

**CIRCUIT DIAGRAMS MANUAL
AN/GSC-24(V) MULTIPLEXER SET**

**MARTIN MARIETTA AEREOSPACE
ORLANDO DIVISION
COMMUNICATIONS AND ELECTRONICS**

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SECTION I INTRODUCTION

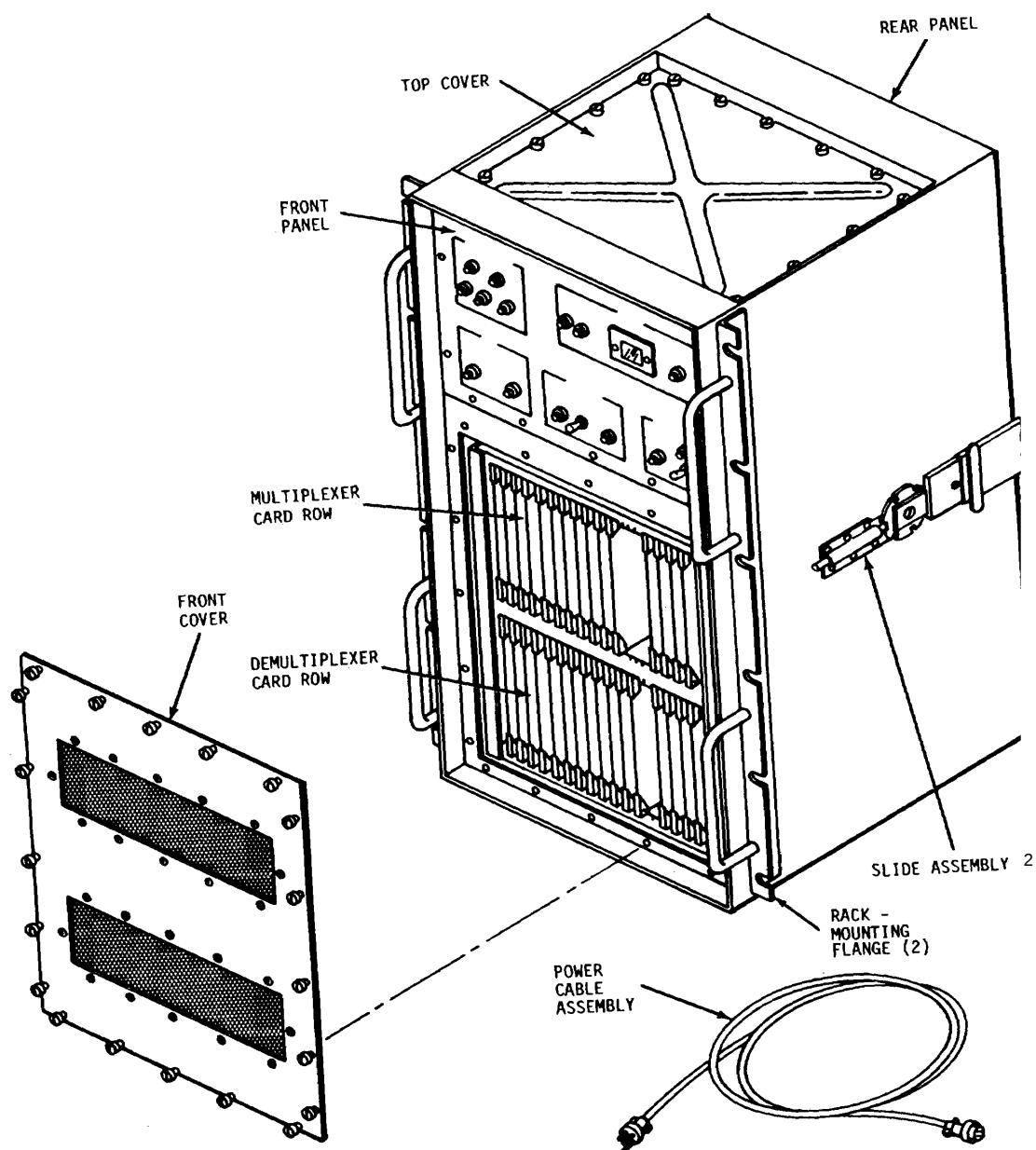
1-1. PURPOSE.

1-2. The purpose of this manual is to provide support information required for troubleshooting of the AN/GSC-24(V) multiplexer set (figure 1-1). Included are schematic and logic diagrams, as well as wire running lists and signal name lists required for tracing signals in the multiplexer set.

1-3. SCOPE.

1-4. The manual is divided in four sections. Section II contains an alphabetical listing of all signals between

the printed circuit cards in the card file assembly. The listing is used for tracing signal distribution within the card file assembly when the signal names are known. Section III contains wire running lists for the interconnecting wiring between the front and back panels, the power supply, and the card file assembly. Also included in section III is a wire running list for the backplane wiring in the card file assembly. Section IV contains the schematic diagrams of the front panel and power supply, and the logic diagrams of the circuit cards mounted in the card file assembly.



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Figure 1-1. AN/GSC-24(V) Multiplexer Set

SECTION II

CARD FILE ASSEMBLY SIGNAL LIST

2-1. GENERAL.

