

CSP 6620A

REGISTER NO.

SECRET-CRYPTO

CRYPTOGRAPHIC EQUIPMENT
PLANNING AND REFERENCE
GUIDE (U)

CSP 6620A

DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
SEPTEMBER 1962

EXCLUDED FROM AUTOMATIC
DECLASSIFICATION FOR DIR 5200.10
PPLY

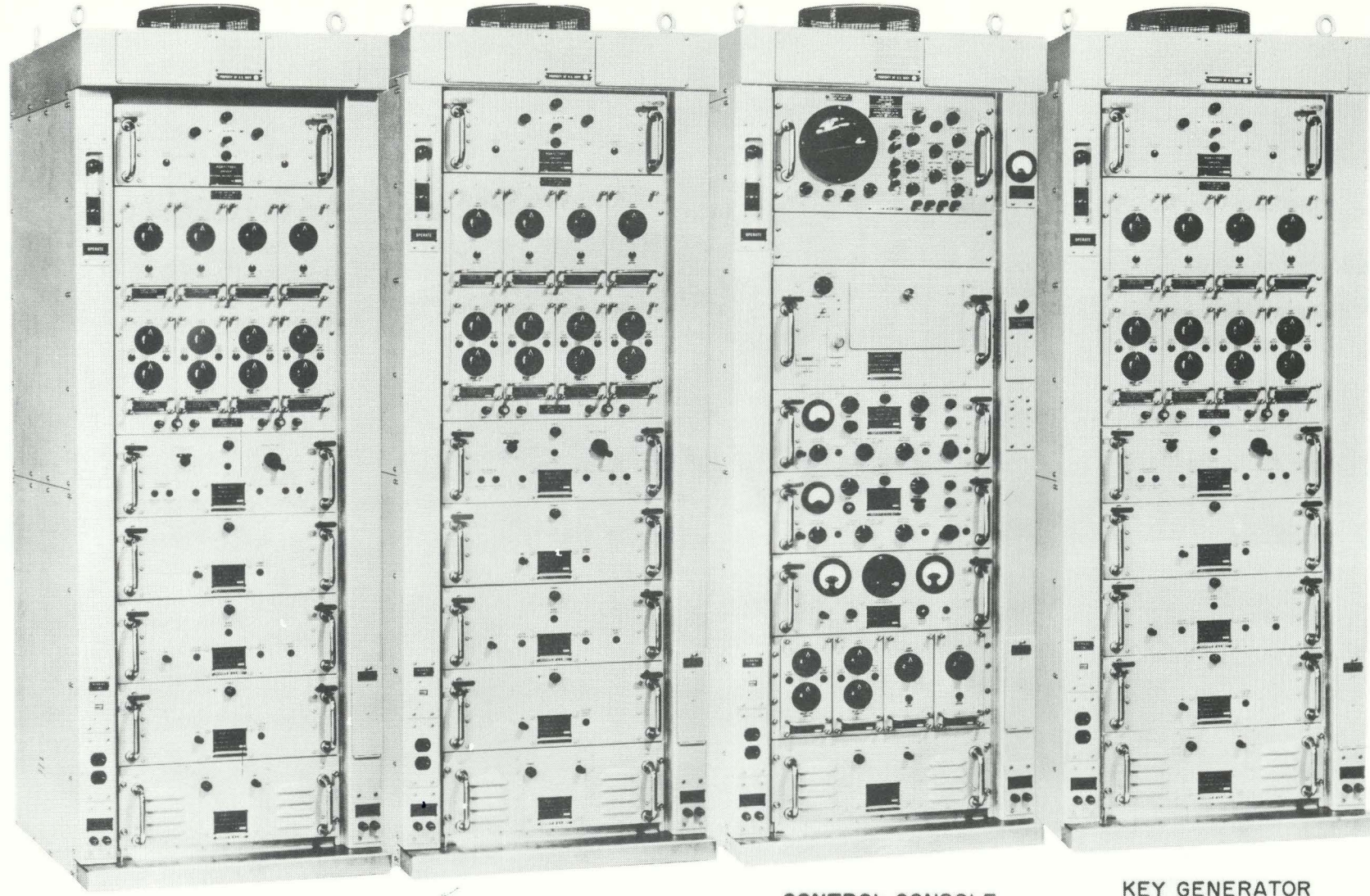
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DECLASSIFIED per SEC 3.4 E.O. 12958
by Director, NSA/Chief, CSS
[Signature] date 27 Oct 98

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ORIGINAL
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TSEC/KO-5



