

SWITCHING SYSTEMS MANAGEMENT
NO. 4A/4M SWITCHING SYSTEMS
ASSIGNMENT PRACTICES
MECHANIZED TRUNK ASSIGNMENT SYSTEM

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NOTICE

Not for use or disclosure outside the
Bell System except under written agreement

SECTION 13c(13)

1.02 When this section is reissued the reason will be given in this paragraph.

1.03 The various reports generated by the MTA will be covered in detail in Dial Facilities Management Practice (DFMP), Division H, Section 13c(14).

1.04 Use of the MTA for trunk assignments and equipment inventory will not be given in detail. If additional information is required, refer to DFMP, Division H, Section 13c(15).

2. SYSTEM DESCRIPTION

2.01 The MTA is an on-line inquiry and input collection system consisting of two regions.

- (a) Region "A" includes inquiry and general edits
- (b) Region "B" includes detailed edits, file updates, and reports

2.02 The data base resides in a centralized computer and is maintained by the Long Lines Department in Cleveland, Ohio. Access to the computer is by multipoint data lines.

2.03 A typical office configuration may consist of three terminals. All communications with the system will be through these three terminals. (See Fig. 1)

- (a) A cathode ray tube (CRT) in the switching machine administration office is used for both inquiry and input.
- (b) A CRT in the 4A/4M maintenance office is for inquiry only.
- (c) A printer in the switching machine administration office receives system output.

2.04 The MTA is designed to:

- (a) Inventory and assign existing trunk related equipment.
- (b) Update and correct the data base on an ongoing basis.

2.05 Equipment inventory is loaded on-line using a CRT. Data entered each day is placed in

file for overnight processing. Upon request, rejected data are transmitted directly to the data-entering office printer the following business day.

2.06 The system supports the inventory of the following equipment items:

- Incoming link frames
- Outgoing link frames
- Centralized automatic message accounting (CAMA) recorders
- Sender link frames/pots
- Trunk relays and associated classes
- Outgoing trunk identification frame (OGTI)
- Incoming register links
- Traffic usage recorder frame (TUR); when hard cabled to the trunk block connector (TBC) and the traffic usage interface (TUI)
- Automatic outgoing intertoll trunk test frame (AOIT)
- Automatic outgoing toll connecting trunk test frame (AOTT) when hard cabled to TBC.
- Outgoing trunk test system (OTTS)
- Common channel interface system (CCIS)
:DAS—distributor and scanner
:TREG—trunk register
- Trunk block connectors
- Miscellaneous equipment (assignable to a trunk group X or trunk).

2.07 Detailed instructions for posting equipment inventories and trunk assignment records are given in DFMP Division H, Section 13c(15).

3. ASSIGNMENT FEATURES

Equipment Status Codes

3.01 Switching equipment in the MTA data base will always have one of eight status conditions:

- In use (IU): the equipment is presently assigned and working on the indicated trunk
- Spare (SP): the equipment is presently not associated with any trunk
- Pending assignment (PA): the equipment has been assigned to the indicated trunk, and the system is awaiting work completion
- Pending disconnect (PD): a disconnect from the indicated trunk has been entered for this piece of equipment, and the system is awaiting work completion
- Pending disconnect/reassignment (DA): this piece of equipment is pending disconnect from the trunk on which it is now working, and has been reassigned to another trunk (both trunks are displayed)
- Defective (DF): the equipment is not in working order, and is temporarily removed from the spare pool
- Not spare (NS): the equipment is wired on the frame, but the assignment is not known. (For equipment on which the assignment has turned over since implementation of the system, the system will display the last assigned trunk.)
- Turned off (TO): The equipment is made not available for assignment (ie, new link frames on a job add).

Work Letters (Trunk Orders or Trunk Requests)

3.02 All assignments, disconnects and rearrangements performed by the system are given a pending status, pending entry of a completion. The pending status on equipment pieces are PA, PD, and DA.

3.03 Pending work is issued under a "letter." Letters are assigned a 6-digit number by the MTA system. The first two digits indicate the year; the last four digits the sequential number within the year. For example, 77-0326. All the work requested by a single transaction is issued under one letter. Up to 50 trunks may be active under one letter. For example, the assignment work for a 100-trunk add would automatically be divided between two letters.

3.04 When work is requested on a trunk which already has work pending, the pending letter for that trunk is replaced by a new letter. Both the old and the new pending activities are combined under the new letter and are reflected on that single document.

Sender Link Frame Assignments

3.05 Sender link frame assignments for group start (first choice incoming trunks) are selected to stagger group starts over all pots and frames within the pots.

