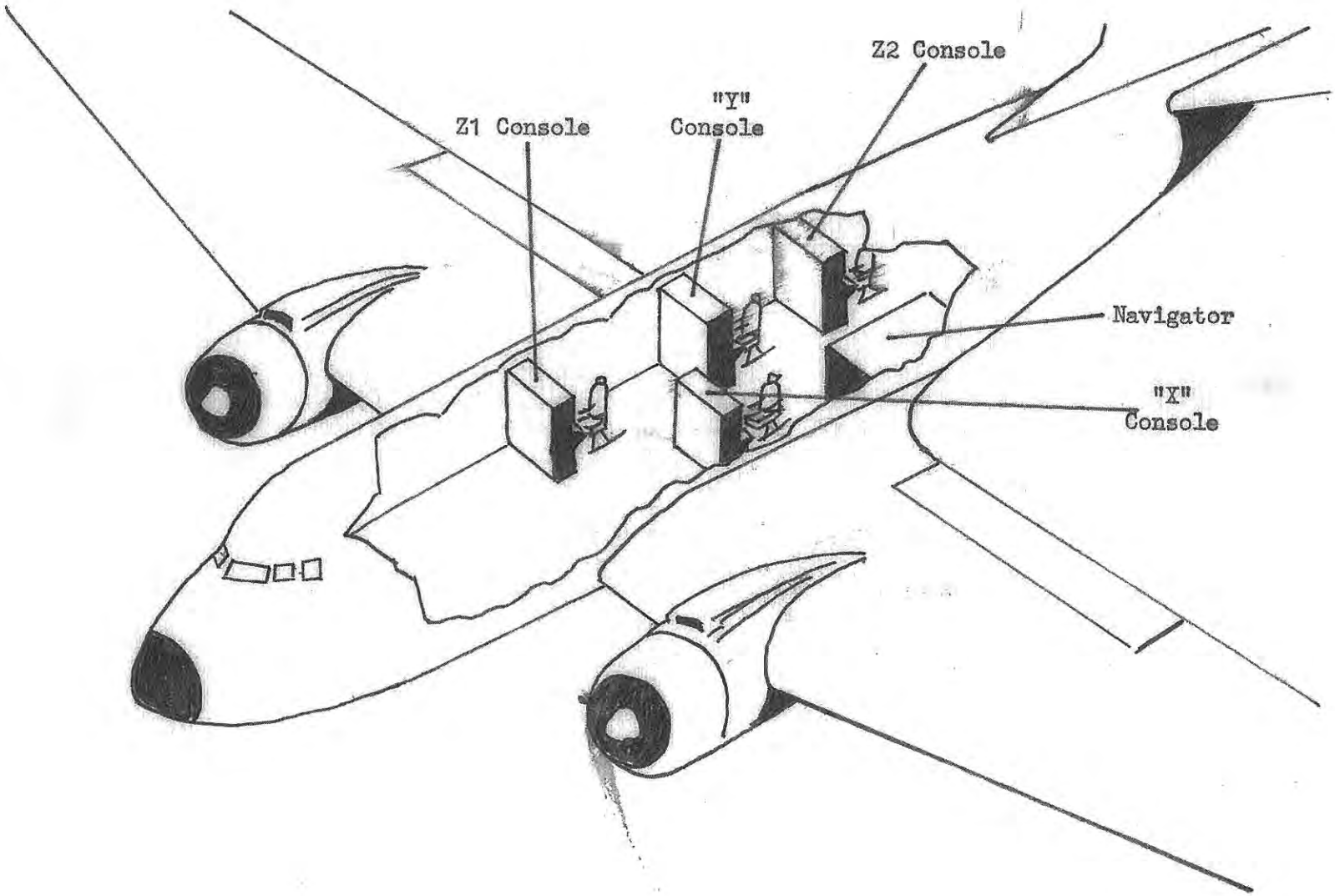
Navigation Equipment: TACAN, Weather Radar, and Doppler.

The AIR-38 system is basically the AIR-35 with the directional finding capability expanded to include the VHF portion of the frequency spectrum.

TABLE 3

[redacted]

COMBAT CROSS ZULU (CCZ)



and the Commander, Naval Forces Vietnam (COMNAVFORV). The Coordinating Committee then passed these recommendations to MACV (J2) for final approval and return to ACC for issuance. While these procedures were ironed out, the 460 TRW provided the ACC with an aircraft availability forecast for the tasking week in question. ACC then assigned individual missions to fulfill the tasking requirement originally generated by the Field Force Commanders to each Collection Management Authority (CMA) and the 6994 Scty Sq on Thursday morning of each week. At the same time ACC provided a "sanitized" version of the tasking to 7AF for issuance of the required Fragmentary Order (FRAG ORDER) for each mission to be flown.[7]

[redacted] With the implementation of Annex India to Techins 1056 on 26 September 1970, the 6994 Scty Sq received position tasking from the appropriate CMA on Friday morning of each week. This tasking was provided by the CMA having the Sigint collection, processing, and reporting responsibility for the specific target area of operations concerned. Prior to each day's series of missions, the applicable CMA provided the majority of technical data. Once airborne, COMBAT CROSS/ COMBAT CROSS ZULU crews, through Direct Support Units (DSU's) had access to additional technical data for individual frag

[redacted]

areas. In addition, DSU's accepted all fixes from the airborne platform, passed tip-offs to the aircraft and accepted messages which were deemed exploitable by the airborne crew.[8]

Annex India to Techins 1056

[redacted] At the close of the previous historical report, actions had been initiated by DIRNSA to provide guidance on technical tasking for both ARDF/Collection positions.[9] On 28 July 1970, DIRNSA informed the 6994 Scty Sq that provisional Annex India to Techins 1056 had been forwarded for formal coordination. The purpose of this annex was to establish standard operating procedures for Sigint technical tasking of Airborne Direct Support (ADS) resources flying in direct support of military commanders.[10]

[redacted] On 5 August 1970, the 6994 Scty Sq received Annex India for review and eventual implementation. On 28 August 1970, the 6994 Scty Sq recommended to PacSctyRgn that subject annex either be rescinded or rewritten as it was not compatible to the tactical requirements of the ADS operations in SEA. These recommendations were based on the following:

1. General tasking of positions for collection by area could be included in the existing Mission Control Directives (MCD) produced each week.

[redacted]

2. CMA preparation of Control Messages (CONMSG) for each mission would place an extremely heavy workload on the CMA, and the CONMSG's would be valueless to the aviation units.

3. ARDF/Collection efforts depended largely upon the technical data contained in the cherry sheets. CONMSG lists of desired targets case notations would not provide this essential information.[11]

[redacted] On 8 September 1970, DIRNSA directed the implementation of Annex India on 26 September 1970.[12] On 19 September 1970, the 6994 Scty Sq requested ACC provide the answers to the following questions prior to implementation of subject annex:

1. How would the CMA assign specific Intercept Assignment Designators (IAD) in CONMSG's? If IAD numbers were assigned to a specific position, how would the CMA know which aircraft would fly that mission? If a change in aircraft occurred, what action was required?

2. Would an additional CONMSG be provided or would original CONMSG allow for switching aircraft types from CCZ to CC or reverse require ACC approval? If ACC approved of switch, would ACC submit Position Effectiveness Report (POEREP)?

3. If diversion was required and authorized by ACC, would diversions be considered cover adjustments and would ACC submit POEREP to CMA?[13]

[redacted]

[redacted] On 20 September 1970, ACC advised the 6994 Scty Sq that the Army Security Agency (ASA) was holding discussions with DIRNSA in an attempt to resolve areas of controversy. In the interim, guidance would be provided by ACC so that all units concerned could uniformally interpet the provisions of Annex India, and implementation could be accomplished with a minimum amount of confusion.[14]

[redacted] On 25 September 1970, ACC advised that due to the unique problem concerning position numbering of ADS resources, the CMA's would assign arbitrary position numbers for CONMSG purposes. The aviation units would record their own position numbers on traffic, tapes, etc. This would enable the CMA's to maintain integrity/continuity of their tasking, and the aviation units would have the necessary base for historical/maintenance records.[15]

[redacted] On 26 September 1970, Annex India was implemented and mission tasking of ARDF/Collection positions was provided by the CMA's via CONMSG's.

[redacted] On 11 November 1970, PacSctyRgn quoted a DIRNSA message to the 6994 Scty Sq which provided an evaluation of the CONMSG tasking system. DIRNSA stated:

...Properly employed, the Annex India will result in

[redacted]

effective tasking and directing of individual collection/ ARDF positions toward desired targets. ...

In order to improve CONMSG tasking and technical support data, DIRNSA requested PacSctyRgn provide the answers to several pertinent questions.[16]

[redacted] On 17 November 1970, the 6994 Scty Sq provided PacSctyRgn with the answers to DIRNSA's queries.[17] On 21 November 1970, PacSctyRgn forwarded these comments to USAFSS and added:[18]

...Formal NSA recognition, support, and tasking of our ground and airborne analysis program would enhance our capability to fulfill the requirements of Annex India for more meaningful and complete Tech support. ...

ARDF Technical Support Test

[redacted] On 24 October 1970, NSA Representative, Vietnam (NRV) [redacted], initiated a 60 day ARDF Technical Support Test to be conducted in two phases.[19] This test pertained to all units in SEA participating in the ARDF program except for LEFT BANK* and Vietnamese Air Force (VNAF). In coordination with ACC, the 6994 Scty Sq and 509 RRG prepared the initial test directive. All aviation units and ground sites were provided with complete procedures and requirements for

*LEFT BANK - Army ARDF helicopters

[redacted]

conducting the test.

[redacted] The primary purpose of the test was to determine if more accurate, timely technical data could be provided to the ARDF units and to improve ground-to-air tipoffs from DSU's.[20]

[redacted] Instead of DIRNSA providing the technical data (Cherry Sheets), the CMA having the responsibility of the SEA area in which the mission aircraft was fragged, was responsible for producing the necessary cherry sheets. This data was forwarded to the appropriate ARDF units and DSUs not earlier than 48 hours prior to mission schedules and included priority one and special emphasis targets only. The cherry sheet data included scheduled time target would be active, predicted callsigns, last fix location, reference designator and MACV priority. By limiting technical data to only those targets of primary interest that had reliable communications schedules, the ARDF platform, by following the scheduled time and last know location listed on the cherry sheet, could be positioned so a fix on the target transmitter could be obtained. When no known priority or special emphasis targets were active the air crews searched for targets of opportunity utilizing a "vacuum cleaner" type coverage.[21]

[redacted] The first 20 days (Phase I) of the test ended on

[redacted]

12 November 1970 and did not provide the hoped for improvements in technical support to ARDF platforms. On 17 November 1970, the 6994 Scty Sq forwarded a consolidated report of the test to NRV[redacted], and recommended the test be terminated or suspended until a revised plan could be implemented and a complete evaluation of Phase I accomplished.[22] On 18 November 1970, PacSctyRgn concurred with this proposal.[23]

[redacted] On 4 December 1970, NRV[redacted] advised that Phase II of the test would begin on 7 December 1970. Only minor changes were made to this phase. The cherry sheet was changed to ARDF Technical Data List (TDL), but contained the same information. Phase II revealed many of the same problems experienced in Phase I. Although there was a marked increase in ground-to-air tip-off on priority targets from DSUs, the accuracy of the technical data provided by the CMAs was still low.[24]

[redacted] On 17 December 1970, NRV[redacted] extended the test until 3 January 1971. Consequently a complete evaluation of the test was not available at the close of this reporting period.[25]

AN/AIR-38 Utilization

[redacted] In order to achieve maximum utilization of

[redacted]

[redacted]

MISSION ACCOMPLISHMENTS

	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
MISSIONS TASKED	340	360	293	302	349	440
MISSIONS FLOWN	338	358	290	302	348	437
FLIGHT HOURS TASKED	2018.0	2143.0	1689.0	1770.0	1939.0	2487.0
FLIGHT HOURS FLOWN	2017.8	2130.8	1658.7	1797.4	1994.3	2472.1
HOURS FLOWN TOT	1464.3	1591.7	1208.2	1325.0	1453.6	1792.3
AMOC	166,530	182,095	154,145	175,455	202,319	240,210
ACTUAL COPY TIME	20,667	21,825	16,327	18,228	22,141	31,035
TARGETS WORKED	2,496	2,574	2,036	2,135	2,660	3,134
TARGETS FIXED	1,364	1,390	1,176	1,139	1,498	1,769
TARGETS CUT	452	523	408	432	544	601
0 - 500 METERS	317	332	264	244	394	428
501 - 1000 METERS	651	637	583	560	771	938
1001 - 2000 METERS	268	293	244	233	233	277

[redacted]

AN/ALR-38 aircraft, the 6994 Scty Sq recommended to PacSctyRgn that non-calibrated ALR-38 aircraft be used for collection purposes. This was based on the fact that aircraft were being modified to AN/ALR-38 capability faster than they could be calibrated.[26] On 19 September 1970, PacSctyRgn concurred with this proposal.[27]

[redacted] In an attempt to improve the fix data of the AN/ALR-38 system, USAFSS conducted a comparison between the AN/ALR-35 and AN/ALR-38 systems. It was determined the variance in the ALR-38 system reliability was attributed to computer programming. USAFSS requested PacSctyRgn provide comments/documentation on any known system facilities which had an impact on fix accuracy.[28] On 28 September 1970, Detachment 2, 6994 Scty Sq provided coments requested by USAFSS.[29]

[redacted] On 14 October 1970, PacSctyRgn advised the 6994 Scty Sq that Pacific Air Forces (PACAF), planned to approach MACV on the feasibility of basing a portion of the AN/ALR-38 configured aircraft at Nakhon Phonom (NKP), Thailand. PACAF requested PacSctyRgn provide the following information: (1) earliest date USAFSS could support deployment of AN/ALR-38 configured aircraft to NKP, and number of aircraft that could be supported initially, (2) desired

[redacted]

phasing of deployment of AN/ALR-38 configured aircraft to NKP, and (3) additional support requirements for five AN/ALR-38 configured aircraft at NKP.[30] On 19 October 1970, the 6994 Scty Sq advised PacSctyRgn that the training program should not represent a problem. However, a rapid transition without thorough planning and preparation for maintenance problems could pose a serious threat to the success of the move.[31]

Joint Courier Activity DaNang (JCAD)

[redacted] On 26 October 1970, the 6924 Scty Sq recommended that in view of the pending deactivation of the 6924 Scty Sq, action should be initiated to transfer the JCAD function to Detachment 2, 6994 Scty Sq. They recommended that coordination between the 6994 Scty Sq and Army Security Agency, Pacific (ASAPAC) be established to ensure proper reaccomplishment of the Memorandum of Agreement between the 6924 Scty Sq and the 509 RRG.[32] On 28 October 1970, USAFSS brought to the attention of DIRNSA the need to renegotiate the current JCAD Memorandum of Agreement. USAFSS was concerned that since the JCAD had been an "out-of-hide" function of the 6924 Scty Sq, The renegotiation of agreement of JCAD to Detachment 2, 6994 Scty Sq would necessitate

[redacted]

an increase in manpower slots. USAFSS requested DIRNSA revalidate the requirement for JCAD, and the requirement to provide raw traffic/tapes to CMA's within 24-hours after intercept.[33]

[redacted] On 30 October 1970, the 6994 Scty Sq informed PacSctyRgn that originally the JCAD function was manned by one Army and two 6924 Scty Sq Air Force personnel. In response to a MACV request in September 1970, an additional daily courier helicopter was added by Army to expedite movement of perishable intelligence from DaNang to various Army units. This expanded the JCAD manning to two Army and two Air Force personnel. The 6994 Scty Sq recommended the two Air Force personnel and associated manning authorizations be transferred to Detachment 2, 6994 Scty Sq in order that the JCAD function continue as presently manned. Further, in view of the possible draw-down of resources and the fact that USAFSS units were not normally responsible for courier activities, it was recommended that MACV and NRV [redacted] be approached in an attempt to relieve Detachment 2, 6994 Scty Sq of this responsibility and to determine if another method or resource could be used to satisfy this requirement.[34]

[redacted] On 2 November 1970, USAFSS

[redacted]

informed PacSctyRgn that although the requirement for JCAD was recognized as valid, there was no documentation to be found to this effect, nor was there any manpower specifically authorized in the manning documents to perform this function. Since NSA was the agency responsible for ensuring that processing/reporting requirements are satisfied, the function would have to be validated by NSA before manpower resources could be justified and allocated to the unit performing the JCAD function. Further, USAFSS agreed with the 6994 Scty Sq that the USAFSS Cryptologic Community were not normally responsible for courier activities. However, the original basis for the establishment of JCAD were: (1) the requirement which could not be found in writing, and (2) the inability of Armed Forces Courier Service (ARFCOS) and other inpcountry systems to deliver raw traffic/tapes within the specified time frame. In conclusion USAFSS stated: "... believe the performance of function will not be detrimental to normal mission as manpower may be allocated against this function."[35]

[redacted] On 24 November 1970, PacSctyRgn stated that DIRNSA advised that: "... the JCAD Memorandum of Understanding dated 29 September 1969 will be renegotiated by 509 RRG and 6994 Scty Sq under MACV (J2) auspices." Justification was

[redacted]

that since MACV orginally tasked the 509 RRG and 6924 Scty Sq to establish the JCAD function, any changes/modifications to the present agreement would have to have MACV (J20 concurrence. The MACV (J2) position was that the 24-hour from time of intercept to report delivery remained a valid requirement.[36]

[redacted] On 1 December 1970, USAFSS directed PacSctyRgn to initiate action to renegotiate the JCAD Memorandum of Agreement. They also advised PacSctyRgn that the Manpower Change Request to provide two additional personnel at Detachment 2, 6994 Scty Sq for the JCAD function had been approved.[37]

[redacted] On 8 December 1970, a discussion took place at DaNang AB, RVN, which included 6994 Scty Sq, 509 RRG, 6924 Scty Sq, Detachment 2, 6994 Scty Sq, and 8th Radio Research Field Station (8RRFS) representatives. The discussions resulted in the formulation of a Memorandum of Agreement between the 509 RRG and 6994 Scty Sq to become effective 1 January 1971. The memorandum provided for the continuation of JCAD operations in response to MACV (J2) requirements. The 8RRFS at Phu Bai, RVN, were tasked with the direct responsibility for JCAD operations, and Detachment 2, 6994 Scty Sq with specific support and liaison responsibilities previously assigned to the 6924 Scty Sq.[38]

[redacted]

