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US AND UK POLICIES AND PRACTICES IN
THE DISSEMINATION OF COMINT
DURING WORLD WAR II

*Prepared by me
October 1951
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ENCLOSURE "B" to "Report of the USCIB Security Committee to the USCIB on the Dissemination of COMINT to Foreign Nationals Serving in NATO or Similar Commands (SC B-35/14). Issued also as USCIB 14/151.

Declassified and approved for release by NSA on 05-07-2014 pursuant to E.O. 13526

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~~REF ID: A66556~~
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US AND UK POLICIES AND PRACTICES IN

THE DISSEMINATION OF COMINT

DURING WORLD WAR II

I. INTRODUCTORY REMARKS

1. a. This Enclosure deals only with the following phases of Communications Intelligence (COMINT) operations as agreed upon between the US and the UK authorities by the end of active hostilities in World War II:
 - (1) The various categories of COMINT;
 - (2) The levels of dissemination in each category;
 - (3) The kinds of disguise employed to provide "cover" for COMINT; and
 - (4) Dissemination of COMINT to foreign nationals.
- b. Since the last of these four aspects is of immediate interest and, moreover, can be disposed of in a relatively brief manner, it will be treated first.

II. DISSEMINATION OF COMINT TO FOREIGN NATIONALS

2. a. From the earliest days of US/UK COMINT collaboration (early part of 1941) there was a firm bilateral understanding (later, a formal agreement) not to disseminate COMINT to third parties by unilateral action. So far as concerns US-produced COMINT, it may be stated categorically that none was ever disseminated on an authorized basis to any

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non-ERUSA foreign nationals; if, in Washington, there were sporadic cases of the contents of an individual message being communicated to a non-ERUSA person, the records examined did not disclose or even hint thereof. However, it is the recollection of the writer that advance warning of the impending invasion of Russian territory by the German Armed Forces in June 1941, a warning derived from COMINT based upon the reading of communications enciphered by the Japanese highest-grade Diplomatic cryptosystem, was communicated to the USSR by US/UK agreement to do so, for by the spring of 1941 there had been established COMINT cooperation between the US and the UK.

- b. For a period of about one year an officer of the Dutch Army (Lieut. Col. Verkuyl) who had worked in the COMINT unit of the Dutch Armed Forces in the Netherlands East Indies and who had escaped when the Japanese over-ran Java in the early months of 1942, was permitted by the A.C. of S., G-2, War Department, to work in one of the cryptanalytic sections of the Signal Security Agency, US Army Signal Corps. This officer was not a recipient of COMINT but obviously saw the decrypts produced within the section to which he was attached. That section dealt with one of the medium-grade Japanese diplomatic cryptosystems known as J-19, a Free French cryptosystem, and certain Hagelin systems. When Col. Verkuyl expressed a

desire to be permitted to work in other sections, too, the request was declined and soon thereafter Col. Verkuyl found it convenient to return to Holland.

c. In regard to non-BRUSA foreign nationals participating in, or receiving the product of, US COMINT activities in installations or units outside the US, a categorical answer can be given so far as concerns high-grade material: there was none -- even when French units were directly under US tactical organizations; not so categorical an answer can yet be given so far as concerns the lower categories of COMINT. Although the records examined do not indicate specifically that such lower-grade material was not disseminated to the French, conferences with US personnel in a position to give information on this point lead to the conclusion that no COMINT of even the lower categories was given the French. Extracts from the records having a bearing on this point are contained in Appendix "A" to this Enclosure. A careful study of these records leads to the following conclusions:

- (1) No COMINT as such was passed to the French units under Sixth Army Group or under First Tactical Air Force (Provisional);
- (2) Information based upon COMINT was occasionally given them under some disguise; and

(3) French units were not particularly handicapped by not being recipients of COMINT, since they benefitted from it to the extent that they had far better ordinary (non-COMINT) intelligence from the Sixth Army Group than otherwise would have been the case, their operations being in reality guided by US officers who did have access to COMINT.

- d. When the US Army was operating in North Africa, there was some liaison with the French, but solely on cryptographic matters. No COMINT whatever was passed to them.
- e. In the Pacific Theater there was some pressure from the Chinese, under the Sino-American Cooperation Organization Agreement (SACO), to provide them with COMINT. The chief US member of SACO added to the pressure by coming to Washington and soliciting assistance on the highest governmental level to bring pressure upon the Army-Navy Communications Intelligence Board (ANCIB) in order to bring about COMINT collaboration with the Chinese. However, the pressure was successfully resisted and the problem was solved in the following manner. A small US unit, Fleet Radio Unit (FRU) China, was set up as a part of the US Naval Group at Chungking, with Capt. J.S. Holtwick, USN, in charge of approximately 100 US officers and enlisted men and approximately the same number of Chinese personnel. The unit was charged with two missions:

- (1) Intercepting traffic for US services; and
 - (2) Training Chinese personnel in traffic analysis and cryptanalysis. This FRU was given no technical assistance from any US units or sources, but succeeded independently in solving certain low-level Japanese codes used in river communications. Capt. Holtwick states that what was produced had little if any intelligence value, except as regards the US section which was with the AAF unit at Kunming and later at Kwelin, when useful air intelligence on coastal shipping was produced.
3. a. Some information was obtained from Brigadier Tiltman, the present Senior British Liaison Officer for COMINT matters in Washington, in regard to British COMINT collaboration with the French and the Poles. Details will be found in paragraph 3, Appendix "B" to this Enclosure.
- b. To summarize that information and also the information given in paragraph 2 above, it may be said that, save for very exceptional instances during the early part of World War II, no COMINT as such was disseminated on an authorized and regular basis to any non-BRUSA nationals.
- c. In Appendix "B" will also be found a brief note on dissemination policy and practices in the US and the UK immediately before and during the early phases of World War II.

III. CATEGORIES OF COMINT

4. a. The categories and sub-categories of COMINT, a brief description of each, the security classifications and COMINT designators were as shown below. The information has been taken from official documents issued by the War Department and the Navy Department.⁽¹⁾

Name	Definition	Designator	Classification
Special Intelligence	Intelligence resulting from solution of high grade codes and ciphers or of those for security reasons placed in this category.	ULTRA	TOP SECRET
Crypt Intelligence	Intelligence resulting from solution of low and medium grade codes and ciphers unless placed in the special category above.	PEARL ⁽²⁾	SECRET
Traffic Analysis ⁽³⁾	Intelligence obtained from a study of radio traffic and direction finding bearings.	THUMB ⁽²⁾	SECRET
Weather Intelligence ⁽⁴⁾	Weather intelligence derived from cryptanalysis.	MANX	TOP SECRET

(1)WD,AG 312.1 (11 Mar 44) OB-S-B-M, subject: Security of Signal Intelligence within European, North African and Middle East Theaters of Operations, dtd 15 Mar 44; WD,AG 312.1 (11Mar 44) OB-S-B, subject: Security of Special Intelligence within European, North African and Middle East Theaters of Operations, dtd 15 Mar 44; WD,AG 380.01 (8 Jul 44) OB-S-B, subject: Security Regulations for Special Intelligence, dtd 10 Jul 44; WD,AG 311.5 (4 Aug 45) OB-S-B, subject: Security Regulations for PINUP Intelligence, dtd 6 Aug 45; WD,AG 311.5 TS (23 Mar 45) OB-S-B-M, subject: Regulations for the Dissemination and Use of Communication Intelligence concerning Weather, dtd 6 Apr 45. Appendix "C" reproduces two of these documents.

(2)On 6 August 1945 PEARL and THUMB COMINT were combined under one designator, PINUP. Because by that date hostilities in Europe were over, only the Pacific and associated Theaters were affected by this change.

(3)The name "Traffic Analysis" was not consistent with the names of other categories, although what was meant was "Intelligence derived from traffic analysis". The term "Traffic Intelligence" soon came into general usage by the US authorities concerned; the term "Y Inference" by the British.

(4)Adopted on 6 April 1945 and affecting principally the Pacific and associated Theaters. See also below note (6).

- b. In the European Theater of Operations Crypt Intelligence and Traffic Analysis (Traffic Intelligence) were each subdivided into two sub-categories:

<u>Name</u>	<u>Definition</u>	<u>Designator</u>	<u>Classification</u>
Crypt Intelligence (1)	Intelligence resulting from solution of medium-grade codes and ciphers.	CIRO-PEARL	SECRET
Crypt Intelligence (2)	Intelligence resulting from solution of low-grade codes and ciphers.	PEARL	SECRET
T/A Intelligence (1)	All information obtained from traffic analysis except direction finding.	THUMB 1	SECRET
T/A Intelligence (2)	Direction finding bearings and other technical aids.	THUMB 2	SECRET

IV. LEVELS OF DISSEMINATION

5. a. With reference to dissemination to officials in Washington, London, or similar locations where COMINT was being produced at a large national center, ULTRA was disseminated only to those staff officers in Departments and Ministries for whom the Head of the Department or the Minister considered the information to be absolutely vital to the execution of their duties, that is, strictly on the need-to-know basis. Special indoctrination was required, together with the signing of a special oath.
- b. With reference to dissemination to operating commands in the field, a brief summarizing statement would be that

ULTRA was never made available to staffs below the level of Army (or equivalent Air and Naval commands), except that (1) ULTRA could be passed to lower formations in the form of operational orders worded according to certain rules, and (2) in exceptional circumstances making it imperative, the C-in-C of a Theater could authorize ULTRA to be passed to lower echelons down to the level of divisions or equivalent Air Force formations if they were operating independently, but only in accordance with rigid regulations as regards transmission channels and physical security of the recipient headquarters. (5) The chart shown as Appendix "D" to this Enclosure gives a graphic picture of the levels of dissemination of ULTRA within a Theater of Combined operations.

c. The actual recipients of ULTRA were specifically designated (according to command or staff responsibility of recipients) and included only the commander of the unit and his deputy, the chief of staff and his deputy, the Senior G-2 (Intelligence), and the Senior G-3 (Operations). In units larger than Army, the commander's Senior G-5 (Plans), the Senior Signal Officer, and the Senior Signal Intelligence Officer could be recipients. In all cases provision could be made, but only as specifically authorized by the commander of the

(5) It appears that the regulations in the Pacific Theater differed from those in the European Theater in this regard. In the regulations pertaining to the latter, ULTRA could be disseminated down to and including Corps Hq only when Corps (or equivalent Air or Naval command) was operating independently; in the Pacific Theater it could be disseminated down to and including Division Hq under similar circumstances. However, no cases of dissemination to Division level were found in the records examined.

unit concerned, for additional staff officers to be recipients. That this loophole in the authorized rules was used is shown by at least two references: (a) in the US 3rd Army the G-2 Executive Officer and the Assistant G-2 were also recipients; (b) at 9th Air Force Hq the Chief Target Officer, the Chief FLAK Officer, the Executive Officer, G-2, and the Operational Intelligence Executive were also recipients of ULTRA.

