## HISTORY OF THE ARMY SECURITY AGENCY AND SUBORDINATE UNITS

FISCAL YEAR 1952

VOLUME II TECHNICAL OPERATIONS

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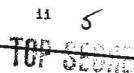
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#### I. FOREWORD

This document presents an account of fiscal year 1952 operations of field units of the Army Security Agency (ASA or the Agency) in the conduct of Communications Intelligence and Communications Security missions for the Army and the Armed Forces Security Agency. From assigned missions imposed upon unit commanders, specific accomplishments have been discussed to provide a comprehensive guide for future planning and instruction.

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Considerable coverage has been devoted to the Agency's effort in improving the overall effectiveness of its tactical units in Korea and other parts of the world. A detailed account of the exploitation of the ASA concept of support to an Army in the field is also included, for this led to emphasis on the gathering of intelligence through low level intercept at forward sites, and proved to be an outstanding contribution by the Agency to the overall effort of the UN Forces in Korea.

Facts herein have been derived from records, reports, and correspondence developed through requirements placed upon commanders of ASA units in every part of the world. Controversial information has been resolved through discussion with qualified military and civilian personnel. Special authority and methods of compilation are contained in AR 220-345, Subj: "Combat Operations," 24 Mar 1953; DA Pamphlet 20-200; Guide to Preparation of American Military History, Aug 1951; Staff Memo No. 28, Hq ASA, Subj: "Records Administration," 9 Nov 1953; Circular 23, Subj: "Historical Activities of the Army Security Agency," 28 June 1955.

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It is intended that dissemination of information contained herein be handled in strict accordance with requirements set forth in Para 9, Draft DA Regulation for the Special Security Officer System and for the security and dissemination of COMINT, 1 January 1955.

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#### II. BACKGROUND

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The outbreak of hostilities in Korea on 25 June 1950 found ASA conducting minimized COMINT and COMSEC missions in support of the Army and the Armed Forces Security Agency. Existing facilities for conducting technical operations consisted of the 53d Sig Sv Co at Warrenton, Virginia, a fixed station, and the 60th Sig Sv Co at Fort Lewis, Washington, which divided its time between fixed station and mobile operational missions. Neither was prepared for overseas assignment.<sup>1</sup>

In the Pacific, there were four field organizations: two Sig Sv Cos, the 126th at Kyoto, Japan and the 111th on Okinawa, and two Sig Sv Dets, the 50th in Tokyo and the 51st at Chitose on Hokkaido. The 126th had operated and trained only as a fixed station. The 111th had participated in mobile exercises, had considerable mobile equipment, and its field training was well advanced. The 50th, utilizing semimobile equipment, was chiefly employed on security monitoring missions in a fixed location. The company, however, had completed field training and was prepared for mobile assignment. It also had a COMINT mission assigned. The 51st, likewise a semi-fixed station, processed COMINT also. Both companies had mobile equipment for which an extended period of familiarization was needed.<sup>2</sup>

In Europe, existing mobile units consisted of the 114th and the 116th Sig Sv Cos and the 52d Sig Sv Det. The two companies were carrying out COMINT missions while the detachment was engaged in security monitoring.<sup>3</sup>

Study, Summ. of Major Activities, ASA 25 June 1950 - 9 Sep 1951, Pl. 1. Tbid. P2.

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3. Tbid. P3.

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All of these units, like their counterparts in the Pacific, were trained on a limited scale in field exercises for mobile assignments, but were chiefly occupied with fixed missions.

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The Korean situation as well as continued tenseness in international developments placed an immediate and heavy demand upon the Agency, unknown since the days of World War II. The principal concern was intensification of the COMINT effort of existing fixed stations, COMINT and COMSEC support to troops operating in Korea, and support for larger forces to be raised for the European theater.<sup>1</sup>

The problems during this period were many. First, none of the tactical units operating as fixed stations could be spared for support in the field until new fixed stations were provided and manned to replace them. Second, although some fixed stations were so situated that they could handle tactical missions in Korea, personnel and equipment shortages dictated that they could be utilized on a temporary basis only. Third, there was not sufficient technical equipment available to carry out extensive missions. This meant that units going into Korea would not be well supplied until research and development processes were stepped up. Finally, technical personnel was critically short. Many personnel not directly engaged in operations were needed in carrying out missions in support of the Agency in the ZI and overseas. Therefore, highly trained personnel were not available for tactical duties without prompt provision for adequate replacement.<sup>2</sup>

Early in the Korean period, priority was given to these matters, and 1. Study, Summ. of Major Activities, ASA, 25 June 1950 - 9 Sep 1951, P3. 2. Thid. P4.

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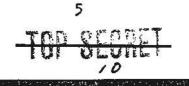


by the end of fy 1951, results were evident. Personnel were being rapidly obtained in line with increases granted by DA. Measures had been taken to organize units to support existing and proposed Armed Forces in the field. Training areas were established and technical training intensified. Facilities, supplies, and equipment were being secured rapidly to produce effective units capable of carrying out increased technical operations.<sup>1</sup>



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1. Study, Summ. of Major Activities, ASA, 25 June 1950 - 9 Sep 1951, P5.



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III. THE SITUATION, 1 JULY 1951

At the start of fy 1952, operational units were fulfilling continuing COMINT and COMSEC support missions pertinent to requirements of DA and AFSA.<sup>1</sup> Intensification of these missions, as a result of Korean hostilities and the need for expansion designed to prevent a similar emergency, created immediate requirement for more tactical units. Some of these had been formed from existing units under the jurisdictional control of Eq ASA Pacific. Others were readied and enroute to Korea or being formed within the ZI as the year began. In Europe, expansion was underway. Tactical units were being reorganized to carry out increased missions and consideration was being given to the formation of new units and extension of facilities.

Meanwhile, operational units within the ZI were continuing their assigned missions and training men who would eventually reach Korea. A specific program to activate, train, and equip new units was in being.<sup>2</sup> At fixed stations, technically trained ASA personnel were being added wherever possible to man increased positions within the operational framework of AFSA facilities.<sup>3</sup>

A degree of success had been achieved in providing immediate support to the Eighth US Army in Korea, but its effectiveness was limited. This was due to the fact that expediency had, of necessity, been the rule applied. Highly trained technical personnel were limited and remained so as fy 1952 began. Many of the early mobile units placed in the combat zones were not fully trained, manned, or equipped. Nor, were the results

Study, Summ. of Major Activities, ASA, 9 Sep 1951 - 31 Dec 1952, Pl.
 Ibid. P3.

3. Ibid. P4.

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as desired. Considerable time was devoted to correcting this situation during fy 1951 and, as the report period commenced, improvement was apparent. First there was clearer understanding of unit mission. In COMSEC, field liaison was improved and resultant security noteworthy. The operational product of COMINT units was better, more efficiently processed. Techniques in working on and with operational traffic were improved through on-the-job training. Equipment, on the other hand, was not as effective as the situation required and considerable modification had to be undertaken. Many pieces were of World War II origin and completely inadequate for operational use in Korea, where rugged terrain predominated.<sup>1</sup>

Agency intercept facilities at the start of fy 1952 consisted of fixed and mobile intercept positions, which was somewhat short of that programmed for completion in fy 1951. A target was set to install if ized positions, mobile intercept positions and 28 direction finders during the report period. Coverage of Chinese Communist military voice morse consisted of intercept positions at the start of the year.<sup>2</sup>

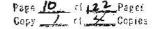
P.L. 86-36 EO 3.3(h)(2)

> 1. Study, History of COMINT Operations During the Korean Conflict, PP 1-7 (Sec 2)

> > 7

2. Analytical Review, ASA, FY 1952 (Sec A).

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IV. THE PROBLEM

Temporary measures utilized in checkmating the Korean situation produced many problems. Operational units in the combat zones were small, inadequately manned and equipped, and dependent, to some degree, on remote stations to assist them with their missions. More men and equipment for new tactical units then, was the immediate requirement. This could be resolved only through procurement. In the case of manpower, losses of technically trained personnel either to AFSA or through release from the service had left the Agency with existing shortages still not made up, while at the same time it was meeting requirements for filler and replacement personnel, particularly linguists, interceptors, and monitors. Much of the personnel problem was attributed to the long training time required of ASA personnel, of whom about 72% were technicians, and the effect of release programs. It was further complicated by the requirement for clearances, and the fact that no Army or civilian occupational counterparts for ASA specialties existed to provide a source of partially trained personnel.

At the operational unit level, the principal problems concerned the need for supplying standard Signal Corps equipment and cryptologic equipment peculiar to the Agency's mission. New models of trucks, trailers, and tactical type monitoring switchboards had to be secured. Another supply problem concerned the need to provide a satisfactory recorder and spare parts to maintain recorders on hand.<sup>1</sup> Power units also offered a problem. Many had been ineffective in operations and required considerable modification. Another constant problem was that of procurement 1. Study, Summ. of Major Activities, ASA, 9 Sep 1951 - 31 Dec 1952, P6.

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and effective utilization of direction finding equipment. Difficulties were attributed to the nature of the transmissions, the arranging of simultaneous tracking, and distortions caused by terrain features and mineral deposits peculiar to Korea.

In operations, a need for low level intercept was apparent, for Chinese circuits was

being intercepted at the start of the fiscal year, and reports from I and IX Corps sectors indicated that frontline UN units were hearing spoken Chinese radio transmissions, making the need obvious. The chief obstacle confronting this accomplishment was the procurement of personnel with linguistic ability in both Chinese and English who, at the same time, were good security risks.<sup>2</sup>

The principal problems toward accomplishment of increases in fixed and mobile intercept positions were the inability to provide personnel to man available equipment and partly to the relatively greater importance of manning tactical units which, in many cases, had to be achieved at the expense of field stations.<sup>3</sup>

Study, Summ. of Major Activities, ASA, 9 Sep 1951 - 31 Dec 1952, P7. 1.

 Study, History of COMINT Operations During the Korean Conflict, FY 1952, Incl 4, Pl.

3. Analytical Review, ASA, FY 1952, (Sec A).

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Page 12 ot 12 Pages Copy \_\_\_\_\_ ct \_\_\_\_ Copies V. THE SOLUTION

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Tactical units of the Agency were increased in both FECOM and EUCOM during the report period. In Korea, field units were strengthened either by reinforcement or substitution of well trained and equipped units for temporary ones. Elsewhere, new tactical units were either enroute to overseas destinations, or awaiting shipment from the ZI. Coincident with this build-up of units was the erection of a number of permanent type facilities designed to allow expansion of all operational facilities throughout the world. Direction finding operations in particular, were intensified.<sup>1</sup>

Personnel increases were registered at practically every operational installation. These were not, however, technically trained personnel in every case. As a result, many shortages of intercept operators, translators, and maintenance personnel remained. Shortages in the language field in Korea were resolved to some degree by the hiring of DA civilians recruited from Formosa. At first, this created a personnel problem, but it was solved by clarification of the position of the civilian in ASA operations and his operational duties were extended to allow greater production of transcribed material which assured maintenance of uninterrupted intercept in Korea.<sup>2</sup>

The Agency dealt with the problem of equipment procurement through intensified research and development. In light of the Korean situation, priority was assigned to equipment necessary in satisfying low level and radio direction finding requirements. The use of the IEM wans was studied

1. Study, Summ. of Major Activity, ASA 9 Sep 1951 - 31 Dec 1952, PP 7-9.

 Study, Eistory of COMINT Operations during the Korean Conflict, FY 1952, Incl 1, FP 3 & 4.

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and modification kits prepared to adapt certain D/F nets to agency use. Constant field research and testing was performed on radio receivers so that by 30 April 1952, all low level teams in Korea were equipped with the SCR-300, BC-583, or BC-603. Related equipment such as antennae, batteries, and power units were also improved.2

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In operations, the introduction of low level intercept in the forward areas of Korea was the Agency's principal contribution. It solved an immediate need for this type of COMINT and results were significant, particularly in information obtained of immediate value to field commanders. At the close of fy 1952, ten such teams composed of personnel of the 303d, 304th, and 301st Comm Recon Bns were operating in Korea.3

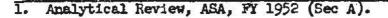
Translation by field units in Korea - minimizing the delay between intercept time and the time the translation reached the consumer - was another significant contribution. Through a spot checking procedure utilizing TBM, preparation of vertical runs equating the

	and equivalent meanings in English was carried
	out by Hq ASA Pacific. This made it possible for personnel with limited
	linguistic background to obtain the crux of a message at a glance. Fol-
•	lowing the arrival of more translators, research on proper
. 86-36 5.3(h)(2)	language context was initiated. As this work progressed, units in Korea
	were furnished support through the and by the training of new personnel prior to field as-
-	signment.
0	1. Study, Summ. of Major Activities, ASA, 9 Sep 1951 - 30 Dec 1952, P8.
	<ol> <li>Study, History of COMINT Operations During the Korean Conflict, FY 1952, Incl 4, PP 5-6.</li> </ol>
	3. Ibid. PP 3-4.
	4. Ibid. Incll, P3.
	11
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As of 30 June 1952, a total of 563 fixed intercept positions were installed throughout the world. Of this total, 398 were in operation. This represented a loss when compared to those in operation at the start of the report period. FS 8601 (VHFS), FS 8605 (Hawaii), FS 8609 (Philippines) had more than the programmed number of positions. FS 8602 (TPRS), FS 8608 (Germany), and FS 8610 (Japan), were short of positions.

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As of 30 June 1952, 125 mobile intercept positions and 15 direction finders were reported as installed. (Note: term "installed" here relates to a position ready to operate; it lacks nothing but mission and personnel). Of the total mobile positions reported as installed, only 98 mobile intercept and 15 direction finders were operating. Coverage of Chinese Communist military voice morse was increased to 24 positions, 18 more than at the beginning of the report period.<sup>1</sup>



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Page 15 of 122 Pages Copy \_\_\_\_ of \_\_\_\_ Copies VI. INDIVIDUAL UNITS

A. Continental United States

1. Field Station 8601 AAU, Warrenton, Virginia

The operational mission of FS 8601 AAU remained essentially the same during fy 1952, as for previous periods. The principal effort was devoted to intercept, raw traffic analysis, and scanning closely paralleling the primary drive.

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The operations service branch of the station continued its primary function of coordinating the intercept effort as directed by AFSA along with duties common to two or more individual branches or sections.<sup>2</sup> Emphasis was placed on providing intercept operations with information derived through T/A.<sup>3</sup> The station averaged 17,661 intercepted msgs during the report period.<sup>4</sup>

The military assignment was carried by Morse analysis personnel throughout the year. Information obtained from intercept data was fruitful to the point of a complete viewing of the military network located in On 10 April 1952, a complete network diagram was provided AFSA. The monthly average of intercepted msgs for this network throughout the fiscal year was 2,570.

P.L. 86-36 EO 3.3(h)(2)

Ann. Rept, FS 8601 AAU, FY 1952, Pl.
 Ibid. P8.
 Ibid. P15.

. Ibid. Pll.

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Doc ID: 6 TAD QEADET P.L. 86-36 net was on the station's intercept The EO 3.3(h)(2 assignment until June 1952, when it was deleted due to a lack of suffi-Cient personnel to cover the assignment. XXXB 05001, an unidentified network, was on continuous assignment until June 1952, when it was deleted due to a lack of intercept operators. network was removed from full coverage The assignment in June 1952. However, due to the ticklish Near East situation, special attention was devoted to this network during the period it was on intercept assignment. No major operational changes occurred during the fiscal year. During the summer months of calendar year 1952, the station carried Ann. Rept, FS 8601 AAU, FY 1952, PL2. 1. 14

An unproductive Mexican military network was dropped from intercept assignment in July 1951. However, during this time, the Brazilian military and naval assignment proved extremely fruitful in producing an order of battle of military establishments in Brazil.

A Russian civil air assignment was made 7 August 1951. Coverage was destined to gain momentum very slowly during the first month, due in part to poor signals and to insufficient knowledge of frequencies and schedules. As intercept conditions improved, coverage increased considerably. On 1 October 1951, the network underwent several operational and functional changes with the introduction of a complete change

Throughout fy 1952, general search missions were assigned by AFSA with priorities established as to both the radio spectrum and times

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Ann. Rept, FS 8601, FY 1952, P13. 1. 2. Tbid. P14.

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of coverage. Traffic analysis personnel carried out these assignments which underwent considerable change. On 1 July 1951, the search mission consisted of search BANER covering the spectrum from five to six mcs between the hours of 00012 to 12002, fourteen to fifteen mcs between the hours of 12002 to 24002, and search DOG from sixteen to seventeen mcs and seven to eight mcs between the hours of 09002 to 01002 and 01002 to 09002 respectively.

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On 26 July 1951 both search BAKER and DOG coverage assignments were changed with a third change occurring again on 14 August 1951. On 4 September 1951, only one position, search BAKER, remained unchanged. On 14 February 1952, search position DOG was established in lieu of search BAKER, reducing the total search positions to one.

