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NATIONAL SECURITY AGENCY

OFFICE OF  
COMMUNICATION SECURITY  
MANUAL

ORGANIZATION AND FUNCTIONS

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MANUAL

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JANUARY 1954

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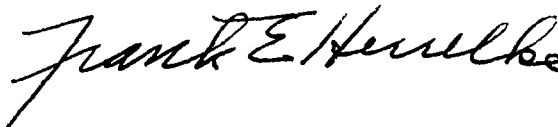
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## MEMORANDUM TO DISTRIBUTION LIST

SUBJECT NSA, Office of Communication Security Manual, Organization and Functions

1 The National Security Agency, Office of Communication Security Manual, Organization and Functions, is published for the information and guidance of all concerned. Its effective date is 4 January 1954.

2 This Manual supersedes the NSA, Office of Communication Security Manual, Organization and Functions, previously published, all copies of which will be destroyed.



F E HERRELKO  
Colonel, USAF  
Assistant Director,  
Communication Security

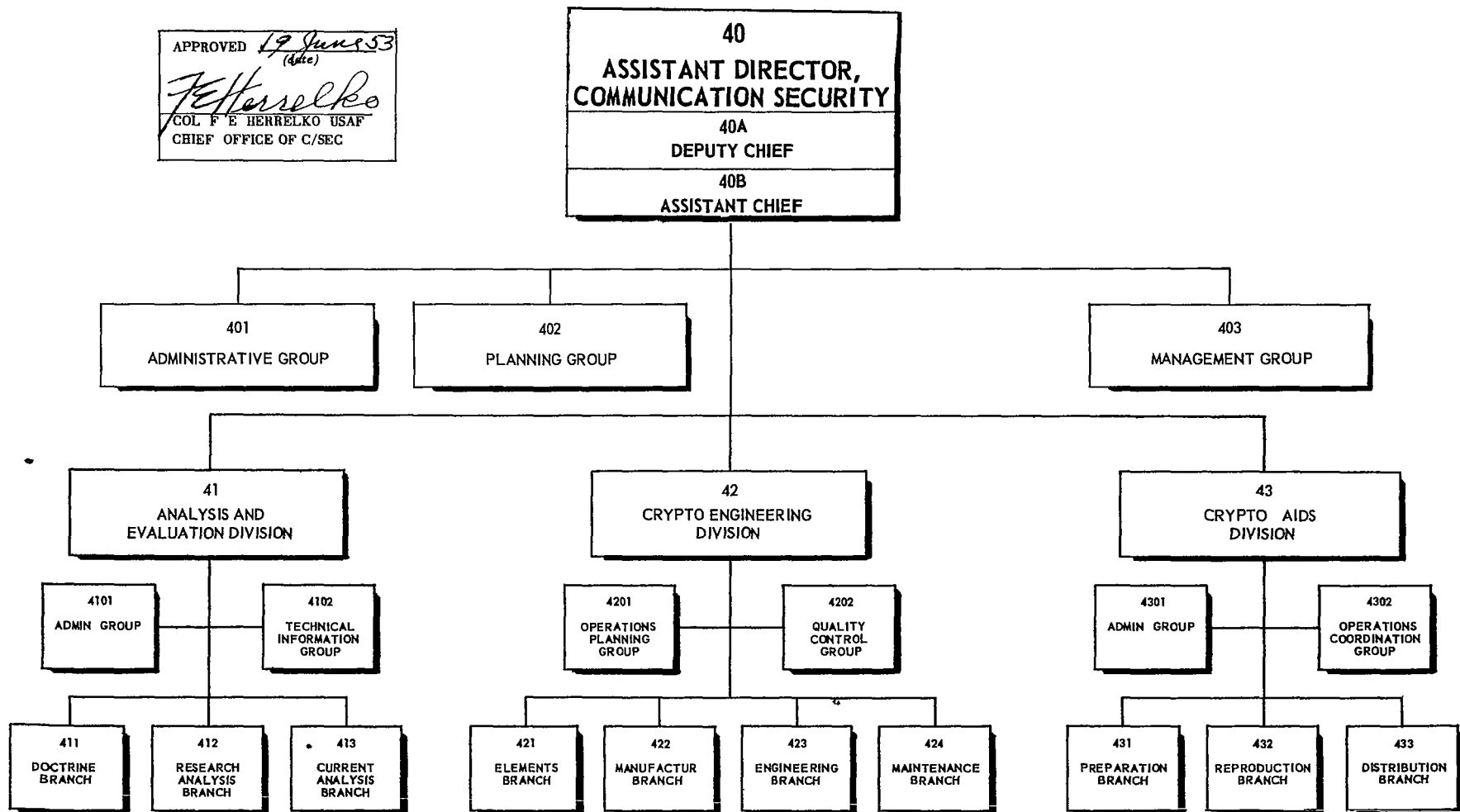
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ORGANIZATIONAL CHART OF OFFICE OF COMMUNICATION  
SECURITY - NSA 40

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## NSA 40

## OFFICE OF COMMUNICATION SECURITY

## A Responsibilities

Responsible for the performance of all COMSEC functions under the cognizance of NSA

## B Organization

NSA-40	Assistant Director, Communication Security
NSA-40A	Deputy Chief, Communication Security
NSA-40B	Assistant Chief, Communication Security
NSA-401	Administrative Group
NSA-402	Planning Group
NSA-403	Management Group
NSA-41	Analysis and Evaluation Division
NSA-42	Crypto-Engineering Division
NSA-43	Crypto-Aids Division

## NSA 40

## OFFICE OF THE ASSISTANT DIRECTOR

- 1 Exercises control over the subordinate echelons of C/SEC in the discharge of its assigned responsibilities
- 2 Advises and collaborates with all elements of NSA as required
- 3 Insures provision of such technical support as is required of NSA by the Armed Forces and appropriate government agencies in their conduct of COMSEC activities
- 4 Exercises operational control over such service COMSEC activities as may be allocated to the operational control of NSA
- 5 Insures compliance with applicable security directives, and establishes such additional security safeguards, as may be necessary, within the Office of Communication Security
- 6 Provides technical support to Combined and NATO COMSEC activities as directed
- 7 Provides, as directed, members or observers on panels and working groups of departments and agencies
- 8 Performs such other functions as assigned by the Director, NSA