- d. Crypt Intelligence (GIRO-PEARL and PEARL) and Traffic Intelligence (THUMB) could be disseminated down to and including the headquarters of an Army Corps (and equivalent Air and Naval formation). However, under SHAEF regulations Army Hq was permitted to pass to Corps Hq only paraphrases of GIRO-PEARL COMINT, never the original texts. Paraphrases or original texts of PEARL could be sent.⁽⁶⁾ Whether the British adhered to this added precaution is not known at this writing. The chart shown in Appendix "E" to this Enclosure gives a graphic picture of this phase of the dissemination regulations. Recipients of PEARL and THUMB were, as in the case of ULTRA, specifically designated according to the position occupied.

(6) SHAEF, AG 380.01-1 GBI - AGM, subject: Security of Signal Intelligence, dated 24 August 1944.

e. MANX was disseminated also on the "need-to-know" basis, and was restricted to the minimum number of selected and named officers and non-commissioned officers (or other persons specifically authorized by the Theater Commander or officer designated by him) necessary for its processing and use. Indoctrination for MANX was required together with the signing of an oath. Dissemination never went below the level of a numbered Air Force; in exceptional circumstances, such as special operations, it could be made available down to US Wing (British Group) level, if specifically authorized by the Theater Commander in each instance. In normal circumstances the Weather Section of the Air Force concerned could produce a map analysis, without any indication of source, which could be passed down to US Wing (British Group) levels. The latter could then add their local observations and issue forecasts. Map analyses as issued by Air Forces were to carry no indication of the source and could not be classified lower than CONFIDENTIAL.⁽⁷⁾ Forecasts or conclusions derived in whole or in part from map analyses could be issued to flying personnel and other unindoctrinated persons only in such form as to give no indication whatever of the source. Such forecasts and conclusions could then be disseminated in the normal manner.

⁽⁷⁾ It was permissible for the Senior Weather Officers down to US Wing (British Group) levels to be indoctrinated in MANX so that they could better appreciate the map analyses issued to them.

V. CHANNELS AND MEANS OF DISSEMINATION

6. a. Original dissemination of ULTRA to Departments, Ministries, Commands, GHQs, Allied Hqs, both at home and overseas, had to be carried out by a centralized disseminating authority, and had in all cases to be over specifically authorized cipher systems or by pouch sent over specifically authorized air routes. (S)
- b. ULTRA was disseminated to operational commands only through special channels. In the Pacific and associated Theaters, as regards US Army (and AAF) recipients, ULTRA was handled by Special Security Officers (SSO) who were attached (not assigned) to the staffs of the headquarters authorized to receive ULTRA and the SSO acted as a special and direct representative of the A.C. of S., G-2, War Department. In the same theaters, as regards the US Navy, ULTRA was handled at the headquarters of the command authorized to receive ULTRA by specially appointed officers trained in COMINT matters and specifically charged with distribution and security of ULTRA. In the European Theater, at all Hq, dissemination of ULTRA was handled by the British, who used the same type of system

(S) The systems used were SIGABA/ECM, CCM, TYPEX, and One-time Pad. All holders of these systems had to be authorized recipients, and special keys were used with the systems. In the UK transmission in plain language was authorized by teleprinter (only, if completely secure and could not be tapped), by telephone (only if "scramblers" were used), and by "safe hand" over reasonable distances and under circumstances unlikely to involve disaster. In case ULTRA was sent overseas by bag or pouch, it had to be enciphered unless the route was completely secure and handling arrangements at both ends were confined to properly authorized personnel.

as the US Army and called in the Special Liaison Unit (SLU); the personnel of these units included US Army Special Security Officers attached to MID, War Department, London.

- c. The foregoing stringent regulations were relaxed in the case of COMINT of the lower categories (GIRO-PEARL, PEARL, THUMB) only to the extent that they did not require the use of SSO or SLU officers for dissemination. The governing principle, the "need-to-know" was applied here, too, and the officers who could be recipients were also specifically designated. In general, the recipients were the same as in ULTRA except that at each level additional G-2 Staff Officers, as specifically authorized by the commander of each headquarters, could be recipients, but not when a Corps was operating independently. Special cryptosystems were used in transmission, as in the case of ULTRA.
- d. The SSO system was also used for the dissemination of MANX, the information being placed by the SSO officer (or Naval officer designated for ULTRA dissemination) directly in the hands of the appropriate Army Weather Officer. Regulations required that map analyses be passed on one-time pad or high-grade machine cipher regardless of the method of transmission.

VI. MISCELLANEOUS PROVISIONS

7. a. There were various additional safeguards placed around the dissemination and use of COMINT, especially ULTRA, such as those relating to:
- (1) Physical security of the recipient Hq;
 - (2) Maintenance of lists of authorized recipients and "sign-offs";
 - (3) References to COMINT in war diaries, logs, journals, action reports, etc., without prior authority;
 - (4) Destruction and/or filing of copies;
 - (5) Briefing of operating personnel who were not indoctrinated;
 - (6) Movements of indoctrinated personnel in forward areas where there was danger of capture;
 - (7) Communications among recipients;
 - (8) Operational use of COMINT; action based on it; orders to subordinate commands.
- b. Of the foregoing, the most important regulations, so far as concerns this Enclosure, were those relating to (8) above, viz., those dealing with the operational use of COMINT. The basic regulations on this phase of COMINT activities come from the references cited in Note (1), above, two of which are reproduced in Appendix "C" to this Enclosure. Study of paragraphs 5 and 6 of the regulations governing ULTRA and paragraphs 8 and 9 of those governing PINUP (PEARL and THUMB) will be sufficient to indicate that much thought was given to the proper use of COMINT in order to protect its sources.

It will be noted that the regulations were so drafted as to permit good operational use without serious risk of compromise of COMINT sources, provided the precautions indicated in the regulations were faithfully observed. The principal methods employed to protect these sources fall under five types:

- (1) Carrying out of appropriate air or land reconnaissance before action is taken against specific targets;
- (2) Use of non-COMINT sources as vehicles by means of which COMINT may be disseminated, e.g., P/W interrogation reports, telephone and radio reports of sightings and incidents, authentic or "manufactured" reports of secret agents, or in appropriate situations "manufactured" reports; information from defectors, or deserters, etc.
- (3) Selection and use of COMINT of a lower grade which can be attributed as a source of a higher-grade, e.g. reports of "Y" activity of smaller units.
- (4) Use of documents (e.g., OB, intelligence summaries, appreciations, etc.) which are disseminated to non-recipients of COMINT and in which there are conclusions which were derived from COMINT, these conclusions being stated so as to give no indication whatever of the source.

(5) Issue of operational orders based upon COMINT but omitting all reference to it and so worded that if captured or intercepted the origin of the orders cannot be traced back to COMINT; e.g., such orders must never contain the precise time, date or place of an enemy operation, specific names of targets, etc.

c. How well these various methods worked in practice is discussed in the next paragraph.

VII. OPERATIONAL USE OF COMINT AND ITS DISGUISE

8. a. On 15 March 1944 General Marshall sent to General Eisenhower a letter which set forth the basis upon which ULTRA was to be made available to American field commands. Two of the significant paragraphs in that letter are as follows:

"7.e. The receipt and distribution, at the Field Commands, of messages containing or relating to ultra intelligence, is handled by Special Liaison Units furnished and controlled by the Director General, G.C.&C.S. The personnel of these units includes American officers attached to MID, War Department, London.

"7.f. One or more American officers assigned to MID, War Department, London, will be detailed to each American Field Command which receives ultra intelligence. These officers will be subject to the administration and discipline of the Command to which they are detailed. They will work under the control of the G-2 or A-2 of the Command as part of his staff. They will have had a period of training at G.C.&C.S., and, if possible, with operational commands in the Mediterranean Theater, and this training will be directed toward equipping them to use ultra intelligence effectively and securely. Their primary responsibility will

"be to evaluate ultra intelligence, present it in useable form to the Commanding Officer and to such of his senior staff officers as are authorized ultra recipients, assist in fusing ultra intelligence with intelligence derived from other sources, and give advice in connection with making operational use of ultra intelligence such fashion that the security of the source is not endangered."

(Emphasis supplied)

- b. In Appendix "F" are extracts from a rather voluminous report, prepared in the Military Intelligence Division, War Department General Staff in 1945-6, on the Special Security Operations in overseas theaters.⁽⁹⁾ These extracts throw considerable light on how COMINT was employed technically in intelligence and other operations, and how the manner of its employment, under the guidance of the general regulations referred to in Paragraph 7.b. above served to disguise and to protect COMINT sources.

- c. (1) The very extensive operations of the US Navy in the Atlantic anti-submarine warfare were successfully conducted without dissemination of COMINT as such to commanders afloat, although specific information as to targets was supplied them in the form of submarine position estimates ostensibly based on D/F fixes.

(9) History of Special Security Operations Overseas in five volumes. Vol. I - History of Supervisory Activities, MIS; Vol. II - History of European Theater; Vol. III - Army Forces, Pacific; Vol. IV - Pacific Ocean Areas; Vol. V - India-Burma and China Theaters.

So securely and successfully were the Navy's COMINT operations conducted that no word or suspicion of the real truth ever got to the enemy, who were driven to the conclusion that the Allied Forces had developed new or greatly improved long-range detection devices which enabled them to locate targets unerringly from a great distance. In the US Navy in general, the Navy's success in the Atlantic anti-submarine warfare was attributed to excellent D/F work.

- (2) In the US Navy's submarine warfare in the Pacific and associated Theaters, submarine commanders were never given COMINT as such but were provided with specific information which was carefully disguised and sent to them by secure cryptosystems. This information was often worded and interlarded with American slang expressions designed to ward off suspicion as to source; the information was available to only one or two officers on each submarine so supplied.