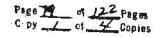
Search EASY was established 6 March 1952, and remained on assignment until 19 March 1952, at which time the area of coverage formerly assigned search EASY was assumed by search DOG. On 29 March 1952, a special mission covering the link was added to the responsibilities of search DOG. Search ABLE was assigned 9 April 1952 and at the same time search DOG's assignment was again altered, except for the assignment.<sup>1</sup>

During April 1952, a second special mission was assigned to search DOG in an effort to establish intercept of a Russian voice transmission notated as During the same month search ABLE and DOG missions were deleted. A new assignment was immediately added establishing three search positions viz: search ABLE, BAKER and CHARLIE. The special

1. Ann. Rept, FS 8601 AAU, FY 1952, P15.

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P.L. 86-36 EO 3.3(h)(2)



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search mission on the \_\_\_\_\_\_ link was assigned search EAKER while search.CHARLIE was designated as the position to cover a Russian \_\_\_\_\_\_\_ and German \_\_\_\_\_\_ voice mission. On 29 April 1952, the search .mission was again changed and re-established into \_\_\_\_\_\_ positions labeled as search ABLE, BAKER, CHARLIE, and DOG. This last change proved most productive, for its daily sverage was thirteen-hundred msgs. The majority of items intercepted were identified as known (red) stations, which proved of interest in determining the number and identification of stations within a given radio spectrum.<sup>1</sup>

A major loss of intercept operators in June, 1952 resulted in the dropping of \_\_\_\_\_\_ general search positions from assignment. Following this, a revised search position, ABLE, covering the five to ten mc band on a twenty-four hour coverage was established by AFSA at the end of fy 1952. This position averaged in excess of one hundred items of intercepted traffic in a given 24 hour period.<sup>2</sup>

In scanning operations during the report period, there existed no more than a 24 hour span from the time of intercept by station personnel to the time of receipt of raw traffic by AFSA. During May and June 1952, the amount of traffic was in such volume that scanners were often behind seven to twelve days in the processing of Russian internal traffic. On especially desirable traffic, messages were selected, processed and dispatched to AFSA by teletype. Weather traffic from BAKER to Moscow fell within this category, therefore, a time lag of four bours was permitted.

1. Ann. Rept, FS 8601 AAU, FY 1952, P16. 2. Ibid. P17.

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Fage 10 of 122 Pages Capy 1 of 7 Copies At the close of fy 1952, the Russian commercial, teletype assign-

P.L. 86-36

Various changes were made in the station's non-Morse assignment during the year however the number of assigned missions remained fairly constant:. At the end of fy 1952, the non-Morse assignment consisted

Local maintenance personnel, in conjunction with Navy personnel from Cheltenham, Md., prepared a plug-board distribution panel for Navy CXOF equipment, making possible the interception of this transmission.

RDF operations ceased at the station in March of 1952. Existent D/F personnel were employed on an mission during the closing weeks of the fiscal year.<sup>3</sup> By far, the most important assignment dealt with "jammers" with the ultimate goal of producing extensive D/F information as well as determining the type of jamming signal (buzzer,

1.	Ann.	Rept,	FS	8601	AAU,	FY	1952,	P18.

2. Ibid. P26.

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EO 3.3(h)(2

3. Ibid. P19.

P.L. 86-36 EO 3.3(h)(2)

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were intercepted and processed by scanners during the report period.<sup>3</sup>

Essentially all traffic intercepted emanated from the Far East and Central Soviet geographical areas, with the Russian city of Irkutsk representing the division point between the Far East and Central target area.

Receiving conditions during the report period varied with the seasons and resultant ionospheric conditions. During the first quarter, receiving conditions varied from poor to generally fair with the best signals and the bulk of intercept traffic being obtained on frequencies in the range 7-15 mcs during the hours OlOOZ to O7OOZ and again between 1500Z and 2300Z. The copyable period lengthened toward the end of this period and continued to improve through the fall months on all frequencies.

During the winter months atmospheric conditions created very poor

1.	Ann.	Rept,	FS	8601	AAU,	FY	1952,	P20.

2. Ann. Rept, FS 8602 AAU, FY 1952, P2.

3. Ibid. P5.

4. Tbid. P2.

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P.L. 86-36 EO 3.3(h)(2) and erratic radio receiving conditions with considerable interference and freak skip periods. In the last quarter, conditions steadily improved with a peak in intercepted traffic in June due primarily to strong signals and excellent receiving conditions.<sup>1</sup>

The service printer radio-teletype assignment consisted of Far Eastern military, air, and main line links. All assigned circuits were covered effectively except when available equipment was inadequate or insufficient to handle heavy volumes of traffic or, at other times, when poor receiving conditions prevailed. The lack of three channel inter-leaved printer and three and four channel baudot demultiplexing equipment resulted in many transmissions not being intercepted. There were no PIX or radio telephone assignments during the report period. A large number of the major however, were observed making a change from oh-off keyed carrier type transmissions to frequency shift keying and dual frequency shift keying.<sup>2</sup>

Daring fy 1952, the principal taper manual coverage was on Soviet Far Eastern air administrative circuits emanating out of

were covered sporadically but effectively. An average of \_\_\_\_\_\_\_ were monitored on full coverage assignment throughout the year. \_\_\_\_\_\_ cyclic positions to be utilized for intercepting five air circuits were assigned as full coverage positions \_\_\_\_\_\_\_.
P.L. 86-36
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rotating coverage (porocos) in February 1952. Excellent results were obtained.

An average of ten Russian Far Eastern Main line and low echelon military circuits were assigned with the most effective coverage obtained during months of October through February. The majority of traffic was intercepted from links between control stations at

A Russian Northern Sea shipping circuit was assigned for full coverage 11 August 1951 and dropped on 14 September 1951, after being sufficiently intercepted by manual Morse, automatic and radio printer.

circuits were assigned by schedule as full coverage groups, with majority of intercept on circuits from

New links, schedules, and fre-

Satisfactory coverage was maintained on Russian

in the Far East during the winter months, but ionospherics led to little coverage during the remainder of the year. Best results were obtained on links between\_\_\_\_\_\_\_\_\_ and an unlocated link notated as temporary case\_\_\_\_\_\_\_ On 3 June 1952, all assigned \_\_\_\_\_\_\_\_ cases were dropped from coverage and one position rotating coverage was essigned 24 hours per day for \_\_\_\_\_\_\_\_\_ 1. Ann. Rept, FS 8602 AAU, FY 1952, P6.



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EIDER

Russian civil air circuit coverage was practically nil, generally being copied during the course of search and dropped as soon as identified.

Soviet frontier guard nets were inadequately covered because of low priority as additional targets.

Chinese Communist shipping circuits were covered adequately until 18 March 1952 when they were dropped due to a heavy decrease in intercept personnel.

Poor coverage was obtained on Chinese Communist links and Chinese Communist unidentified links (temporary cases) which were assigned during the winter months. Good coverage was obtained on Chinese Communist unidentified links, but not on the specific cases as assigned.

Chinese Communist weather transmissions originating at Peking were copied intermittently when assigned circuits were inactive. Weather nets were not assigned at any time during the year. <sup>2</sup> REF: VOL.  $\mathcal{I}_{P}$ .  $\mathcal{SF}_{P}$ 

Ann. Rept, FS 8602 AAU, FY 1952, P7. 1. Ibid. P8. 2.

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P.L. 86-36 EC 3.3(h)(2)

Doc ID: 655

B. Territories and Possessions

1. Hq ASA Aleska, 8614 AAU, Fort Richardson

To fulfill mission requests, a major T/A effort toward intercept of military low echelon nets in the Chukotsk area was initiated by this beadquarters in November 1951. Several assignment changes were made during the year in order to obtain most valuable traffic.<sup>1</sup>

P.L. 86-36 EO 3.3(h)(2)

> The advance detachment of the 333d CRC arrived in Alaska on 7 April 1952 and became operational after 9 April 1952. The remainder of the unit arrived later in the quarter and by the end of the fy, \_\_\_\_\_\_ intercept and \_\_D/F positions were operational at three locations. These positions were primarily engaged in search missions in order to begin identification of potential enemy communications.<sup>2</sup>

> > 2. Field Station 8607, Fairbanks, Alaska

A high of 39,757 msgs intercepted was recorded in June 1952, and an average of 28,669 msgs was recorded for the year. On 12 January 1952, the method of bandling intercept was changed. As a result, transmission of raw traffic was expedited and time between interception and transmission reduced from ten hours to one hour and thirty two minutes. REF: VOL. F

Summ. Ann. Rept, Eq ASA Alaska, FY 1952, P17. 1.

2. Analytical Rept, ASA, FY 1952, TAB A.

3. Summ. Ann. Rept, Hq ASA Alaska, FY 1952, Pl.

4. Tbid. P2.

TOP SESILE

3. Field Station 8605 AAU, Helemano, T. H.

The station's basic mission of intercepting and forwarding radio transmissions to AFSA remained unchanged during fy 1952. The Morse assignment consisted exclusively of Russian circuits, all of which employed manually keyed transmissions. This included 47 military cases, 5 civil air cases, 2 air defense cases, and a 24-hour search mission.

At the end of the report period, this assignment had decreased to 38 military cases, 4 military air cases, 2 high and low echelon military search missions, six cases on 16 hour coverage, three cases on 13 hour coverage, six cases on 12 hour coverage, and nine cases on 7 hour coverage.

The average number of msgs intercepted per month was 5,519 compared with a monthly average of 6,085 for the previous fiscal year. The total number of msgs intercepted during the year, 66,227, represented a decrease of approximately 1 per cent below the total for the previous 1 fiscal year.

Close liaison was maintained between Morse and non-Morse personnel to insure optimum coverage of links common to both. As such links transmitted traffic by Morse, non-Morse and radio telephone, changes were usually directed by procedure signals, the most common being ZZA, ZZB, ZZC, and QST. Recovery of these directed changes permitted coverage of the link on the new form of transmission. During the report period, 1231 instances of such changes were exploited.

1. Ann. Rept, ASA Hawaii (FS 8605 AAU) FY 1952, P14 (Sec A).

TAP STARF

Morse personnel continued to compile all available data upon frequencies used by Russian military cases. This information was charted with the idea of eventually recovering the systems of allocation and rotation in order to predict frequencies.<sup>1</sup> Research was unproductive,

Although these did not constitute the complete range used, they were within that which could be copied.<sup>2</sup>

Non-Morse personnel performed the majority of all non-Morse traffic analysis during fy 1952. Considerable progress was made in establishing schedules and identification of service radio printer links. Military identification and operator aids were continued and expanded. These were beneficial in maintaining good coverage on military links in spite of a loss of a number of qualified operators.<sup>3</sup>

P.L. 86-36 EO 3.3(h)(2)

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3. Ibid. P17.



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P.L. 86-36 EO 3.3(h)(2)

Doc ID: 655

approximately 99% of all intercepted transmissions were identified. The station's R/T mission for fy 1952 consisted of an eight man hours per day search for Russian civil air fleet (less navigational) transmissions. This assignment was quite unproductive due to a lack of skilled Russian linguists. Some desirable transmissions were intercepted, but no identifications made.<sup>1</sup>

HOP Stone

Continued assistance was rendered by traffic analysis personnel to intercept sections during the report period.

This eliminated waste of man hours on unwanted circuits. With the advent

On 8 January 1952, USN-14 began accepting requests for direction finding bearings and fixes. Results were relatively unproductive since the Navy D/F net was able to provide comparatively few fixes. Although USN-14 provided many on-line bearings, the distances involved were too great to be of help in identifying targets.<sup>3</sup> REF: VOL.  $\mathcal{I}$  P. 67

C. Pacific

1. Japan

a. Hq ASA Pacific, 8621 AAU, Tokyo

(1) Integration

Throughout fy 1952, technical operations of Hq ASA Pacific were controlled by the Intelligence, Security and Communications

Ann. Rept, ASA Hawaii (FS 8605 AAU) FY 52, F18 (Sec A). 1.

- 2. Ibid. P19.
- 3. Tbid. P18.

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branches of the headquarters.1

Doc ID: 655

The organization of the Intelligence Branch varied somewhat over the previous fiscal year in that operation was on a language problem basis rather than functional. Under this method, activities such as T/A, C/A and translation were performed by language problem sections as a unit. Efforts were coordinated by a central control section known as Integration. Here, new and previously uncovered systems were isolated, intelligence produced from unknown systems, and the end product of language sections prepared reflecting the collective operational effort.<sup>2</sup>

THP SECRET

#### (a) Russian Problems

Because of stringent requirements for COMINT in support of the UN effort in Korea, work on Russian communications was limited to maintaining continuity on existing nets through T/A. Relatively few intercept positions were available for Russian case coverage, and the necessity for maintaining net continuity required that those positions which were available be utilized in poroco. As this type of coverage did not favor complete net analysis, more detailed study was necessary in order to maintain the current network and to develop new links.

In cooperation with the Air Force Security Service (Pacific), one Morse position was made available by ASA Pacific for search coverage of the Russian air warning net during the conduct of Ferret missions. In turn, Ferret mission data was furnished to Hq ASA Pacific. This procedure was adopted in an effort to provide close coordination between units.

1. SAR, Hq ASA Pacific, FY 1952, P53. 2. Ibid. F72.

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2	
*	All (air warning) traffic intercepted during the conduct of a
	Ferret flight was forwarded by teletype, priority precedence to AFSS
0	(P).
	During the month of March 1952, an unusually high number of security
·*	breaches were observed in the Far Fast military district communications
	network. This security breakdown was attributed to the institution, in
P.L. 86-36	February, of a textual address system which apparently created an un-
EO 3.3(h) (2)	expected burden for those outstations performing relay functions.
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	·
8 E 3 8	was of
2 2 1	particular interest since the identification of in
8 12	July 1951 was related to pre-truce talks. , observed on this
*	link as early as 3 October 1950, was believed to be connected with mili-
	tary operations in Korea. noted 25 December 1950, served an
	organization
5 <sup>10</sup>	1. Ann. Rept, Hq ASA Pacific, FY 1952, P89.
-50	2. Ibid. P90.
79 25	28 Page <u>31</u> of <u>121</u> Pages
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P.L. 86-36 EO 3.3(h)(2)

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HAP SECTION EASE A special daily radio report to Hq ASA was initiated on 8 February 1952 covering all activity observed on this case.

changed from Morse to the non-Morse parallel

Research on chatter intercepted on

indicated

when operators

#### (b) North Korean Problems

. The North Korean section was given the responsibility for providing close technical support to field units processing North Korean COMINT. Its mission was research and C/A of North Korean

in a minimum of time. All effort in North Korean T/A was conducted at the 330th CRC throughout the year.

The principal personnel problem encountered was that of insufficient linguists for field units in Korea, a condition which resulted in part from the necessity for rotation of personnel from the field.

- 29

1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P91.

Signer. P.L. 86-36 EO 3.3(h)(2 of 85% and 125% respectively. During the second quarter of fiscal Figures for the year 1952, first quarter are not available, since records kept at that time covered only by Ho ASA, Ho ASA Pacific, and units in Korea. During the first half of the fiscal year Hq ASA Pacific successfully coped with the North Korean air problem; during the latter half of the year, however, the volume of this material declined and more were in evidence. Decision was reached to turn responsibility for this problem over to the AF as soon as it static, wide expansion of this procedure was facilitated. In addition, landlines were extensively utilized, further reducing exploitation of North Korean communications. Nevertheless, a good percentage of intercepted traffic appeared good at the end of the fiscal year. (c) Chinese Communist Problems A radiogram from Hq ASA (11 Aug 51) indicated that intercept stations under the control of the Chief, ASA Pacific, would, in the future, be responsible for intercept of the Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P92. 1. Tbid. P94. 2. 30 Page 35 of 122 Pages

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P.L. 86-36

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EO 3.3(h)(2)

and the development of unidentified material in the Manchuria and Korea areas. To permit the best possible use of available personnel, the section was reorganized in project groups to conform with the above assignments with \_\_\_\_\_\_\_ analysts having responsibility for the \_\_\_\_\_\_\_\_\_ link. Two other project units were also designated, one to provide analytic essistance on the navigational air problems, and one to perform analysis on all voice intercept. Developments in these activities are treated under separate subheadings below.

TED OFAS?

i. Navigational Air Analysis on these nets was primarily directed toward determining the relative importance of outstations on the various nets. In this connection, it was determined that the nomenclature "North and Central Manchuria net" and "South Manchuria net" for and respectively, was erroneous; and it was recommended to AFSA that the nets be more properly designated ."Manchuria Training" and "Manchuria Tactical." Volume studies on the Manchuria training net showed recurring traffic patterns tentatively believed to indicate training cycles. With the transfer of responsibility for this problem to the 6920th Security Group on 10 March 1952, analysia effort was discontinued and analysts reassigned to the At the beginning of the year, nets thought to compose the complex were almost exclusively located, by D/F, in Manchuria. However, with the edvent of D/F stations in Korea, activity in Korea proper was intercepted. Approximately 40 temporary cases as well as 16 cases with permanent notations were studied during the year.<sup>1</sup> The first period-to-

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1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P96.

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EO 3.3(h)(2)

period continuities, the primary step toward network analysis, were established after the September call-sign change. The contribution to the problem was necessarily slight at first because of a lack of personnel available for the problem. Also, analysis performed by analysts at the 501st CRG was available almost concurrent with raw traffic. The \_\_\_\_\_\_ was heard only until 22 August 1951 and no information of value was derived from its study.

Series

Analysts very early in the year noted the similarity of location as well as simultaneous moves of those stations with units mentioned in pavigational traffic, and such information was passed via weekly COMINT summaries to intelligence consumers.

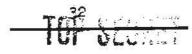
## iii. 3d Field Army Nets

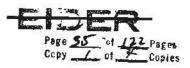
ii.

