

Chief Signal Officer

Director of Intelligence

12 Dec 1947

Department of the Army

ATTN: Operations and Planning Section

Maj Whitehead/8129 Ext 216

Army Communic. Service Division

1. The Army Security Agency is placing in war reserve stock the quantities of cryptographic devices indicated below:

SIGABA	2,000
SIGIVI	4,000
SIGAMUG	175 -> 1000
SIGCUM	1,250 \ A 5 Am 2 -
SIGHUAD	500
SIGN U N	150

Plans have been made for the reconditioning of these machines and their packaging in vapor proof metal barriers for long term storage.

- 2. A 131B2 S/S, as well as various other teletype equipments, is required for each cryptographic installation utilizing either SIGCUM or SIGHUAD. No provision for the storage of SIGTOT (131B2 S/S and 14AB Transmitter Distributor) has been . made, since these equipments are controlled by the Chief Signal Officer.
 - 3. Information is requested as to the present availability of 131B2 S/S in Class A condition and plans of the Chief Signal Officer concerning the long time storage of this equipment for use with SIGCUM and SIGHUAD.

FOR THE DIRECTOR OF INTELLIGENCE:

HAROLD G. HAYES Colonel, Signal Corps _ Chief. Army Security A ency

DEC 12 1017 SIGNED AND SENT OUT

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SUSPENSE COPY

C30AS-61

SUBJECT: War Reserve Stocks

11Decup

TO1

Chief Signal Officer

The Pentagon

Eashington 25, D. C.

ATTESTION: Operations and Flanning Section
Army Communications Service Division

l. Authority has been granted this agency to place in war reserve the quantities of cryptographic devices indicated below:

agadie	2000
SICIVI	4000
SIGAMOG	175
3 IGCUM	1250
SIGHUAD	500
KIKDIE	150

Plans have been made for the reconditioning of these as these and their packaging in vapor-proof metal barriers for long-time storage.

- 2. A 13182 3/3, as well as various other teletype squipments, is required for each cryptographic installation utilizing either SIGCUE or SIGHUAD. No provision for the storage of SIGTOT (13102 3/3 and 14AB Transmitter Distributor) has been made, since these equipments are controlled by the Chief Signal Officer.
- 3. Information is requested as to the present availability of 13182 5/3 in Class A condition and plans of the Chief Signal Officer concerning the long-time storage of this equipment for use with SIGCUM and SIGHUAD.

POR THE CHIEF, ARMY SOCURITY AGENCY:

HAMILL D. JOHES Major, Signal Corps Executive Officer

Saily as me gall



11 Dec 47



MUST REMAIN WITH ATTACHED PAPERS

NUMBER EACH MEMO OR REPLY IN LEFT BORDER, PLACE NAME, RANK AND TELEPHONE NUMBER BOTTOM OF EACH ACTION DRAW LINE UNDER EACH ACTION

ENTER FILE CLASSIFICATION ADJUTANT _

į	ТО	FROM	DATE	SUBJECT	
1.	AS-82	AS-81	4 Dec 47	Storage Program for Rotors and Documents	
				that Technical Staff be furnished information in regard to storage of rotors, SIGAMUG, SIGIVI, and documents.	
7	in such	IŲAD, and a manner	150 SIGN	ged in the rehabilitation of 2,000 SIGABA, 1,250 SIGCUM, IN. These items will be packed in moisture-proof barriers available for use at any time in the future. A companion ated equipment controlled by your Branch is necessary.	
				WILLIAM BRANN Chief, Technical Staff Security Division Extension 388	
	AS-81	AS-82	5 Dec 47		
	1. No provision is being made for long time storage of SIGAMUG inasmuch as there are none available for storage and no additional procurement is contemplated. 2000 SIGIVI will be processed by CSGAS-85 and turned over to CSGAS-82 for storage. 2. No plans are being made by this Branch for long time storage of documents such as keylists, operating and maintenance instructions, etc. Such decision is based on the impossibility of incorporating constant changes in such documents while packed and stored. Furthermore, rapid production of such material in an emergency would not entail any great difficulty.				
	SIGABA quantit which m rotors rotors	and SIGO ies suff ay be ne on order will be	UM rotors icient for eded in t , 2,060 s packed in	y for long time storage of a large supply of There are at present, rotors on order in r use with world wide, theater, and special systems he event of an emergency. Of the 3,190 sets of ets have been completed. When completed these wooden boxes and no special processing will be time storage. WILLIAM V. RUSSO Chief, Materiel Branch Security Division Extension 492	

