

SAGE DATA TRANSMISSION SYSTEMS — SAGE SERVICES OPERATION AND ADMINISTRATION OF THE TROUBLE REPORT CENTER AT SAGE SYSTEM DIRECTION CENTERS

| | CONTENTS | PAGE |
|----|---|------|
| 1. | GENERAL | 1 |
| 2. | DESCRIPTION OF TROUBLE REPORT CENTER | 1 |
| 3. | FUNCTION OF TROUBLE REPORT CENTER | 2 |

1. GENERAL

1.01 The purpose of this practice is to describe the procedures to be followed in the administration of a trouble report center for the SAGE system. Many of the procedures outlined in this practice are necessitated by the requirements of the customer. Issue 2 of this section replaces Issue 1 of Section E12.107.0 dated October 1956.

1.02 Every attempt has been made to fit these procedures into the present practices.

1.03 In order to coordinate the efforts of the various contracting agencies involved in the SAGE system the Air Force has created a liaison group within the Direction Center. This group is under the command of an officer known as "The Maintenance Control Section Officer" (MCSO). The performance of all communications and other electronics devices in a subsector is the responsibility of this group. All troubles will be analyzed by this group for the purpose of assigning restoration responsibility among the various contracting agencies involved.

1.04 Another function of this group is maintaining a "Status Board" which will show the progress of maintenance activity on all communications and electronics device troubles in the subsector. In order that the "Status Board" be kept up to date it will be necessary for the contracting agencies to furnish trouble status information on their equipment whenever required by the MCSO.

1.05 The Air Force requires that all reports concerning communications within a given subsector be given by the representatives of the MCSO to one location within the Direction Center. They have stipulated that these reports be accepted 24 hours a day, 7 days a week at this location. In the SAGE system this location is called the "Trouble Report Center."

1.06 For all services which are intra-subsector, the test room at the DC is designated combined Serving and Control Office as defined in the Control Office Plan. For those circuits which interconnect Direction Centers, that Direction Center which was established earlier will be designated Control Office. For those circuits which interconnect Direction Centers and Combat Centers, the Combat Center will be designated Control Office. For those circuits which interconnect Combat Centers, the Combat Center which was established earlier will be designated Control Office.

2. DESCRIPTION OF TROUBLE REPORT CENTER

2.01 A typical floor plan for the Trouble Report Center is shown in the attached Fig. 1. It is suggested that the Trouble Report Centers adhere to this layout insofar as practicable in order to conform with the space limitations within the building.

2.02 The communications facilities which terminate in the Trouble Report Desk are shown in the attached Fig. 2. These communications are:

(a) Two-way Automatic Tie Lines or P.B.X. Extensions to be used by the MCSO for trouble reporting trunks. These trouble reporting trunks shall also serve to relay trouble status reports to the MCSO.

(b) House Order Wire to be used for communication between the Trouble Report Desk and various locations throughout the building.

(c) Central Office Trunks or No. 4-type Tandem Trunks to be used for local administrative needs.

(d) Interposition Trunks, one to each of the four different types of toll testboards, i.e., Airground Testboard, Data Testboard, Private Line Testboard and Teletypewriter Testboard.

(e) An extension from the maintenance P.B.X. This extension is primarily for use in console maintenance.

2.03 The same communications facilities outlined above will appear in an image turret on one of the toll desks (see Fig. 2).

2.04 Located at the Trouble Report Desk is the Trouble Report Distributor. The Trouble Report Distributor consists of slots which are identified by various maintenance locations, i.e., Air-ground Testboard, Exchange Maintenance, etc. When a trouble report is inserted in a slot, a micro-switch in the slot is operated causing visual and delayed audible signals to appear at the maintenance location indicated on the slot.

3. FUNCTION OF TROUBLE REPORT CENTER

3.01 All trouble reports received at the Trouble Report Desk shall be recorded on the Trouble Report Ticket, Form E-4220. Private Services Results Measurement Plan practices describe the preparation of this Trouble Report Ticket.

3.02 Trouble reports received at the Trouble Report Desk can be separated into two categories:

(a) Those reports which concern the P.B.X., extension stations, coin telephones, station equipment and, etc.

(b) Those reports which concern Toll Telephone and Telegraph Private Services.

