

DATA SET 203-TYPE MAINTENANCE

1. GENERAL

1.01 This section provides maintenance procedures for data set 203-type. Test procedures are contained in Data Set 203-Type, Test Procedures (Section 592-019-500).

1.02 This section is reissued to direct the maintenance procedure to replaceable circuit packs rather than complete data units. Also, the requirement for a 748A extracting tool has been deleted.

1.03 Schematics and related information for the data set apparatus are listed below:

- Data Set 203-Type — SD- and CD-1D151-01
- 22A-Type Data Unit — SD- and CD-1D152-01
- 23A-Type Data Unit — SD- and CD-1D153-01
- 24A-Type Data Unit — SD- and CD-1D154-01
- 38A-Type Data Unit — SD- and CD-1D230-01

General Maintenance Philosophy

1.04 The overall plan for maintaining data service provided by 203-type data sets follows the general philosophy outlined in Section 590-010-300. In general, trouble experienced by the customer will be reported to the local plant service center (PSC) or serving test center (STC). The trouble report must be evaluated to determine whether a craft employee must be dispatched.

1.05 If access to a data test center equipped to test 203-type data sets is available, the remote test may be conducted to aid in locating any possible trouble. In any event, the knowledge available at the DTC should be exploited whenever possible to aid in sectionalizing the trouble.

1.06 To minimize the time spent on customer premises locating and repairing a defective data set, trouble sectionalization procedures should concentrate on localizing the trouble to a data unit.

When the trouble is sectionalized to one data unit, replace all circuit packs with known good circuit packs and retest. If the test still fails, replace the networks and retest again. If the test still fails, replace the circuit packs and networks to their original locations and replace the data set. If the test indicates the trouble is cleared using known good circuit packs and/or networks, replace the new circuit packs and/or networks one at a time with the original circuit packs and/or networks until the trouble recurs. This procedure will isolate the defective circuit pack(s) and/or networks with a minimum of downtime.

1.07 Only the defective circuit pack need be returned to WE for repair, and the remaining circuit packs will be available for repair service on subsequent trouble reports.

2. SERVICE INSTRUCTIONS

2.01 No routine maintenance is required for the data set 203-type.

2.02 All trouble reports will be processed approximately as shown in Fig. 1.

2.03 Once the procedures in Fig. 1 arrive at a conclusion that a telephone employee must be dispatched, the analysis procedures shown in Fig. 2 should be used to clear the trouble.

2.04 Individual apparatus of the data set 203-type which are to be held as spare equipment should be tested, tagged, and, if possible, returned to their original shipping containers for protection. They should be stored in the same environment as required by the data set. Spare equipment must be ready for immediate use.

2.05 If a data set 203-type is suspected of being in trouble, it should be tested using the procedures given in Section 592-019-500.

- If the data set meets the specified requirements and trouble persists,

- (1) Confirm that all connecting cables (telephone line, customer interface, and power) test satisfactorily.
- (2) Check for any connector defects.
- (3) Check for intermittent trouble in station wiring, protectors, etc.

- Circuit packs which cause a data unit to fail test requirements should be replaced.

Note: To minimize the time spent on customer premises, all circuit packs of a data unit may be replaced as a first attempt, and all appropriate networks replaced as a second attempt, to repair the station.

- Troubleshooting should be complemented using tests as directed in Section 592-019-500. When the trouble is cleared, have the customer verify operation with the far-end station equipment, if possible, before being returned to customer service.



After making a replacement, verify that all options of the original station are provided and connected. Option strap identification is provided in Data Set 203-Type, Installation and Connections (Section 592-019-200).

2.06 Data set apparatus to be returned to the distributing house should be properly tagged and carefully packed (in original shipping containers,

if available) to protect the apparatus in transit. Also, the nature of the trouble should be described as completely as possible, and this description should be included with the apparatus being shipped.

3. REPLACEMENT PROCEDURES

3.01 Replacement is limited to circuit packs, plug-in networks, 41A power unit, and 19A data unit used by the data set where the trouble has been sectionalized.