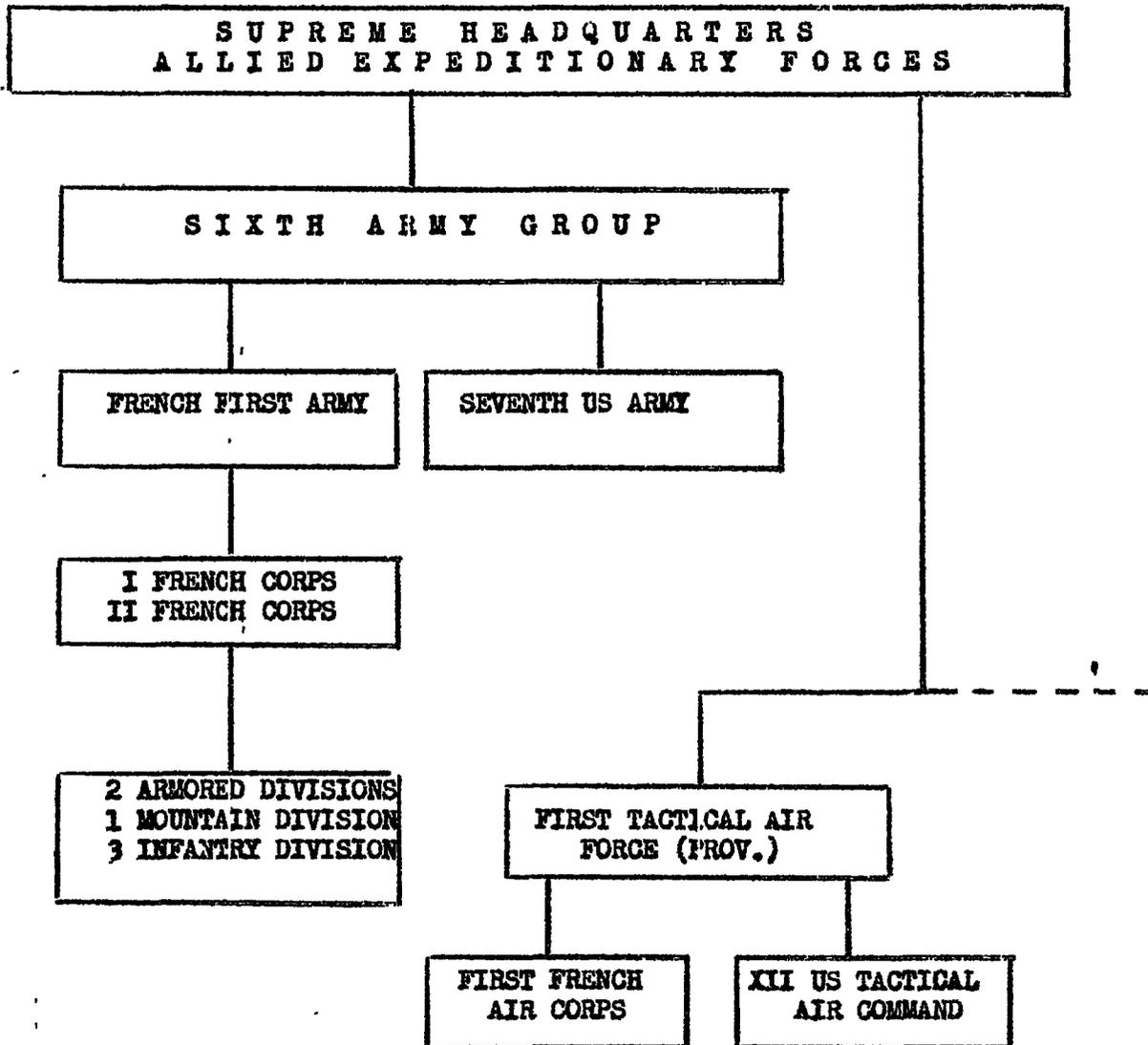
9. The conclusions to which careful consideration of US/UK practical experience in World War II in regard to the use and protection of COMINT sources in active operations leads may be summarized as follows:

- a. The regulations in effect in the latter part of the War were sound;
- b. They could be executed successfully in practice;

- c. They were adequate to protect and to conserve COMINT sources; and
- d. They permitted maximum operational usage to be made of the intelligence even under conditions where some disguise was necessary.

THE COMINT SITUATION AS REGARDS FRENCH UNITS UNDER US COMMAND
DURING WORLD WAR II

1. The following chart gives that portion of the Allied Order of Battle for the final offensive in Europe which shows the French units involved: (1)



(1) From Eisenhower, Crusade in Europe, Appendix B. Basis: SHAEF G-3 Summary #309, Apr 11 45; SHAEF A-3 Operational Summary, Apr 6, 45.

APPENDIX "A" to ENCLOSURE "B" to Report of USCEE Security Committee SC B-35/14
See ENCLOSURE "B", Para. 2.c.

2. The following extracts are from the reports of Special Security Operations in the European Theater as compiled in the official US Army G-2 history of Special Security Operations: (2)

a. From the final report of the SSO with Sixth Army Group:

"6. Relations with the French. The French problem at 6th Army Group had two aspects, (a) the liaison officers in the Hq, and (b) the 1st French Army, neither of which could, of course, be allowed to suspect the existence of ultra.

"a. French Liaison Officers. Whatever may have been the original intention, the French had no operational role in the Army Group Hq. There were, however, a sizeable cluster of Frenchmen in each section, doing what I do not know. Since they did not attend the staff conferences, and since there was in any event no impulse to an over-generous candor with the French, there was at no point any security problem as regards them. To this there is one exception, the one or two officers stationed in the G-2 Section who of necessity were aware of the locked ultra room, the daily appearance of the generals, and the fact that I figured in operational intelligence. I should think it possible that Major de Chiselle, who was longest in the office, had a rather shrewd idea of what in fact was cooking. He was, however, too much of a gentleman ever to make any direct inquiries.

"b. 1st French Army. No security problem ever arose with respect to this army and, correlatively, ultra intelligence was rarely, if ever, of direct benefit to the operations of that army. On the comparatively few occasions when the intelligence presented a matter of operational urgency, Torrielli and I were usually able to concoct an approximately correct story out of agents' reports, Tac R, etc. which was passed down to the Army G-2. Apart from these half-dozen instances, the French Army benefitted from ultra intelligence only so far as it had far better open intelligence from the Army Group than otherwise would have been the case. This was of some general value in that after about 6 months of indignant protests at Army Group estimates (which persisted in placing the opposing enemy forces at about one-quarter instead of quadruple the French Army) the French began eventually to have a fair degree of confidence in the American intelligence estimates."
(Volume II-Part II, P. 440)

(2) See Note (9) of Enclosure "B".

- b. Extract from the final report of the SSO with First Tactical Air Force (Provisional):

"Colonels Taylor and Young and I conferring at Vittel thought that the normal ultra system could be installed at TACAF using the Sixth Army Group SLU facilities. Then we learned that General Royce intended his staff to be joint French-American rather than American with French liaison officers as was the case at the Army Group. Naturally the normal ultra methods had to be abandoned. "C" decreed (1) that no ultra material was to enter TACAF headquarters and that no ultra conferences were to be held there, (2) that only the top personnel (Commanding General, Deputy Commanding General and A-2) were to be indoctrinated, and (3) that service was to be rendered through the Sixth Army Group SLU and ultra room.

"Formal assignment of an MIS, WD, officer to a headquarters to which "C" had only reluctantly granted any ultra was considered inadvisable. We agreed that the following procedure would be followed: (1) I would continue to maintain my ultra office at the Army Group, (2) the three indoctrinated officers would attend the daily air-ground ultra briefing at the Army Group, (3) one of the indoctrinated officers would be notified of urgent messages throughout the day and transmission would be arranged personally, (4) I would spend at least half of my time at the Air Force acting as Assistant G-2, the Deputy A-2 being a Frenchman.

"The plan worked in part. The three indoctrinated personnel were faithful attendants at the morning briefing from General Dever's first conference at Vittel to his last in Heidelberg. Messages requiring immediate action were easily taken care of by my walking over to the Air Force Headquarters or Young coming to the Army Group. No ultra material was ever taken into the Air Force Headquarters and no conferences were held there."

* * * * *

"f) Security. Security never presented a problem at TACAF. No material entered the headquarters and no conferences were held there at the ultra level. Since the Air Force rarely, if ever, took any direct operational action there was no occasion for a security breach of this nature.

"There was probably little speculation among the unindoctrinated at TACAF about the morning conference and my job because both were connected with Army Group. There was much about the Army Group they did not expect to know. For these reasons the French were not a security danger.

"g) The French Problem. The French had a natural reluctance to comply with orders of higher headquarters run by Americans. General Royce's plan to make TACAF a truly combined American-French headquarters was therefore admirable. The plan was never carried out, however. The Americans were always in complete control of TACAF and the French sat around as non-working deputies, held minor jobs and filled liaison sections. There were just enough to make the introduction of ultra impossible and yet not enough to gain the advantages of a combined headquarters." (Vol. II-Par II, pp.382-383 and 385)

EARLY WORLD WAR II POLICIES AND PRACTICES

INTRODUCTORY REMARKS

1. a. In the US just before Pearl Harbor, the sensitive nature of COMINT and the necessity of protecting its sources were recognized from the earliest days of its production by both the Army and the Navy. These two factors led to such a restrictive dissemination policy that the Joint Congressional Committee on the Investigation of the Pearl Harbor Attack commented upon its effects in no uncertain language. Following are some extracts bearing on the point, taken from the Recommendations of the Majority:⁽¹⁾

"2. Supervisory officials cannot safely take anything for granted in the alerting of subordinates.
(p. 254)

... "With Pearl Harbor as a sad experience, crucial intelligence should in the future be supplied commanders accompanied by the best estimate of its significance." (p. 255)

"3. Any doubt as to whether outposts should be given information should always be resolved in favor of supplying the information." (p. 255)

* * *

"14. Restriction of highly confidential information to a minimum number of officials, while often necessary, should not be carried to the point of prejudicing the work of the organization.

"The Magic intelligence was preeminently important and the necessity for keeping it confidential cannot be overemphasized. However, so closely held and top secret

(1) Senate Document No. 244, 79th Congress, 2d Session.

APPENDIX "B" to ENCLOSURE "B" to Report of USCIB Security Committee SC B-35/14.
See ENCLOSURE "B", Para. 3.

"was this intelligence that it appears the fact the Japanese codes had been broken was regarded as of more importance than the information obtained from decoded traffic. The result of this rather specious premise was to leave large numbers of policy-making and enforcement officials in Washington completely oblivious of the most pertinent information concerning Japan." (p. 261)

* * *

"While, as previously indicated, it is appreciated that promiscuous distribution of highly confidential material is dangerous, it nevertheless should be made available to all those whose responsibility cannot adequately and intelligently be discharged without knowledge of such confidential data. It would seem that through sufficient paraphrase of the original material the source of the information could have been adequately protected. Certainly as great confidence could be placed in ranking officials of various departments and bureaus of the Government as in the numerous technicians, cryptographers, translators, and clerks required for the interception and processing of the Magic." (p. 262)

- b. Changes in policy and practices with regard to dissemination were made by the Army and the Navy soon after Pearl Harbor. Specific regulations were then established by both Services and although not issued as Joint regulations, they were practically identical. By May 1943 they were also practically identical with the British regulations, separate agreements having been entered into between the UK organization and the US Army, and between the same organization and the US Navy.
- 2. a. In the UK there was a long tradition of security in regard to COMINT operations going back several centuries, no doubt, but scrupulously followed in World War I, when the activities

of the COMINT organization were conducted under the cover-name "Room 40, O.B." Almost ten years had to pass before the veil of secrecy hiding its work was lifted a bit and the Earl of Halifax could say:

"To Room 40, the country owes an immense debt of gratitude - a debt which at the time, at least, could never be paid. Secrecy was of the very essence of the work, and never was secrecy more successfully observed."

b. During the early part of World War II all the high-grade COMINT produced by the UK organization⁽²⁾ was never disseminated as COMINT but as information picked up by secret agents. The present Senior British Liaison Officer for COMINT in Washington (Brigadier Tiltman) stated that these "reports" were passed to three groups of officials:

- (1) Those "in the know", who made proper use of the intelligence;
- (2) Those not "in the know" who correctly guessed the source. They sometimes used the intelligence improperly but since GC & CS could exercise no control over them they represented a hazard to security;
- (3) Those not "in the know" who were entirely unimaginative and threw the material away as the worthless product of untrustworthy scoundrels.

(2) Current cover-name, the Government Communications Headquarters (GCHQ); cover-name in World War II, Government Code and Cypher School (GC&CS).

This sort of disguise was dropped by the end of 1943, apparently not because it was unsatisfactory as cover but for political reasons not germane to this study.