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NSA 401

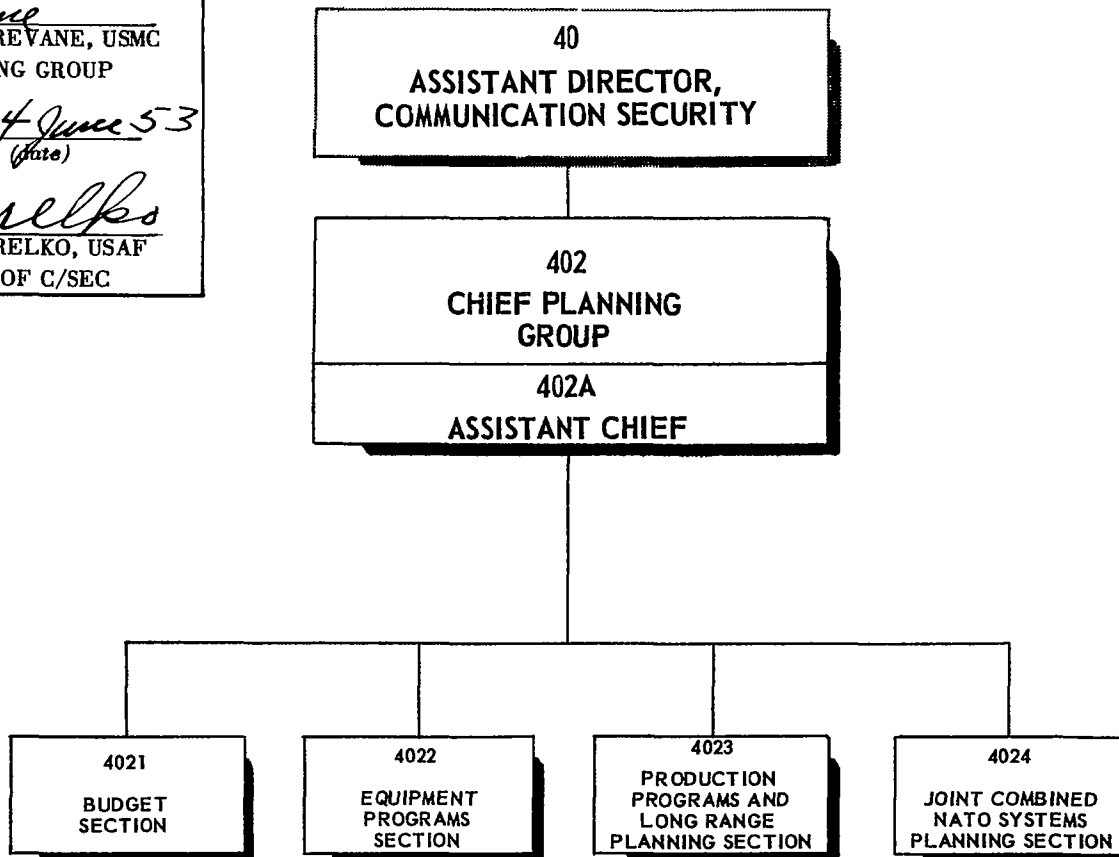
## ADMINISTRATIVE GROUP

- 1 Advises the Assistant Director, Communication Security on the formulation of administrative procedures, policies and regulations
- 2 Coordinates and supervises the application of all administrative procedures within C/SEC
- 3 Administers Top Secret Control for C/SEC
- 4 Insures the proper preparation of all outgoing correspondence
- 5 Supervises all mail and records activities
- 6 Assures the proper routing of all incoming and outgoing correspondence
- 7 Responsible for determining by the nature of incoming correspondence which correspondence must be brought to the attention of the Assistant Director, Deputy Chief, or Assistant Chief prior to being routed to the Group or Division having cognizance for the action
- 8 Mail and Records
  - a Provides mail and central file service for C/SEC
  - b Administers intra-Office office supply procurement and issue
- 9 Performs such other duties as assigned by the Assistant Director, Communication Security

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PLANNING GROUP - NSA 402

APPROVED	<i>22 June '53</i> (date)
<i>Revane</i>	
LT COL H J REVANE, USMC CHIEF, PLANNING GROUP	
APPROVED	<i>24 June '53</i> (date)
<i>Fetherelko</i>	
COL F E HERRELKO, USAF CHIEF, OFFICE OF C/SEC	



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## NSA-402

## PLANNING GROUP

- 1 Performs a coordinating function concerning communication security activities, within the Office of Communication Security and with other Offices and Staff Divisions of NSA, with the appropriate US Civil Agencies, with appropriate NATO and UK authorities, and with the U S Armed Forces
- 2 Coordinates technical and operational planning for C/SEC
- 3 Recommends fiscal policies and budget objectives required for effective operation of C/SEC
- 4 Prepares detailed statement of C/SEC program for each fiscal year
- 5 Performs long range planning for mobilization as pertains to C/SEC
- 6 Maintains technical liaison with the Services and prepares a comprehensive long range program for each COMSEC equipment from the time the requirement for a crypto-equipment is first expressed until the equipment is placed in use
- 7 Performs special planning in relation to NATO and BRUSA agreements
- 8 In conjunction with Crypto-Aids Division serves as the Standing Group Distribution and Accounting Agency, NATO, and as such, performs general planning for NATO systems, obtains requirements for NATO organizations, and plans production to meet these requirements
- 9 Advises on COMSEC objectives for inclusion in NSA plans and, as required, supplies information on or prepares COMSEC portion of these plans
- 10 Performs such other duties as assigned by the Assistant Director, Communication Security

## NSA-4021

## BUDGET SECTION

- 1 Based upon the FY program and, in conjunction with the Comptroller (OOF), Plans and Policies Division (12), Logistics Division (17), and the C/SEC Staff Groups and operating Divisions, prepares the C/SEC budget and personnel requirements for the FY, including written justification of program objectives and cost estimates
- 2 Prepares the C/SEC funding program in conjunction with the Comptroller (OOF), the C/SEC Staff Groups and operating Divisions, and recommends changes as required Prepares schedules of commitments and forecasts of procurement actions in coordination with the Logistics Division (17)
- 3 Recommends fiscal policies and budget assumptions required for effective operation of C/SEC Coordinates plan with C/SEC Staff Groups and operating Divisions
- 4 Prepares and initiates procurement program for crypto-equipment for FY based upon estimated requirements from Services, and informs the Logistics Division (17) Specifically
  - a Initiates action on procurement programs by preparing initial requests for procurement which consolidates Service requisitions and NSA requirements Makes changes in requests as required from time to time
  - b Maintains continuous liaison with Logistics Division (17) and the Comptroller (OOF) on bids and contractual and obligating actions affecting C/SEC procurements

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- c Keeps up-to-date information on prices, changes in prices, and estimated dates of availability. Initiates the necessary action to and with the Services and the Comptroller (OOF), to ensure the availability of funds for procurement of all materials as required.
- 5 Performs such other duties as assigned by the Chief, Planning Group

NSA - 4022

## EQUIPMENT PROGRAMS SECTION

1 Maintains contact with Services for NSA on matters relating to COMSEC equipment under development and procurement. In this capacity, obtains authoritative information on Service needs and preferences, relays this to the Office of Research and Development (30) and the Logistics Division (17), and relates it to the over-all COMSEC equipment program.

2 Compiles, and, in conjunction with the appropriate operating Divisions of C/SEC, Office of Research and Development (30), and Plans and Policies Division (12), prepares NSA Communication Security Research and Development program.

3. Prepares comprehensive, long-range, program for each COMSEC equipment, covering from the time the need for an equipment is first expressed as a military characteristic until the equipment is placed in use. Specifically

- a Coordinates NSA's actions on military characteristics and prepares answer to JCEC
- b Acts to establish R & D projects in NSA by initiating RADAC action. Positions project in program. Prepares NSA-40 project sheet
- c Prepares and maintains long-range time schedule (based on the Office of Research and Development (30) estimate of development time, and Logistics Division (17) estimate of procurement time) covering development, test, and procurement
- d Maintains constant, thorough, and detailed liaison with the Office of Research and Development (30), C/SEC operating Divisions, and Services during development.
  - Arranges for using personnel to view equipment during development. Keeps abreast of the status of each item during development phase.
- e Arranges for tests of equipment by Services and for NSA's participation therein
- f Furnishes to Logistics Division (17) specifications and drawings for the procurement of COMSEC equipment. Acts as office of record for such specifications. Has cognizance over production design changes
- g Determines, on the basis of service tests or other Service originated data and engineering data, when a newly developed COMSEC equipment is ready for procurement. Recommends initiation of procurement and distribution of COMSEC equipment
- h Maintains close coordination check with C/SEC operating Divisions on all COMSEC activities related to new equipment such as introduction of cryptosystems and preparation of manuals, key list data and maintenance training

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- i Prepares and maintains detailed time schedule for bringing all elements of a new equipment to completion and ready for use at the scheduled time
- j Establishes C/SEC priorities for Research and Development projects for COMSEC equipment, and prepares written information to the Office of Research and Development (30) setting forth these priorities