Tactical Application of ARDF

[redacted] In an effort to expand the use of ARDF and provide quick reaction of exploitable situations in Cambodia, the 6994 Scty Sq, in coordination with the 460 TRW and 7AF, instituted procedures to pass fix information to an orbiting Photo Reconnaissance aircraft. The first mission under this concept was flown on 3 June 1970 and terminated on 30 June 1970. Although several photographs were taken, they revealed nothing of significance.[38]

[redacted] On 6 August 1970, the 6994 Scty Sq informed PacSctyRgn that due to the high interest generated by this type of coordinated effort, 7AF had directed the resumption of the Photo Reconnaissance/EC-47 missions.[39]

[redacted] On 11 August 1970, a four day test of this concept was conducted. Twenty-nine fixes were passed to an orbiting RF-101 Photo Reconnaissance aircraft. Specific targets concerned were Communist Headquarters, South Vietnam (COSVN) and COSVN Tactical Control Center; however, photographs again yielded no significant results.[40] On 2 November 1970, another exercise using the same air-to-air tip-off procedures was initiated. An RF-4C aircraft was fragged against preplanned targets derived from fixes provided by the

[redacted]

6994 Scty Sq on a daily basis to 460 TRW Intelligence. The reconnaissance aircraft covered the preplanned locations plus the fixes passed from the EC-47 platform. This test terminated on 25 November 1970. Of the 112 targets photographed during this exercise, only four produced any significant results, i.e., small huts, possible long wire antenna configurations, etc., but no targets worthy of strike were revealed. The prevailing canopied terrain and dense foliage largely stymied the effort.[41]

[redacted] On 9 December 1970, the 6994 Scty Sq, advised PacSctyRgn that 7AF had decided to eleminate the ARDF/Photo Reconnaissance program. 7AF stated: "...the concept of A/A ARDF/Photo Coordination was basically sound and should be reserved for future contingency use...."[42]

[redacted] Early in June 1970, the 6994 Scty Sq, 460 TRW, and 7AF in coordination with NRV[redacted], devised a program whereby ARDF results could be further expanded. The 6994 Scty Sq provided 7AF Intelligence a listing of fixes of 1000 meters or less from selected areas in Southeastern and Northeastern Cambodia. This information was then provided to the Target Development Branch where target selection was made and FRAG worksheets submitted to the Directorate, Combat Operations

[redacted]

between 0830 - 0930 hours each day. Once final selections were made, FRAG Orders were issued for Tactical Air (TACAIR) strikes to take place the next day. A Forward Air Control (FAC) aircraft provided visual reconnaissance of the selected target area prior to TACAIR strikes.[43]

[redacted] During the period 1 July 1970 to 1 August 1970, 313 TACAIR strikes were fragged in Cambodia, 109 of which were based solely on ARDF results and 20 on ARDF/FAC visual reconnaissance. Positive Bomb Damage Assessment (BDA) was reported on 31 percent of the strikes generated by ARDF.[44]

[redacted] In a leter to the 6994 Scty Sq, the Special Assistant, Director of Operations Intelligence, 7AF stated:[45]

> ...the excellent cooperation of all concerned, and plain hard work, your organization has contributed immeasurably to the creation of a respectable target data base on NVA/VC units in Cambodia. During the early phases of the air campaign in Cambodia, fixes obtained by 6994th elements were the prime input to 7AF target development. In many cases, ARDF was the only source of information. ...

[redacted] On 22 December 1970, PacSctyRgn was informed that 7AF and the 6994 Scty Sq were developing procedures whereby fix coordinates could be passed from an EC-47 platform to an orbiting FAC aircraft. The theory being that if the FAC finds a worthwhile target he can call in an immediate

[redacted]

TACAIR strike. At the close of this reporting period, operating instructions and procedures were being developed to test this concept in Laos.[46]

Operational Test of Radio Fingerprinting

[redacted] On 10 July 1970, USAFSS informed the 6994 Scty Sq that plans were being coordinated to conduct an operational test of Radio Fingerprinting (RFP) aboard a Zulu configured EC-47 platform. This test was to be conducted utilizing a LEFAIR KNEE RFP System developed by the Army.[47] On 22 July 1970, PacSctyRgn informed the 6994 Scty Sq, that test plans were in initial stages of formulation and would be forwarded during October/November 1970.[48] On 17 November 1970, USAFSS informed the 6994 Scty Sq the starting date for the Airborne RFP Test (Project COMFY NAG), had been slipped to approximately 1 February 1971.*[49]

Water Soluble Paper

[redacted] As reported in the previous historical report, USAFSS granted the 6994 Scty Sq a waiver to carry the NSA Tasking Listing and Mission Priority Listing (Cherry Sheets) aboard mission aircraft without being printed on water soluble paper. This waiver expired on 31 December 1970.[50]

[redacted] On 23 December 1970, PacSctyRgn was requested

*Test was originally scheduled to begin on/about 15 Sep 1970. (Hist,TSCW-NOFORN, 6994Scty Sq,1 Jan-30 Jun 70, p 34)

[redacted]

to amend this waiver to include Hestia Pads and to approve an extension of the waiver.[51] PacSctyRgn agreed and recommended to USAFSS the waiver be renewed.[52] On 31 December 1970, USAFSS approved this request and granted the 6994 Scty Sq an extension on the waiver until 31 December 1971.[53]

Air-Ground-Air Communications

[redacted] On 22 August 1970, PacSctyRgn directed the 6994 Scty Sq to establish an Air-Ground-Air Communications Study Group. The purpose of this group was to study Region communications problems and identify potential problem areas in order to improve the overall system reliability.[54]

[redacted] On 13 September 1970, the 6994 Scty Sq provided PacSctyRgn with a resume of communications problems currently affecting ARDF operations. Two of the major problems identified were; (1) excessive KY-8 secure voice malfunctions preventing communications with DSUs, and (2) inadequate DSU coverage in Cambodia and Laos.[55]

[redacted] On 27 October 1970, Ultra High Frequency (UHF)/ KY-8 secure voice capability was installed within the local operations section of the 6994 Scty Sq. Through coordination with ACC, procedures were established whereby mission aircraft could pass ARDF/Collection data directly to the 6994 Scty Sq

[redacted]

when communications with the DSU failed or were unsatisfactory. The information was then passed to the CMAs electrically. The addition of this equipment also provided the 6994 Scty Sq with a means of ground checking the KY-8 equipment aboard the aircraft prior to takeoff, thus reducing the number of KY-8 malfunctions.[56]

[redacted] On 13 November 1970, PacSctyRgn informed the 6994 Scty Sq that action was being initiated to provide more timely ARDF support to [redacted]. In view of the history of air-ground-air communications difficulties between mission aircraft flying over Laos and the DSU at Ramasun Station, Thailand, it was proposed that a DSU type operation be established at [redacted].[57]

[redacted]

[redacted]

[redacted]

Vietnamization of EC-47

[redacted] Planning for activation of the Republic of Vietnam Armed Forces (RVNAF) EC-47 Squadron continued throughout this period. On 1 July 1970, HQ USAFSS informed Commander in Chief, Pacific Air Forces (CINCPACAF) that one set of Avionics Ground Equipment (AGE), unique to maintenance of the AIR-34 system, could be provided for the RVNAF EC-47 program. They further pointed out, however, that the AGE would not be available until the Squadron was completely operational and one of the 6994 Scty Sq detachments was deactivated, which appeared to be sometime during Fiscal Year (FY) 73. It appears then that this would necessitate co-location of the RVNAF unit with a detachment of the 6994 Scty Sq during the initial stages of their operation.[62]

[redacted] Until definite lines of authority could be established, PacSctyRgn identified LOSX/DOA at their headquarters as addressee for all requests for information or assistance concerning logistics aspects of "COMBAT CROSS Vietnamization."[63]

[redacted]

The USAFSS "Draft ED-47 Special Equipment Logistics Support Annex to United States Air Force Material Guidance for Vietnam Air Force Logistics System (U)", dated 1 September 1970, was coordinated on by both 7AF and Air Force Advisory Group (AFGP). [redacted] Early indications were that the RVNAF EC-47 organization would be composed of mixed crews with Vietnamese Air Force (VNAF) front-end (pilot, copilot, navigator, and flight engineer) and Army of the Republic of Vietnam (ARVN) back-end (ARDF) operators. Additionally, maintenance of ARDF equipment would be an ARVN responsibility. The 6994 Scty Sq was not in favor of this type of organizational structure for many reasons. Many difficulties were encountered with the present structure (460TRW/6994SS), and it was some time before the two units reached their present degree of rapport. The 6994 Scty Sq believed that the Vietnamese would encounter even more difficulties in control and operation of a squadron composed of personnel from two different branches of service. Another factor arguing against the integrated squadron concerned acquisition of logistic support. Maintenance logistics for the program would utilize existing Air Force channels, which the VNAF structure was already set up for and equipped to handle. Maintenance of the ARDF equipment

[redacted]

[redacted]

[redacted]

by ARVN forces would require establishment of a completely new supply chain or transfer of material once it had been procurred through the existing system. This would lengthen and complicate the entire process. Although these problems were not considered insurmountable, the 6994 Scty Sq believed them to be detrimental to establishment of an effective operational organization, the 6994 Scty Sq recommended that a single service structure be considered with all personnel involved assigned to the same unit. Many of the agencies concerned with the Vietnamization program agreed with this recommendation. On 1 July 1970, PacSctyRgn indicated their opposition to an integrated VNAF/ ARVN squadron and stated they believed a solely VNAF organization to be the best structure.[64] It was generally agreed by personnel at MACV, NRV[redacted], CAS, Saigon, 7AF, and the 6994 Scty Sq that an all VNAF structure would be the most practical. After considerable thought however, and at the insistence of the Chief, Special Security Technical Branch (SSTB), the majority of agencies concerned agreed with the integrated concept. Their decision was to present for review to the RVNAF Joint General Staff (JGS) a proposed integrated squadron under command of the Chief,SSTB.[65] In an attempt to forestall this proposal, the 6994 Scty Sq discussed the split structure with

[redacted]

[redacted]

[redacted]

Brig. Gen. Kendall S. Young, Commander, AFGP, at the suggestion of Brig. Gen George K. Sykes, Deputy Chief of Staff, 7AF Intelligence. General Young was very adamant in his refusal to re-open the subject.[66] At the suggestion of the Commander, 6994 Scty Sq, Major Gen. Carl W. Stapleton, Commander USAFSS, sent a message to Gen. Lucius D. Clay, Jr., Commander, 7AF, outlining the USAFSS position on the integrated squadron concept and indicated that Lt. Col. Leon S. Inge, Commander, 6994 Scty Sq, was familiar with the subject and could answer any questions or furnish additional information.[67] General Clay was reportedly in favor of an all VNAF structure as of 13 November 1970 and discussed the subject for one hour with Vice Admiral Noel Gayler, (USN), Director NSA, during his visit to Vietnam. The 6994 Scty Sq again briefed Admiral Gayler concerning the pros and cons of the integrated structure and although he appeared to be open minded concerning the subject, he did not commit himself at that time. Without final coordination with concerned agencies, NRV[redacted] submitted an integrated organizational proposal to SSTB on 11 November 1970 through CAS, Saigon.[68]

[redacted] At SSTB's request, the 6994 Scty Sq briefed SSTB personnel on 21 November 1970, concerning the

[redacted]

technical aspects of the EC-47 program. The briefing addressed the capabilities and limitations of the AIR-34 system, 6994 Scty Sq/460 TRW organizational structure, and tasking/reporting procedures. The briefing was presented to Lt. Col. [redacted] (ARVN), Executive Officer SSTB and staff, plus representatives from CAS Saigon and NRV[redacted]. The subject of organizational structure was brought up by the SSTB representatives who expressed doubt that the VNAF and ARVN could work effectively together because of political differences. They cited the present U-6* program as an example, stating that the pilot may or may not fly the missio n planned and may abort in favor of another requirement.[69]

[redacted] In a follow-up letter in late December 1970, to the previously referenced EC-47 organizational proposal, NRV[redacted] recommended through CAS Saigon to SSTB, that operator training classes should start on schedule in April 1971.

[redacted] On 6 August 1970, the draft USAFSS Vietnamization Improvement and Modernization Plan (VIMP) was forwarded to the 6994 Scty Sq to be used as a basis for planning and in coordinating VIM matters with other involved agencies. Of the assumptions made in this plan, six were considered significant:

*VNAF ARDF Program

[redacted]

[redacted]

1. Training material, information, and classroom/airborne instruction would be restricted to the Secret non-codeword level.

2. All Vietnamese personnel to be trained would be able to speak English and training material written in English would be used. All instruction would be conducted in the English language.

3. Aircraft turned over to the RVNAF would come from Detachment 1, 6994 Scty Sq resources with mission detasking commensurate with the aircraft turnover.

4. Adequate facilities for the training program would be available at Tan Son Nhut AFLD, RVN.

5. The 6940 Scty Wg would provide the training packages, supplies, support, and any assistance necessary for the ARDF training program.

6. The 6994 Scty Sq would provide all administrative and logistics support for the program.[70]

[redacted] One of the 6994 Scty Sq's major conerns was with assumption number two. Preliminary indications, derived from informal conversations with SSTB and 509 RRG personnel who were already involved with the VIM program, were that the 6994 Scty Sq would be extremely lucky if any ov the Vietnamese students would be able to speak English.

[redacted] [redacted]

[redacted] In reply to the USAFSS draft plan, the 6994 Scty Sq pointed out that the trainees being proficient in the English language was a poor assumption. The 6994 Scty Sq also indicated that there was a strong possibility that training facilities would not be available on Tan Son Nhut AFID, and that the necessity for back-up by Sanders Technicians in conducting maintenance training should be explored.[71]

[redacted] On 30 August 1970, a meeting was held at MACV Headquarters with representatives from NRV[redacted], 7AF, and AFGP. It was recommended that the back-end crew be phased in even though AFGP stated that they would not be able to support a complete turn over prior to FY73.[72] This would mean that SSTB personnel would fly in aircraft maintained and crewed by United States Air Force personnel. NRV[redacted] outlined and concurred with this proposal in a message to DIRNSA on 2 September 1970.[73]

[redacted] On 9 September 1970, NSA indicated their non-concurrence with the MACV/AFGP proposal to slip the turnover of aircraft to the VNAF.[74] 7AF then informed CINCPACAF that the accelerated schedule for activation of the EC-47 program would adversely impact, and be at the expense of, other VIM actions and advocated the same proposal put forth by MACV/AFGP.[75]

[redacted]

NSAPAC added their concurrence to the MACV/AFGP proposal.[76] As of November 1970, action was still pending on final determination of the activation schedule for the EC-47 program.

[redacted] The NSA VIMP, published 9 November 1970 tasked the 6994 Scty Sq with conducting operator and maintenance training. Training under this plan was to commence 1 April 1971 and 31 December 1971 for operators and maintenance personnel respectively. Maintenance training would be conducted for 29 students in three phases: (1) Formal classroom training on AIR-34 system, equipment theory and operation, (2) Organization level (flight-line) training by On-the-Job-Training (OJT), and (3) Intermediate level OJT. The first two phases would each be 12 weeks in length and the third 26 weeks. Prerequisites were completion of the USAF Air Training Command Airborne Radio Maintenance Technical School. Six classes would be conducted for operator training with a total of 80 students. This would provide sufficient crews to man 20 aircraft. The plan called for an eight week operator training course using essentially the same training material and schedules used in the USAFSS school. Prerequisites were graduation from SSTB Morse Operator School, and 90 to 180 days field experience.

[redacted] Instructors would be assigned or attached to the

[redacted]

6994 Scty Sq and training materials would be provided by the 6940 Technical Training Group, Goodfellow AFB, Texas. Subsequent to receipt of theeNSA VIMP, and as a result of a USAFSS query, DIRNSA stated that air-ground-air tip-off procedures would be included in the course, Market Time and Game Warden procedures would not be included, and that the G-276 Demodulators would not be turned over to the RVNAF along with the aircraft.[77] On 11 December 1970, DIRNSA directed NRV[redacted] to amend the VIMP to reflect early (1 April 1971) activation of the back-end crews and the MACV/AFGP proposed scheduled to physically turn over all 20 aircraft during FY72/73.[78] On 24 December 1970, the 6994 Scty Sq was given authority to represent PacSctyRgn and USAFSS in discussions with other agencies identified in the VIMP relating to tasking and requirements.[79]

[redacted]

[redacted]

III. SIGINT PROCESSING AND REPORTING

Processing

Voice Processing

[redacted] The voice processing effort at the 6994 Scty Sq has been hampered throughout this period by a continuing paucity of intercept. The only productive area was centered over the Crow's Nest, Parrott's Beak, and Angel's Wing, Svay Rieng Province. (That portion of Cambodia that protrudes into South Vietnam in the vicinity of WT9900, XS3095, and XT3520). Intercept from Sub Region 2, high frequency, single channel, voice communications accounted for the greatest volume of intercept and exploitable traffic.[1]

[redacted] There were no changes to local operator processing procedures which consisted of the voice intercept operator recording VC/NVA voice communications while airborne. When short messages were intercepted, transcription was performed while airborne and passed via secure voice communications air-to-ground. After mission recovery the recorded magnetic tapes were transcribed and exploitable messages forwarded immediately.

VHF Voice Test

[redacted] On 2 December 1970, DIRNSA requested that an eight

[redacted]

day voice test be conducted in the VHF frequency range. The purpose of this test was to determine if VC/NVA forces located in Cambodia were using VHF voice communications.[2]

[redacted] The 6994 Scty Sq was required to record on magnetic tape, complete schedules of any voice communications identified as VC/NVA and sample all unidentified voice communications noted (less English and French). Once the aircraft recovered the tapes were forwarded to DIRNSA.[3] On 10 December 1970, DIRNSA extended the test period through 17 December 1970.[4] During the period of the test, a total of 31 magnetic tapes were recorded of unidentified voice activity in the VHF frequency range. (None of which was determined by the 6994 Scty Sq to be VC/NVA communications). At the close of this reporting period, no feedback on the results of this test had been received from DIRNSA.

