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## Appendix \_\_\_\_\_ to British - U. S. C. I. Agreement

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I The Responsibility for Traffic .

II The Allocation of Cryptanalytic

## Regulations for the coordination of British - U. S. cryptanalysis,

## traffic analysis, and associated techniques

#### OUTLINE

· Analysis

Tasks

## I The Responsibility for Traffic Analysis

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II The Means of Allocation of Crytp-

analytic Tasks

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- B. Principles to be Followed in
- the Allocation of Cryptanalytic Tasks
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Communication . Traffic Analysis Traffic Intelligence Cryptanalysis Cryptanalytic Achievement



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The Responsibility for Traffic Analysis.

> Traffic analysis will not be allocated as such, but the party which performs the interception shall be primarily responsible for the appertaining traffic analysis, with the other party rendering such assistance as may be practicable.

#### II The Means of Allocation of Cryptanalytic Tasks.

A. Establishment and Functions of the Allocation Committee.

1. STANCIB and SIGINT will establish and provide for the organization of a permanent committee for the allocation of cryptanalytic tasks.

2. The committee shall have the responsibility of making an initial allocation of cryptanalytic tasks and the continuing responsibility of making new allocations and re-allocations to the end that there is at all times a complete coverage of the work to be done.

3. In making all allocations, the committee shall adhere to the principles set forth in Paragraph II B hereof.

4. Each party shall supply the committee with all information which it may consider that it needs.

5. Action of the committee shall be only by unanimous consent.

B. Principles to be Followed in the Allocation of Cryptanalytic Tasks.

? 1. All systems in which a party has a primary national interest shall be allocated to that party. Any system, however, in which both parties claim a primary national interest, shall be allocated to both parties.

2. All systems not allocated to one or both of the parties under the preceding paragraph shall be considered to fall into one of the following two categories:

a. Those from which intelligence is wanted because of the known or suspected value of the information;
b. Those of known or expected low intelligence value.
J. Each system in category 2a shall be allocated on the basis of the following principles progressively considered:

a. Available capacity in terms of personnel and other facilities for handling the task. (Since the primary purpose of allocation is to produce maximum intelligence, the first consideration in the allocation of a task is always to place the task where it can be done best. Each party accordingly will be given tasks appropriate to the facilities and talents available and, insofar as possible, in sufficient volume to utilize completely its full potentialities). b. If personnel and other facilities are equally available, systems related cryptographically and systems whose texts will permit cross-working shall normally be assigned to the same party. (e.g. assuming that each party has facilities available for more work, that a system with "Y" cryptographic characteristics is being considered for allocation,

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The Responsibility for Traffic Analysis.

1. Each party separately is responsible for all traffic analysis tasks.

2. However because of the close association of traffic analysis with the intercept stations, a primary responsibility for traffic analysis of a given area will fall on that party controlling the intercept.

#### II Allocation of Cryptanalytic Tasks.

1. Each party separately is responsible for all cryptanalytic tasks.

In the event that one party through lack of equipment or personnel is unable to perform certain of its cryptanalytic tasks, those tasks by mutual agreement of the operating agencies may be allocated to one of the parties.
 Should a party to whom a task has been so allocated determine to discontinue its

efforts, prompt notification will be made to the other party. 4. Each agency will endeavor

to comply with requests for the occasional use of special equipment applicable to traffic analysis or cryptanalysis.



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and that Party "A", through prior allocation, has developed facilities for attacking "Y" type problems, then the new system of "Y" type should be allocated to Party "A": systems which have their most useful i n systems allocated to Party TOP SECRET

"A" should likewise be allocated to Party "A").

c. If the consideration of available personnel and facilities and cryptographic characteristics does not determine the allocation, then the relationships of the textual content to (i) primary assignment and (ii) primary interest shall control.

4. Each system in category 2b shall be allocated on the basis of the following principles progressively considered:

 A system shall be allocated to the party which has the greater need for it for training purposes;

If the needs of the parties for training purposes are approximately equal, a system shall be allocated on the basis of relation in general interest to previously allocated systems (e.g., if Country X is an originator in several fields and its traffic is considered to be unimportant, all of its systems might be allocated to Party "A" on the ground that Country Y, a near neighbor of Country X, had previously been allocated to Party "A").

c. Any remaining systems shall be allocated in accordance with the judgment of the allocation committee.

5. No allocation shall be made as to the following foreign countries, it being the intention that no collaboration or exchange will take place as to ' them:

## C. Assistance by Other Party.

Although a particular system has been allocated to one party, it may develop that the other party has a special interest from the technical point of view in a problem presented by the work on that system or has available facilities or techniques, including possibly a withheld technique, which might be useful in making the attack. In such case, the party to which the system has been allocated may request the assistance of the other party, or the other party may offer its assistance. As a general rule, such assistance will be given or accepted, as the case may be.

D. Activity of Other Party.

For the purpose of keeping in touch with all problems, each party is priveleged to engage in research and decryption in relation to systems allocated to the other party. In the event of a shortage of facilities, however, it is the obligation of a party to handle first the work on the systems allocated to it and to subordinate its activities on the systems allocated to the other party.