3.06 Sender link pots and frames are selected on a rotation basis. In the simplified example below a 10-trunk group is assigned to a 3-pot, 12-frame office. A sender link group within the frame is selected based on time zone and trunk weighting.

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POT	FRAME	TRUNK #
A	001	1
	002	4
	003	7
	004	10

POT	FRAME	TRUNK #
B	005	2
	006	5
	007	8
	008	

POT	FRAME	TRUNK #
C	009	3
	010	6
	011	9
	012	

In Link Frame Assignments

3.07 In link assignments for group start trunks are staggered over all frames. Criteria for in link assignments are:

- (a) spreading a trunk group evenly over all frames
- (b) not assigning more than one trunk in a group to a switch

- (c) maintaining a balance of CCS for each time zone over all frames and switches
- (d) utilizing a proportionate percentage of available terminations per frame
- (e) spreading assignments across the bays and horizontals within the switch.

Out Link Frame Assignments

3.08 Out link frame assignments for group start trunks are staggered evenly over all frames. Criteria for out link assignments are:

- (a) spreading a trunk group evenly over all frames
- (b) not assigning more than one trunk from a group to a switch
- (c) maintaining a balance of CCS for each time zone over all frames and switches
- (d) utilizing a proportionate percentage of available terminations per frame
- (e) spreading assignments across the bays and horizontals within the switch
- (f) never assigning the out links for the first and last trunks in a subgroup on the same paired frames.

Outgoing Trunk Relay Assignments

3.09 The system assigns the next available relay on trunk additions.

CAMA Recorder Assignments

3.10 Recorder assignments are selected to spread a trunk group evenly over all the recorders in which the trunk group is indexed.

TBC Assignments

3.11 The switching machine administrator must define the TBC subgroups for each trunk group. The system stores the subgroups, and when trunk additions are requested, assigns individual terminals to individual trunks. The system is sensitive to routing considerations which affect

TBC assignments, such as determination of "A" or "B" city for 2-way groups.

3.12 Whenever assignments leave less than 25% of the defined subgroups for a trunk group spare, the system generates a warning message stating the number of spares for the group. This is to provide advance warning on conditions which might necessitate a trunk block rearrangement.

Data Base Integrity

3.13 Several levels of recovery are an integral part of the system and will be implemented by the Cleveland Data Services Center as required to ensure absolute data base integrity. Inaccurate or incomplete cross references will not occur within the system. Completed work will not be lost through hardware failures.

Security

3.14 The physical connection between the terminals and the computer via multipoint data telephone lines is never broken. Security from unauthorized use of an office's data base is provided by two "software" features:

- terminal address sensitivity and
- authorized sign-on codes.

Terminal Address Sensitivity

3.15 The system maintains a terminal status file table listing of which terminals are authorized to access which office records. All sign-ons are edited against this table. This table is updated only by the system manager upon agreement with the offices and/or area involved. The system provides for a single terminal to access several offices' records, as might be desirable for centralized administration.

Authorized Sign-on Codes

3.16 Access to an office's records, even from a terminal authorized to access those records, requires entry of the proper sign-on code for that office.

3.17 A sign-on code is made up of any four characters specified by the switching machine administrator. Two sign-on codes are specified

for each office. One authorizes use of all system functions; the other permits inquiry only. Sign-on codes may be changed by the switching machine administrator via the CRT as often as judged necessary for security. Sign-on code changes are in effect immediately.

3.18 When a proper sign-on code is entered, the system returns a NEXT REQUEST display.

3.19 If anything other than a proper sign-on code is entered, an error screen is returned and system access is denied.

3.20 Once a terminal is signed on it remains signed on to perform all authorized transactions until it is signed off by choosing the sign-off option on the NEXT REQUEST display.

3.21 A terminal left signed on when not in use, will not block system access from any other terminal, nor degrade system response for other users. However, such action might risk offering system access to an unauthorized user through that terminal.

4. TRANSACTIONS

4.01 There are two basic transactions within the MTA system.

(a) **Inquiry:** Inquiries are entered through either of the CRT terminals. Inquiry module is used by Network Administration and Network Maintenance to inquire on trunk and equipment assignments. Answers are in realtime and are transmitted only to the CRT making the request. There are three inquiry options (see Fig. 2).

(b) **Input:** Inputs include requests for the system to perform work, update records, or compile reports. Inputs are entered through the CRT in the switching machine administration office. When the input has passed the edit, it is processed and output to the printer in the switching machine administration office. The 003 display lists the various input options to the system (see Fig. 2). The individual inquiry and input options will be explained in Part 5 and 6 which follow.

5. INQUIRY

5.01 *Inquiry on trunk by trunk name:*

Inquiries may be entered on display 004 by entering the trunk number, CLLI code or geographic spelling and direction for the requested trunk. Up to 20 trunks may be entered on a display. Display 005 is sent back for each trunk queued, listing all of the equipment assigned or pending (see Fig. 3).