Reporting

DURMIS Reporting

[redacted] In efforts to standardize evaluation of ARDF mission results and achieve optimum operational performance, the procedures prescribed in USAFSS Manual 200-4, Volume XII were implemented on 24 October 1970.[5]

[redacted]

Critic Reporting

[redacted] On 20 July 1970, the 6994 Scty Sq was authorized to issue lateral and follow-up Critic Reports as an exception to Techins 4019, for non-end product reporting units.[6] Implicit in this authorization was the responsibility for reporting changes to the lateral/follow-up distribution lists according to Techins 4015. The first Comint Weekly Recapitulation of Changes (WECAP) Report, was submitted on 5 September 1970.[7]

[redacted] The authorization to issue lateral/follow-up Critic Reports stimulated a flurry of correspondence concerning contradictions between Techins 4019 and [redacted] Supplement 1 to Techins 4019. The [redacted] Supplement required that a Critic Report be issued if a manned Sigint platform was lost due to enemy action, regardless of the weapon system used. Conversely a DIRNSA message limited Critic Reporting on loss of an ARDF aircraft (COMBAT CROSS ZULU configuration) due to North Vietnamese (NVN) fighter and/or Surface-to-Air Missile System (SAMS), eliminating Critic Reports for loss to ground fire.[8]

[redacted] On 1 September 1970, the 6994 Scty Sq queried PacSctyRgn on this ambiguity.[9] On 2 September 1970, PacSctyRgn requested assistance from [redacted] and DIRNSA in resolving this

[redacted]

matter.[10] On 30 October 1970, PacSctyRgn requested clarification from [redacted] and DIRNSA on the following questions: (1) Does Critic criteria apply to all COMBAT CROSS aircraft or only COMBAT CROSS ZULU aircraft, (2) Is a critic to be issued regardless of weapons used or only if loss is due to NVA fighter and/or SAMS.[11] On 5 November 1970, DIRNSA responded by quoting a portion of a forthcoming Annex Delta to Techins 4019 which would resolve this problem. However, in the interim the 6994 Scty Sq was directed to abide by [redacted] Supplement 1.[12] As of 31 December 1970, the new Annex Delta to Techins 4019 had not been received.

Southeast Asian Technical Summary Reports

[redacted] During this reporting period the preparation of the Southeast Asian Technical Summary (SEATS) Reports continued at a steady increase. Overall more than 1,084,000 communications groups for this technical report were prepared by 6994 Scty Sq analytical personnel. The average tasking cycle group count was 40,154 groups.

[redacted] Two heavy SEATS report preparation periods occurred between 7 November 1970 and 20 November 1970. This was a result of an increase in missions flown by the 6994 Scty Sq and the recovery of ARDF aircraft assigned to Detachment 1,

[redacted]

6994 Scty Sq at Tan Son Nhut AFID on 16 November 1970 and 20 November 1970. All associated reporting was accomplished by 6994 Scty Sq analytical personnel with no difficulties encountered.

[redacted] Only minor modification in the general SEATS report format have been made. The majority were stimulated by DIRNSA in an effort to attack suspected new crypto systems employed by VC/NVA entities. On 13 November 1970, DIRNSA modified Techins 2037 to require the entry of callsigns as intercepted vice as degarbled by the unit.[13] This was prompted by correspondence between Bien Hoa (USM-626), and the 6994 Scty Sq, in an effort to resolve problems resulting from the degarble process.[14] Since the modification of Techins 2037 no problems in this area have been encountered.

[redacted] On 30 November 1970, the 6994 Scty Sq was notified by USAFSS that DIRNSA intended to completely revise Techins 2037.[15] The 6994 Scty Sq replied to the proposed format and advised PacSctyRgn that no difficulties were anticapated in utilizing the new DIRNSA Form 7838 for SEATS Report hand logging.[16] At the close of this period the new SEATS Report format had not been implemented by DIRNSA.

[redacted]

ARDF Recovery Report

[redacted] During this reporting period approximately 2,000 ARDF Recovery Reports (ARR) were issued by the 6994 Scty Sq. The greatest number issued during any one tasking cycle was 102 ARR's (16-20 November 1970).

[redacted] Only minor modifications have been made to the ARR format. Most changes were to the comments section and were prompted by requests from USM-626 to expand this section for Wideband extraction of unidentified targets.[17]

[redacted] On 17 November 1970, the 6994 Scty Sq queried DIRNSA on the status of Techins 2038. Since the implementation of the ARR on 6 June 1970 a hard copy of Techins 2038 had not been published. Recommended changes were included in this correspondence.[18] On 19 November 1970, DIRNSA advised that the new version of Techins 2038 was in coordination for publication.[19] At the end of this reporting period the new Techins 2038 had not been received.

Exploitable Message Reports

[redacted] During this period the 6994 Scty Sq issued a total of 312 Exploitable Message Reports (EMR). Only one minor modification to the general format had been made.

Airborne Incident Reports

[redacted] Five Airborne Incident Reports (AIR) were issued by the 6994 Scty Sq during this period. None of the incidents reported resulted in any damage to mission aircraft or injuries to 6994 Scty Sq crew members.

[redacted] On the afternoon of 20 November 1970, at 0545Z the crew members of COMBAT CROSS ZULU mission 802 Delta, reported that an air burst occured approximately 200-300 meters off the right wing of the aircraft while over VS568322 (general vicinity of Ba Hon, Tinh Kien Giang Province). The aircraft was flying at an altitude of 4,700 feet at the time of the air burst. It is interesting to note that the NVA 18 Bravo Regiment (Forward Element) was known to be located in this area. This NVA Regiment was fixed at VS6030 by an ARDF platform from Tan Son Nhut AFLD on 19 November 1970.[20]

Airborne Analysts Program

[redacted] On 18 September 1970, the 6994 Scty Sq advised NRV[redacted] and PacSctyRgn that in view of the proven value of having an airborne analysts aboard COMBAT CROSS ZULU aircraft, steps were being taken to expand the airborne analytical program within the 6994 Scty Sq complex. In order to have an effective, productive program the airborne analyst must

have immediate access to technical data not presently carried aboard mission aircraft. The 6994 Scty Sq requested the following technical data be authorized aboard all COMBAT CROSS ZULU missions: (1) V65B VC/NVA callsign listing, (2) book/pair listings, (3) necessary rotas for area flown, (4) VC/NVA, Q and Z signals listings, (5) link activator list, (6) crypt systems identifers, and (7) country wide callsign listing.[21]

[redacted] On 19 October 1970, PacSctyRgn concurred with this proposal and requested USAFSS assistance in obtaining permission for airborne analyst to carry the additional technical data aboard mission aircraft.[22]

[redacted] On 30 October 1970, PacSctyRgn advised USAFSS that the current restrictions on training assigned R202X0's for flying status has had a serious impact on promoting the airborne analytical program. Region requested authorization be granted to send those R202X0 personnel who are physically qualified, with six months retainability to Pacific Jungle Survival School (PJSS) with waivers for the basic survival training course, and subsequent assignment as Airborne Analysts (A202X0). Approval of this request would: (1) facilitate the expansion of the airborne analysis program throughout the 6994 Scty Sq complex, (2) expedite achieving

[redacted]

analytical expertise and subsequent increased in productivity, (3) maximum use of VC/NVA qualified analysts with sufficient retainability in SEA, and (4) promote voluntary consecutive overseas tours between ARDF units by airborne analysts.[23]

[redacted] On 3 November 1970, USAFSS advised the 6994 Scty Sq that they were aware that the prohibition of training assigned R202X0's for flying duties as well as limitations on the Comint material that could be carried aboard mission aircraft were severely hampering the success of the airborne analyst program. They stated the major obstacle on training assigned R202X0 personnel to flying duties was Headquarters, United States Air Forces (HQ USAF), reluctance to grant waivers for the basic survival training. Waivers for SEA personnel were being granted on a name basis only and subject to detailed justification. USAFSS request the names of the candidates selected for flying duties and an attempt would be made to obtain a waiver from HQ USAF. USAFSS also stated they had been informally advised that the subject of Comint material to be carried aboard ARDF platforms in SEA was under review by NSA.[24]

[redacted] On 7 November 1970, the 6994 Scty Sq forwarded to PacSctyRgn the names of the R202X0's selected as airborne analyst.[25]

[redacted]

[redacted]

[redacted] On 9 December 1970, NRV[redacted] informed the 6994 Scty Sq that DIRNSA's policy on carrying Comint material aboard ARDF platforms in SEA was:[26]

> ...Category II technical support materials carried aboard should be limited to only that which is essential to effective conduct of particula Sigint operation involved. It must be limited to the absolute minimum, i.e., only when required, it may include last fix, date of last fix, schedules, callsigns, frequencies, ARDF trigraph, case notation, and priority, and must be further limited on each aircraft to the required for each mission. ...

As of 31 December 1970, the status of the airborne analyst program remained an outstanding item.

[redacted]

FOOTNOTES

CHAPTER I

1. Hist, ([redacted]), 6994 Scty Sq, 1 Jan - 30 Jun 70, 15 Oct 70.

2. Ibid.

3. Ibid.

4. Opins 3561, [redacted], 12 Dec 69.

5. Hist, ([redacted]), 6994 Scty Sq, 1 Jan -30 Jun 70, 15 Oct 70.

6. Ibid.

7. Ibid.

8. Ibid.

9. Opins 3561, [redacted], 12 Dec 69.

10. Ibid.

11. AFM 100-45, [redacted], 22 May 70.

12. Hist, [redacted], 6994 Scty Sq, 1 Jan - 30 Jun 70, 15 Oct 70.

13. Ibid.

CHAPTER II

1. OPINS 3561, [redacted], 12 Dec 69.

2. Ibid.

3. Hist, [redacted], 6994 Scy Sq, 1 Jan - 30 Jun 70, p. 20.

4. Ibid.

5. Ibid.

6. Ibid.

7. OPINS 3561, [redacted], 12 Dec 69.

8. Ibid.

9. Hist, [redacted], 6994 Scty Sq, 1 Jan - 30 Jun 70, p. 29.

10. Msg, [redacted], DIRNSA to USAFSS (B6-428-70), 282225Z Jul 70, (Doc 1).

11. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, DO 280414Z Jul 70, (Doc 2).

12. Msg, [redacted], USA-561 to USM-704, DORM 190416Z Sep 70, (Doc 3).

13. Ibid.

14. Msg, [redacted], USM-704 to USM-604, (IAPVS3/OPS)200843Z Sep 70, (Doc 4).

15. Msg, [redacted], USM-704 to USM-561 (IAPVS3/OPS) 250745Z Sep 70, (Doc 5).

16. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 110233Z Nov 70, (Doc 6).

17. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 170900Z Nov 70, (Doc 7).

18. Msg, [redacted], PacSctyRgn to USAFSS, 210103Z Nov 70, (Doc 8).

19. Msg, [redacted], NRV[redacted] to USA-561, 230805Z Oct 70, (Doc 9).

20. Msg, [redacted], NRV[redacted] to DIRNSA, 031030Z Oct 70, (Doc 10).

21. Ibid.

22. Msg, [redacted], 6994 Scty Sq to NRV[redacted], 170130Z Nov 70, (Doc 11).

23. Msg, [redacted], PacSctyRgn to 6994 Scty SQ, 182109Z Nov 70, (Doc 12).

24. Msg, [redacted], NRV[redacted] to USA-561, 040030Z Dec 70, (Doc 13).

25. Msg, [redacted], NRV[redacted] to USA-561, 171017Z Dec 70, (Doc 14).

26. Msg, [redacted] 6994 Scty Sq to PacSctyRgn, 160852Z Sep 70, (Doc 15).

27. Msg, [redacted] PacSctyRgn to 6994 Scty Sq, 190224Z Sep 70, (Doc 16).

28. Msg, [redacted], USAFSS to PacSctyRgn, 232110Z Sep 70, (Doc 17).

29. Msg, [redacted], Det 2, 6994 Scty Sq to 6994 Scty Sq, 281[redacted]30Z Sep 70, (Doc 18).

30. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 140215Z Oct 70, (Doc 19).

31. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 190945Z Oct 70, (Doc 20).

32. Msg, [redacted], 6924 Scty Sq to 6994 Scty Sq, 260650Z Oct 70, (Doc 21).

33. Msg, [redacted], USAFSS to DIRNSA, 282105Z Oct 70, (Doc 22).

34. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 300605Z Oct 70, Doc 23).

35. Msg, [redacted], USAFSS to PacSctyRgn, 022235Z Nov 70, (Doc 24).

36. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 242130Z Nov 70, (Doc 25).

37. Msg, [redacted], USAFSS to PacSctyRgn, 011545Z Dec 70, (Doc 26).

38. Memo of Agreement, [redacted], 509RRG and 6994 Scty Sq, subj: Joint Courier Activity-DaNand (JCAD), 8 Dec 70, (Doc 27).

39. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 060740Z Aug 70, (Doc 28).

40. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 180736Z Aug 70, (Doc 29).

41. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 020327Z Dec 70, (Doc 30).

42. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 090837Z Dec 70, (Doc 31).

43. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 160745Z Jun 70, (Doc 32).

44. Ibid.

45. Ltr, [redacted], Hq 7AF to 6994 Scty Sq, subj: Application of ARDF Results, Cambodia, 20 Jul 70, (Doc 33).

46. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 220336Z Dec 70, (Doc 34).

47. Msg, [redacted], USAFSS to PacSctyRgn, 101351Z Jul 70, (DOc 35).

48. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 222156Z Jul 70, (Doc 36).

49. Msg, (U), USAFSS to PacSctyRgn, 172054Z Nov 70, (Doc 37).

[redacted] [redacted]

50. Hist, [redacted], 6994 Scty Sq, 1 Jan - 30 Jun 70, p. 34.

51. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 230215Z Dec 70, (Doc 38).

52. Msg, [redacted], PacSctyRgn to USAFSS, 242015Z Dec 70, (Doc 39).

53. Msg, [redacted], USAFSS to PacSctyRgn, 311425Z Dec 70, (Doc 40).

54. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 222040Z Aug 70, (Doc 41).

55. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 131110Z Sep 70, (Doc 42).

56. Msg, [redacted], 6994 Scty Sq to USM-704, 270844Z Oct 70, (Doc 43).

57. Msg, [redacted], PacSctyRgn to USASAPAC, 130231Z Nov 70, (Doc 44).

58. Msg, [redacted], CAS Vientiane to PacSctyRgn, 240936Z Dec 70, (Doc 45).

59. Msg, [redacted], PacSctyRgn to CAS Vientiane, 242100Z Dec 70, (Doc 46).

60. Msg, [redacted], 6994 Scty Sq to Det 2, 6994 Scty Sq, 260832Z Dec 70, (Doc 47).

61. Msg, [redacted], CAS Vientiane to 6994 Scty Sq, 021357Z Jan 71, (not available).

62. Msg, [redacted], USAFSS to CINCPACAF, 011855Z Jul 70, (Doc 48).

63. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 120214Z Aug 70, (Doc 49).

64. Msg, [redacted], 6994 Scty Sq to USAFSS, 010007Z Jul 70, (Doc 50).

65. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 040935Z Jul 70, (Doc 51).

66. Msg, [redacted], 6994 Scty Sq to USAFSS, 050315Z, (Doc 52).

67. Msg, [redacted], USAFSS to 6994 Scty Sq, 092045Z Nov 70, (Doc 53).

68. Msg, [redacted], 6994 Scty Sq to USAFSS, 131045Z Nov 70, (Doc 54).

69. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 211200Z Nov 70, (Doc 55).

70. Msg, [redacted], USAFSS to PacSctyRgn, 062145Z Aug 70, (Doc 56).

71. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 250746Z Sep 70, (Doc 57).

72. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 011000Z Sep 70, (Doc 58).

73. Msg, [redacted], NRV[redacted] to DIRNSA, 020636Z Sep 70, (Doc 59).

74. Msg, [redacted], DIRNSA to NRV[redacted], 092053Z Sep 70, (Doc 60).

75. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 150320Z Sep 70, (Doc 61).

76. Msg, [redacted], NSAPAC to DIRNSA, 140317Z Oct 70, (Doc 62).

77. Msg, [redacted], DIRNSA to USAFSS, 251629Z Nov 70, (Doc 63).

78. Msg, [redacted], DIRNSA to NSAPAC, 112303Z Dec 70, (Doc 64).

79. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 242122Z Dec 70, (Doc 65).

CHAPTER III

1. Msg, [redacted], DIRNSA to USM-626, 132047Z Nov 70, (Doc 66).
2. Msg, [redacted], DIRNSA to USM-607, 022217Z Dec 70, (Doc 67).
3. Ibid.
4. Msg, [redacted], DIRNSA to USM-607, 102242Z Dec 70, (Doc 68).
5. USAFSSM 200-4, Vol XII, [redacted], 2 Feb 70.
6. Msg, [redacted], DIRNSA to USA-561, 201956Z Jul 70, (Doc 69).
7. Msg, [redacted], USA-561 to DIRNSA, 050049Z Sep 70, (Doc 70).
8. Msg, [redacted], DIRNSA to USA-561, 282253Z May 70, (Doc 71).
9. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 010222Z Sep 70, (Doc 72).
10. Msg, [redacted], PacSctyRgn to [redacted], 020254Z Sep 70, (Doc 73).
11. Msg, [redacted], PacSctyRgn to [redacted], 300138Z Oct 70, (Doc 74).
12. Msg, [redacted], DIRNSA to PacSctyRgn, 052036Z Nov 70, (Doc 75).
13. Msg, [redacted], DIRNSA to USA-561, 132111Z Nov 70, (Doc 76).
14. Msg, [redacted], USA-561 to USM-626, 050215Z Nov 70, (Doc 77).
15. Msg, [redacted], USAFSS to USA-561, 302245Z Nov 70, (Doc 78).
16. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 170435Z Dec 70, (Doc 79).
17. Msg, [redacted], USM-704 to USA-561, 280630Z Jul 70, (Doc 80).
18. Msg, [redacted], USA-561 to DIRNSA, 170721Z Nov 70, (Doc 81).
19. Msg, [redacted], DIRNSA to NRV[redacted], 192137Z Nov 70, (Doc 82).

