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To The Special Study
Group of The NSA/SAE
(Summer 1953).

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Auth: Commander, USAFSS

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HEADQUARTERS

Initials *HRS*

UNITED STATES AIR FORCE SECURITY SERVICE

Date *4 Aug 53*

Office of the Commanding General

BROOKS AIR FORCE BASE
SAN ANTONIO, TEXAS

4 August 1953

Professor Howard P. Robertson
NSA Scientific Advisory Board
The Pentagon
Washington 25, D. C.

EO 3.3(h)(2)
PL 86-36/50 USC 360

Dear Professor Robertson:

The following summary of the thoughts and opinions which were expressed in the recent conference in this Headquarters is submitted in fulfillment of your verbal request:

Any military operation of major consequence must be preceded by preparatory actions of some sort and these actions must, in turn, be preceded or accompanied by related electronic emissions or by changes in the normal pattern of electronic emissions in areas.

At least some of these emissions or changes can be detected by intercept operations conducted in locations beyond

The likelihood that significant electronic emissions or changes in the pattern of emissions will not only be intercepted but will also be identified and reported to appropriate agencies in time to be operationally useful is dependent on many inter-related factors, such as intercept coverage, analytical effort, communications facilities, background information, and counter, cover or deceptive measures.

In so far as intercept coverage directed against air targets is concerned, there has been a very great increase within the past few years, - the USAFSS having increased from zero to over positions in this period; however, our best current estimates indicate that approximately positions are required to provide adequate intercept coverage of all worthwhile air communications. Our planning is based on this figure and if in the next few years it is achieved, the likelihood of intercepting all significant items will be correspondingly increased.

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Personal Letter to Professor Howard P. Robertson, 4 August 1953

Improvement in the quality and timeliness of the analytical effort poses perhaps the greatest problems of all for, although our ability in this field is improving, our analysts are faced with an ever-increasing amount of raw material. Our present approach to the overall problem of timely analysis and reporting is to summarize the intercept material at the point of intercept level and then to transmit the results thereof to Group level where every effort is made to identify and report items of significant intelligence value soon enough to be operationally useful. This procedure must be measured in terms of hours rather than minutes and if a significant item is not detected in this first stage of analysis, the chances are it will be a matter of days before it is discovered. Then, too, there is the problem of making a collation of a large number of items in order that the proper inference may be drawn as to their collective significance. Despite the many problems involved in timely analysis and reporting, there are many instances where items have been detected and reported quickly and correctly, and it is well to remember that if the cost and difficulty of detecting these items by COMINT methods is great so, too, is the cost and difficulty of preventing their detection.

A considerable amount of communications facilities must be devoted exclusively to the COMINT effort; however, the problems involved in the operation of a COMINT communications system are essentially the same as those involved in the operation of any communication system designed to handle large quantities of high priority, highly classified traffic.

The ability to correctly interpret individual electronic emissions or electronic emission patterns is largely dependent on an extensive, detailed knowledge of past emissions and emission patterns. In so far as [] air communications are concerned, there has been a tremendous increase in the amount of available background information during the past few years and, with the ever-increasing amount of intercept coverage, it is anticipated that this type of material will increase correspondingly.

There are many countermeasures available to [] which could seriously hamper our COMINT effort. Some, based on technological improvements, require a considerable time period for implementation, in which case there is some advance warning. Others,

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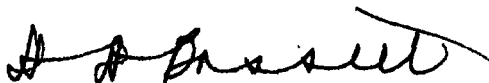
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Personal Letter to Professor Howard P. Robertson, 4 August 1953

on the other hand, could be put into effect very suddenly and with serious consequences; however, any such measures would be relatively expensive from the [] standpoint and they would be readily detectable. Resort to them would at least serve to alert appropriate U.S. agencies.

Cover and deception measures are always a threat; however, they become increasingly complex and difficult of implementation more or less in proportion to the scope and complexity of the military operation with which they are associated. While there can probably never be any guarantee that communications cover and deception operations will always be detected, the likelihood that they will be goes up more or less in proportion to the improvement in our background information on past [] electronic emissions and emission patterns. Since, as indicated above, our store of background information has increased very greatly and should continue to do so in the future, it follows that the likelihood of a successful [] communications coverage or deception operation decreases correspondingly.

The foregoing thoughts and opinions lead to the conclusions that our current COMINT effort is capable of producing a considerable amount of extremely valuable information and that there is a fair degree of likelihood that COMINT would provide advance warning of a major [] military operation. This likelihood should increase very appreciably during the next few years, - more or less in proportion to the increase in intercept coverage, quality and timeliness of analytical effort, and increase in our store of background information.



H. H. BASSETT
Brigadier General, USAF
Commander

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Auth: CG, USAFSS	
Initials <i>mlb</i>	
Date <i>3</i> AUG 1953	

BRIEFING AND DISCUSSION OF COMINT CAPABILITY TO
PROVIDE ADVANCE WARNING OF ATTACK, 29 JULY 1953

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Initials <i>MB</i>	
Date: 3 AUG 1953	

I. INTRODUCTION

On 29 July 1953, a special advisory committee to the Director, National Security Agency, visited Headquarters, AFSS, in the course of its investigation to determine the capability of COMINT to provide advance warning of attack. The program was limited to approximately four hours (0830 - 1230) and included a formal presentation by members of the AFSS staff, followed by general discussion with the committee. The Commander of the USAF Security Service, General Bassett, introduced the Deputy Chief of Staff, Operations, who served as moderator for the briefing.

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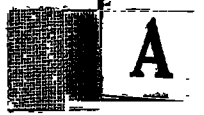
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II. AFSS BRIEFING

(In order of presentation)

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TAB A

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COLONEL GORDON W. WILDES, DC/S, OPERATIONS

AS YOU ALL DOUBTLESS KNOW, THE SECURITY SERVICE IS A COMMAND OF THE AIR FORCE WHOSE COMMUNICATIONS INTELLIGENCE FACILITIES ARE UNDER THE OPERATIONAL CONTROL OF THE NATIONAL SECURITY AGENCY. ORGANIZATIONALLY, FROM THE STANDPOINT OF COMMUNICATIONS INTELLIGENCE, WE HAVE TWO GROUPS DEPLOYED - ONE IN LANDSBERG, GERMANY - THE OTHER AT JOHNSON AIR FORCE BASE, CLOSE TO TOKYO. AT THE PRESENT TIME, SIX RADIO SQUADRONS, MOBILE, REPORT TO THE 6910TH SECURITY GROUP WHILE THREE IN THE FAR EAST REPORT AND ARE UNDER THE CONTROL OF THE 6920TH SECURITY GROUP. A SEPARATE SQUADRON, THE 3RD RADIO SQUADRON, MOBILE, IS DEPLOYED IN ALASKA WITH HEADQUARTERS AT ANCHORAGE AND DETACHMENTS ON THE ALEUTIAN CHAIN AND ST. LAWRENCE ISLAND. THE TOTAL STRENGTH OF THE COMMAND TODAY IS 14,528 OFFICERS, AIRMEN, AND CIVILIANS.

CONCEPTS

THE UNITED STATES AIR FORCE SECURITY SERVICE WAS ESTABLISHED WITH THE PRIMARY PURPOSE OF PROVIDING COMINT SUPPORT TO AIR AND AIR DEFENSE OPERATIONS. THEREFORE, OUR TARGETS HAVE GENERALLY BEEN CONFINED TO THE COMMUNICATIONS OF HOSTILE OR POTENTIALLY HOSTILE AIR AND AIR DEFENSE ORGANIZATIONS, SINCE THESE FORCES CONSTITUTE THE PRINCIPAL DETERRENT TO OUR OWN AIR FORCE OPERATION.

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I SHOULD LIKE TO BRIEFLY DISCUSS OUR CURRENT CONCEPT OF OPERATIONS IN ORDER TO PROVIDE YOU WITH A GENERAL BACKGROUND FOR THE FURTHER DISCUSSIONS. FIRST, COMINT HAS ALWAYS BEEN CONSIDERED AS AN ESSENTIAL WEAPON OF AERIAL WARFARE AND THE DEFENSE AGAINST IT. IT IS RELATIVELY RELIABLE IN REFLECTING OUR OPPONENT IN HIS OWN TERMS - THE PROBLEM REALLY BEING TO PROPERLY INTERPRET AND UNDERSTAND THE DATA WE OBTAIN FROM ENEMY COMMUNICATIONS. THERE IS A BASIC CONTINUITY IN THIS FIELD IF THE TECHNICAL PROBLEMS CAN BE SOLVED SINCE COMMUNICATIONS OR ELECTRONIC SIGNALS IN SOME FORM ARE NECESSARY AND INEVITABLE IN THE CONDUCT OF WAR. FROM COMINT CAN BE OBTAINED A CURRENT PICTURE OF THE ENEMY IF IT IS POSSIBLE TO TRANSLATE INTERCEPTED SIGNALS REFLECTING THE ACTIVITY OF THE ENEMY INTO INTELLIGIBLE INFORMATION ON A RAPID BASIS. IT IS OBVIOUS TO ALL OF US, I KNOW, THAT WITH THE INCREASE OF ELECTRONICS IN MODERN WAR, THE FIELD OF COMMUNICATIONS INTELLIGENCE AND ELECTRONIC INTELLIGENCE IS VAST AND CAN PROVIDE US, IF WE CAN PROPERLY EXPLOIT IT, WITH UNIQUE AND ALL IMPORTANT SOURCES OF INTELLIGENCE FOR AIR AND AIR DEFENSE OPERATION:

THE SECOND CONCEPT IS THAT AS A SOURCE OF OPERATIONAL AIR INTELLIGENCE, COMINT CONTRIBUTES TO THE BASIC INTELLIGENCE REQUIREMENTS CONCERNING THE OPPONENT. PROPERLY EXPLOITED, IT ESTABLISHES WHAT EXISTS - THE STRENGTH, COMPOSITION, AND

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DEPLOYMENT OF THE ENEMY - HIS ORDER OF BATTLE. FURTHER, IT PROVIDES CONTINUING DATA ABOUT THE ACTIVITY OF THE ORGANIZATIONS INCLUDED IN THE ORDER OF BATTLE, THUS ENABLING AN ASSESSMENT OF ENEMY CAPABILITY. AND FINALLY, THE DEVELOPMENT OF THE ORDER OF BATTLE AND OF THE ASSESSMENT OF THE CAPABILITY OF THE ENEMY CONSTITUTES THE BASIS FOR A SOUND ESTIMATE OF HIS INTENDED ACTION.

THE THIRD AND ONE OF OUR MOST IMPORTANT CONCEPTS OF OPERATION IN THE SECURITY SERVICE IS THAT EFFECTIVE EXPLOITATION OF THIS TYPE INTELLIGENCE FOR SUPPORT OF RAPID MOVING AIR OPERATION NECESSITATES MAXIMUM SPEED IN THE PRODUCTION OF THAT INTELLIGENCE COMPATIBLE WITH TECHNICAL CAPABILITIES FOR COMPLETENESS AND ACCURACY. THIS REQUIRES THE REDUCTION TO A VERY MINIMUM OF THE TIME LAG BETWEEN ACTUAL INTERCEPT OF THE ENEMY SIGNAL AND THE RECOGNITION AND INTERPRETATION OF THE SIGNIFICANCE OF THAT SIGNAL AS INTELLIGENCE INFORMATION. THEREFORE, THE ANALYSIS OF THE SIGNAL MUST BE ACCOMPLISHED, INSOFAR AS POSSIBLE, CLOSE TO THE POINT OF INTERCEPT SO THAT USABLE INFORMATION MAY BE MADE IMMEDIATELY AVAILABLE TO FRIENDLY FORCES. THIS MUST BE DONE RAPIDLY AND REGULARLY.