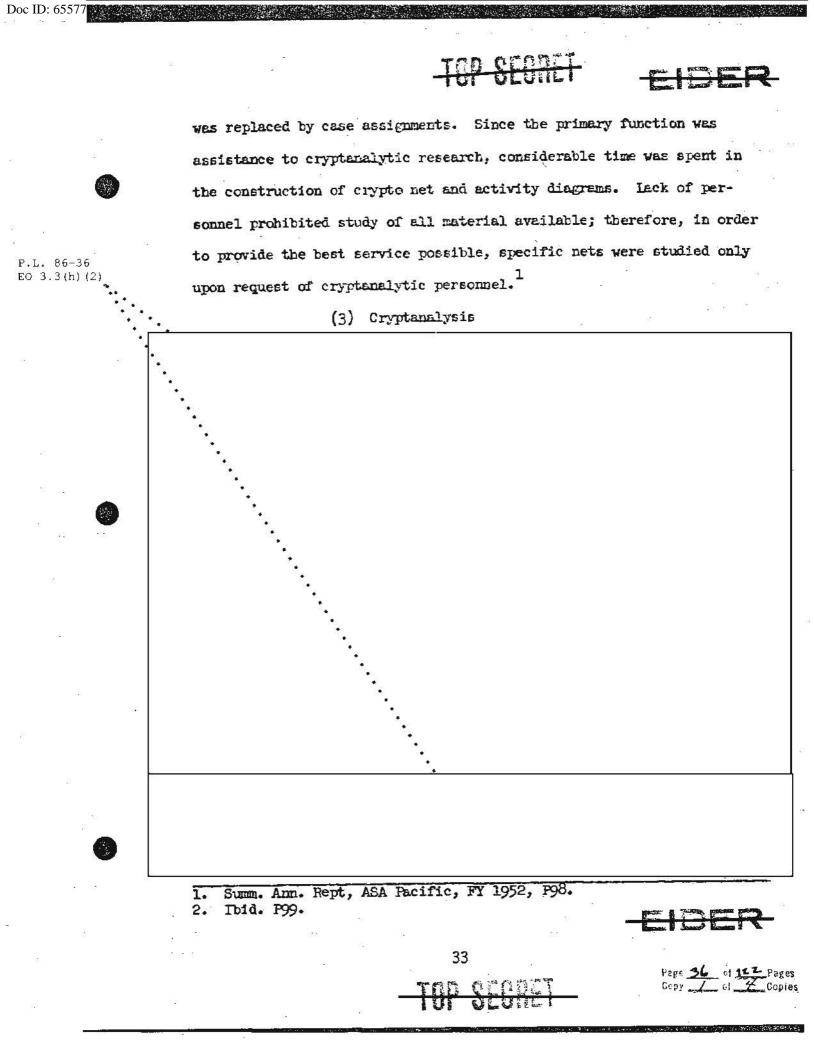
Of all the projects taken under study perhaps less was known of the Third Field Army network than any other. As a result, considerable time was spent by Hq ASA Pacific in basic exploration of its workings. Quantity of intercept varied considerably, making any detailed continuing study almost an impossibility. During the last quarter of the year, however, it became possible to engage in special studies which produced certain technical benefits both to AFSA and to the field stations.<sup>1</sup>

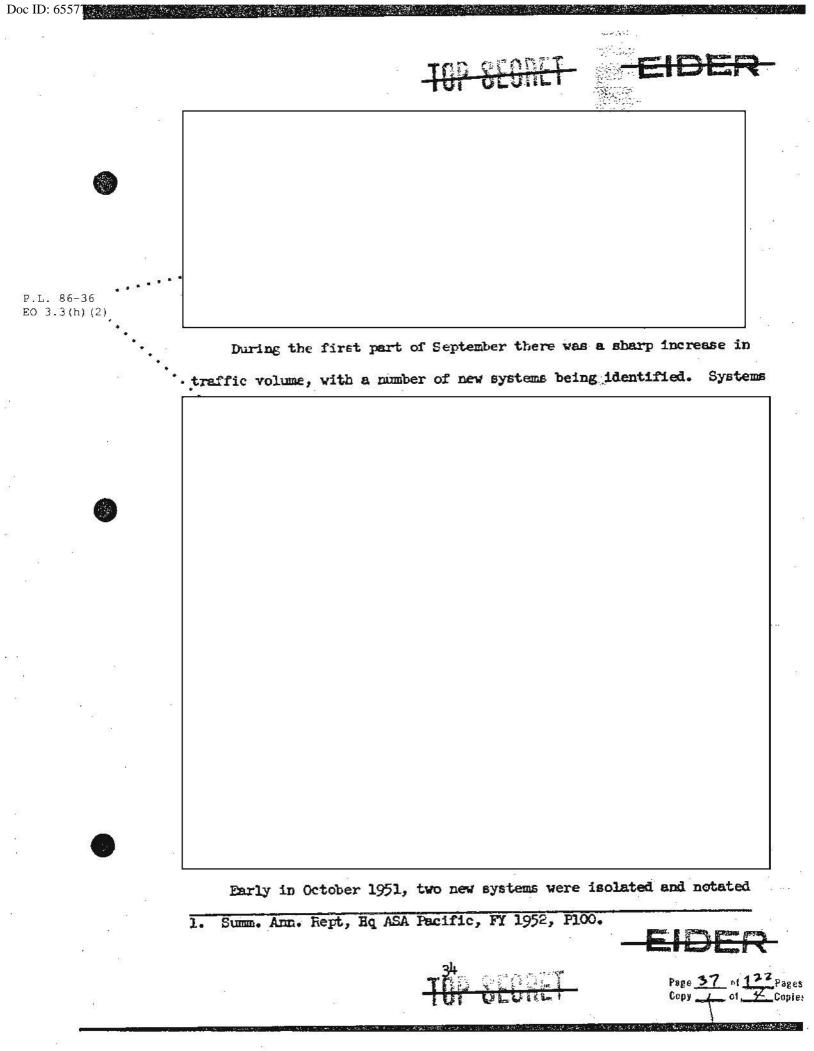
iv. Voice Project

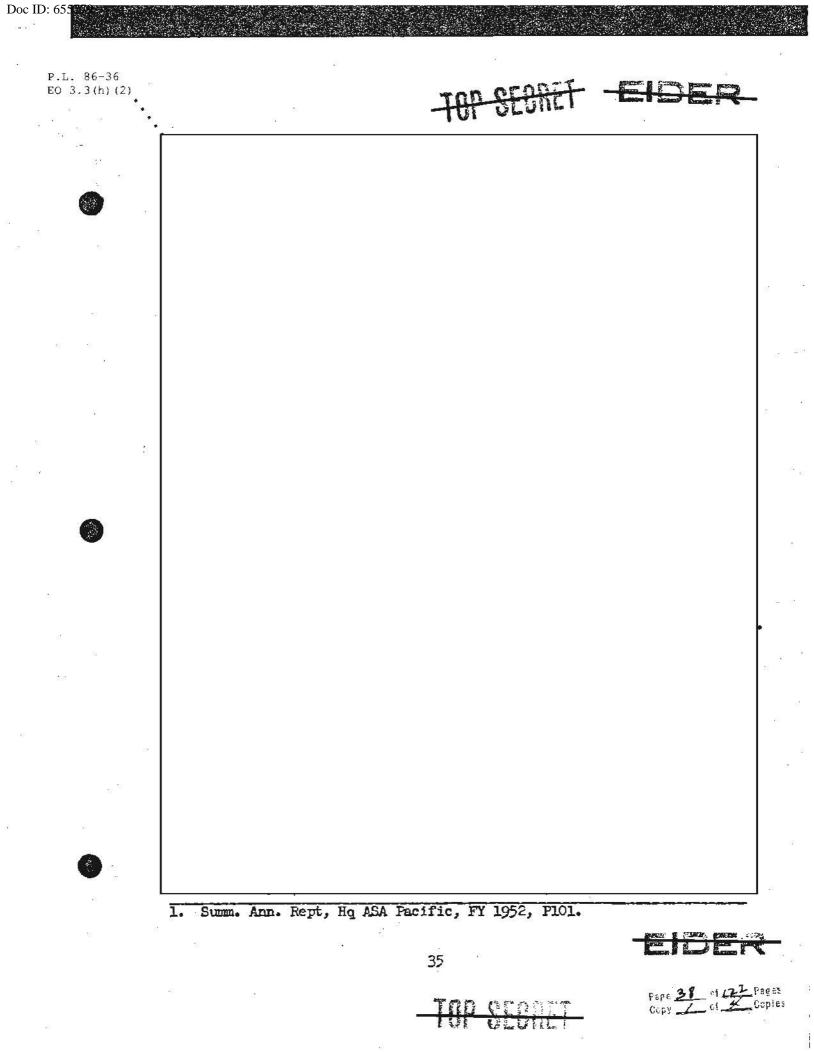
From one analyst charged only with keeping voice texts current, this project grew to a maximum working team of four. Initial success followed the change in intercept tactics when complete search 1. Summ. Ann. Rept, Hg ASA Pacific, FY 1952, P97.







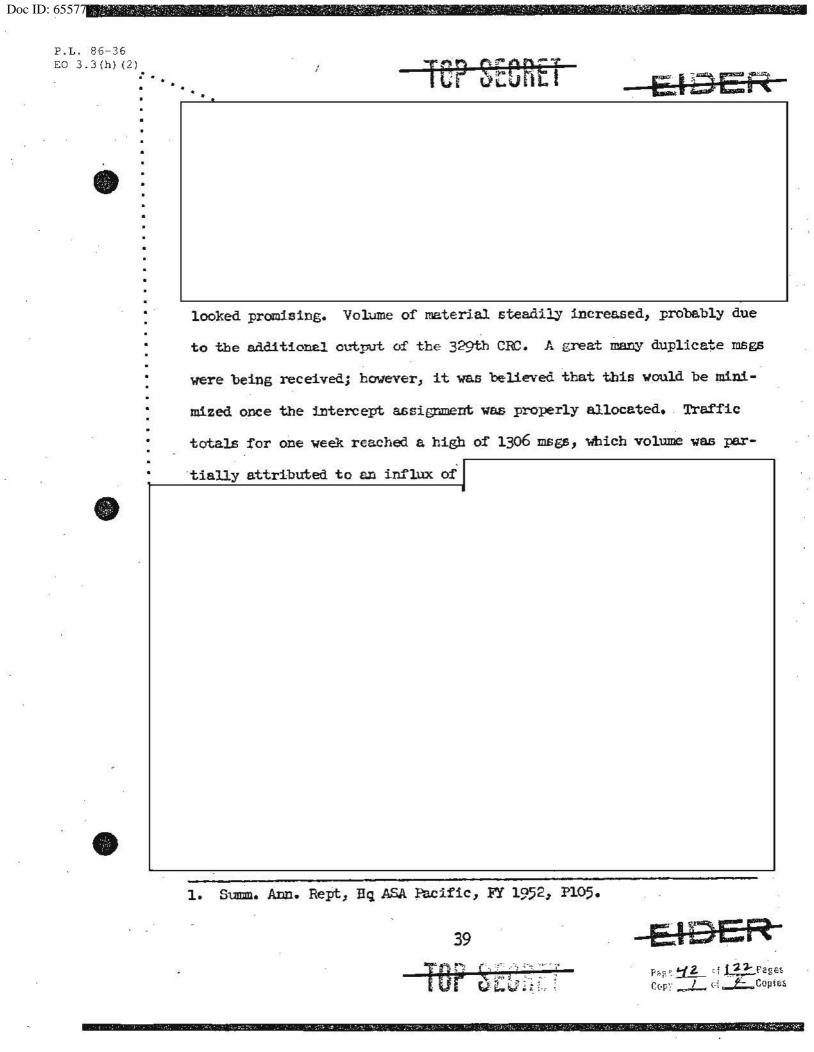


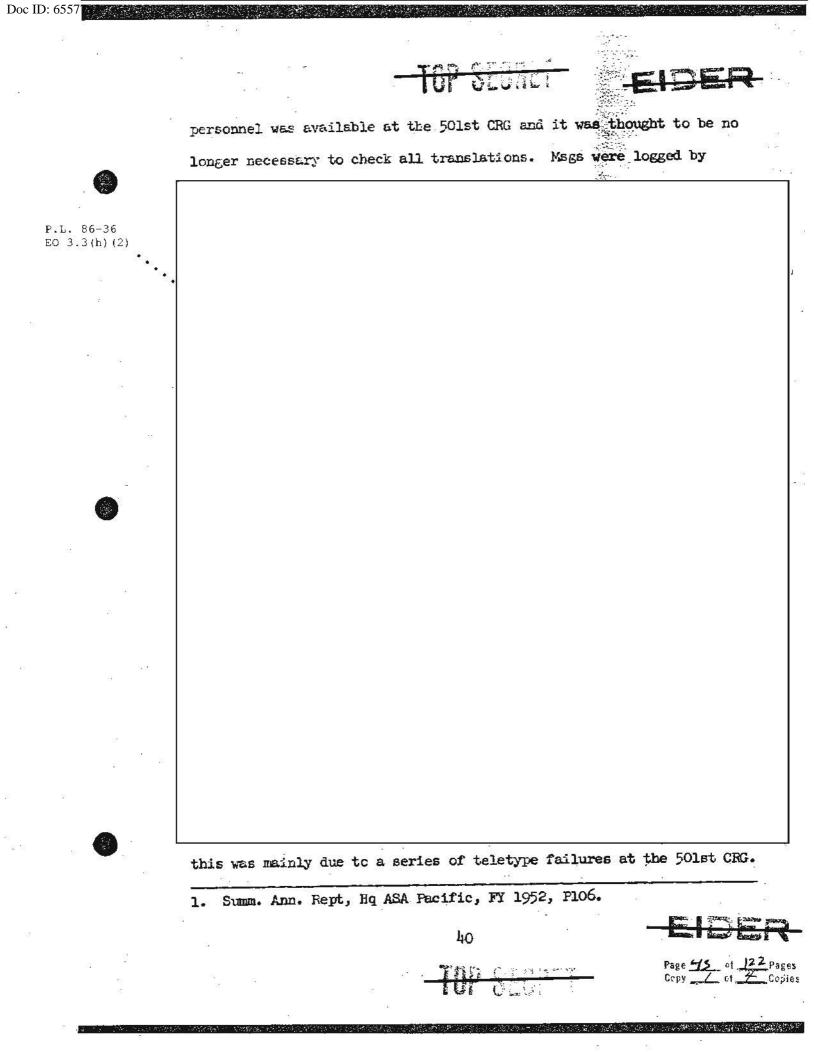


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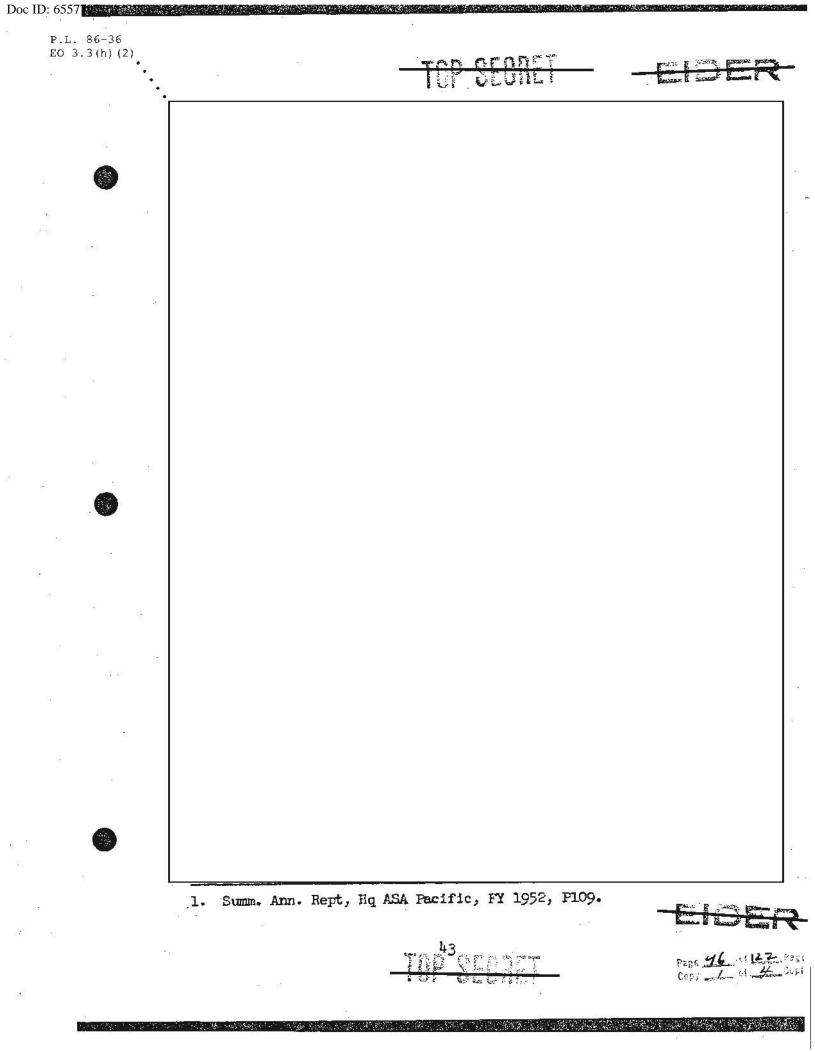
were received, which was the first time this system had been seen since early December 1951. During the latter part of January 1952, traffic volume continued to increase although during this period P.L. 86-36 dropped to virtually nothing. Examination of traffic for EO 3.3(h) (2) the previous five weeks revealed a steady decline in this system and Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P104. 1. 38





Doc ID: 6557 TOP SEGNET P.L. 86-36 EO 3.3(h)(2 During the first part of May 1952, a drop in volume was noted. Also, a number of variations on old systems appeared. This may have been an attempt to increase cryptographic security. Summ. Ann. Rept, Eq ASA Pacific, FY 1952, P107. 1. 41 Page <u>44</u> of <u>1+2-</u> Pages Copy <u>1</u> of <u>4</u> Copies

Doc ID: 65577 P.L. 86-36 EO 3.3(h)(2) C.C. 2 6 3 to 1 Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P108. . 1. 42 ct 12 2 Pages ct 42 Copies Page En lan Copy \_ 



systems usable, two undergoing linguistic exploitation, and two in the research stage. Vast experience had been gained and new procedures developed. Liaison among the three headquarters concerned (Hq ASA, ASA Facific, the 501st CRG) resulted for the most part in

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P.L. 86-36 EO 3.3(h)(2)