20. Msg, [redacted], 6994 Scty Sq to USAFSS, 200922Z Nov 70, (Doc 83).

21. Msg, [redacted], USA-561 to DIRNSA, 190810Z Sep 70, (Doc 84).

22. Msg, [redacted], PacSctyRgn to 6994 Scty Sq, 240148Z Oct 70, (Doc 85).

23. Msg, [redacted], PacSctyRgn to USAFSS, 302025Z Oct 70, (Doc 86).

24. Msg, [redacted], USAFSS to PacSctyRgn, 031630Z Nov 70, (Doc 87).

25. Msg, [redacted], 6994 Scty Sq to PacSctyRgn, 070029Z Nov 70, (Doc 88).

26. Msg, [redacted], NRV[redacted] to 6994 Scty Sq, 090819Z Dec 70, (Doc 89).

[redacted]

GLOSSARY

A

AB	Air Base
ACC	ARDF Coordinating Center
ADS	Airborne Direct Support
AFGP	Air Force Advisory Group
AFLD	Airfield
AGE	Avionics Ground Equipment
AIC	Airborne Intercept Collection
ARDF	Airborne Radio Direction Finding
ARFOCOS	Armed Forces Courier Service
ARVN	Army of the Republic of Vietnam
ASA	Army Security Agency
ASAPAC	Army Security Agency, Pacific

B

BDA	Bomb Damage Ass essment

C

CAS	Controlled American Source
CC	Combat Cross
CCZ	Combat Cross Zulu
CINCPACAF	Commander in Chief, Pacific Air Forces

[redacted] [redacted]

[redacted]

CMA	Collection Management Authority
COMINT	Communications Intelligence
COMNAVFORV	Commander, Naval Forces, Vietnam
COMSEC	Communications Security
COMUSMACV	Commander, United States Military Assistance Command, Vietnam
CONMSG	Control Message
COSVN	Central Office, South Vietnam
CTZ	Corps Tactical Zone
	D
DIRNSA	Director, National Security Agency
DNG	DaNang
DODSPECREP	Department of Defense Special Representative
DSU	Direct Support Unit
	E
EWLO	Electronic Warfare Liaison Officer
	F
FAC	Forward Air Controller
FRAG	Fragmentary
FY	Fiscal Year
	G

[redacted]

[redacted]

[redacted]

H

HF	High Frequency
HQ	Headquarters

I

IAD	Intercept Assignment Designator

J

JGS	Joint General Staff

K

L

M

MACV	Military Assistance Command, Vietnam
MCD	Mission Control Directive
MHZ	Megahertz

N

NKP	Nakhon Phanom
NRV	National Security Agency Representative, Vietnam
NSA	National Security Agency
NVA	North Vietnamese Army

O

OL-DD	Operating Location, Delta-Delta

[redacted] [redacted]

[redacted]

P

PACAF	Pacific Air Force
PacSctyRgn	Pacific Security Region
PHC	Phu Cat
POEREP	Position Effectiveness Report

Q

R

RFP	Radio Fingerprinting
RRFS	Radio Research Field Station
RRG	Radio Research Group
RTAFB	Royal Thai Air Force Base
RVN	Republic of Vietnam
RVNAF	Republic of Vietnam Armed Forces

S

Scty Sq	Security Squadron
Scty Wg	Security Wing
SEA	Southeast Asia
SIGINT	Signal Intelligence
SSIO	Security Service Liaison Officer
SSTB	Special Security Technical Branch

T

TACAIR	Tactical Air

[redacted]

[redacted]

[redacted]

TDL	Technical Data Listing
TEWS	Tactical Electronic Warfare Squadron
TRW	Tactical Reconnaissance Wing

U

UHF	Ultra High Frequency
USAF	United States Air Force
USAFSS	United States Air Force Security Service
USIB	United States Intelligence Board

V

VC	Viet Cong
VHF	Very High Frequency
VIMP	Vietnamization Improvement and Modernization Plan
VNAF	Vietnamese Air Force

PROJECT NICKNAMES

COMBAT CROSS	The basic configuration of the USAF ARDF electronic warfare platform EC-47 aircraft utilized by the 6994 Security Squadron
COMBAT CROSS ZULU	Identical to COMBAT CROSS except that two additional collection positions have been installed
COMFY NAG	The testing of LEFAIR KNEE Airborne Radio Fingerprinting system aboard COMBAT CROSS aircraft in SEA

[redacted]

[redacted]

LEFAIR KNEE	ASA developed solid state, radio fingerprinting system designed primarily for use in ARDF operations in SEA
LEFT BANK	An ASA ARDF program utilizing HU-1D helicopters under the control of the Tactical Field Commander

[redacted]

BIOGRAPHY

UNITED STATES AIR FORCE

COLONEL LEON S. INGE

On 29 July 1970, Col Leon S. Inge assumed command of the 6994 Security Squadron, Tan Son Nhut Airfield, Republic of Vietnam. His previous assignment was at Hq European Security Region, Frankfurt, Germany. While stationed in Germany, Col Inge served as Director Systems Management and for the last two years as Assistant Deputy Chief of Staff of Operations.

Born July 9, 1928, in New York City, New York, Col Inge attended Regis High School from which he graduated in 1946. He graduated from Fordham University, New York, in 1950 and received a B. A. degree in Constitutional History, simultaneously receiving a commission in the Air Force through the ROTC program.

After a short tour with Hq First Air Force, Mitchell AFB, New York, he applied for Flight Training and received his Navigator wings at Ellington AFB, Texas, in October 1951. After additional training, his first assignment was to the 90th Bomb Sq, 3rd Bomb Wing, Korea, where he flew combat missions in B-26s as a navigator-bombardier. Col Inge was then assigned

in August 1952, to the 314th Troop Carrier Wing, Sewart AFB, Tennessee, where he flew C-122 and C-119 aircraft until June 1955. While at Sewart he attended the Squadron Officers School at Maxwell AFB. He volunteered for USAFSS training in 1955, completed the Communications Intelligence Officer's course in 1956 and after special training at Kelly AFB, Texas, was assigned to the 6901st Special Communications Group (SCG), Zweibruken, Germany until July 1959.

Upon hs return from Germany, Col Inge was assigned to the Strategic Air Command and served on a combat crew as a Senior Standboard Navigator with the 91st Air Refueling Squadron, Lockbourne AFB, Ohio, from 1959 to 1963, during which time he received a regular commission, and from 1963 to 1965 he served as Senior Standboard Navigator with the 9th Air Refueling Sq, Mountain Home, Idaho. After graduating from the Armed Forces Staff College, Norfolk, Virginia, in June 1965, Col Inge was assigned to the 6937th Communications Group, Peshawar, Pakistan until July 1967. Col Inge received a consecutive tour with Hq European Security Region, Frankfurt, Germany, where he served as Director of Systems Management and Evaluation and then as Assistant DCS Operations from 1967 to 1970. He received a third consecutive overseas tour in

1970 as Commander, 6994 Security Squadron, Tan Son Nhut Airfield, Vietnam, his current assignment.

Col Inge's decorations include the Distinguished Flying Cross, Air Medal with one oak leaf cluster, Meritorious Service Medal, Air Force Commendation Medal with one oak leaf cluster, and the Combat readiness Medal.

Col Inge's wife, Lynn and two daughters, Lisa, 17, and Lauren, 12, reside in Laurel, Maryland.

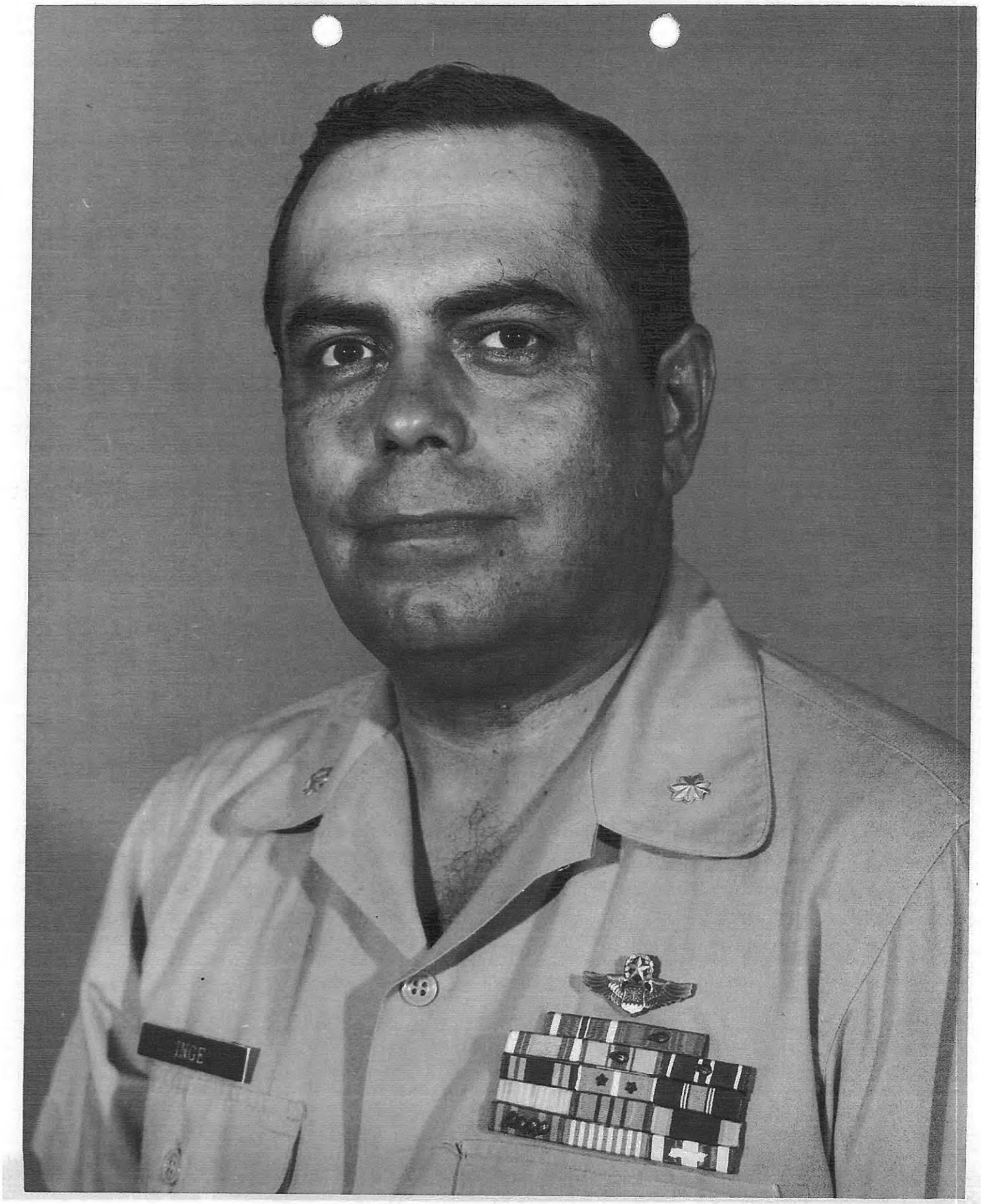
1950	Commissioned 2nd Lt, ROTC, Fordham University
1950	Hq 1st Air Force, Mitchell AFB, New York
1950-1951	Student Pilot Training, Waco, Texas (ATC)
1951	Student-USAF Navigator School, Ellington AFB, Texas (ATC)
1951	Student-B-26 CCTS, Langley AFB, Virginia (TAC)
1952	Navigator/Bombardier B-26, 3rd Bomb Wing, Kunsan, Korea
1952-1955	Navigator-Troop Carrier, Sewart AFB, Tenn. (TAC)
1953	Student-Squadron Officers Course, Maxwell AFB
1955-1956	Student-Communications Intelligence Officers School, Kelly AFB, Texas (USAFSS)
1956-1959	Chief Transec Analysis Branch, 6901 Special Communications Group, Zweibruken, Germany
1959	KC-97 CCTS, Randolph AFB, Texas
1959-1963	KC-97 Standardization Evaluator, 376th BW, Lockbourne AFB, Ohio
1963-1965	KC-97 Standardization Evaluator, 9th SAW, Mountain Home, Idado
1965	Student-Armed Forces Staff College, Norfolk, Virginia
1965-1967	Mission Mgt Officer, Asst Operations Officer, 6937 Comm Gp, Peshawar, Pakistan
1967-1970	Director Systems Management, Assistant DCS Operations, Hq European Security Region, Frankfurt, Germany
July 1970	Commander 6994 Security Squadron, Tan Son Nhgt Airfield, Vietnam

DATES OF RANK

Rank	Temporary	Permanent
2nd Lt	13 Jun 1950	13 Jun 1950
1st Lt	05 May 1952	09 Oct 1953
Captain	29 Dec 1955	01 Feb 1956
Major	15 Jul 1963	27 Jul 1964
Lt Col	31 Oct 1966	
Col	13 Nov 1970	

AWARDS AND DECORATIONS

Distinguished Flying Cross
Air Medal (w/1-OLC)
Meritorious Service Medal
AF Commendation Medal (w/1-OLC)
Combat Readiness Medal
National Defense Service Medal (w/1-Star)
Armed Forces Reserve Medal
Air Force Longevity Services Award (w/4-OLC)
Air Force Outstanding Unit Award
Korean Service Medal
United Nations Service Medal
Expert Marksmanship Ribbon


INCE

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XXX

PRIORITY Z 8024142 AUG 70

6994SCTYSQ

~~USAFSS/DOR~~

TO: ~~INFO:~~ ~~PACSCTYRGN/DOR~~

[redacted]/DO

SUBJ: Provisional Annex I, Techins 1056, 24 Jul 70 (U)

REF: USAFSS DOR 291940Z Jul 70.

We have reviewed subj kprocedures and consider them unrealistic. Major improvements in the timeliness, accuracy and quantity of tech support data contained in the cherry sheets used by the aircrews is essential. General tasking of positions for collection by area can be included in the existing mission control directive (MCD) produced weekly. CMA preparation of CONMSGS for each mission will place an extremely heavy workload upon the CMA and the CONMSGS will be valueless to the aviation units. Cherry sheets will still be required for each mission and must include up-to-date, comprehensive and accurate tech data for the effective ARDF or collection of desired targets. The CONMSGS (which cannot be carried on the acft and do not contain the technical data required) will be superflous to the aviation units

6 AUG 70

1

4641

SMSgt Robbins/cds

JACK BARNES, Lt Colonel, USAF
Operations Officer

[redacted]

[redacted]

[redacted] | SECURITY CLASSIFICATION [redacted]

PRECEDENCE	RELEASED BY	DRAFT	PHONE
ACTION PRIORITY	Lt Col Barnes	SMS [redacted]	4641
INFO			

and would not justify the time and manpower necessary to prepare $ them. Air Force units alone fly approx 230 missions per week which would require an estimated 300 CONMSGS, changes and correction messages.

2. In the tactical environment the effectiveness of ARDF or collection efforts depends largely upon the accuracy of the tech data contained in the cherry sheets which permits the aircrew to position the acft on the target schedule close enough to hear or fix the low powered xmtrs, and to identify the desired target primarily by call-signs. Efforts expended to improve the cherry sheets and the data base from which they are prepared will improve effectiveness and provide increased tasking direction toward the field commanders desired end product. CONMSG lists of desired targets ease notations will not. Since section three para one charlie required the CMA to provide the technical support data it is superfluous for the CMA to prepare a CONMSG. The effort expended on the CONMSGS would be better used if applied to the data base for the technical support data to be used in the cherry sheets. The cherry sheets are effectively the vehicle which determines how the mission will be flown and what will be collected during the mission. If changing the name of the cherry sheets to CONMSG would improve it then this change would be worth considering.

CONTROL NO.	TOR/TOD	PAGE NO.	NO. OF PAGES	MESSAGE IDENTIFICATION	INITIALS
	[redacted]	2	3		

SECURITY CL[redacted]

DD FORM 1 NOV 63 173-1 REPLACES EDITION OF 1 MAY 55 WHICH MAY BE USED.

ABBREVIATED JOINT MESSAGEFORM [redacted] IFICATION

PRECEDENCE	RELEASED BY	DRAFT	PHONE
ACTION PRIORITY	Lt Col Barnes	SMSgt Robb[redacted]ns	4641
INFO			

3. The present system has the merits of simplicity and responsiveness to the current tactical requirements of the airborne direct support operations in SEA. The requirements of tactical field commanders will not be satisfied by the implementation of the proposed annex procedures. The proposed ~~xxxx~~ CONMSGS will add a workload that will detract from the essential tasks of the # CMA.

4. Subject ~~x~~ annex would generate a multitude of ~~xxxx~~ messages from CMAs ~~xxx~~ while not improving the end product at all. It will also generate POEREPS which will be equally valueless. We strongly urge that this provisional annex be rescinded or at least rewritten to utilize the present vehicles; mission control directive (MCD), cherry sheets, and airborne recovery reports to respectively provide general tasking, specific mission tasking and to report deviations and causes along with results.

CONTROL NO.	TOR/TOD	PAGE NO.	NO. OF PAGES	MESSAGE IDENTIFICATION	INITIALS
		3	3		

SECURITY CLASSIFICATI[redacted]

DD FORM 1 NOV 63 173-1 REPLACES EDITION OF [redacted]

JOINT MESSAGEFORM

[redacted]

RESERVED FOR COMMUNICATION CENTER

[redacted]

TYPE MSG		MULTI	SINGLE
		XXX	

PRECEDENCE

ACTION ROUTINE

INFO ROUTINE

DTG 190416Z Sep 70

SPECIAL INSTRUCTIONS

[redacted]

FROM: USA-561

TO: USM-704

INFO: USA-562

USA-563

USA-564

[redacted] SEPT 70.

SUBJECT: IMPLIMENTATION ANNEX INDIA TECHINS 1056 (U)

REF: DIRNSA B6-540-70, 082336Z SEPT 70.

PRIOR TO IMPLIMENTATION OF SUBJECT ANNEX ON 26 SEPT IAW REF THE FOLLOWING INFORMATION IS REQUIRED.

A. HOW WILL CMA ASSIGN SPECIFIC IAD NUMBERS IN CONMSGS? AND IAD NUMBERS TO BE TIED TO A SPECIFIC POSITION? IF SO, HOW DOES THE CMA KNOW WHICH ACFT WILL FLY THAT MISSION AND IF A CHANGE IN ACFT OCCURS WHAT ACTION IS REQUIRED? SUGGEST IAD NUMBERS BE OMITTED FROM CONMSG AND THOSE ACTUALLY USED REPORTED TO CMA IN ARR.

B. WILL ADDITIONAL CONMSG BE PROVIDED OR WILL ORIGINAL CONMSG ALLOW FOR SWITCHING ACFT TYPES FROM CCZ TO CC OR REVERSE WITH ACC APPROVAL? IF ACC APPROVES SWITCH WILL ACC SUBMIT POEREP?

DATE	TIME
18	1300
MONTH	YEAR
SEPT	1970
PAGE NO.	NO. OF PAGES
1	2

DRAFTER

TYPED NAME AND TITLE: SMSGT ROBBINS/gdw

PHONE: 4643

RELEASER

SIGNATURE: EJM

TYPED (or stamped) NAME AND TITLE: EDWARD J. MILLER, Capt, USAF
OIC, Mission Management

SECURITY [redacted]

[redacted]

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DC F/F

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PRECEDENCE ACTION ROUTINE INFO	RELEASED BY CAPT MILLER	DRAFTED BY SMSGT ROBBINS/gdw	PHONE 4641

C. IF DIVERSION IS REQUIRED AND AUTHORIZED BY ACC WILL DIVERSIONS BE CONSIDERED COVER ADJUSTMENTS AND WILL ACC SUBMIT POEREP TO CMA?