AS YOU ARE AWARE, THERE ARE CERTAIN FUNDAMENTAL PROCESSES AND FUNCTIONS WHICH MUST BE PERFORMED IN THE COMINT COLLECTION AND PRODUCTION OPERATION AND I SHOULD LIKE TO DISCUSS THE

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VARIOUS SUCCESSIVE PHASES OF THE COMINT CYCLE FROM THE STANDPOINT OF THE PROBLEMS WHICH WE HAVE ENCOUNTERED IN PROVIDING TIMELY COMINT TO SUPPORT AIR OPERATION. IN THIS REGARD, I WISH TO EMPHASIZE THAT IT HAS BEEN AN ACCEPTED DOCTRINE OF THIS COMMAND THAT OUR PRIMARY MISSION HERE HAS BEEN TO PROVIDE EARLY WARNING OF ATTACK AND A CONSIDERABLE AMOUNT OF OUR THINKING AND EFFORT HAS BEEN DIRECTED TOWARD THIS END.

THE FIRST STEP IN THE COMINT CYCLE IS TO ISOLATE THE SIGNALS TO BE EXPLOITED FOR THE PURPOSE OF MEETING SPECIFIC REQUIREMENTS. FOR EXAMPLE, IF THE PRIMARY THREAT OF AIR ATTACK COMES FROM , IT IS NECESSARY THEN TO DETERMINE WHAT TYPE OF COMMUNICATION THIS ORGANIZATION UTILIZES AND IN GENERAL, WHERE AND HOW THEY WILL BE EMPLOYED IN ORDER THAT APPROPRIATE INTERCEPT EQUIPMENT CAN BE PROVIDED. AS THE NATURE OF COMMUNICATIONS TARGETS CHANGES, IT IS NECESSARY TO EFFECT CORRESPONDING CHANGES IN THE INTERCEPT PLAN. HAVING DETERMINED THE TARGET, THE NEXT STEP IN THE COMINT CYCLE IS THE ACT OF INTERCEPTING THE DESIRED COMMUNICATIONS CHANNELS AND NETWORKS. THERE ARE, OF COURSE, THREE FACTORS THAT DETERMINE THE INTERCEPT OPERATION. THESE FACTORS ARE THE EQUIPMENT, THE LOCATION OF THE EQUIPMENT, AND THE INDIVIDUAL PROFICIENCY OF PERSONNEL.

OF EQUIPMENT, OF COURSE, MUCH CAN BE SAID AND AS YOU WELL KNOW, IT IS NECESSARY TO CONTINUALLY STUDY AND TEST NEW

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TYPES OF INTERCEPT EQUIPMENT, ANTENNAS AND ASSOCIATED EQUIPMENT IN ORDER THAT THE VERY MAXIMUM EFFICIENCY MAY BE ATTAINED. IT IS AXIOMATIC THAT AS THE CHARACTERISTICS OF THE ENEMY'S TRANSMITTING EQUIPMENT CHANGES, SO MUST WE CHANGE OUR OWN RECEIVING EQUIPMENTS.

THE MATTER OF THE LOCATION OF THE EQUIPMENT IS ONE OF OUR MOST VEXING PROBLEMS SINCE [REDACTED] IS THE [REDACTED] WITH POTENTIAL COMMUNICATIONS TARGETS [REDACTED] POSES TREMENDOUS PROBLEMS IN THE FIELD OF LOCATION. AT PRESENT, WE ARE [REDACTED] THE [REDACTED] IN THE [REDACTED] AND [REDACTED] BUT THERE [REDACTED] [REDACTED] AND [REDACTED] AND [REDACTED] WHICH WE [REDACTED] [REDACTED] THE PROBLEMS OF [REDACTED] IN THOSE [REDACTED] ARE, OF COURSE, FORMIDABLE.

THE VITAL FACTOR OF INDIVIDUAL PROFICIENCY IS TRULY THE MAJOR PROBLEM AND THE SECURITY SERVICE PURSUES AN ACTIVE AND CONTINUING TRAINING COURSE IN ORDER TO ACHIEVE MAXIMUM EFFICIENCY OF ALL OF OUR PERSONNEL. DESPITE OUR VAST IMPROVEMENTS IN MACHINES AND DEVICES, THE HUMAN BEING IS STILL THE MOST IMPORTANT ASSET IN THE COMMUNICATIONS INTELLIGENCE FIELD.

THE THIRD STEP, AFTER INTERCEPT, IS TO IDENTIFY AND COLLATE THE TRAFFIC. THIS IS THE CRUX OF THE PROBLEM OF TIMELINESS: TO REDUCE THE TIME LAG BETWEEN THE TIME OF INTERCEPT AND RECOGNITION OF SIGNIFICANT INTELLIGENCE DATA. TO MEET THIS PROBLEM, WE ENDEAVOR TO ACCOMPLISH AS MUCH

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INITIAL PROCESSING AS POSSIBLE IN FORWARD AREAS. THE SUCCESS OF FORWARD PROCESSING IS DEPENDENT UPON AVAILABILITY OF CURRENT AND COMPLETE RECOGNITION DATA. WE ARE MEETING THIS NEED BY SUPPLEMENTING THE MAJOR RESEARCH EFFORT IN THE REAR AREA BY CURRENT PROCESSING FOR TACTICAL PURPOSES AT THE SECURITY GROUP LEVEL AND BY UTILIZING MACHINE METHODS IN THE FIELD, TO MAINTAIN RAPID FLOW OF CURRENT SUPPORTING TECHNICAL DATA TO ALL UNITS.

THE FOURTH STEP OF THE CYCLE IS REPORTING THE RESULTS OF ANALYSIS ON A TIMELY BASIS FROM THE FORWARD PROCESSING CENTERS, BOTH SQUADRON AND GROUP.

FINALLY, TO ACHIEVE THE REQUIRED RAPID DISSEMINATION OF INFORMATION, IT IS NECESSARY TO PROVIDE A RAPID MEANS OF COMMUNICATIONS TO THE APPROPRIATE COMMANDER RESPONSIBLE FOR TAKING ACTION. THE AIR FORCE HAS A COMMUNICATION SYSTEM - CENTERED HERE AT ~~WHEELS~~ ^{Kelly} AIR FORCE BASE FOR THIS PURPOSE. THERE ARE DIRECT COMMUNICATIONS FROM THE OVERSEAS GROUPS TO THIS HEADQUARTERS AND FROM HERE TO THE VARIOUS COMMANDS SERVED - CHIEFLY, THE STRATEGIC AIR COMMAND AND THE AIR DEFENSE COMMAND. COMPARABLE ARRANGEMENTS EXIST BETWEEN OVERSEAS GROUPS - THEIR SUBORDINATE SQUADRONS AND LOCAL AIR COMMANDERS IN THE FIELD.

MY REMARKS HAVE BEEN LIMITED TO PROVIDING A GENERAL OUTLINE OF THE AFSS ORGANIZATION AND CONCEPTS OF OPERATION.

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IN ORDER TO GIVE YOU A BRIEF BUT MORE DETAILED SUMMARY OF WHAT WE ARE DOING AND HOW WE ARE DOING IT, SEVERAL MEMBERS OF THE AFSS STAFF WILL COVER VARIOUS ASPECTS OF OUR OPERATION RELEVANT TO THE QUESTION UNDER CONSIDERATION. THEY WILL DISCUSS TRAFFIC ANALYSIS, THE AFSS ELINT PROGRAM, INTELLIGENCE REQUIREMENTS AND REPORTING AND COMMUNICATIONS.

FIRST, MR. MCCARTNEY, OF OUR ANALYSIS OFFICE, WILL DISCUSS TRAFFIC ANALYSIS.

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TAB B

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TRAFFIC ANALYSIS - MR. MCCARTNEY

COLONEL WILDES REFERRED EARLIER THIS MORNING TO THE BASIC
RESPONSIBILITY OF THIS HEADQUARTERS FOR STUDY OF [REDACTED]

[REDACTED] COMMUNICATIONS IN ORDER TO ENHANCE PREVENTION OF A
SURPRISE ATTACK UPON THE UNITED STATES. THIS STATEMENT, OF
COURSE, PRESUPPOSES A KNOWLEDGE AND A TECHNIQUE WHICH DOES IN
FACT EXIST FOR THE IDENTIFICATION OF ALL TYPES OF COMMUNICATIONS
SIGNALS. THE ART OF COLLECTING, RECORDING, ANALYZING AND PRODUC-
ING THIS INFORMATION IS KNOWN IN COMINT CIRCLES AS TRAFFIC
ANALYSIS.

AS WE ALL ARE AWARE, MILITARY OPERATIONS DICTATE A COORDINATED
AND TIMELY MEANS OF COMMUNICATIONS -- THIS REQUIREMENT IS VERY
PRONOUNCED IN OUR AIR AGE. THESE COMMUNICATIONS ARE ALSO CARE-
FULLY SCRUTINIZED BY THE COMMUNICATING AUTHORITIES IN ORDER TO
PREVENT PENETRATION FROM OUTSIDE SOURCES. THIS ACTION PLUS THE
ACTION EMBODIED IN THE PREPARATION OF ALL ASSOCIATED COMMUNICATIONS
INSTRUCTIONS IS REFERRED TO IN MILITARY CIRCLES AS COMMUNICATIONS
OPERATIONS INSTRUCTIONS (COI). IN OTHER WORDS, THESE INSTRUCTIONS
CLEARLY POINT OUT WHO IS GOING TO COMMUNICATE WITHIN SPECIFIC
MILITARY ORGANIZATIONS, WHAT THEY ARE AUTHORIZED TO SAY AND THE
MANNER IN WHICH THESE STATEMENTS ARE TO BE MADE. NOW NATURALLY,

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THIS COI BY AND OF ITSELF CLEARLY DEPICTS THE JURISDICTION OF THE
COMMANDER THAT THE COMMUNICATIONS SYSTEM SERVES. THIS DEPICTION
IN OUR EFFORTS AGAINST [] AIR FORCES COMMUNICATIONS IS
TITLED AIR ORDER OF BATTLE.

IT WOULD BE VERY NICE IF WE COULD AVAIL OURSELVES OF THE
ENEMY COI'S AS WE WOULD THEN HAVE THE BASIC DATA NECESSARY TO
FOLLOW SELECTED LINKS OR NETS WITHIN ANY GIVEN COMPLEX OF COMMUNI-
CATIONS ACTIVITY. HOWEVER, BEING DENIED THIS INFORMATION, THE
FIRST STEP OF TRAFFIC ANALYSIS IS THAT OF DETERMINING WHO IS
COMMUNICATING WITHIN ANY GIVEN NETWORK AND HOW THESE COMMUNICA-
TIONS MAY TIE IN WITH THOSE OF LATERAL, SUBORDINATE OR SUPERIOR
NETWORKS. HOW IS THIS PROBING ACTION EXPANDED TO THE POINT WHERE
WE CAN BE REASONABLY SURE THAT WE HAVE ACHIEVED THIS OBJECTIVE?
ASSUMING THAT WE ARE BEGINNING OUR PROBING EFFORT WITHOUT THE
BENEFIT OF ANY TECHNICAL INFORMATION ON THE TARGET AREA, WE WOULD
ESTABLISH BASIC UNITS OF INTERCEPT TO EXPLORE THE FREQUENCY SPEC-
TRUM AND TO PULL OUT FROM THIS EXPLORATION SPECIFIC FREQUENCIES.
THIS IS A NATURAL STARTING POINT, SINCE FREQUENCIES ARE THE BASIC
ELEMENT OF ANY NETWORK. NOW I AM SURE THAT YOU CAN QUICKLY SEE
THAT HAVING ISOLATED A FREQUENCY, THE NEXT SERIES OF STEPS WOULD
BE ORIENTED TOWARD DETERMINING HOW IT WAS USED. FOR EXAMPLE WE
WOULD OBSERVE WHETHER THE FREQUENCY WAS USED ONLY DURING HOURS OF
DAYLIGHT, NIGHT TIME HOURS, WHETHER IT WAS USED ONLY ON SPECIFIC
DATES; FINALLY IF OVER A PERIOD OF TIME IT WAS FOUND THAT THIS

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SPECIFIC FREQUENCY ONCE USED WOULD REAPPEAR LATER IT WOULD BE POSSIBLE TO ESTABLISH SOME SORT OF PREARRANGED FREQUENCY ROTATION SYSTEM. THIS STEP, IN OTHER WORDS WOULD ENABLE US TO DETERMINE WHAT SPECIFIC FREQUENCY WE COULD BE REASONABLY SURE OF INTERCEPTING THROUGH METHODOICAL APPLICATION OF OUR INFORMATION AND RESOURCES.