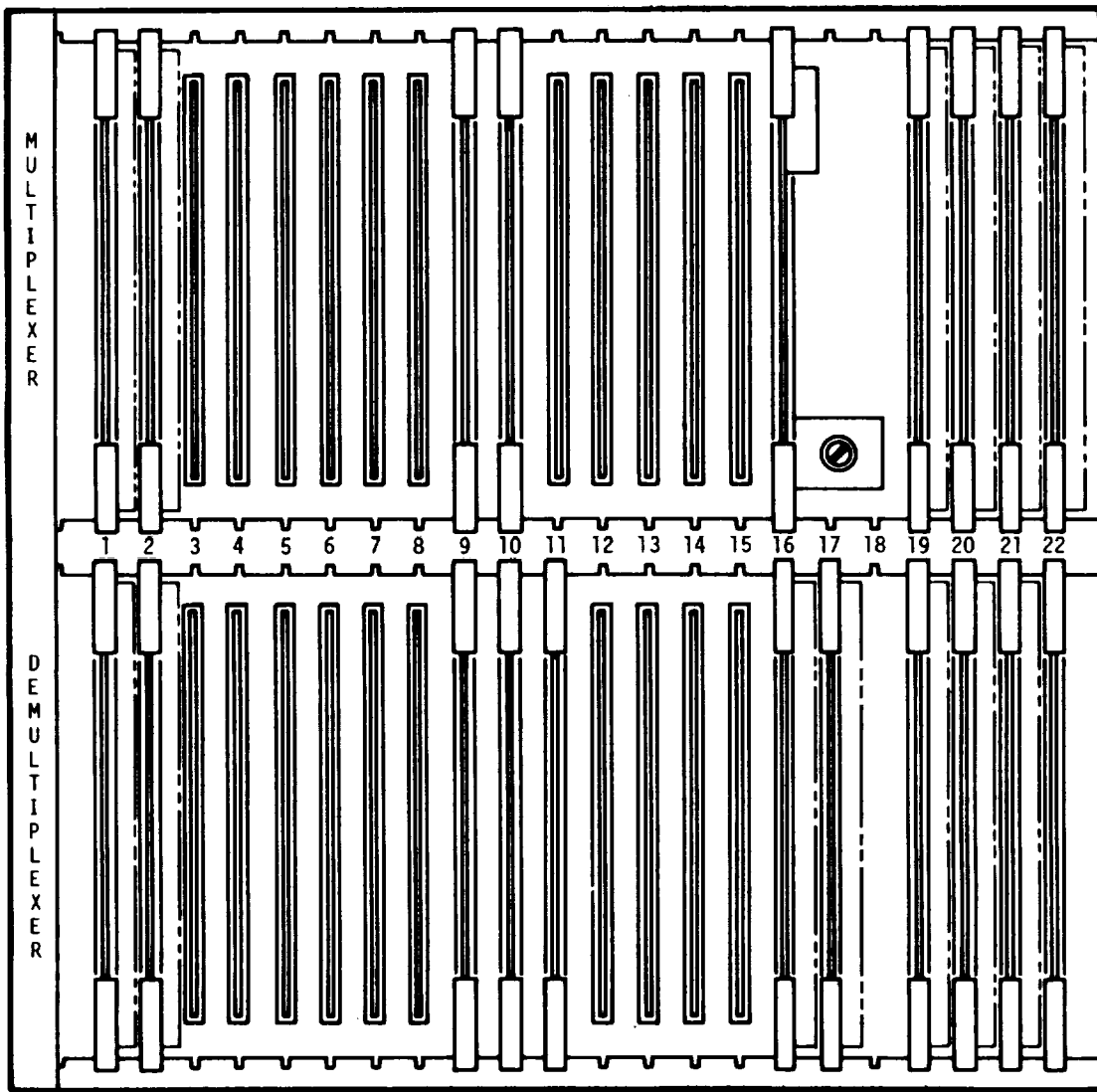
2-2. This section contains an alphabetical listing of the signals generated on the printed circuit cards in the card file assembly, and their sources and destinations. In the list, the signals have the same input/output functional names as those that appear on the card logic diagrams in section IV. The list does not include signal destinations or sources that are outside the card file assembly. External inputs and outputs associated with cards in the card file assembly can be traced by using the wire running lists in section III.

2-3. EXPLANATION OF USAGE.

2-4. The 44 plug-in circuit card locations (slots) in the card file, as viewed from the front of the multiplexer set, are marked 1 through 22 for the MULTIPLEXER row and 1 through 22 for the DEMULTIPLEXER row. Up to 40 of the 44 card slots may contain functional printed circuit cards; slots 17 and 18 in the MULTIPLEXER row and slot 18 in the DE-MULTIPLEXER row are not used. Slot 22 in the DEMULTIPLEXER row stores the extender card. The card slots are so marked to support the diagnostic function. A faulty circuit card can be the corresponding card slot number appearing in the FAULT LOCATION numerical display on the front panel.

2-5. Since three card slots are not used, the reference designation for a given circuit card electrical connector does not necessarily match the card slot number. The connector reference designations are marked consecutively as XA1 through XA41 on the rear of the card file. Figure 2-1 shows a front view of the card file assembly, and lists the connector reference designations associated with the card slots shown. Table 2-1 lists the 44 card slots and the electrical connector designations and card types associated with each of the 41 used card slots.

2-6. Table 2-2 is used to locate the sources and/or destinations of signals between the printed circuit cards in the card file assembly when the signal names are known. The table is divided into three columns: the "Signal Name" column lists the signal names alphabetically; the "Source" column lists the connector and pin numbers of the points of origin; and the "Destination" column lists the connector and pin numbers of the destinations.



MULTIPLEXER ROW:

SLOT	CONNECTOR
1 THRU 15	XAO1 THRU XA15
16	XA16
17, 18	NOT USED
19	XA17
20	XA18
21	XA19
22	XA20
22	XA41

DEMULTIPLEXER ROW:

SLOT	CONNECTOR
1 THRU 15	XA21 THRU XA35
16	XA36
17	XA37
18	NOT USED
19	XA38
20	XA39
21	XA40

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Figure 2-1. Card File Assembly (Front View) With Card Slots and Associated Connector Reference Designations