5.02 *Inquiry on trunk by equipment piece:*

This module is used to find which trunk is assigned to a specific piece of equipment. When an equipment piece is entered on display 076, the system sends back display 077, which provides the trunk to which the piece is assigned and a list of all equipment assigned or pending. Up to 20 pieces of equipment may be queued on display 076 (see Fig. 4).

5.03 *Inquiry on equipment piece:* This module is to determine the present, pending, or previous trunk assignment for a specific piece of MTA assigned equipment. Inquiries on equipment pieces are entered on display 007. Up to 20 pieces may be entered on a display. Display 009 is sent back for each equipment piece queued, providing assignment data for each piece (see Fig. 5).

5.04 The inquiry module is used by Network Administration and the maintenance forces as an ongoing equipment and trunk record.

6. INPUTS

6.01 *Add new trunks:* The trunk assignment module is used to add trunks to an existing trunk group. The trunks to be added are entered on display 010 (see Fig. 6). Display 010 is edited in on line and any errors incurred will be displayed on CRT. For example, a trunk cannot be added until the trunk group data and the TBC subgroups are in MTA, a trunk relay reservation has been made, and a trunk with the same number does not exist. When edits are corrected, the terminal is free for further processing. When display 010 has passed the edit, it is processed by the computer and the terminal is free for further input or inquiry. The trunk assignment module will select equipment to balance the traffic load over the machine, post the equipment as PA, add the trunks to the group file, assign a letter number, and prepare a frame work document for each trunk.

The frame work documents will be transmitted to the office printer as soon as they are prepared.

6.02 *Disconnect trunks:* The trunk disconnect module is used to discontinue trunks. The trunks to be disconnected are entered on display 012 (see Fig. 7). Display 012 is edited in on line and any errors incurred will be displayed on CRT. For example, a trunk which does not exist cannot be disconnected. When edits are corrected, the terminal is free for further processing. When display 012 has passed the edit, the terminal is free for further input or inquiry. The trunk disconnect module will post equipment on the disconnected trunks as pending disconnect, mark the trunks "PD" in the trunk group record, assign a letter number, and prepare a frame work document for each trunk. The frame work document will be transmitted to the office printer as soon as it is prepared.

6.03 *Change a trunk:* The trunk change module is used to assign, or change/rearrange equipment on an existing trunk. Assignments may be either specific (ie, specify a particular item of equipment) or general (ie, specify the type of equipment desired, and let the system choose the item). The trunk to be changed, and the equipment to be assigned and/or disconnected are entered onto display 013 (see Fig. 8). Display 013 is edited in on line and any errors incurred will be displayed on CRT. The terminal is then free for further input or inquiry. The trunk change module will post equipment PA or PD, as appropriate. Update the trunk record, assign a letter number, and prepare a frame work document for the trunk. The frame work document will be transmitted to the office printer as soon as it is prepared.

6.04 *Add/disconnect miscellaneous equipment:*

The add/disconnect miscellaneous equipment module is used to assign and disconnect miscellaneous equipment at trunk group level. This module is used to assign/disconnect equipment such as peg count and overflow registers, NC lamps and GB relay. It is not used to assign/disconnect equipment on individual trunks. The "change a trunk module" is used for this purpose. The trunk group name and equipment to be assigned and/or disconnected are entered on display 018 (see Fig. 9). The display is edited in on line and any errors incurred are displayed on CRT. When edits are corrected, the terminal is then available for further input or inquiry. The system will then post the assignment

to the equipment record, reference the assignment to the trunk group, and send a trunk group layout report to the office printer reflecting the new assignment. There will not be a frame letter associated with this entry.

6.05 Make equipment not spare (NS) or defective (DF): This module is used to mark equipment with a NS or DF status, which removes it from the spare tool and places it on a controlled inventory. This module will also be used to clear a NS or DF status, replacing the equipment in the spare pool and removing it from the controlled inventory. The change is entered on display 015, which is edited in on line and any errors incurred are displayed on CRT (see Fig. 10). When errors are corrected, the terminal is free for further processing. There will not be a report returned on the printer from this module.

6.06 Add new trunk group: This module is used to enter the data for a new trunk group. This module must be used before making trunk assignments to the new group. The data for a new trunk group is entered onto display 017, edited in on line, then stored by the system to reference for all future additions to that trunk group (see Fig. 11).

6.07 Change to the trunk group: This module is used to change the trunk assignment data which was entered on "add new trunk group," display 017, (Fig. 11). Change options are selected from display 019 (Fig. 12). Choice A through E will present the appropriate display (020, 021, 022, 123, 024, 032). The PRESENT column of these displays lists what is stored in MTA. The data to be changed is entered in NEW fields. See Fig. 12A, B, and C.