## (4) Traffic Analysis

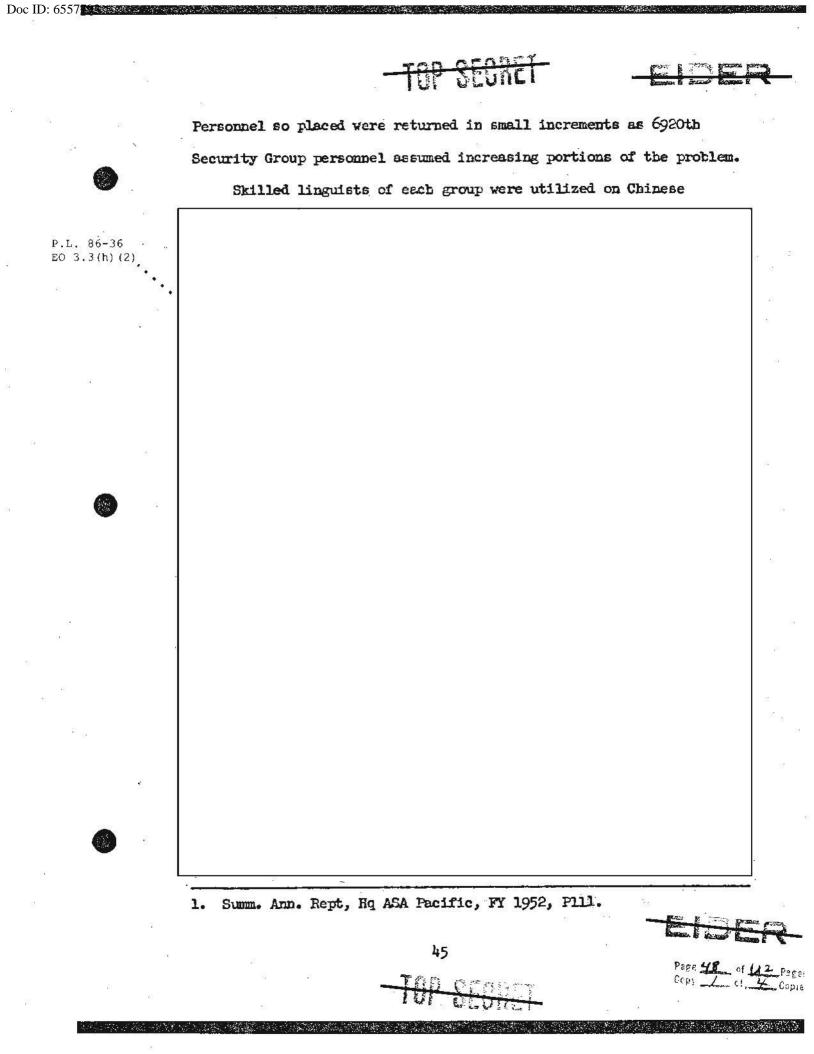
(c) Chinese Communist Air

Chinese Communist Air material was processed by a separate air subsection at the close of fy 1952. Activity of this subsection, as covered herein, encompasses the period from 1 July 1951 to 11 March 1952. On the latter date, responsibility for this activity was transferred to the 6920th Security Group, Air Force Security Service. At this time personnel engaged in the Chinese Communist and air problem were placed on indefinite temporary duty to the 6920th Security Group to assist in the effort and to insure against loss of continuity.

1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, F110.

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Translated messages that contained intelligence of urgent value, such as flights of MIG-15's into Korea, and other significant matters were immediately teletyped as a SPOT to Special Security Officer G2, Hq FECOM, ASA and AFSA.<sup>1</sup> Remaining translations, containing information of value for compiling activity and studies, were forwarded by courier to the same consumers.

It was found that duplication of intercept, at least on the most important cases, was necessary for positive verification of significant messages that contained air unit numbers and number of aircraft.

P.L. 86-36 EO 3.3(h)(2)

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received. This practice provided the consumer with tentative informa-2 tion.

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1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P112. 2. Ibid. P113.

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Doc ID: 65577 P.L. 86-36 EO 3.3(h)(2) TOP SECTION <del>LISER</del> 47 Page 50 clif2 Pages Copy \_\_\_\_ cl\_\_2 Copies 网络国际国际中的国际 网络中国部 1 St. 1 St. 1997

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	In November 1951, it became apparent that
P.L. 86-36 EO 3.3(h)(2)	tactical net), was of great tactical value, in that it reported
	. flights of aircraft into Korea. In order to utilize this informa-
	tion, however, it was determined that it would be necessary to operate
8.	
	at, or close to 5th Air Force. Headquarters. Plans were made to send
2	a team to the 326th CRC, Korea, to be further attached to 5th AF Hq
	for operation. Its mission was to intercept,
	and analyze traffic on on the spot at 5th
	Air Force Hq. The team was designated "326th Northern Fox Detachment"
à	
	and was in operation assuming full responsibility for both cases on

1 December 1951. Traffic intercepted at the detachment was received

sent to the detachment. Copies of all translations and spots were forwarded for study.2

Plans were made in early January 1952 for the consolidation of the Chinese Air section with the 6920th Security Group, Johnson Air Base, Japan. The group lacked the experienced personnel needed to efficiently assume the responsibility for this project, particularly skilled linguists. Arrangements were made to place personnel of ASA Pacific on TDY to the group to assist in the operation, until such

- Summ. Ann. Rept, Hq ASA Pacific, FY 1952, Pl14. 1. 2.
  - Tbid. P115.

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time as the AF unit was capable of assuming full responsibility.

During the period under report, the CCF Air net reconstruction consisted of 8 identified control stations with a total of 64 identified outstations. At the time of the move of the CC air section on 11 March 1952, 9 Chinese Communist air training schools and 20 Chinese Communist air divisions had been identified, complete with basic types of aircraft and locations.

During the period 1 July 1951 to 11 March 1952, a total of 28,582 translations were produced, of which 6,890 were SPOTS. Approximately 3,000 Chinese and Russian pilot names and approximately 250 airfields in operation throughout China and Manchuria were compiled.

## (5) Radiotelephone

For operational purposes, R/T activities of ASA Pacific were divided into four independent components. The transcribing component was organized on a language basis, subdivided into Chinese and Russian subsections. Operational effort was primarily that of the Russian problem, while effort on the Chinese problem consisted mainly of transcribing and performing limited T/A. Transcriptions of Chinese material were largely duplications or verifications of transcriptions made by field units in Korea. Accordingly, units were directed to forward only transcriptions, and to retain recordings for a two-week period. If no requests for confirmation or re-transcription were received within this time, tapes were erased and reused. Where re-transcription was required, tapes were forwarded for such action. This

1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, Pll6.

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arrangement greatly reduced the work load and alleviated the shortage of tapes that had existed for some time.

Production of intelligence on Russian Far East military and naval air activity steadily increased.

A test for low level Russian voice was conducted in Korea from September 1951 through March 1952. Results were negative.

A Russian voice test was conducted at Nemuro, Kokkaido, Japan, in October. Results as concerned low echelon Russian military voice were negative, but reception on known air nets was considered to be of better quality than reception at other stations in Japan.

Two Joint-service tests were conducted aboard a destroyer. The first test, a Russian monitoring assignment, was made in late March and early April 1952. The second, a Chinese test, was conducted in the latter part of April. This test revealed no intercept of interest that was not adequately being covered at other intercept sites.<sup>2</sup>

(6) Radio Direction Finding

At the outset of fy 1952, the ASA Pacific high frequency direction finding net consisted of a landline teletype network connecting all facilities located on the main Japanese Islands,

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- 1. Summ. Ann. Rept, ASA Pacific, FY 1952, Pl17.
- 2. Ibid. P118.

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P.L. 86-36 EO 3.3(h)(2) with an additional terminal at 1st Radio Squadron Mobile, Johnson AF Base, for use in joint Army-Air Force D/F operations.

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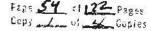
Results obtained were generally satisfactory on both ASA Pacific and joint D/F missions on targets in the Far East north of the 30th parallel. However, results on targets in the areas south of this parallel, particularly on control net missions, were generally unsatisfactory due to lack of simultaneous bearings on such missions from D/F units located on Okinawa and Clark Field, Philippine Islands. Establishment of FIASH control facilities to these units was planned, but could not be inaugurated due to lack of necessary equipment and personnel.

In view of the success obtained in joint Army-AF operations, it was considered desirable to include Navy Pacific D/F facilities in such joint operations. A separate landline teletype circuit, joining D/F control stations of the various service nets (lst RSM, Johnson AF Base; NAVRAUFAC (S), Yokosuke) and Hq ASA Pacific was obtained and became operational 10 September 1951. Results were generally good on a majority of missions initiated in spite of the fact that the time delay in processing missions was excessive due to re-encipherment required at each control station for all missions initiated.

In October 1951, equipment and personnel necessary for operations of a radio control circuit to Okinawa and Clark Field D/F units was obtained.<sup>2</sup> This circuit was placed in operation 15 October and provided additional communications circuits required to operate all ASA Pacific

2. Ibid. P79.

the local barries of the



<sup>1.</sup> Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P78.

## TOP SEGNET

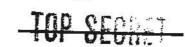
D/F units on a FLASH control basis. Results obtained, particularly on targets in the South-Central China area, improved considerably, although generally poor results were obtained initially from the temporarily located D/F unit at Clark Field. Antennas on this unit were changed to the low-frequency type (36 foot diagonal spacing) in May 1952. Preliminary accuracy checks indicated a standard deviation of 3.2 compared with a previous value of 5.0.

During the period June to December 1951, AFSAG 1244 (for mission assignments and reports) and AFSAG 1245 (for tracking information) cryptographic systems were employed on the ASA Pacific net. Operational use of the AFSAG 1245 system was successful and considered excellent for transmission of tracking information. On the other hand, the AFSAG 1244 system proved very cumbersome, and its use resulted in excessive time delay in initiating missions. Following modifications, the system proved faster and more convenient to use, and provided improved results on targets which were "on-the-air" for only short periods of time.<sup>1</sup>

D/F mission assignments received from AFSA during the latter part of 1951 generally contained a large number of nets which remained on assignment for long periods of time without change. Results obtained were generally poor, since stations had a tendency to take repeated bearings on a few targets of assigned nets while ignoring other targets. A rotating cyclic assignment procedure was used for those missions originating at ASA Pacific which provided slightly better, although

1. Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P80.

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not completely satisfactory, results. A new D/F priority system with a twelve-day cyclic assignment of D/F missions was initiated by AFSA in February 1952. This procedure, with the addition of specifically designating responsible tip-off stations for each target, was initiated 20 February 1952.

On 21 May 1952 the ASA Pacific emergency net combined with the D/F network in order to conserve personnel, and operational control of the transmitter equipment formerly used for the emergency net was transferred to the D/F control met. All D/F facilities began operating in the radio metwork, and the teletype met was used only as a mission report circuit. Teletype circuits used by the D/F net from Tokyo to Chitose and Kumanmoto were transferred to the Comm Center, ASA Pacific. The circuit from Tokyo to Kyoto Control was incorporated into the joint met to form a four-station joint met.<sup>2</sup>

A major problem in D/F operations throughout the year was extreme shortage of technically qualified personnel. On-the-job training at individual units solved this problem to an extent, but because of the personnel shortage, trainees were, in many instances, the only available operating personnel. Under these conditions, approximately three months was required to qualify replacement personnel received from the ZI as satisfactory D/F operators. Efforts were made early in the fiscal year to establish a training course in D/F operations, but this could not be accomplished because of a shortage of replacement personnel. In June 1952, two courses were established, each of four weeks duration,

Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P81.
 Tbid. P82.

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for training personnel and evaluators. Fersonnel in the initial classes were expected to complete their training in the latter part of July 1952, to be assigned to D/F installations in Korea. Personnel from subsequent courses were to be assigned to units of the ASA Pacific or Korean D/F net as required until uniformly trained and technically qualified personnel were stationed at all D/F facilities. 70 b. 356th Communications Reconnaissance Company (Scty),

Chitose.

Doc ID: 6557

P.L. 86-36 EO 3.3(h)(2)

The operational mission of this company remained unchanged from the start of the report period until January 1952, at which time operational and administrative control was assumed by FS 8612 AAU.2

Full coverage of the non-Morse intercept mission was not maintained due to imited qualified personnel and equipment. Sufficient information was obtained powever, on Russian military and naval traffic which allowed determination as to the extent of activity by those organizations. The addition of Russian cyrillic mills in July 1951 substantially reduced the time lag previously caused by hand processed traffic.

On 24 October 1951, a team consisting of 0 and EM was sent to Hokkaido to test that location as an intercept station. The reception of Russian army circuits was not favorable, but reception of Russian military and naval air was excellent.

The company's RDF mission prior to the January changeover was

Summ. Ann. Rept, Hq ASA Pacific, FY 1952, P83. Ann. Rept, 356th CRC, FY 1952, P4. 2. 3. Tbid. P5. 54

basically one of Chinese search with special periodic missions on Korean and Russian targets.

TAP SFARET

At the close of fy 1952 the company's operational mission had been withdrawn and build-up commenced toward its employment on a future tactical mission.<sup>2</sup> REF: VOLF P. 94

c. Field Station 8610 AAU, Kyoto

No change occurred in the operational mission of Field Station 8610 AAU during fy 1952. The intercept mission was assigned by AFSA and was separated into manual Morse, radio printer and radio telephone categories. The radio direction finding mission was assigned by the Chief, ASA Pacific.

At the beginning of the report period, the Morse intercept mission was predominently Chinese Communist with a minority of an existing \_\_\_\_\_\_ positions assigned to taper targets. During the ensuing twelve months, this situation was gradually reversed as Chinese Communist missions were replaced by taper targets. In June 1952, the last of these missions was dropped. The Morse intercept mission consisted of \_\_\_\_\_\_\_ taper positions and \_\_\_\_\_\_\_ general search positions at the close of the fiscal year.<sup>3</sup>

The intercept mission included one position for R/T intercept during the year. Periodic voice interceptor personnel shortages resulted in less than 24 MHPD coverage during certain periods. During the first part of the year, successful intercept of yoke and certain

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- 1. Ann. Rept, 356th CHC, FY 1952, P5.
- 2. Ibid. P4.
- 3. Ann. Rept. 8610 AAU, fy1952, PP 11-12.



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taper targets was performed. Detection of the yoke mission and adjustment of the taper assignment during the last half of this period caused a sharp decrease in the ancunt of intercept, R/T intercept was suspended during the period 24-31 May 1952, due to shortage of replacement parts.

VHF equipment was installed during the report period, but results were unproductive.

A very large volume of radio printer traffic was intercepted during the first quarter of fy 1952 as a result of coverage of nonpriority links when assigned targets were inactive.get From October 1951 to February 1952, a system of operator specialization was initiated whereby an operator was fully trained in simplex or multiplex systems. In addition, a systematic and intense search effort was initiated for taper service targets and new commercial links. Intercept of non-priority commercial links was discontinued. This caused a sharp decrease in the amount of intercept volume, but the coverage of the assigned mission improved. A further decrease of simplex intercept was caused by the expanded use of double frequency shift systems. At the time, the station was unable to cover related transmissions due to a lack of proper equipment. A request to delete from essignment most of the circuits employing the double frequency shift system was granted. Facilities and personnel were then applied to taper service search and the remainder of the assignment. In February and March 1952, excellent results were observed on the search

1. Ann. Rept, FS 8610 AAU, FY 1952, P13. 2. Ibia. FP 13 & 14.

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for service targets. A request was granted to cut back the commercial assignment to relieve personnel and equipment for further development of military air, naval, naval air, police, 1 shipping, civil air, and unidentified links. RLH: V-1 87. d. Field Station 8612 AAU, Chitose

-TAP SECH

With the transfer of all personnel of the 356th CRC to FS 8612 AAU on 20 November 1951, technical operations commenced at Camp Chitose #1.<sup>2</sup> The Morse intercept mission was coverage of Russian military nets (Far Eastern district) and the station's location was quickly determined to be the finest in the Far East for the assignment as fade-outs were non-existent. On 15 January 1952, the operational area was moved to a site five miles distant from the original. Signals in the new area were excellent and voice level very low.<sup>3</sup>

Non-Morse operations commenced at the station 20 November 1951. A study of intercepted traffic was conducted which indicated an almost 100% conversion of Russian fighter units in the Far East to jet type aircraft.<sup>5</sup>

Following the activation of the station, T/A personnel set up operations at Chitose #2 and essumed control of the assigned mission which, at the time, appeared to be alternating more and more between manual and printer transmissions. On 10 June 1952 the Russian military

1.	Ann.	Rept,	FS	8610	AAU,	FY	1952,	P14.	81
2.	Ann.	Rept,	FS	8612	AAU,	FY	1952,	F9.	
3-	Ann.	Rept,	FS	8612	AAU,	FY	1952,	P10.	
		. P12.			1.50		52 53		
5.	Thid.	P13.							

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TOP SECRET nets (Far Eastern district) changed from reports prepared on activities and recovery of circuits in the Russian communication nets. In November 1951, radio direction finding moved to the station's ermapent site at Chitose #2. Teletype procedures were changed and literal one-time peas were used for enciphering and deciphering mis-Numerical bag-time pads were used for tracking targets. The sions. mission at this time was 100% Chinese and Korean targets. Periodic

special assignments on Russian targets were forwarded from ASA Pacific.

effect a major communications change that gave both services a common

19 February 1952, same system. D/F bearings from the station, individual Russian operator styles, and compromises helped correctly to identify the units after REF. VOL I P. 91 each change.

2. Korea

On 20 January 1952,

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501st Communications Reconnaissance Group a.

