● IDENTIFIED OUTWARD DIALING (IOD) FROM PBX EXTENSIONS
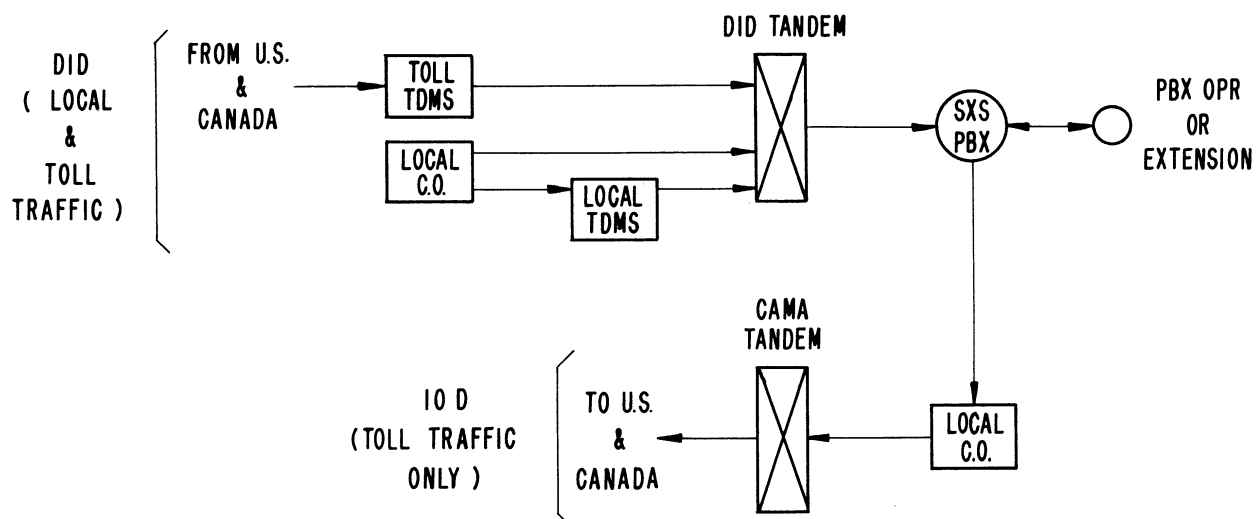
Extensions of dial PBX systems have taken on characteristics of individual subscriber lines in that they may now receive and originate toll calls without the services of a PBX switchboard attendant. The previous issue of the BULLETIN contained a description of direct inward dialing (DID) to PBX extensions. This article will attempt to round out the picture with an explanation of how individual PBX extensions or business departments and accounts are identified for billing purposes on outward dialed toll calls.

One method of toll billing a PBX customer by departments or accounts employs a system of code identification which utilizes trunk numbers. The customer designates trunk numbers as code numbers for each department or account, such as, Sales Department - MAin 2-1000, Engineering Department - Main 2-1001, etc. The trunk code number is given to the CAMA or "0" operator and is recorded on the AMA tape or on a toll ticket.

area (NPA) code of the XOX or XIX type) and a block of four-digit numbers not necessarily the same as the extension numbers. A number is assigned to each extension requiring toll billing and to each account or department requiring code billing. The customer is furnished a supply of stickers which he may place on the telephones to show billing numbers. The IOD numbers cannot, of course, be used for dialing purposes. To forestall such attempts, consideration is being given to a plan which will use the letters "Z" and "Q" in place of "O" and "1" in the three-digit codes, since these letters do not appear on most non-coin station dials.

A PBX extension user, having IOD service, gives his special IOD number, say 500-9413, to the CAMA operator when she challenges him at the start of his call. She then keys it into the equipment and so causes it to appear on the AMA tape. The Accounting Department associates the special number with the proper customer and shows it on the toll statement.

When automatic number identification (ANI)

DID TANDEM

DID (LOCAL & TOLL TRAFFIC)

FROM U.S. & CANADA

TOLL TDMS

LOCAL C.O.

LOCAL TDMS

SXS PBX

PBX OPR OR EXTENSION

CAMA TANDEM

IOD (TOLL TRAFFIC ONLY)

TO U.S. & CANADA

LOCAL C.O.

The Telephone Company Accounting Department bills and lists the calls chronologically under the various trunk numbers. Codes for this service, for which there is no charge, are limited to the number of trunks serving the customer. This method will no longer be used when automatic number identification is introduced in 1961.

The extension of direct dialing created the need for identified outward dialing(IOD) from PBX extensions. This is an automatic method of allocating the cost of long distance calls to individual PBX extensions (Extension Billing) or business accounts and departments (Code Billing). With IOD, for which there is a charge, a customer is assigned a three-digit numerical code, (at present an unassigned numbering plan

goes into effect, a long distance call from a PBX extension not arranged for extension billing will be charged automatically to the directory number of the PBX trunk. When extension billing is required the CAMA tandem will receive a class of service mark which will bring in the CAMA operator to receive the IOD code from the customer.

In New York City, an exception exists in the case of PBX customers served by Yukon 8, a #5 Crossbar unit with which a special MBW developed person-to-person switchboard is associated. These customers dial a "O" prefix and 7 or 10 digits for all toll calls, whether they are station-to-station or person-to-person, paid or collect calls. In these cases, since the calling directory number is automatically entered on the AMA tape, the

operator is required to prepare a ticket to show the special number on IOD calls. Development of work is under way which will permit the operator to key in the IOD number as is now done at the CAMA positions.

When a #5 crossbar office is arranged as a PBX, the PBX extension is the equivalent of a subscriber line and DID and IOD present no special problem. Exeter 4, located at 140 West Street, is of this type and so far is the only one of its kind in the New York Company. A similar unit, also to be located at 140 West Street, is on order and will serve approximately 3500 extensions of the W.E. Company by October, 1960. #5 crossbar offices, as presently designed, are practical as PBX's for larger organizations (3,000 or more extensions) when they require new equipment installations because of changes in location or the obsolescence of existing equipment.

— J.A. Meagher

Manhattan Engineering

(Ed. Note — "Who made that phone call to Tahiti? We never sell any of our fur coats down there." IOD will tell.)

● WINDING ROAD

Where do you lead—you black, winding ribbon?
Through smoky cities with skyscrapers high—
Past factories and stores, past men and women,
Beyond the horizon, to meet the sky?
Do you travel through fields all fenced with rails—
Or past stately spruce that whisper and call—
Become peaceful road, or wandering trail
In a forest of ferns and pine trees tall?
Do you ramble through a New England town,
Past salt box houses and curio shops,
Past fishing vessels that bob up and down,
Or silent farmers who harvest their crops?

Lead me, you may, to many new places,
Or home again to familiar faces.

— Marian Smith

(Ed. Note — The above appeared in "Briars and Ivy" (1959), the literary magazine of Briarcliff High School. The author is the daughter of our Joe Smith (who never wrote a poem himself), and is now attending St. Bonaventure College, where she is still turning out graceful verses. We hope she keeps it up — as someone said awhile ago, scaling Parnassus is a great deal of fun and adventure and never hurt anyone. Marian may one of these days turn out some poems that will endure much longer than her father's outside plant constructions and devices.)

"YOU PEOPLE WERE RECOMMENDED BY A FRIEND OF MINE."