

**Task Oriented Practice
(TOP)**

*4ESS*TM SWITCH WITH 1B PROCESSOR
MAINTENANCE FUNCTION VERIFICATION

SYSTEM EVALUATION AND ACCEPTANCE TESTS

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FIND YOUR JOB IN THE LIST BELOW THEN GO TO

Acceptance NTP-002

All the procedures in this book support acceptance tests.

PURPOSE

The system acceptance tests for a 4ESS™ switch office are covered in TOP 234-155-001 (Final Verification Tests) and 234-155-005 (Operational Readiness Tests). These tests, which are to be performed jointly by AT&T and the operating company, demonstrate that the system has been properly installed and is ready for commercial service. During the installation and testing interval, in most instances, operating company personnel have limited opportunities for "hands-on" experience. The purpose of this volume is to provide some additional tests – maintenance function verification tests – that can be done solely by operating company personnel. By performing these tests, Maintenance Operations Center (MOC) technicians can gain additional familiarity with system operations prior to cutover.

REQUIREMENTS

The maintenance function verification tests contained in this volume are completely optional. Although some of the tests have not been covered elsewhere, they are intended to be performed primarily for additional training and as a confidence builder. The operating company can decide which of the tests, if any, they want to perform to suit their needs. Any tests performed should be completed during the the turnover to cutover interval.

SEQUENCE

These tests do not need to be performed in a particular sequence. However, if the input/output channel tests are to be performed, it is recommended they be done first since the I/O system will be used in all the other maintenance function verification tests.

ACCEPTANCE

PRECAUTIONS

The following tests are disruptive or potentially disruptive and must be scheduled to avoid interference with required activities during the turnover-cutover interval:

- MCC Processor Control Functions Tests
- System Update Test
- Recent Change Rollback and Rollforward Test

PREREQUISITES

Since some of the MOC technicians may be performing some of the tasks for the first time, it is recommended that at least one person who is qualified in 4ESS switch operation and maintenance be present while a test is being performed.

The status of the system should be as follows:

- All preturnover testing has been successfully completed
- All equipment-affecting change notices (CNs) have been completed
- The generic and Office Data Assembler (ODA) programs are essentially at cutover status
- All program overwrites, except those officially authorized by Product Engineering Control Center (PECC) or AT&T Bell Laboratories, have been removed
- All frames pass diagnostics ATP and are operating in full duplex configuration
- No units have been restored unconditionally (UCL)

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ACCEPTANCE TASKS

The maintenance function verification tests consist of the following tasks:

- Perform MCC Processor Control Functions Tests NTP-003
- Test Ability of Central Controls to Switch if Active Central Control Loses Power NTP-004
- Perform Network Management Features Tests NTP-005
- Perform Input/Output Channel Tests NTP-006
- Perform Recent Change Rollback – Rollforward Test NTP-007
- Perform AT&T 3B Computer Tests NTP-008
- Perform MCC Tests NTP-009
- Test ODA Update Process Using AT&T 3B Computer Tape Units NTP-010
- Prepare For ODA Update NTP-011
- Perform ODA Update NTP-012

ACCEPTANCE

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DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Notify All Work Centers That Potentially Disruptive Tests Are To Be Performed	-
2	At MCC Terminal: Enter 108 to Obtain Display Page 108	-
3	If 801-RESTRICT RC Not Colored Black on White, Enter Poke Command 801	-
4	Notify MAC To Suspend Recent Change Activity Until Tests Are Completed	-
5	Perform Forced Processor Configuration Recovery Test	DLP-500
6	Perform Software Recovery Phase Test	DLP-501
7	Perform PC Trigger Test	DLP-502
8	At MCC Terminal: Enter 108 to Obtain Display Page 108	-
9	Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored White on Black)	-
10	Notify Work Centers That Tests Have Been Completed	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Notify All Work Centers That Potentially Disruptive Tests Are To Be Performed	-
2	Notify MAC To Suspend Recent Change Activity Until Tests Are Completed	-
3	Condition System	
	1. At MCC Terminal: Enter 108 to Obtain Display Page 108	-
	2. Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored Black on White)	-
	3. At SYSTEM STATUS Portion of Page 108: Ensure That No Other Functions Are Inhibited	-
	4. At PC Sequencer Portion of EAI Page: Ensure That DISABLE AUTO PC Is Off (Poke 70 Displayed White on Black)	-
	5. At FORCE FNCT Portion of EAI Page: Ensure That No Indicators Are Lighted	-
	6. At TTY: Enter Message OP:00SUNITS! To Determine Units That Are Out-of-Service	-
	7. If Any of the Following Units Are Out-of-Service, Restore Them With RST Message:	-
	Central Control AU Bus 0/1	
	Program Stores PU Bus 0/1	
	Call Stores SSD 0/1	
	APIs AUI 0/1	
	Data Unit Selectors IFB 0/1	
	PS Bus 0/1 MUP 0/1	
	CS Bus 0/1 XPWR	
4	Diagnose Call Stores and Program Stores	
	1. Perform Normal Diagnostics and Memory and Slave Tests on One Call Store or Program Store	DLP-504
	2. Enter Message RST:a b! To Restore Call Store or Program Store to Service a = Unit type (CS or PS) b = Member number	-
	3. Repeat 1 and 2 for Remainder of Call Stores and Program Stores	-
5	Force Central Controls to Switch	DLP-503