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PAGE NO _____

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1. AS-65 48-80 14 BOV 47 AS-82

Packaging and Accounting for Reserve Cryptographic Devices

l. Authorisation has been received to package the following devices for long-term storage:

> 2000 SIGABA, W/SIGIVI 1000 310CUM 250 SIGHUAD 150 SIGNIN

- The packaging and accounting procedure as set forth below has been approved by the Director of Intelligence and will be followed in conducting this long-term atorage program.
- 3. The items to be stored will be reconditioned and cleaned and placed in the carrying case or safe provided for the equipment. A lucrication notice will be attached to the device in such a way that it will not be overlooked at the time the device is unpeckaged. Two designated officers will supervise the peckaging and be responsible for the correctness of the information stancilled on the setel barrier end the shipping box. At the time the carrying case or sefe is closed over the device, each of the certifying officers will transcribe the register number from the nameplate to a separate copy of Form CSGAS 1506, 9 October 1947 (Inclosure 1). These separate transcriptions will then be compared for secursey and, if correct, the device will be sealed in the metal barrier. After the cover has been soldered on the metal barrier, the short title(s), register number(s) and check this number with mesoplate on mechines will be stencilled thereon, the data checked by each officer and the barrier placed inside the shipping box. After the cover of the shipping box has been put in place and fastened, the short title(s), register number(s), fregile and upright indication will be stencilled on the tox and each officer will complete his copy of Fora GSGAS 1506 by affixing his signature and the date thereto. The two certificates for each peckers will then be filed in the records of CSGAS-82 until such time as the form mentioned in peragraph 7 is received from an accountable officer who We has unpacked the equipment for use. At that time, both forms representing the same item(s) of equipment may be destroyed and the regular procedures of account-/ ing placed into effect.
 - 4. There Marked. The short title(s) and register number(s) will be stencilled near the center of the metal barrier cover. The phrase "check this number with manaplate on machine" will be stencilled directly below the short title(s) and register number(s).
 - 5. Shipping Box. The short title(s) and register number(s) will be stencilled near the lower left corner on one side of the shipping box. "Fregile" will be stencilled diagonally ecross the sides and ends in such a position as not to interfore with the abort title and register markings. Upright position will be indicated

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1. AS-85 AS-80 14 Nov 47 AS-82

Packaging and Accounting for Reserva Cryptographic Devices (contd)

by arrows on both sides with the arrow heads pointing toward the top and "this side up" stencilled immediately above the arrow heads.

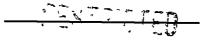
- 6. Accounting. In transfer of the packaged units from one custodian to another, the consolidated transfer report will list the units as *Packaged SIGABA, register numbers 1, 2, 3, 4, etc., * as may be applicable.
- 7. Prior to shipment of the device to a user, a form substantially as shown on Inclosure 2 will be securely fastened in the recessed portion at one end of the shipping box in a waxed envelope. This form will have the correct return address typed or stamped in at that time. The waxed envelope will be marked "Open First."
- 8. In view of the existing officer shortage, the officers required for cortification should be present only when actually necessary. These officers will be made available by AS-25 upon request from AS-80.
- a. At least one of the two certifying afficers will be from sources other than 43-82 or AS-65.
 - b. One of the two certifying officers will be Regular Army.

2 Incls

Form CSGAS 1506,
 9 Oct 47 (in trip)

2. Sample return form

H. L. CLARE Acting Chief, Security Division Extension 241



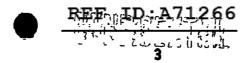
REF ID: A71266

MOTICE

CHECK THE REGISTER NUMBER OF THIS MACHINE IMMEDIATELY AGAINST
THAT SHOWN ON THE COVER OF THE SETAL BARRIER.
ENTER THE SHORT TITLE OF DEVICE
ENTER THE NUMBER SHOWN ON MAMEPLATE OF THE MACHINE
REGISTER NUMBER
ENTER THE NUMBER SHOWN ON COVER OF METAL BARRIES.
REGISTER BUMBER
SIGN CARD AND RETURN TO:
(Signature with rank & organization

FORM NO. 3

del .