NOW OF COURSE, CONCURRENT WITH THE PROBING ACTION IN SEARCH OF SPECIFIC FREQUENCY INFORMATION, OTHER TYPES OF INFORMATION WOULD BE COMING TO HAND FOR EVALUATION ALONG WITH THE EVALUATION OF THE FREQUENCY. ONE OF THE MAJOR ELEMENTS OF COMMUNICATIONS INFORMATION OF THIS TYPE PERTAINS TO WHAT WE SHALL CALL THE "IDENTIFIER", OR, AS WE REFER TO IT, THE CALLSIGN OF THE TRANSMITTING STATION. WE WOULD FOR EXAMPLE EQUATE THE CALLSIGN USAGE, CHANGES THERETO WITH FREQUENCY CHANGES. AS YOU CAN SEE A RELATIONSHIP BETWEEN CALLSIGN CHANGE AND FREQUENCY CHANGE WOULD BE IMPORTANT, PARTICULARLY IN THE INITIAL STAGES OF OUR INVESTIGATIONS.

ANOTHER ITEM OF PARTICULAR IMPORTANCE IN THE EXPLORATORY PHASE IS THAT OF MAINTAINING CAREFULLY DOCUMENTED INFORMATION AS TO WHAT TYPE OF TRAFFIC IS BEING PASSED OVER THE PARTICULAR LINKS OR NETS IN WHICH WE ARE INTERESTED. WE BEAR IN MIND NOW OF COURSE, AT THIS PARTICULAR POINT THAT WE ARE STILL BASICALLY INTERESTED IN WHO IS COMMUNICATING. HENCE, THE TYPE OF MATERIAL, BY CATEGORY, THE TIMES THE MESSAGES ARE FILED AND THE ASSOCIATED PROCEDURES UTILIZED BY THE COMMUNICATING OPERATORS HAVE INTRINSIC VALUE TO

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TO THE SOLUTION OF OUR BASIC QUESTION. OVER A PERIOD OF TIME, THROUGH THE CAREFUL CODIFICATION OF THIS INFORMATION, WE WOULD BE ABLE TO DETERMINE WHETHER THE TYPE OF TRAFFIC WAS ALTERED AT THE TIME THE CALLSIGNS AND FREQUENCIES CHANGED. IF THIS WAS NOT IN FACT ACCOMPLISHED, WE WOULD HAVE A BASIC GROUPING TOOL WITH WHICH WE COULD MAINTAIN CONTINUITY OF SPECIFIC ASSOCIATIONS OF NETS AND, INDEED IN MANY CASES CONTINUITY OF SPECIFIC LINKS WITHIN NETS. THE TYPES OF TRAFFIC IN WHICH WE ARE INTERESTED DURING THIS BRIEF DISCUSSION, WE WILL CLASSIFY INTO THREE GENERAL CATEGORIES; FIRST ADMINISTRATIVE TRAFFIC, SECOND, OPERATIONAL TRAFFIC, WHICH IS BROKEN DOWN INTO MORSE COMMUNICATIONS AND VOICE COMMUNICATIONS AND THIRD, RADIO TELETYPE OR NON-MORSE TYPE COMMUNICATIONS. I HAVE NOT MENTIONED NON-COMMUNICATIONS TYPES OF SIGNALS, AS THAT SUBJECT WILL BE FURTHER DISCUSSED BY A LATER SPEAKER.

I HAVE NEGLECTED TO MENTION UP TO THIS POINT THE TREMENDOUS ASSISTANCE TRAFFIC ANALYSIS ACHIEVES THROUGH CAREFUL AND COORDINATED RELATIONSHIP WITH THE INTERCEPT OPERATOR. FOR EXAMPLE, DURING TIMES OF CALLSIGN CHANGE AND FREQUENCY CHANGE OR BOTH, AN OPERATOR MAY SERVE AS THE MAJOR EQUATING TOOL BY MERELY COMMENTING THAT THE TRANSMITTER FROM WHICH HE SELECTED CERTAIN CALLSIGNS OR FREQUENCIES SOUNDS REMARKABLY SIMILAR TO THAT OF A PREVIOUS PERIOD. SECONDLY, HE MAY ASSIST US THROUGH INTERPRETATION AND PERSONAL EQUATION OF THE MAN WHO IS PERFORMING THE ACTUAL TRANSMISSION. AS MOST OF YOU ARE AWARE, I AM SURE, COMMUNICATIONS OPERATORS HAVE INDIVIDUAL IDIOSYNCRASIES THAT ARE SOMEWHAT ANALOGOUS TO OUR INDIVIDUAL VOICES. THIS PARTICULAR

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ASPECT IS INDEED OF SUFFICIENT IMPORTANCE AT ALL STAGES OF TRAFFIC ANALYSIS THAT TECHNICAL EQUIPMENTS HAVE BEEN DESIGNED AND PROVIDED THE INTERCEPT UNITS IN ORDER THAT WE MAY OBTAIN PERMANENT RECORDS OF THE CHARACTERISTICS OF BOTH THE TRANSMITTER AND THE COMMUNICATIONS OPERATOR.

IN SUMMARY OF THIS PORTION OF OUR INVESTIGATION THEREFORE, WE MAY SEE THAT, AS WE EXPAND THE AMOUNT OF EFFORT IN TERMS OF INTERCEPT AND ANALYSIS AND AS REPRESENTED BY THE DEPLOYMENT OF OUR RSMS, WHICH COLONEL WILDES HAS EARLIER DISCUSSED WITH YOU, WE COME EVER CLOSER TO A RECONSTRUCTION OF THE COMMUNICATIONS OPERATIONS INSTRUCTIONS (COI) IN USE BY THE TARGET NET WORKS. IN OTHER WORDS, IN FINDING THE ANSWER TO THE QUESTION: "WHO IS COMMUNICATING" WE ALSO ARRIVE AT AN ORDER OF BATTLE.

HAVING DETERMINE WHO IS COMMUNICATING, OUR NEXT AND LOGICAL STEP IS TO DETERMINE WHAT THESE COMMUNICATORS ARE SAYING IN BEHALF OF THE MESSAGE ORIGINATORS OR UNIT COMMANDERS. AS REGARDS [REDACTED] MATERIAL, WE ARE CURRENTLY RECEIVING LITTLE IN THE WAY OF THIS TYPE OF MATERIAL, SINCE THERE IS A [REDACTED] WITHIN [REDACTED] THAT [REDACTED] WILL NOT BE [REDACTED] OF [REDACTED] OF [REDACTED] IN OTHER WORDS, THE [REDACTED] NETWORKS DO EXIST AND AS I HAVE PREVIOUSLY STATED [REDACTED] FROM CAREFUL ANALYSIS OF THESE NETWORKS. HOWEVER, THE TRAFFIC CURRENTLY PASSED IS [REDACTED]

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[] OF COURSE, IS [] AS TO

WHAT IS BEING SAID. FOR EXAMPLE, AS YOU ARE AWARE, AIR OPERATIONS
NECESSITATE RAPID COMMUNICATIONS; PARTICULARLY IS THIS TRUE WITH
RESPECT TO [] AIRCRAFT AND AS A RESULT
ALL COMMUNICATIONS ARE EXCHANGED BETWEEN AIRCRAFT AND RELATED
STATIONS BY MEANS OF VOICE COMMUNICATIONS. THIS NECESSITATES
THE PROVISION OF ADEQUATE LINGUISTS TO COPE WITH THE LANGUAGE
PROBLEM. HOWEVER, VOICE INTERCEPT PROVIDES US WITH OUR []

[] LET US LOOK, FOR EXAMPLE, AT A FEW OF
THE MORE VALUABLE FINDINGS THAT VOICE COMMUNICATIONS HAVE MADE
POSSIBLE. FIRST WE ARE ABLE TO DETERMINE THE [] AND
[] SECONDLY, WE ARE ABLE TO DETERMINE
[] AND OVER A PERIOD OF TIME, THE []
[] THIS MATERIAL, WHEN MULTIPLIED
AS YOU CAN SEE IS OF EXTREME VALUE TO OUR MILITARY PLANNING
EFFORT.

THE [] BEING A [] TYPE OF AN ORGANI-
ZATION ENGAGED IN [] FLIGHTS PROVIDES US WITH BOTH
[] IN ADDITION TO WHAT I HAVE
ENUMERATED AS GROWING OUT OF OUR ANALYSIS OF INTERCEPT PERTAIN-
ING TO [] AIRCRAFT, THE [] PRO-
VIDES US WITH MORSE COMMUNICATIONS WHICH ARE UTILIZED EXTENSIVELY
IN REPORTING [] AND [] AND IN MANY
CASES []

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WE HAVE THUS NOW COVERED THE TWO BASIC POINTS IN WHICH I AM CONCERNED IN THIS BRIEFING, NAMELY THAT OF EXPLAINING TO YOU THE BROAD, GENERAL TECHNIQUES INVOLVED IN DETERMINATION OF WHO IS COMMUNICATING AND IN DETERMINING WHAT THEY ARE SAYING. THIS OF COURSE IS PREPARATORY TO THE THIRD STEP, THAT OF EXPLOITING THE KNOWLEDGE WE GAIN THROUGH THE ACCOMPLISHMENT OF THE FIRST TWO.

MAJOR HINMAN WILL DISCUSS THE MATTER OF EXPLOITATION WITH YOU. SUFFICE IT TO SAY THAT ONCE WE HAVE ACHIEVED THE TWO MAJOR OBJECTIVES, THE SUCCESSFUL EXPLOITATION IS DEPENDENT UPON A COORDINATED UTILIZATION OF OUR INTERCEPT FACILITIES TO HARMONIZE WITH THE OVERALL NATIONAL, SERVICE AND SPECIFIC THEATER INTELLIGENCE REQUIREMENTS. IN SUMMARY, I HAVE EXPLAINED TO YOU THE FUNCTION OF TRAFFIC ANALYSIS AS BEING THAT OF DETERMINING THE NATURE AND ORGANIZATION OF COMMUNICATIONS NETWORKS, THE MANNER IN WHICH THEY OPERATE AND THE APPLICATION OF THIS INFORMATION TO INTERCEPT AND INTELLIGENCE OPERATIONS.

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TAB C

COLONEL GORDON W. WILDES, DC/S, OPERATIONS

THE NEXT SPEAKER, COLONEL HILL, IS GOING TO DISCUSS OUR ELINT PROGRAM. ELINT IS AN ABBREVIATION FOR THE WORDS ELECTRONIC INTELLIGENCE. AS COLONEL HILL WILL EXPLAIN TO YOU, THIS FIELD, WHILE RELATIVELY OLD, HAS NOT BEEN EXPLOITED TO THE EXTENT THAT COMMUNICATIONS INTELLIGENCE HAS BEEN EXPLOITED. WE, HERE IN THE SECURITY SERVICE, ARE ATTEMPTING TO DEVELOP NEW APPROACHES IN THIS FIELD. ONE OF THE CONCEPTS WHICH WE FIRMLY BELIEVE TO BE SOUND IS THAT ELECTRONIC INTELLIGENCE AND COMMUNICATIONS INTELLIGENCE MUST BE COMPLEMENTARY TO ONE ANOTHER AND PROPERLY COMBINED THROUGH ANALYSIS WILL PROVIDE US WITH A MORE COMPLETE AND ACCURATE INTELLIGENCE PRODUCT.

LT COLONEL LANDON P. HILL

UP TO NOW, THE BRIEFING HAS BEEN CONFINED TO COMINT. I WILL INTRODUCE A NEW TERM - ELINT OR ELECTRONIC INTELLIGENCE - - - DEFINED AS THAT INFORMATION RESULTING FROM THE INTERCEPTION AND ANALYSIS OF SIGNALS WHICH DO NOT RESULT IN A LITERAL TEXT. COMINT, OF COURSE, HAS TO DO WITH THOSE SIGNALS WHICH DO, OR COULD, RESULT IN A LITERAL TEXT. THE INCREASING SOPHISTICATION OF COMMUNICATIONS SYSTEMS MAY WELL RESULT IN CONSIDERABLE CONFUSION, AT THE INTERCEPT SITE, ON THESE POINTS OF DEFINITIONS.