3. a. With regard to COMINT collaboration with the French and the Poles, Brigadier Tiltman offered the following information:

- (1) British liaison with the French in COMINT matters was conducted through Major (later Colonel) Bertrand, the head of the French Army "Y" (COMINT) activities under the French Army General Staff, Deuxième Bureau.
- (2) Commencing about 1933, the British established a relationship with the French in regard to work on the Russian problem. As this relationship netted nothing to the British, it was eventually discontinued. At about the time of the Munich Pact, a relationship was reestablished. The French had obtained an agent's report concerning the German military Enigma machine. The report gave the results of a test which had been made of the machine, apparently indicating the cipher sequence produced by enciphering a single letter a large number of times. The British made an analysis of this report, but, apparently through an error on the part of the analyst, failed to obtain from it the technical information which it was possible to derive.

A subsequent contact was apparently made with the French, as a result of which Bertrand revealed to the British information which had been received from the Poles. According to Tiltman, the Poles had made an analysis of this same report, and, as a result, had succeeded in devising a scanning system capable of running rapidly through all of the dipher machine combinations. This system was in fact, the basic principle of the bombe. By its use, the Poles were able to reconstruct the wheel wiring of the German machine. All of this information was supplied to the French, who in turn passed it on to the British.

- (3) According to Tiltman, the Polish group joined the French cryptanalytic group in Paris, although the Poles worked as a distinct unit. The British also had a party under a Major Pritchard working with the French cryptanalytic organization at the same place. Tiltman had occasion to visit them periodically. At first, the French were reserved in their dealings with the British, but ultimately their relations were quite free.
- (4) Collaboration with the French at the main British COMINT center in London began in September 1939, with the attachment of an officer of the French Air Force (Lieut. Bracconnier) to the staff in Hut 6 (where the work on German

Army and Air Force Enigma systems was handled) at Bletchley Park (BP).

- (5) Soon thereafter a group of about eight French Navy (and four more French Air Force) officers came to work at BP. None of these French officers was ever in the activities connected with Enigma solution nor in the precincts of Hut 3 (where emendation and dissemination of final COMINT was done). These officers were cryptanalysts and were part of the British sections which worked on material of lower grade than Enigma.
- (6) COMINT products from the solution of the so-called "Red Key", the general German Air Force Enigma system, were given to the French through Colonel Bertrand, but this stopped in June 1940 with the fall of France.
- (7) The French Navy officers at BP left soon after the German air attacks on Britain in 1940. Four French Air Force officers stayed on at BP for some time thereafter. Also, one Frenchman (Livingston, né Schaeffer), an archaeologist of considerable repute, stayed on at the Berkeley Street office (Diplomatic COMINT) in London.

b. It was further stated that:

- (1) Collaboration came to a close shortly after the fall of France.

- (2) The French COMINT organization went "underground" after the fall of France, moving to a hideaway in Southern France. Colonel Bertrand gave oral assurance to the British that French COMINT personnel would remain loyal and not divulge either French or British COMINT secrets. This promise was apparently kept.
- (3) There was for a time a Free French intercept or "Y" station north of London, at which were also some young Polish mathematicians under a Polish Colonel Langer who had been the head of the Polish group mentioned above under Para. 3. a. (3). Langer was at EP during the war but exactly how long was not indicated.

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1. AG 312.1 (11 Mar 44) OB-S-B, subject: Security of Special Intelligence with European, North African and Middle East Strategic Air Forces in Europe, dated 15 March 1944.
2. AG 311.5 (4 Aug 45) OB-S-B, subject: Security Regulations for PINUP Intelligence, dated 6 August 1945.

APPENDIX "C" to ENCLOSURE "B" of Report of USCIB Security Committee SC B-35/14. See ENCLOSURE "B", Para. 4.a.Note (1).

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Washington 25, D. C.

AG 312.1 (11 Mar 44)OB-S-B

FM/md 2B-939 Pentagon

15 March 1944

SUBJECT: Security of Special Intelligence
within European, North African
and Middle East Theaters of
Operations.

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:.....:
: S E C R E T :
:Auth: T. A. G.  :
:Initials: L. E. J. :
:Date: 15 Mar 44  :
:.....:

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TO: Supreme Commander,
Allied Expeditionary Forces
The Commanding Generals,
U.S. Forces in the European Theater of Operations
U.S. Army Forces in the North African Theater of Operations
U.S. Army Forces in the Middle East
Strategic Air Forces in Europe

1. In order that in certain combined operations British and American recipients of intelligence resulting from the solution of high grade codes and ciphers may be bound by the same security regulations, the inclosed Security Instruction 'A', Memorandum on the Dissemination of Signal Intelligence within the British and American Forces, and the inclosed Security Instruction 'B', Regulations for Maintaining the Security of Special Intelligence, have been agreed upon for the European, North African and Middle East Theaters of Operations.

2. Effective 1 April 1944 the inclosed Security Instruction 'A' and Security Instruction 'B' will supersede letter, AG 312.1 (13 Oct 43) OB-S-B-M, 14 October 1943, subject: Security of Ultra Dexter Intelligence, within the European, North African and Middle East Theaters of Operations and, within those Theaters, will apply to all commands of the Army.

3. The inclosed Security Instruction 'B' contains detailed regulations for maintaining the security of Special Intelligence, defined as information obtained by cryptographic means from enemy high grade codes and ciphers or those for security reasons placed in that category. The inclosed Security Instruction 'A' is a general guide for the handling of all Signal Intelligence, including not only Special Intelligence but also lower grade Signal Intelligence.

4. The inclosed Security Instruction 'A' and Security Instruction 'B' will be distributed only over the special channels prescribed in Security Instruction 'B' for Special Intelligence and will be made available only to persons authorized to receive Special Intelligence pursuant to Instruction 'B'. All provisions of Security Instruction 'A' applicable to Signal

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AG 312.1 (11 Mar 44)OB-S-B

(Cont'd)

13 March 1944

Intelligence of lower grade than Special Intelligence (i.e., "Crypt Intelligence" and "Traffic Analysis") will be separately issued through command channels as Security Instruction 'C'.

5. Reproduction of this letter and the inclosures hereto is prohibited.

By order of the Secretary of War:

/s/ J.A. Ulio
J.A. ULIO
Major General
The Adjutant General

2 Incls.

#1 - Security Instruction 'A'

#2 - Security Instruction 'B'

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SECURITY INSTRUCTION 'A'
MEMORANDUM
on the
DISSEMINATION OF SIGNAL INTELLIGENCE
WITHIN THE BRITISH AND AMERICAN FORCES

1. Intention of Memorandum.

This Memorandum is intended to serve as a general guide to all Commanders, Intelligence Staffs, and Signal Intelligence Officers at equal levels, for dealing with the handling, dissemination and security of Signal Intelligence.

2. Nomenclature.

Special nomenclature to be used in signals and written communications dealing with Signal Intelligence is set out in Annexure (b).

3. Security.

The preservation of secrecy in the handling of Signal Intelligence is a vital factor in the conduct of the war.

If this degree of security is to be maintained, it is essential that the British and American Signal Intelligence Services should pursue the same methods at every level and in every theatre of war. Leakage at any one point may not only jeopardise the flow of intelligence in the theatre of war concerned, but also effectively dry up the source all over the world.

4. Issue of Security Instructions.

Uniform security instructions for the handling of Crypt Intelligence and Traffic Analysis will be issued from time to time through the senior Signal Intelligence Officers serving in the relevant theatre of war or through the local Signal Intelligence Board where one has been formed.

The handling of, and cyphers used in connection with Special Intelligence are dealt with in the special instructions referred to in Para. 5 (ii).

5. Distribution

(i) The governing principle regarding the distribution of Signal Intelligence is that it will only be disclosed to those Officers who have the absolute need to know it for the proper execution of their duties.

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(ii) Special Security regulations as regards Special Intelligence in the European Theater have been agreed and will be issued by British and American authorities to all concerned.

Any alterations in the regulations for the dissemination and security of Special Intelligence may only be sent to authorized recipients of such material and over the special routes that have already been laid down, and are not to be included in documents connected with Crypt Intelligence and Traffic Analysis.

(iii) The levels on which intelligence derived from Signal Intelligence will be disseminated are given in Annexure (a).

6. Handling of Intelligence obtained from Crypt Intelligence and Traffic Analysis

In general the British and American Army and Air authorities have agreed that as a principle "In any action taken upon Intelligence derived from Crypt Intelligence and Traffic Analysis and any documents or telegrams based upon it, it is essential that its origin be disguised, and that the codes and cyphers used for its dissemination be absolutely secure". In accordance with the above, when it is necessary in the text to specify the source, this should be done by using respectively the single words PEARL and THUMB encyphered in the text. No other reference to source should be made.

7. Cyphers to be used in signalling Crypt Intelligence

Signals containing Crypt Intelligence must always be sent as Most Secret (U.S. Secret) in special cyphers to be authorized for the purpose.

8. Cyphers to be used for signalling Traffic Analysis.

Signals containing information derived from Traffic Analysis must always be sent in the highest grade cyphers available to all addressees, but may be regarded as requiring a lower degree of security than Crypt Intelligence.

9. Exchange of results.

It has been agreed, with the approval of the Chiefs of Staff, that the British Signal Intelligence organization and the U.S. Signal Intelligence Service operating in a common theatre of war shall cooperate and exchange the results of their Signal Intelligence work without reservation, and shall make these results available to those Officers on levels as laid down in Annexure (a).

Furthermore it has been mutually agreed that the distribution of these results may not be degraded below these levels without reference to the London Signal Intelligence Board or equivalent American authority.

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10. Information regarding Signal Intelligence Units employed in theatres of war

In order to carry out the above policy, the British and U.S. Military and Air Authorities have agreed to inform each other of the Signal Intelligence Units that it is proposed to employ in all theatres of war.

11. Naval Cooperation

The British Admiralty has associated itself with the following arrangements and the Naval levels of dissemination are shown in Annexure (a).

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LEVELS ON WHICH INTELLIGENCE DERIVED FROM 'SIG. INT'
MAY BE DISSEMINATED TO GENERAL AND INTELLIGENCE
STAFFS OF ALLIED SERVICES

Promulgation Level

Type of 'I' British Service American Service

COMBINED ALLIED FORCE

	Commander-in-Chief of Allied Forces	
	Chief of Staff	
	Senior Staff Officers (G-2)	Intelligence
SPECIAL	" " " (G-3)	Operations
	" " " (G-5)	Plans
	Commander-in-Chief Allied Air Forces	
	and his Senior Staff Officer or C.O.S.	
	and his Senior Intelligence Officer	

Air Force Commanders-in-Chief, their Senior Air Staff Officers and Senior Air Intelligence Staff Officers.

Air Force Commanders-in-Chief, their C.O.S. and Senior Air Intelligence Staff Officers.

Air Officers commanding Air Forces or Commands, their Senior Air Staff Officers, and Senior Air Intelligence Officers.

Air Division Commanders, Chief of Staff Air Division, and Senior Air Intelligence Officers.

Additional Staff Officers as may be specially authorized by the Commander-in-Chief.