CROSS REFERENCE SHEET

MAIN SUBJECT War Reserve Stocks

CLASSIFICATION NUMBER Equipment_Storage of Crypto

To AS_24

Date of Communication 10Nov 47

From AS_80

Date of Basic Document

BRIEF SUMMARY

It is considered essential that adequate stockpiles of cryptomechanisms be established to provide for implementation of the Mobilization Plan.

In order to establish a twenty month's adequate stockpile for cryptographic machines, it is recommended that authority be grant ed Security Division to place in war reserve the quantity of cryptographic devices indicated below:

SIGABA	2000	Sigcum	1250
SIGIVI	£ 000	SIGHUAD	500
SIGAMUG	175	SIGNIN	150

Mrs Beyke Classifier

Routed to File

Mrs Beyke Typist

Date of Classifying 24 Nov 47

CROSS REFERENCE NUMBERS

Post wur Planning

Reulement Wignal Requirements

WDGAS Form No. 1493 7 October 1946 44052

10 Nov47

THRU: AS20

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1. AS-24 AS-80 10 Nov 47

War Roserve Stocks

- 1. Eased on the Department of the Army Mobilization Plan 1, 1947, the Phased Mobilization Troop Sasis sets forth the activation schedules for all units which are to be mobilized after M-Day. The rate of activation will approximate 300,300 men per month toward a goal of 4,500,000 personnel for twelve periods and 8,000,000 personnel for twenty-four periods.
 - 2. It is considered essential that adequate stockpiles of cryptomechanisms be established to provide for implementation of the Mobilisation Flan.
 - 3. Cryptographic equipments have no commercial counterparts and therefore require considerable time for procurement. Eased upon experience in World War II, approximately eighteen to twenty months elapse between the initiation of contracts and actual delivery of an adequate stockpile of cryptomechanisms. Further, although new cryptomechanisms are in process of development, no bulk procurement is contemplated until emergency conditions warrant it. So for approximately eighteen to twenty months, existent cryptomechanisms must serve the using forces.
 - 4. In order to establish a twenty month's adequate stockpile for cryptographic machines, it is recommended that authority be granted Security Division to place in wer reserve the quantity of cryptographic devices indicated below:

SIGABA	2000
SIGIVI	4000
SIGANGG	175
SIGCUM	1250
SIGHUAD	500
BICRIE	150

Flans have been made for the reconditioning of these machines and their packaging in moisture-proof, vapor-proof metal barriers. Security Division has received approval for the accounting procedures to be used while the machines are in storage and during their distribution to using forces.

5. Justification for the above figures is as follows:

a. During the last war, 2,700 SIGABA were issued. Based on eight million troops in the field, this makes a ratio of 337 SIGABA per million men or 101 SIGABA per monthly increment of 500,000 men. To expedite operations, two SIGIVI baskets for each SIGABA is required. It is considered appropriate to maintain a quantity of SIGABOO baskets for combined usage.

REF_ID: A71266

1. AS-24 AS-80 10 Nov 47

War Reserve Stocks (contd)

- b. There were 2,500 SIGCUM issued during the last war. Using the above ratio, nimety-three SIGCUM will be required per month.
- c. The Airways and Air Communications Service requirements for M-Day are 250 SIGHUAD. Since there exists only 158 of these devices, some 500 SIGCUM (Converters M-288) will require medification to meet this and current requirements. It is further anticipated that a number of SIGHUAD will be required by other users, resulting in additional SIGCUM being changed over to meet those requirements.
 - d. The SIGHIE is an integrated device designed for field use by division and lower echelons. A number of requests were made by the Army Ground Forces during the last war for a device of this kind but none were issued because the machine was not available before the war ended. Although the Army and Air Force requirements are not known, it is considered appropriate to maintain a quantity of this device on hand in war reserve.

I. L. CLARK
Acting Chief, Security Division
Extension 241