ELINT, AS SUCH, IS NOT NEW - - ONLY OUR APPROACH IS NEW. HOWEVER, TO TAKE THINGS IN PROPER ORDER, LET'S ELABORATE ON SOME OF THE ASPECTS OF T/A, JUST DISCUSSED BY MR. MAC CARTNEY.

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A. SOMETIME AGO, AS A RESULT OF PROCESSING THE TRAFFIC INTERCEPTED FROM THE CIRCUITS OF THE [REDACTED] OUR TRAFFIC ANALYSTS INFERRED THE EXISTENCE AND LOCATIONS OF SOME THINGS WHICH WERE OBVIOUSLY [REDACTED] [REDACTED] FURTHER, FROM MESSAGE CONTENT IT WAS INFERRED THAT THESE "THINGS" WERE PROBABLY [REDACTED] SUCH AS ARE IN COMMON USE THROUGHOUT THE WORLD.

B. BY SIMILAR METHODS, THE PROCESSING OF COMMUNICATIONS PASSED OVER THE CIRCUITS OF THE [REDACTED], AGAIN PRIMARILY BY TRAFFIC ANALYSIS, RESULTED IN "BREAKING OUT" [REDACTED] AND [REDACTED] OF WHAT WERE TERMED [REDACTED] OVER A PERIOD OF SEVERAL YEARS, IN CONJUNCTION WITH COORDINATED OPERATION BY COMINT UNITS, AND BY [REDACTED] PURELY COMINT MEANS HAVE BEEN DEVELOPED FOR FURTHER BREAKING DOWN [REDACTED] INTO [REDACTED] ETC.

C. ALTHOUGH THESE PURELY COMINT RESULTS ARE MOST VALUABLE AND ARE OBTAINABLE [REDACTED] INTO THE [REDACTED] THE INFORMATION IS STILL INCOMPLETE, IN THAT [REDACTED] ARE BY [REDACTED] AND ESSENTIALLY NOTHING IS KNOWN OF THE [REDACTED] OF SOME [REDACTED] WHICH WE DO KNOW EXIST.

MORE OR LESS COMPLETELY ASIDE FROM THESE T/A EFFORTS, PURELY ELINT OPERATIONS WILL PROVIDE US WITH AN ELECTRONICS ORDER OF BATTLE, I.E., THE LOCATION OF NAVIGATIONAL AIDS, RADAR SETS, ETC., AT LEAST IN PERIPHERAL AREAS. IT IS PROBABLE THAT THE SCOPE OF THIS INFORMATION WILL BE EXTENDED WITH THE DEVELOPMENT OF NEWER INTERCEPT VEHICLES AND TECHNIQUES.

A. IN ADDITION TO ORDER OF BATTLE, ELINT OPERATIONS PROVIDE INFORMATION AS TO THE TECHNICAL SIGNAL CHARACTERISTICS OF THESE DEVICES.

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B. AND FINALLY, ELINT INTERCEPT PROVIDES SOME INFORMATION ON [REDACTED]

[REDACTED] IN THE [REDACTED] OR AIR WARNING SYSTEM UNDER SCRUTINY.

OUR NEW APPROACH TO ELINT INVOLVES THE MARRIAGE OR COLLATION OF BOTH COMINT AND ELINT INFORMATION, SO THAT NOW:

A. WE NOT ONLY KNOW SOMETHING [REDACTED] OF THE [REDACTED] CONNECTED WITH AIR WARNING ACTIVITIES, BUT DETAILS OF THE DEVICES USED AT PARTICULAR LOCATIONS, AS WELL.

B. WE ARE ALSO IN A POSITION TO DEVELOP [REDACTED] OF THE

[REDACTED] OF THE WARNING SYSTEM SUCH AS:

- (1) [REDACTED] OR [REDACTED]
- (2) ABILITY TO REPORT [REDACTED]
- (3) THE [REDACTED] THE WARNING SYSTEM [REDACTED] AND OTHER FORMS OF INFORMATION UPON WHICH TO BASE [REDACTED] ANALYSES."

I WOULD LIKE TO DIVERGE SLIGHTLY TO DISCUSS THE IMPORTANCE OF [REDACTED] ANALYSIS. AS I MENTIONED BEFORE, COORDINATED COMINT OPERATIONS WITH [REDACTED] FLIGHTS IN SUCH [REDACTED] AREAS AS THE [REDACTED] HAVE PROVIDED [REDACTED] OF THE [REDACTED] THE WARNING SYSTEM, AS WELL AS THE [REDACTED] SYSTEM [REDACTED]

A. ON THE BASIS OF THESE DETAILS, THOSE AIR COMMANDERS DIRECTLY CONCERNED WITH SUCH FACTS INCLUDING SAC AND ITS BOMBER COMMANDS, AND THE TACTICAL AIR FORCES IN OVERSEAS AREAS, MAY EFFECTIVELY PLAN FOR AIR OPERATIONS WITH SOME FORE KNOWLEDGE OF THE OVERALL DEFENSE SYSTEM IN THE TARGET AREAS, AS WELL AS

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ALONG [REDACTED]

B. I MIGHT INDICATE HERE THAT PLANNING BY THE STRATEGIC AIR COMMAND FOR RETALIATORY ATTACKS [REDACTED] SHOULD A WAR BEGIN, IS BASED LARGELY ON THE RESULTS OF A CONTINUING [REDACTED] ANALYSIS. RETURNING TO ELINT, IT'S PROBABLY OBVIOUS THAT OUR EOB INCLUDES [REDACTED]

C. ON THIS SUBJECT, I FEEL IT'S RELEVANT TO MENTION THE [REDACTED] [REDACTED] INTERCEPT IN THE U.K. DURING WORLD WAR II. FROM THE EARLY DAYS OF THE WAR, CONSIDERABLE INTERCEPT EFFORT WAS DEVOTED TO THIS PURPOSE AND DESPITE ALL GERMAN SECURITY MEASURES, SOME 90 ODD PERCENT OF ALL RAIDS ON GREAT BRITAIN WERE FORECAST WELL IN ADVANCE AND, ACTUALLY, THE PROBABLE TARGET AREA WAS FAIRLY WELL LOCALIZED LONG BEFORE THE ATTACKING FORCE CAME ACROSS BRITISH TERRITORY.

D. THIS HISTORY SEEMS TO INDICATE THAT [REDACTED] INTERCEPT CAN POSSIBLY CONTRIBUTE, TO SOME DEGREE, TO DETERMINING SOMETHING ABOUT THE IMMINENCE OF HOSTILITIES. FOR EXAMPLE, THERE IS CURRENTLY IN [REDACTED] A [REDACTED] SIMILAR TO [REDACTED]. THE MAJOR DIFFERENCE IS IN THE [REDACTED] WHEREIN THE [REDACTED] PROBABLY [REDACTED] [REDACTED] BY ABOUT [REDACTED]. AS THIS SYSTEM DEVELOPES, AND AS WE OBSERVE THE MANNER IN WHICH [REDACTED] IT, THERE IS A POSSIBILITY THAT WE MAY BE ABLE TO BUILD-UP SOME METHOD OF PREDICTING IMPENDING [REDACTED] AIR OPERATIONS.

E. REGARDLESS OF THE POTENTIAL WHICH MIGHT BE USEFUL IN PREDICTING AN OUTBREAK OF HOSTILITIES, ^{thorough} ~~THROUGH~~ STUDY OF [REDACTED] WILL CERTAINLY PROVIDE CONSIDERABLE BACKGROUND FOR TACTICAL UTILIZATION. THIS THOUGHT IS BASED ON THE EXISTING KNOWLEDGE WHICH WE HAVE AND WHICH CLEARLY

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3-11/51

SHOWS THAT THE [] FOR COMMUNICATION, OR ACTUALLY [],
[] EXTENDS TO THE COMMON [] SYSTEMS IN TACTICAL USE
WHEREIN [] ARE THE RULE, RATHER
THAN THE EXCEPTION. BY RELATING THE SYSTEM OF []
TO THE SYSTEM OF [], WE WILL HAVE MADE YET ANOTHER STEP IN
PROVIDING TACTICAL COMMANDERS WITH FACTUAL INFORMATION ABOUT THE POSSIBLE,
OR ACTUAL, ENEMY.

F. BESIDE THE PURELY O B VALUE OF ELINT INFORMATION, WE SHOULD NOTE
IN PASSING THAT WE ALSO WILL HAVE PROVIDED INFORMATION OF VALUE TO THOSE
ENGAGED IN ACTUAL ELECTRONICS COUNTERMEASURES.

- (1) IF, FOR EXAMPLE, IT IS DECIDED THAT DECEPTIVE MEASURES WOULD
BE PROFITABLE, THE NECESSARY TECHNICAL CHARACTERISTICS WILL
HAVE BEEN PROVIDED.
- (2) ON THE OTHER HAND, IF THESE INTERCEPTED RADIATIONS ARE OF
NO DIRECT INTEREST TO US, THE KNOWLEDGE FROM INTERCEPT, OF
THESE CHARACTERISTICS IS ADEQUATE FOR THEM TO BE JAMMED
EFFECTIVELY.

IF YOU'LL AGREE THAT WE'VE TAKEN CARE, TO SOME EXTENT, OF THE
[] SYSTEMS ASSOCIATED THEREWITH, I'D LIKE TO
POINT OUT ANOTHER INTELLIGENCE AREA FOR THE USEFUL APPLICATION OF THIS
BONUS EFFECT DERIVED FROM THE COLLATION OF COMINT AND ELINT, THAT IS []

A. A FEW YEARS AGO, AIR FORCE INTELLIGENCE ACTIVITIES ARRANGED FOR A
GROUP OF APPROPRIATELY QUALIFIED INDIVIDUALS TO STUDY JUST ONE QUESTION.

THIS WAS: "WHAT CAN BE LEARNED FROM INTERCEPTING THE []

[]

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THE INDIVIDUALS OF THE STUDY GROUP, WHO FOR THE MOST PART, HAD NEVER BEEN EXPOSED TO SPECIAL INTELLIGENCE AND ITS RAMIFICATIONS, RAPIDLY ARRIVED AT THE CONCLUSION THAT [] WOULD PROBABLY PROVIDE THE [] TO THESE OPERATIONS.

B. THE GROUP FURTHER DETERMINED THAT SUBSEQUENT TO THE [] INTO [] OPERATIONS WOULD PAY CONSIDERABLE DIVIDENDS. IN VIEW OF THE COMPLEXITIES OF [] — EACH [] COMPLEXITY BEING DEPENDENT LARGELY ON [] THERE IS OBVIOUSLY A REQUIREMENT FOR CONSIDERABLE INFORMATION ABOUT THE METHOD BY WHICH [] INCLUDING THE TRANSMITTING AND RECEIVING GADGETS INVOLVED.

C. AS A RESULT OF THE ACTIVITIES OF THIS GROUP, BOTH COMINT AND NON-COMINT AGENCIES WENT TO WORK. THEIR EFFORTS PRODUCED LITTLE, HOWEVER, THE COMBINATION OF CLASSICAL INTELLIGENCE (COLLATERAL) PLUS [] INTERCEPTS FROM WHAT WE WOULD TERM [], DID RESULT IN SOME BACKGROUND ON WHICH TO BASE FURTHER EFFORT;

(1) ONE BIG STEP WAS TO LOCALIZE THE AREA INVOLVED. FROM THE DISPOSITION OF OUR [] YOU CAN EASILY VISUALIZE HOW NICE IT IS TO KNOW THAT WE MUST [] INSTEAD OF []

(2) THE COMBINATION ALSO BROUGHT OUT SOMETHING WHICH MIGHT SEEM TO BE TRIVAL — BUT WHEN DEALING WITH THE [] SYSTEM IS REALLY COMPLEX — BUT IT BROUGHT OUT THE FACT THAT [] WOULD PROBABLY BE THE PRINCIPLE [] INVOLVED IN [] THE COMPLEXITY OF THIS TRIVAL

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SITUATION WAS TOUCHED ON IN SUBSTANCE BY COLONEL WILDES AND MR. MAC CARTNEY — BUT IS WORTHY OF FURTHER MENTION. YOU'LL NOTICE THAT THOSE WHO CAME BEFORE ME, AND MAJOR HINMAN WHO FOLLOWS, GENERALLY TALK ABOUT SOME ASPECT OF THE [] AIR FORCE. MOREOVER, YOU WILL ALSO FIND, THAT THE SO-CALLED TEXTA DATA WHICH [] OF THE [] AIR FORCE IS RATHER WELL-DEVELOPED ON AREAS OF INTEREST. HOWEVER, FOR ONE REASON OR ANOTHER, TEXTA DATA ON [] IN THE, SAY, [] SEEMS TO BE SADLY LACKING.