6.08 Trunk block: This module is used to assign trunks to or disconnect trunks from trunk blocks and to perform TBC rearrangements. One of five options is chosen from the 025 display (see Fig. 13A).

(a) **Make a new reservation:** When option A on display 025 is selected, display 026 is returned (Fig. 13B). The subgroups to be established for a new group or added to an existing trunk group are entered on display 026. The input is edited, then stored by the system for use in assigning TBC terminals for the trunks in the group.

(b) **Discontinue an existing reservation:**

When option B of 025 display is selected; display 031 will be returned (Fig. 13C). This module is used to release a range of TBC terminals that has been reserved as a subgroup for a specific trunk group. A "D" is entered next to each subgroup to be deleted. These terminals will then be available for assignment to another trunk group.

(c) **Assign specific TBC terminals:** When option C of display 025 is selected, display 027 will be returned (Fig. 13D). Display 027 will list all of the subgroups assigned to the specific trunk group. An "A" in the option field of the TBC subgroup that is to be assigned will bring up display 028 (Fig. 13E). The 028 display will list 40 terminals of the TBC subgroup selected on 027. This display is used to assign specific TBC terminals to designated trunks. When 028 display is entered into the MTA, a frame letter will be received on the office printer.

(d) **Disconnect specific TBC terminals:**

When option D is selected on display 025, display 052 will be received (Fig. 13F). Display 052 will list all of the subgroups assigned to a specified trunk group. A "D" is entered in the option field of the TBC subgroup containing the terminals to be disconnected. When 052 display is entered into MTA display, 029 will be displayed (Fig. 13G). Display 029 will list 40 terminals for the TBC subgroup selected and the assignment on each terminal. A "D" is entered in the option field for each terminal to be disconnected. When display 029 is entered into the MTA, a frame letter will not be automatically produced but can be requested through the report "S" option. This module is used for TBC rearrangements.

(e) **Compress TBC reservations:**

When option "E" of display 025 is selected, display 129 will be returned (Fig. 13H). This option is used to reduce the range of TBC terminals in a subgroup. This display will show current subgroups and the range of assigned terminals. To drop excess terminals, enter the new range in the space provided. Terminals to be dropped must be SP or PD and either the from or to terminal may be changed but not both.

6.09 Rebalance: The rebalance module is used to generate assignment moves to rebalance the in link frame, out link frame, or sender link

frame. When a rebalance is needed as indicated by MTA balance reports (option S-reports), machine reports from other sources, or from local experience, the rebalance module can be used. Trunks will be moved to the frame or frames to be rebalanced from the most heavily loaded frames, and trunks moved from the frame or frames to be rebalanced are moved to the lightest loaded frames. This is a controlled option. Requests to use the rebalance feature is made to the area coordinator.

- (a) When the rebalance option is entered, display 034 will be displayed (Fig. 14A). Entering an "A" choice produces the 035 display. This display is used to select the in link to be rebalanced (Fig. 14B). Up to five in links can be entered on this display for rebalance.
- (b) Choice "B" on display 034 will return display 037. This display is used to select the out link frame or frames to be rebalanced (Fig. 14C). Up to five out link frames can be entered on this display for rebalance. The IT or TC train must also be entered on this display.
- (c) Choice "C" on display 034 will return the 038 display (Fig. 14D). This display is used to enter the sender link frames requiring rebalance. Up to five sender link frames may be entered on this display. The frame type, ie, M (MF) and frame number must be entered on this display.
- (d) The "D" choice on display 034 is used to change the "floating low" CCS level. This choice is completed on the 034 display and no additional display is required. The floating low CCS is used in the balancing logic of in link and out link frames. When frames have equal CCS, the logic will check the frame spare count and assign trunks with CCS less than the floating low on frames with the highest spare count.

6.10 Balance after machine add: This module is used to load assignments on sender links, in links and out links on a machine addition. This module also allows link frames to be "turned off" (not available for assignment) or "turned on" by the CRT. The action to be performed is chosen on display 095 (Fig. 15A).

- (a) Choice "A" on the 095 display will select display 040. This display is used to enter the in link frame and the percentage it is to be

loaded. Up to five frames can be entered on the 040 display (Fig. 15B).

- (b) Choice "B" on the 095 display will select the 042 display. This display is used to enter the train and out link frame and the percentage it is to be loaded. Up to five frames can be entered on the 042 display (Fig. 15C).