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Catalogue

## E. Termination of Allocation.

If a party lacks the interest or facilities to exert proper effort to perform its obligation as to a system allocated to it, it shall so notify the allocation committee, whereupon the party's responsibility ends. The allocation committee shall then offer the system to the other party, which may accept or reject, as it sees fit. TOP

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## F. Protection of National Interests.

In order that each party may protect its national interests as it sees them, each party shall always be free to work on any communication system of any foreign country.

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Subject Matter of Exchange. III

A. Intelligence

1. As to each foreign country, except those excluded from collaboration and exchange, either party, which recovers any intelligence by cryptanalysis or traffic analysis, will deliver all intelligence so recovered to the other party. This will always be without a request from the other party and without regard to whether the other party has possession of or access to such intelligence.

2. Performance of this obligation as to a particular foreign country requires the recovering party to deliver to the other party a copy of each of the following which it may prepare:

- a. Translations of plain text messages
   b. Translations of cryptograms
- c. Strategical and tactical comments appended to trans-2 lations 197
- ? d. Intelligence summaries
  - e. Crypto-summaries dealing mainly with the titles and effective dates of the foreign country's cryptographic systems
  - f. Traffic analysis intelligence reports

3. The recovering party is not required, but is permitted, to deliver any of the following:

- . ? g. Translations of plain text messages
- 3 h. Strategical and tactical comments appended to translations
- 11. Intelligence summaries.

B. Technical Products

1. As to each foreign country, except those excluded from collaboration and exchange, either party, which makes any cryptanalytic achievement or performs any traffic analysis, will deliver the products thercof to the other party. This will always be without a request from the other party and without regard to whether the other party has possession of or access to such recovery.

2. Among the items intended to be exchanged hereunder are the following:

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The following items are not required, but are permitted, to be exchanged:

C. Methods and Techniques.

1. As to each foreign country, except those excluded from collaboration and exchange, either party, which in the past has developed or which in the future may develop or which in the future may engage in research in the hope of developing, a method or technique ef attack on a communication system of that country, will fully disclose such method or technique, including the administrative organization of the attack, to the other party, or, in the case of research, will fully disclose its plans. This will always be without a request from the other party, and without regard to whether the other party has a method or technique, or is engaged in research in the hope of developing a method or technique, for accomplishing the same or a similar purpose.

2. All of the provisions of the preceding paragraph are subject to the limitations of Paragraph Four of the Basic Agreement.

3. The fact that the disclosing party may have the privilege of using the method or technique or apparatus apportaining thereto on a royalty-free basis, shall not relieve the receiving party of the obligation to pay royalties.

D. Personnel

Each party is authorized, with the consent of the other, to send personnel to work with the personnel of the other party on any task allocated to such other party or for which it may be responsible.

## IV Means and Manner of Exchange.

A. Methods of Transmittal

The methods of transmittal of material subject to exchange are provided for in Appendix \_\_\_\_\_\_ (Channels for Exchange and Liaison).

B. Time of Making Reports

1. Intelligence, cryptanelytic achievements, products of traffic analysis, disclosures of methods and techniques, and disclosures of plans for research in method and technique, all of which are designated as subjects of exchange in Part III of this Appendix, shall be reported by each party within a reasonable time and by appropriate means, but in every case not later than one month from the date of recovery, discovery or plan,

2. In addition to the foregoing, each party will deliver to the other party a monthly recapitulation of the progress, or lack of progress, made by it on the tasks allocated to it and for which it is responsible.

3. In addition to the foregoing, each party will deliver to the other party a quarterly report of its research in traffic analysis and cryptanalysis not applicable to any immediate problem.

4. The report on withheld methods and techniques provided for in Paragraph Four of the Basic Agreement shall be delivered not later than one month after the date on which it first would become reasonably possible to do so.

C. Reports of Liaison Officers

Each party may forward requests for material subject to exchange to its liaison officers, whe will be given full assistance in filling such requests. The liaison officers may also undertake independent studies of operations as a basis for their reports. TOP SECRET D. Forms of Reports D. Standardization of Terminology It is recommended that the 1. It is thought that a uniform operating agencies of the terminology is desirable, but that parties adopt a uniform system as a general principle this uniformof nomenclature for cryptanalysis ity should not be allowed to destroy and traffic analysis and for practices of long-standing which designations or titles of have become familiar to both parties. communication systems. 2. Cryptanalytic Terms. Every effort will be made to adhere to the definitions and use of terms contained in the ASA dictionary. 3. Traffic Analysis Terms. It is recommended that a uniform terminology be used to describe the various systems of call-sign and frequency working. The following are suggested: Call-sign Fixed or Changing Station (double or single) or Link Frequency Sending frequency (British: Netz) Receiving frequency. Controlled multinary (British: Star) Free multinary (British: Kreis) Binary (British: Line) 4

E. Standardization of Reports

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1. The subject matter and kinds of cryptanalytic reports being unpredictably varied, no standardization of cryptanalytic reports is required.