D. THE RESULTS OF THE TEXTA DEFICIENCY IS THAT OUR INTERCEPT OPERATIONS, WHICH ARE JUST BEGINNING AT A PAIR OF SITES [], WILL OF NECESSITY BE RATHER BLINDLY GUIDED UNTIL ADEQUATE TEXTA IS DEVELOPED. NO DOUBT, OUR GENERAL SEARCH OPERATIONS FROM WHICH WE HOPE TO PRODUCE A [] INTO THE [] ACTIVITY, WILL CONCURRENTLY PRODUCE TRAFFIC FROM WHICH TEXTA CAN BE DEVELOPED; HOWEVER, WE MUST REMEMBER THAT ADEQUATE TEXTA IS A PREREQUISITE TO REALLY DIRECTED SEARCH.

E. DESPITE THE GLOOMY TONE OF MY ABOVE REMARKS, THERE IS AT LEAST ONE BRIGHT LIGHT ON THE SCENE — [] [] A SUBJECT OF INTENSE INTEREST TO [] HAS A GREAT DEAL TO DO WITH [] CAN BE [] PURPOSES. ALTHOUGH SOME INTERESTING [] INFORMATION FROM THE [] AREA WILL PROBABLY BE [], WE'RE CONFIDENT THAT [] THERE IS SUFFICIENT TO PERMIT READY [] SO THAT IN THE SAME MANNER IN WHICH THE U.S. STUDY GROUP INADVERTENTLY LEARNED OF THE [] TO BE EXPECTED FROM SOME [], SO ALSO WE MIGHT LEARN WHETHER THE [] AROUND [] ARE SUITABLE FOR []

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F. YOU PROBABLY THINK THAT I'VE GONE WAY OFF THE ELINT TRACK, BUT I'D LIKE TO THINK THAT IT'S BECOMING INCREASINGLY OBVIOUS THAT ALTHOUGH ELINT, AS SUCH CAN HAVE MEANING; WHEN IT'S EVALUATED IN THE LIGHT OF APPLICABLE COMINT, THE MEANING IS ENHANCED MANY FOLD.

(1) AS A RESULT OF THIS CONCEPT, OUR INITIAL ATTACK ON THE [REDACTED] [REDACTED] PROBLEM IS [REDACTED] WITH [REDACTED] YET FAIRLY JUDICIOUSLY DIRECTED [REDACTED] SEARCH.

(2) LUCKILY, THE ELINT ASPECTS OF THE [REDACTED] PROBLEM ARE TECHNICALLY SUCH THAT WE CAN AIM OUR SIGHTS [REDACTED] THEREBY REMOVING AT LEAST ONE OF THE FREQUENTLY INDETERMINANT FACTORS OF COMINT.

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TAB D

~~SECURITY INFORMATION~~

COLONEL GORDON W. WILDES

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THE GUIDING OBJECTIVE OF THE COMINT EFFORT IS TO MEET ALL NATIONAL INTELLIGENCE REQUIREMENTS. THE SECURITY SERVICE HAS BEEN CONCERNED PRINCIPALLY WITH THE REQUIREMENTS OF AIR COMMANDERS - WHICH ARE, OF COURSE, A PART OF OUR NATIONAL OBJECTIVES. THE OVERRIDING CONCERN OF THE PRINCIPAL AIR COMMANDS WHICH WE SERVE AND IN PARTICULAR, STRATEGIC AIR COMMAND AND AIR DEFENSE COMMAND, IS THE DEFENSE OF THE UNITED STATES AGAINST ATTACK - FOR THIS PURPOSE, THE PRIME PREREQUISITE IS ADVANCE WARNING OF ATTACK.

THE BASIC FACTOR IN AIR DEFENSE IS THE DEGREE OF EARLY WARNING THAT A DEFENSE FORCE OBTAINS FROM WHATEVER MEANS OR SOURCE IT HAS AVAILABLE. THE SOURCES THAT MAY BE UTILIZED IN DERIVING EARLY WARNING ARE QUITE NUMEROUS, ESPECIALLY WHEN ONE CONSIDERS EARLY WARNING FROM A LONG TERM, ALL EMBRACIVE VIEWPOINT, I.E., "STRATEGIC EARLY WARNING." IN THE SITUATION THAT CONFRONTS US TODAY, [] AGGRESSIVE INTENTIONS MUST BE MEASURED IN TERMS OF [] TOTAL MILITARY AND INDUSTRIAL CAPACITY, SINCE INDICATION OF THE IMMINENCE OF AGGRESSIVE ACTION MAY BE FOUND IN THE INFORMATION COLLECTED ABOUT ANY OR ALL PHASES OF THIS TOTAL CAPACITY. IT MAY, THEREFORE, BE SAID THAT THE TOTAL INTELLIGENCE COLLECTION FACILITIES OF THE UNITED STATES ARE EMPLOYED IN THIS TASK OF PROVIDING "STRATEGIC EARLY WARNING."

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THE PART THAT THE UNITED STATES AIR FORCE SECURITY SERVICE CAN PLAY IN AIDING THE AIR DEFENSE PROGRAM IS, THEREFORE, LIMITED IN SCOPE, FOR THE UNITED STATES AIR FORCE SECURITY CONCENTRATES ITS EFFORT UPON THAT SEGMENT OF THE TOTAL [] EFFORT THAT [] OF AIR ATTACK . . . [] THIS ORGANIZATION IS THE [] THAT IS [] OF [] AGAINST [] DURING PEACETIME, THERE IS A REQUIREMENT FOR CLOSE SURVEILLANCE OVER THE [] TO OBSERVE [] ASSESS [] AND [] AND THEREBY AID IN THE OVERALL TASK OF DETERMINING THE "IMMINENCE OF ATTACK."

ONCE IT HAS BEEN DETERMINED THAT AN ATTACK IS IMMINENT, THE REQUIREMENT EXISTS TO IDENTIFY, SPECIFICALLY, THE [] [] UNIT OR UNITS THAT WILL BE INVOLVED IN SUCH AN ATTACK, FROM WHAT BASES THE ATTACK WILL BE LAUNCHED, AND WHEN THE ATTACK IS TO BEGIN. SPECIFICALLY, IT IS NECESSARY TO PERFORM THE FOLLOWING FUNCTIONS:

- (1) MAINTAIN CONTINUOUS SURVEILLANCE OVER [] [] UNITS IN ORDER TO DETERMINE THEIR STRENGTH, COMPOSITION, AND LOCATION.
- (2) RECOGNIZE THE PREPARATION AND LAUNCHING OF AN ACTUAL OR SIMULATED STRIKE BY [] UNIT OR UNITS.

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(3) CONTINUALLY TRACK THE STRIKING AIRCRAFT, ONCE THE ATTACK HAS BEEN LAUNCHED.

(4) IDENTIFY THEIR TARGETS.

(5) FOLLOW THEIR ACTIONS WHILE MOVING INTO, FLYING OVER AND WITHDRAWING FROM THE TARGET AREA.

IT IS THEREFORE NECESSARY TO PROVIDE A MEANS BY WHICH TO OBSERVE THE ACTIVITIES OF THE [REDACTED] AND RELATED UNITS THROUGH THE IMMEDIATE ANALYSIS AND EVALUATION OF THEIR COMMUNICATIONS SIGNALS. SINCE [REDACTED] ACTIVITIES ARE OFTEN RELATED TO AND DEPENDENT UPON THE ACTIVITIES OF OTHER [REDACTED] ORGANIZATIONS, THE TOTAL PLAN MUST PROVIDE FOR AN INTEGRATED, COMPREHENSIVE METHOD OF PROVIDING TIMELY COMINT ON THOSE ORGANIZATIONS, AS WELL AS THE [REDACTED] [REDACTED], IN ORDER THAT A COMPLETE PICTURE OF THE AIR SITUATION MAY BE MAINTAINED.

THE AIR FORCE SECURITY SERVICE PROPOSES TO ACHIEVE THE PROPER DEGREE OF TIMELINESS AND INTEGRATION BY PLACING A SURVEILLANCE RESPONSIBILITY IMPLEMENTED BY APPROPRIATE PROCEDURES ON ALL ECHELONS FROM POINT OF INTERCEPT THROUGH THE SPECIAL Z OF I PROCESSING CENTER. THIS PROCEDURE WILL ENTAIL MAINTENANCE OF A CONTINUOUS SUMMARY OF THE [REDACTED] [REDACTED] AND RELATED ACTIVITY AT THE POINT OF INTERCEPT WITH PROVISION FOR RAPID CORRELATION AND RELAY OF SIGNIFICANT INFORMATION TO APPROPRIATE COMMANDERS. THIS PLAN IS NOW BEING WORKED OUT IN DETAIL WITH THE AIR DEFENSE COMMAND IN

RESPONSE TO A SPECIFIC COMMITMENT PLACED ON THE AIR FORCE SECURITY SERVICE BY DIRECTOR, NATIONAL SECURITY AGENCY.

THE TOTAL COMINT RESPONSIBILITY OF THE AIR FORCE SECURITY SERVICE, AS ASSIGNED BY THE AIR FORCE, INCLUDES THE COLLECTION AND DISSEMINATION, WITHIN THE AIR FORCE, OF ALL COMMUNICATIONS INTELLIGENCE MADE AVAILABLE FROM PRODUCING AGENCIES. TO INSURE AN EFFECTIVE DISSEMINATION PROGRAM RESPONSIVE TO THE ACTUAL NEEDS OF AIR COMMANDERS, WE MAINTAIN A CONTINUOUS AND INTIMATE AWARENESS OF THE INTELLIGENCE REQUIREMENTS OF EACH OF THE COMMANDS THROUGH THE SSO SYSTEM. THE OVERALL PROBLEM OF RELATING THE REPORTING AND DISSEMINATING PROGRAM TO THE OPERATIONAL REQUIREMENTS FOR COMINT WITHIN THE AIR FORCE WILL BE DISCUSSED BY MAJOR HINMAN OF THE AFSS OFFICE OF DISSEMINATION.

MAJOR RICHARD H. HINMAN

GENTLEMEN, YOU HAVE HEARD BRIEF DISCUSSIONS OF OUR METHODS SO I SHOULD NOW LIKE TO GIVE YOU AN EQUALLY BRIEF TREATMENT OF THE PRODUCT ITSELF - COMMUNICATIONS INTELLIGENCE, ITS DISSEMINATION, ITS VALUE AS AN INTELLIGENCE PRODUCT, AND LASTLY, ITS LIMITATIONS. BUT FIRST FOR REVIEW PURPOSE, I SHOULD LIKE TO SHOW YOU:

(1) (DEPLOYMENT, STRENGTH) CHARTS 1, 2, AND 3 (CHARTS USED ARE NOT AVAILABLE.)