G.H.Q. A.H.Q. or ARMY GROUP HDQES.

<u>SPECIAL</u>	Commander	Commander
	C.O.S.	C.O.S.
	Principal Staff Officer	
	Intelligence	G-2.
	Principal Staff Officer	
	Operations	G-3.
	Principal Staff Officer	
	Plans	G-5.
	G.S.O.1. (I) (a)	O.C. Intelligence Branch, G-2.
	G.S.O.1. (I) (s)	Signal Intelligence Officer.

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Type of 'I'	British Service	American Service
	Air Force Commander	Air Force or Division Commander.
	Senior Air Staff Officer	C.O.S. (A.F.)
	Senior Intelligence Officer R.A.F.	A-2. (A.F.)

Additional Staff Officers as may be specially authorized by the Commander.

ARMY HDQRS

SPECIAL	Army Commander	Army Commander
	C.O.S.	C.O.S.
	G.S.O.l. (I)	G-2
	G.S.O.l. (Ops)	G-3
	Additional I Officers as specially authorized by Army Commander.	Additional G-2 Staff Officers as specially authorized by Army Commander.
	Air Force Commander	Air Force Commander
	Senior Air Staff Officer	C.O.S. (A.F.)

IN THE EVENT OF A CORPS OR TASK FORCES OR AIR FORCE GROUPS (U.S. WINGS) OPERATING INDEPENDENTLY, AN ARMY GROUP COMMANDER MAY BE GIVEN SPECIAL AUTHORITY FOR DISSEMINATION TO THE FOLLOWING:

SPECIAL	Corps Commander	Corps Commander
	B.G.S.	C.O.S.
	Principal Staff Officer (I)	G-2,
	" " " (Ops.)	G-3.
	Group Commanders R.A.F.	Wing Commanders (A.F.)
	Senior Air Staff Officer	C.O.S. A.F. Wing
	Senior Intelligence Officer.	A-2, Wing.

NAVAL COMMANDS

Naval Commanders-in-Chief.

SPECIAL	Force Commanders and selected Flag Officers, and their Senior Staff Officers specially authorized by them.
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Annexure (a) Cont'd

<u>Type of 'I'</u>	<u>British Service</u>	<u>American Service</u>
CRYPT AND TRAFFIC ANALYSIS	All recipients of 'Special'; all Intelligence Officers in all Headquarters higher than Corps or Group (U.S. Wing) and in addition:	
	<u>CORPS HDQRS</u>	
	Corps Commander B.G.S. G.S.O.2. Intelligence G.S.O.2. Operations All Intelligence Officers Air Intelligence Officer Additional I Officers as authorized by Corps Commander.	Corps Commander. C.O.S. G-2 G-3. All G-2 Intelligence Officers Air Officer.

MISCELLANEOUS

Group Commanders R.A.F. Senior Air Staff Officer. Senior I Officer	Air Division Commanders. C.O.S. Air Division Wing Commanders (A.F.) C.O.S. A.F. Wing. A-2. Wing.
Additional Staff Officers as authorized by Group Comdrs, R.A.F.	Additional Staff Officers as authorized by Air Division or Wing Commanders.

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Annexure (b)

NOMENCLATURE FOR ACTIVITIES RELATING TO THE
STUDY OF FOREIGN SIGNALS.

Item (c) concerning Special Intelligence must not under any circumstances be disclosed to any person not aware of the existence of this source. See Promulgation Levels in Annexure (a).

<u>Terms to be employed.</u>	<u>Short Title.</u>	<u>Definition.</u>
(a) Signal Intelligence	Sig.Int.	Comprises (a) the interception of all enemy and neutral communications and radio transmissions, and their solution; (b) the Intelligence resulting therefrom, and the preparation of such Intelligence in a useful form.
(b) Y Service Radio Intelligence Service	Y (Br.) R.I. (Amer.)	The Organisation responsible for the interception of all enemy and neutral radio transmission including the operation of D/F services.
	<u>Code Word</u>	
(c) Special Intelligence	Ultra	Intelligence resulting from solution of high grade codes and cyphers or of those for security reasons placed in this category.
(d) Crypt Intelligence	Pearl	Intelligence resulting from solution of low and medium grade codes and cyphers unless placed in the special category above.

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(e) Traffic Analysis

Thumb

Intelligence obtained from a study of radio traffic and D/F bearings.

Reference item (b): It is important to note that the expression 'Y' is restricted to the above definition.

Reference item (c): This now supersedes and takes the place of all previous code names such as Sirdar, Swell, etc.

Reference items (d) and (e): These code words will be changed from time to time as may be considered necessary.

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~~TOP SECRET~~TOP SECRETSECURITY INSTRUCTION 'B'THESE INSTRUCTIONS CANCEL PREVIOUS REGULATIONS ON THIS SUBJECTREGULATIONS FOR MAINTAINING THE SECURITYOF SPECIAL INTELLIGENCEI DEFINITION

Special Intelligence is the agreed name for the resultant most secret information obtained by cryptographic means from enemy high grade codes and cyphers, or those for security reasons placed in this category.

II IDENTIFICATION

All messages dealing with Special Intelligence whether containing the actual information or summaries, appreciations, queries and comments thereon, are to be identified by the code word ULTRA. All other code names (e.g. SIRDAR, ZYMOTIC) are therefore cancelled by these instructions.

III VALUE

Information from Ultra can be regarded as reliable and action may be taken upon it in accordance with the security instructions given hereunder.

IV SECURITY1. General

Preservation of the source of Ultra information is of the utmost importance in the conduct of the war. This consists of preventing the development of suspicions on the part of the enemy that his communications are being read, thereby giving him no cause to change his cryptographic and signals security system. If from any document that might fall into his hands, from any message that he might intercept, from any word that might be revealed by a prisoner of war, or from any ill-considered action based upon Ultra information, the enemy were given cause to believe that his communications were not adequately safeguarded against the interception which he knows to be employed against him, he will effect changes which will deprive us of the immediate knowledge of his operations and strategy. The loss of this information would vitally affect operations on all fronts.

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The source and contents of Ultra messages are to be disclosed only to those officers and their staffs who for the proper execution of their duties have the absolute need to know such information.

2. Authorized Recipients

The number and level of officers authorized to receive Ultra is severely restricted.

In Ministries and Departments - to those staff officers for whom the Minister or Head of Department considers the information is vital to the proper execution of their duties.

In Operational Commands, G.H.Qs. or A.H.Qs. - to those officers holding the following posts:

British Service

American Service

COMBINED ALLIED FORCE

Commander-in-Chief of Allied Forces
 Chief of Staff
 Senior Staff Officers (G-2) Intelligence
 " " " (G-3) Operations
 " " " (G-5) Plans
 Commander-in-Chief Allied Air Forces,
 his Senior Staff Officer or C.O.S. and
 his Senior Intelligence Officer.

Air Force Commanders-in-Chief
 their Senior Air Staff Officers,
 and Senior Air Intelligence Staff
 Officers.

Air Force Commanders-in-Chief,
 their C.O.S. and Senior Air
 Intelligence Staff Officers.

Air Officers Commanding Air
 Forces or Commands, their Senior
 Air Staff Officers and Senior
 Air Intelligence Officers.

Air Division Commanders,
 Chief of Staff Air Division
 and Senior Air Intelligence
 Officers.

Additional Staff Officers as may be specially authorized by the Commander-in-Chief.

G.H.Q. A.H.Q. or ARMY GROUP HDQRS.

Commander
 C.O.S.
 Principal Staff Officer
 Intelligence

Commander
 C.O.S.
 G-2

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~~TOP SECRET~~~~TOP SECRET~~British ServiceAmerican ServicePrincipal Staff Officer
Operations

G-3

Principal Staff Officer
Plans

G-5

G.S.O.1(I) (a)

O.C. Intelligence Branch, G-2

G.S.O.1(I) (s)

Signal Intelligence Officer

Air Force Commander

Air Force or Division Commander

Senior Air Staff Officer

C.O.S. (A.F.)

Senior Intelligence Officer

R.A.F.

A-2., (A.F.)

Additional Staff Officers as may be specially authorized by the Commander.

ARMY HDQRS

Army Commander

Army Commander

C.O.S.

C.O.S.

G.S.O.1.(I)

G-2

G.S.O.1.(Ops)

G-3

Additional I Officers as
specially authorized by Army
CommanderAdditional G-2 Staff Officers as
specially authorized by Army
Commander

Air Force Commander

Air Force Commander

Senior Air Staff Officer

C.O.S. (A.F.)

In the event of a Corps or Task Force or Air Force Groups (U.S. Wings) operating independently an Army Group Commander may be given special authority for Ultra to be disseminated to the following:

Corps Commander

Corps Commander

B.G.S.

C.O.S.

Principal Staff Officer (I)

G-2

" " " (Ops)

G-3

Group Commanders R.A.F.

Wing Commanders (A.F.)

Senior Air Staff Officer

C.O.S. A.F. Wing

Senior Intelligence Officer

A-2 Wing

NAVY COMMANDS

Naval Commander-in-Chief.

Force Commanders and selected Flag

Officers and their Senior Staff

Officers specially authorized by them.

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3. Regulations to be Applied to Authorized Recipients.

All officers who are authorized to receive Ultra must be properly initiated into the nature of the source and briefed regarding the security regulations. They must read these regulations and sign a form stating they have done so and fully understand the penalties for infringement of the secrecy acts both during and after the war.

Special Liaison Units (S.L.U.) are attached to each Operational Command or Headquarters authorized to receive Ultra. They are responsible for the secure handling of Ultra and the general carrying out of these security regulations. They hold the special cyphers in which Ultra is transmitted and are the unit through which all Ultra messages must be passed.

Initiation and briefing in operational areas should be carried out either by the Senior Special Liaison Unit Officer, or a Staff Officer of equivalent rank of Brigadier.

In cases where Operational Commanders consider that additional officers to those specially enumerated in paragraph 2 should be authorized recipients of Ultra, they must apply through the Special Liaison Units to Washington or London over Ultra routes, giving reasons for the request.

Where individual officers holding posts which entitle them to Ultra at Operational Commands are changed, the Commander making the change must personally guarantee the new holder as a reliable recipient. The new holder can then be initiated and briefed without reference to London or Washington.

If an officer relinquishes a post which has entitled his access to Ultra, he automatically forfeits his right to see this material and will sign an undertaking to this effect.

When officers who have had an intimate knowledge of Ultra material leave these posts it is highly undesirable that they should be transferred to posts which might involve capture by the enemy.

Authorized recipients of Ultra may not under any circumstance show, read, or discuss Ultra messages or their contents, with any other person of any service unless they are satisfied that such persons are also authorized to receive it.

Up to date lists of named authorized recipients must be kept in Ministries, Departments, Commands and G.H.Qs., where Ultra is received. It is the duty of the Special Liaison Units to keep these lists at Operational Commands and Commanders must

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therefore keep the Special Liaison Units informed of the names of all officers on their staffs who are authorized to receive Ultra.

The names and posts of all authorized recipients and any changes should be forwarded promptly by the Special Liaison Units to London or Washington, in order that complete lists of all authorized recipients may be maintained at London and Washington on a current basis.