- (c) Choice "C" on the 095 will display the 043 display. This display is used to enter the type, the sender link, and the percentage it is to be loaded. Up to five frames can be entered on the 043 display (Fig. 15D). When the information is entered into the MTA, it will determine what load the frames should carry by applying the entered percentage to the average frame's load. Frame letters will be issued for the changes.

- (d) Choice D, E, and F on the 095 display will return the 085, 086, and 087 display, respectively. These displays are used to specify the in link frames, out link frames, and sender link frames to be turned off (TO). This option merely removes the frame from the MTA file, making it unavailable for assignments. However, data can still be displayed using one of the "inquiry" modules (see Fig. 15E, 15F, and 15G).

- (e) Choice G, H, and J on the 095 display will return the 088, 089, 096 displays, respectively. These displays are used to restore to service in link frames, out link frames, or sender link frames (see Fig. 15H, 15J, 15K).

6.11 Cancel a letter: This module is used to cancel a pending letter. This is work which has been entered into the system and written up, but for which a completion has not been entered. Once a letter has been completed, it **cannot** be cancelled. The disconnect module must be used to undo the "completed" work.

- (a) The cancel option will produce the 044 display (see Fig. 16). This option is used to cancel an entire letter or individual items on a letter. Cancellations are entered onto display 044 in two ways:

- (1) A cancellation for a letter may be entered. When only a letter is entered the work on all trunks on that letter is cancelled. Pending assignments revert to previous status.

(2) When both a letter and a particular trunk are entered on display 044, only pending work on the specified trunk is cancelled. The letter remains open if it contains any other active work. For a definition of work letters, see 3.02, 3.03, and 3.04.

6.12 Order completion (work letter): This module is used to enter completion of work which the MTA system is holding as pending. Display 039 is used to enter a completion (see Fig. 17). Work completions are entered on display 039 under two conditions:

- (a) When all work is completed on a letter: when only a letter is entered, all work on that letter is completed, the status code updated, and the letter closed.
- (b) When work on particular trunk(s) on a letter are completed: when a letter and a trunk are entered on display 039, only work pending on that trunk is marked as completed. Equipment assigned to that trunk will have status codes updated. The letter will remain open if any other work on it is active. When the system has processed the completion, a notice will be sent to the office printer as confirmation.

6.13 Reservation: The reservation module is used to add, delete, or change reservations for trunk relays. Trunk relays must be reserved for a trunk group before any new trunks can be added by the "add new trunk module." Before relay reservations can be made for a trunk, the trunk group must have been established through the "add new trunk group" module. The reservation module will bring up display 053 (see Fig. 18A).

- (a) Choice "A" on display 053 will display 054 (see Fig. 18B). This display is used to enter trunk relay reservations into the system.
- (b) Choice "B" on display 053 will display 056 (see Fig. 18C). This display is used to delete an existing reservation.
- (c) Choice "C" on display 053 will display 055 (see Fig. 18D). This display is used to make a change in trunk group information.

6.14 Reports: This module is used to request reports. A report will not be compiled or transmitted unless specifically requested through

this module. When this module is selected, the 061 display will be returned (see Fig. 19). This display contains a list of all available reports. All reports, except the back-up listing, are transmitted directly to the office printer. Reports are covered in detail in DFMP Division H, Section 13c(14).

6.15 CAMA routine: The system assigns CAMA recorder indexes for NNXs, and CAMA recorders to trunks. The switching machine administration office must provide the NNXs for each CAMA trunk group and specify in which recorder(s) each group is to be indexed. The CAMA routine module will produce the 045 display (see Fig. 20A). This module is used for the following:

- (a) To specify the NNXs for each CAMA trunk group. As NNXs are added (display 046) and deleted (display 047) indexes in the recorder(s) where the trunk group is indexed are assigned or made spare, accordingly, (see Fig. 20A).
- (b) To specify in which recorder(s) each trunk group is to be indexed. The system will assign indexes for all a group's NNXs when a group is indexed in a new recorder (display 049). The system will spare the indexes assigned for a group's NNXs when the group is removed from a recorder (display 050, see Fig. 20B).
- (c) To assign or disconnect specific indexes in a particular recorder(s) (see Fig. 20C). This option is used to select a particular index in a recorder for a specific NNX.

6.16 Sign off: This option is used to sign off the CRT terminal.

6.17 Inventory update: This module is used to load an existing office's equipment records into the MTA system. Load data is entered on line using the CRT.

6.18 Cutover option: Existing manual trunk assignments are posted in the inventory using the CRT and the X-cutover option. This option is not available to offices in production.