(2) RESPONSIBILITIES TO MAJOR AIR COMMANDS - IT IS THE RESPONSIBILITY OF HEADQUARTERS, USAFSS, TO SUPPLY COMINT ON A TIMELY BASIS ON [REDACTED] TO TWENTY-FOUR AIR FORCE COMMANDS, TO CIA, TO THE DIRECTOR OF INTELLIGENCE, USAF, TO THE STATE DEPARTMENT, AND TO VARIOUS OTHER U.S. ASSOCIATED COMINT AGENCIES. THE RESULTS OF FIELD ANALYSIS ARE RECEIVED AT THIS HEADQUARTERS AND THE INFORMATION FROM THE 6910TH SECURITY GROUP, THE 6920TH SECURITY GROUP, THE 3RD RADIO SQUADRON, MOBILE, AND [REDACTED] IS INTEGRATED INTO REPORTS WHICH ARE DISSEMINATED TO THESE CONSUMERS. THE MEDIA FOR SUCH DISSEMINATION ARE:

- (1) THE DAILY DIGEST
- (2) THE WEEKLY DIGEST
- (3) THE DAILY [REDACTED] AND [REDACTED]

[REDACTED] ACTIVITY REPORT

- (4) DAILY [REDACTED] REPORTS
- (5) ALERT TYPE OR SPOT REPORTS
- (6) THE MONTHLY [REDACTED] REPORT
- (7) SPECIAL AIR SUMMARIES

THE FLOW OF THIS INFORMATION IS SHOWN ON THE CHART PRESENTED HERE (SEE ATTACHMENT NO. 1). IT SHOULD BE EMPHASIZED THE TRAFFIC ANALYSIS FROM WHICH OUR INFORMATION IS DERIVED, EXCEPT FOR DEEP ANALYSIS ON THE ASSIGNED MISSION OF THIS COMMAND, IS PERFORMED ENTIRELY AT GROUP OR SQUADRON LEVEL. OUR JOB HERE AT HEADQUARTERS IS TO INTEGRATE THIS

INFORMATION INTO AN UNDERSTANDABLE WHOLE PICTURE ON THE DAILY ACTIVITY OF [REDACTED] FOR OUR CONSUMERS.

(3) OUR GUIDES - INTELLIGENCE REQUIREMENTS OF MAJOR AIR COMMANDS. MANY OF THESE REPRESENT NOTHING MORE THAN ESSENTIAL ELEMENTS OF INFORMATION WHICH, IF ANSWERED, HELP TO ASSIST THE COMMANDER IN ASSESSING [REDACTED] CAPABILITIES. OTHERS, HOWEVER, FALL INTO THE CATEGORY OF EARLY WARNING INDICATORS. MOST OF THESE, WHEN TAKEN SEPARATELY, HAVE LITTLE MEANING BUT IT IS OUR CONTENTION THAT INFORMATION ON ANY ONE OF THEM MAY BE THE FINAL PIECE IN A JIGSAW PUZZLE.

A. DAILY QUERIES FROM MOST ZI COMMANDS. CLOSE COORDINATION THROUGH SPECIAL SECURITY OFFICER.

B. EXAMPLES OF COMINT REPORTING WHICH HAVE SATISFIED SOME OF THE EARLY WARNING INDICATORS.

(1) COORDINATED AIR [REDACTED] EXERCISES
(ATTACHMENT NO. 2)

(2) [REDACTED]
(ATTACHMENT NO. 3)

(3) ASSIGNMENT OF [REDACTED] AIRCRAFT TO [REDACTED]
AIR UNITS (ATTACHMENT NO. 5)

C. LONG RANGE INDICATORS - OVER A PERIOD OF TIME, COMINT HAS FURNISHED INFORMATION WHICH HAS INDICATED A LONG RANGE TREND. FOR EXAMPLE:

(1) [REDACTED] CONCENTRATION ON DEVELOPMENT OF [REDACTED]
[REDACTED] SYSTEM.

~~SECURITY INFORMATION~~

(2) INTEGRATION OF [REDACTED]
WITH [REDACTED]

(3) EXTENSIVE PROGRAM OF [REDACTED]

D. NEGATIVE INDICATORS - COMINT HAS ALSO FURNISHED
INFORMATION WHICH TENDS TO INDICATE A LACK OF [REDACTED]

[REDACTED] EXAMPLES ARE:

(1) ABSENCE OF [REDACTED] IN [REDACTED]
[REDACTED]

(2) APPARENT LACK OF [REDACTED]
CAPABILITY.

(4) OUR LIMITATIONS - AS ALL OF YOU KNOW, THERE ARE
MANY LIMITATIONS IN COMINT, AND AS YOU ALSO KNOW, THERE ARE
MANY REASONS FOR THESE LIMITATIONS. OF COURSE, THE IDEAL
SITUATION WOULD BE TO READ HIGH LEVEL MESSAGES PASSED
BETWEEN VARIOUS GOVERNMENTAL OR MILITARY ECHELONS. ALSO,
IDEALLY, WE WOULD LIKE TO KEEP TRACK OF THE DAILY STATUS OF
[REDACTED] FOR EXAMPLE, BOTH THE AIR DEFENSE
COMMAND AND THE STRATEGIC AIR COMMAND HAVE STATED THEY DESIRE
TO KEEP TRACK OF [REDACTED] AIRCRAFT DAILY. WE HAVE ATTEMPTED
TO DO THIS BY PREPARING A DAILY AIRCRAFT ACTIVITY REPORT.
THESE COMMANDS HAVE ALSO STATED THEY DESIRE NOTIFICATION
WHEN A [REDACTED]
HOURS. A GLANCE AT THIS CHART (ATTACHMENT NO. 6) WILL SHOW
YOU THAT OFTEN [REDACTED] THERE ARE, OF
COURSE, MANY POSSIBLE EXPLANATIONS FOR [REDACTED]

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SUCH AS [REDACTED], OR [REDACTED]. BUT
THE FACT THAT IT IS IMPOSSIBLE TO [REDACTED]
OF [REDACTED] WITH THE FACILITIES PRESENTLY
AT OUR DISPOSAL CANNOT BE IGNORED.

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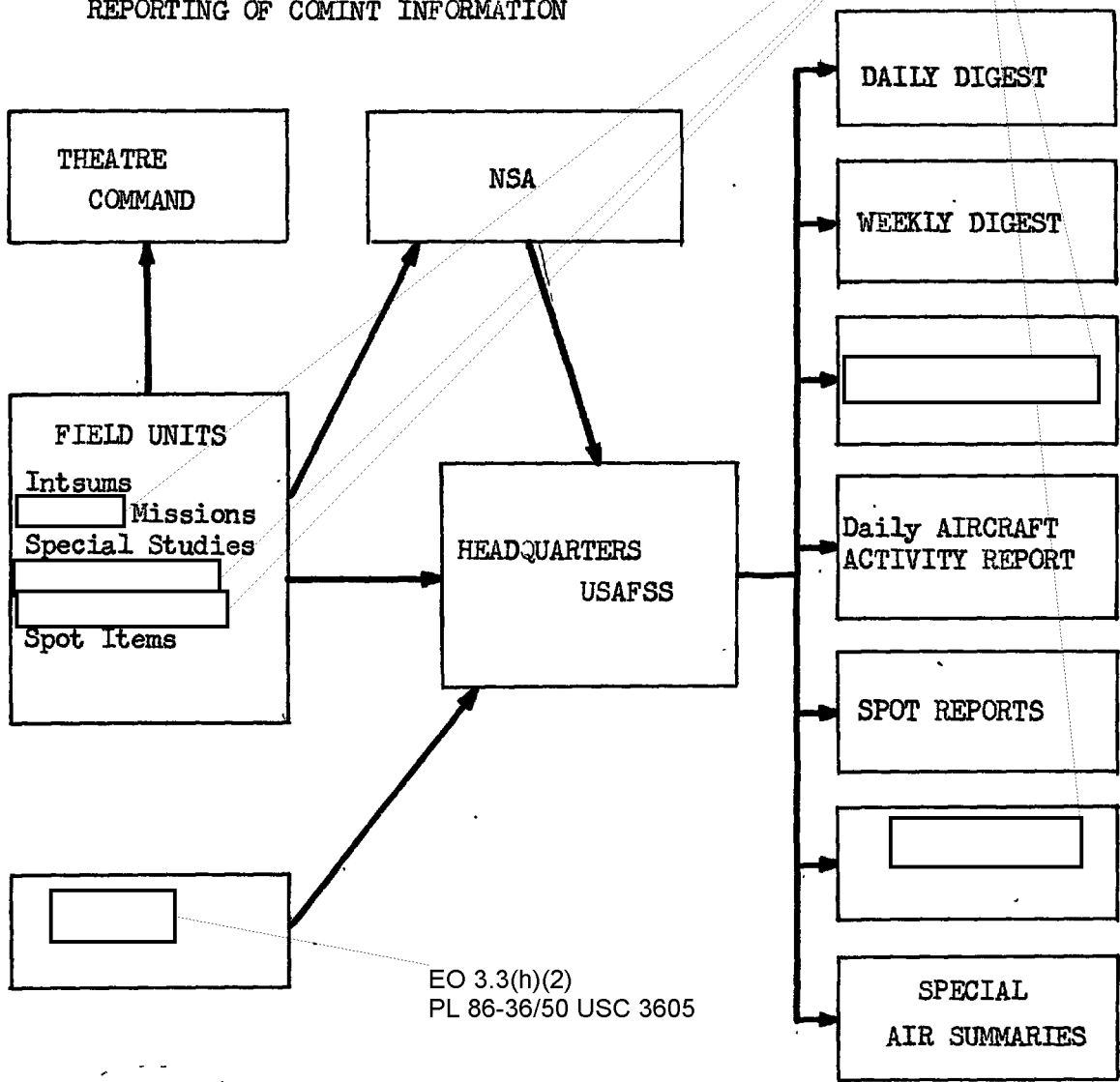
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Auth: CG, USAFSS
Initials: *RWH*
Date: **3 AUG 1953**

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ATTACHMENT #1

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REPORTING OF COMINT INFORMATION



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ATTACHMENT #2

COORDINATED AIR [] EXERCISES

COORDINATED AERIAL [] EXERCISES HAVE BEEN OBSERVED IN BOTH [] AND [] AREAS AND IN [] IN THE [] [], [] HAVE BEEN EMPLOYED TO [] AIRCRAFT IN SIMULATED AERIAL COMBAT INVOLVING JET FIGHTERS AS EARLY AS JANUARY 1953 AND SEVERAL OTHER ITEMS SINCE THEN. SIMILAR TYPE EXERCISES HAVE BEEN NOTED IN [] SINCE 30 JUNE, AFTER WHICH [] EXERCISES HAVE BEEN INCREASINGLY EVIDENT. THE [] HAVE ALSO INDULGED IN [] EXERCISES, AND [] HAVE REPORTED THAT SEVERAL ATTEMPTS AT [] OF [] AIRCRAFT HAVE BEEN MADE WITH THE AID OF [] THIS INFORMATION HAS BEEN REPEATEDLY REPORTED BY THIS COMMAND.

REPORTS OF THE SORT DESCRIBED ABOVE ARE USED BY AIR COMMANDS CONCERNED TO DETERMINE THE [] AIR DEFENSE CAPABILITIES AT ALL TIMES.

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~~ATTACHMENT #3~~
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INCREASED [REDACTED] BY [REDACTED] BETWEEN [REDACTED]

APPARENT AFTER 16 FEBRUARY TO PRESENT

FOLLOWING A [REDACTED]

BETWEEN [REDACTED] ON 16 FEBRUARY, THE [REDACTED]

BECAME EXTREMELY [REDACTED] A SHARP INCREASE IN THE [REDACTED]

ALONG [REDACTED] BETWEEN [REDACTED] WAS

BEGUN 17 FEBRUARY. MAJORITY OF [REDACTED] AIRCRAFT WERE

[REDACTED] FROM [REDACTED] BASED [REDACTED] AND CONVENTIONAL AIRCRAFT

FROM [REDACTED] - CONVENTIONAL FIGHTERS FLEW BETWEEN

13,000 AND 16,000 FEET WITH THE [REDACTED] FLYING COVER AT

FROM 19,600 TO 27,200 FEET. [REDACTED] OF THESE AIRCRAFT

[REDACTED] ON [REDACTED] AIRCRAFT, AND IN

ONE INCIDENT ON 18 FEBRUARY, VECTORED [REDACTED] ON

[REDACTED] AND [REDACTED]

[REDACTED] PROBABLY SUSPECTED A

TRAP ON PART OF [REDACTED] AND [REDACTED]

[REDACTED] FOLLOWING THESE [REDACTED] THE [REDACTED]

[REDACTED] WHEN [REDACTED] RECEIVED AN [REDACTED]

[REDACTED]

[REDACTED]

THIS [REDACTED] AND APPARENTLY [REDACTED] ATTITUDE CONTINUED

THROUGH FEBRUARY, AND TO THIS DAY, THE AREA BETWEEN [REDACTED]

AND THE SOUTHERN [REDACTED] IS VERY [REDACTED] NUMEROUS

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OTHER INSTANCES HAVE BEEN REPORTED WHEN [] HAVE
SHOWN [] IF NOT A [] ATTITUDE.