D. SUGGEST CMA INCLUDE VCXX SCH ON ALL CONMSG'S FOR ALL POSITIONS INCLUDING ARDF.

M/R [redacted]: NSA msg requires implimentation of Annex I, T1056 on 26 Sept 70. On that date CONMSG's will be produced by CMA's which include position IAD numbers. The method that CONMSG are proposed will effect our operation and various changes such as switching ACFT or diversions to other areas require submission of POEREP. We query ACC to determine responsibility for these reports and also suggest omitting IAD numbers and inclusion of VCXX Sch and all position (to reduce number of POEREPS) we would have to submit.
SMSGT ROBBINS/DORM/4641

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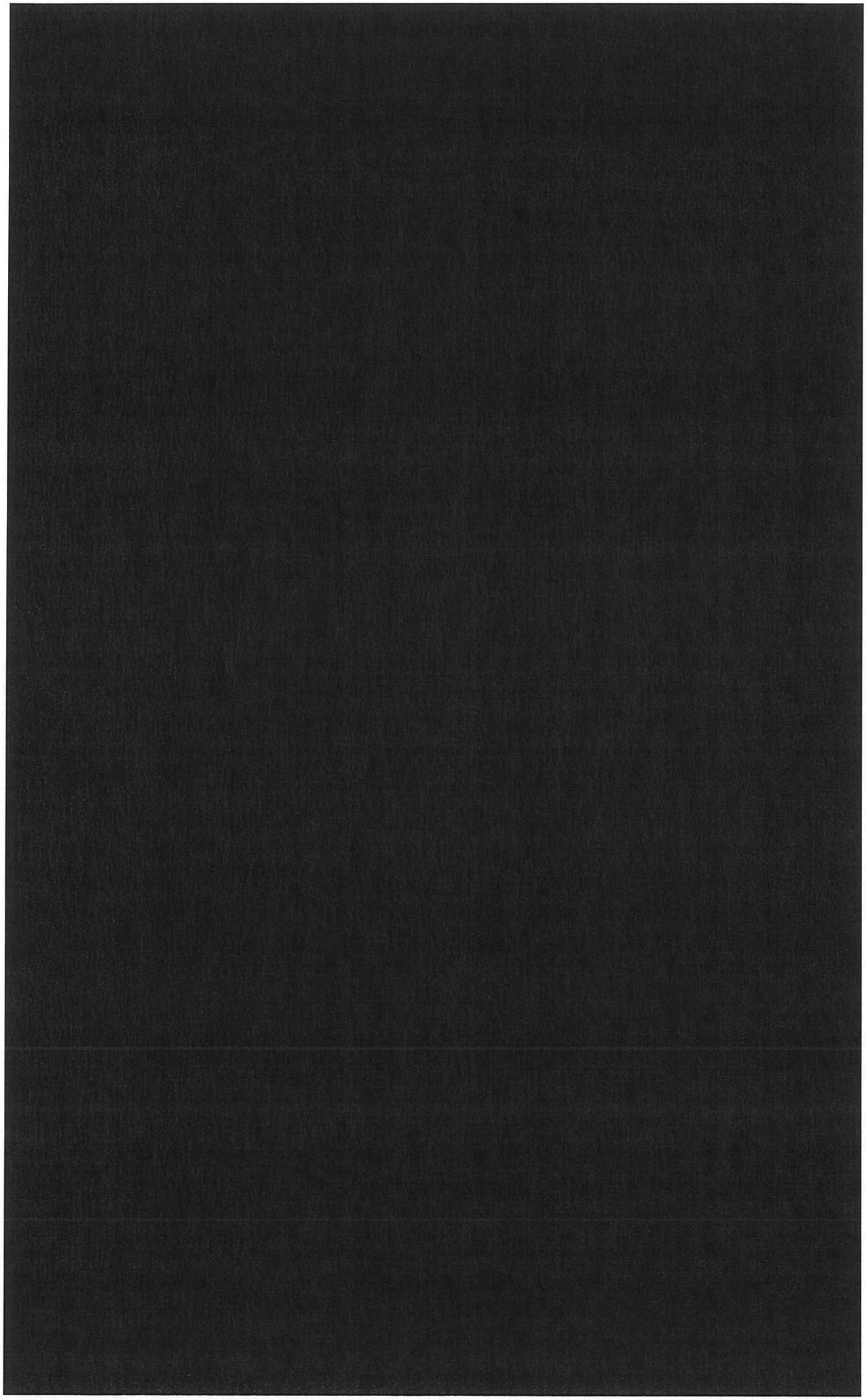

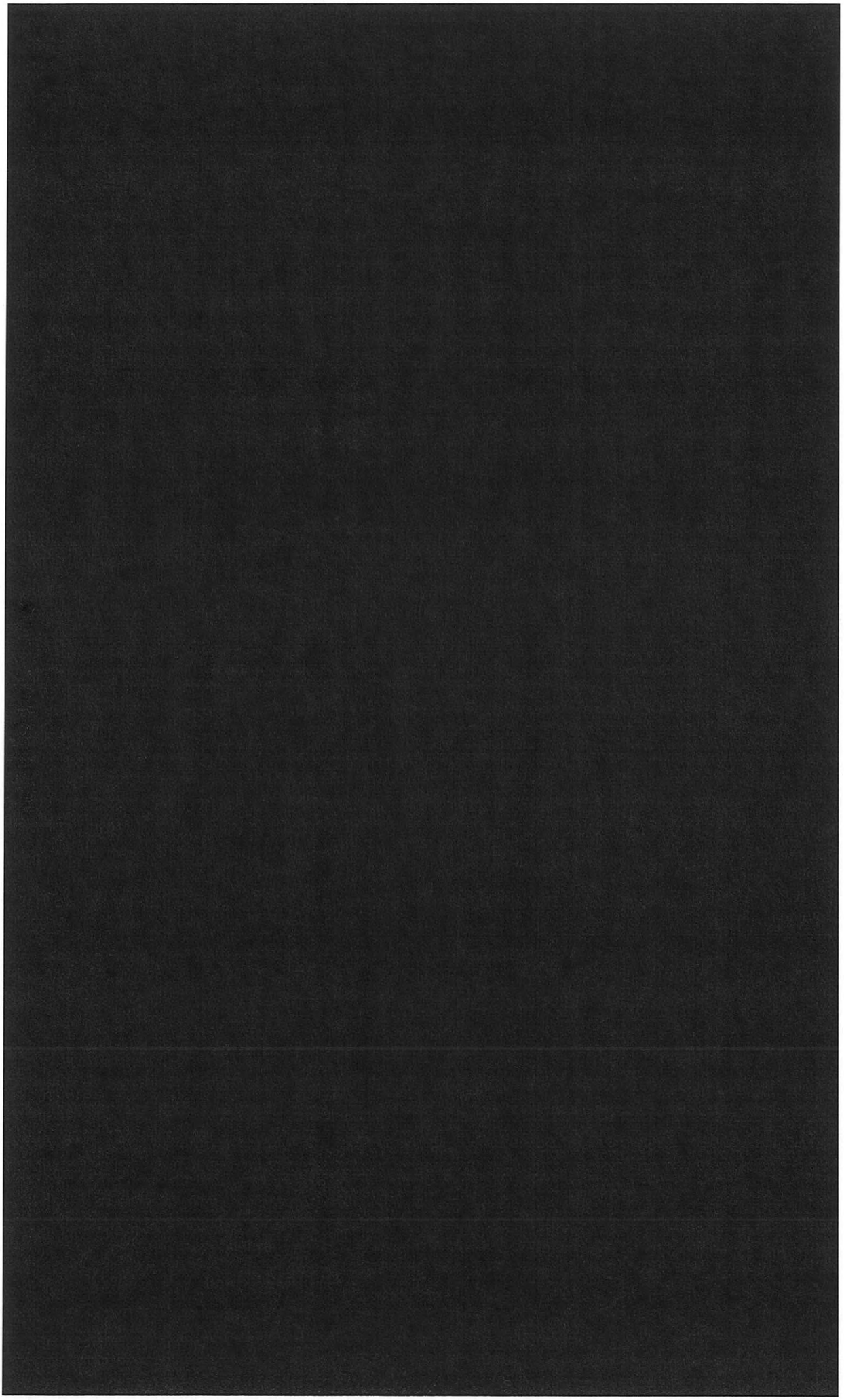

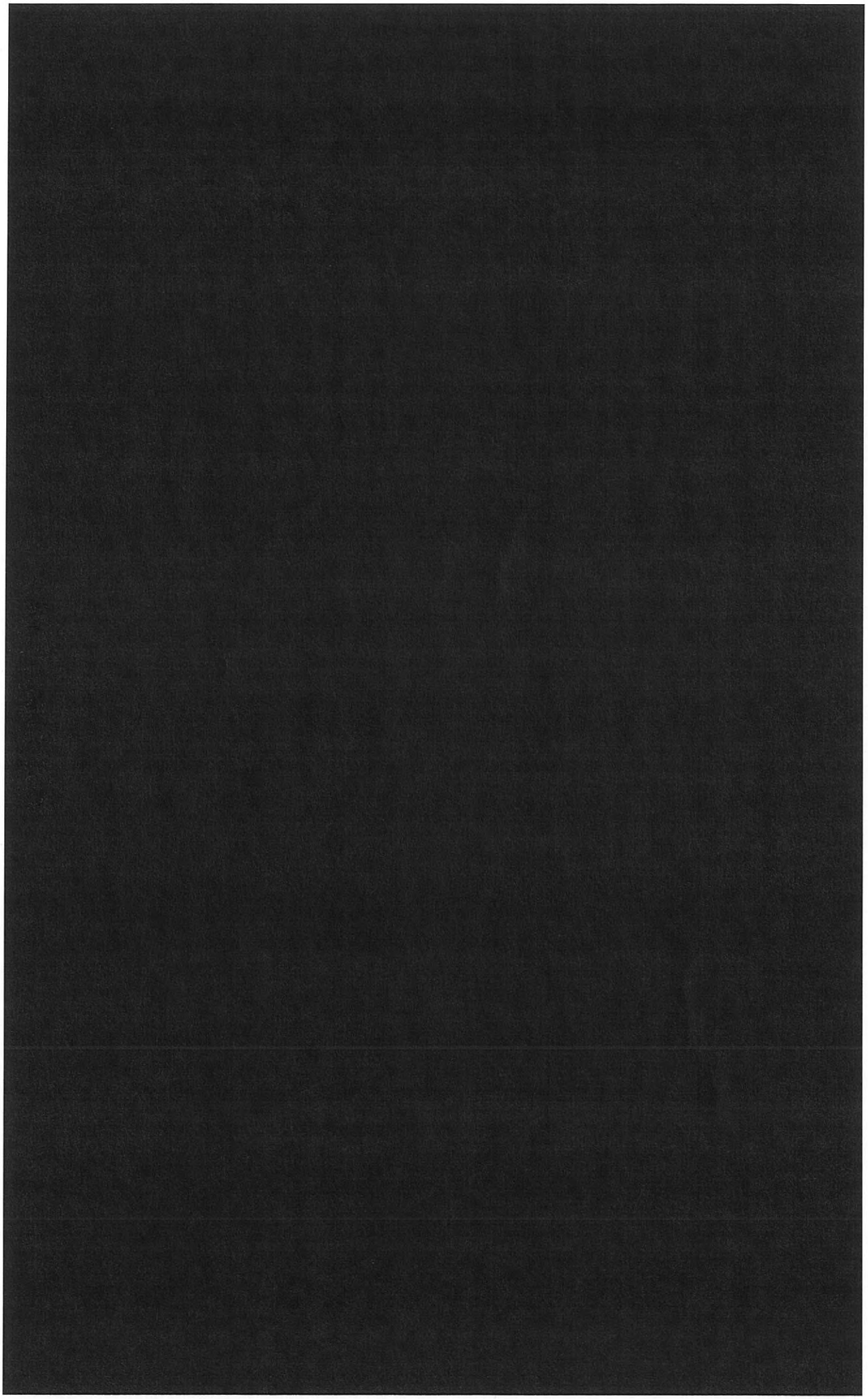

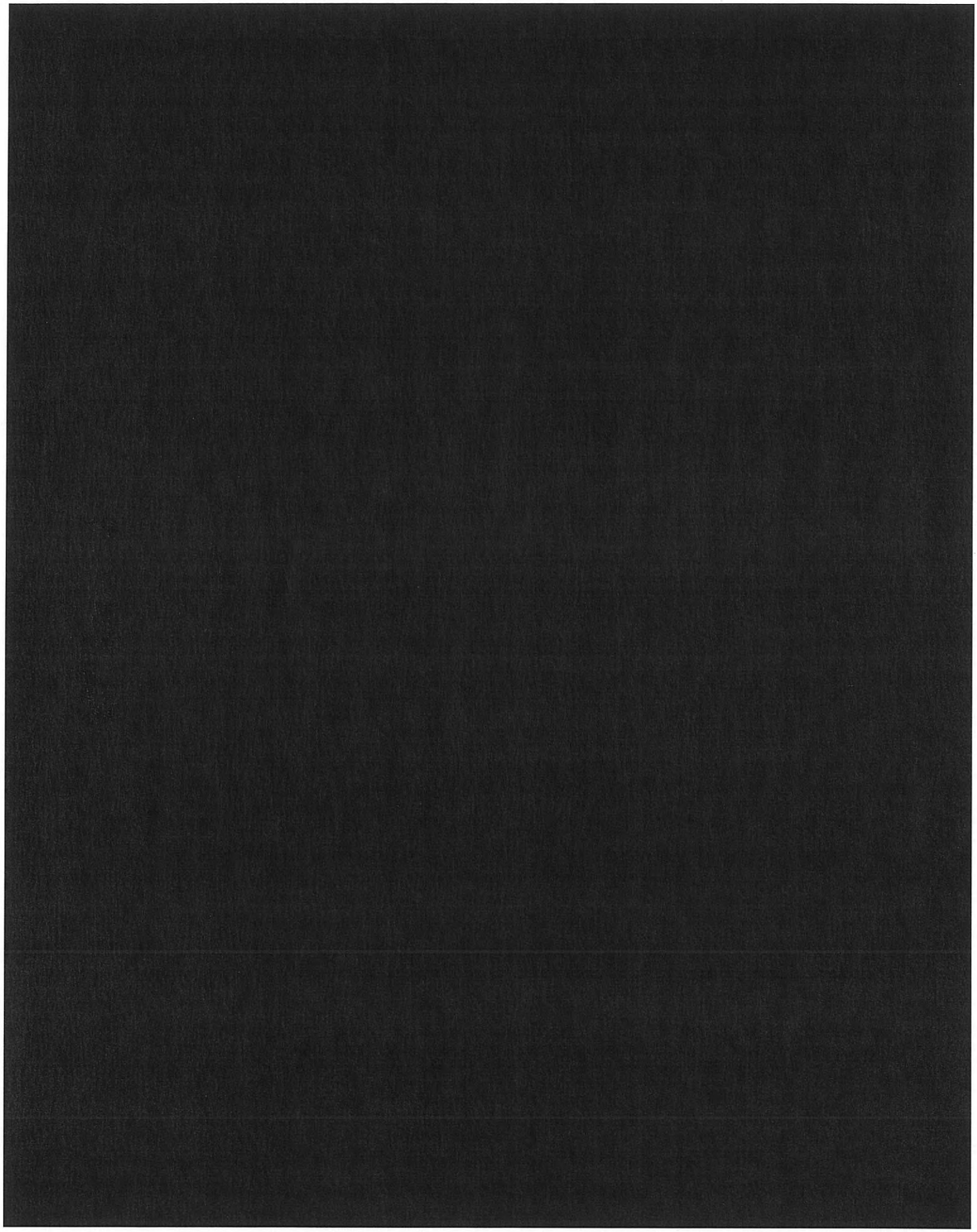

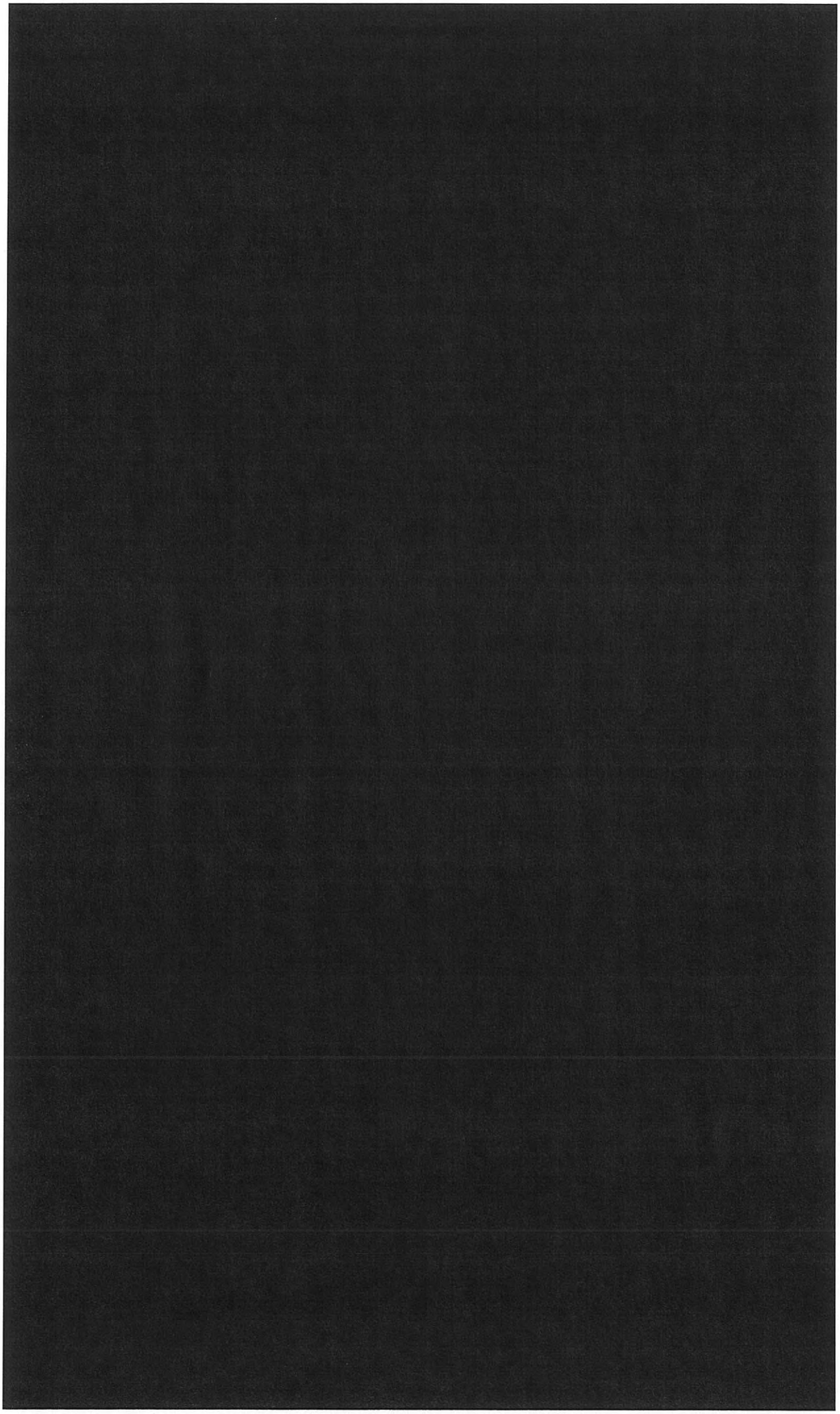

JOINT MESSAGEFORM

RESERVED FOR COMMUNICATION CENTER [redacted]

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PRECEDENCE

ACTION PRIORITY

INFO

DTG 170900Z Nov 70

FROM: 6994 CTY SQ, TAN SON NHUT AB, RVN

TO: PACSCTYRGN (DOR)

INFO: DET 1, 6994 SCTY SQ

DET 2, 6994 SCTY SQ

DET 3, 6994 SCTY SQ

[redacted] DORM

SPECIAL INSTRUCTIONS

[redacted]

D? R/F

SUBJ: PROVISONAL ANNEX INDIA T1056/SEA

REF UR DOR 110233Z NOV 70.