TEST ABILITY OF CENTRAL CONTROLS TO SWITCH IF ACTIVE CENTRAL CONTROL LOSES POWER

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

6	At MCC Terminal: Enter 108 to Obtain Display Page 108	-
7	Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored White on Black)	-
8	Notify Work Centers That Tests Have Been Completed	-

TEST ABILITY OF CENTRAL CONTROLS TO SWITCH IF ACTIVE CENTRAL CONTROL LOSES POWER

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Load Network Management (NWM) Data and Verify	DLP-505
2	At NMDT Channel, Type EOT! to Call Up Generic Control (CN) Directory Display Page	-
3	Perform Nongeneric Directory Page Tests	DLP-506
4	Perform Dynamic Overload Control (DOC) Transmission Test	DLP-507
5	Perform Network Management Display (NMD) Panel Test	DLP-508
6	Perform On-Site Operations Report (OSOR) Test	DLP-509

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Prepare Office I/O Channel Equipage List	DLP-510
2	Verify Channel Assignments	DLP-511
3	Perform Backup Channel Tests	
	1. Test MTC Backup Channel	DLP-513
	2. Test SREC1 Backup Channel	DLP-515
	3. Test Remaining Backup Channels	DLP-516
4	Perform Message Accept and Reject Tests	DLP-512

PERFORM INPUT/OUTPUT CHANNEL TESTS

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Notify All Work Centers That Disruptive Tests Are To Be Performed	-
2	Notify MAC To Suspend Recent Change Activity Until Tests Are Completed	-
3	At MCC Terminal: Enter 108 to Obtain Display Page 108	-
4	Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored Black on White)	-
5	Enter Message AUD:NUM (43,44,45)! Response: AUD COMPLETED, 0 ERRORS DETECTED Messages Print (Audit 43 Takes Approximately 20 Minutes To Complete)	-
6	Write Backup ODA Tape	DLP-514
7	At RCMOC Floppy Disk: Insert New Rollforward Diskette	
	1. Remove Current Rollforward Diskette From Floppy Disk	-
	2. Label and Store Diskette According to Local Instructions	-
8	3. Insert Blank or Erasable Diskette Into Floppy Disk and Depress RESTART Switch	-
	At RCREC Floppy Disk: Insert New RC Buffer Diskette	
	1. Remove Current Rollforward Diskette From Floppy Disk	-
9	2. Label and Store Diskette According to Local Instructions	-
	3. Insert Blank or Erasable Diskette Into Floppy Disk and Depress RESTART Switch	-
10	At MCC Terminal: Enter 108 to Obtain Display Page 108. Enter Poke Command 801 (RESTRICT RC)	-
11	Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored Black on White)	-
12	Input and Verify Dummy Recent Change for Rollback With a Phase	DLP-517
13	Perform Recent Change Rollback Via Manual Request for Phase 3	DLP-518
13	Perform Recent Change Rollforward	
	1. Remove Rollforward Diskette From RCMOC Floppy Disk	-
	2. Insert Diskette Just Removed From RCMOC Into SREC1 Floppy Disk and Depress RESTART Switch	-
	3. Reenter Recent Change Data From Rollforward Diskette at SREC1 TTY	DLP-519