4. Dissemination of Ultra

A. To Ministries, Departments, Commands, G.H.Qs., and A.H.Qs., both at Home and Overseas.

Original dissemination of Ultra must be carried out by a centralized disseminating authority.

Dissemination to the authorized recipients shown in paragraph 2, must in all cases be:

- (i) over specially authorized routes,
- (ii) in specially authorized cyphers, which must either be one time tables or special settings of a machine cypher which is agreed as secure by the cryptographic experts of both the United Kingdom and the United States of America,

except in the following cases when Ultra may be disseminated in plain language within the U.K. or within the country of origin, provided it is not 'occupied' or enemy territory.

- (a) over teleprinters, only if the teleprinters are completely secure and cannot be tapped by unauthorized personnel,
- (b) over telephones, only if scramblers are used.
- (c) By safe hand of officer over reasonable distances and under circumstances unlikely to involve disaster,
- (d) Ultra material sent overseas by bag or pouch must be encyphered unless the route is completely secure and handling arrangements at either end are confined to properly authorized personnel.

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Note 1. Special Maintenance engineers should be employed for the teleprinter circuits. Teleprinters and their staffs should be segregated from general teleprinter rooms and access to them forbidden to unauthorized persons. They should preferably form part of a special section responsible for the safe dissemination of all Ultra material in the Ministry, Department or Command.

Note 2. Bags and pouches should not be sent:

- (a) by air over routes which might incur forced landings in neutral or enemy territory,
- (b) By sea on routes which might involve capture by the enemy.

B. To Operational Commands Overseas

Normally Ultra messages affecting both higher and lower formations who are authorized recipients, are sent direct from the disseminating centre to each formation concerned.

The specially authorized routes referred to above consist of W/T or cables and normally Special Communication Units (S.C.U.) in direct W/T communication with the disseminating centre, are attached to Operational Commands. S.C.U. are also attached to static Headquarters, unless a completely adequate alternative communication system is available. Special Liaison Units are responsible for the safe delivery of decyphered Ultra messages to authorized recipients at the Command or Headquarters to which they are attached.

C. Intercommunication between Ultra Recipients.

Intercommunication between recipients on matters which in any way concern Ultra material, whether in the form of queries, comments, summaries or appreciations, must be over the authorized Ultra routes and unless transmitted in accordance with the exceptions in paragraph 4. A. must be sent in the special Ultra cyphers either through the original disseminating centre or the S.L.U.

D. Further Dissemination by Recipients.

If any recipients consider that any original Ultra message should have a further distribution to that already

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given, they must not retransmit direct but must refer the request to the original disseminating centre or S.L.U. who will undertake the further distribution to other authorized recipients as required. They will also inform any other interest recipients of the further action taken.

E. S.L. Units in H.M. Ships.

It is physically impossible and also undesirable to have S.L. Units attached to the Staff of all Flag Officers. There are in addition a number of instances where the method of application of these regulations is not applicable to naval usage. The Admiralty, therefore, retain their own Ultra service to all naval units.

5. Employment of Material

Any action based upon Ultra information which is taken by a Commander must be so camouflaged that the action itself cannot lead the enemy to the conclusion that it is based on Ultra Intelligence alone.

Momentary tactical advantage is not sufficient ground for taking any risk of compromising the source.

No action may be taken against specific sea or land targets revealed by Ultra, unless appropriate air or land reconnaissance has also been undertaken.

When ultra information is to be used by a Command as a basis for action to be taken by a subordinate command which is not an authorized recipient, the information when passed to the subordinate command must be translated into terms of an operational order, so worded that if captured or intercepted by the enemy the origin of the order could not be traced back to Ultra information, e.g., orders must never contain the precise time, date or place of an enemy operation, or the name of any ship revealed by Ultra. Such operational orders if transmitted by W/T must be in high grade cyphers.

The utmost care is to be taken when briefing pilots for an operation based on Ultra information that only such details are given them as might have been obtained by other means, such as air reconnaissance, and only such as are essential to the success of the operation.

6. Summaries, Appreciations and Papers

When Ultra material is prepared in the form of a summary, appreciation or paper, these automatically become subject to

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same security regulations concerning dissemination, distribution, handling and use, as the Ultra material itself, except:

- (i) Where the information has also been received from other sources.
- (ii) Order of Battle information which may be included in normal secret documents after a suitable lapse of time during which it is reasonable for the enemy to suppose that the information could have been obtained by other means.

It is therefore evident that in order to avoid undue restrictions on information from other sources, such information should not be mixed with Ultra unless this is absolutely necessary.

7. Safety

No original Ultra message, and only such records as cannot give any clue to the nature of the source, may be kept at any Operational Headquarters below that of an Army Group.

It is the duty of the Special Liaison Units to keep an accurate log of all copies of messages delivered to Commands and in the case of formations below the level of Army Groups, to retrieve and destroy them.

The number of hours during which the Commanders may retain Ultra messages depends on their proximity to the enemy, but destruction should normally take place as soon as the necessary action has been taken.

Recipients of Ultra at Operational Commands may not under any circumstances carry on their persons or despatch outside their Headquarters, Ultra messages which have been delivered to them.

It is the responsibility of the Commander to whom the Special Liaison Units are attached to see that Special Liaison Units are never required to go within probable risk of capture by the enemy.

It is the responsibility of the Senior Officer of Special Liaison Units to destroy all in clear Ultra messages, cypher pads and material, should he consider the situation warrants such action.

Special measures are to be taken to ensure that all Ultra material whether at Ministries, Departments, Home or Overseas Commands, is at all times so carefully handled and kept that

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no unauthorized person can obtain access to it and that it is properly destroyed at the earliest practicable moment.

Note: Records will normally be kept at production centres which will be able to produce back messages if required.

~~SECRET~~REGULATIONS FOR MAINTAINING THE
SECURITY OF PINUP INTELLIGENCE

1. Scope and Purpose. These Regulations are designed to safeguard the following types of intelligence:

a. Crypt Intelligence: Information resulting from the solution of enemy codes and ciphers, unless such information has been placed in a special category for which separate regulations have been issued.

b. Traffic Analysis: Information resulting from the study, short of cryptanalysis, of enemy communication networks, communication procedure, cryptographic procedure, and call signs coupled with the use of D/F and other technical aids.

c. Plain Language: Information resulting from translations of enemy plain language traffic and abbreviated plain language intercepted on enemy military circuits. Commercial plain language traffic is excluded from the above definition.

2. Security: The extreme importance of Crypt Intelligence, Traffic Analysis and Plain Language as sources of reliable information concerning enemy activities and intentions has been repeatedly proved. Preservation of these sources requires that the enemy be given no reason to suspect the degree of our success in acquiring such intelligence. If, from any document which might fall into his hands, from any message he might intercept, from any word revealed by a prisoner of war, or from any ill-considered action taken upon the basis of such intelligence, the enemy were given cause to believe that his communications are not adequately safeguarded against the interception which he knows to be employed against him, he would effect changes which would deprive us of knowledge of his operations on all fronts. Extreme care is therefore required in order to preserve the security of such intelligence from all unauthorized persons, and these regulations are to be strictly observed.

3. Code Word. All messages or other documents transmitting Crypt Intelligence, Traffic Analysis or Plain Language or any reference thereto will contain a code word to indicate the source and to insure handling in accordance with these Regulations. The code word for Crypt Intelligence, Traffic Analysis and Plain Language is PINUP. In transmissions by wire or radio, the code word will be enciphered in the text.

4. Security of Code Word. The meaning of the code word PINUP shall not be disclosed to any person not eligible under these Regulations to receive PINUP Intelligence. It shall be the responsibility of every person eligible to receive PINUP Intelligence to take all possible precautions to preserve the secrecy of the code word.

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5. Classification. All PINUP Intelligence will be classified
SECRET.

6. Authorized Recipients.

a. The levels upon which PINUP Intelligence may be disseminated, and the officers at any level eligible to receive it, are restricted. The governing principle is to limit dissemination only to those who have absolute need of the information for the execution of their duties.

b. Except as otherwise provided in these Regulations, PINUP Intelligence will not be made available below the level of Corps or, in the case of Air Force formations, below the level of Group (British) or Wing (U.S.).

c. Within headquarters authorized to receive PINUP Intelligence, it may be made available only to officers holding the following posts:

- (1) Commander and his Deputy
Chief of Staff and his Deputy
All Intelligence Officers
Senior Operations Staff Officer
Senior Planning Staff Officer
Senior Signal Officer
Signal Intelligence Officers

(2) Additional officers absolutely necessary for its handling and use within such headquarters, as specifically authorized in each instance by the Theater Commander who shall satisfy himself as to the necessity therefor and as to the reliability of the individuals concerned.

(3) In exceptional circumstances making it imperative, the Theater Commander may authorize the passing of PINUP Intelligence to commands below the levels prescribed in subparagraphs b. and c. above, but only if the physical security of the receiving headquarters is assured.

d. Persons eligible to be recipients of PINUP Intelligence in accordance with the foregoing provisions must be thoroughly briefed in these Regulations before such intelligence is actually made available to them.

7. Transmission and Handling.

a. Messages containing PINUP Intelligence or any reference thereto will be transmitted only in cryptographic systems

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specifically authorized for that purpose. For U.S. Forces such authorization will be by the Theater Commander; for British forces such authorization will be by the Chief Signal Intelligence Service Officer in the respective theater.

b. Documents containing or referring to PINUP Intelligence should be addressed only to authorized recipients by name or appointment and marked on inner cover "to be opened by addressee only." Such documents, including cryptographed versions, will be burned immediately after their usefulness ceases. At headquarters below Army level this will normally be as soon as their contents have been absorbed by those who have to act upon them. Such documents will not be carried on the person of a recipient outside his headquarters, except as dictated by absolute necessity.

c. In order to avoid subjecting these Regulations intelligence having less stringent security requirements, such intelligence should not be included in the same documents with PINUP Intelligence, except when absolutely necessary.

8. Operations Based on PINUP Intelligence. Commanders will take every precaution to insure that any action taken upon the basis of PINUP Intelligence cannot be traced by the enemy to this source. For example, appropriate land or air reconnaissance should be undertaken whenever practicable, in such manner, and sufficiently in advance of the proposed action, so that the enemy is led to believe that such reconnaissance furnished the basis for the action; and orders directing such reconnaissance, as well as any other operational orders based on PINUP Intelligence, must never contain precise names, dates, times or other details known only through these sources, and must be dispatched in high grade cryptographic systems. Similarly, great care must be taken in briefing airplane crews, in order that only necessary details are given them and always in a form that cannot be traced to this source.

9. Exceptions to Restrictions on Dissemination. It is recognized that, from time to time, special circumstances will require that persons not eligible under these Regulations to become recipients of PINUP Intelligence may yet require information derived therefrom for the proper performance of their duties. Accordingly, the following exceptions to the restrictions embodied in these Regulations are authorized:

a. In Wire or Radio Messages: When, in the judgment of the Theater Commander, circumstances require that conclusions based on PINUP Intelligence be passed to commands or personnel other than those provided for in paragraph 6 above, such conclusions may be so passed, subject to the following rules:

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(1) The code word PINUP will not be used but the classification SECRET will be retained;

(2) The conclusions will be so stated as to give no indication whatever of the source. Special care must be taken in this respect with Crypt Intelligence to avoid any apparent relation between the statement of conclusions and the content of the enemy message on which the conclusion is based; to this end no exact strength figures, times, or other precise details that have appeared in an enemy message will be included.