3.02 All data set 203 circuit packs are held in their respective nest positions by a retaining bar secured to the nest by two screws. When replacing a circuit pack, remove the retaining bar and keep all removed hardware available for reassembly after testing.

3.03 The retaining bar is notched so it can be used to safely pry a circuit pack from its slot location. By hooking the notch in the circuit pack keyway and operating the retaining bar as a lever, the circuit pack will release from its mating connector. This operation pulls the circuit pack out where a fingertip hold can be used. Pulling straight out on the circuit pack will remove it from its nest position. The replacement circuit pack is inserted in the nest keyslot. Pressing straight in firmly on the circuit pack face plate will seat the circuit pack into the mating connector.

3.04 After final tests are completed, retaining bars should be replaced on each nest.

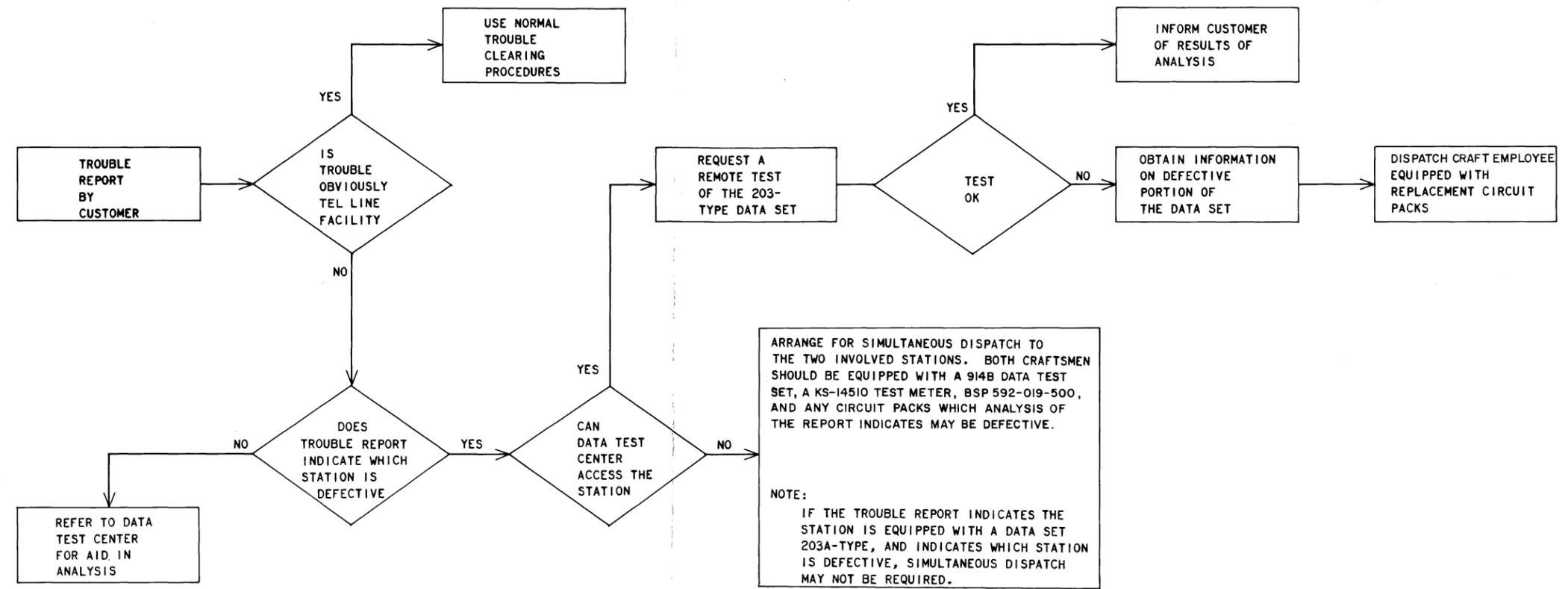


Fig. 1—Analysis for Confirming a Trouble Report

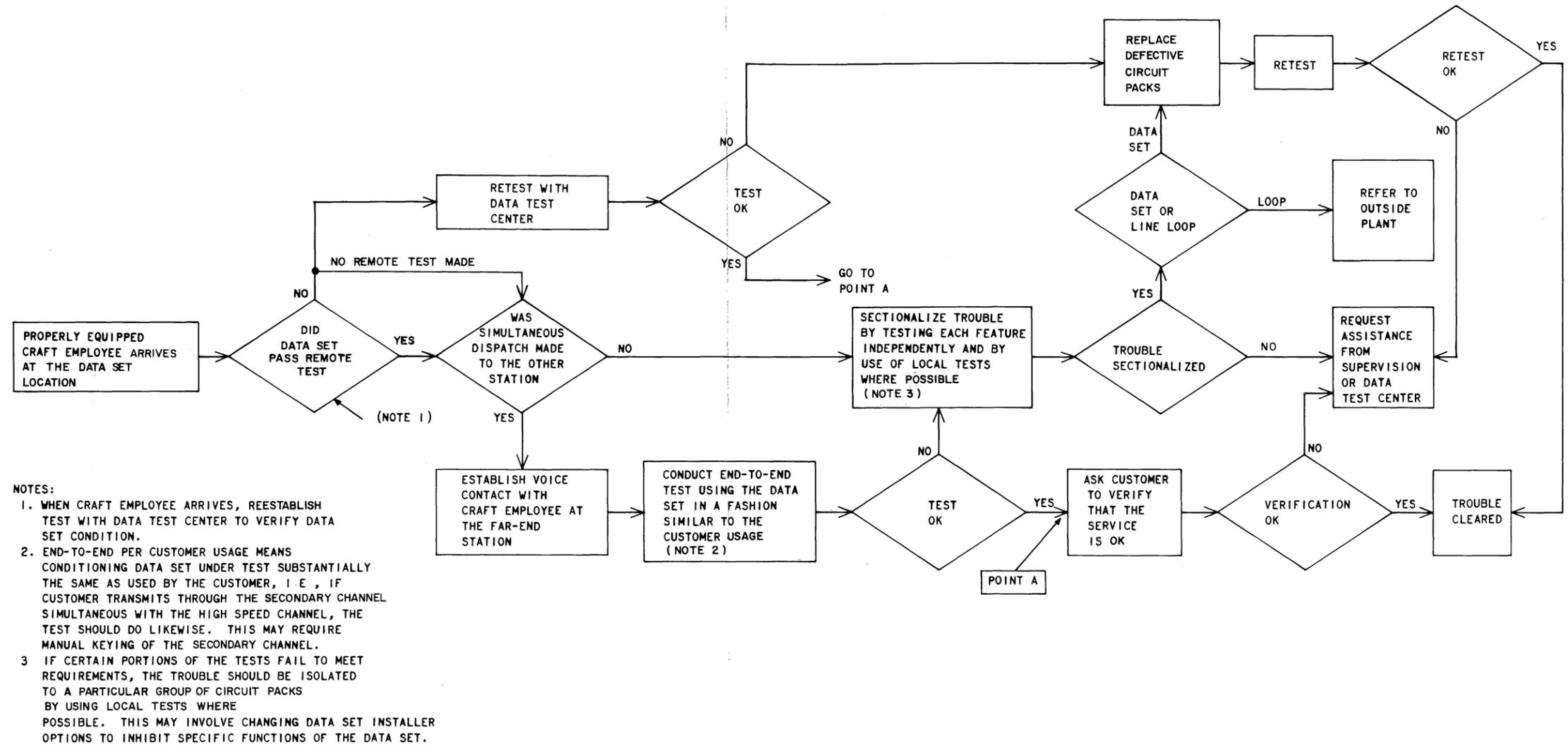


Fig. 2—Craft Employee Analysis For Clearing a Trouble Report