SECTION 13c(13)

7. REFERENCES

7.01 The switching machine administrator should have the following DFMPs available:

Division H, Section 13c(4), Trunk Link Frame
Division H, Section 13c(5), Trunk Block Connector
Division H, Section 13c(6), Sender Link Frame

Division H, Section 13c(7), Incoming Trunk Service Observing
Division H, Section 13c(8), Trunk Distributing Centers
Division H, Section 13c(10), Outrigger Switches
Division H, Section 13c(12), Output Link
Division H, Section 13c(14), MTA Reports
Division H, Section 13c(15), Operational Procedures

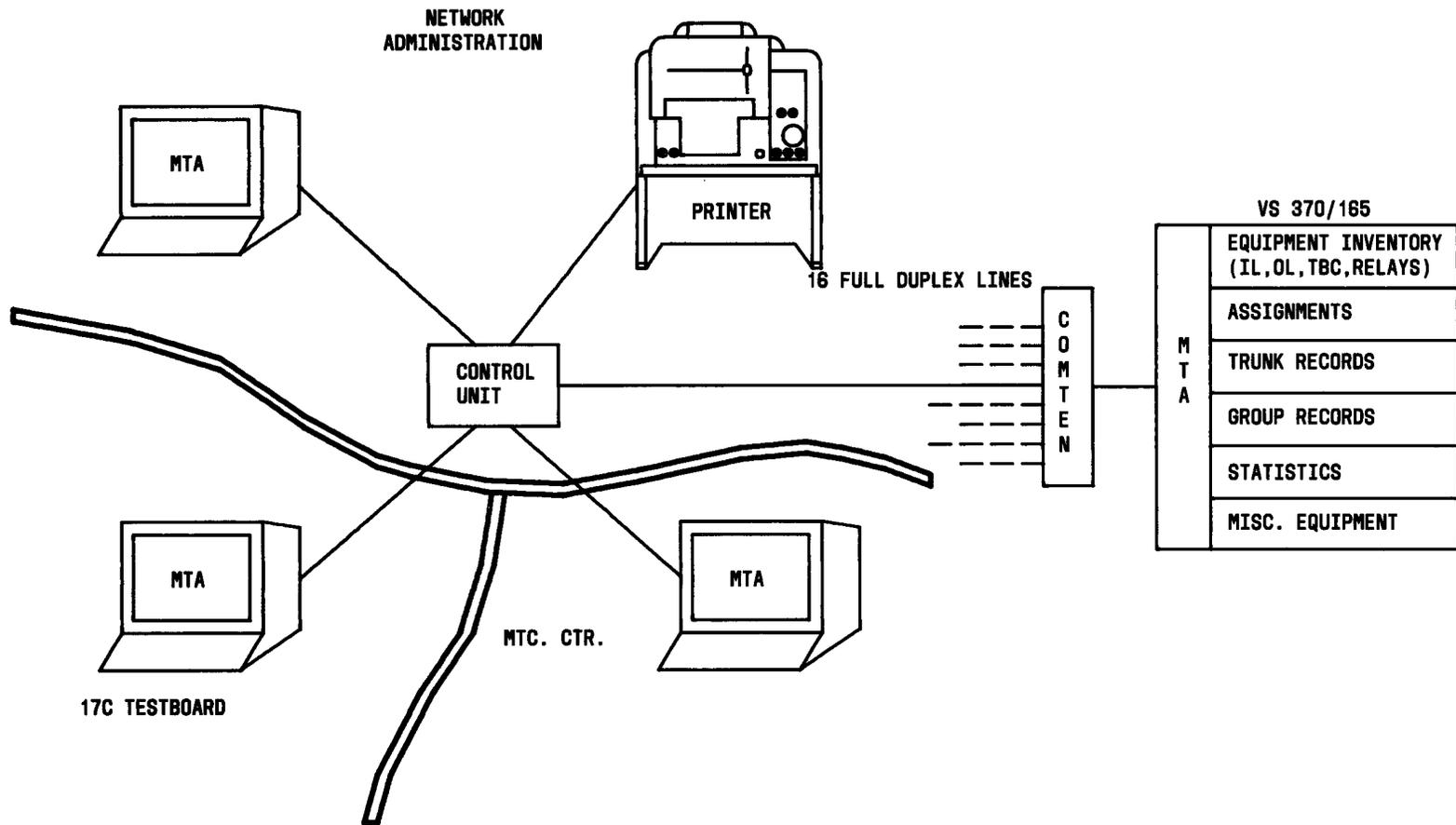


Fig. 1—Office Configuration (2.03)

002 ENTER NEXT REQUEST
A - INQUIRE ON TRUNK BY TRUNK NAME.
B - INQUIRE ON TRUNK BY EQUIPMENT PIECE.
C - INQUIRE ON EQUIPMENT PIECE.
U - SIGN OFF.
X - CUT-OVER SYSTEM.
CHOICE: -