(3) Messages containing such conclusions will always be sent in the cryptographic system of highest security available.

(4) The message will always include the express stipulation that the conclusions may be used by the recipient only as the basis for operational orders and shall not be given further dissemination.

b. In Orders of Battle, Summaries, Appreciations and Other Documents: When, in the judgment of the Theater Commander, circumstances justify the inclusion of conclusions derived from PINUP Intelligence in any order of battle, summary, appreciation or other similar document the distribution of which is not restricted to the commands and personnel provided for in paragraph 6 above, such conclusions may be so used, subject, however, to the following conditions:

(1) The code word PINUP will not be used, but the classification SECRET will be retained;

(2) The conclusions will be so stated as to give no indication whatever of the source (see sub-paragraph a (2) above);

(3) The further dissemination of such conclusions beyond the document in which they are thus permitted to appear will be prohibited.

10. Personnel Handling PINUP Intelligence.

a. Personnel whose duties include cryptographing, transmitting, filing, or handling messages or other documents required by these Regulations to contain the word PINUP will be kept to the minimum number necessary.

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b. Before undertaking their duties, such personnel will be carefully briefed, to insure an understanding of the content and importance of these Regulations.

c. The handling of PINUP Intelligence will be restricted to commissioned personnel insofar as possible, but

(1) enlisted personnel may perform the necessary cryptographic duties involved in the transmission of PINUP Intelligence provided they have the normal security clearance required by their respective services, and provided the requirements of sub-paragraphs a and b above are observed.

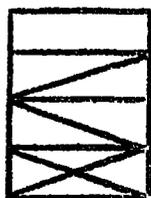
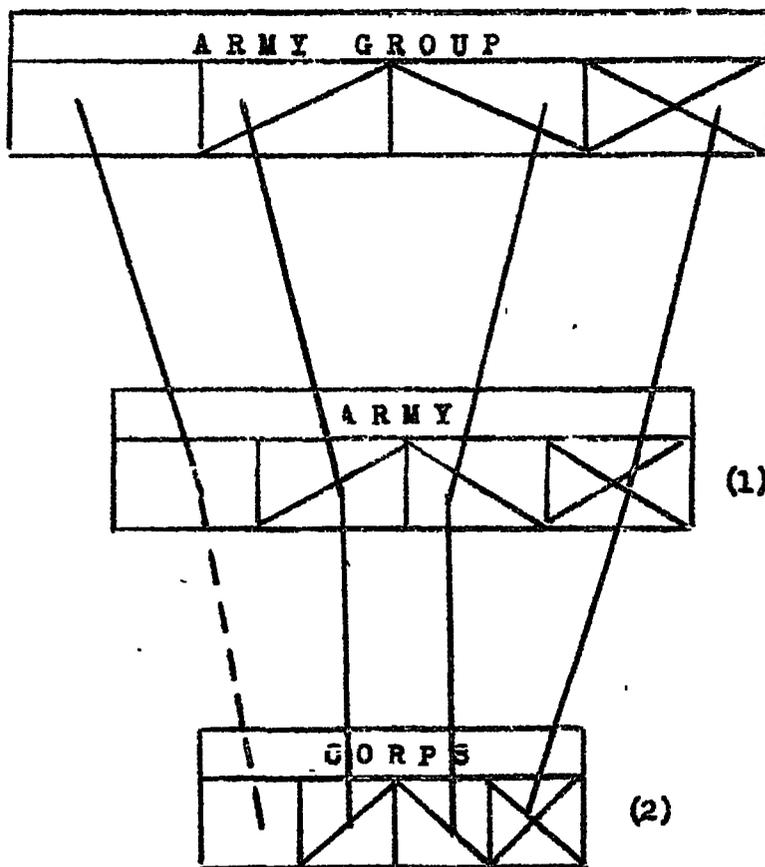
(2) when any officer who is a recipient of PINUP Intelligence shall require enlisted personnel to assist him in the handling of such material, and when their duties do not include the cryptographing of messages, he may make application to the Theater Commander for permission to use such personnel and such permission may be granted upon the personal guaranty of the officer requesting such permission as to the reliability of such personnel, and subject to the undertaking of such officer thoroughly to brief such personnel in these Regulations before any such use shall be made of their services.

11. Personnel Producing PINUP Intelligence. Nothing in these Regulations shall be construed to prohibit signal intelligence personnel directly engaged in the production of PINUP Intelligence from having access to such intelligence to the extent necessary for the proper performance of their respective duties.

12. Questions Concerning Regulations. All questions with respect to the interpretation or application of these Regulations which cannot be disposed of by the Theater Commander should be directed by him, through the most secure channels, to the Assistant Chief of Staff, G-2, War Department.

13. Distribution of Regulations. To preserve secrecy it is essential that the distribution of this document be limited to those who require it in order to safeguard the security of PINUP Intelligence.

CHART SHOWING LEVELS OF COMINT DISSEMINATION WITHIN US ARMY



CIRO-PEARL
PEARL
THUMB
INTELLIGENCE SUMMARIES

———— PARAPHRASE OR ORIGINAL
- - - - - PARAPHRASE ONLY

- (1) May republish signal intelligence items as received from Army Group, but these must be "side-lined" to show that they are not to be passed to Corps.
(2) Intelligence Summaries minus signal intelligence items.

APPENDIX "E" to ENCLOSURE "B" of Report of USCIB Security Committee SC B-35/14

OPERATIONAL USE AND VALUE OF ULTRA(1)

1. Extract from a report compiled at the War Station England entitled "The Use of Ultra Intelligence by U.S. Army Commands in the European Theater of Operations":

"5. Operational value of ultra:

"Paragraph 7.f. of the Marshall letter charged the representatives with presenting ultra intelligence 'in useable form' and with giving advice in connection with making operational use of it. The experience of the ETO representatives shows that the reliable guiding influence of ultra in working with other intelligence outweighs its value as a separate and distinct source of operational information. Its normal function is to enable the representative and his recipients to select the correct information from the huge mass of sigint, P/W, agent, reconnaissance and photographic reports. Ultra is the guide and the censor to conclusions arrived at by means of open intelligence; at the same time the latter is a secure vehicle by which ultra may be disseminated under cover. 'It is important to protect source; it is also important to get the last bit of exploitation, the ultimate from ultra consistent with security.'

"And ultra often did have a direct operational value. The reports list many examples of ultra information which was of such immediate value that the shortest possible steps (e.g. aerial reconnaissance) were used to translate it into open intelligence so that operational action could be taken at once. In some few instances, Allied air superiority was such that target information could be exploited at once, without any need for cover. Thus, in a period when the tactical air commands were daily attacking inhabited localities a dozen miles behind the front, a message stating that a German division was assembling in a given village could be converted to action immediately by including that village in the list of targets for the next formation to go out." (Vol. II. Part II. pp. 279-280).

(1) Extracts are quoted from the "Report of Special Security Operations Overseas". See ENCLOSURE "B", Note (9).

APPENDIX "F" to ENCLOSURE "B" of Report of USCIB Security Committee SC-B 35/14. See ENCLOSURE "B", Para. 8.b.

2. Extract from final report of SSO with Ninth Air Force:

"Non-Ultra Materials

"It is so obviously true that Ultra is but one among many sources of intelligence that a discussion of fusion of non-Ultra materials with Ultra would be interminable. The principles of fusion of this intelligence with others are not unique. The sole unique feature is the security requirement that it be done in a cool, dark place. This question is really preliminary to a discussion of dissemination of Ultra to recipients.

"In Ninth Air Force, intelligence from all sources was available at all times and was searched constantly. Regarding air order of battle, it was routine to examine the following:

- (1) Photo reconnaissance report of airfield coverage as summarized in the Daily Airfield Intreps, plus selected detailed reports.
- (2) P/W interrogation reports.
- (3) Telephone and W/T reports of sightings and incidents.
- (4) Report of "Y" activity.
- (5) All poop sheets, charts and prepared matter of intelligence nature emanating from Air Ministry, SHAEP, or other organization or command.

"With regard to intelligence other than that relating to air order of battle, familiarity with the intelligence materials and procedures of all other sections of the Headquarters became a necessity, and the use of such non-Ultra materials may best be mentioned under the succeeding section of this paper."

* * *

"Purportedly, the sources of this intelligence were principally radio traffic analysis, but also PW interrogation reports, photo reconnaissance, crew reports, and miscellaneous sources. Actually, Ultra played a major part in the development of all these summaries, appreciations, and opinions. Ultra was a guide and a censor to conclusions arrived at by means of other evidence, especially Y evidence. Conversely, Y was a most excellent cover in which Ultra intelligence of OB, dispositions, and tactics could be masked and disseminated.

"A few examples will demonstrate.

"Shortly after jet aircraft began to operate tactically on the West Front, it became apparent in Y that each time jets were detected active conventional fighters were also up, remaining in rear areas on some undisclosed mission. Ultra indicated that the conventional fighters were flying airfield cover for jets during take-off and landing. Thus, the Y staff could issue the appreciation, the 'guess' that fighters were screening jet airfields during the times that jets were using them.

"When in January a high percentage of the enemy fighter gruppen was withdrawn from the West to combat the Russian offensive, it was at once indicated from Y traffic analysis that a reduction of force had been accomplished, and it was clear which base areas were no longer active. From the latter fact it could be established what units had been withdrawn, with a fair degree of precision. By deduction then, using Y alone, a good appreciation was possible. However, with Ultra at hand to guide the deductive processes, the Y staff could speak out with an assurance and a degree of precision not possible otherwise. These same processes were gone through, not only in January, but throughout the war; whenever Ultra indicated a base change, a withdrawal, or a reinforcement by a unit, evidence would be looked for in Y so that the fact could be disseminated from an open source; conversely, when Y suggested a changed situation, Ultra would be read for confirmatory evidence or for precise details.

"Y direction-finding apparatus permits the establishment of base areas of enemy units, but when a number of airfields are contained in a very small area it is seldom possible to D/F the exact field. Ultra, in such cases, told us the exact field, and permitted the Y staff to make another accurate 'guess'.

"These are minor examples, and not specially good ones, of the application of Ultra to Y. There were many, many related circumstances in which authoritative opinions were expressed, based ostensibly on Y (or photo recce, or PW interrogation) intelligence, but actually supported by Ultra. Had Ultra not lain unseen in the background many of the expressed opinions would either not have been risked at all or would have been rendered with less assurance, owing to the scrappy or inconclusive quality of the Y intelligence.

During the past year few days passed during which Ultra did not insert itself into the estimates and opinions of the Y staff. Y evidence is often not completely conclusive. Like other open sources, it is often fragmentary and permits of more than one alternative conclusion. Ultra insures that the correct alternative is selected. Thus Ultra is the guide and censor for Y, and at the same time the latter is a secure vehicle by which Ultra may be disseminated under cover. This point is not to be under-estimated.