4 Keeps abreast of trends and technical advances in the communication field in order to relate and integrate security equipment to proper communication equipment In connection with this, collects data from the Services and commercial concerns concerning communication equipment under development or in production Summarizes and publishes this data as the Communication Equipment Survey for use in engineering and planning security equipment compatible with associated communication equipment

5 Determines by constant liaison with Service Cryptologic Agencies the type of technical information required by them for conduct of their responsibilities Obtains and forwards it to the Services

- 6 Performs such other duties as assigned by the Chief, Planning Group

NSA - 4023

PRODUCTION PROGRAMS AND  
LONG RANGE PLANNING SECTION

1 Gathers long-range quantity requirements for cryptomaterials and equipment periodically from the US, NATO, and UK Services, the offices of NSA, and certain Civil Agencies Obtains data on current quantity requirements from C/SEC Divisions Summarizes quantity data according to general type of material and time when needed to determine total C/SEC production work load Disseminates information concerning over-all work load to C/SEC Divisions for use in estimating needs and capabilities

2 Based upon the production potential of a FY as determined by the approved budget and in conjunction with the operating division, translates the production objective for the year into general monthly production objectives for each major type of material Phases program build-up or cut-back according to production potential desired at end of Fiscal Year or stated quantity needs

3 In conjunction with the Services and operating Divisions of C/SEC determines the general type and quantity of cryptomaterials and equipments to be produced for war reserve Includes reserve quotas in identifiable form in general monthly production objectives

4 In coordination with each Service and operating Division of C/SEC, determines characteristics and organization (cryptonets, cryptochannels) of cryptosystems which will be brought into use by the introduction of new crypto-equipment

5 Summarizes data supplied by the Services on the rate of use of cryptomaterial for comparison with production rates and determination of trends

6 Follows production activities through close and continuous contact with production units Assists divisions in overcoming problems in meeting time schedules and target quotas

7 Based upon studies of production rates compared with production objectives, recommends areas where simplification studies would be useful and where changes should be made in work measurement points to yield accurate and useful data

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8 Based upon JCS plans and Service requirements, prepared mobilization plans for the Office of Communication Security in conjunction with the C/SEC staff groups and operating Divisions Outlines expansion of production facilities, personnel needs, and increases in procurement activity Maintains check list of emergency actions to be taken in event of mobilization Prepares Disaster Plan for C/SEC in conjunction with operating Divisions

9 Performs such other duties as assigned by the Chief, Planning Group

NSA - 4024

EO 3.3(h)(2)

PL 86-36/50 USC 3605

## JOINT-COMBINED-NATO SYSTEMS PLANNING SECTION

1 For cryptosystems (channels, nets etc ) and tactical cryptomaterial involving extensive usage and high volume production, investigates COMBINED and NATO need and, in conjunction with operating divisions, initiates plans relating to organization and supply of the material

2 Performs special planning relating to Combined US-UK and NATO communication security materials and operations with particular emphasis upon organization, supply and use of cryptosystems Coordinates, with the Office of Communication Security Divisions and Logistics Division (17), all Office of Communication Security proposed actions and agreements involving production or procurement of cryptomaterial for COMBINED and NATO use Follows through on all COMBINED and NATO agreements, including the special BRUSA COMSEC conferences, to assure fulfillment of agreements

4 Represents NSA as member of the Combined Security and Cryptographic Panel of the CAN-UK-US Joint-Communications-Electronics Committee (JCEC) and as a member on the Communication Security Panel of the Communications Electronics Coordinating Section (CECS) of the Standing Group, North Atlantic Military Committee

5 Maintains direct and continuous liaison with the U S Services, the U K , Canada, the Standing Group North Atlantic Military Committee (CECS) and SHAPE and SACLANT Communication Security Organizations

6 Maintains necessary records and files pertaining to CAN-UK-US and NATO matters affecting COMSEC, and prepares Office of Communication Security papers and correspondence for submission to the CAN-UK-US Joint Communications-Electronics Committee (JCEC) and to the Communications-Electronic Coordination Section (CECS) of the Standing Group, or through the Standing Group to NATO nations and commands

7 Performs short term operational planning projects which do not fall into activities of any other Planning Group section

8 Performs such other duties as assigned by the Chief, Planning Group

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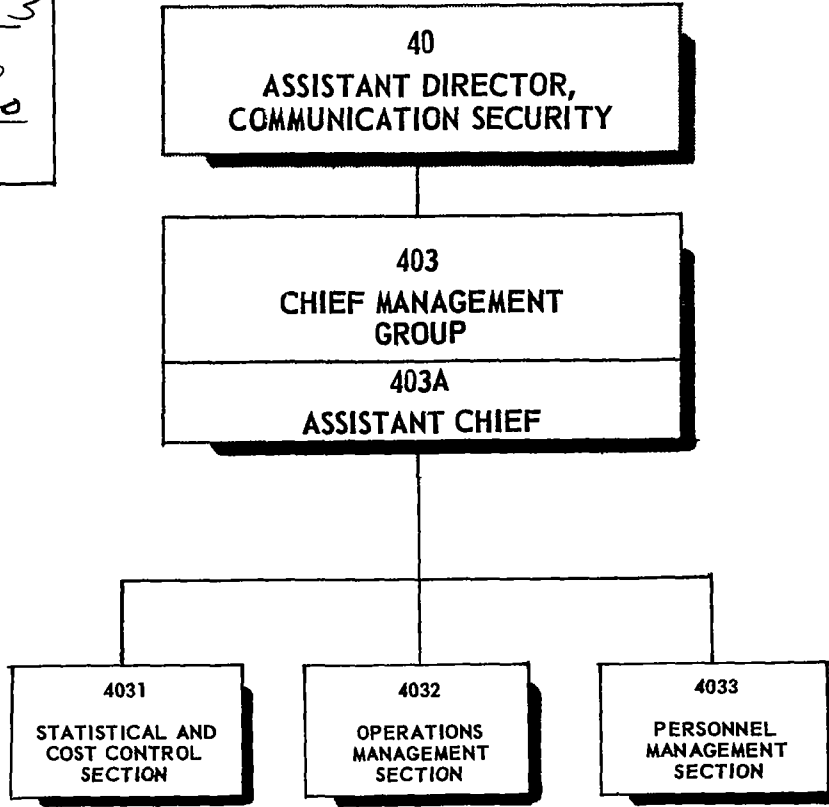
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APPROVED 22 June 1953  
*(date)*  
*J. M. Bushnell*  
 LCDR J M BUSHNELL, USN  
 CHIEF, MANAGEMENT GROUP

APPROVED 24 June 53  
*(date)*  
*F. E. Herrelko*  
 COL F E HERRELKO, USAF  
 CHIEF, OFFICE OF C/SEC

ORGANIZATIONAL CHART OF  
MANAGEMENT GROUP - NSA 403



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## NSA - 403

## MANAGEMENT GROUP

1. Establishes and maintains programs for realistic and effective business and plant management of C/SEC with emphasis upon methods, cost and utilization of resources in order that C/SEC may effectively meet requirements of the U.S. Armed Forces, other U. S. Government Agencies, and combined and NATO organizations.
2. Represents the Assistant Director, Communication Security, on management matters.
3. Coordinates and supervises the application of all training policies and procedures within C/SEC.
4. Coordinates with C/SEC operating Divisions and Offices with respect to specific job requirements both military and civilian, and submits to Personnel Division (15) for procurement.
5. Translates bulk allotments of military and civilian personnel into NSA-40 Tables of Distribution and makes intra-office assignments.
6. Performs such other duties as assigned by the Assistant Director, Communication Security.