The inception of low-level intercept by the 501st CRG during fy 1952 clearly achieved the greatest success of all ASA elements in Kores. The original mission, at its initiation in August 1951, was to provide COMINF of an operational nature to tactical commanders in the Korean theater of operations.<sup>2</sup> At first, this restricted the effort

Ann. Rept, FS 8612 AAU, FY 1952, P18. 1. Summ. Ann. Rept, 501st CRG, FY 1952, P7. 2.

put into

On

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to the Chinese Communist low level voice problem. In February 1952, this was expanded to include the North Korean problem in support of the X US Corps. Subsequent decreases in the strength of North Korean units on the main line of resistance lowered the potentiality for COMINT and prompted an almost full reversion to concentration on the Chinese Communist problem at the close of the report period.

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By 1 April 1952, the 501st had eight low level teams operating in the I US Corps, IX US Corps, and the X US Corps areas. Teams of the 301st CRB were responsible for the North Korean problem and teams of the 303d CRB were handling the Chinese Communist problem.<sup>2</sup> The consumers, ASA Facific and Special Security Officer EUSAK, volunteered no opinion on the value of COMINT derived during the development stages, however, enthusiastic recognition of the effort soon came from the 45th Inf Div, the 3rd Inf Div, and Hq 1st Bn, 15th Inf Div. These tangible evidences of merit reflected the growing operational maturity of the effort.<sup>3</sup>

Despite early difficulty with establishing low level intercept sites, controlling the security of operations, and providing suitable equipment, the overall accomplishments in support of the Eighth US Army in Korea proved essentially worthwhile to the broad problem of intercepting enemy traffic. Prior to the arrival of ASA units in Korea, the policy of ASA in relation to low level team operation had been a restrained one.<sup>4</sup> It was felt that allowing intelligence personnel to

- 1. Summ. Ann. Rept, 501st CRG, FY 1952, P7.
- 2. Ibid. P9. 3. Ibid. P10.
- 3. Ibid. Plo. 4. Ibid. Pl4.

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work in close proximity to the MIR posed a continuous threat to information being compromised. The urgent need for low level intelligence material prompted ASA to relax its resistance and permit the function of low level teams in Korea. Early efforts failed to satisfy United Nation's divisions and regiments however because of inadequate ASA coverage. Gradually, as increased support was rendered, and more units were placed under ASA operational control, acceptance and satisfaction mounted noticeably. Low level intercept finally became as much a part of the Agency's mission as high level intercept.

Initiating the low level effort found many operational personnel unprepared to perform low level intercept by reliance on previous training. The need for special training at the ASA Tng Ctr soon became evident.<sup>1</sup> Utilization of personnel returning from Korea as instructors was seen as a possible solution to the problem of securing adequately trained personnel but experience had shown that officers and non-commissioned officers required a broader tactical background or tactical orientation, and needed training in recognizing the type of information desired. Further, it became imperative that officers be able to evaluate material gathered by voice interceptors.<sup>2</sup>

Until mid-November 1951 actual exploitation of Chinese Communist and North Korean intercepted traffic was limited to T/A, C/A and translation efforts. Group headquarters served as a "clearing house" for all such technically processed traffic, but due to a lack of trained

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Summ. Ann. Rept, 501st CRG, FY 1952, P15. 1.

2. Ibid. P16.

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In December, efforts were initiated, upon the arrival of qualified personnel, to establish contextual and addressor - addressee continuity of traffic. Emphasis was placed on identification of units from whom intercepted traffic was emanating. Likewise, deliberate steps were taken to tie-in the results of low level voice COMINT with that of the voice morse COMINT.

To a lesser extent, North Korean traffic was scanned for accuracy of place-name locations and collation. A goal was established to enhance useable intelligence derived from all classes of translations by coordinating all possible assistance to T/A, C/A, and translator personnel in the form of currently collateral tactical information, POW reports, enemy documents, and OE material. It was felt that only through this direct coordination could the essential elements of COMINT be implemented to better serve the needs of the field forces.

In early January, plans were formalized for the establishment of a "Collation and Analysis" unit in the COMINT section at Group headquarters. It is to be remembered that in effect, "the Comint Section" until this time, was a mis-nomer. Rather, the term "Operations Section" was more applicable, since a "Collation and Analysis" unit was not included in the TOE.<sup>1</sup> Its function was to analyze critically all translations, T/A studies, interrogation reports, and captured documents. Close liaison with the low level voice section was maintained, but low

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1. Summ. Ann. Rept, 501st CRG, FY 1952, PP 16 & 17.

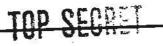
Page 64 of 122 Pages Copy \_\_\_\_\_ of \_\_\_\_ Pages level voice personnel determined any possible tie-ins with Chinese Communist voice-Morse or North Korean translations through a pseudointegration arrangement. Further, collateral information available from OE section personnel located at Group after 19 January, and publications promulgated by ASA Pacific and Eq ASA, were assimilated into analyses of the translations.

With the effective full strength arrival of the 329th CRC in Korea, it was expected that individual efforts of the 326th and 329th CRC's would successfully materialize into a full exploitation of the Chinese Communist voice Morse intercept problem. Hovever, the uniqueness of the Chinese Communist T/A requirements, plus the need for speed in availability of daily coverage reports and decrypts, made for ineffective individual unit pursuit of the overall problem. In addition, the sophistication presented obstacles which could not be overcome by 329th personnel who had not yet been indoctrinated in the deviations of Chinese Communist techniques from procedures and methods employed by them in their training. It was obvious that proper introduction of untutored personnel into the active operational problem could be met only through complete unification of trained and untrained personnel in a common effort. Finally, no translator personnel were included in the organizational strength of the 329th prior to its arrival. Consequently, the entire Chinese Communist intercept translation problem continued to fall upon the 326th CRC, necessitating unification of the effort at a centralized point, via Group beadquarters. 1

1. Summ. Ann. Rept, 501st CRG, FY 1952, P18.

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F.L. 86-36 EO 3.3(h)(2)



As the scope of Chinese Communist voice-Morse intercept operations expanded, it was only logical for T/A, C/A and translation efforts to develop magnitude. This meant that the TOE of the group had to be exceeded to meet growing personnel and equipment needs. In a deliberate move to delegate translation of all current and critical tactical information to Group, arrangements were made for only minor

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functions to be performed by the headquarters section. Responsibility for translation of traffic containing residual intelligence, not believed to be current, was assumed by ASA Pacific processing sections. The new arrangement resulted in an increase in COMINT that could be of immediate value to the field forces.

In January and subsequent months, formal reports were developed.<sup>1</sup> Format, context, and quality were improved through collaboration of all operational sections concentrated at Group. Integration personnel materially intensified the consistency of factual content of the material, and served as control over the intelligence content.

North Korean translation and T/A was assisted during fiscal year 1952 by collation and analysis personnel of the 501st CRG through full exploitation of COMINT as it originated from the 330th CRC, the ROK Int Det, and the 15th Rad Sq Mob.<sup>2</sup> To improve the product, T/A, C/A, and translator personnel were concentrated at Group headquarters during May 1952 to conserve critically short technical manpower, and to improve the final intelligence product of the three sources. This move was not too successful as it soon became apparent that intercept continuity,

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1. Summ. Ann. Rept, 501st CRG, FY 1952, P19.

2. Ibid. P20.

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which had remained in the Eastern front section, was suffering due to a lack of immediately available analytical assistance to the intercept operation. Accordingly, since this was the only source which could be controlled to maximum analytical advantage, developmental effort was returned to the 330th and responsibility for coordinating intelligence from the three sources was re-established at Group headquarters within the COMINT section.

T/A by ASA units in Korea commenced in July 1951, with the 60th Sig Sv Co exclusively handling North Korean traffic. At that time efforts to intensify search missions in order to gain a broader T/A picture were continually made. By August, this analysis was expanded to include ROK Int Gp "M" and Det 13 of the 1st Rad Sq Mob. Coordination of intercept efforts of these units was made to insure comprebensive coverage and to eliminate duplication of effort.

The possibility of incomplete coverage of the North Korean problem by units in Secul had been considered by the Group in the past, but it had not been felt that a search was advisable. This was attributed to the comparative quiet at the front, and to the Kaesong conferences in progress. Later, the group was requested to exploit low level voice and to determine whether any North Korean signals were not readable in the Secul area.<sup>2</sup> A small detachment was sent out and the results prompted a decision to move the 60th Sig Sv Co to an advance position. This necessitated the establishment of a section to process material provided by Det 13 of the 1st Red Sq Mob and ROK Int Gp "M",

Summ. Ann. Rept, 501st CRG, FY 1952, P21. 1. 2. Tbid. P22.



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and to service SSO, EUSAK. Accordingly, a North Korean processing section was organized within the COMINT section of the 501st to accomplish the mission.<sup>1</sup>

In summary, progress in the Chinese Communist intercept effort caused Group to arrive at the decision to augment its T/A organization by adding men from staff sections, other teams, and from battalion. The Chinese communications system was then broken down into networks and assigned for study. A plotting section for RDF was established in order that combined studies could be made. Following this, a policy was established whereby Group could assign its own mission, thereby providing control at Group. This policy also extended Group authority to alter its mission to meet changes in tactical requirements.<sup>2</sup> By March 1952, Group T/A personnel had notated nine new Chinese voice Morse and eight new Chinese continuous wave cases.3

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Summ. Ann. Rept, 501st CRG, FY 1952, P23. 1.

Ibid. P24. 2. 3.

Tbid. P25.

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E.L. 86-36 EO 3.3(h) (2)

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The Integration section of the 501st was not formed under its TOE nor did it receive any recognition of its mission in the ASA concept of operations. The reason for adding this feature to the Group's operational structure was to augment the direction and coordination of the intelligence effort of all operational units in Korea. Accordingly, all traffic was channeled to this section prior to submission to Hq ASA Pacific.<sup>2</sup> The most important problem was the unpreparedness of personnel to handle the assigned mission as most had no thorough knowledge of field forces requirements. On-the-job training solved this problem and it was conceded that this section contributed most toward the intelligence effort in Korea from the time of its formation until the termination of the fiscal year.<sup>3</sup>

OB section operations at Group commenced in January 1952 at which time personnel of the 326th CRC were placed on DS to carry out this activity. Primary functions were to assist C/A and T/A personnel by locating geographical place names and identifying enemy units appearing in translated intercepted traffic.

Summ. Ann. Rept, 501st CRG, FY 1952, F28. 1. Ibid. P29. 2. Ibid. F30. 3. Ibid. F36.

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By the end of heport period the overall scope of this work began to broaden to include more complete files on Chinese Communist Forces personalities, a current history file on all known CCF units in Korea (from both COMINT and collateral scurces) name file, plus dissemination of periodic COMINT reports on known CCF units in Korea, indicating both front line and rear area reserve units. As a result of increasing emphasis on voice Morse traffic, additional personnel were added for publication of a daily COMINT summary of current Chinese voice Morse translation.

Immature operation of RDF at the start of fy 1952 found the 126th Sig Sv Co without D/F stations and lacking coordination with the 60th Sig Sv Co. Bearings were reaching the 126th approximately four days late, and in insufficient quantity.<sup>2</sup> D/F on the North Korean problem was adequate at the time. To coordinate the two units, Group personnel were sent to the 126th Sig Sv Co. This was followed by Group assigning D/F missions in an effort to isolate individual nets geographically to determine the presence of enemy transmitters in previously unexploited areas.

The amount of valid bearings diminished during August 1951. Coordination between intercept and D/F control seemed to be poor due to the lack of continuity of valid bearings on targets intercepted on the same frequency daily. D/F search methods were unproductive

1. Summ. Ann. Rept. 501st CRG, FY 1952, P32. 2. Ibid. P39.

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in isolating new nets and tracking down old ones, and it was decided that special D/F missions should be assigned in rotation to the various stations daily. REF. VCL I P 395

301st Communications Reconnaissance Battalion Throughout fy 1952, the 301st CRB performed the threefold mission of (1) maintaining lieison with & Corps G-2 and Sig Scty officers; (2) contacting all signal and communication officers concerned with traffic monitored by Det #2, 352d CRC (Scty); and, (3) operating all ASA LLI teams in the X Corps: sector from 30 December 1951 to 30 June 1952, inclusive. The following pertains to its last named function.

During the greater part of the report period, the X Corps front was almost entirely made up of the North Korean Peoples Army with only one small sector on the extreme left flank containing Chinese Communist Forces. This, together with very high hills prevalent in the sector, greatly complicated the assignment of LLI in Korea.

The battalion's initial low level team tested CCF traffic first from Hill 1181, then from Hill 931 during the period 30 December 1951 to 1 February 1952 inclusive. By the end of January, the value of CCF LLI proved negative. Simultaneously, an experiment to intercept North Kcrean traffic was initiated. By 7 February, CCF intercept was discontinued on Hill 931 and only NK intercept attempted.

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1. Ann. Rept, 301st CRB, FY 1952, P6. 2. Ibid. P7.

b.

Various line-of-sight locations in the 7th Inf Div sector and in the lat Marine Div area were used in extensive testing for North Korean traffic during February, March, and April 1952. Results were entirely negative. As other sources of intelligence information confirmed the conclusion that use of radio by the North Korean Peoples Army was nil, LLI was terminated 24 April 1952. The problem of detecting friendly Korean traffic from North Korea was another major factor in terminating this test. ROK units could not be relied upon to use only authorized call signs. Finally, qualified Korean linguists, competent to perform the operator-translator mission, were unavailable.

TOP SECRET

The final phase of LLI for the report period commenced on 14 May 1952 in the 7th ROK Div sector, Hill 1220, where opposition was solely CCF. On 21 May, a CCF LLI site was set up as Hill 1220. Results in traffic volume, information derived, and stations noted, proved very favorable in the period to 30 June 1952. On two occasions, warnings by this intercept site produced direct tactical results in repelling CCF patrols. On 21 June, a North Korean LLI test site was set up on Hill 1181. At the end of the year, traffic was being screened to separate North Korean transmissions from South Korea.

REF. 1 ... I. P. 101 -

326th Communications Reconnaissance Company (Int) C.

1. Ann. Rept, 301st CRB, FY 1952, P8. 2. Ibid. P9.

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The 326th CRC remained located at its original site north of Seoul throughout most of fy 1952. At the close of the report period, no change in location or mission was contemplated. Reception of CW signals was good during the year, with the MLR approximately sixty miles north of the company site. Targets were located on the average of two hundred miles from the front.

Voice Morse was copied by the 1st Op Flat located at Yonchon, approximately 30 miles from Secul. The company manned and supplied [11] LI teems. These were located at 1st Marine Div, 1st Commonwealth Div, 48th Inf Div, and the 303d CRB. The mission of these teems was to support the division through intercept of enemy low level traffic picked up along the MLR. In a reorganization effected during May 1952, the battelion assumed administrative as will as operational control of these teams.<sup>2</sup>

The range of enemy radio activity during the year extended from 3000 to 6500 kcs, with the heaviest falling between 300 to 3300, 4200 to 4400, and 6000 to 6500 kcs.<sup>3</sup> REF. VOL.  $\mathcal{I}$  P.  $\mathcal{I}^{23}$ 

d. 329th Communications Reconnaissance Company (Int)

From 6 December 1951 to 10 May 1952, the 329th CRC was located with the Ninth Corps of the Eighth US Army, Korea, where CW intercept at or near the MLR was carried on. The command post of the company and the intercept operations site were at Chunchon, Korea.

1. Ann. Rept, 326th CRC, FY 1952, P7. 2. Ibid. P21. 3. Ibid. P22.

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F.L. 86-36 EO 3.3(L)(2)

P.L. 86-36 EO 3.3(h)(2)

Operational facilities consisted of \_\_\_\_\_\_ intercept positions utilizing three 8-hour tricks. Mission was assigned by the 501st CRG, but due to frequent changes of mission, there was a loss of intercept time which proved detrimental to the effort.

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Some progress was made in search and development during the report period. Call signs not listed as known cases were given positions and, as a result, ten case numbers were assigned.

As of 31 December 1951, battalion effort in intercept and analysis of the low level Chinese effort was taken over by intelligence companies with BN Hqs and Dets reverting to their normal mission of operational control and liaison.<sup>2</sup> Since the company arrived in Korea at this changeover period, there was no opportunity to acquire on-the-job training in this effort.

Following coordination with the 304th CRB, the company sent its first low level team (Team C) to the vicinity of the MLR on 11 January 1952. Team "B" followed on 13 January and Team "A" on 17 January. Each team was accompanied by one DA civilian Chinese, who had been procured by FECOM.<sup>3</sup> Traffic intercepted by these teams was found most valuable to tactical units facing the enemy.<sup>4</sup>

Pursuant to Ops 0 #1, 501st CRG 25 April 1952 and operational expediency, the entire low level effort of the 329th was transferred to the 304th CRE on 7 May 1952. Personnel engaged in the effort

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1. Ann. Rept, 329th CRC, FY 1952, P14. 2. Ibid. PP14. 15. 3. Ibid. P15. 4. Ibid. P16.

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were placed on DS to Bn, where they remained until the close of the fy.<sup>1</sup>

The company established its first voice Morse intercept site in the vicinity of Sabangori, a few miles from the front lines, on 17 January 1952, with an aggregate of 32 EM, 1 WC, and 4 DA civilians (Chinese). Mission assignments came from the 501st CRG through traffic control at the company's main operational area near Chunchon. Operations commenced 18 January 1952. Three HO-17's were utilized for the installation of six positions. Intercept personnel were divided into three equal numbers and placed on three different tricks. Raw traffic was couriered to translating, transcribing, C/A, and T/A sections of the 326th CRC. The Sabangori site was changed on 7 April 1952 to the vicinity of Chipori, about eight miles from the MLR. This became the main site of the 329th.<sup>2</sup>

From 11 May 1952 to 30 June 1952, the 329th acquired full responsibility for voice Morse intercept effort in both the IX and I Corps--hence of the entire Morse effort in Korea. During this period, the company continued its D/F efforts, but CW functions were turned over entirely to the 326th CRC.<sup>3</sup>

In late April 1952, the company moved from Chunchon to a voice Morse site at Songjong. The voice Morse det that had moved there from Sabangori in January then moved to a voice Morse site at Yonchon.<sup>4</sup>

1. Ann. Rept, 329th CRC, FY 1952, P17. 2. Ibid. PP17, 18. 3. Ibid. P21. 4. Ibid. P22.

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Personnel of the 326th engaged in voice Morse intercept were transferred to the 329th; while CW intercept personnel of the 329th transferred to the 326th.