3.03 Trouble reports which are exchange reports as covered in Paragraph 3.02 (a), shall be processed in the following manner. After transcribing the trouble report to the Trouble Report Ticket, the station line card for the reported trouble shall be taken from the card file tub. The trouble report shall be entered on this line card and the line card attached to the Trouble Report Ticket. The line card and ticket

shall then be placed in the "EXCHANGE" slot of the Trouble Report Distributor. If no personnel are available the line card shall be placed in the slot marked "SUPERVISOR". This is done so that the supervisor can determine the restoration priority of the report.

3.04 Upon receipt of the Trouble Report Ticket and attached line card, the necessary equipment information shall be transcribed from the line card to the Trouble Report Ticket and the line card should be placed in the "EXCHANGE PENDING" box attached to the Trouble Report Desk. It is desirable that line cards shall not be taken from the Trouble Report Center. After the trouble is cleared the information required to close out the line card entry at the Trouble Report Desk shall be entered on the Trouble Report Ticket.

3.05 The Trouble Report Ticket is the log record for the test room.

3.06 Trouble Reports which are described in Paragraph 3.02 (b), shall be processed in the following manner. Upon receipt, the trouble report shall be recorded on the Trouble Report Ticket. After filling out the Trouble Report Ticket, the circuit layout and the Trouble History Cards associated with the reported circuit shall be removed from the card file tub. The ticket and the cards shall be placed in the proper slot of the Trouble Report Distributor, i.e., reports on data service will be placed in the slot marked "DATA," etc.

3.07 After obtaining the ticket and the cards, the necessary tests required to sectionalize the trouble shall be made at the testboard. Sectionalized troubles can be divided into two categories:

(a) Troubles which the testing procedures indicate as locating in the exchange plant.

(b) Troubles which the testing procedures indicate as being in the toll plant or at outlying sites.

3.08 When it has been determined that the trouble locates in the exchange plant, the trouble tested, etc., shall be noted on the Trouble Report Ticket. The Trouble Report Desk will be called on the interposition trunk and the trouble be referred for clearance. Upon receipt of this

referred trouble, the station line card for the involved service shall be removed from the file tub and placed in the "EXCHANGE" slot of the Trouble Report Distributor with a second Trouble Ticket attached. This ticket will indicate which testboard will be called to procure any information required to clear the trouble. When the trouble has been cleared the testboard shall be called for the "O.K." The information necessary to close out the line card entry shall be entered on Trouble Report Ticket. This closed out ticket is then returned to the Trouble Report Desk where the line card is closed out and returned to file.

3.09 After giving the "O.K." the testboard shall return the Trouble Report Ticket, Trouble History Card and layout card to the Trouble Report Desk where any required information can be transcribed to the Trouble History Card before returning it to file.

3.10 The troubles described in Paragraph 3.07 (b), shall be sectionalized as per the existing practices. The Trouble Report Ticket shall be completed and returned with the associated Trouble History and Layout Cards to the Trouble Report Desk. At the Trouble Report Desk the necessary information on the ticket shall be transcribed to the Trouble History Card and the cards shall be filed in the card file tub.

3.11 Upon receipt of the completed Trouble Report Ticket, the Trouble Report Desk shall notify the MCSO that the trouble reported has been cleared. An entry of this restoral time shall be made on the Trouble Report Ticket.

3.12 When it is necessary to locate the card file tub at the toll testboard, it becomes the responsibility of the testboard to assume the duties normally discharged at the Trouble Report Desk.

3.13 Two files will be kept for completed Trouble Report Tickets. One file will contain those tickets which cover troubles which are located in toll plant or at outlying locations. The other file will contain those tickets dealing with troubles on exchange equipment within the Direction Center.

3.14 Daily summaries of troubles in the "Internal" equipment should be forwarded to the local exchange test center in whose maintenance area the Direction Center is located. They should be excluded from the exchange trouble summary, however, since SAGE services are measured under the Private Services Results Measurement Plan.

3.15 Fig. 4 presents in Flow Chart form the origination and progress of a trouble report in the SAGE system Direction Centers as described in this practice.