2. Similarly it is recognized that traffic analysis reports should not be rigidly standardized and will change in form and content from time to time. However it is suggested that the following items would cover the general series of reports required and that these designations be adopted to facilitate exchange and classification of material:

## a. For Agency and Intercept Station use:

NAD	(Net	Analysis	Casebook): Diagrams): Research):	Circuit Diagrams Special traffic analysis reports, such	
WAV	(Net Analysis		Weekly) :	as call-sign studies The weekly or monthly report on cir- cuits, together with pertinent data and comments	

#### b. For Agency use only:

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TAC (Traffic Analysis Crypt): Traffic analysis studies on the uses of cryptographic systems or on direct traffic analysis applications to. cryptanalysis

TAD (Traffic Analysis Diagrams): Circuit diagrams including stypt-ographic and Order of Battle information

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TAP (Traffic Analysis Personalities)

TAS (Traffic Analysis Systems): Tabulations of cryptographic

TAT (Traffic Analysis Translations)

TAF (Traffic analysis Fusion); Special reports involving the use of Order of Battle and decode ' material

> : Reports of personalities appearing in chatter and simple cryptographic systems

systems by circuit

: Translations of plain language and simple cryptographic systems

As found necessary, other series may be added to the above by either party.

3. It is likewise difficult to standardize the report forms themselves; except for the Net Analysis Weekly which is the basic report and carries routine periodic information. It is recommended that the following form be used:

6	Case-Number		. NAW	#		
	/		Date	i i		
	C/S system	Frequer	cy system			×.
	Oalls	Locations	Frequencies	Schedules	Traffic	totals
	Heard:	2. 11	*			

... Frequencies Dates

Notes:

#### V Definitions.

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For the purposes of this Appendix, the following definitions are adopted:

Communication: The conveyance of thought by any method (including speech, facsimile and other special means)

Traffic Analysis: The analysis of the radio communication systems of a foreign country with a view toward determining such country's communication methods, procedures, and organ-ization, and the application of that analysis to the related fields of intercept control, cryptanalysis, and intelligence

Traffic Intelligence: All information of an intelligence nature obtainable from the study of foreign radio traffic, by any means short of the cryptanalysis of the text

Cryptanalysis: The total of the processes, other than the processes of traffic analysis, involved in the conversion of a secret communication into plain text, with or without the general system and the specific keys

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Cryptanalytic Achievement: Any progress in cryptanalysis.

# Appendix to British - U. S. C. I. Agreement

#### Regulations for the coordination of the exchange

#### of collateral material .

1. The parties agree to exchange all collateral material, as that expression is commonly understood by the operating agencies of the parties and whether set forth on paper or incorporated in a physical object of apparatus and however acquired, which may be applicable to the traffic analysis or the cryptanalysis of a foreign communication system.

2. Collateral material shall include among other things:

- a. Information regarding aids to communication intelligence, for example, mathematical techniques, cryptanalytic machinery, or special intercept equipment.
  - b. Cryptographic instruction messages and service messages.
  - c. Captured, compromised, or acquired communications equipment
  - and documents, including , cryptographic keys, and cryptographic instructions.
  - d. Information about foreign communications derived from other sources, such as agents or prisoners of war.
  - e. Technical write-ups, including registered publications.
  - f. Technical aids to translation and evaluation, such as dictionaries, glossaries, atlases, and transliterations.
  - g. Training material.
  - h. General information about foreign communications.
  - i, Governmental publications on communications.

3. Each party may make suggestions for the acquisition of collateral material by the other party and may offer its assistance or request the assistance of the other in making a general or particular acquisition.

4. The exchange may take the form of a gift, loan, sale, or rental, or by rendering available, or otherwise, as may be agreed by the operating agencies of the parties.

5. As to all collateral material which is subject to exchange, each party shall deliver to the other a list of the material now on hand and shall also deliver monthly a list of all accessions.

6. The operating agencies of the parties shall establish standards for forms and lists and a standard or ideal catalogue of collateral material.

7. The operating agencies of the parties shall exchange lists of best cognizant sources.

8. The parties shall keep each other informed of plans for projects in the field of collateral material and shall divide the labor in cases where such division will utilize the personnel and facilities of both parties in the most efficient and satisfactory manner.

9. It is recommended that the operating agencies establish field liaison in the acquisition of collateral material.

10. The party furnishing collateral material is not required, but is permitted, to divulge its source. The party furnishing will indicate the reliability or authenticity of the material.

11. All of the provisions of this Appendix are subject to the limitations of Paragraph Four of the Basic Agreement.

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## <u>APPENDIX A TO BRITISH-U.S. C.I. AGREEMENT</u> <u>British - U.S. Communication Intelligence</u> <u>Security and Dissemination Regulations</u>

## General

1. These regulations shall be the basis of all regulations for the security and dissemination of Communication Intelligence information issued by or under the authority of STANCIB or the London SIGINT Board and other appropriate officials of the governments of the two parties. The scope and phrasing of such regulations may vary in accordance with varying requirements of the parties, agencies, departments, and ministries to whom they are designed to apply, but all shall be in accord with these basic regulations in every respect. To insure uniform interpretation of what constitutes such accord, each party shall refer all such regulations to the other for information prior to issue.