## NSA - 4031

## STATISTICAL AND COST CONTROL SECTION

1. In conjunction with the Logistics Division, the Comptroller, and C/SEC operating Divisions, establishes and reviews stock control and supply procedures required for efficient conduct of C/SEC operations.
2. In coordination with the Comptroller and C/SEC operating Divisions, develops and administers a cost accounting system within C/SEC. Makes adaptations or changes in system necessary to fit it to C/SEC organization, production program, and Fiscal structure.
3. Establishes and maintains Fiscal records of C/SEC. Keeps operating Divisions informed of availability of funds. In coordination with operating Divisions, determines supplementary fiscal records to be maintained in the Divisions. Conducts audits of internal C/SEC ~~security~~ records.
4. Obtains, summarizes, and publishes production and cost data of the operating Divisions.
5. Consolidates periodic progress reports, monthly operational summaries, quarterly and annual reports, and presentation data for C/SEC.
6. Reviews requisitions and issue slips prepared by operating Divisions for availability of funds, and appropriateness of fiscal citations, and record notations.
7. Performs such other duties as assigned by the Chief, Management Group.

## NSA - 4032

## OPERATIONS MANAGEMENT SECTION

1. Conducts a continuing management improvement program to assure conservation and utilization of material and equipment.

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- 2 In conjunction with the Comptroller and operating Divisions, devises and conducts work simplification and method studies, evaluates the results thereof, and initiates the necessary action when and as required to insure that administration and production procedures are economical and efficient
- 3 Analyzes organizational and proposed organizational changes for C/SEC in order to advise on whether organization is consistent with principles of good management
- 4 Administers the allocation of space within C/SEC and in coordination with operating Divisions insures its proper utilization
- 5 In conjunction with the Comptroller and operating Divisions, devises and conducts work measurement programs suitable to C/SEC production techniques and needs
- 6 Reviews operating Division records of machine utilization for the purpose of taking action to improve utilization and, in coordination with operating Divisions, develops machine replacement programs
- 7 Recommends to the Assistant Director, Communication Security, manpower allocations in accordance with long-range production plan based upon recommendations of the Planning Group and the operating Divisions. Reviews and advises from management aspect changes in critical grades
- 8 Conducts special management projects and surveys as required
- 9 Administers within C/SEC the NSA reports and forms control program
- 10 In conjunction with and under the direction of the Comptroller conducts surveys as approved by the Assistant Director, Communication Security
- 11 Performs such other duties as assigned by the Chief, Management Group

## NSA - 4033

## PERSONNEL MANAGEMENT SECTION

- 1 Conducts a continuing management improvement program to assure conservation and utilization of manpower
- 2 Originates and coordinates personnel relations programs
- 3 Coordinates specialized on the job training as required by NSA-40 personnel
- 4 Coordinates with NSA-40 offices and Divisions with respect to specific job requirements and submits to NSA-15 for procurement action
- 5 Makes intra-office assignments
- 6 Translates bulk allotment of military and civilian personnel into NSA-40 tables of distribution
- 7 Administers the efficiency awards program within C/SEC
- 8 Coordinates orientation and training tours within C/SEC
- 9 Recreation Council Representative for C/SEC
- 10 NSA Credit Bureau representative for C/SEC
- 11 Performs such other duties as assigned by the Chief, Management Group

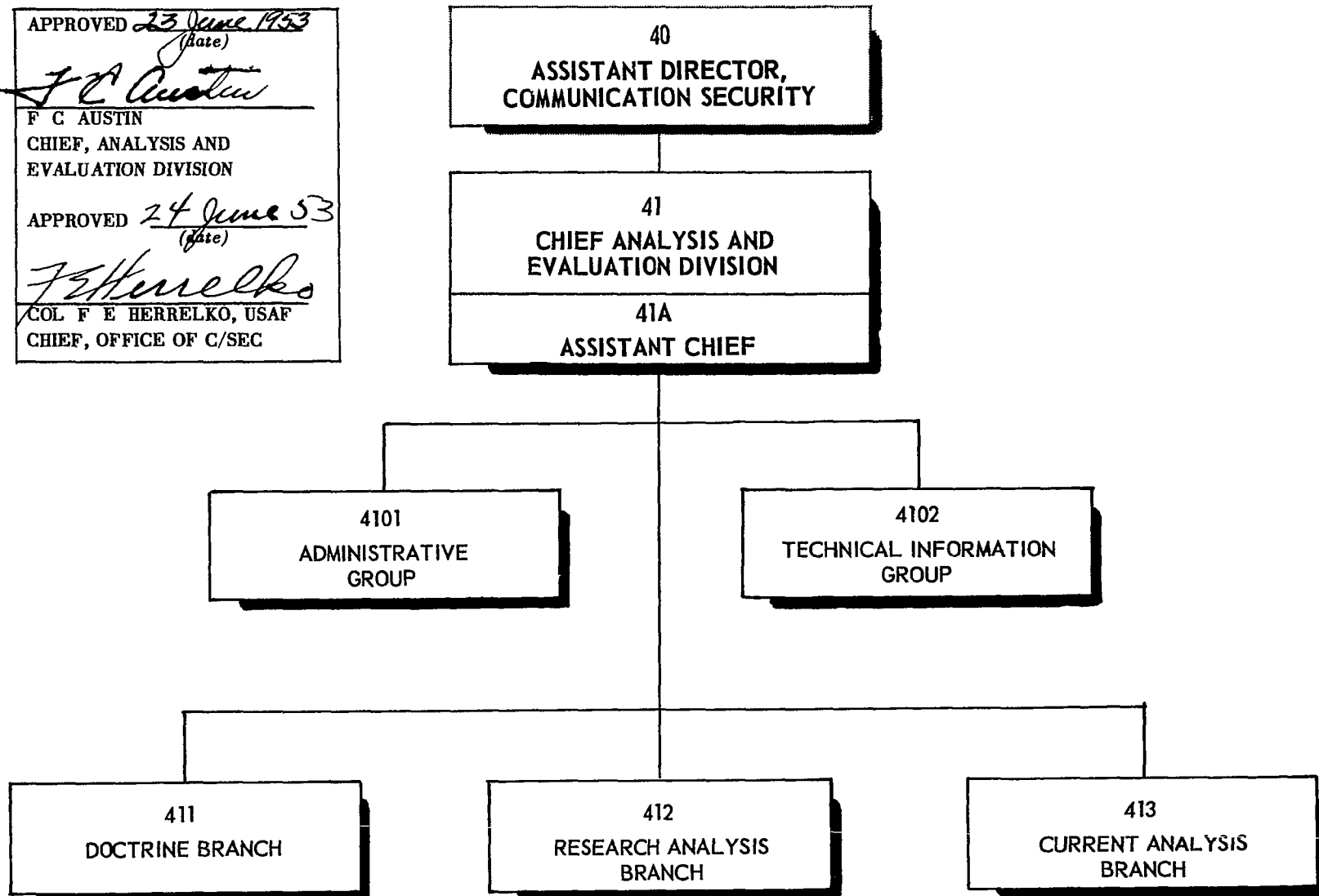
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ORGANIZATIONAL CHART OF ANALYSIS AND  
EVALUATION DIVISION - NSA 41

APPROVED <u>23 June 1953</u> (date)
<i>F C Austin</i>
F C AUSTIN CHIEF, ANALYSIS AND EVALUATION DIVISION
APPROVED <u>24 June 53</u> (date)
<i>F E Herrelko</i>
COL F E HERRELKO, USAF CHIEF, OFFICE OF C/SEC