On 12 May 1952, at Songjong, the company placed voice Morse intercept positions into operation, dividing the operation into three 8-hour tricks. On the same day, five HO-17's were dispatched to Yonchon for the surpose of installing ten voice Morse intercept positions. The Yonchon site remained the responsibility of the 326th until the 329th assumed responsibility and began operating with ten positions.2

Transcription and translation sections of the 326th CRC were moved to the company on 13 May 1952 and commenced operations the next day. The daily output of the sections was between 30 and 35 tapes.

Raw traffic from Yonchon was run to the company at Songjong by three daily motor carriers. Daily motor couriers were being used to carry raw traffic to Secul for processing, and when on 25 June 1952 the motor courier service was expanded to include air courier service three times a day with the Seoul airport, the company experienced its fastest movement of raw traffic to Secul.

Toward the close of the fy, one HO-17 consisting of voice Morse intercept positions was moved to the Chorwon area, in an effort

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1. Ann. Rept, 329th CRC, FY 1952, P24. 2. Ibid. P23. ...<sup>.</sup>

P.L. 86-36 EO 3.3(h)(2) to obtain additional signals believed to exist and which apparently could not be intercepted at either Songjong or Yonchon. This effort l was successful. Traffic produced proved of immense value to the UN effort during the serious fighting of this period.

The use of tape recorders (RD-74's) in the voice Morse effort enabled the company to obtain coverage of increasing amounts of traffic. However, the lack of spare parts for recorder maintenance made complete coverage of all case assignments impossible. .. In addition to 16 DA civilians (Chinese), the company employed four ROKA enlisted men from the ROKA Sixth Div. "These soldiers were radio operators who understood and wrote Chinese, but not English. They operated voice Morse positions as operators and Chinese translators, copying Chinese chatter in characters. Their copy was then translated into useable English by DA civilians. REF; VOL. I P. 330th Communications Reconnaissance Company (Int) The copying of North Korean military radio nets

composed the main body of radio intercept by the 330th CRC during fy 1952. From time to time, however, special checks and missions were assigned to include Chinese and Russian nets.

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- 1. Ann. Rept, 329th CRC, FY 1952, P24.
- 2. Ibid. P25.
- 3. Ibid. P26.
- 4. Ann. Rept, 330th CRC, FY 1952, PP10-11.

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Translation personnel provided translations on North Korean Peoples Army and naval nets during the year. These were supplemented by high level translations from Hq ASA Pacific and AFSA. These personnel also worked on air traffic for a short period, but the air problem was eventually made the responsibility of AFSS leaving only military and Morse traffic. Early in 1952, coverage of North Korean naval traffic was dropped, thus leaving military traffic as the principal assignment at the close of the report period.<sup>1</sup>

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1. Ann. Rept, 330th CRC, FY 1952, P17.

3. Okinawa

a. 327th Communications Reconnaissance Company (Int)
 During fy 1952, the primary mission of the

327th Comm Recon Co was the interception of Chinese Communist military and administrative air traffic. Secondary missions included Viet Minh, Chinese Communist and Russian voice, and Russian non-Morse transmissions.

On 15 May 1952, all facilities and mission of the 327th were taken over by Field Station 8603 AAU. REF. VOL  $\overline{I}$  P. 125

4. Philippines

a. Field Station 8609 AAU

There was no major change in the technical operations of FS 8609 AAU during fy 1952. The mission consisted of five general categories of radio interception: (1) Morse manual, (2) automatic Morse (3) non-Morse multiplex, simplex, radio telephone and facsimile, (4) radio finger printing (T/I), and (5) radio direction finding (D/F). With the exception of a few theater missions assigned by Hq ASA Pacific and very rare requests from 1. Ann. Rept, 330th CRC, FY 1952, Pl4.

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local AF officials for D/F fixes on lost aircraft, the intercept i mission was assigned and controlled by AFSA.

Throughout the year, Morse manual intercept personnel handled the following categories of traffic:

2. Chinese military, air and unknown .3. Russian \_\_\_\_\_, air and military .4. Viet Minh internal and military

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The bulk of the Morse manual mission (and resultant intercept traffic) was Viet Minh, Chinese and general search.<sup>2</sup> Shortage of operator personnel necessitated the transfer by AFSA of the Russian components of the Morse manual mission to other stations in January 1952.

The most ciritcal period of operator shortage arose in March 1952 and lasted for three months. Mission reductions ranging as high as 50% of the normal Morse manual coverage resulted.

Automatic Morse intercept was heavily stressed during the report period as the most important and productive activity from the standpoint of intelligence material produced. Of interest was the discovery that many stations in the Far East, particularly Chinese, transmitters, operated with frequency shift

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signals.

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The station's non-Morse mission increased during the year and

	Ann. Rept, Ibid. P9.	FY 8609 AAU, FY 1952, P8.	100 pp 0. C 100000021002000 S 20200
3.	Tbid. P10.		
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output grew accordingly. Impostant additions included Morse links in \_\_\_\_\_\_\_\_categories. On 21 November 1951, a high-priority 24-hour daily search mission was established to confirm non-Morse frequencies, methods and types of transmission, as well as to search for new signals. In the last seven months of the report period, better coverage of changing, growing non-Morse activity in the Far and Middle East resulted.

Radio direction finding activity, although problematic, was carried out by the station from December 1951 to the end of the report period.<sup>3</sup> A transmitter, located at Camp O'Donnell, 14 air miles north of Clark AFB, was keyed remotely by station personnel via landline. Telephone lines connected the site with operations, and one-time pad was used to encipher msgs between the two. A special code, set down by the Communications Director, 13th AF, provided a convenient and secure method for acknowledging frequency changes.

In May 1952, station personnel began handling the combined ASA Pacific D/F emergency net.  $REF: VOL \underline{FP} \underline{129}$ 

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D. Europe

1. Germany

1. Ann. Rept, FS 8609 AAU, FY 1952, Pl1. 2. Ibid. P16. 3. Ibid. P15. Tbid. P15.

Page

a. Eq ASA Europe, 8620 AAU, Frankfurt

(1) Integration

Extensive research was performed during fy 1952 on the Soviet Forces in Germany and the military forces of the Soviet satellites, to improve the COMINT product of ASA Europe.

From extracts of collateral intelligence information, a comparison was made with existing COMINT on the Central Group of Forces and the Soviet maneuvers in East Germany. Other comparisons of COMINT and collateral information were made on ground units and air units of GOFG, CGF, and the Czech Army. Czech defectors were interviewed and data was elicited which was invaluable to ASA mobile teams. Research pertaining to Soviet and satellite AAA activity;

(2) Traffic Analysis

On 20 July 1951, a reorganization of

1. Ann. Rept, Hq ASA Europe, FY 1952, P13.

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operational sections and teams of ASA Europe was effected, which involved the dissolution of the C/A Section. Personnel were then assigned to 5 T/A teams, where they could work in closer coordination with other traffic analysts. IBM became a separate team. In December 1951, responsibilities of teams within the Operations Division were changed to conform with the source of intercept. A Research Team was formed of both traffic analysts and cryptanalysts to do intensive studies on problems of the other teams. The gradual loss of personnel necessitated the suspension of Commercial Section operations in April 1952. All traffic received from landline intercept was forwarded to Hq ASA without any analytical action by Hq ASA Europe. In June 1952, all Soviet effort was concentrated in one T/A team. This was done so that related information pertaining to the Russian problem would not have to be passed between T/A teams, but would be supervised and coordinated in one place.

(a) Team #1.

T/A Team #1 maintained analytical

31.71

continuity on the major Soviet nets, including all

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1. Ann. Rept, Hq ASA Europe, FY 1952, P39.

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• This team was also charged with the compilation, filing, and distribution to all subordinate outstations of T/A notes from all sources. T/A guidance and assistance to outstations was an additional responsibility.

## (b) Team #2.

This team was assigned the cryptographic and T/A effort on satellite targets, including Hungary, Czechoslovakia, Yugoslavia, German Communist Police, and Polish. Reports, in the form of \_\_\_\_\_\_\_ analyses of nets, and informational write-ups were prepared weekly, or as the occasion demanded.

1. Ann. Rept, Hq ASA Europe, FY 1952, P42.

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Doc ID: 6557 P.L. 86-36 EO 3.3(h)(2) VLUILI The major accomplishments of Team 2 may be summarized in each target area as follows: 1. Ann. Rept, Hq ASA Europe, FY1952, P43. 82 Page 85 Copy Pag Cep Color Carlos

Doc ID: 655 . \*(c) Team #3. This team increased in both mission In July 1951, IBM was established as a separate team. and personnel. P.L. 86-36 EO 3.3(h)(2) reports of Team #4 were consolidated weekly, enabling Team #4 to obtain depth on bearings. (d). Team #4. Team'A was responsible for the processing of all bearing reports which were received from the mobile and fixed nets of ASA Europe and also from. Was A library of matching shots maintained. This library was greatly increased by the addition of a DEN 17 at FS 8606. All matters pertaining to clandestine transmitters were also handled by this team. Inspections of all D/F sites were held and many equipment errors were located and corrected. A different method of reporting fixes was adopted in February 1952, and close coordination with analysts in Teams 1 and 2 maintained. 1. Ann. Rept, ASA Europe, 8620 AAU, FY 1952, P43. 2. Ibid. PP44,45. 83

inter"

(e) Team #5.

Team 5 maintained close liaison with

ASA analytical teams and with theater recipients. The EEI of EUCOM and USFA was translated into assignments, and, through the efforts of Teams 1, 2, and 4, into COMINT.<sup>1</sup>

(3) Radio Direction Finding

The ASA Europe D/F net prior to 1 June 1952

consisted of control, alternate control, and five RDF sites. These were:

Net Control FS 8608 AAU Herzo Base, Germany Alternate Control FS 8608 AAU Scheyern, Germany USM 6-A Herzo Base, Germany USM 6-B Bremen, Germany USM 6-C Berlin, Cermany USM 6-C Berlin, Cermany USM 8 Scheyern, Germany USM 8-C Passau, Germany

Early in the fiscal year, establishment of a new teletype circuit between control and the outstations eliminated a considerable amount of communications difficulties previously encountered.<sup>2</sup>

In addition to the RDF net discussed above, FS 8606 AAU maintained three mobile RDF units for use during maneuvers or in connection with special missions or tests.

Facilities and personnel for a mobile RDF net were provided by the 331st and 332d CRC's. Control alternated between these two companies, and at the beginning of the fiscal year, sites were located

1. Ann. Rept, ASA Europe, 8620 AAU, FY 1952, P45. 2. Ibid. P45.

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P.L. 86-36 EO 3.3(h)(2 at Hof, Fulda, and Coberg. Subsequent unit movements involved relocation of these outstations and at the close of the year, net controls were located at Giessen and Heilbronn with outstations at Kassel, Hammelburg, and Memingen. A site formerly located at Ansbach was deactivated in the interest of personnel conservation. The one major problem confronting this net was the matter of satisfactory radio communication. Atmospherics made contact with outstations difficult and at the end of the report period no workable solution had been reached.

b. 331st Communications Reconnaissance Company (Int) At the beginning of fy 1952 the 331st CRC emphasized traffic originating in the \_\_\_\_\_\_ The company's mission included the interception of radio traffic, RDF, and performance of basic analysis on intercepted, traffic. The intercept assignment was of five types: full coverage, priority position rotating coverage (Priority POROCO), sampling position, rotating coverage (Sampling POROCO), additional, and alternate.<sup>2</sup>

Later, information from higher headquarters, supplemented by local

85

1. Summ. Ann. Rept, ASA Europe, FY 1952, P46. 2. Summ. Ann. Rept, 8620 AAU, FY 1952, P32. analysis, made more positive identification possible. From 1 July to 10 August 1951 the company located at Hof notated five new nets. From the time of its arrival in Giessen (12 August 1951) until the

about

15 nets were motated. Of these, five were later renotated by Hq ASA with permanent case numbers. From 15 April through June 1952, EO 3.3(h)(2) 19 nets were notated.

> In early September, voice intercept positions were sent to Altefeld to experiment with VHF intercept. The mission was to copy low level tank traffic, using receivers S-36 and antennae RC-173. For over a month the group was situated in and around Altefeld. The mission was largely unsuccessful owing to the fact that VHF signals have line-of-sight characteristics, and there was extremely high terrain between available intercept sites and sources of transmission.

> From 1 November until late February, voice intercept personnel were located at Giessen. Results were unsatisfactory because of the distance from the source of transmission and relocation closer to the border was impracticable because of the weather.

Late in April the section moved to Wasserkuppe, Germany, and was situated on the top of a mountain overlooking the East Zone. Results were improved until a nearby AF unit caused prohibitive interference.<sup>2</sup>

1. Ann. Rept, 331st CRC, FY 1952, PP22 & 11. 2. Ibid. P24.

86

The RDF unit was part of a three station D/F net with a base line of 46 miles running parallel to the border of the Soviet Zone of Germany. The 331st had D/F sites located at Hof, Fulda, and Coburg Germany. The cutstation at Fulda was manned and equipped by the 332d CRC.

HIP STORE

An SCR-291 RDF set was used at each D/F site, with an SCR-399 as the means of communications for the control net. The security system entailed the use of AFSAL 5100G. All bearings received by control from the outstations were plotted immediately and results submitted for analysis.

On 9 August 1951 the Hof site was secured and moved to Eschwege, thus lengthening the base line to 100 miles. The D/F control position was moved to Giessen with the rest of the company, but this site was changed to Kassel in September 1951, remaining there throughout the year. The Kassel site proved highly suitable for D/F being located on a large flat area, formerly an air strip.

Late in October, the outstation located at Coburg was moved to Hammelburg, thereby extending the base line to 120 miles.

87

In November 1951, the 331st and the 332d combined their outstations to form a \_\_\_\_\_\_\_station D/F net with control to be handled alternately on a monthly basis by the two companies. By adding the \_\_\_\_\_\_\_butstations--one at Ansbach and one at Memmingen---the base line was extended to

1. Ann. Rept, 331st CRC, FY, 1952, P13. Ibid. Pl

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250 miles. Each cutstation remained equipped with one SCR-291 and one SCR-399, and the use of the AFSAL 5100G was still unchanged.

In April 1952, the AFSAL 5100G was replaced by two new code systems. The mission assignment code (MACO) was a "one time pad" system used for mission and assignment and other administrative matters. Although more seucre than the old code, it proved cumbersome, due to the amount of paperwork required to prepare a message for transmission. To overcome this difficulty, a code clerk was assigned to assist the control operator and an adequate system for using the code was worked out. The ASA Europe tracking code (TRACO) was employed for use by control in tracking a target for the outstations. Before the change, the AFSAL 5100G was used for tracking, but TRACO proved to be much faster and more accurate. The AFSAL 5100G was still being maintained for emergency use at the close of the report period.2

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332d Communications Reconnaissance Company (Int) C. Throughout fy 1952, the radio intercept mission

of the 332d CRC consisted of four general net categories: Russian

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1. Ann. Rept, 331st CRC, FY 1952, P14. 2. Toid. P15. 3. Abstract, Ann. Rept, 332d CRC, FY 1952, Piii.

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tentatively identified. As recovery of procedure commenced, target intercept was increased and the network assigned to the regular mission of the company effective 10 January 1952.

89

1. Abstract, Ann. Rept, 332s CRC, FY 1952, F21.

1-24 At this time, one position was assigned to cover this net 24-hours daily. With the increase in intercept provided by full coverage, importance was attached to the complete recovery of all operating procedure employed by the net. On 28 January 1952, a P.L. 86-36 EO 3.3(h)(2) former assumptions of the advance in suffixes in association with root were confirmed. During the month of February 1952, evidence of a

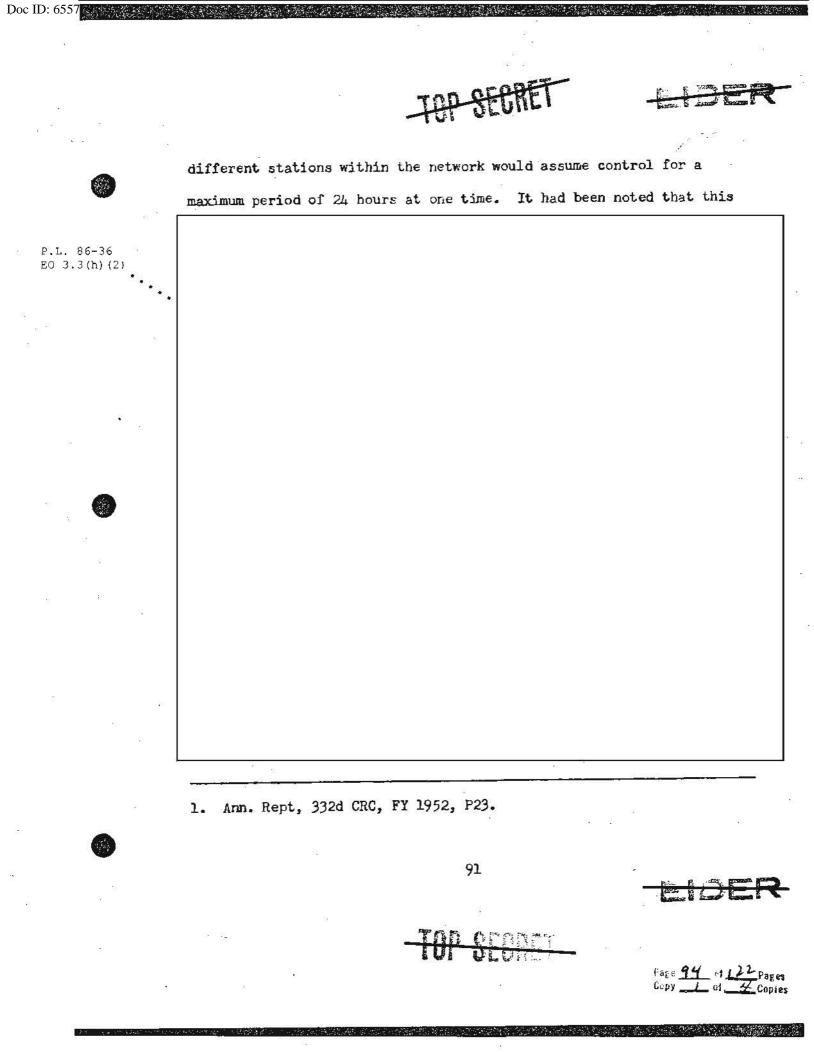
type of rotating control operation was first indicated. At this time,

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1. Ann. Rept, 332d CRC, FY1952, P22.