## Basic Principles of Security.

2. The value of Communication Intelligence, both in war and in peace, cannot be overestimated: conservation of the source of this intelligence is of supreme importance. It is essential, therefore, that the dissemination accorded all related or resultant information be strictly controlled and limited. The physical security of related documents is not

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alone sufficient; it is essential that all references to the information involved, and all revelations thereof, even indirect, be avoided except among those to whom this information is necessary for the proper performance of <u>official</u> duties. The time limit for the safeguarding of Communication Intelligence information never expires. Although from time to time alleged Communication Intelligence information may be published, it is of the utmost importance that persons cognizant of Communication Intelligence matters and recipients of Communication Intelligence information refrain from regarding the fact of such publication as releasing them from the necessity of maintaining complete and absolute silence on all subjects involved until they are freed from this obligation by unmistakeable, categorical, official notice.

3. In time of war, the full effectiveness of Communication Intelligence cannot be realized unless operational use is made of it. However, when action is contemplated in the light of Communication Intelligence, the possibility of compromising the source must always be borne in mind and this danger must always be weighed against the military advantage to be gained. In general, momentary tactical advantage is not sufficient ground for risking the compromise of a Communication Intelligence source. When the decision is made to take action based on Communication Intelligence, studied effort must be made to ensure that such action cannot be attributed to Communication

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Image Reference:1



Intelligence alone. In every case, where at all practicable, action against a specific target revealed by Communication Intelligence shall be preceded by appropriate reconnaissance or other suitable deceptive measures to which the enemy can reasonably be expected to attribute the action.

4. In time of peace the principle that the conservation of Communication Intelligence sources is a paramount consideration, affecting any action taken in the light of Communication Intelligence, must be rigidly upheld.

## Definitions and Categories

5. <u>Communication Intelligence</u> (COMINT) is the name given to intelligence derived from the work of those agencies, operating under the coordination and control of STANCIB or the London SIGINT Board, which study radio transmissions, and other communications, not originated by United States or British officials. The terms <u>Communication Intelligence</u> (COMINT) and <u>Signal Intelligence</u> (SIGINT) are synonymous. Communication Intelligence is divided into two categories, as follows:

(a) Special Intelligence

(b) Traffic Intelligence

6. <u>Special Intelligence</u> is that Communication Intelligence which results from the decryption of the texts or substance of encrypted communications. It is designated by the code word CREAM. Communication Intelligence obtained from

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plain language messages may on occasion be included in the category of Special Intelligence.

7. <u>Traffic Intelligence</u> consists of intelligence which results from an analysis of communication networks, procedure signals, call signs, D/F bearings, and other technical aids, i.e., intelligence obtained from intercepted communications by all means short of the actual decoding or deciphering of the texts or substance of these communications. It is designated by the code word IVORY.

8. If the intelligence obtained by the processes described in paragraph 7, above, includes information derived from encrypted messages in such a way that it clearly reflects the use of such information, it becomes Special Intelligence. Communication Intelligence obtained from the translation of plain language messages is normally classed as Traffic Intelligence. 9. In war-time it may be found necessary to sub-divide both Special Intelligence and Traffic Intelligence into smaller categories in order to permit certain classes of Communication Intelligence (compromise of which would not endanger the more important Communication Intelligence sources) to be distributed to special agencies and lower echelons of the military forces which, for security reasons, would not normally receive

other Communication Intelligence material.

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## Dissemination

10. The guiding principle of dissemination is that each item of Communication Intelligence, as such, will be made known to those individuals who require it in the performance of their duties and who have been "indoctrinated" and made aware of the source, and only to those individuals.

11. Every effort shall be made to reduce the number of "indoctrinated" persons to an absolute minimum. Personnel to be indoctrinated for assignment to Communication Intelligence duties shall be the subjects of special security enquiries. Except in categories and individual cases agreed upon from time to time by STANCEB and the London SIGINT Board, personnel to be indoctrinated as recipients of Communication Intelligence information shall be the subjects of special security enquiries.

12. STANCIB and the London SIGINT Board shall maintain complete lists of persons currently "indoctrinated" for Communication Intelligence in their respective governments.

13. STANCIB and the London SIGIAT Board shall keep each other fully informed of the departments, ministries, agencies, offices and broad categories of persons receiving Communication Intelligence and of the approximate number of "indoctrinated" persons in each.

14. Should it become essential for operational reasons (as may occur in war) to disseminate a specific item of

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Communication Intelligence to an official who is not an authorized recipient (i.e., not "indoctrinated") it must be embodied in a communication so worded that the subject matter cannot be traced back to Communication Intelligence sources (with names, times and positions, and other specific data from original decrypted texts carefully omitted) and, if to be transmitted by a means exposed to interception, encrypted in the available cryptographic system of greatest security and most limited distribution. The code words CREAM and IVORY are not to be used in connection with such communications.

15. Communication Intelligence shall never under any circumstances and in any form be disseminated to any ministry, department, agency, office, or individual from which or from whom it might reasonably be expected to find its way, officially or extra-officially, into the possession of any person or group who could use it for commercial competition or commercial gain or advantage.

## Security Classification and Transmission of Communication Intelligence

16. "Raw traffic" (i.e., intercepted traffic showing no evidence of processing for Communication Intelligence purposes) is classified CONFIDENTIAL.