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## NSA-41

## ANALYSIS AND EVALUATION DIVISION

- 1 Responsible for the preparation of COMSEC policies, and doctrine for Armed Forces, Combined and NATO application
- 2 Responsible for preparation of policies and doctrine in the use of strategic communications cover and deception, coordinating and obtaining approval of proper authorities as necessary
- 3 Directs the implementation of policies and doctrine in the Armed Forces pertaining to COMSEC and strategic communications cover and deception
- 4 Originates publications governing doctrine, procedures and techniques
- 5 Determines the security afforded to communications by cryptosystems, COMSEC equipment and communication procedures In conjunction therewith recommends or requests adaption of the most secure systems, devices or procedures and when appropriate devises secure systems and procedures
- 6 Performs continuing analysis of Armed Forces, Combined and NATO communications In conjunction therewith evaluates communications procedures and practices as they affect the security of current communications, to insure conformity of communication procedures with the requirements of communication and determines the effect of discrepancies, violations and variations in procedure on the security of communications
- 7 Arranges for and obtains such available intelligence as deemed necessary
- 8 Compiles certain historical data and maintains reference material pertinent to Division operations
- 9 Obtains and evaluates information indicative of the cryptologic potential and accomplishments of foreign countries
- 10 Performs such other duties as assigned by the Assistant Director, Communication Security

## NSA-4101

## ADMINISTRATIVE GROUP

- 1 Coordinates and supervises the application of all administrative policies, regulations and procedures
- 2 Performs civilian and military personnel duties
- 3 Administers Top Secret Control

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- 4 Maintains cost accounting records
- 5 Insures correct preparation and routing of correspondence
- 6 Provides mail and central file service
- 7 Maintains Cryptographic Account
- 8 Provides logistical support
- 9 Supervises physical security
- 10 Insures that adequate cleanliness of division spaces is maintained
- 11 Performs other duties as may be assigned by the Chief, Analysis and Evaluation Division

## NSA-4102

## TECHNICAL INFORMATION GROUP

- 1 Maintains and directs necessary liaison with other organizational segments of NSA and outside intelligence agencies to insure that information of intelligence interest to the Division is effectively provided
- 2 Keeps Division and Branch Chiefs informed concerning the intercept, cryptanalytic, traffic analytic, and military jamming capabilities and successes of foreign countries
- 3 Provides periodic reports on foreign cryptologic potential as directed
- 4 Prepares historical reports of a technical nature on U S cryptologic activities as directed
- 5 Maintains technical reference material (other than registered cryptographic) necessary for the effective performance of the Division mission
- 6 Serves as Consultant to Branch and Division Chiefs in determination of the probability of success of foreign cryptologic effort against U S Communications Security
7. Performs such other functions as may be directed by the Chief, Analysis and Evaluation Division

## NSA-411

## DOCTRINE BRANCH

- 1 Formulates the basic policies and regulations for maintenance of Communication security in the operation of various cryptosystems and prepares the specific crypto-operating instructions for

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the individual cryptosystems Procedures governing the use of specific cryptosystems are coordinated with the Research Analysis Branch as required

2 Prepares the basic policies for maintenance of physical security of cryptomaterial in all phases of its handling and prepares specific instructions governing that handling

3 Promulgates procedures for reporting violations of physical security and violations of cryptosecurity

4 Reviews all reports of violations in order that operating instructions may be revised to minimize violations arising from inadequate instructions

5 Performs procedural evaluations of all existing and proposed cryptosystems and COMSEC mechanisms and devices

6 Recommends features for new crypto-equipments which will make them operationally more efficient

7 Determines physical characteristics of rotors, cores, notch rings, etc , which bear directly on operating procedures such as identification patterns, bench marks, assembly devices, etc

8 Conducts or arranges necessary tests and studies to establish the validity of proposed procedures

9 Determines the format for key lists based on variables stipulated by NSA-412 and composes key list specifications showing both the nature of the variables to be included and the format to be used in their presentation

10 Coordinates with NSA-412 on their cryptodata sheets prior to their dissemination to insure that security and operational requirements are compatible

11 Review letters of promulgation prepared by NSA-43 to insure that they contain correct information relative to the physical security and handling of the subject documents and/or equipment

12 Reviews COMSEC publications relating to procedural matters which have been originated by other Offices or Agencies and makes recommendations to insure conformance with COMSEC requirements

13 Maintains liaison as appropriate with other NSA organizations and other governmental agencies to give necessary technical assistance and advice in communication security matters

14 Prepares new policies and executes established policies governing the use of strategic communications cover and deception, reviews plans and policies of other preparing organizations in this field, and provides such technical advice and assistance as may be required by cognizant Joint and Service agencies engaged in cover and deception activities

15 Provides, as required, special training and instructional material for use of personnel engaged in COMSEC activities

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- 16 Advises other NSA organizations on matters pertaining to cryptologic countermeasures which are within the scope of NSA responsibility
- 17 Determines the criteria for approved circuits
- 18 Performs such other duties as assigned by the Chief, Analysis and Evaluation Division

## NSA-412

## RESEARCH ANALYSIS BRANCH

- 1 Accomplishes evaluation of the cryptographic security of all existing and proposed cryptosystems for U S , Combined and NATO use
- 2 Accomplishes evaluation of traffic flow security of all systems intended to provide such security
- 3 Accomplishes evaluation of inherent security of communications procedures, devises secure systems for call-signs, addressing methods, authentication, etc
- 4 Accomplishes security evaluation of non-cryptographic communications equipments which have security features
- 5 Establishes requirements based on analysis for operating procedures which will provide the maximum of cryptosecurity or traffic flow security compatible with operational requirements
- 6 Establishes cryptosecurity standards and criteria for use in the production of keying materials
- 7 On request, recommends for the use of the Services, other U S agencies or NATO countries special cryptosystems that may be specially devised or adapted for a stated purpose
- 8 Exercises technical control of the cryptographic aspects of communications cover and deception
- 9 Evaluates reports of violations of cryptosecurity that require application of cryptoanalytic techniques, recommends declaration of compromise or remedial action where appropriate
- 10 Advises on cryptosecurity aspects of violations of the physical security of cryptomaterial
- 11 Reviews operating procedures and documents as required to insure conformance with requirements for cryptosecurity and transmission security
- 12 Undertakes evaluation of intelligence as necessary to insure proper evaluation of security of U S communications in the light of foreign cryptologic potential

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13 Devises new techniques of analysis, where these are applicable, revises existing security evaluations and requirements for operating procedures

14 Maintains liaison as necessary with other NSA Branches and Divisions

15 Prepares cryptodata sheets for the purpose of informing the Services of the nature of systems under development and the major procedural rules expected to apply in the use of the systems, prepares similar documents on existing systems as reference material for communications personnel

16 Performs such other duties as assigned by the Chief, Analysis and Evaluation Division

## NSA-413

## CURRENT ANALYSIS BRANCH

1 Conducts complete security analysis of communication circuits and nets as required, to determine the over-all security of these and prepare recommendations for the improvement of security. In the course of this analysis it applies traffic analysis techniques to friendly circuits in order to determine the amount and kind of information which can be so derived from friendly communications

2 Conducts analysis of encrypted traffic volume reports and of samplings of encrypted traffic to detect unreported violations of cryptographic procedures, to derive statistics necessary for the evaluation of suspected cryptographic compromises, and to provide a basis for the evaluation of the effectiveness of the cryptonet structure

3 Investigates reports of violations of communication procedures, practices dangerous to security, and suspected compromise to determine the effects of these upon the current state of communication security and to propose remedial action after evaluation. (When evaluation requires the application of cryptoanalytic techniques, the final evaluation or a review of the evaluation will be made by the Research Analysis Branch )

4 Conducts analysis required for strategic manipulative communication cover and deception programs, prepares control traffic and traffic release schedules, and conducts concurrent evaluation of programs

5 Prepares materials based on current analysis as required in support of Division missions, including Division responsibilities for training in communication security and the preparation of precedural publications

6 In coordination with the Research Analysis Branch develops new techniques of security analysis and of analysis for manipulative communication cover and deception