FIG. 1
SUGGESTED LAYOUT OF TROUBLE REPORT CENTER

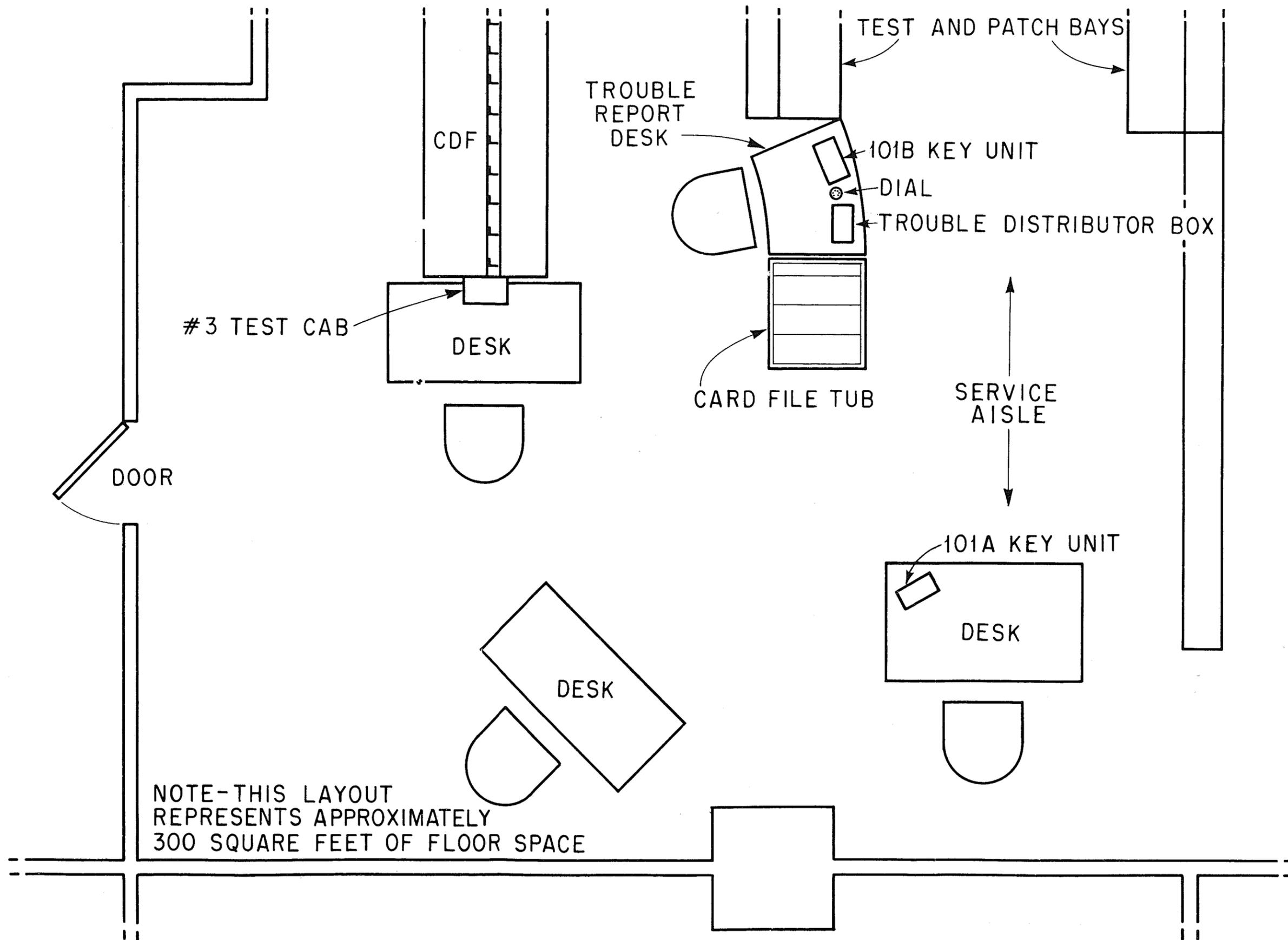


FIG. 2
COMMUNICATIONS DIAGRAM IN SAGE TROUBLE REPORT CENTER

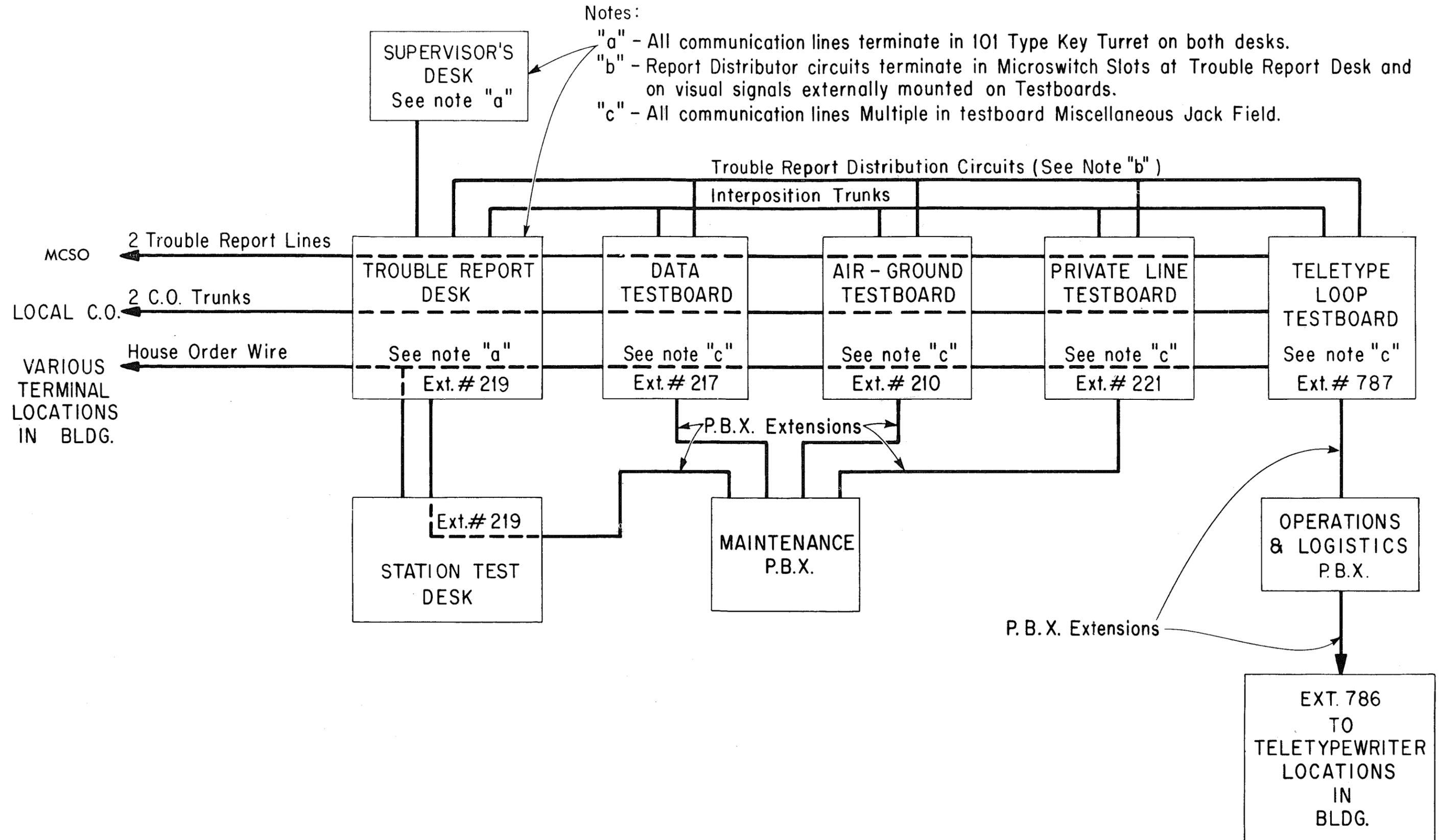