17. CREAM information is classified TCP SECRET. The words TOP SECRET and the code word CREAM must appear on every sheet of paper which contains this intelligence. This rule applies

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top secret

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to maps and charts on which are plotted data and information derived from Special Intelligence. The code word CREAM shall be included in the text of every despatch (signal) conveying such intelligence, except as provided in paragraph 22, below.

18. IVORY information is classified SECRET. The word SECRET and the code word IVORY must appear on every sheet of paper which contains this intelligence, unless TOP SECRET CREAM information appears on the same sheet. This rule applies to maps and charts on which are plotted data and information derived from Traffic Intelligence. The code word IVORY shall be included in the text of every despatch (signal) conveying such intelligence (unless the despatch also conveys CREAM intelligence), except as provided in paragraph 22, below.

19. TOP SECRET Communication Intelligence material may not be transmitted in plain language (unencrypted) except as follows:

(a) Sealed, via officer courier and other safe-hand channels, and over routes, approved by STANCIB or the London SIGINT Board, or both, as appropriate.
(b) Via completely protected local communication systems exclusively internal to agencies and offices producing or utilizing Communication Intelligence of the appropriate categories.

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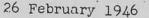
(c) Via external landlines only as specifically approved by STANCIB or the London SIGINT Board, as appropriate, in each instance.

20. SECRET and CONFIDENTIAL Communication Intelligence material may not be transmitted in plain language (unencrypted) except as provided in paragraph 19, above, and, in addition, by protected postal channels (such as Ü. S. Registered Mail), and over routes, approved by STANCIB or the London SIGINT Board, as appropriate.

21. Except in the circumstances contemplated in paragraph 14, above, Communication Intelligence material, except "raw traffic", transmitted in encrypted form shall be encrypted in special cryptographic channels expressly and exclusively provided for this purpose, and in no other. Such channels shall possess at least the security of the CCM and must be approved by STANCIB or the London SIGINT Board, as appropriate. Cryptographic channels for the transmission of "raw traffic" shall be agreed upon from time to time by STANCIB and the London SIGINT Board.

22. In technical communications which are strictly limited in circulation to agencies engaged in the various processes involved in the production of Communication Intelligence, and which are encrypted in cryptographic channels exclusively assigned for such technical exchanges, the words CREAM and IVORY may be omitted.

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23. Other than as contemplated by paragraph 22, above, communications among cognizant officials of the British and U.S. governments which reveal actual success or progress in the production of CREAM and IVORY information <u>in specific in-</u> <u>stances or fields</u> shall bear the appropriate code word designations even though they do not themselves reveal Communication Intelligence as such.

24. The code word CREAM, and its significance and connotations, bears the TOP SECRET classification. The code word IVORY, and its significance and connotations, bears the SECRET classification. In addition to the restrictions imposed by these classifications, these connotations shall not be made known to "non-indoctrinated" persons, nor shall these words be used in their code-word senses in the presence of "nonindoctrinated" persons.

25. Except as implicitly involved in the operation of paragraphs 14 and 19(a), above, documents containing CREAM and IVORY information must remain exclusively in the possession of "indoctrinated" persons, secure from examination by "non-indoctrinated" persons.

General Exception to Regulations for Classification and Dissemination

26. With the approval of STANCIB and the London SIGINT Board in each broad instance, and despite any other provisions

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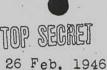
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of these regulations, certain elementary Traffic Intelligence, such as D/F bearings and fixes, and certain categories and series of plain language intercepts from

may be disseminated under the classification CONFIDENTIAL, and certain categories and series of plain language intercepts from military circuits may be disseminated under the classification SECRET. The field of such dissemination need not be confined to "indoctrimited" persons, and such dissemination may be made during peacetime, but, with these exceptions, its extent must be limited in accordance with the principle expressed in paragraph 10, above. The code word IVORY shall not be employed in connection with the exchange, use, and dissemination contemplated by this paragraph, and those plain language intercepts from military circuits shall be so disguised as not to reveal the source.

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## APPENDIX B TO BRITISH-U.S. C.I. AGREEMENT

# COORDINATION OF, AND EXCHANGE OF INFORMATION ON, CRYPTANALYSIS, TRAFFIC ANALYSIS, DECRYPTION, TRANSLATION,

## AND ASSOCIATED TECHNIQUES

1. The cryptanalysis, traffic analysis, decryption and translation undertaken and prosecuted by each party shall be as basically suited to its own needs, but each party shall welcome from the other suggestions as to extensions of its work, and shall endeavor to act favorably upon such of these suggestions as are within its powers and are considered to promise due contribution to the common good.