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Due to the flexible mission assignment covering the				ſ
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P.L. 86-36 EO 3.3(h)(2)	report period to ascerta	in exactly when any o	ne net was on assignmen	nt
for a specified period of time.				
5	During the first part of the year, the			
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was given extensive coverage, both on Morse and R/T transmissions. Close conversion was maintained between CW and voice sections so as to make certain that any net when changing from CW to voice and vice-versa was immediately copied. Due to a mission change in August 1951, the Morse phase of the was dropped from assignment and a larger portion of the military networks in replaced them ... At one time or another, during the fiscal year, at least five or were on the assigned P.L. 86-36 EO 3.3(h)(2) mission. A search mission was put on assignment which was flexible enough to cover almost all Soviet units working in Main efforts were expended toward the interception of the actual assigned armies and their subordinates, but emphasis was also placed on the interception of all units which utilized a suffix call or were noted to be passing operational type traffic. . Interception of the latter cases was greatly aided by patrols which were sent out to the border areas on various occasions. During maneuvers in the these patrols did an excellent job of intercepting low echelon maneuver units which as a rule could not be heard at Heilbronn. . Numercus five zero nets were copied and assigned a temporary case number. After a period of continuity they were aligned and identified as to exactly which Army they belonged.

1. Ann. Rept, 332d CRC, FY 1952, PP25,26.

93

P.L. 66-36 EO 3.3(h)(2) On 15 April 1952, a complete change-over of Soviet basic station was evidenced. This locations. greating affected mission coverage for all networks which were first intercepted were logged as five zero cases and, for a time, the actual mission was disregarded and main efforts directed towards the proper identification and co-equation of all intercepted networks. but the mission still had to be put aside until it was possible to locate subsidiary units to each individual Army. Toward the latter part of the year, a split coverage system was The 332d initiated concerning the Mechanized command network and the was assigned the Headquarters. The 331st CRC was assigned Атшу. In addition Mechanized and the the to this, ell'units which were subordinate to the were included in the mission. These two units were put on 24-hour coverage. At the close of the report period, the Mechanized Army was being covered by a detachment of the 332d at Hof, was being given full coverage at while the Heilbronn. Throughout the report period traffic analysis personnel of the

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332d CRC continued to disseminate the assigned mission to intercept 1. Ann. Rept, 332d CRC, FY 1952, PP26, 27.

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3.11

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personnel and kept the mission current by adding or deleting case notations when such was indicated by higher authority. Texta information and assistance in identifying unknown nets was provided.<sup>1</sup> Overall analytical intelligence increased as a result of sub-dividing personnel and assigning them specific assignments related to the mission.

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EO 3.3(h)(2)

Cryptanalysis personnel centered their efforts during the first half of fiscal year 1952 around the production of two distinct

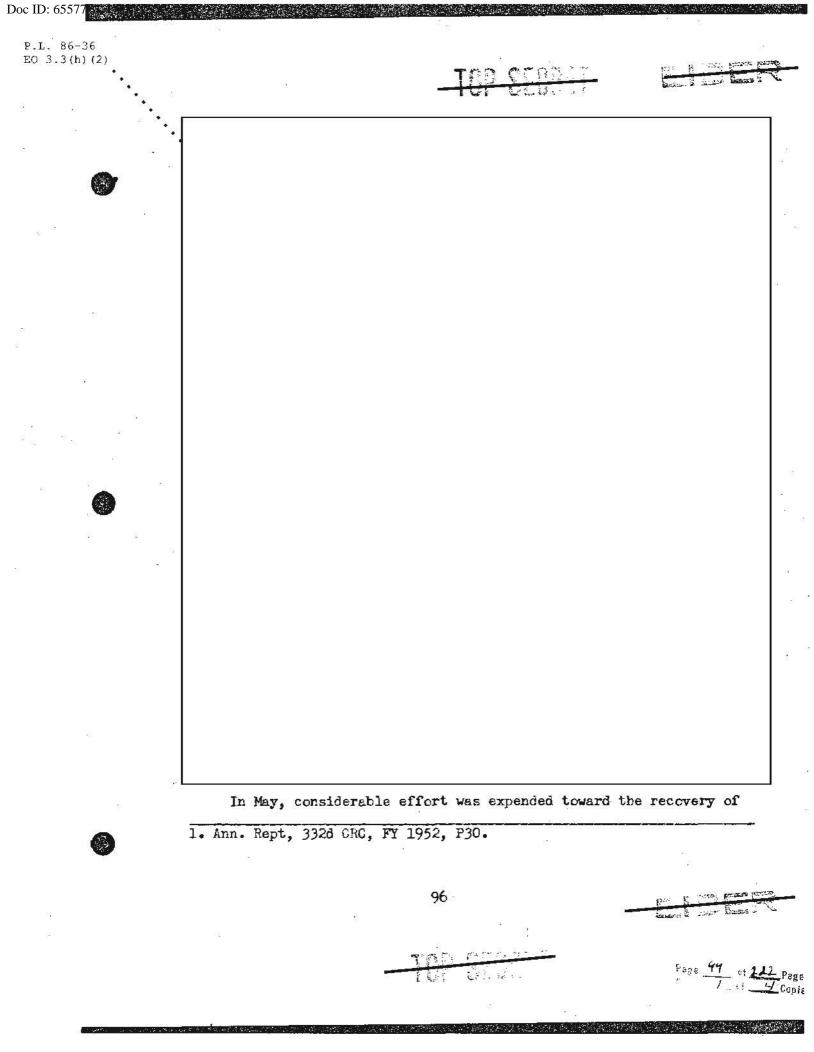
During the early part of January 1952, cryptanalysis personnel

1. Ann. Rept, 332d CRC, FY 1952, P29.

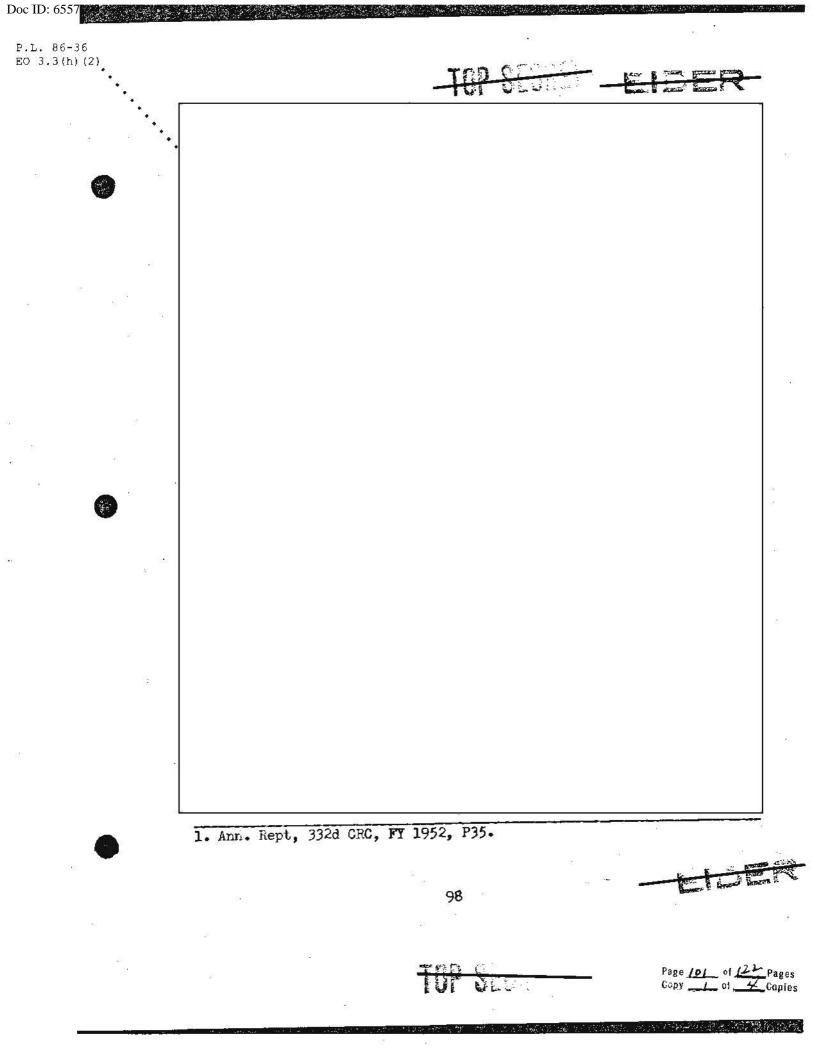
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Doc ID: 65577 P.L. 86-36 EO 3.3(h)(2) Throughout the first half of the fiscal year, R/T personnel placed emphasis on the great number of unidentified air nets or voice nets intercepted. 1. Ann. Rept, 332d CRC, FY 1952, P31. 2. Ibid. P32. 97 Fage 100 of 122 Pages Copy 1 of 14 Copies



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hese nets.

The overall D/F mission consisted almost totally of Russian CW and RP (non-Morse) operation. The 332d operated two D/F stations, located at Wassenkuppe and Coburg, Germany during the report period. Special patrols Figured largely in the operational set-up of the 332d during the year. On 22 October 1951, a special team composed of one officer, Morse intercept operators, woice intercept operators, one radio repairmen, marging analysts, cryptanalysts and two administrative men were sent to patrol the Russian zonal border of Germany in that wicinity between Coburg and Hef. The purpose was to obtain as much coverage as possible on the assigned mission and drain as much intelligence from Russian networks in that area as could be covered by intercept positions.

Because of the unusual amount of traffic being received by the special mission team, another group of men consisting of one officer, Morse intercept operators, traffic analysts, two security guards, one power maintenance man, and one cock, were sent to join the first team. Three tricks of five men each were retained at the Heilbronn site and maintained mission coverage for the home

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1. Ann. Rept, 332d CRC, FY 1952, P36.

station. The patrol completed the mission and returned to the parent organization 12 November 1951.

On 10 February 1952, a team consisting of Morse intercept operators and voice intercept operators, were sent to patrol the Russian zonal border in the vicinity of Hof and to intercept as much traffic as possible coming from Russian maneuvers which were taking place at that time. Morse and voice intercept positions were used during the first part of the patrol's activity. Traffic intercepted proved to be excellent and as a result, the first team was joined by another consisting of Morse intercept operator positions and six more operators. The addition of traffic analyst was required to identify cases and control the flow of intercepted traffic. A few days later, the patrol was further strengthened by the addition of Morse intercept operators. giving full coverage on four positions over each 24-hour period. o operational traffic was intercepted. Suffixes of two and three appeared intermittently which strongly indicated a CPX. police network was also given full The coverage by one of the patrol's Morse intercept positions. A few days later, the suffixes stopped appearing and the patrol. returned to Heilbronn.

During the latter part of June 1952, enother patrol was dispatched 1. Ann. Rept, 332d CRC, FY 1952, P17.

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to the vicinity of Hof in an effort to further the intercept of traffic for the unit mission. The patrol consisted of \_\_\_\_\_end \_\_\_\_\_\_operating \_\_\_\_\_\_ Morse intercept positions and \_\_\_\_\_\_voice intercept position. The patrol continued to operate at the close of the report period and produced a heavy volume of traffic on Russian networks. Every fifteen days, personnel at the patrol site were rotated so that a considerable amount of men would benefit from the field operation.<sup>1</sup> Rep. 152\_

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d. 'Field Station 8606 AAU

The operational mission of FS 8606 AAU during fy 1952 consisted of operation of a fixed radio intercept station responsible for the collection of intelligence produced at the direction of Ho ASA Europe. In addition, the station conducted special missions and provided operational support to ASA units.<sup>2</sup>

One of the principal functions of FS 8606 AAJ was the direction of a special project team which was placed in operation on 26 July 1951 at Regensburg, Germany for the purpose of monitoring and locating suspected \_\_\_\_\_\_ radio transmitters. No positive results were obtained.<sup>3</sup>

On 24 July 1951, an intercept team was dispatched to Hersfeld, Germany for the purpose of determining the origin of Russian voice transmissions. The transmissions proved to be a Russian

1. Ann. Rept, 332d CRC, FY 1952, P18. 2. Ann. Rept, FS 8606 AAU, FY 1952, P9. 3. Ibid. P13.

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> operating in the \_\_\_\_\_\_\_\_ possibly military in nature. On 28 December 1951, a D/F team utilizing trucks was sent to locate a source of interference affecting the Munich Military Post radio system. Investigation determined that an ICR station located in the vicinity of Salzburg, Austria was creating the difficulty. In addition to procedures established in fy 1951 for reporting radio jamming and interference by Seventh Army units, new instructions were issued during the report period for reporting radio jamming and interference by units of US Forces in Austria.<sup>2</sup>

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. On 15 April 1952, a major communications change was made by all Russian nets on assignment.<sup>3</sup> On 16 April 1952, personnel were placed on alert and the working schedule arranged to insure maximum effort in the recovery.

All intercept material was scanned for operator's remarks and

prepared for ASA Europe.4

The primary mission of manual Morse personnel during fy 1952 was the interception of Morse transmission emanating from the

Toward this end, several

special projects were initiated.5

1. Ann. Rept, FS 8606 AAU, FY 1952, P15. 2. Ibid. P15. 3. Ibid. P24. 4. Tbid. P25. 5. Ibid. P77.

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From 3 July to 7 September 1951, a detachment of Navy intercept operators was assigned to work with station operators on coverage

From 8 February to 23 March 1952, a detachment of manual Morse personnel from the station conducted a mobile intercept operation at Freyung V/Wald; Germany with the general mission to develop any Czech military activity that could be heard. Intercept coverage was good and several military type nets were developed that had not been heard previously.

in

this field. In April 1952 RFP personnel supplied information to

1. Ann. Rept, FS 8606 AAU, FY 1952, P80.

2. Ibid. P84.

3. Ibid. P85.

4. Ibid. P74.



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The fy 1952 mission of the non-Morse section was the intercept, the recording and processing of all commercial and military non-Morse The commercial portion of the mission was covered on transmissions. a strict priority basis because of the limited number of receiving positions available. Because of an inability to identify all service transmitters with case designations, the RP service assignment was covered in a different manner. All service transmissions found through search were treated as potential assigned cases. The assignment was divided into two parts, main line two channel and low level printer. Two channel output increased considerably during fy 1952 because authorization was received to give service transmissions priority usage of separating equipment. The LLP assignment was given as complete a coverage as equipment and operators would permit. A manual Morse position set up to cover pilot Morse was productive, and many identifications resulted from calls sent on Morse.

P-SEGARE

On 22 January, a series of experimental tests were begun to determine the flexibility of identifying two channel transmitters

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1. Ann. Rept, FS 8606 AAU, FY 1952, P84.

- 2. Ibid. P85. 3. Ibid. P86.
- 4. Ibid. P87.

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Page 107 of 122 Pages Copy \_\_\_\_\_ et \_\_\_\_ Copies The fy 1952 mission of the R/T section consisted of intercept, recording, translation, transcription, and forwarding for analysis, all voice transmissions on assignment. This included intercept of commercial, military, neval end air nets emanating from within Soviet controlled areas of Europe.

In addition to the above, several assignments of brief duration and special nature were undertaken. These included the intercept and recording of a voice net in Poland sending number groups in German voice; the reporting of any unusual jamming of voice nets, particularly "Woice of America" broadcasts; and recording and forwarding for analysis some new types of non-Morse signals. An attempt was also made to intercept VHF military transmissions emanating from within the \_\_\_\_\_\_\_\_ but this test produced negative results.

R/T personnel participated in two special missions away from Herzo Base during fy 1952.<sup>2</sup> The first of these began 8 February 1952 and consisted of a small detachment which was sent to the Czechoslovakian border at Freyung V/Wald, Germany, in an attempt to intercept traffic from military maneuvers. Transmissiona of Czech voice were intercepted, recorded, translated in the field, and forwarded by courier for analysis and processing. Results considerably

1. Ann. Rept, FS 8606, FY 1952, P90. 2. Ibid. P93.

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augmented the development of C2ech voice intercept. During the course of operations, two hundred seventy-three nets vere intercepted, the majority being identified as \_\_\_\_\_\_ air nets. The second mission, to test the effectiveness of intercept in the Berlin area, remained in progress at the close of fy 1952. A test site was established in Berlin and a small group of operators placed at this location on 10 April 1952. Three languages -- Russian, Czech, and Polish -- were immediately intercepted and tapes forwarded for translation and processing. Results of voice intercept, particularly Polish, were excellent.<sup>1</sup>

14/10

The RDF mission for fy 1952 consisted of the receipt of assignments, locating missions, assigning missions to units of the ASA Europe RDF net, providing information as to activities of all desired targets, receiving bearing reports from units, and reporting results to control.<sup>2</sup>

Mission coverage increased with the coordination of activities and the installation of equipment during the report period. Daily plotting continued in order to check accuracy of RDF units and to detect any large scale movement of assigned targets.

