

SECTION 6 - SECURITY EQUIPMENT

6.1 TSEC/KW-7 GENERAL DESCRIPTION

The TSEC/KW-7 is an on-line, half duplex, teletypewriter security equipment for point-to-point or netted single channel HF, VHF, UHF, and wire circuits.

6.2 REFERENCE DATA

- a. Table of Technical Publications - Table 6-1.
- b. Primary Power Requirements - Table 6-2
- c. Heat Dissipation - Table 6-3
- d. Unit Weight - Table 6-3

6.3 INSTALLATION REQUIREMENTS

a. Arrangements - The TSEC/KW-7 may be installed in a standard 19 inch rack or on a shelf type foundation or similar flat surface of adequate strength. See Figure 6-1 for typical foundation details. Mounting brackets are supplied with TSEC/KW-7 for installing in a standard 19 inch rack. The KWL-4/TSEC loop adapter should be installed as close as possible to TSEC/KW-7 because the interconnecting cables W-21 W-22 are furnished. These cables are 8 foot long and are not to be cut to a shorter length. The KW-8/TSEC remote unit, if used, should be installed adjacent to the associated teletype position.

b. Outline and Mounting Dimensions on Figure 6-2.

c. Grounding Specifications - All bonding and grounding to be in accordance with Table 6-1, item No. 1.

6.4 CABLE DIAGRAM AND CONNECTION DETAILS

a. Elementary Connections - Figure 6-3

b. Electronics Installation and Maintenance Standards - To be in accordance with Table 6-1 Item No. 6.

c. Security Requirements - To be in accordance with Table 6-1 Item No. 5.

6.5 FIELD CHANGE REQUIREMENTS - None.



ITEM NO.	NAVSHIPS NO. DRAWING NO. MIL. STD. NO.	TITLE
1	Mil. Std. 1310A (NAVY)	Shipboard Bonding and Grounding Methods for Electromagnetic Compatibility
2	*RE-F-2692637	Outline and Mounting Data
3	*RE-F-2692641	External Connections
4	RE-F-2692660	Outline and Mounting Data
5	NAVSHIPS INST. 05510.33B	Installation Criteria for Shipboard Secure Electrical Information Processing Systems
6	0967-000-0000	Electronics Installation and Maintenance Books

*These plans are not essential for installation but if available use as reference.

TABLE OF TECHNICAL PUBLICATIONS
TABLE 6-1

SECURITY EQUIPMENT

EQUIPMENT	VOLTAGE	CURRENT	POWER	REMARKS
TSEC/KW-7	115/230 VAC, 50, 60, or 400 HZ, or 24VDC, Single Phase		300 Watts Starting 75 Watts Running	