2. Allocation between the parties of analytical and production tasks shall take the form of continuous elimination, by mutual agreement, of unwanted duplication and continuous suggestion and mutual arrangement as to the undertaking of new tasks and changes in the status of old ones,

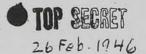
3. <u>STATUS OF TASKS</u>. Except as restricted through application of paragraph 3 (b) of the basic agreement, each party shall keep the other fully and continuously informed, in detail, of all cryptanalysis, traffic analysis, decryption and translation being undertaken by it, of the approximate facilities and number of persons engaged in each phase of the effort, and of general

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progress in each phase of the effort. The continuous exchange of information contemplated by this paragraph will be in the form of information reports prepared by the operating sections concerned. These information reports will cover each system under study and will indicate any change in status of a system, the cessation or curtailment of effort on any task, and, wherever possible, projected changes in emphasis on given tasks. In addition to the report there shall be such interim reports as are necessary, covering specific tasks in detail. These reports may be in the form of messages or technical write-ups relating to new discoveries, technical advances, or other observed changes. When there have been such interim reports the information report will make reference thereto, whether the interim reports be in the form of messages or written reports.

4. <u>METHODS</u>, <u>TECHNIQUES AND TECHNICAL PRODUCTS</u>. Except as restricted through application of paragraph 4(b) of the basic agreement, each party shall keep the other fully and continuously informed, in detail, of all methods and techniques employed, developed, and discovered in the course of and in connection with all cryptanalysis, traffic analysis, decryption, and translation undertaken by it. Similarly each shall furnish to the other all technical products of these processes which are involved in and applicable to the processes themselves. Exchange by radio of this information shall be

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as continuously agreed and arranged between the two parties. In addition, all of this information, whether or not also exchanged by radio, shall be exchanged via regular liaison channels, as established in another appendix to this agreement.

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5. AIDS TO PROCESSING. Except as restricted through application of paragraph 4(b) of the basic agreement each party shall keep the other fully and continuously informed. in detail, of the nature and use of all compilations, files. devices, and apparatus developed by it, or developed as a result of its processes, and employed by it in the processes of cryptanalysis, traffic analysis, decryption, and translation, and shall endeavor to furnish to the other, upon request, copies or specimens of such aids ..... The conveyance by one party to the other, pursuant to this paragraph, of a device or apparatus may take the form of a gift, loan, sale, rental, or rendering available, as may be agreed and arranged between the two parties in the specific instance. The fact that the disclosing party may have the privilege of using a method or technique, or a device or apparatus pertaining thereto, on a royalty-free basis shall not of itself relieve the receiving party of the obligation to pay royalties.

6. <u>CRYPTO-INTELLIGENCE</u>. Except as restricted through application of paragraph 3(b) of the basic agreement, and as a specific application of paragraph four of this appendix, each

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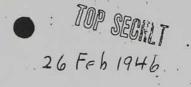
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party shall furnish to the other, continuously, currently and without request, all communication intelligence (including summaries, studies and estimates) produced or obtained by it which bears on foreign communications. In the case of Special Intelligence which includes information of foreign cryptographic systems and the use thereof (i.e., "crypto-intelligence") the material exchanged shall be in the form of decrypted. untranslated versions of the messages involved, and this exchange shall be in spite of and in addition to any exchange of translations effected in accordance with any other provision of this agreement. The exchange contemplated in this paragraph shall normally be effected by radio except where slower delivery will obviously serve the purpose adequately. In addition, there shall be a complete exchange of the same information via regular liaison channels, as established in another appendix to this agreement.

## Standardization

7. Both parties will strive toward uniform technical terminology and nomenclature in the fields of coordinated effort treated in this appendix. It will be understood, however, that there will normally be no need for interference with unilateral usages of long standing which are so well known to all concerned of both parties that the resultant well-established pairing of



synonyms is quite as satisfactory as complete uniformity.

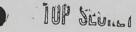
8. Exhibit 1 describes in detail the functional system for the nomenclature of foreign cryptographic systems which is adopted by both parties.

9. Exhibit 2 is a list of code names for specific fields of Communication Intelligence activity. This list is adopted for common use by both parties.

10. Standardization of translations shall be effected through continuous agreement and arrangement between the two parties. Until agreement is reached on the standard translation into English of a foreign word or expression whose meaning is doubtful the foreign word or expression shall be added in a footnote or in brackets after each occurrence in translated texts of an English equivalent thereof.

11. All bases of standardization presented in this appendix and its exhibits shall be subject to continuous review and, upon agreement, change.

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## APPENDIA 6 TO 0.5. - BATTION

## U.I. AUREDMENT

CUBLECTION AND EACHANCE OF NAW TRAFFIC

1. The facilities maintained, channels utilized, and opportunities exploited by each party for the interception and collection of raw traffic shall be those available to it and basically suited to its own needs, but each party shall welcome from the other suggestions as to expansions of these facilities, extensions of these channels and exploitations of previously unexploited opportunities, and shall endeavor to act favorably upon such of these suggestions as are possible of implementation and are considered to promise due contribution to the common good.

2. Except as restricted through application of paragraph 3(b) of the basic agreement, each party shall furnish to the other as promptly as possible, without request and as a matter of routine, copies of all raw traffic collected and acquired by its operating agencies, regardless of source. Neither party shall be obliged to reveal to the other the source or manner of collection of raw traffic.

3. Allocation between the parties of world intercept coverage shall take the form of continuous elimination, by mutual agreement, of unwanted duplication and continuous suggestion and mutual arrangement as to changes.