THIS MSG IN THREE PARTS.

PART ONE: OVERVIEW.

THE OPERATIONAL IMPACT OF ANNEX INDIA HAS BEEN TO LEVY UPON THE CHAS AND AVIATION UNITS A TASK WHICH DOES NOT, AS A RULE, CONTRIBUTE SIGNIFICANTLY TO THE OVERALL ACCOMPLISHMENT OF THE MISSION. THE MAJ RITY OF THE MISSIONS FLOWN ARE PRIMARY ARDF WITH COLLECTION AS A SECONDARY FUNCTION. OUR CONSUMERS MEASURE THE RESULTS OF A MISSION BY THE NUMBER OF FIXES/CUTS OBTAINED ON MACV

DATE	TIME
MONTH	YEAR
PAGE NO. 1	NO. OF PAGES 10

DRAFTER

TYPED NAME AND TITLE: Captain Sayles/pb

PHONE 4891

RELEASER

SIGNATURE

TYPED (or stamped) NAME AND TITLE: JACK BARNES, Lt Col, USAF

SECURITY CLAS [redacted]

[redacted]

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U.S.G.P.O. 1967-242-605

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ABBREVIATED JOINT MESSAGEFORM
and/or COORDINATION SHEET

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ACTION PRIORITY INFO	Lt Col Barnes	Captain Sayles	4891

PRIORITIES AND HOW THEY CONTRIBUTED TO LOCATING ENEMY TARGETS WITHIN THEIR SPECIFIC AREAS; AND NOT BY HOW SUCCESSFUL A MISSION WAS IN INTERCEPTING CONMSG TASKED TARGETS. GENERALLY, CONMSG'S HAVE NOT BEEN RELIABLE, TIMELY IN RECEIPT, NOR HAVE THEY BEEN OF ANY MANAGEMENT VALUE TO THE AVIATION UNITS EITHER ABOARD THE AIRCRAFT OR ON THE GROUND. TWO ITEMS WHICH COULD CONTRIBUTE IMMEASURABLY TO THE SUCCESS OF EACH MISSION WOULD BE TO UTILIZE THE TIME EXPENDED PREPARING CONMSG'S TO IMPROVE THE ACCURACY AND QUALITY OF CHERRY SHEETS, AND ADDITIONALLY TO ALLOW THE AVIATION UNITS TO CARRY THE V65 BRAVO CALLSIGN LISTING ABOARD MISSION AIRCRAFT.

PART TWO: COMMENTS: (REF SECTION TWO OF PSR MSG)

A. AVIATION UNITS

1. CONMSGS HAVE GENERALLY DEFINED THE SPECIFIC SIGNIT TASK TO BE ACCOMPLISHED. HOWEVER, THE AVIATION UNIT DOES NOT GENERATE MISSION TECH SUPPORT DATA FOR AIRCREWS. IT ONLY INSURES THAT THE AIRCREWS HAVE AVAILABLE THAT TECH SUPPORT PROVIDED BY THE CMA. CONTRARY TO GROUND OPERATIONS, AVIATION UNITS DO NOT HAVE AN ANALYTICAL SECTION DEDICATED TO

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ABBREVIATED JOINT MESSAGEFORM
and/or CONTINUATION SHEET

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ACTION PRIORITY INFO	Lt Col Barnes	Captain Sayles	4891

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SUPPLEMENTING NORMAL TASKING INSTRUCTIONS WITH UP-TO-DATE TECHNICAL INFORMATION, BUT MUST RELY UPON THE CMA TO PROVIDE THIS SUPPORT. THOSE ANALYTICAL ACCOMPLISHMENTS REPORTED THUS FAR BY AVIATION UNITS ARE MOSTLY INDIVIDUAL EFFORTS RATHER THAN A MISSION DIRECTED EFFORT. IMPROVEMENT COULD BE ACCOMPLISHED BY RESOLVING TASKING PRIORITIES IN FAVOR OF THE MACV PRIORITY LISTING.

USB

2. GENERALLY, WE HAVE BEEN ABLE TO RELY UPON THE COMMSG AS A STATEMENT OF TASKS BECAUSE THE ARDF POSITION COMMSG IS NORMALLY NOTHING MORE THAN THE TARGETS ASSIGNED AFTER PRODUCTION OF THE CHERRY SHEET. FOR COLLECTION POSITIONS, COMMSG'S USUALLY INCLUDE A BRIEF SECTION FOR EXPANDING TARGET REMARKS (E.G., TIP OFF TO DF), BUT THE MISSION IS USUALLY VCI/VCH SCH/DEV. ONLY RECENTLY HAVE SPECIFIC CASES/RD'S BEEN ASSIGNED TO COLLECTION POSITIONS.

3. IMPLEMENATION OF ANNEX INDIA HAS NOT IMPROVED THE TECH SUPPORT DATA AVAILABLE TO AIRCREWS TO GUIDE THE MISSION POSITIONS ACCORDING TO THE STATED TASKS. THE PRIMARY TECH DATA SOURCE AVAILABLE TO AIRCREWS HAS BEEN THE CHERRY SHEET, AND FROM THIS DATA, THE MISSION COURSE IS FLOWN

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TO ENSURE THAT THE AIRCRAFT IS POSITIONED CORRECTLY AT THE SCHEDULED TIME. PRIOR TO IMPLEMENTATION OF ANNEX INDIA, THE RELIABILITY OF CHERRY SHEETS WAS LESS THAN FIVE PERCENT. HOWEVER, FOR THE MAJORITY OF THE PERIOD SINCE IMPLEMENTATION WE HAVE BEEN INVOLVED IN AN ARDF TECH SUPPORT TEST WHERE A CONCERTED EFFORT HAS BEEN MADE TO IMPROVE THE VALIDITY OF THE CHERRY SHEETS. VALIDITY IS NOW VARYING BETWEEN TWO TO TEN PERCENT. SIGNIFICANT MISSION IMPROVEMENT CAN BE REALIZED BY AUTHORIZING THE V65 BRAVO CALLSIGN LISTING TO BE CARRIED ABOARD AIRCRAFT. THIS LIST IS ESSENTIAL AND THE KEY TO INCREASED ANALYTICAL CAPABILITY AS IT WOULD ALLOW THE ANALYST TO NOT ONLY IDENTIFY CALLSIGNS TO BOOK PAIRS BUT ALSO DISTINGUISH HIGH LEVEL FROM LOW LEVEL TARGETS. OF EQUAL IMPORTANCE IS THE VALIDITY OF THE CHERRY SHEET. IF IT COULD BE IMPROVED TO ABOVE FIFTY PERCENT RELIABILITY MORE AND VARIED TARGETS COULD BE ADDED TO IT AND SUBSEQUENTLY DF'D DURING THE SAME TIME PERIOD. HOWEVER, BECAUSE OF CHERRY SHEET LIMITATIONS THE MAJORITY OF THE IDENTIFIED TARGETS WHICH ARE FIXED ARE OBTAINED BY LUCK.

4. QUESTION: HAS THE VARYING OF TARGET SEQUENCE WITHIN

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PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION PRIORITY	Lt Col Barnes	Captain Sayles	4891
INFO			

MACV PRIORITY RESULTED IN FLEXIBILITY OF FLIGHT ROUTE PLANNING, AND MEETING OF MORE REQUIREMENTS? IF NO, WHY NOT? BELIEVE THE QUESTION RELATES TO THE ARDF TECH TEST, WITH THE CONCERTED EFFORT MADE DURING THIS TEST AN INCREASE IN VALIDITY OF CHERRY SHEETS WAS FROM TWO TO TEN PERCENT. HOWEVER, THE QUESTION IS SO VAGUE THAT SPECIFIC INTENT OF QUESTION IS NOT CLEAR.

B. AVIATION UNITS AND CMA'S

1. THE ADS COMMSG'S HAVE NOT RPT NOT IMPROVED MISSION MANAGEMENT TO ANY APPRECIABLE DEGREE. IT HAS IN MOST INSTANCES HAMPERED MANAGEMENT. INFO INCLUDED IN COMMSG IS MOSTLY DUPLICATION OF OTHER EFFORTS AND REQUIRES CONSTANT RECHECKING. THIS IS ESPECIALLY TRUE OF ASSIGNMENTS TO ARDF POSITION, DATA RELATING TO FRAG POINT, ITOT'S, NUMBER OF SORTIES, DATES OF MISSIONS, AND EVEN TARGET DATA WHICH ARE OBTAINED BY OTHER MEANS. THE MAJORITY OF THIS INFORMATION IS PROVIDED BY MACV AND IS TIMELY. COMMSG'S MAY OR MAY NOT BE RECEIVED PRIOR TO ACTUAL MISSION LAUNCH, AND IN MANY INSTANCES THE COMMSG WILL NOT AGREE WITH THE MACV TASKING. THEREFORE, IT CANNOT BE COUNTED ON AS RELIABLE INFORMATION.

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INFO			

THE ONLY PORTION OF THE COMMSC THAT HAS VALUE IS THE TASKING OF COLLECTION RESOURCES. IN THIS RESPECT THERE IS GENERALLY NO OTHER SOURCE OF INFORMATION AVAILABLE SO THAT TASKING IS ASSURED CORRECT AS THERE IS NO METHOD OF CROSS REFERENCE. IN MANY INSTANCES DUE TO TEMPORARY CHANGES IN SCHEDULE, NON-AVAILABILITY OF AIRCRAFT, ETC., CC MISSIONS HAVE BEEN CHANGED TO ZULU WITH NO TASKING RECEIVED EITHER PRIOR TO OR AFTER LAUNCH. IN CHECKING WITH CMA'S IT WAS FOUND THAT THEY WERE NOT PROVIDING ANY COMMSC'S ON TASKING ADJUSTMENTS OF LESS THAN 72 HOURS DURATION. CONSEQUENTLY, FOR EVERY CHANGE IN SCHEDULES THAT DID NOT ALLOW THREE DAYS NOTICE, NO COMMSC WAS ISSUED, THIS HAS SINCE BEEN RECTIFIED. THIS ALSO ADDED TO THE UNRELIABILITY OF COMMSC CONTENT.

2. COMMSC TASKING HAS NOT BUT NOT PROVIDED THE CAPABILITY TO BETTER MEASURE MISSION RESULTS. TO ENABLE MANAGEMENT PERSONNEL TO EVALUATE MISSION EFFECTIVENESS WISELY AND ACCURATELY A DATA BASE MUST BE ESTABLISHED. ON GROUND SITES THIS DATA BASE IS NORMALLY AVAILABLE TO SOME DEGREE, IF NOT, THE TASKING IS NORMALLY OF SUFFICIENT LENGTH THAT A DATA BASE CAN BE ESTABLISHED. HOWEVER, UNDER THE PRESENT ABDF TASKING

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ACTION PRIORITY	Lt Col Barnes	Captain Sayles	4891
INFO			

SYSTEM IT IS IMPOSSIBLE TO EVALUATE MISSION RESULTS EXCEPT ON A WEEKLY BASIS, AS THAT MIGHT BE THE ONLY SERIES OF MISSIONS FLOWN. THE PRIMARY MEASUREMENT OF A MISSION IS MADE BY OUR CONSUMERS WHO ARE INTERESTED IN THE NUMBER OF FIXES/CUTS/EXPLOITABLE MESSAGES THAT WERE OBTAINED FROM TARGETS WITHIN THE FRAGGED AREA. HOWEVER, EVEN THIS STATISTIC IS UNSTABLE BECAUSE WHEN COMBAT OPERATIONS ARE UNDERWAY IN AN AREA THE TARGETS MOVE OUT TO ANOTHER AREA. NORMALLY, THIS RESULTS IN NEW FRAG AREAS BEING ESTABLISHED TO KEEP ABREAST OF THE TARGETS. FURTHERMORE, TO PROVIDE MEASURE OF A POSITION OR CASE YOU MUST HAVE A CONSTANT SOURCE OF INFORMATION. NORMALLY THIS IS OBTAINED FROM PTAR'S, ICAR'S, ETC., BUT, NONE OF THESE REPORTS ARE ISSUED BY 6994 UNITS. THE ONLY SOURCE AVAILABLE IS THE ARR'S WHICH REFLECT ONLY X POSITION ACCOMPLISHMENTS AND LUMP THE COLLECTION [redacted] INFO INTO ONE ENTRY EACH FOR MORSE AND VOICE COPY. ALSO THE IAD'S WHICH ARE INCLUDED ON THE COMMSG'S ARE NOT USED EXCEPT IN TWO PLACES. THE FIRST ON THE COMMSG ITSELF, AND SECONDLY IN THE 011/012 LINES OF THE DURMIS. SOME UNITS WHICH HAVE RELATIVELY

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ACTION PRIORITY	Lt Col Barnes	Captain Sayles	4891
INFO			

STABLE IAD'S (PDMB) USE THEM ON THE PSR'S. TSN IS UNABLE TO DO SO BECAUSE IAD'S CHANGE WEEKLY AND SOMETIMES DAILY. THE IPD IS THE ONLY NOTATION USED REGULARLY IN THE ARR AND ON TRAFFIC. RECOMMENDATIONS WHICH WOULD PERHAPS PROVIDE ORDER, WOULD BE TO INCREASE THE ACCURACY OF THE CHERRY SHEETS, ALLOW THE ANALYST TO CARRY THE V65 AID ABOARD THE AIRCRAFT AND ASSIGN VC SCN TO ALL COLLECTION POSITIONS. THE ANALYST WITH HIS AID WOULD PROVIDE GUIDANCE FOR THE COLLECTION POSITIONS ON A CONTINUING BASIS AND THE IMPROVED CHERRY SHEET WOULD MORE EFFECTIVELY DIRECT THE ARDF OPERATOR.

3. COMMSGS, HAVE NOT PROVED A BURDEN OR HAD AN ADVERSE IMPACT UPON COMM FACILITIES.

4. ALTERNATE ASSIGNMENTS BY ADS MISSIONS HAVE NOT THUS FAR PROVIDED ANY SIGNIFICANT RESULTS IN MEETING MORE INTELLIGENCE REQUIREMENTS. ALTERNATE ASSIGNMENTS ARE NORMALLY PROVIDED TO GROUND SITES TO INCREASE EFFECTIVENESS DURING PERIODS OF TARGET INACTIVITY. THE ASSIGNMENT OF ALTERNATE IAD'S TO AIRBORNE COLLECTION/ARDF POSITIONS SERVES NO USEFUL PURPOSE. IF THE CHERRY SHEETS WERE MORE

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ACTION PRIORITY	Lt Col Barnes	Captain Saylee	4891
INFO			

ACCURATE AND THE COLLECTION OBJECTIVES BETTER DEFINED, ALTERNATE IAD'S WOULD NOT BE REQUIRED. THE PRIMARY ASSIGNMENT TO COLLECTION POSITIONS OF VCX/VGM SCH WITH ANALITICAL GUIDANCE WOULD PROVE MORE EFFECTIVE THAN THE ASSIGNMENT OF ALTERNATE ASSIGNMENT.

PART THREE: RECOMMENDATIONS.

THE ARDF PROGRAM IS BASED ON FLEXIBILITY OF ASSIGNMENT AND THE ABILITY TO PROVIDE ARDF CAPABILITY TO A GIVEN AREA AT A MOMENTS NOTICE. THE IMPLEMENTATION OF THE ADS COMMSG HAS ATTEMPTED TO LESSON THE FLEXIBILITY OF ASSIGNMENT, AND [redacted] IF COMMSG TASKING WERE PERFORMED AS TASKED, IT WOULD TO SOME DEGREE LIMITED OUR CAPABILITY TO COLLECT. OUR PRIMARY CONSUMER IS MACV AND THE AREA COMMANDERS; ANY SYSTEM WHICH ATTEMPTS TO LIMIT OUR ABILITY TO RESPOND TO THEIR REQUIREMENTS SHOULD BE SERIOUSLY REVIEWED. IN SUMMARY, RECOMMEND THAT ANNEX INDIA BE SUSPENDED UNTIL A MORE USEABLE SYSTEM BE DEVISED. HOWEVER, IF THAT IS NOT POSSIBLE, RECOMMEND THAT THE PRESENT PROCEDURES OF TASKING THE X POSITION BY COMMSG BE TERMINATED AS IT USUALLY CONTAINS LESS GUIDANCE THAN THE CHERRY SHEET. ALSO RECOMMEND THAT COLLECTION POSITIONS BE TASKED BY MACV

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ACTION PRIORITY	Lt Col Barnes	Captain Sayles	4891
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AREA VICE INDIVIDUAL MISSION AREA, AS IS THE PRESENT

CASE. IN THIS WAY A SOMEWHAT LIMITED EVALUATION [redacted] OF

[redacted] COLLECTION EFFECTIVENESS WOULD BE POSSIBLE

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SUBJ: PROVISIONAL ANNEX I, TECHINS 1056 (U)
REFS: A. DIRNSA MSG B6-665-70, 092230Z NOV 70.
B. USAFSS DOR MSG 102025Z NOV 70.

