KEY GENERATORS
TSEC/KG-7

CONTROL CONSOLE
TSEC/HO-5

KEY GENERATOR
TSEC/KG-7

PRODUCTION MODEL
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.

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/UGC-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 KO-5 LOCK-OUT UNIT. AFTER ENCRYPTION THE OUTPUT IS MULTIPLEXED INTO AUDIO TONES BY THE AN/UGC-2 FOR TRANSMISSION OVER A 3KC VOICE CHANNEL.

STATUS
DESIGNATED STANDARD EQUIPMENT (OPNAVINST 0026.1A 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 SUPERS TRAINING COURSE IS CONDUCTED AT MARE ISLAND. (SEE KW-22 TRAINING INFORMATION)

CRYPTOSYSTEM
CYCLOPS
CRYPERIOD - 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-SO REFERS)

PUBLICATIONS
MAINTENANCE: KAM-4, KAM-34, KAM-35 (ALL SECRET-CRYPTO)
OPERATING: KAO-96 (SECRET-CRYPTO)

UNIT COST
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<td>24 3/4 IN</td>
<td>625 LBS</td>
<td>115</td>
<td>4480 WATTS</td>
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* - HO-5 IS 20 IN. WIDE.
CABINETS PROVIDED ARE SUITABLE FOR SECURING TO DECK.
16 CHANNEL TELETYPETRITER OPERATION

TTY EQUIPMENT

AN/UGC-3 4, 8, 12, 16 CHANNEL

KO-5

UGA-1 4, 8, 12, 16 CHANNEL

AN/UCC-1, AN/FGC-25b, ETC.

AN/UCC-25b

16 CH.

FDM TERM.

SSB XMTR

SSB REC.