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4. Provision shall be made for the exchange by radio of selected classes of raw traffic as continuously arranged between the two parties. In addition, all raw traffic, whether or not exchanged by radio, shall be exchanged via regular liaison channels, as established in another appendix to this agreement. In general the procurement, maintenance, and utilization of raid means of exchange and of rapid means of delivery from intercept points shall be promoted and encouraged by each party to the utmost extent of its means, and usable radio teletype channels shall be kept filled to the limit of their capacity with raw traffic.

5. Each party shall meep the other fully and continuously informed, in detail, of the operational intercept positions available to and utilized by it as such, and of the coverage provided thereby. The exchange of this information shall be effected at least in the form of exhibit 1 with this appendix. The exchange of coverage reports by radio, to cover part or all of the information of the written reports, and to be in addition thereto, may be agreed and arranged from time to time.

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## Standardization

6. The use of typewriters for the preparation of intercepted raw traffic shall be encouraged and promoted.

7. The physical form of intercepted raw traffic shall be standardized as far as practicable. Radio intercepts shall be prepared and exchanged in the standard form of exhibit 2 with this appendix.

3. The standard glossary of terms and abbreviations presented as exhibit 3 with this appendix is adopted for use by both parties for coordination and direction of intercept and raw traffic exchange.

9. STANCICC will prepare, periodically as necessary, a catalogue, to be known as the World-Wide Fre uency Index, of all known radio transmissions in the form of exhibit 4 with this appendix. This catalogue is adopted by both parties as the standard for liaison in matters of military intercept coordination. Liaison in matters of

intercept coordination will be in terms of call signs and frequencies. The London SIGINT Board will furnish continuously all data available to it which will assist in the preparation of the World-Wide Frequency Index. STANCICC will furnish to the London SIGINT Board the number of copies of each edition of this catalogue which that Board may require.

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10. All bases of standardization presented in this appendix and its exhibits shall be subject to continuous review and, upon mutual agreement, change.

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APPENDIX D TO BRITISH-U.S. C.I. AGREEMENT EXCHANGE OF COMMUNICATION INTELLIGENCE

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1. Except as restricted through application of paragraph 3(b) of the basic agreement, each party shall make available to the other without request and as a matter of routine, and shall furnish as requested, all Communication Intelligence produced by its operating agencies, regardless of whether the other party is known or supposed to be producing, or to be in a position to produce, duplicate or similar Communication Intelliggence.

2. Exchange of Communication Intelligence by the most rapid available means shall be as continuously agreed and arranged between the two parties. In addition, all Communication Intelligence, whether or not also exchanged by such means, shall be exchanged via regular liaison ohannels, as established in another appendix to this agreement. In either case, delivery by each party to the other or to the other's agent shall be with the least possible delay, and each party shall give due heed to representations by the other as to apparently avoidable delay, and shall institute action, appropriate to its facilities and requirements and insofar as the involvements are within its control, to eliminate such delay.

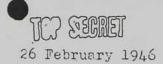
3. Special Intelligence exchanged in accordance with paragraph 1, above, shall be in the form of decrypted versions of individual items translated into English and of appreciations and summaries prepared from such translations.

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Appendix D

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4. For purposes of interpretation of paragraph 1, above, an item of Special Intelligence is considered to have been "produced" by an agency when it has been translated into English by that agency. In addition, upon request from time to time by either party, the other shall, if such provision is not unduly inconvenient to it, furnish copies of specific items or items in specific categories or fields of Special Intelligence which are decrypted by its agencies but not translated into English.

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Appendix D .

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## APPENDIX E TO BRITISH-U.S. C. I. AGREEMENT

## EXCHANGE OF COLLATERAL MATERIAL

## PARTI

## Collateral material and information which hears directly on foreign communications.

1. Within the intent and limitations of paragraph 2 of the basic agreement there will be a complete exchange between the two parties of all available information which bears directly on foreign communications, or on Communication Intelligence processes applied to foreign communications, whether such information be set forth in words or embodied in a document, object, or apparatus, purchased, captured, or otherwise acquired. Neither party shall be obliged to reveal to the other a source of such collateral material although there should normally be furnished, where appropriate, an estimate of the reliability of the source.

2. The conveyance by one party to the other, pursuant to paragraph 1, above, of a device, apparatus, or document may take the form of a gift, loan, sale, rental, or rendering available, as may be agreed and arranged between the two parties in the specific instance. The fact that the party thus conveying a device, apparatus or document may have the privilege of using it on a royalty-free basis shall not of itself

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relieve the receiving party of the obligation to pay royalties.

3. Each party shall welcome from the other suggestions as to opportunities for the acquisition of collateral material bearing directly on foreign communications and shall endeavor to act favorably upon such of these suggestions as are possible of implementation and are considered to promise due contribution to the common good.

## PART II

## Collateral material and information which does not bear directly on foreign communications.

1. Upon the request of either party the other may, at its discretion, furnish or divulge collateral material or information which does not bear directly on foreign communications provided there is no objection on the part of the ministry, department, agency, office, or person which originally made available the material or information or which bears the responsibility for the control thereof. In any case, neither the source nor its reliability need be divulged.

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## APPENDIX G TO BRITISH-U.S.

