

Unauthorized Phones Get Their DUE

Detecting unauthorized extensions and answering devices on Bell System lines can now be done more quickly and more accurately than ever before with a new system developed at Bell Labs' Guilford Center location, Greensboro, N. C. The DUE (Detection of Unauthorized Equipment) system was designed by members of the Loop Maintenance System Laboratory for testing one- and two-party residential lines, non-key business phones, and semipublic coin phone lines. An added advantage is that it reduces the cost of checking a line from ten or fifteen cents—the present cost—to two or three cents.

The system tests up to 300 lines an

hour, automatically comparing the number of phones or other equipment on a line with accounting or customer billing records. It then prints out a list of phone numbers where there is a discrepancy, along with a summary report of the number of lines checked and found suspect. Customers found to have more phones than the records indicate are notified and given an opportunity to correct the situation.

The equipment for the DUE system consists of a circuit for connecting to individual telephone lines, a minicomputer, magnetic-tape and paper-tape readers, and a teletypewriter to print out the test results. The system is usu-

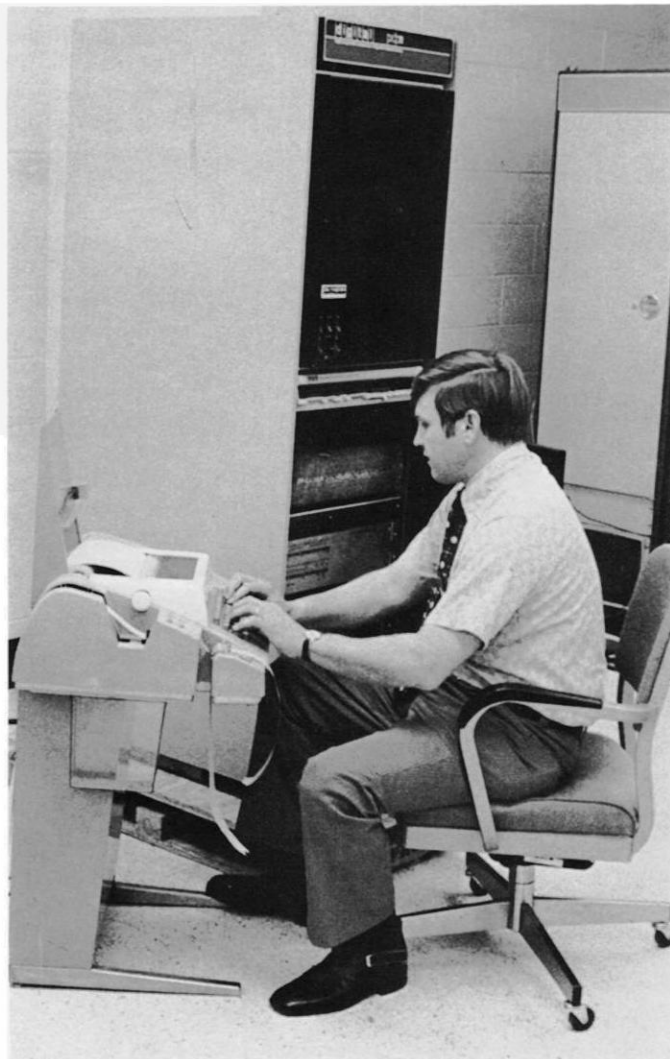
ally located in an Operating Company repair service bureau and is connected to the central office test trunks via a local test desk. It can be put into a small van and moved from one repair service bureau to another.

There is also a manual version of DUE, equally effective but slower. For smaller bureaus this may be all that is needed. In large bureaus, the manual version complements the automatic system by enabling personnel to check individual lines, perhaps just before an employee is sent to disconnect an unauthorized telephone.

DUE systems are now available to Bell System Operating Companies.



Nannie A. Stockard, a tester for Southern Bell, demonstrates a manual version of the DUE test set. In an Operating Company, the set is connected to central office test trunks via a local test desk like the one at which Mrs. Stockard is sitting.



Tom Robinson, supervisor of the Mechanized Testing Design Group at Guilford Center, inputs data to begin measurements for detecting unauthorized equipment connected to a line.