"It is important to protect source; it is also important to get the last bit of exploitation, the ultimate from Ultra consistent with security. Y is a first class cover for such exploitation.

"If all the foregoing may be called indirect aid to Y by Ultra, there was also the direct support. Occasionally Ultra signals contained valuable information directly relating to radio frequencies, call-signs, times of transmission by ground stations, and like technicalities. When such signals contained completely technical information relating to cypher tables, key sheets, frequencies, call-signs, etc., of interest only to signal intelligence, it was the policy of BP to address them directly to the signal staffs at SHAEP, 2nd TAF, and Ninth AF. These staffs would then manage to impart the needed advice to the technical Y personnel. That section at BP, under S/L Smith, which prepared the special signals for Y staffs are to be commended for their attentiveness to the needs of the field Y service." (Vol. II, Part I, pp. 305 and 313-315)

3. Extract from final report of SSO with Ninth Tactical Air Command:

"IV. OPERATIONS

A. EMPLOYMENT

"Most important in the employment of ULTRA intelligence is that it be collated with other lower level material. Besides Special Intelligence, information from all sources - higher headquarters, adjacent commands, pilots reports, air P/W interrogations, photo interpretations, visual recce, signal intelligence ('Y'), captured documents, ground sources, agents, and civilians - must be utilized. All available evidence must be collected and fused together to produce the answers to the Essential Elements of Information.

"To bring together all information concerning the enemy and grind it into meaningful intelligence was the real mission of this Recipient at IX TAC. If this recognized conception is understood, then the use of ULTRA intelligence operationally at this field Command may make sense.

"The office of this ULTRA Specialist served as the 'assembly room' for information wherein collecting and fusing was done. Here all reports of other Commands, pilots, recce, P/Ws, etc. were sent for perusal and collation. The Writer's conception is that there are two intelligence pictures - one, the ULTRA Source, and the other, the general open source. The 'assembly room' was the place where an effort was made to build up the general intelligence picture to the ULTRA level by ascertaining the extent to which ULTRA items had been securely revealed by open sources."

* * *

"Cover' for ultra activities was provided through the medium of the 'G.A.F. Section'. This officer acted as self-appointed 'expert' on all matters relating to the G.A.F. All information from non-ultra sources relating to enemy airfields, aircraft, air order of battle, technological developments, etc. were routed to the officer, and various articles were written from time to time in the daily A-2 periodic report (from open sources) on the strength and disposition of various parts of the G.A.F. and on the serviceability of airfields. Thus the receipt of ultra intelligence was kept well submerged in other matters from open sources relating to the G.A.F. in general." (Vol. II. Part I. pp. 351 and 379)

4. Extract from final report of SSO with First Tactical Air Force(Provisional):

"5. Comments.

"a) Place of Ultra In Intelligence. Ultra was the most important source of information to TACAF just as it must have been to all other major commands in Europe. In writing about the place of ultra at one command there is an inevitable tendency to compare the value of the messages received at the command's SIJ link with the value of the command's photography, sigint or PW's. The attempt to answer in this simple fashion the frequent question 'how important was it?' leaves out of the weighing the very important guiding influence which ultra exercised on each headquarters through other headquarters. For instance the widely circulated Shaef Weekly Target Intelligence Report with its priority lists of fuel, ammunition and ordnance dumps was almost completely reliable and quickly responsive to ultra. Yet, it was never looked upon at TACAF as part of the ultra picture. Or similarly an airfield attack suggested by the Ninth Air Force through open channels usually conformed with what I would have selected from ultra records at TACAF.

"It appears to be commonly accepted among field recipients that the reliable guiding influence of ultra in working with other intelligence outweighs its value as a source of operational information. As instances cited by Gardner show, it does have operational value but its normal function is to enable one to select the correct information from the huge mass of PW, agent, recce and photography reports." (Vol. II. Par I, pp. 386-387)

5. Extract from final report of SSO with First Allied Airborne Army:

"The main importance of ultra intelligence with the 1st Allied Airborne Army consisted primarily of furnishing a confirmatory foundation for the compilation and issuance of enemy air appreciations applicable to GAF reaction, possible counter-measures and strength of opposition affecting contemplated airborne operations in various areas; each planned parachute drop and glider landing naturally calling for revised or entirely new appreciations. It is obvious that ultra air intelligence was invaluable in writing these appreciations, in that it furnished the necessary confirmation of German Air Force Order of Battle, strength of operational aircraft, type of aircraft, scale of effort, etc. For each planned operation, two appreciations were written; one based entirely on ultra for perusal and study by the General Staff and one written in generalized 'open' terms for dissemination down to Corps Commanders and Divisional G-2's." (Vol. II, Part I, p.392)

6. Extract from final report of SSO With Seventh Army:

"The ultra specialist was expected to be currently familiar with information from other sources, but at no time was it desired that his briefings include a merging of ultra and other information. This distinction was closely drawn by the G-2, both for reasons of security and because the merger of all sources of information was accomplished in other ways. At the Seventh Army the chief of the order of battle section was a recipient and the 'opening up' of ultra was his primary responsibility. Estimates of the enemy situation were prepared by still another officer in the combat intelligence section, and ultra was injected into these estimates of enemy capabilities by informal consultation with the G-2. Target information derived from ultra provided no problem for it had been agreed between the G-2 and the A-2 of XII Tactical Air Command, supporting the Seventh Army, that all ultra targets would be handled by the Air Force. With order of battle, estimates, and targets provided for in the above manner, the remaining ultra required little or no correlation with other information." (Vol. II, Part II, p. 448)

7. Extract from final report of SSO with Eighth Air Force:

"It is difficult to compare Ultra with information from other sources, since it resembled none except reports from Allied agents. It actually amounted to being able to read the minds of most of the top German military leaders a considerable part of the time. Ultra complemented other types of information and they provided a constant check on its continued accuracy." (Vol. II, Part II, p.471)

8. Extract from final report of SSO serving the ground and air forces of the Tenth Army during the Okinawa campaign in the Pacific

Theater:

"Pertinent ULTRA was passed to Corps in the form of operational orders by Commander Amphibious Forces commanding Task Force Fifty One, the overall commander during the amphibious phase of the operation." (Vol. IV, p. 863)

9. Extract from final report of SSO serving with the XXIV Corps in the Pacific:

"ULTRA intelligence on a tactical level is needed by an independently operating Corps. Such a Corps should have an SSO. In the past ULTRA has been of value to Corps ground troops, though its primary value has been to air and naval commands. In a larger combat zone an army, however, should have no difficulty in passing pertinent information to subordinate Corps through operational orders and regular signal channels. This was done in the EFO ... Throughout the operation the Corps G-2 and CG definitely desired to see and evaluate all ULTRA. This was forcibly expressed during the first three weeks when Corps had almost sole charge of the fighting responsibility. Corps will therefore oppose any policy that would force reliance on the vaguer operational message version rather than personal view of the raw ULTRA ... (Vol. IV, pp. 881-882)

10. Extract from report of visit to the Mediterranean Theater SSO's:

"ULTRA VERSUS OTHER FORMS OF INTELLIGENCE

"On one point everyone visited and interviewed was in accord. That is, that special intelligence must be used in conjunction with other forms of intelligence. A full and complete knowledge and understanding of Photo Reconnaissance, Prisoner of War Interrogation, OSS Agent's Reports, Radio Intercept, etc. are vital in order to derive the maximum value from Source.

"There is no lack of appreciation of Special Intelligence in the Mediterranean Theater for those people know and admit that it won the Battle of North Africa for them and that it is the most important single intelligence factor available. But they likewise counsel the importance of not relying on this alone, but rather utilizing it to substantiate information received from other sources and to employ other sources in obtaining intelligence already established by ultra.

"An individual officer with no general combat intelligence background cannot be 'bathed in the blood of the lamb' and thereby be made into a truly valuable special intelligence officer. Key intelligence officers visited counseled without dissension that such recipients must be men with wide experience in ordinary combat intelligence. Learning to use the special 'on top of' general intelligence is a task in itself, and the special intelligence officer should not be handicapped by a lack of knowledge and understanding of the capabilities, limitations, employment, and productivity of these other forms of intelligence.

"The ultimate aim in every intelligence section is to build the ordinary intelligence picture up to the level of the special intelligence picture. This not only requires initiative and ingenuity but a broad knowledge of general intelligence. Just as one must have particular background and training in the interpretation and evaluation of special intelligence, it is essential that the chosen recipient have a background in general intelligence.

"The greatest value which the special intelligence officer can be to the headquarters which he is serving, is to be constantly developing and exploiting (in a legitimate manner) the general intelligence which he knows has been confirmed by Source. Likewise in guiding the employment of other intelligence sources in order to build up the general intelligence picture and bring to the knowledge and use of all intelligence personnel the information involved. To influence the general intelligence picture accordingly the special intelligence officer must know these sources intimately in order to avoid compromise and to devise proper cover for his source of knowledge. This is the real challenge in the job confronting the special intelligence officer." (Vol. II, Part II, pp. 594-595)

11. Extract from another report of visit to the Mediterranean Theater

SSO's:

"On one point these people were all unanimously agreed; next to security itself, the most important consideration in connection with this intelligence is that it be collated with lower level staff, and that it be interpreted for the operational people by intelligence officers familiar with its pitfalls, trained in its interpretation, and experienced in its use. Luard was especially strong on this point and emphasized the fact that it could mislead an inexperienced hand as often as it could enlighten him -- he is therefore placing men who have worked on it for some time under himself in the position of recipients in the more forward HQ's.

"On consideration of the above, it was interesting to me that some 16 recipients at 15th Army Group HQ, more than half were Intelligence Personnel, and that of the remainder, which included Alexander and his C of S and his G-3, very few of them ever saw any of the original items. Their being 'in the picture' entitled them to remain in Alexander's 9:00 staff meeting after all the non-authorized personnel trooped out, and to hear the daily G-2 appreciation based on this material. Of course Alexander himself could see anything he liked, and has had considerable experience with the material, but he relies on his G-2, Brigadier Aiery, and the personnel under him to interpret the stuff for him. In the case of 5th Army, as I have already reported, even the G-3 is not in the picture; moreover, it is largely items containing OB information which are sent there direct from BP. Material requiring more collation and interpretation, such as information about enemy supply and communications, as a rule reach 5th Army HQ only in the form of appreciations from AFHQ and from 15th Army Group, who have more material available and larger intelligence personnel to work it up in useable and intelligible form. As far as the 'cover' for OB and other information available from this source is concerned, that is ingeniously worked out by the men who prepare the various appreciations. AFHQ may know that a certain division is being sent into the line facing 5th or 8th Army; depending on the amount of collateral intelligence indicating such an enemy reinforcement, they may have to say that photo recce suggests such a move, or that PW interrogation places a certain division in a certain area suggesting its possible movement into the line (in both cases the PR and PW cover must be genuine) or they may have to say simply that in view of the casualties known to have been suffered by the enemy in a given area, reinforcement is likely, and any one of the 5 divisions known to be available are mentioned as possible for movement -- one of which will be the actual one known to be ordered up. As soon as confirmation on a lower level is received the beans can then be spilled." (Vol. XI, Part II, pp. 609-611)