## C.I. AGREEMENT

## LIAISON AND CHANNELS FOR EXCHANGE

## Liaison personnel

1. Each party shall maintain, in the country of the other, at an appropriate location, a senior liaison official accredited to the other, who may be accompanied by the necessary staff. All Communication Intelligence liaison matters in each country shall be under t he cognizance and control of the senior Communication Intelligence liaison official in that country.

2. Upon agreement between STANCIB and the London SIGINT Board in each specific case, additional liaison personnel may be accredited, and working groups may be assigned, to operating agencies of either party by the other. All such additional liaison personnel shall be under the control and direction of the appropriate senior liaison officers. Working groups of either party in the agencies of the other shall be regarded as, and shall have the status of, liaison personnel.

3. Liaison officials of one party shall normally have unrestricted access to those parts of the other's operating agencies which are engaged directly in the production of

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Communication Intelligence, except such of those parts as keep files of general collateral information. This restriction is premised upon the limitation expressed in paragraph 2 of the basic agreement. The points of contact of liaison officials within operating agencies for requests and inquiries shall be as determined, established and delimited by the party to which they are accredited.

## Channels for Exchange

4. Communications between the two parties shall regularly be conducted through the liaison channels established by this appendix. In addition, it is contemplated that channels for continuous conversation and arrangement directly between technical sections and coordinating groups of operating agencies may be established from time to time as the need for them becomes apparent.

5. Requests by a party or its agencies for information or material shall be made by that party via its senior liaison official accredited to the other. Normally but not necessarily the other party's senior liaison official shall be kept informed of such requests.

6. A senior liaison official or his authorized representative having a request for information or material shall, acting through the prescribed channels and points of contact, receive whatever pertinent information or material is made available to him, and shall forward it, normally via channels under the control of his own country, to the requesting party

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or its appropriate operating agency. Upon receipt, the requesting party shall give the senior liaison official of the providing party, or liaison officials delegated by him, whatever share in the distribution and utilization of the information and material it may have established as applicable and appropriate.

7. No provision of paragraph 6, above, shall be construed as preventing either party from accommodating the other by transporting materials for the other's senior liaison official. Each party shall endeavor to assist the other in this respect, as may be practicable, when requested to do so, but both parties shall endeavor to reduce such requests to the minimum by continuously adjusting their facilities to their requirements and vice versa.

8. Each party shall normally accommodate the other's senior liaison official by making available to him, on his request, facilities for packaging and preparing material for transportation. Each party shall, to the extent of facilities operated by or available to it, accommodate the other's senior liaison official by assisting him with safe-hand and other transportation within its own country.

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1 March 1946

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## MEMORANDUM

Corrections to BRUSA C.I. Appendices.

Appendix F.

Substitute new Appendix F (herewith) for old Appendix F dated 28 February.

Capt. Ford

1 March 1946

## APPENDIX F TO BRITISH-U.S. C. I. AGREEMENT

## COMMUNICATIONS

#### Radio Circuits

1. The U. S. Navy will provide radio and terminal equipment on loan basis as necessary for the establishment of a four-channel multiplex radio-teletype circuit between its operating agencies in Washington, D.C., and the principal operating agencies of the Admiralty and Commander, U.S.Naval Forces, Europe. Admiralty will provide the necessary antennas, electric power, control lines and suitable housing for all equipment at the British end of the circuit at no cost to the U. S. The Admiralty will provide all maintenance and operating personnel for the London terminal except such operating personnel as are provided by Commander, U.S. Naval Forces, Europe, on his channels. Similarly, the U. S. Navy will provide all maintenance and operating personnel for the Washington terminal except such gperating personnel as are provided by the British Admiralty Delegation on its channel.

2. The London SIGINT Board will continue to maintain in operation the existing radio telegraph circuit (HYDRA) between Oshawa and London (GCCS). STANCIB will maintain a land-line link between Oshawa and Washington.

## Extraordinary routing of Raw Traffic

3. Raw traffic exchanged between the parties in accordance with Appendix C will normally be passed as provided in

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Appendix G. However, in a specific case where one party controls or has the use of a communication channel (radio or otherwise) the terminals of which are so located that the channel could be employed, advantageously from the standpoint of time-saving, for the transmission of raw traffic directly from one party's source to the other's (Washington or London) operating agency, the parties may agree on such employment and on appropriate contributory arrangements.

## Cryptographic Channels for Communications

4. Communications exchanged by exposed means between agencies of STANCIB on the one hand and those of the London SIGINT Board on the other shall employ cryptographic channels provided exclusively for communications between these agencies. Such cryptographic aids as are used shall be subject to the approval of STANCIB and London SIGINT Board and will be provided as mutually agreed.

## Physical Transmission

5. The channels used by each party for the physical transmission of documents containing information of Communication Intelligence matters shall be those regarded by that party as normally suitable for the transmission of documents of the security classification involved except that, in no case, without the specific concurrence of both parties, shall a document containing unencrypted CREAM or IVORY information

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be conveyed by aircraft or land transport over territory controlled by other than the United States or British governments, nor, without similar concurrence, shall raw traffic be similarly conveyed over territory controlled by the government whose agencies or citizens originated it.