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

14	Place Rollforward Diskette Back Into RCMOC Floppy Disk	
	1. Remove Rollforward Diskette From SREC1 Floppy Disk	-
	2. Insert Diskette Just Removed From SREC1 Floppy Disk Into RCMOC Floppy Disk and Depress RESTART Switch	-
15	Input and Verify Dummy Recent Change for Input Message Rollback	DLP-520
16	Perform Recent Change Rollback Using an Input Message	DLP-521
17	Cancel Dummy Recent Changes by Entering RCCNL:RCTORNU a! for Each Dummy Recent Change (a = ORNU of Dummy RC)	-
18	Erase Diskette in RCMOC and RCREC Floppy Disks by Entering .CN* for Each Diskette	-
19	Notify Work Centers That Tests Have Been Completed	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Perform Control Unit Demand Diagnostics	DLP-522
2	Perform Disk File Controller Demand Diagnostics	DLP-523
3	Perform Input/Output Processor Demand Diagnostics	DLP-524
4	Perform Emergency Recovery Tests	DLP-525
5	Write Backup Tape(s)	DLP-526
6	Enter Recent Change To Change Office Name, Generic ID, and Time Zone	DLP-527
7	Copy Partitions 2, 4, 13, and 16	DLP-528

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	At TTY: Enter Message OP:00SUNITS! To Obtain List of Units That Are Out-of-Service	-
2	Enter Message RST:a b! (a = Unit Type, b = Member Number) To Restore Any 1A Processor Units That Are Out-of-Service	-
3	Wait for TTY Response RST:a b COMPLETED for 1A Processor Units That Were Out-of-Service	-
4	At TTY: Enter Message DGN:MCC 0!	-
5	Wait for TTY Response DGN:MCC 0 COMPLETED ATP	-
6	At TTY: Enter Message RST:MCC 0!	-
7	Wait for TTY Response RST:MCC 0 COMPLETED	-
8	Run 1B Processor CC Diagnostic Phase 95 to Test PC Function	DLP-529
9	Restore Standby CC to Service (RST:CC a!)	-
10	Switch 1B Processor Central Controls (CCs)	DLP-562
11	Run 1B Processor CC Diagnostic Phase 95 to Test PC Function	DLP-529
12	Restore Standby CC to Service (RST:CC a!)	-
13	Switch 1B Processor Central Controls (CCs)	DLP-562

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required	—
2	At MCRT, if Screen Displays EAI Page, Depress NORM/DISP (PF2) Key	—
3	Enter 101 in Command Mode To Obtain Display Page 101	—
4	Depress CMD/MSG (PF3) To Move Cursor to Bottom of Screen	—
5	If Test ODA Update Process Is Expected To Last Through Midnight	
	1. At MCRT, Enter Message INH:DMQ;SRC REX! To Inhibit REX	—
	2. At MTC Channel, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	—
6	If 1600 BPI Network Management Tape Is Not Available, Write Network Management (NWM) Tape	DLP-530
7	Mount New 1600 BPI ODA Tape on Idle Tape Unit	DLP-532
8	At MCRT, Enter Message VER:UPDATE:TAPE,MT a! (a = Tape Unit Number) and Record BASE and CONTROL Numbers for Later Use in LOAD Message. Ensure That BASE and CONTROL Numbers Are Correct for This Office	DLP-533
9	Load New ODA on Disk (LOAD:UPDATE:ODA "aaaabb",MT c!)	DLP-534
	<i>Caution: When ODA COMPLETE - READY FOR NWM output message is received; update program enters 20-minute wait mode. Input message to process network management must be entered within this time limit or test terminates and complete restart is required</i>	
10	If Loading of ODA Tape Was Aborted, Perform Items 11 Through 13; Otherwise, Go to Item 14	—
11	Demount ODA Tape From Tape Unit	DLP-531
12	At MCRT, Enter Message OP:OOS! and Ensure That All Units Are in Service	—
13	Repeat From Item 7 Using Another ODA Tape	—
14	If Only One Tape Unit Is Available, Demount ODA Tape After Tape Rewinds	—
15	Obtain 1600 BPI Network Management Tape	—
16	Mount Network Management Tape on Tape Unit and Verify Tape Identification Is Correct for Update (VER:UPDATE:TAPE,MT a! a = Tape Unit Number)	DLP-535