7 Conducts continuous communication security surveillance of National Security Agency communications

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8 Establishes the requirements for submission to the National Security Agency of monitor copy and of samplings of encrypted traffic, of reports to the National Security Agency concerning circuit and encrypted traffic volume data, and of reports to the National Security Agency concerning violations of communication security procedures, practices dangerous to security, and suspected compromise

9 Establishes procedures for processing of data within the Branch, including the use of machine processing, and maintains statistical data concerning friendly communications. Specifically it maintains records concerning friendly security monitoring capabilities, concerning violations, practices dangerous to security, and suspected and actual compromise, concerning encrypted traffic volumes, and concerning traffic characteristics on circuits subject to manipulation in strategic manipulative communication deception programs

10 Performs such other duties as assigned by the Chief, Analysis and Evaluation Division

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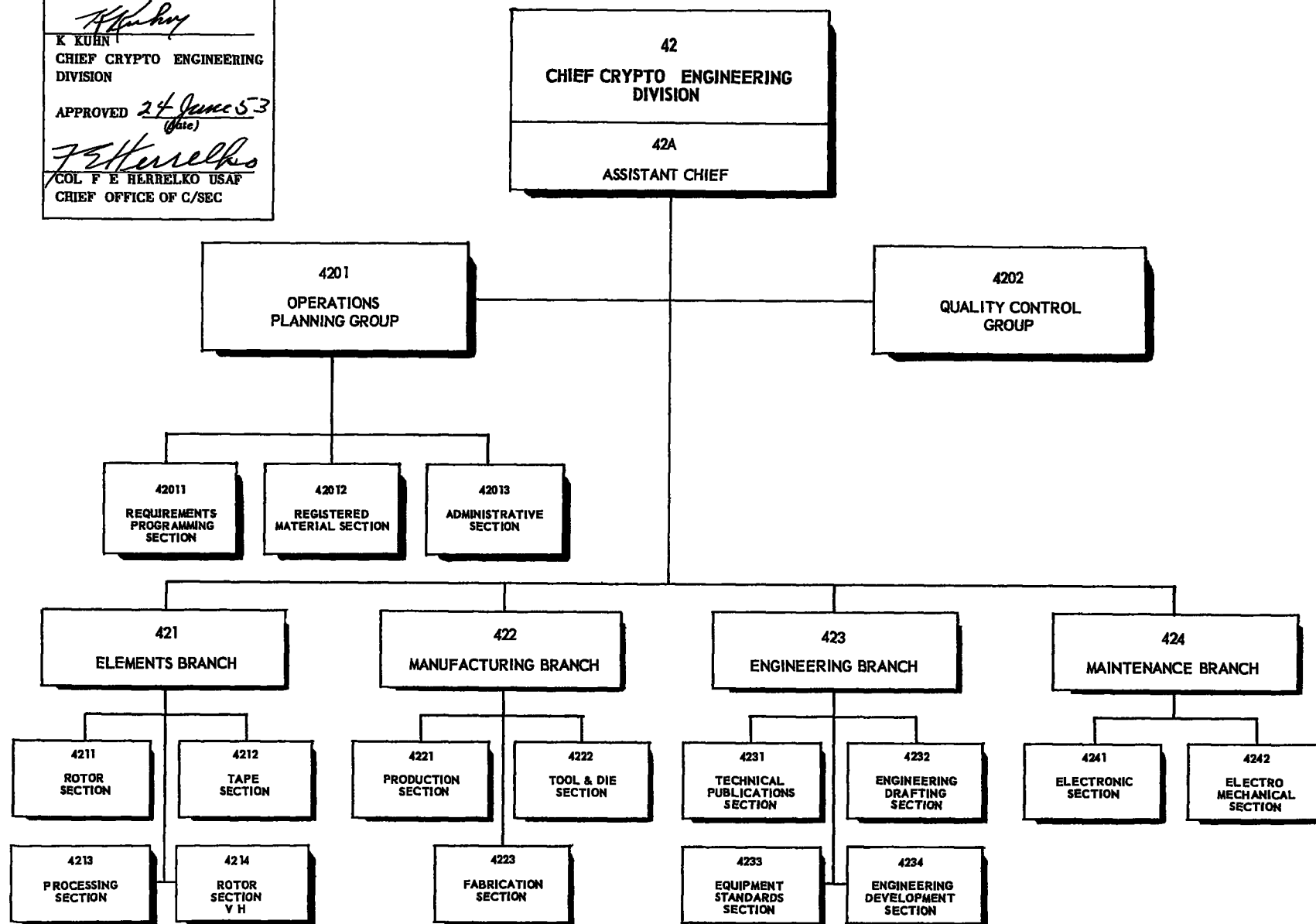
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APPROVED 22 JUNE 1953  
(date)  
*K. Kuhn*  
K KUHN  
CHIEF CRYPTO ENGINEERING  
DIVISION

APPROVED 24 JUNE 53  
(date)  
*F. E. Herrelko*  
COL F E HERRELKO USAF  
CHIEF OFFICE OF C/SEC

## ORGANIZATIONAL CHART OF CRYPTO-ENGINEERING DIVISION - NSA 42



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NSA-42

## CRYPTO-ENGINEERING DIVISION

- 1 Performs basic engineering analysis with respect to planning production <sup>methods</sup> ~~methods~~
- 2 Prepares engineering studies in methods and production control and efficiency of production methods
- 3 Performs fabrication, modification, production, testing, inspection, repair and maintenance of all crypto-mechanisms, laying elements, devices and equipment prior to issuance to using services and upon return therefrom
- 4 Prepares training manuals, course outlines, maintenance manuals and replies to technical inquiries from the field
- 5 Performs such other duties as assigned by the Assistant Director, Communication Security

NSA-4201

## OPERATIONS PLANNING GROUP

Supervises and directs the activities of the various sections which are responsible for operations and material requirements planning, budget preparation, fiscal and cost accounting, personnel procedures, registered publications storage and control Serves as Administrative staff office for the Division

Performs such other duties as assigned by the Chief, Crypto-Engineering Division

NSA-42011

## REQUIREMENTS PROGRAMMING SECTION

- 1 Initiates procurement for all items for which the Division is responsible
- 2 Coordinates with project engineers material requirements for special projects and prepares supply forecasts
- 3 Maintains complete and current project control records of property, equipment spare parts, subassemblies, and associated items
- 4 Prepares and distributes the cryptographic parts catalog used by NSA and the Services
- 5 Authorizes the release of parts and related items for NSA projects, and other users of crypto equipment
- 6 Compiles material and project cost data for regular and special reports as required
- 7 Maintains detailed procurement records, associated fiscal records, specifications and catalog reference files
- 8 Provides custodial and miscellaneous supply services
- 9 Maintains Division Memorandum Receipt account

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10 Maintains personnel, time and attendance, labor and leave records for <sup>NSA</sup>~~NSA~~-42, and records, verifies and distributes payroll checks and other personnel actions such as, notifications of change in job titles and salaries, section designations and change in leave category

11. Prepares and distributes monthly and special reports on work projects, production, fiscal and personnel status

12 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 42012

## REGISTERED MATERIAL SECTION

1 Establishes and directs policies and procedures for the distribution and accounting of registered crypto material, maintaining detailed records as prescribed by the Department of Defense security regulations for the handling of registered crypto material for the Division

2 Receives, stores and issues all registered crypto material for the Division

3 Assigns registry numbers for all crypto equipments produced under the cognizance of NSA-42

4 Responsible for the destruction of all registered and non-registered crypto material

5 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 42013

## ADMINISTRATIVE SECTION

1 Performs a variety of stenographic, typing and clerical duties for the Division

2 Sets up and maintains current files of correspondence, personnel records, travel requests and vouchers, and periodic and special one-time reports for the Division