KEY GENERATORS
TSEC/KG-7

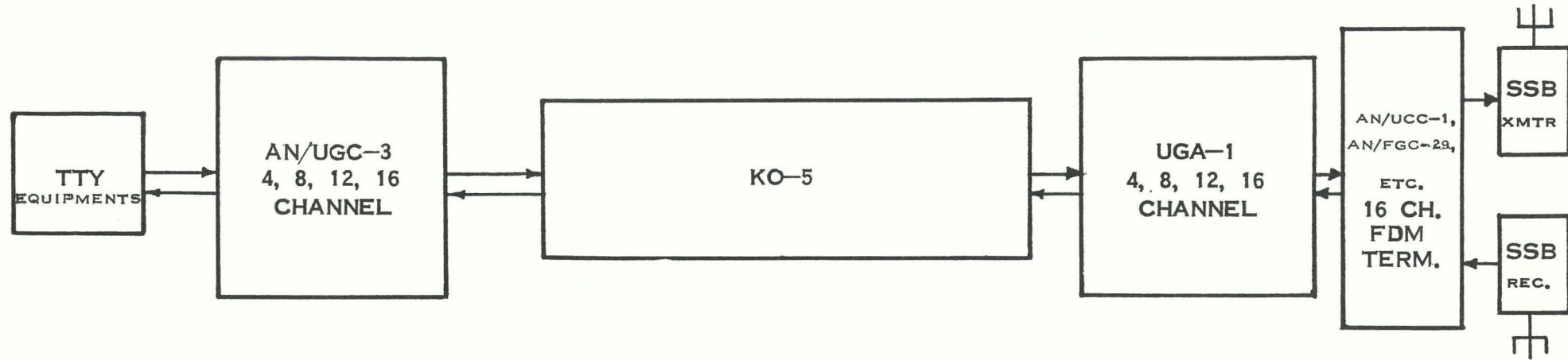
CONTROL CONSOLE
TSEC/HO-5

KEY GENERATOR
TSEC/KG-7

PRODUCTION MODEL

DESCRIPTION	<p>AN ON-LINE COMPLEX ELECTRONIC FULL DUPLEX CRYPTO EQUIPMENT CAPABLE OF PROVIDING SECURITY ON POINT-TO-POINT MULTI-CHANNEL TELETYPEWRITER CIRCUITS OR A SINGLE CHANNEL POINT-TO-POINT FACSIMILE CIRCUIT. THE COMPLETE TERMINAL CONSISTS OF THREE KG-7 KEY GENERATORS AND AN HO-5 CONTROL CONSOLE. TWO KG-7s ARE UTILIZED FOR TRANSMITTING (ONE FOR KEY AND ONE FOR CHECK-KEY) AND ONE KG-7 IS UTILIZED FOR RECEIVING. THE KO-5 WAS DESIGNED FOR USE WITH TELETYPEWRITER OR FACSIMILE EQUIPMENTS ON EITHER MULTIPLEX OR SINGLE-SIDEBAND CIRCUITS. IT CAN BE USED WITH ANY STANDARD TELETYPEWRITER OR FACSIMILE EQUIPMENT IN CONJUNCTION WITH APPROPRIATE SIGNAL PROCESSING DEVICES (MODEMS). KEYING VARIABLES ARE DETERMINED BY MEANS OF KEY TAPES. TRAFFIC FLOW SECURITY IS PROVIDED.</p> <p><small>IN TELETYPEWRITER OPERATION THE AN/UGC-3 MULTIPLEXES 16 CHANNELS INTO A SERIAL STREAM FOR THE INPUT TO THE KO-5. AFTER ENCRYPTION BY THE KO-5 THE AN/UGA-1 DEMULTIPLEXES THE SIGNAL INTO 16 CIPHER CHANNELS PROVIDING A SUITABLE INPUT FOR THE AN/FGC-29 (OR EQUIVALENT). IN FACSIMILE OPERATION THE OUTPUT OF A STANDARD AN/TXC-2 FACSIMILE TRANSMITTER IS CONVERTED INTO A DIGITAL STREAM BY THE HOC-2 LOCK-OUT UNIT. AFTER ENCRYPTION THE OUTPUT IS MULTIPLEXED INTO AUDIO TONES BY THE AN/UXC-2 FOR TRANSMISSION OVER A 3KC VOICE CHANNEL.</small></p>														
STATUS	DESIGNATED STANDARD EQUIPMENT (OPNAVINST 002651,1A OF 13 JULY 1962 REFERS). TWO TERMINALS ARE NOW BEING EVALUATED FOR PASSING LOFARGRAMS IN THE SOSUS SYSTEM VIA POINT-TO-POINT FACSIMILE.														
TRAINING	A BUPERS TRAINING COURSE IS CONDUCTED AT MARE ISLAND. (SEE KW-22 TRAINING INFORMATION)														
CRYPTOSYSTEM	CYCLOPS CRYPTOPERIOD - 48 HOURS.														
CLASSIFICATION	EQUIPMENT: SECRET-CRYPTO (EXTERNAL VIEWING - NO CLEARANCE REQUIRED) KEYING MATERIAL: SECRET-CRYPTO TRAFFIC: ALL CLASSIFICATIONS (FOR TOP SECRET AND SPECIAL CATEGORY TRAFFIC CSPM 1C, 1-50 REFERS)														
PUBLICATIONS	MAINTENANCE: KAM-4, KAM-34, KAM-35 (ALL SECRET-CRYPTO) OPERATING: KAO-56 (SECRET-CRYPTO)														
PROCUREMENT (COST IN THOUSANDS)	UNIT COST	PAST		FY 1963		FY 1964		FY 1965		FY 1966		FUTURE		TOTAL	
	\$89,100	QTY	AMOUNT	QTY	AMOUNT	QTY	AMOUNT	QTY	AMOUNT	QTY	AMOUNT	QTY	AMOUNT	QTY	AMOUNT
		58	51,678											58	51,678
PHYSICAL CHARACTERISTICS (CONSISTS OF 4 BAYS)	HEIGHT	WIDTH		DEPTH		WEIGHT		VOLTAGE		POWER		REMARKS			
	72 IN. EACH BAY	31 3/8 IN.* EACH BAY		24 3/4 IN. EACH BAY		625 LBS. EACH BAY		115 (60 CPS)		4480 WATTS TOTAL		* - HO-5 IS 28 IN. WIDE. CABINETS PROVIDED ARE SUITABLE FOR SECURING TO DECK.			

16 CHANNEL TELETYPEWRITER OPERATION



TSEC/KO-5: SYSTEM BLOCK DIAGRAM
FACSIMILE