1. THE FOLLOWING IS A CONSOLIDATED RESPONSE TO REF ALFA AND IS BEING FORWARDED AS PER INSTRUCTIONS CONTAINED IN REF BRAVO PARA TWO. THIS MSG IN THREE PARTS.

PART ONE: OVERVIEW.

THE OPERATIONAL IMPACT OF ANNEX INDIA HAS BEEN TO LEVY UPON THE CNAS AND AVIATION UNITS A TASK WHICH DOES NOT, AS A RULE, CONTRIBUTE SIGNIFICANTLY TO THE OVERALL ACCOMPLISHMENT OF THE MISSION. THE NAJORITY OF TH MISSIONS FLOWN ARE PRIMARY ARDF WITH COLLECTION AS A SECONDARY FUNCTION. OUR CONSUMERS MASURE THE RESULTSOF A MISSION BY THE NUMBER OF FIXES/CUTS OBTAINED ON MACV PRIORITIES AND HOW THEY CONTRIBUTE TO LOCATING ENEMY TARGETS WITHIN THEIR SPECIFIC AREAS; AND NOT BY HOW SUCCESSFUL A MISSION WAS IN INTERCEPTING CONMSG TASKED TARGETS. GENERALLY, CONMSG'S HAVE NOT BEEN RELIABLE, TIMELY IN RECEIPT, OR HAVE THES BEEN OF ANY KNOWN MANAGEMENT VALUE TO HE AVIATION UNITS EITHER ABOARD THE AIRCRAFT OR ON THE GROUND. TWO ITEMS WHICH COULD CONTRIBUTE IMMEASUREABLY TO THE SUCCESS OF EACH MISSION WOULD BE TO UTILIZE THE TIM EXPENDED PREPARING CONMSG'S TO IMPROVE THE ACCURACY AND QUALITY OF CHERRY SHEETS, AND ADDITIONALLY TO ALLOW THE AVIATION UNITS TO CARRY THE V65 BRAVO CALLSIGN LISTING ABOARD MISSION AIRCRAFT.

PART TWO: COMMENTS:

A. AVIATION UNITS.

1. CONMSGS HAVE GENERALLY DEFINED THE SPECIFIC SIGINT TASK TO BE ACCOMPLISHED. HOWEVER, SINCE ALL AVIATION UNITS DO NOT HAVE AN ANALYTICAL SECTION DEDICATED TO SUPPLEMENTING NORMAL TASKING INSTRUCTIONS WITH UP-TO-DATE TECHNICAL INFORNATION, THEY MUST CURRENTLY RELY UPON THE CMA TO PROVIDE THIS SUPPORT. THOSE ANALYTICAL ACCOMPLISHMENTS REPORTED THUS FAR BY USAF AVIATION UNITS ARE THE RESULTS OF CNCERTED EFFORTS TO DEVELOP A MISSION TECH SUPPORT CAPABILITY. OVERALL IMPROVEMENT COULD BE ACCOMPLISHED BY RESOLVING TASKING PRIORITIES IN FAVOR OF THE MACV PRIORITY LISTING.

2. GENERALLY, THE ADS SIT CONMSG HAS BEEN UNRELIABLE AS A STATEMENT OF TASKS BECAUSE THE ARDF POSITION CONMSG IS NORMALLY NOTHING MORE THAN THE TARGETS ASSIGNED AFTER PRODUCTION OF THE CHERRY SHEET. FOR COLLECTION POSITIONS, CONMSG'S USUALLY INCLUDE A BRIEF SECTION FOR EXPADNING TARGET RENARKS (E.G., TIP OFF TO DF), BUT THE MISION IS USUALLY VCX/VCM SCH/DEV. ONLY RECENTLY HAVE SPECIIIC CASES/RD'S BEEN ASSIGNED TO COLLECTION POSITIONS.

3. IMPLEMENTATION OF ANNEX INDIA HAS NOT IMPROVED THE TECH SUPPORT DATA AVAILABLE TO AIRCREWS TO GUIDE THE MISSION POSITIONS ACCORDING TO THE STATED TASKS. THE PRIMARY TECH DATA SOURCE AVAILABLE TO AIRCREWS HAS BEEN THE ARDF CHERRY SHEET, AND FROM THIS DATA, THE MISSION COURSE IS FLOWN TO ENSURE THAT THE AIRCRAFT IS POSITIONED CORRECTLY AT THE SCHEDULED TIME. PRIOR TO IMPLEMENTATION OF ANNEX INDIA, THE RELIABILITY OF CHERRY SHEETS WAS LESS THAN FIVE PERCENT. HOWEVER, FOR THE MAJORITY OF THE PERIOD SINCE IMPLEMENTATION OUR UNITS HAVE BEEN INVOLVED IN AN ARDF TECH SUPPORT TEST WHERE A CONCERTED AEFFORT HAS BEEN MADE TO IMPROVE THE VALIDITY OF THE CHERRY SHEETS. VALIDITY IS NOW VARYING BETWEEN TWO TO TEN PERCENT. SIGNIFICANT MISSION IMPORVEMENT CAN BE RALIZED BY AUTHORIZING THE V65 BRAVO CALLSIGN LISTING TO BE CARRIED ABOARD AIRCRAFT. THIS LIST IS ESSENTIAL AND THE KEY TO INCREASED ANALYTICAL CAPAEILITY AS IT WOULD ALLOW THE ANALYST TO IDENTIFY CALLSIGNS TO BOOK PAIRS AND THEREBY DISTINGUISH HIGH LEVEL FROM LOW LEVEL TARGETS. OF EQUAL IMPORTANCE IS THE VALIDITY OF THE CHERRY SHEET. BECAUSE OF CHERRY SHEET LIMITATIONS THE MAJORITY OF THE IDENTIFIED TARGETS WHICH ARE FIXED ARE OBTAINED BY LUCK.

4. QUESTION: HAS THE VARYING OF TARGET SEQUENCE WITHIN MACV PRIORITY RESULTED IN FLEXIBILITY OF FLIGHT ROUTE PLANNING, AND MEETING OF MORE REQUIREMENTS? IF NO, WHY NOT? BELIEVE THIS QUESTION RELATEES O THE ARDF TECH TEST, WHICH, WITH THE CONCERTED EFFORT MADE DURING THIS LEST, RESULTED IN AN ESTIMATED VALIDITY OF CHERRY SHEETS OF FROM TWO TO TEN PERCENT.

B. AVIATION UNITSS AND CMA'S:

1. THE ADS CCONMSG'S HAVE NOT CP NOT IMPROVED MISSION MANAGEMENT TO ANY APPRECIABLE DEGREE. THEY HACE IN MOST INSTANCES HAMPERED MANAGEMENT. INFO INCLUDED IN CONMSG IS MOSTLY DUPLICATION OF OTHER EFFORTS AND REQUIRES CONSTANT RECHECKING. THIS IS ESPECIALLY TRUE OF ASSIGNMENTS TO ARDF POSITION, DATA RELATING TO FRAG POINT, ITOT'S, NUMBER OF SORTIES, DATES OF MISSIONS, AND EVEN TARGET DATA WHICH ARE OBTAINED BY OTHER MEANS. THE MAJORITY OF THIS INFORMATION IS PROVIDED BY MACCV AND IS TIMELY. CONMSG'S MAY OR MAY NOT BE RECEIVED PRIOR TO ACTUAL MISSION LAUNCH, AND IN MANY INSTANCES THE CONMSG WILL NOT AGREE WITH THE MACV TASKING. THEREFORE, IT CANNOT BE COUNTED ON AS RELIABLE INFORMATION. THE ONLY PORTION OF THE CONMSG CONCEPT THAT IS INDISPUTABLE IS THE TASKING OF COLLECTION RESOURCES, I.E., THERE IS GENERALLY NO OTHER SOURCE OF INFORMATION AVAILABLE FOR CROSS REFERENCING. IN MANY INSTANCES DUE TO TEMPORARY CHANGES IN SCHEDULE, NON-AVAILABILITY OF AIRCRAFT, ETC., CC MISSIONS HAVE BEEN CHANGED TO ZULU WITH NO TASKING RECEIVED EITHER PRIOR TO OR AFTER LAUNCH. IN CHECKING WITH CMA'S IT WAS FOUND THAT THEY WERE NOT PROVIDING ANY CONMSG'S ON TASKING ADJUSTMENTS OF LESS THAN 72 HOURS DURATION. CONSEQUENTLY, FOR EVERY CHANGE IN SCHEDULES THAT DID NT ALLOW THREE DAYS NOTICE, NO CONMSG WAS ISSUED . THIS HAS SINCE BEEN RECTIFIED BUT ALSO ADDED TO THE UNRELIABILITY OF CONMSG CONTSNT.

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RR YMRDOR
DE YHLAKZ 0817 3252111
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TO USAFSS/DOR
INFO 6994SS
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[redacted] FINAL SECTION OF TWO DOR
3. CONMSG TASKING HAS NOT RPT NOT PROVIDED THE CAPABILITY TO BETTER MEASURE MSSION RESULTS. TO ENABLE MANAGEMENT PERSONNEL TO EVALUATE MISSION EFFECTIVENESS WISELY AND ACCURATELY A DATA BASE MUST BE ESTABLISHED. ON GROUND SITES THIS DALA BASE IS NORMALLY AVAILABLE TO SOME DEGREE. IF NOT, THE TASKING IS NORMALLY OF SUFFICIENT LENGTH THAT A DATABASE CAN BE ESTABLISHED. HOWEVER, UNDER THE PRESENH ARDF TASKING SYSTEM IT IS IMPOSSIBLE TO EVALUATE MISSION RESULTS EXCEPT ON A WEEKLY BASIS, AS THAT MIGHT BE THE ONLY SERIES OF MISSIONS FLOWN. THE PRIMARY MEASUREMENT OF A MISSION IS MADE BY OUR CONSUMERS WHO ARE INTERESTED IN THE NUMBER OF FIXES/CUTS/EXPLOITABLE MESSAGES THAT WERE OBTAINED FROM TARGETS WITHIN THE FRAGGED AREA. HOWEVER, EVEN THIS STATISTIC IS UNSTABLE BECAUSE WHEN COMBAT OPERATIONS ARE UNDERWAY IN AN AREA THE TARGETS MOVE OUT TO ANOTHER AREA. NORMALLY, THIS RESULTS IN NEW FRAG AREAS BEING ESTABLISHED TO KEEP ABREAST OF THE TARGETS. FURTHERMORE, A CONSTANT SOURCE OF INFORMATIOS IS REQUIRED TO PROVIDE MEASURE OF A POSITION OR CASE. NOR ALLY THIS IS OBTAINED FOV PTAP'S, ICAR'S, ETC., BUT, NONE OF THESE REPORTS ARE ISSUED BY 6994 UNITS.
5. CONMSG'S HAVE NOT PROVED A BURDEN OR HAD AN ADVERSE IMPACT UPON COMM FACILITIES.
4. ALTERNATE ASSIGNMENTS BY ADS MISSIONS HAVE NOT THES FAR PROVIDED ANY SIGNIFICANT RESULTS IN MEETING MORE INTELLIGENCE REQUIREMENTS. ALTERMATE ASSIGNMENTS ARE NORMALLY PROVIDED TO GROUND SITES TO INCREASE EFFECTIVENESS DURING PERIODS OF TARGET INACTIMITHOMM THE ASS ONMNT OF ALTERNATE IAD'S TO AIRBORNE COLTENT TTHAROF POSITIONS SERVES NO USEFUL PURPOSE. IF THE CHERRY SHEEETS WERE MORE ACCURATE AND EXTENSIVE, AND THE COLLECTION OBJECTIVES BETTER DEFINED, ALTERNATE IAD'S WOULD NOT BEE REQUIRED. THE PRIMARY ASSIGNMENT TO COLLECTION POSITIONS OF VCX/VCM SCH WITH ANALYTICAL GUIDANCE WOULDPROVE MORE SFFECTIVE THAN DESIGNATING AN ALTERNATE ASSIGNMENT.
PART THREE: RECOMMENDATIONS.
THE ARDF PROGRAM IS BASED ON FLEXIBILITY OF ASSIGNMENT AND THE ABILITY TO PROVIDE ARDF CAPABILITY TO A GIVEN AREA AT A MOMENTS NOTICE. THE IMPLEMENTATION OF THE ADS CONMSG HAS LESSONED THE FLEXIBILITY OF ASSIGNMENT AND IF CONMSG TASKING WERE PERFORMED AS TASKED, IT WOULD TO SOME DEGREE, LIMIT THE CAP-

SILITY TO EFFICIENTLY PERFORM THE ARDF MISSION. SINCE THE PRI-
MARY CONSUMER OF OUR PRODUCT IS MACV AND THE AREA COMMANDERS,
ANY SYSTEM WHICH ATTEMPTS TO LIMIT OUR ABILITY TO RESPOND TO THEIR
ARDF REQUIREMENTS SHOULD BE SERIOUSLY REVIEWED. RECOMMEND
THE PRESENT PROCEDURE OF TASKING THE "X" POSITION BY COMMSG BE
TERMINATED AS IT USUALLY CONTAINS LESS GUIDANCE THAN THE CHERRY
SHEET. IN SUMMARY, IT APPEARS THE TEST PERIOD THUS FAR HAS RE-
GRETFULLY DEGENERATED INTO THE FOREWARNED PAPER EXCERCISE DUE
TO LACK OF FULL PARTICIPATION BY ALCON. THEREFORE, IF WE ARE
TO MAKE THIS AN EFFECTIVE PROGRAM, SEVERAL CHANGES MUST BE MADE
TO ALLOW FOR FLEXIBILITY IN ARDF COVERAGE AND MORE SPECIFIC
TASKING AND/OR TASKING REMARKS FOR THE COLLECTION POSITIONS.
ABOVE ALL, WE FEEL THE KEY TO THE SUCCESS OF ANNEX INDIA IS
THE AMOUNT OF EFFORT EXPENDED BY THE CMA'S. IN THE AREA OF
COLLECTION, FEEL WE SHOULD PRESS FOR MORE SPECIFIC TASKING
FROM THE CMA'S WITH APPROPRIATE UP-TO-DATE TECH SUPPORT OR,
COMPLETE THE PRESENT CONCEPT FOR THE CMA'S. ALTHHOUG THE CMA'S
HAVE BEEN DELEGATED THE RESPONSIBILITY OF SUPPORTING THE ADS
PROGRAM, ARMY PERSONNEL ACTIONS HAVE HISTORICALLY BEEN
AMISS IN ENSURING ADEQUATE NUMBERS OF EXPERIENCED PERS
WERE ASSIGNED TO PERFORM THESE DEMANDING TASKS. TIME FAC-
TORS INVOLVED IN BUILDING EFFECTIVE CMA'S PRECLUDE FULL IM-
PLEMENTATION OF ANNEX INDIA AT THIS TIME AND CONSEQUENTLY,
THE DESIRED SPECIFIC TASKING FOR COLLECTION FROM THE CMA'S
MAY VERY WELL TAKE THE FORM OF VC SEARCH. GENERIC TASKING
OF THIS NATURE WOULD NOT BE ADVANTAGEOUS OR SUCCESSFUL WITHOUT
SPECIFIC TASKING FOR AND AUTHORIZATION TO USE THE V65B CALLSIGN
LISTING WHICH HAS PROVEN ITS VALUE AS AN AID TO ARDF AND COL-
LECTION. AS FAR AS ARDF ITSELF IS CONCERNED, BELIEVE THAT THE
TIME HAS COME TO CONSIDER THE ASSUMPTION OF THE PRESENT TECH
SUPPORT FUNCTIONS BY PROVIDING OUR OWN DIRECTION IN THIS AREA
BASED ON MACV AND AREA COMMANDER REQUIREMENTS. BELIEVE OUR
RESPONSE TO DIRNSA SHOULD FULLY EXPLAIN AND STRONGLY EMPHA-
SIZE OUR ANALYHICAL AUGMENTATION OF NSA/CMA PRODUCED TECH
SUPPORT. ALTHOUGH OUR EFFORT IS RELATIVELY LIMITED WITHIN
DETAIL RESOURCES, IT HAS BEEN RECOGNIZED BY USAFSS MANAGERS,
CMA ANALYSTS, AND NSA REPS AS A SUCCESSFUL AND NECESSARY PRO-
GRAM WHICH HAS SIGNIFICANTLY IMPROVED MISSIONINFORMANCE
AND THE QUALITY OF OURPRODUCT. FORMAL NSA RECOGNITION,
SUPPORT, AND TASKING OF OUR GROUND AND AIRBORNE ANALYSIS
PROGRAM WOULD ENHANCE OUR CAPABILITY TO FULFILL THE REQUIRE-
MENTS OF ANNEX INDIA FOR MORE MEANINGFUL AND COMPLETE TECH
SUPPORT. CANNOT FULLY ANTICIPATE MAGNTUDE OF TASK ASSUMPTION;
HOWEVER, CONSIDERING THE SMALL NUMBER OF CMA PERS ASSIGNED TO
PRODUCE THE PRESENT CHERRY SHEETS, FEEL THE TASKS CAN BE
ACCOMPLISHED WITHIN OUR PRESENT MANPOWER RESOURCES; CONTINGENT
UPON CONTINUED ASSISTANCE FROM THE CMA'S AND THE REDISTRIBUTION
OF AUTHORIZED AFSC'S UNDER CURRENT CEILING LIMITATIONS. THE
USA 294SS IS PRESENTLY ADDRESSING AFSC REDISTRIBUTION AND RESULTS
WILL BE FORWARDED UPON RECEIPT.