Normally, test bearings were assigned after each mission. As this was not elways possible, every effort was made to increase test missions and still not neglect the priority mission. In March 1952, reference numbers were assigned to test stations.<sup>3</sup> This reduced the

1. Ann. Rept, FS 8606 AAU, FY 1952, P84. 2. Ibid. P62. 3. Ibid. P66.

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number of groups for enciphering and deciphering, thus reducing time requirements in assigning and obtaining results of test missions. Personnel shortages in May 1952 created the necessity for each RDF unit to take test shots by its own initiative.<sup>1</sup> A group of 20 test stations was assigned to each unit in June 1952 in order to provide the necessary depth for proper accuracy studies. Plans were made to provide the ASA Europe teletype conference net with on-line cipher machines SIGNIN, in July 1952. REF: VCL. I = 164

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e. Field Station 8608 AAU.

The intercept mission of FS 8608 AAU during the period 1 July 1951 - 30 June 1952 fell into three general categories: Russian, Yugoslavian, and miscellaneous assignments. The mission remained constant with some variation occurring in Polish and Caechoslovakian assignments.

The Russian mission was divided into the following categories:

exceedingly good considering the difficulty in penetrating the vast area. As certain low echelon nets operating on low power were not

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Ann. Rept, FS 8606 AAU, FY 1952, P67.
 Ann. Rept, FS 8608 AAU, FY 1952, P9.

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TED SERV regularly heard, tie-ins for favorable net reconstructions, and the continuity necessary for successful analysis, were not afforded. 14 received excellent coverage P.L. 86-36 during the year. As COMSEC of these forces was very good, only EO 3.3(h)(2) limited analysis could be performed. As fy 1952 ended, the assignment as dropped. received special attention of T/A The Maneuver activity was suspected during September and ersonnel. October 1951. In November, erratic RDF shots indicated their return to Austria, but no definite location of stations could be made. The general location however, was plotted somewhere between Vienna and Linz. The lack of signal activity during this move indicated that stringent signal security was being enforced. There were no suffix or link calls noted out of any of the staticns during November, and only short radic silences could be equated to the movement. It was apparent that commanders wished to keep troop movements as quiet as possible. As there was no activity of the garrison circuits, which paralleled the tactical field net it appeared that the planned to remain in a tactical setup. Activity of the during January, February, and the first three weeks of March of 1952 remained normal. Army level worked the six divisions in the sending and receiving practice 1. Ann. Rept, FS 8608 AAU, FY 1952, P10. 108

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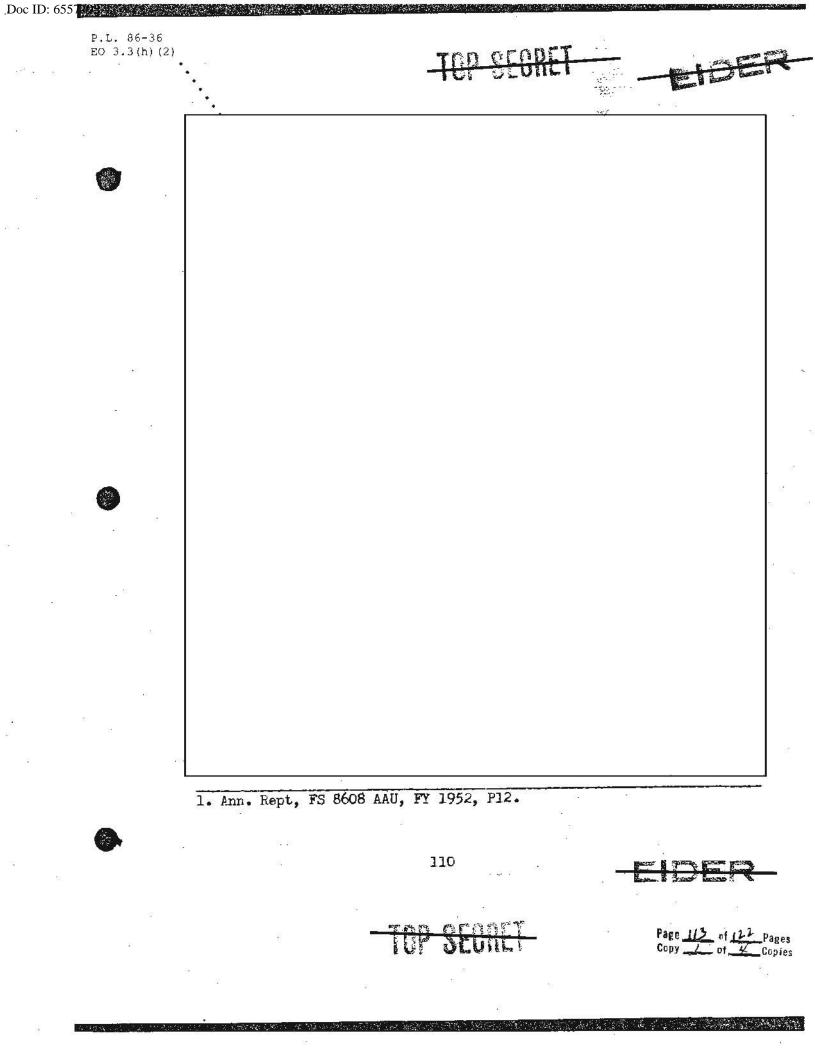
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traffic preceded by dinomes (challenges). Each outstation was worked as a separate.net of the sub-link in the \_\_\_\_\_\_\_ series - control for each being co-located with control of \_\_\_\_\_\_\_ During this two and three quarter month period, no major maneuver was noted. From 24 through 31 March, the Central Groups of Forces participated in maneuvers around the Linz area. Control for \_\_\_\_\_\_\_ used a suffix call; the suffix station assumed control of the net while control was apparently moving to another location. During the maneuver period, the volume of traffic greatly decreased.

1. Ann. Rept, FS 8608 FY 1952, F11.

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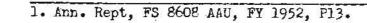
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considerable attention by station enalysts during fy 1952. Most of the initial development of these nets was accomplished during the report period, and more detailed analysis resulted.

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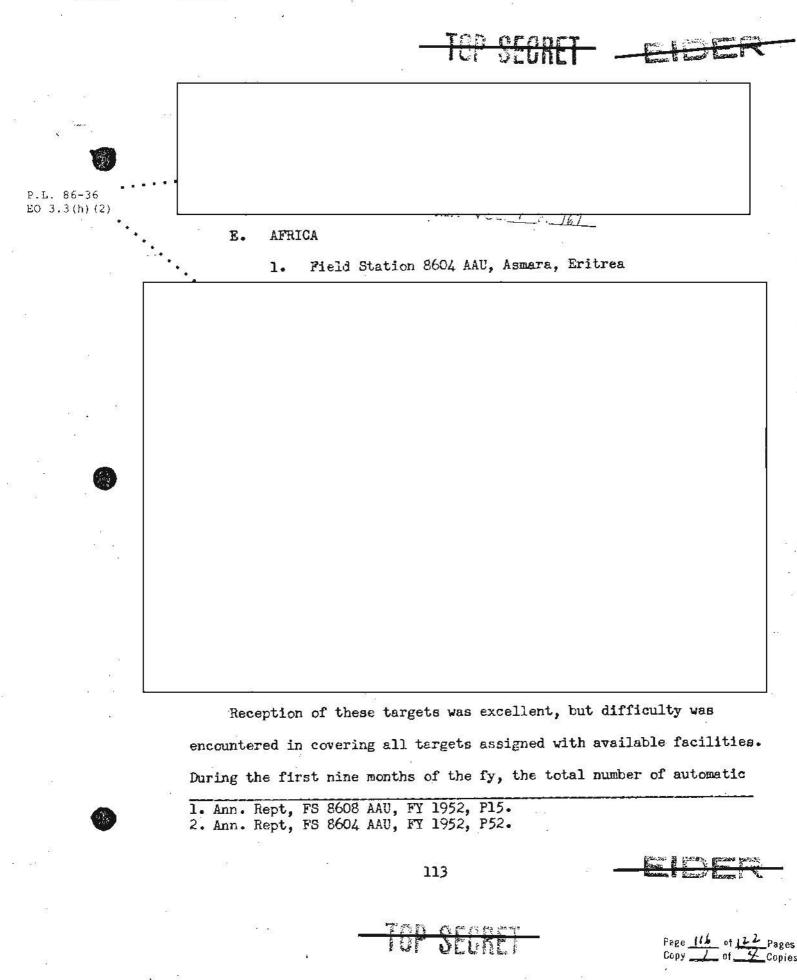
1. Ann. Rept, FS 8608 AAU, FY 1952, P14.

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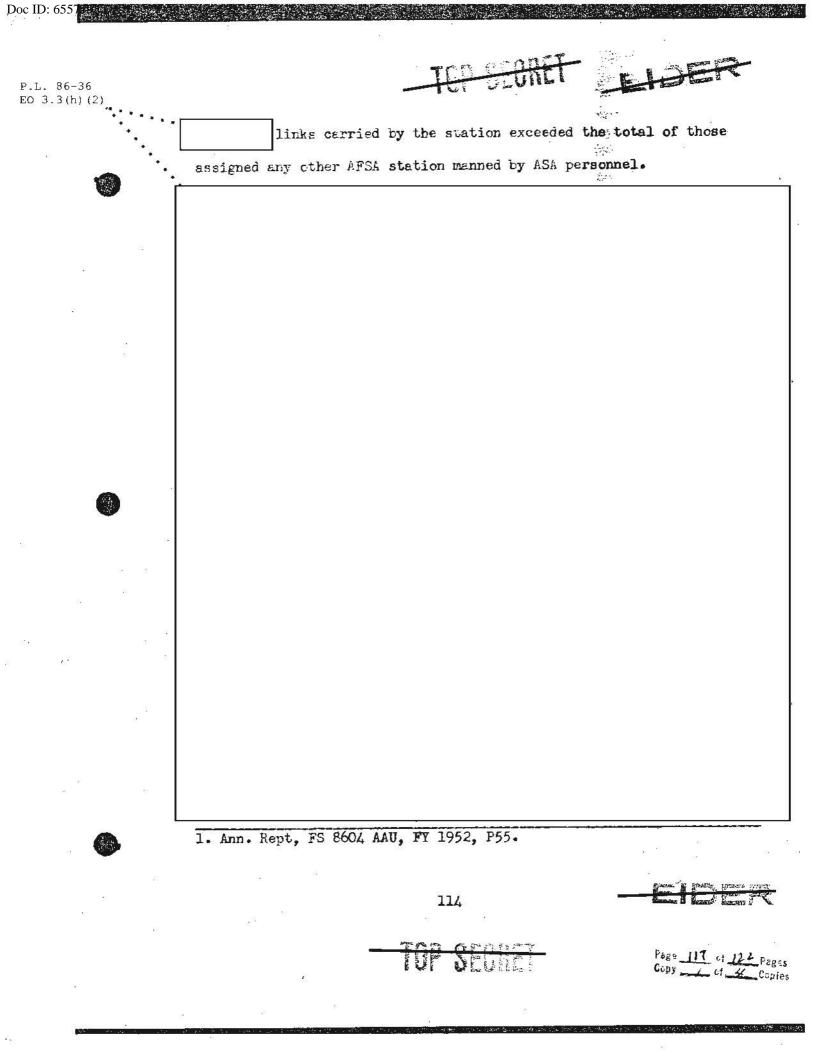
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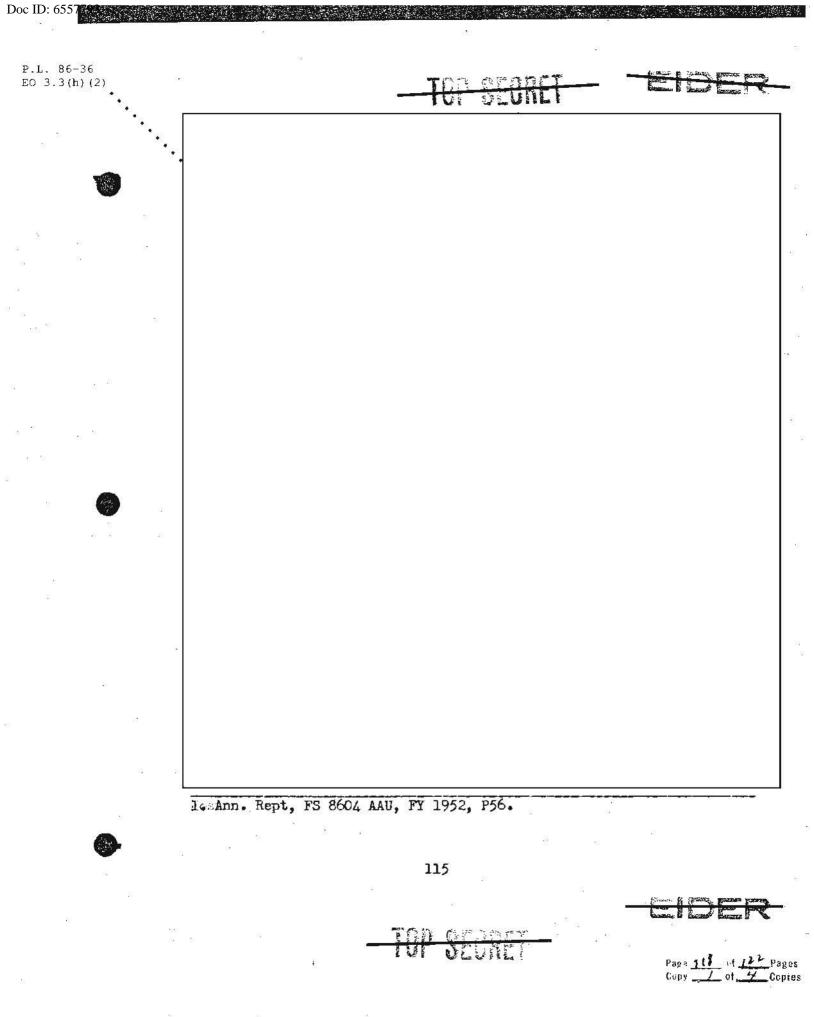
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Most traffic analysis conducted by the station during fy 1952 was limited to operator aid. This was accomplished by systematic registry of incoming COMINT and utilizing this data to produce .\_\_\_\_\_\_\_ required by intercept personnel. In addition, checks on the efficiency of coverage and control of use of facilities was effected through surveillance and

Raw traffic was forwarded to Hq ASA and the AFSA 24 hours after intercept during fy 1952. Outgoing traffic totals varied primarily as a result of changes to AFSA directives for categories of traffic intercepted. Beginning mid-May 1952, AFSA directed transmittal by redio of all intercept, including chatter, but excluding perforated tape recorded RF traffic. Incoming traffic totals were generally lower than those for fy 1951 except for a slight increase in the last two months of the report period.

A direct one-half duplex radio teletype circuit was inaugurated 27 July 1951. This permitted a higher volume of traffic to be transmitted daily. An immediate decrease of approximately sixty percent in tape re-run rate was observed.<sup>2</sup> REF: VOL.  $\frac{7}{2}$  F.  $\frac{167}{2}$ VII. SPECIAL PROJECTS

A. TICOM

study of intercepted traffic.

ASA participation in TICOM during fy 1952 was limited to the 1. Ann. Rept, FS 8604 AAU, FY 1952, P57. 2. Ibid. P59.

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provision of confidential funds in support of the project and review by the TICOM branch, Hq ASA Europe of collateral intelligence derived.<sup>1</sup> As this was no significant departure from similar activity conducted during fy 1951, reference is included only as related to new developments.

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new items developed was the shift of line communications to New Group Soviet Forces Germany Hqs at Wunsdorf near Zossens.<sup>2</sup>

Additional information on cryptographic activities of the West German Government was received through confidential sources during the year. It was determined that contracts had been received for the construction of cryptographic machines bassd on the Enigma principle, but designed to work at normal typing speeds. The firm of Siemens and Halske, Munich was visited and additional information gained on the activities in the construction of cryptographic machinery. Toward

1. Ann. Rept, Hq & Hq Co 8620 AAU, FY 1952, Pll. 2. Ibid. Pl4.

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the end of the report period, TICOM representatives visited Berlin



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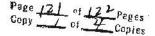
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> Similar interrogations were carried out by TICOM representatives at Hq ASA Pacific. In all instances, reports were compiled and results forwarded to ASA or AFSA at Washington.<sup>2</sup>

B. SAPPORC Mission (Security Monitoring)

This mission, which commenced during fy 1951, continued during the report period. Radio operators of the 356th CRC (Scty) (former 51st Sig Sv Det) carried out intercept operations for the 6th District of the 441st CIC Det located at Sapporo, Hokkaido, Japan and maintained 24 hour watch on eight illegal Japanese radio stations transmitting to Russia. The team continued to search for unidentified illegal radio atations. Transmissions were copied and bearing

1. Ann. Rept, Hq & Hq Co 8620 AAU, FY 1952, P15. 2. Tbid. P17.



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requests sent out to D/F stations of FS 8612 AAU under whose 1&2. jurisdiction the team was operating.

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1. Ann. Rept, FS 8612 AAU, FY 1952, P18. 2. Ann. Rept, 356th CRC, FY 1952, P6.

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