003 ENTER NEXT REQUEST
A - INQUIRE ON TRUNK BY TRUNK NAME.
B - INQUIRE ON TRUNK BY EQUIPMENT PIECE.
C - INQUIRE ON EQUIPMENT PIECES.
D - ADD NEW TRUNKS.
E - DISCONNECT TRUNKS.
F - CHANGE A TRUNK.
G - ADD/DISC MISCELLANEOUS EQUIPMENT.
H - MAKE EQUIPMENT N/S OR DEFECTIVE.
J - ADD NEW TRUNK GROUP.
K - CHANGE TO THE TRUNK GROUP.
L - TRUNK BLOCK.
M - REBALANCE.
N - BALANCE AFTER MACHINE ADD.
P - CANCEL A LETTER.
Q - ORDER COMPLETION.
R - RESERVATION.
S - REPORTS.
T - CAMA ROUTING.
U - SIGN OFF.
V - INVENTORY UPDATE.
CHOICE: -

Fig. 2—Inquiry Options Only and Full System Capability
(4.01)

034 PLEASE SELECT THE TYPE OF EQUIPMENT FOR REBALANCE. HRBGPAAH41T
A - INLINK
B - OUTLINK
C - SENDER LINK
D - REDEFINE FLOATING LOW CCS LEVEL
(FOR OPTION D, ENTER CHANGES BELOW)

	PRESENT	NEW
INLINKS	15	--
IT OUTLINKS	15	--
TC OUTLINKS	15	--

CHOICE: -

Fig. 14A—Rebalance (6.09)

035 ENTER INLINK FRAME FOR REBALANCE. NR -
FRAME
--
--
--
--
--

Fig. 14B—Rebalance (6.09)

037 ENTER OUTLINK TRAIN AND FRAME FOR REBALANCE NR -

TRAIN	FRAME
--	--
--	--
--	--
--	--
--	--

Fig. 14C—Rebalance (6.09)

038 ENTER TYPE OF FRAME AND SENDER LINK FOR REBALANCE. NR -

TYPE	FRAME
-	---
-	---
-	---
-	---
-	---

Fig. 14D—Rebalance (6.09)

095 PLEASE ENTER CHOICE BELOW.

- A - LOAD IN LINK FRAME.
- B - LOAD OUT LINK FRAME.
- C - LOAD SENDER LINK FRAME.
- D - TURN OFF IN LINK FRAME, BAY, OR SWITCH.
- E - TURN OFF OUT LINK FRAME, BAY, OR SWITCH.
- F - TURN OFF SENDER LINK FRAME.
- G - TURN ON IN LINK FRAME, BAY, OR SWITCH.
- H - TURN ON OUT LINK FRAME, BAY, OR SWITCH.
- J - TURN ON SENDER LINK FRAME.

CHOICE -

Fig. 15A—Balance After Machine Addition (6.10)

040 ENTER INLINK FRAME AND PERCENTAGE OF NR -
FRAME TO BE ASSIGNED.

FRAME	PERCENTAGE
---	---
---	---
---	---
---	---
---	---

Fig. 15B—Balance After Machine Addition (6.10)

042 ENTER OUTLINK TRAIN, FRAME AND PERCENTAGE OF NR -
FRAME TO BE ASSIGNED

TRAIN	FRAME	PERCENTAGE
--	--	---
--	--	---
--	--	---
--	--	---
--	--	---

Fig. 15C—Balance After Machine Addition (6.10)

043 ENTER TYPE OF FRAME, SENDER LINK FRAME AND NR -
PERCENTAGE OF FRAME TO BE ASSIGNED

TYPE	FRAME	PERCENTAGE
-	---	---
-	---	---
-	---	---
-	---	---
-	---	---

Fig. 15D—Balance After Machine Addition (6.10)

055 YOU REQUESTED A CHANGE TO THIS RESERVATION.

NR: -
HRBGPAHA41T

ACTION: A TRUNK GROUP: PHLAPAMK41T DIR: 0
T.E. CLASS: 008 QUANTITY: 009 AUTHORIZATION: 0
TEST DATE: 10/12/76 DUE DATE: 10/26/76
CIRCUIT ORDER: 096274

ENTER ONLY THOSE FIELDS YOU WISH CHANGED.