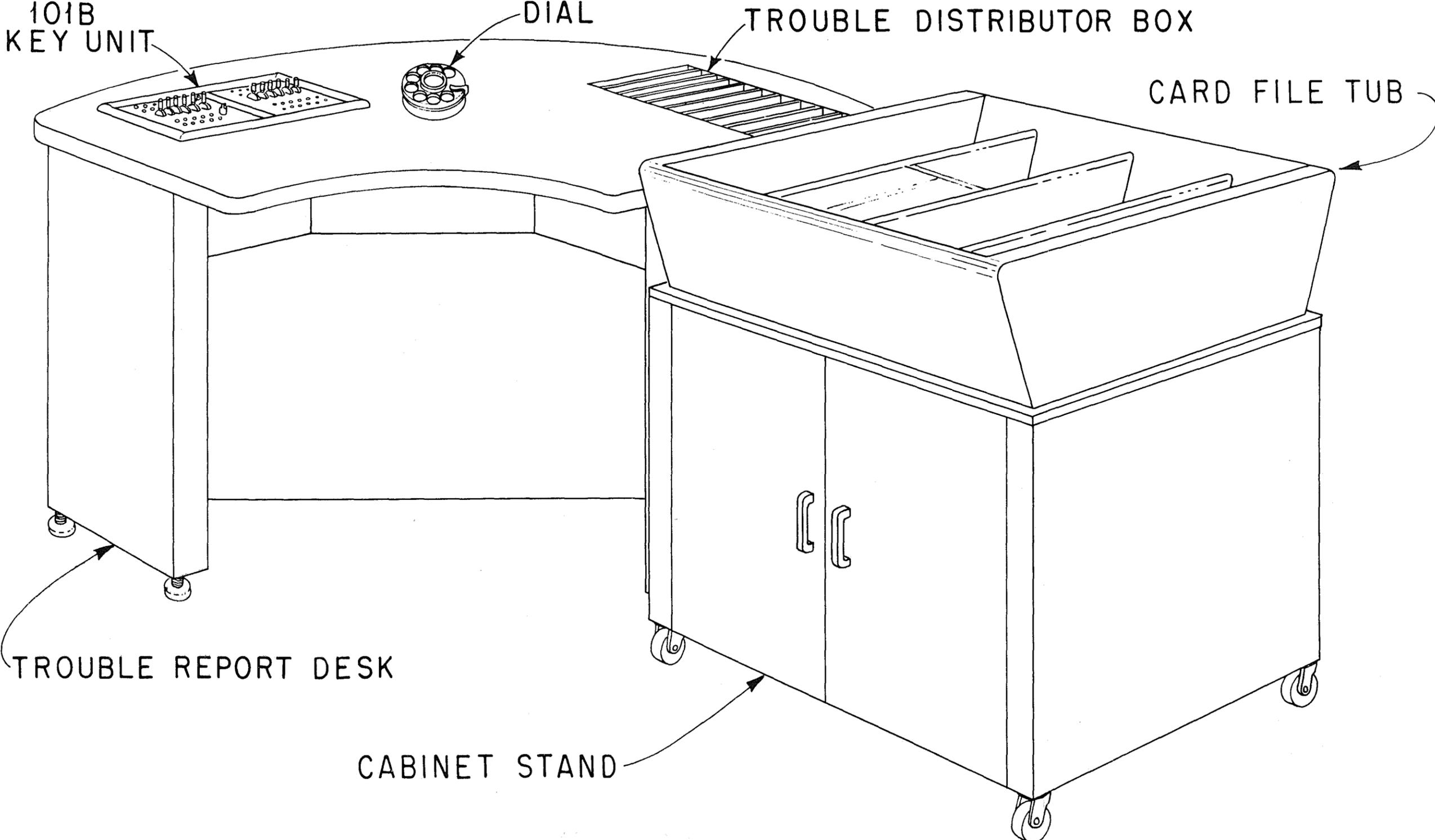


FIG. 3 TROUBLE REPORT DESK ASSEMBLY



SYMBOL KEY

- ⊙ TROUBLE TICKET ORIGINATION
- ENTRY ON TROUBLE TICKET OR HISTORY CARDS
- △_H HOLD OR PENDING FILE
- △_F PERMANENT FILE
- ▭ COMPARISON OR ANALYSIS
- MOVEMENT OF TROUBLE TICKET OR HISTORY CARDS
- ⌋ AFFECTS OTHER TROUBLE TICKETS AND / OR HISTORY CARDS

FIG. 4
FLOW CHART OF TROUBLE REPORT TICKETS - SAGE & ASSOCIATED CARDS
IN TROUBLE REPORT CENTERS