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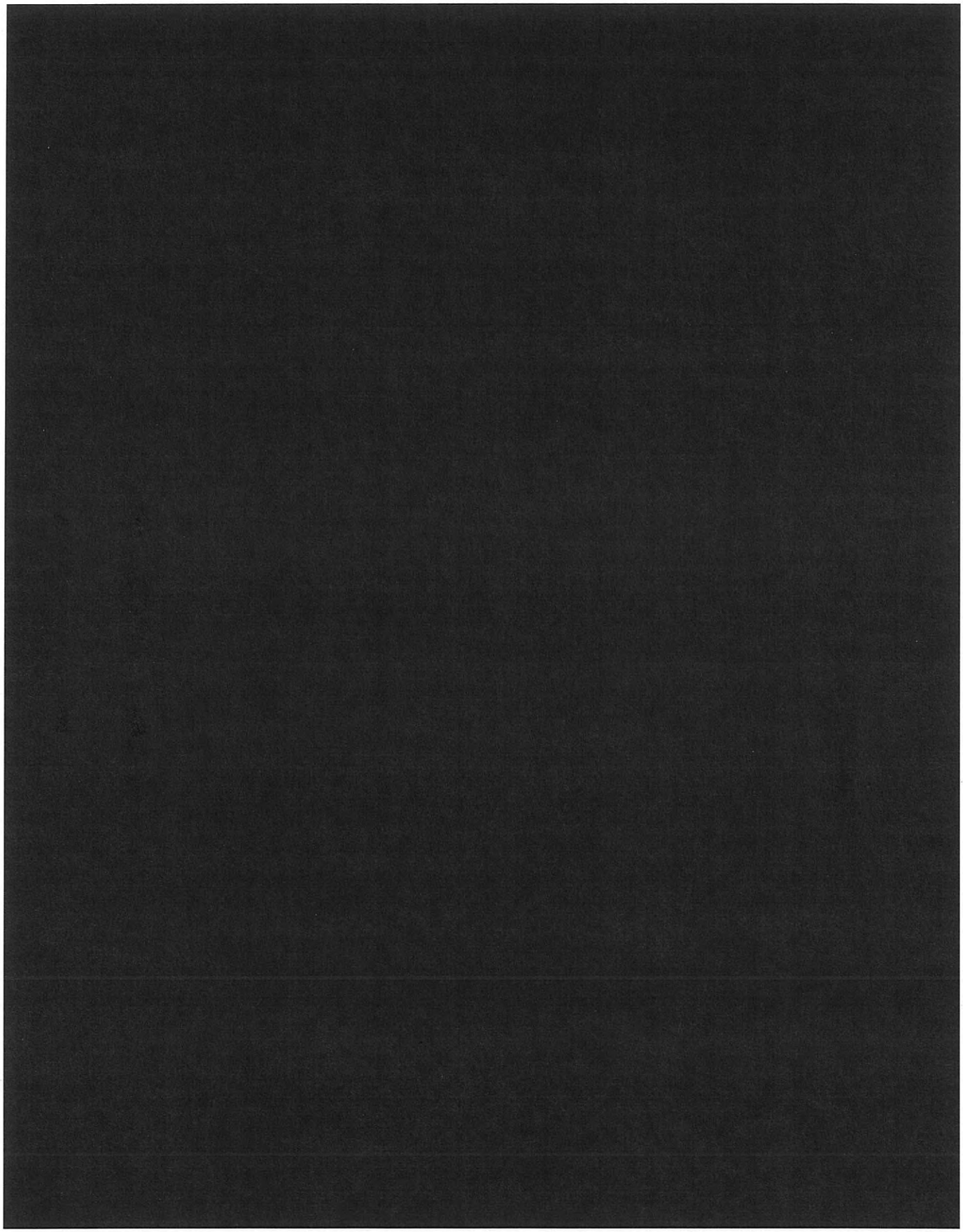

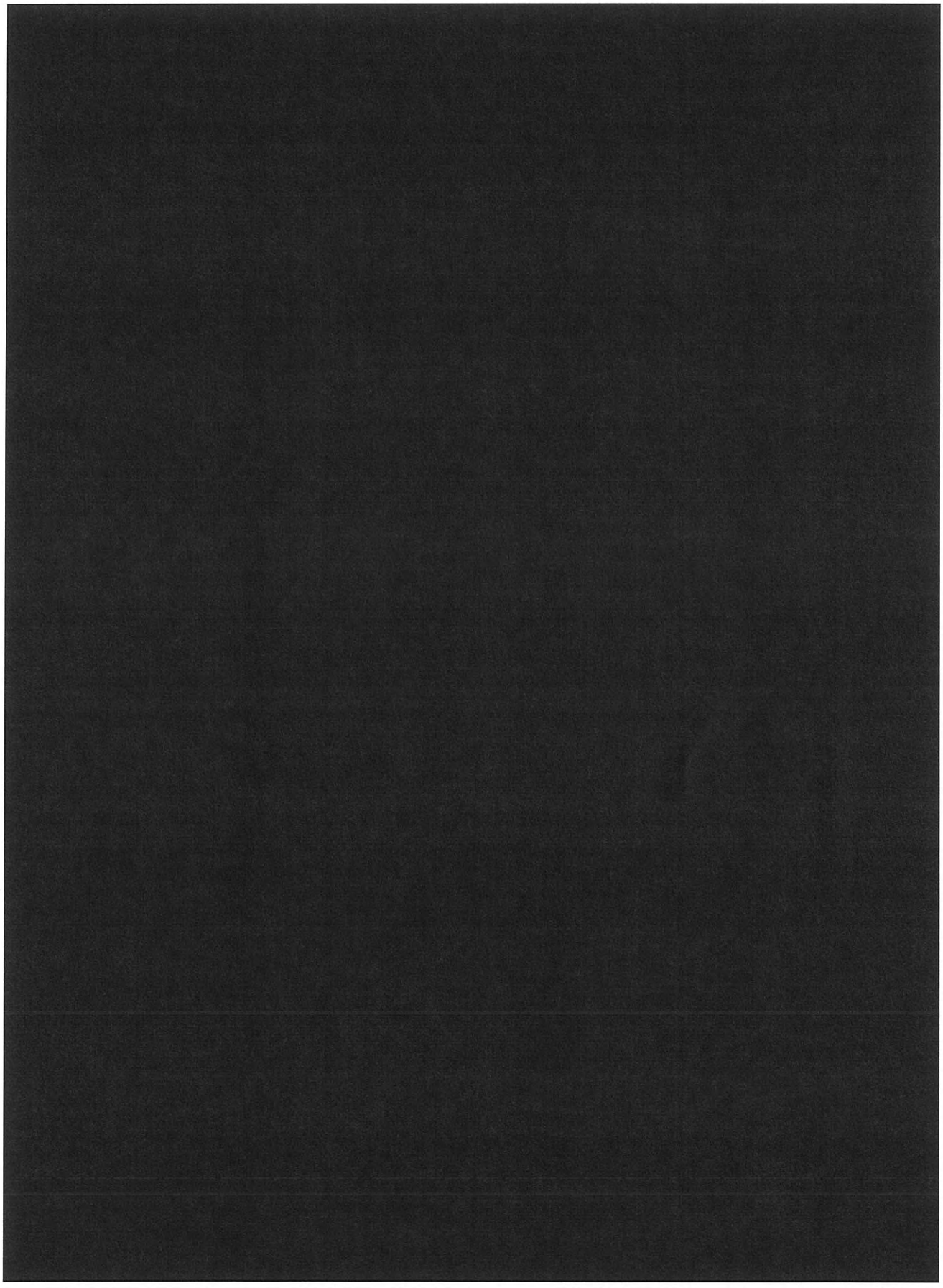

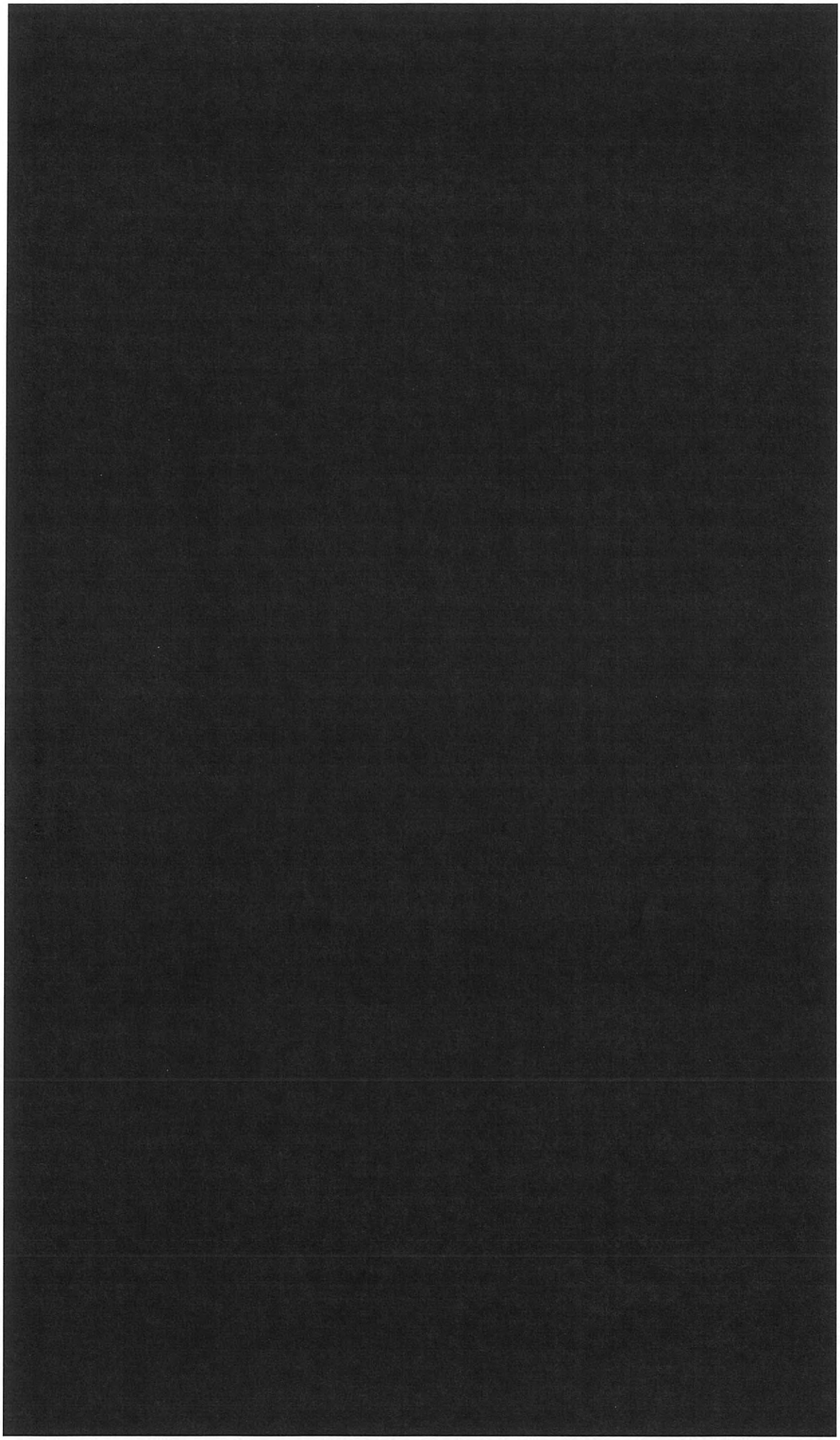

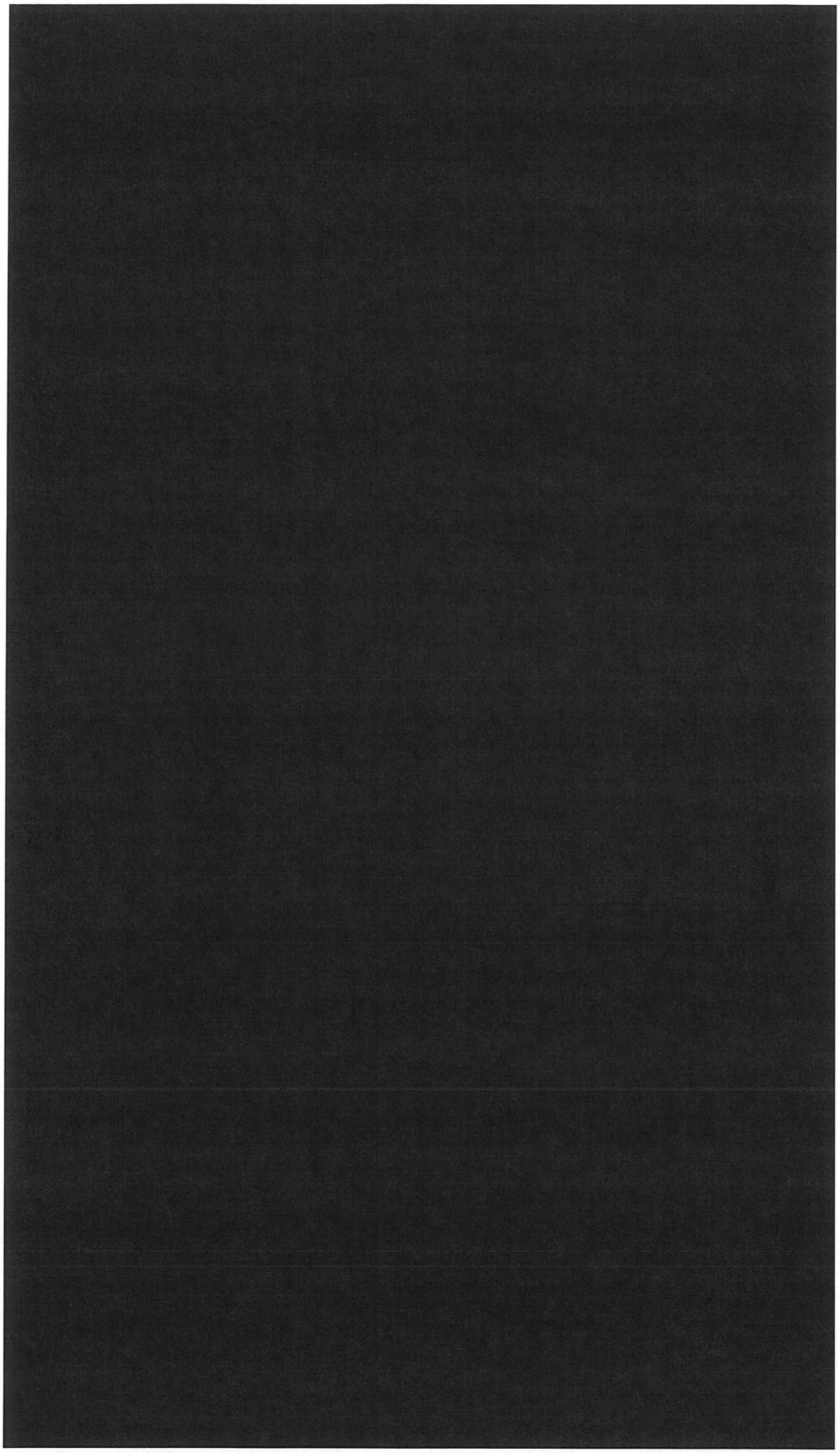

JOINT MESSAGEFORM

RESERVED FOR COMMUNICATION CENTER

CLA [redacted]

MSG	BOOK	MULTI	SINGLE
		XX X	

PRECEDENCE

ROUTINE

ROUTINE

DTG 170130Z Nov 70

SPECIAL INSTRUCTIONS

FROM: 6994 SCTY SQ TAN SON NHUT AB, RVN

TO: NSAPAC REP VIETNAM [redacted]

INFO: USAFSS (AC/DO)

PACSCTYRGN (DO)

USA-562

USA-563

USA-564

USM-607

USM-626

USMB704 (ACC)

USF-794 (HOLD AND PASS TO DIRNSA)

USA-561 (DOET MESSENGER)

[redacted] DOBM

ARDF TECH SUPPORT TEST (20-DAY STATUS REPORT) [redacted].

RV MSG R461-6002-70, 070133Z OCT 70.

SG IN THREE PARTS.

NE: OVERVIEW

RST 20 DAY PERIOD OF THE 60 DAY ARDF TECH SUPPORT TEST HAS

SULTED IN THE HOPED FOR IMPROVEMENTS IN PROVIDING ACCURATE

CAL SUPPORT/GUIDANCE TO ARDF AIRCRAFT. THERE HAS BEEN NO

DATE	TIME
16	
MONTH	YEAR
NOV	70
PAGE NO.	NO. OF PAGES
1	5

NAME AND TITLE

PHONE 4891

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RELEASED

SIGNATURE

TYPED (or stamped) NAME AND TITLE

JACK BARNES, Lt Col, USAF

[redacted]ions Officer

Y CLASSI[redacted] STRUCTIONS

FORM NOV 68 173

REPLACES EDITION OF 1 MAY 58 WHICH MAY BE USED.

☆ GPO 1967-242-606

ABBREVIATED JOINT MESSAGEFORM
and/or CONTINUATION SHEET [redacted]

PRECEDENCE	RELEASED BY	DRAFTED BY	PHONE
ACTION ROUTINE INFO	Lt Col Barnes	Capt Bayles	4891

INCREASE IN SUPPORT FROM CMA'S AND ACTUALLY A SIGNIFICANT DECREASE IN C/A TIP OFF BY DSUS. ADDITIONALLY TEST PROCEDURES HAVE RESULTED IN MISSION DEGRADATION IN BOTH USA-562 AND USA-563 AREAS OF RESPONSIBILITY. THE ONE PRIMARY BENEFIT HAS BEEN THE OPPORTUNITY FOR EACH UNIT TO TEST THE NEW NSA GENERATED IDENT AID, WHEN IT WAS RECEIVED IN TIME, CONTAINING ALL TARGETS IN A GIVEN AREA OF CONCERN IN ALPHABETIC ORDER BY TRANSMITTER. AIR FORCE RADIO OPERATORS HAVE FOUND THIS TO BE AN EXTREMELY BENEFICIAL TECH AID FOR USE AGAINST VOTS IN SOUTH VIETNAM. PROBLEMS AND RECOMMENDATIONS ARE SPECIFIED IN PART TWO AND THREE BELOW. THE BASIC PROBLEM OF LACK OF TIMELY TECHNICAL SUPPORT FROM CMA'S AND DSUS PRECLUDES REAPING BENEFITS FROM THIS TEST. WE ARE NOT RECEIVING DAILY UPDATED DATA OR TECH SUPPORT FOR DIVERTED MSMS. CHERRY SHEET TECH SUPPORT HAS REMAINED CONSTANT WITH THE SAME AMOUNT OF ACCURACY BEING EXPERIENCED AS PRIOR TO THE TEST. GENERALLY THROUGHOUT THE 6994 SS COMPLEX ONLY 2-10 PERCENT OF ALL CHERRY SHEET ENTRIES PROVED VALID WITHIN LIMITS OF THE TEST PROCEDURES. THERE HAS BEEN A SLIGHT INCREASE IN NUMBER OF TARGETS WORKED IN USA-561 AREA OF RESPONSIBILITY DURING THIS PERIOD (FIX, CUT, LOP) WHICH IS ATTRIBUTED TO THE EMPLOYMENT OF VACUUM CLEANER CONCEPT IN CONJUNCTION WITH NSA IDENT AID.

PART TWO: PROBLEMS.

CONTROL NO.	TOR/TGD	PAGE NO. 2	NO. OF PAGES 5	MESSAGE IDENTIFICATION	INITIALS
SECU [redacted]				REGRADING INSTRUCTIONS	

DD FORM 1 NOV 68 173-1 REPLACES EDITION OF 1 MAY 68 WHICH MAY BE USED.