ORIGINAL

TABLE OF PRIMARY POWER REQUIREMENTS
TABLE 6-2

NAVSHIPS 0967-306-1010

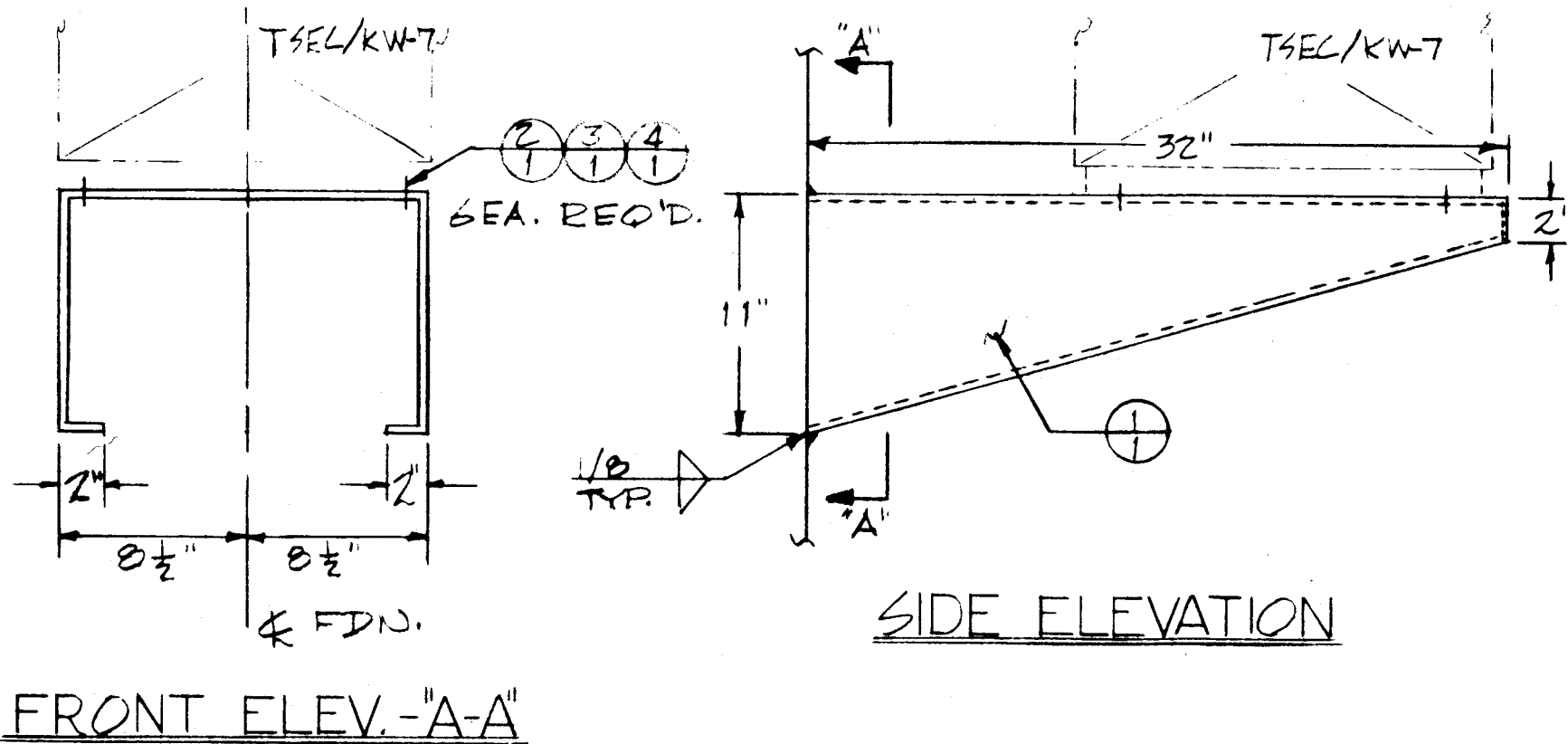
EQUIPMENT	HEAT DISSIPATION	UNIT WEIGHT
TSEC/KW-7	75 Watts	75 LBS.
KWF-1/TSEC		8 LBS.
KWL-4/TSEC		3 LBS.
KWX-8/TSEC		3 LBS.