QUANTITY: ---
AUTHORIZATION: -
TEST DATE: --/--/--
DUE DATE: --/--/--
CIRCUIT ORDER: -----

Fig. 18D—Reservation (6.13)

061 ENTER REPORT DESIRED

HRBGPAHA41T

A - TRUNK GROUP LAYOUT REPORT
B - TRUNK GROUP REPORT - DROP EQUIP
C - DETAILED EQUIPMENT LIST
D - TRUNK BLOCK CONNECTOR BY TRUNK GROUP
E - TRUNK BLOCK CONNECTOR BY CONN/RELAY
F - NOT SPARE EQUIP, DEFECTIVE EQUIP
G - OFFICE SUMMARY XXXX NOT AVAILABLE XXXX
H - WORK ACTIVITY REPORT
I - TRUNK EQUIPMENT SUMMARY
J - EQUIPMENT SUMMARY
K - RESERVATION SUMMARY
L - FRAME LETTER
M - EQUIPMENT BALANCE PROFILE
N - CAMA TRUNK GROUP SUMMARY
O - CAMA RECORDER INDEX REPORT
P - CHANGE NAME AND ADDRESS
Q - TURNED OFF EQUIPMENT LIST
R - WORK UNIT REPORT
S - LOAD REJECTS REPORT
T - T.B.C. SUB-GROUP SUMMARY
CHOICE: -

Fig. 19—Reports (6.14)

045 ENTER TRUNK GROUP AND OPTION DESIRED.

HRBGPAHA41T

TRUNK GROUP

BRSPXAB658

A - ADD NNX'S TO A GROUP.

B - DELETE NNX'S FROM A GROUP.

C - ADD A GROUP TO AN INDEX

D - DELETE A GROUP FROM AN INDEX.

E - ASSIGN-DISC SPECIFIC INDEXES IN RECORDER --

CHOICE: -

046 ENTER NNX'S TO BE ADDED TO BRSPXAB658

HRBGPAHA41T

NNX

658

047 ENTER (D) IN ACTION FIELD OF NNX'S TO BE DELETE.

HRBGPAHA41T

BRSPXAB658

NNX ACTION

658 -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -
--- -

Fig. 20A—CAMA Routine (6.15)

045 ENTER TRUNK GROUP AND OPTION DESIRED.

HRBGPAAHA41T

TRUNK GROUP

BRSPAXB658

A - ADD NNX'S TO A GROUP.

B - DELETE NNX'S FROM A GROUP.

C - ADD A GROUP TO AN INDEX

D - DELETE A GROUP FROM AN INDEX.

E - ASSIGN-DISC SPECIFIC INDEXES IN RECORDER --

CHOICE: -

049 BRSPAXB658

HRBGPAAHA41T

NNX: 658

ENTER RECORDERS IN WHICH THIS GROUP IS
TO BE INDEXED:

05	06
10	14
--	--
--	--
--	--
--	--
--	--
--	--
--	--

050 BRSPAXB658

HRBGPAAHA41T

ENTER (D) INTO THE ACTION FIELD FOR
THE RECORDERS FROM WHICH THIS GROUPS
NNX'S ARE TO BE REMOVED:

RCDR	ACTION	RCDR	ACTION
05	-	06	-
10	-	14	-
--	-	--	-
--	-	--	-
--	-	--	-
--	-	--	-
--	-	--	-
--	-	--	-
--	-	--	-

Fig. 20B—CAMA Routine (6.15)

045 ENTER TRUNK GROUP AND OPTION DESIRED.

HRBGPAAH41T

TRUNK GROUP

BRSPAXB658

A - ADD NNX'S TO A GROUP.

B - DELETE NNX'S FROM A GROUP.

C - ADD A GROUP TO AN INDEX

D - DELETE A GROUP FROM AN INDEX.

E - ASSIGN-DISC SPECIFIC INDEXES IN RECORDER 05

CHOICE: E

102 ASSIGN AND DISCONNECT SPECIFIC INDEXES.

NR: -

HRBGPAAH41T

TRUNK GROUP BRSPAXB658				RECORDER 05			
IND	NNX	TRUNK GROUP	ACT	IND	NNX	TRUNK GROUP	ACT
00	272	LBNNPALES61	-	01	273	LBNNPALES61	-
02	---	-----	-	03	274	LBNNPALES61	-
04	935	BLVLPAXB935	-	05	838	PLMYPAPAB38	-
06	367	EZTWPAXE367	-	07	692	MLBGPAXM692	-
08	658	BRSPAXB658	-	09	667	RDVLPAXR667	-
10	---	-----	-	11	652	PXTNPAPAMGO	-
12	---	-----	-	13	---	-----	-
14	774	NCLDPANCMGO	-	15	---	-----	-
16	365	GRTZPAXG365	-	17	657	PXTNPAPAMGO	-
18	---	-----	-	19	---	-----	-
20	---	-----	-	21	---	-----	-
22	---	-----	-	23	---	-----	-
24	---	-----	-	25	---	-----	-
26	---	-----	-	27	---	-----	-
28	---	-----	-	29	---	-----	-

Fig. 20C—CAMA Routine (6.15)