3 Receives, routes and distributes all incoming and outgoing correspondence for the Division

4 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 4202

## QUALITY CONTROL GROUP

1. Directs and conducts quality control functions for the Division

2 Establishes and maintains a system of statistical quality control for parts, components, and equipments manufactured by NSA-42

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- 3 Performs and maintains a periodic and systemic inspection on all precision tools, jigs, gauges, and fixtures used by NSA-42
- 4 Devises methods and procedures for the inspection of parts, components and equipments
- 5 Performs inspection of all parts and materials ordered by NSA-42 to determine conformity to drawings and specifications
- 6 Establishes and performs an acceptable quality level inspection on certain equipments purchased by NSA-40 for the Services or NSA
- 7 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 421

## ELEMENTS BRANCH

- 1 Supervises and directs activities of various sections in the manufacture and inspection of all keying elements
- 2 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 4211

## ROTOR SECTION

- 1 Wires all rotors produced by NSA at NAVSECSTA

## NSA - 4212

## TAPE SECTION

- 1 Manufactures all one-time-tape produced by NSA
- 2 Produces M-209 key lists for the Services and NSA

## NSA - 4213

## PROCESSING SECTION

- 1 Performs the stamping of register numbers on all nameplates for registered crypto-equipment and sets of rotors manufactured by NSA-42
- 2 Performs the stamping of all identifying matter on individual rotors and one-time-tapes manufactured by NSA-42
- 3 Performs the phases of beading, washing, contouring, broaching, etc , of rotor processing
- 4 Rehabilitates all reused rotors

## NSA - 4214

## ROTOR SECTION V H

- 1 Wires all rotors produced by NSA at Vint Hill Farms

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## NSA - 422

## MANUFACTURING BRANCH

- 1 Supervises and directs the activities of various sections engaged in the manufacture of spare parts, tools, dies, jigs and fixtures and assembly of crypto-equipment
- 2 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA - 4221

## PRODUCTION SECTION

- 1 Manufactures parts for communication, crypto, production and special equipments

## NSA - 4222

## TOOL &amp; DIE SECTION

- 1 Designs and manufactures tools, dies, jigs, and fixtures
- 2 Provided maintenance service on all shop equipments used by NSA-42

## NSA - 4223

## FABRICATION SECTION

- 1 Rehabilitates, fabricates, and modifies communications, crypto, production and special equipments

## NSA - 423

## ENGINEERING BRANCH

- 1 Supervises and directs activities of various sections performing basic engineering functions and associated support activities for the Division
- 2 Performs such other duties as assigned by the Chief, Crypto-Engineering Division

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## NSA - 4231

## TECHNICAL PUBLICATION SECTION

- 1 Prepares Repair and Maintenance Instructions on COMSEC equipment.
- 2 Prepares instructions on modifications and special installations of COMSEC equipment and changes to Repair and Maintenance Instructions
- 3 Establishes specifications and standards used by contractors in the preparation of Repair and Maintenance Instructions on COMSEC equipment

## NSA - 4232

## ENGINEERING DRAFTING SECTION

- 1 Prepares various types of drawings for the manufacture and/or procurement of parts, special devices, production equipment and COMSEC equipments
- 2 Prepares design layouts of development and production models of COMSEC equipment
- 3 Designs and prepares drawings of tools, jigs, and fixtures
- 4 Prepares diagrams and drawings used as illustrations in maintenance instruction manuals
- 5 Maintains complete file of all drawings and applicable specifications produced in NSA-42 and those prepared for NSA-42 by contractors
- 6 Establishes specifications and standards governing drafting practices employed on NSA drawings
- 7 Provides general drafting and ozalid printing services

## NSA - 4233

## EQUIPMENT STANDARDS SECTION

1. Investigates and evaluates field trouble reports on COMSEC and associated equipment
- 2 Participates in Service test of new COMSEC equipment
- 3 Investigates and evaluates new ideas or changes to COMSEC equipment
- 4 Performs maintenance evaluation on new and existing COMSEC equipment
- 5 Establishes initial requirements for spare parts, maintenance tools and test equipment on new COMSEC equipments
- 6 Prepares programs and conducts courses for maintenance training

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## NSA-4234

## ENGINEERING DEVELOPMENT SECTION

- 1 Designs, develops and manufactures parts for experimental models
- 2 Designs and develops production models of new and modified equipments and special devices
- 3 Establishes standards and specifications on equipments, devices, and components produced by NSA-42

## NSA-424

## MAINTENANCE BRANCH

- 1 Supervises and directs the activities of personnel engaged in maintaining NSA manufacturing and operational communications equipment
2. Performs such other duties as assigned by the Chief, Crypto-Engineering Division

## NSA-4241

## ELECTRONIC SECTION

- 1 Provides electronic maintenance of communications, crypto, production, and special equipments

## NSA-4242

## ELECTRO-MECHANICAL SECTION

- 1 Provides electro-mechanical maintenance of teletypewriter, communications, crypto, production and special equipments

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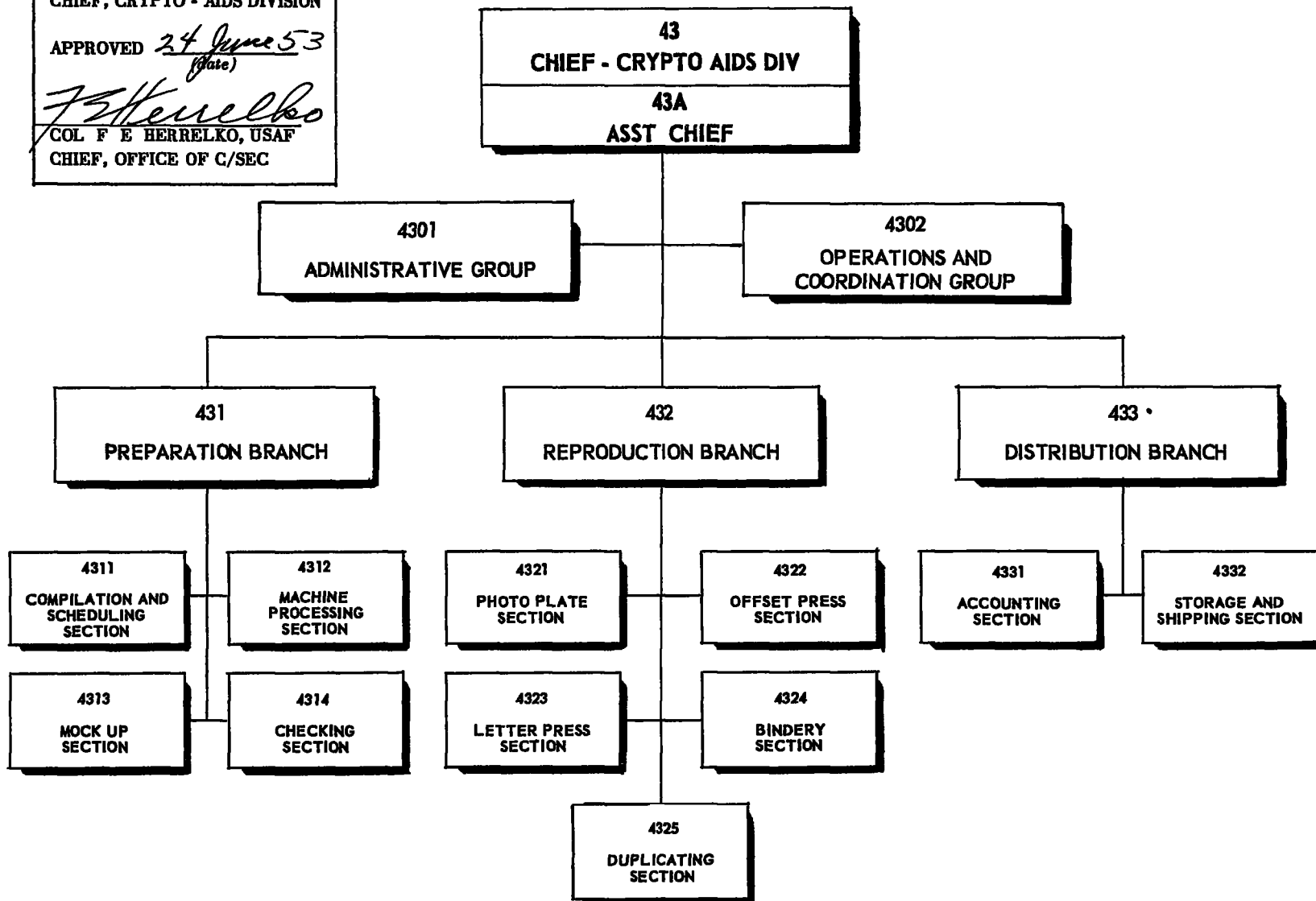
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APPROVED *24 May 1953*  
(date)  
*[Signature]*  
CDR D I MATHER, USN  
CHIEF, CRYPTO - AIDS DIVISION