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ATTACHMENT #4

ASSIGNMENT OF [] AIRCRAFT TO [] AIR UNITS

THE RECORD MADE BY COMINT IN THE IDENTIFICATION OF [] AIRCRAFT IN [] AIR FORCES IS A GOOD ONE. THE [], AS WELL AS THE [] AND MORE RECENTLY THE [] WERE INITIALLY DETECTED IN [] AND LATER [] SPECIFIC UNITS. IN THE CASE OF THE [] IT WAS [] IN THE [], FOLLOWED BY ITS ASSOCIATION WITH [] IN THE [] AND FINALLY WITH [] AIR FORCES AND [] AIR FORCES.

DISCLOSURE THAT [] AIRCRAFT ARE [] TO EXISTING UNITS ENABLES A BETTER EVALUATION OF THE [] AND [] OFFENSIVE AND/OR DEFENSIVE POTENTIAL. DETECTION OF THE [] OF [] AIRCRAFT TO UNITS IS ESSENTIAL SINCE IT WILL ENABLE US TO [] IN THE [] OF THE UNITS [] AIRCRAFT.

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ATTACHMENT #5

[] TO [] AIR FORCES

[] AND [] MESSAGES INDICATED ON 20 AND 21 FEBRUARY TWO FLIGHTS OF FIVE [] EACH WERE TO FLY FROM [] TO [] THESE MESSAGES WERE INTERCEPTED BY THE [] DETACHMENTS AND RELAYED TO THAT GROUP WHO, IN TURN, TRANSMITTED THE INFORMATION TO THIS HEADQUARTERS. THESE FLIGHTS REPRESENTED THE FIRST [] INDICATION OF []. THE INFORMATION WAS RECEIVED AT THIS HEADQUARTERS IN TWO [] MESSAGES. THE FIRST MESSAGE CONCERNED THE 20 FEBRUARY [] MESSAGE; THIS WAS RECEIVED AT HEADQUARTERS, USAFSS AT APPROXIMATELY 1300 HOURS. THE SECOND MESSAGE CONCERNING THE SECOND [] MESSAGE WAS RECEIVED APPROXIMATELY AT 1600 HOURS. FOLLOWING AN INITIAL INTELLIGENCE EVALUATION WHICH INCLUDED THE [] OF THE AIRCRAFT, WIRES WERE DRAFTED AND DISSEMINATED TO ALL THEATERS AND ZI AIR COMMANDS ON 21 FEBRUARY (TIME ELEMENT FOR DISSEMINATION OF BOTH MESSAGES WERE APPROXIMATELY 4 HOURS (2 HOURS FOR EACH EVALUATION)).

THE FIRST REFERENCE TO ACTIVITY OF THESE AIRCRAFT IN [] APPEARED IN A [] MESSAGE (FROM [] WHICH REPORTED THE DEPARTURE OF FIVE [] (PROBABLE) FROM [] (POSSIBLE). IN ADDITION, A [] MESSAGE FROM [] A POINT ON THE FLIGHT ROUTE FROM [] [] FOR FIVE AIRCRAFT ON 20 FEBRUARY. [] MESSAGES (THE ORIGINATOR AND ADDRESSEE ARE NOT KNOWN) SCHEDULED FIVE ADDITIONAL [] ON 21 FEBRUARY. A [] MESSAGE FROM [] TO AN UNKNOWN LOCATION DUPLICATED

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THIS MESSAGE BY FORECASTING "FIVE [] [] AIRCRAFT" TO FLY ON 21 FEBRUARY FROM [] TO AN UNKNOWN DESTINATION. THE [] OF THE [] ON 21 FEBRUARY AT [], HOWEVER, [] IN A MESSAGE FROM [] TO []

[] EIGHT (POSSIBLY NINE) OF THESE [] UTILIZED CALLSIGNS ASSIGNED TO A UNIT AT [] (THE LOCATION OF THE [] [] WHICH HAS BEEN CONNECTED WITH [] ANOTHER [] USED A CALLSIGN ALLOCATED TO THE [] BASED [] THIS AIRCRAFT PREVIOUSLY DISPLAYED PERFORMANCE CHARACTERISTICS INDICATIVE OF [] TYPE AIRCRAFT ON 20-21 JANUARY (WEEKLY DIGEST 53-5).

THE [] FLIGHT OF THESE [] WAS AT LEAST PARTIALLY REFLECTED IN [] COMMUNICATIONS. TWO (POSSIBLY FOUR) OF THE AIRCRAFT INVOLVED IN THE 20 FEBRUARY FLIGHT WERE NOTED IN A FLIGHT FROM [] TO [] ON 14 FEBRUARY. ON 15 FEBRUARY TWO OF THESE AIRCRAFT WERE NOTED OPERATIONAL EAST OF [] AND ARE ASSUMED TO HAVE FLOWN TO [] THREE OF THE FIVE AIRCRAFT IN THE SECOND FLIGHT (21 FEBRUARY) WERE OBSERVED ON 16 FEBRUARY FLYING [] ALONG THE [] FLIGHT ROUTE BETWEEN [] ON 17 FEBRUARY ONE OF THESE AIRCRAFT GAVE A [] [] FROM [] AND THE OTHER TWO ARE BELIEVED TO HAVE BEEN FLYING THE SAME ROUTE.

THE FLIGHT OF [] TO [] ON 20 FEBRUARY WAS APPARENTLY RELATED TO THE ABOVE [] ACTIVITY. [] WERE FREQUENTLY ASSOCIATED WITH RECENT [] FLIGHTS INTO []

THE GREAT CARE THAT WAS TAKEN TO [] OF THE [] WAS INDICATED BY THE [] FROM [] PROVIDED FOR THE FIRST FLIGHT ON 20 FEBRUARY. POSSIBLY RELATED WAS THE

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FOLLOWING [] MESSAGE FROM [] ON 17 FEBRUARY: []

[] THREE

HOURS LATER, A SIMILAR MESSAGE REVEALED: []

[]

[]

SINCE 21 FEBRUARY SOME OF THESE [] HAVE BEEN OBSERVED IN []

[] MESSAGES UTILIZING CALLSIGNS WHICH ARE NOT []

[] THE TYPE OF OPERATION HAS BEEN [] UTILIZING

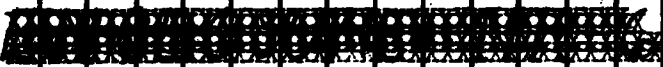
APPARENT [] AS []

COMINT IDENTIFIED THIS ACTIVITY AND REPORTED IT PRIOR TO THE COMPLETION OF THE OPERATION.

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IVITY

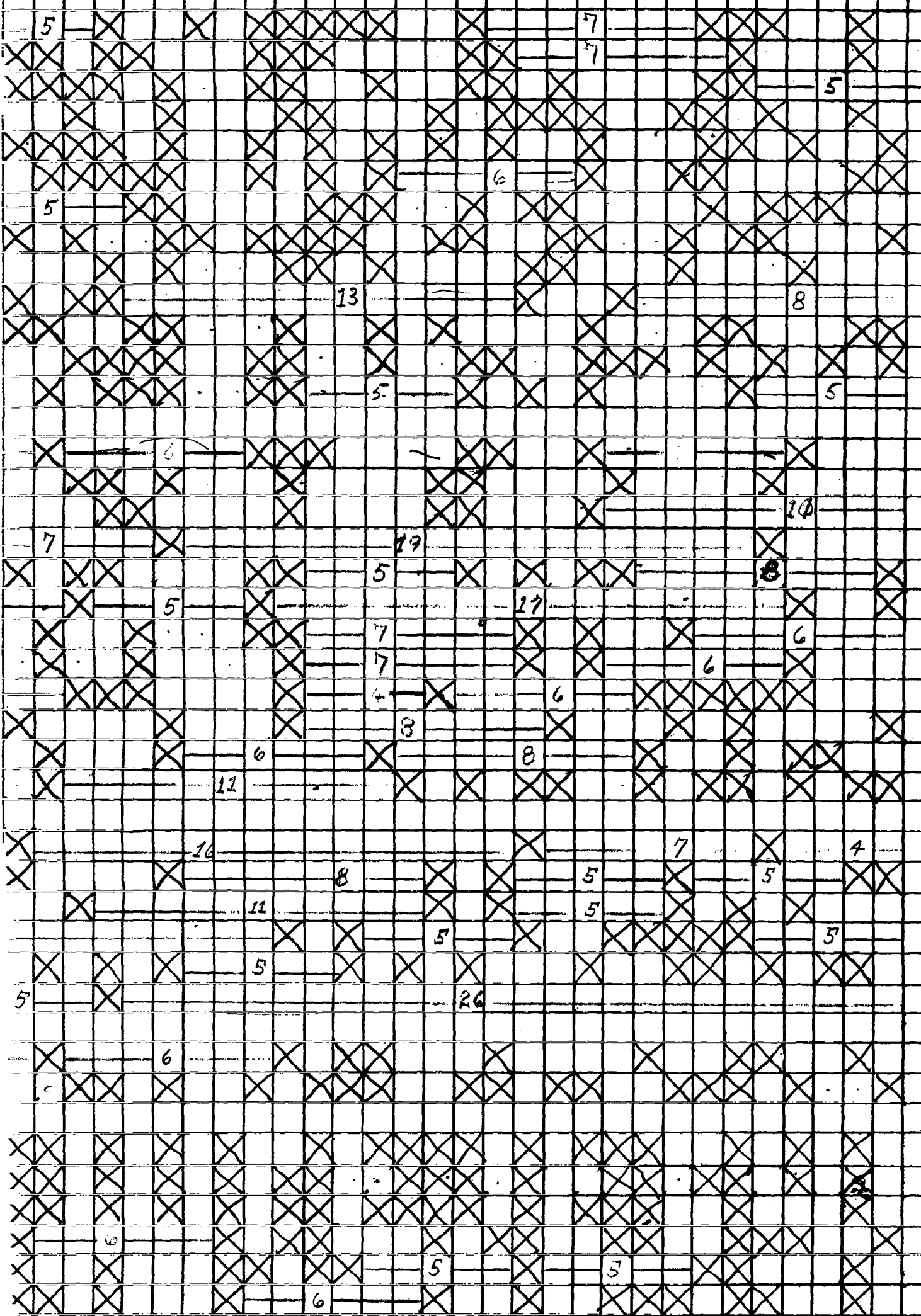
ATTACHMENT #6



3 AUG 1953

53

2930 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



ARD 4TH MAY 1953



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~~SECURITY INFORMATION~~

TAB E COLONEL GORDON W. WILDES, DC/S, OPERATIONS

AN INTEGRAL PART OF THE DISSEMINATION AND AN IMPORTANT FACTOR IN ALL ASPECTS OF OUR OPERATION IS THE COMMUNICATIONS SYSTEM. MAJOR FOGARTY OF THE COMMAND COMMUNICATIONS OFFICE WILL GIVE YOU A BRIEF SUMMARY OF AFSS COMMUNICATIONS.

MAJOR GEORGE H. FOGARTY

THE TASK OF THE COMMAND COMMUNICATIONS OFFICE - THAT OF PROVIDING A RAPID AND SECURE COMMUNICATIONS SYSTEM FOR THE UNITED STATES AIR FORCE SECURITY SERVICE - IS THE LEAST COMPLEX OF THOSE YOU'VE HEARD DESCRIBED THIS MORNING.

THE COMMUNICATIONS SYSTEM OF SECURITY SERVICE MUST MOVE THE INTERCEPTED TRAFFIC TO ITS POINTS OF ANALYSIS, AND PROVIDE A MEANS FOR DISSEMINATION OF THE ANALYZED PRODUCT.

EACH RADIO SQUADRON, MOBILE AT FULL STRENGTH WILL GENERATE FROM SIXTY TO NINETY THOUSAND GROUPS OF TRAFFIC PER DAY. THIS TRAFFIC IS COMPOSED PRIMARILY OF THE SUMMARIZED INTERCEPTED TRAFFIC TAKE, WITH A SMALL AMOUNT OF THE RESULTS OF PRELIMINARY ANALYSIS AND SOME ADMINISTRATIVE TRAFFIC.