TABLE 6-2/6-3

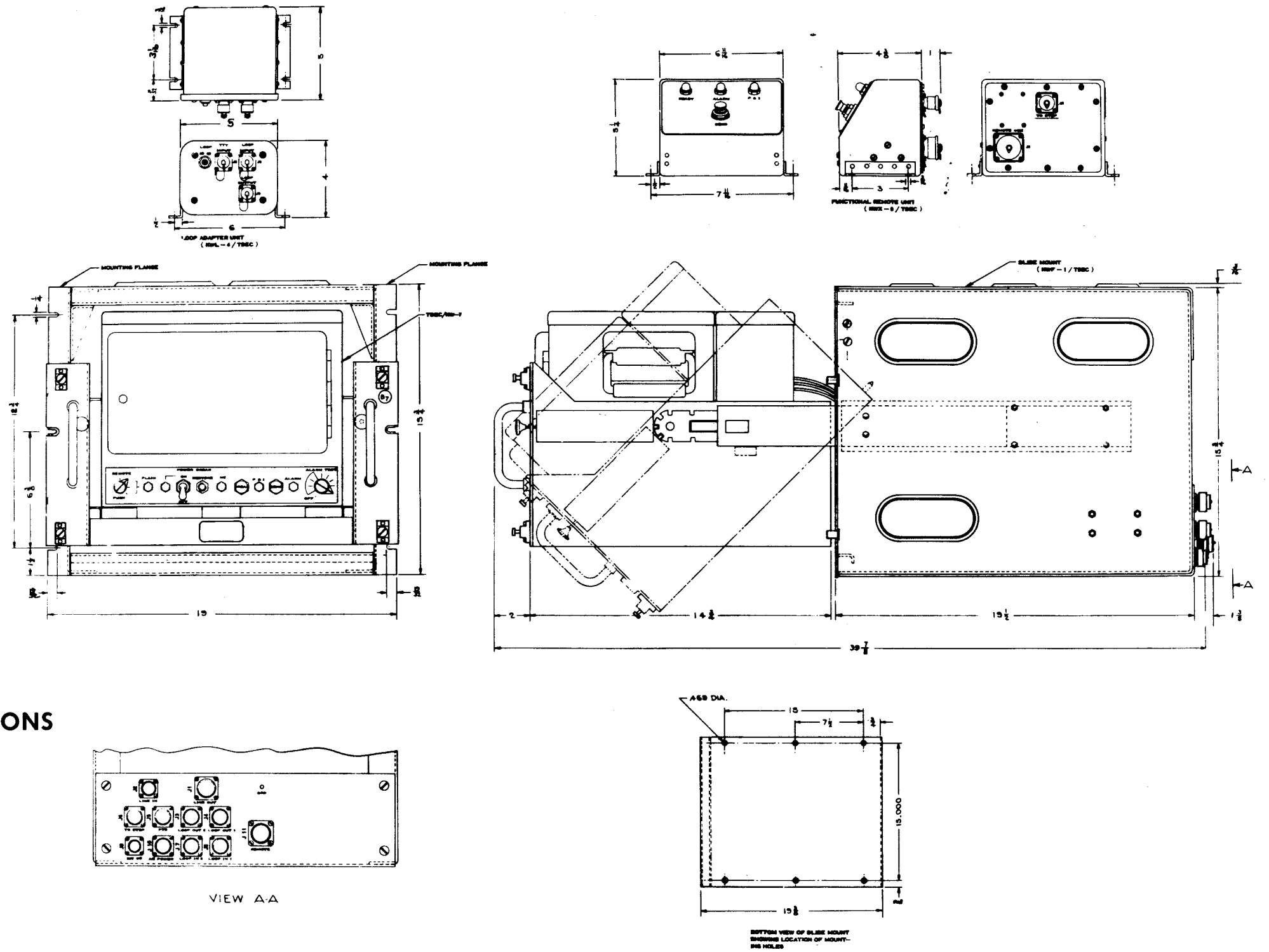
TABLE OF MISCELLANEOUS DATA
TABLE 6-3

6-4

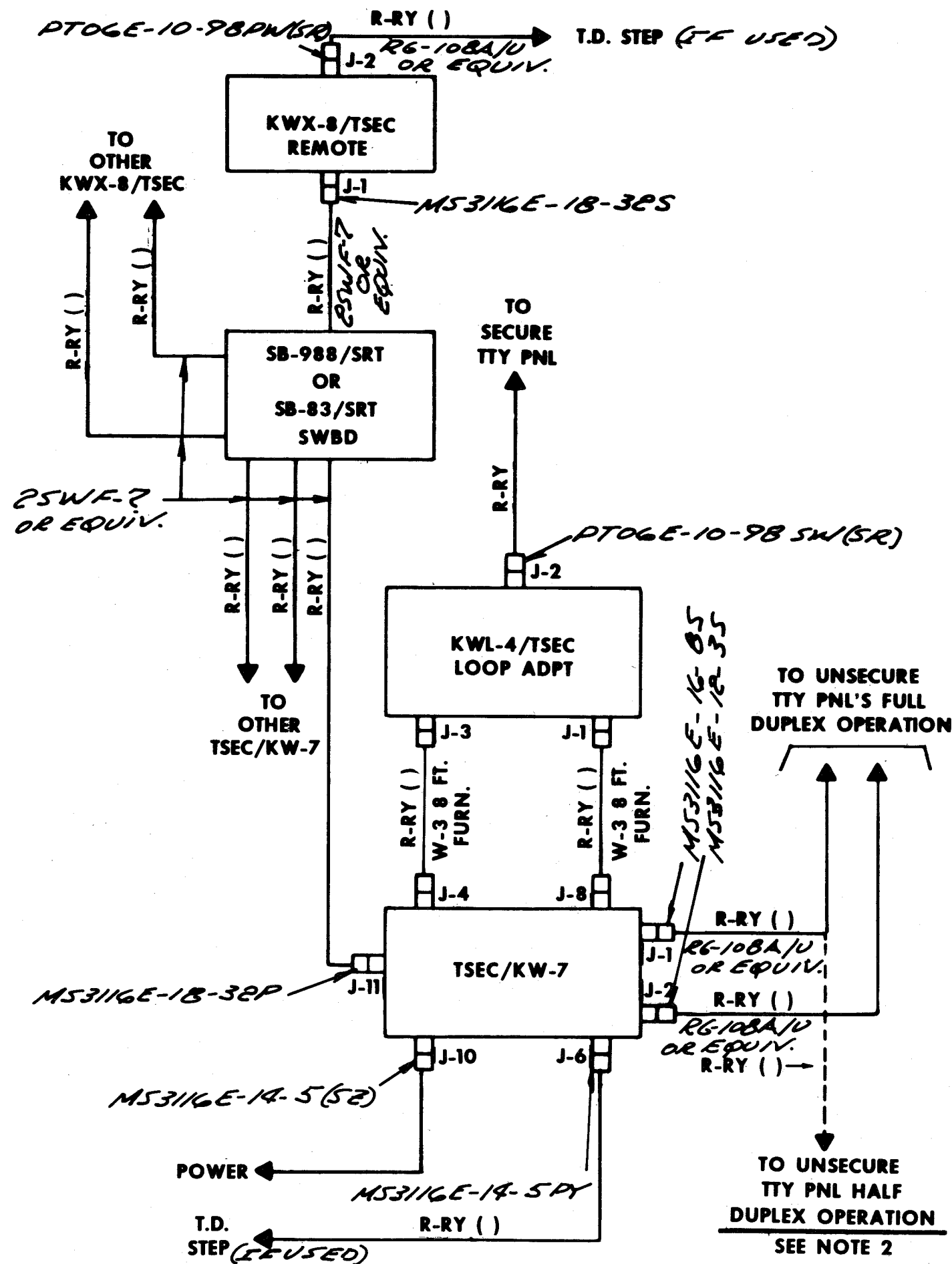
LIST OF MATERIAL—QUANTITIES FOR ONE FDN						
PIECE NO.	NAME	NO. REQ'D	MATERIAL	MTL SPEC.	REMARKS	SNOP ROUTING
				FED.	STOCK NO.	
1	7.65# TET.	1	M.S.	9515	237-5333	
2	3/8" HEX. HD. BOLT	6	STEEL	5306	270-9424	
3	3/8" HEX. HD. NUT	6		5310	637-2054	
4	3/8" LR. WASH.	6		5310	011-0730	
1	1/4" TET.	1	ALUM.	9535	542-7643	



TSEC/KW-7
TYPICAL FOUNDATION DETAILS
FIGURE 6-1



TSEC/KW-7
OUTLINE AND MOUNTING DIMENSIONS
FIGURE 6-2



NOTES:

1. All plugs furnished with equipment.
2. For two wire neutral operation proceed as follows:
 - a. Cable ~~W-8~~ and J2 of KWF-1/TSEC are not used.
 - b. Strap terminals E2 and E4 on the TSEC/KW-7.
 - c. Transmitter/Receiver line current is then applied to terminals E1 and E5 on the TSEC/KW-7 by connecting pin A of J1 on KWF-1/TSEC to E1 on the TSEC/KW-7 and pin B of J1 on KWF-1/TSEC to E5 on the TSEC/KW-7.
 - d. Positive line battery must be connected to E1 on the TSEC/KW-7.
3. For four wire neutral operation receiver line is applied to terminals E1 & E2 on the TSEC/KW-7 and transmitter line current is applied to terminals E4 and E5 on the TSEC/KW-7. Terminal E5 must be connected to negative line battery.
4. *C = Small c in J-11 and J-1.
5. Jumper Terminal V and W in J-11 and J-1.
6. Jumper Terminal D and Z in J-11 and J-1.
7. Ground all shields.

**TSEC/KW-7
CABLE DIAGRAM
FIGURE 6-3
(CONTINUED)**

TSEC/KW-7
CABLE DIAGRAM
FIGURE 6-3