APPROVED *24 June 53*  
(date)  
*[Signature]*  
COL F E HERRELKO, USAF  
CHIEF, OFFICE OF C/SEC

ORGANIZATIONAL CHART OF CRYPTO-AIDS  
DIVISION - NSA 43



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## NSA-43

## CRYPTO-AIDS DIVISION

1 Supervises and directs the activities of the various Branches within the Division which are responsible for the coordination of requests for programming, preparation, reproduction, storage, distribution and accounting of all crypto material produced This includes Service, Joint, Combined, NATO and non-military material

2 Exercises overall coordination control of the various branches in accomplishing the Division's assigned responsibilities

3 Functions as the NATO Distribution and Accounting Agency

4 Renders technical assistance and coordinates preparation of certain cryptographic material with other Division and Offices concerning methods and facilities to accomplish a project

5 Performs such other duties as assigned by the Assistant Director, Communication Security

## NSA-4301

## ADMINISTRATIVE GROUP

1 Develops and coordinates the Crypto-Aids portion of the C/SEC budget

2 Maintains stock levels and initiates procurement actions to obtain necessary production equipment, material and supplies required for the production of printed cryptomaterial

3 Maintains property accountability records for all property held within the Division

4 Maintains and supervises the Division cost accounting program Determines the cost and provides the billing of cryptomaterial produced by NSA for outside agencies

5 Performs all civilian and military administrative functions within the Division

6 Prepares recurring administrative reports as required

7 Performs such other duties as assigned by the Chief, Crypto-Aids Division

## NSA-4302

## OPERATIONS COORDINATION GROUP

1 Receives, reviews, and processes requests for crypto material including rotors, tapes and pads for use by the U S Armed Forces, other U S Government Agencies, and certain allied governments Provides liaison with the Services and other government agencies as required

2 Assigns nomenclature to Armed Forces Cryptographic systems, documents, machines, and related material Maintains appropriate records in connection therewith

3 Schedules the preparation and production of cryptomaterial including the determination of the reproductive process to be used with printed material, including changes, and corrections thereto sufficiently in advance of their effective date to assure adequate time for distribution

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- 4 Renders technical advice to other Divisions and Offices concerning methods and facilities to accomplish a project
- 5 Prepares operational plans and reports as required.
- 6 Assists in the development and preparation of mobilization plans
7. Participates in the planning and production of NATO and Combined Cryptomaterial
- 8 Performs such other duties as assigned by the Chief, Crypto-Aids Division

## NSA-431

## PREPARATIONS BRANCH

1. Supervises and directs the activities of the various sections which are responsible for compilation, scheduling, machine processing, mock-up and cryptographic checking
2. Performs such other duties as assigned by the Chief, Crypto-Aids Division

## NSA-4311

## COMPILATION AND SCHEDULING SECTION

- 1 Initiates and schedules requests for production of cryptomaterial on a supersession basis
- 2 Coordinates the format for all cryptographic documents and prepares letters of promulgation concerning their production, distribution and use
- 3 Develops and produces rotor wiring diagrams and cam contour patterns and provides cryptographic checks for all key lists using these items
- 4 Maintains Master Control Records of all established cryptographic systems including the initiation, supersession rate, and compromises

## NSA-4312

## MACHINE PROCESSING SECTION

1. Operates IBM Equipment with specialized devices in the preparation, processing and production of one time pads, codes, random scrambles, and other cryptographic documents

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NSA-4313

## MOCK-UP SECTION

- 1 Translates original draft of cryptographic material into suitable form for lithographic processing by means of PSM typewriters, varitypers, phototype and other specialized techniques
- 2 Prepares mimeograph stencils in the accepted format for the reproduction of cryptographic material requiring limited distribution

NSA-4314

## CHECKING SECTION

- 1 Engages in the cryptographic checking and proof reading of mock-up copy and stencils prior to entering the reproduction process

NSA-432

## REPRODUCTION BRANCH

- 1 Supervises and directs the activities of the various sections which are responsible for photoplate making, offset and letterpress reproduction, and final finishing (bind) of printed material produced with the Division
- 2 Performs such other duties as assigned by the Chief, Crypto-Aids Division

NSA-4321

## PHOTO PLATE SECTION

- 1 Photographs for the purpose of producing lithographic plates, all copy required to be reproduced by the offset printing method
- 2 Reproduces by the photographic process special jobs for the various Offices and Divisions within the Agency
- 3 Prepares, strips and opaques negatives required for producing offset plates
- 4 Sensitizes, exposes, and develops all lithographic plates used in the reproduction branch  
Controls the regraining of used plates

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## NSA-4322

## OFFSET PRESS SECTION

1 Reproduces by the offset method in quantity cryptographic and cryptologic material, forms, and miscellaneous printed items

## NSA-4323

## LETTER PRESS SECTION

1 Translates original draft of cryptographic and cryptologic material into suitable form for either letter press or lithographic processing by means of monotype and hand composition

2 Reproduces by the letter press method in quantity cryptographic and cryptologic material, forms and miscellaneous printed items

## NSA-4324

## BINDERY SECTION

1 Provides all finishing operations for cryptomaterial produced by the offset press, letter press and machine processing section, including cutting, folding, collating, stitching, padding, strip cutting and packaging

2 Visually checks all documents for completeness and quality

3 Establishes accountability for all cryptographic documents by the assigning of register numbers

## NSA-4325

## DUPLICATING SECTION

1. Produces by the Zerox process, paper plates for limited production of specialized types of material by the offset method

2 Reproduces by the mimeograph process, specialized types of material

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## NSA-433

## DISTRIBUTION BRANCH

- 1 Supervises and directs the operation of the various sections concerned with the storage, distribution and accounting of registered cryptographic materials
- 2 Performs such other duties as assigned by the Chief, Crypto-Aids Division

## NSA-4331

## ACCOUNTING SECTION

- 1 Maintains master accounting records covering the bulk distribution of registered cryptographic documents of the Armed Forces, other U S Government Agencies and Allied Governments
- 2 Accounts for all registered cryptographic documents issued to custodians within the Agency
- 3 Maintains historical library of all registered crypto documents
- 4 Assumes initial accounting for all cryptomaterial produced by Foreign Governments for use of U S Armed Forces and/or NSA

## NSA-4332

## STORAGE AND SHIPPING SECTION

- 1 Inventories all cryptographic material received for distribution
- 2 Provides for limited storage of registered cryptomaterial as required
- 3 Makes necessary arrangements for receipt and dispatch of crypto material by the Armed Forces Courier Service, Post Office Department, Railway Express, and certain allied governmental courier services
- 4 Issues<sup>S</sup> registered cryptographic material to custodians within the Agency

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