THE FIRST LINK IN THE COMMUNICATIONS NETWORK IS THE CIRCUITRY FROM THE INTERCEPT LOCATIONS - THE SQUADRONS AND DETACHMENTS - TO THE GROUP.

THE VOLUME OF TRAFFIC, COUPLED WITH THE NEED TO SAFEGUARD THE KNOWLEDGE OF OUR COMINT SUCCESS, MAKES ON-LINE-ENCRYPTED TELETYPE THE ONLY CHOICE AS A TRANSMISSION MEDIUM.

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AT THE SECURITY GROUPS, THE PRINCIPAL ANALYSIS EFFORT FOR AIR FORCE PURPOSES OCCURS. SIMULTANEOUSLY WITH THE DELIVERY OF THE TRAFFIC TO THE GROUPS ANALYSTS, THE SAME TRAFFIC MUST BE RELAYED TO THE NATIONAL SECURITY AGENCY FOR THE MORE EXTENSIVE ANALYSIS WHICH GOES ON IN WASHINGTON.

THE RESULTS OF THE ANALYSIS AT THE GROUP TAKES THE FORM OF SPOT REPORTS, ALERT REPORTS AND INTELLIGENCE SUMMARIES. BY VOLUME, THESE PRODUCTS OF ANALYSIS ARE PERHAPS ONE TENTH AS LARGE AS THE INTERCEPTED TRAFFIC, BUT MUST BE HANDLED IN THE MOST EXPEDITIOUS POSSIBLE MANNER, IF THEIR VALUE IS TO BE EXPLOITED ON A TIMELY BASIS.

DIRECT TELETYPE CIRCUITS ARE MAINTAINED FROM THE GROUPS TO THE AIR FORCE CONSUMERS IN THE THEATER, TO ARMY, NAVY AND ALLIED COMINT AGENCIES IN THE THEATER FOR MUTUAL EXPLOITATION OF INTELLIGENCE, AND TO HEADQUARTERS, SECURITY SERVICE, HERE IN TEXAS, WHERE THE RESULTS OF ANALYSIS ARE COLLATED AND DISSEMINATED TO THE AIR FORCE COMMANDS.

THE INTERCONTINENTAL CIRCUITS, FROM HEADQUARTERS SECURITY SERVICE TO THE GROUPS ARE JUSTIFIED PRIMARILY ON THE BASIS OF THE NEED FOR TIMELINESS IN THE RETURN OF THE ANALYZED TO COMMUNICATIONS INTELLIGENCE TO THE DISSEMINATION HEADQUARTERS. TO INSURE THAT THE MAXIMUM USE IS MADE OF THESE CIRCUITS, ANY CIRCUIT TIME AVAILABLE BETWEEN PASSING OF THE RESULTS OF ANALYSIS IS USED TO SUPPLEMENT THE CIRCUITS WHICH PASS THE BULK OF THE INTERCEPTED TAKE TO THE NATIONAL SECURITY AGENCY. RELAY FACILITIES, WITH SUFFICIENT CIRCUIT CAPABILITY TO HANDLE ALL SUCH TRAFFIC EXPEDITIOUSLY, EXIST BETWEEN SECURITY SERVICE AND NATIONAL SECURITY AGENCY.

DISSEMINATION FROM HEADQUARTERS SECURITY SERVICE TO CONSUMERS IN THE UNITED STATES IS ACCOMPLISHED BY MEANS OF THE AIRCOMNET, AND BY ON-LINE COMMERCIAL TELETYPEWRITER EXCHANGE CIRCUITS.

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I HAVE AVAILABLE TRAFFIC DIAGRAMS, AND PRESENT AND PROJECTED TRAFFIC
LOAD FIGURES, WHICH YOU MAY EXAMINE DURING THE GENERAL DISCUSSION PERIOD.

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III. RESUME

Following a general discussion, General Bassett, AFSS, summarized the presentation and the AFSS views expressed on the questions raised by the Special Committee.

It was emphasized that the principle problem is in developing a capability for recognizing significant developments which might be indicative of attack as they are reflected in the communications being intercepted and studied. It is in this process that greatest time is consumed and in which the greatest problems of provision of timely warning are encountered. The existence of an effective AFSS or overall U.S. communications system in itself is not sufficient to provide the warning unless the information which is indicative of an attack can be placed in the communications system on a timely basis. Therefore, the communications problem is, in fact, secondary to the overall problem of timely analysis and recognition of significant data. The solution to this second problem can only be found in continuity of effort on technical problems encountered, in the development of a high level of experience among analytic personnel, and in compilation of copious records about the communications being studied.

Admittedly, it is possible for [redacted] [redacted] to take certain actions regarding their communications security which can hinder our capability to attack them successfully. They may, for example, effect major changes in communications procedures or security systems to screen impending actions. These changes may be made drastically and suddenly or may be accomplished over an extended period of time. Nonetheless, if they are recognized, such changes in themselves are considered to constitute significant indicators; and if they are followed and reported as they occur, they can be used in themselves to reduce the element of surprise in hostile actions. Furthermore, we believe that it is virtually impossible to accomplish major military actions without extensive communications. Under such circumstances, and particularly if procedural changes have been made, we further believe that the chances are very good that mistakes will be made by the communicators which will provide us with substantial assistance in performing our task. Past experience would seem to bear out this contention.

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Finally, it is acknowledged that communications intelligence cannot provide a 100% guarantee against the element of surprise in specific hostile actions; however, we strongly feel that because of its advantages, as enumerated in the opening remarks, the communications intelligence effort greatly reduces such a danger although it cannot be represented in any specific percentage figure. Likewise, within certain limitations, the more extensive the COMINT effort is, the greater is its chance of intercepting and recognizing significant data which may be indicative of impending hostile actions.

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IV. SPECIFIC QUESTIONS AND ANSWERS

QUESTIONS ASKED BY MR. WILKS

- I. WHAT IMPORTANT TRAFFIC ANALYSIS STUDIES, IF ANY, REMAIN UNDONE AT GROUP LEVEL OR AT HEADQUARTERS AFSS ON ACCOUNT OF LACK OF TRAFFIC ANALYSIS SPECIALISTS?
1. THIS QUESTION, TO BE PERFECTLY FRANK, IS DIFFICULT TO ANSWER. AS WILL BE RECALLED AT THE BRIEFING PRESENTED BY AFSS ON 29 JULY 1953, THE FUNCTIONS OF GROUP OPERATIONS ARE MAINLY CONCENTRATED UPON:
- a. THE PROVISION OF MAXIMUM INTERCEPT FROM ALL SQUADRONS ENGAGED IN ALL TYPES OF INTERCEPT COVERAGE ON ALL TYPES OF ACTIVITY.
 - b. TIMELY REPORTING OF RESULTS OF ANALYSIS. DEPENDENT UPON NATURE OF ACTIVITY THIS TYPE REPORT MAY BE ORIGINATED IN MINUTES AFTER THE INTERCEPT; OR IT MAY BE AND, IN FACT, GENERALLY IS ON DAY PLUS ONE TO DAY PLUS THREE.
2. HEADQUARTERS AFSS ON THE OTHER HAND, IN ACCORDANCE WITH ITS NSA ASSIGNED MISSION, IS RESPONSIBLE FOR MAJOR PROCESSING ON A LONG-TERM BASIS OF ALL [REDACTED] [REDACTED] AND [REDACTED] TRAFFIC. THUS, TO SPECIFICALLY ANSWER THE QUESTION ABOVE ENUMERATED, THE FOLLOWING POINTS SHOULD BE KEPT IN MIND:

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- a. THE SCOPE OF TRAFFIC ANALYSIS IS DIRECTLY RELATED TO THE AMOUNT OF INFORMATION THAT IS AVAILABLE ON "WHO IS COMMUNICATING" AND "WHAT THEY ARE SAYING"; FURTHER THE AMOUNT OF EFFORT EXPENDED TOWARD THE PROVISION OF NECESSARY INTERCEPT (RAW TRAFFIC) WILL HAVE A VERY PRONOUNCED BEARING UPON THE OVERALL TASK TO BE ACCOMPLISHED.
- b. THE TIMELY REPORTING MISSION OF THE GROUPS IS AND WILL CONTINUE TO BE DEPENDENT UPON A WELL DEFINED TECHNICAL BACKGROUND AGAINST WHICH THE INTERCEPT MAY BE FLASHED. IN THIS REGARD, SINCE NSA AND COLLABORATING CENTERS PERFORM THE LONG-TERM ANALYSIS ON ALL INTERCEPT EXCEPT [REDACTED] AND [REDACTED] THE QUESTION SHOULD BE REFERRED TO NSA FOR COMPLETE REPLY.
- c. AS TO THE FACETS OF THE [REDACTED] FOR WHICH AFSS IS RESPONSIBLE, IT IS CONSIDERED THAT CURRENT MANNING AND PLANNED OPERATIONAL CONCEPTS WILL PROVIDE NECESSARY SPECIALISTS TO PERFORM THE TASKS OF ANALYSIS. IT IS EMPHASIZED THAT IN TRAFFIC ANALYSIS, AS IN OTHER FIELDS OF RESEARCH, EXPLOITATION OF THE RESULTS IS DIRECTLY RELATED TO THE KNOWLEDGE THAT IS AVAILABLE ON THE SUBJECT.

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II. WHAT COMMUNICATIONS INTELLIGENCE STUDIES HAVE BEEN MADE OF

[REDACTED] INCLUDING FLIGHTS TO
[REDACTED] AND OTHER OVERSEAS BASES?

1. AFSS HAS CONDUCTED EXTENSIVE COVERAGE OF THE [REDACTED]
[REDACTED] NETWORKS [REDACTED]; IN NO CASE
HAS [REDACTED] IF IN FACT
THERE HAS BEEN ANY [REDACTED] COMMUNICA-
TIONS ACTIVITIES.

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III. WHAT SPECIAL AND CONTINUING COMINT STUDIES ARE BEING MADE TO KEEP IN DAY-TO-DAY TOUCH WITH MANEUVER ACTIVITY OF [REDACTED]? ARE THERE REPORTS ON THIS SUBJECT?

1. THIS QUESTION IS CLOSELY ALLIED TO THE FIRST ASKED BY MR. WILKS. HENCE, THE MECHANICS OF A REPLY WILL NOT BE REPEATED INSOFAR AS TECHNICAL ASPECTS ARE CONCERNED. GIVEN TO TECHNICAL PROFILE OF SPECIFIC COMMUNICATIONS NETWORKS OF THE [REDACTED] [REDACTED], THE ACT OF FOLLOWING EACH INDIVIDUAL NETWORK IS LIMITED ONLY BY THE FACILITIES AVAILABLE TO BE APPLIED TO THE TASK. AS GENERAL BASSETT POINTED OUT OUR CURRENTLY MANNED POSITIONS APPROXIMATE ONLY ONE THIRD OF OUR ESTIMATED POSITION REQUIREMENTS. THIS FACT POINTS UP THE IMPOSSIBILITY OF BEING ABSOLUTELY CERTAIN THAT WE ARE GETTING [REDACTED] [REDACTED] NETWORKS [REDACTED]

THE CHARTS OF ACTIVITY DISPLAYED DURING THE BRIEFING ON 29 JULY 1953 DEPICT A TECHNIQUE OF FOLLOWING UNIT ACTIVITY — ANALYTICALLY AFSS IS MAINTAINING A CAREFUL LOG OF THE SPECIFIC [REDACTED] ACTIVITY WITHIN [REDACTED] PERIODIC REPORTS OF THE RESULTS OF THIS TYPE OF STUDY AS PRESCRIBED BY THE NATIONAL SECURITY AGENCY ARE NOW AVAILABLE FOR STUDY IN NSA. THESE

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REPORT FORMATS ARE NOW UNDER STUDY FOR PURPOSE OF
REFINEMENT. IT IS CONSIDERED THAT WITH ADDED EFFORT
IN TERMS OF FACILITIES AND A CONCURRENT STRENGTHENING
OF THE FIELD ANALYSIS CAPABILITY A CORRESPONDING
IMPROVEMENT IN THE ABILITY TO KEEP DAY-TO-DAY TOUCH
WITH ACTIVITY IS SURE
TO EMERGE.

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