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

17	Load New Network Management Data on Disk and Complete Data Base (LOAD:UPDATE:CONT NWM,MT a!)	DLP-536
	<i>Notes:</i> 1. After receiving MAPPING DYNAMIC DATA FROM NORMAL FILE output message, WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR may be received. Mapping dynamic data cannot cross 15-minute time boundary due to long-term storage data mutilation. System automatically maps dynamic data when in proper window 2. After receiving DATABASE COMPLETE – READY FOR ODA UPDATE output message, loading process is complete	
18	If Loading of Network Management Tape Was Successful, Go to Item 22. If It Was Aborted, Perform Items 19 Through 21	–
19	Demount Network Management Tape From Tape Unit	DLP-531
20	At MCRT, Enter Message OP:00S! and Ensure That All Units Are in Service	–
21	Repeat From Item 7	–
22	At MCRT, Enter Message COPY:LSNC ALL! To Rebuild Any Large-Scale Nailup Connections and Update TOSL in UPDATE File	–
	<i>Note:</i> After VER message has been entered (Item 23) and if no critical overwrites are required (Item 24), procedure can be continued at Item 25 without waiting for verify to complete. Printout must be observed periodically for errors	
23	At MCRT, Verify 1AFile Hashed Areas for 0 Errors (VER:APPFILE UPD!)	DLP-537
24	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-538
25	Compare Critical Data in New ODA With Data in Active System by Performing Items 26 Through 27	–
26	Run Cross Translations Compare Program (XLCP)	DLP-539
27	Analyze, With Help From Support Organization, Results of XLCP for Unexpected Mismatches	–
28	If XLCP Did NOT Find Unexpected Mismatches, Go to Item 30	–

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

29	If XLCP Found Unexpected Mismatches Between New ODA and Data in Active System, After Consulting With Appropriate Support Organization, Select Option A or B and Proceed As Directed	
	A. If Mismatches Can Be Corrected Within the Hour, Determine Additional Overwrites To Be Inserted and Repeat From Item 24	-
	B. If It Is Determined That Corrections Cannot Be Made Within the Hour, Await Further Instructions Before Proceeding	-
30	Demount Tape(s) From Tape Unit(s)	DLP-531
31	If REX Was Inhibited in Item 5	
	1. At MTC Channel, Enter Message ALW:MACLI,CLASS MTCE! To Allow REX	-
	2. At MCRT, Enter Message ALW:DMQ;SRC REX! To Allow REX	-
32	Obtain List of All Trunks Added During Quiet Period. These Trunks are Set to CAD.DSA State During "Prepare for Update" Procedure	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required	—
2	Establish Frame Hardware Status Required for Update	DLP-540
3	At MCC Terminal: Enter 108 To Obtain Display Page 108	—
4	Enter Poke Command 801 (RESTRICT RC) (801-RESTRICT RC Colored Black on White)	—
	<i>CAUTION: DO NOT enter COPY:APPFILE NORM message after ODA tape has been written</i>	
5	Write Backup ODA Tape (800 BPI Tape)	DLP-541
6	If Office Is Covered by Operation Support System, Request Appropriate Support Organization To Convert Recent Change Data Bases for Monitor Channel and Operation Support System	—
	Note: Writing of long-term storage on tape must be initiated during 7-minute window beginning 4 minutes past any quarter hour	
7	Write Backup Long-Term Storage (LTS) Tape	DLP-544
8	Notify Network Manager To Obtain Hard Copy of All Network Management Display System (NMDS) PA Pages Since Controls Associated With These Pages Will Be Lost Concurrent With Update	—
9	Write Backup Traffic and Plant Measurement (TPM) Tape	DLP-545
10	Write Backup Trunk Out-of-Service List (TOSL) Tape	DLP-546
11	Save Tapes Just Written Until New Data Base Is Finally Committed	—
12	Perform Item 11.A or 11.B per Local Practice To Obtain Trunk Subgroup Maintenance Status. Save Printout for Trunk Circuit Recovery Verification	
	A. Enter Message OP:TSGSTAT;DETL:ALL!	—
	B. Enter Message OP:TSGSTAT;DETL:TCA a! a = Number for Each Assigned Trunk Control Area	—
13	Enter Message OP:TANTOTAN! To Obtain Listing of All Active TAN-to-TAN Connections. Save Printout To Verify That Connections Are Still Up After Office Is Running on New Generic and/or ODA	—
14	Enter Message VER:NAILUP;ALL! To Obtain Listing of All Active Large Scale Nailup Connections. Save Printout To Verify That Connections Are Still Up After Office Is Running on New Generic and/or ODA	—
15	Enter Message OP:00SUNITS! and Ensure That All Processor Units Are in Service	DLP-540

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

16	Run CC Diagnostic Phase 95 To Test PC Function (Three Combinations)	DLP-529
17	Restore Standby CC to Service (RST:CC a!)	-
18	Switch 1B Processor Central Controls (CCs)	DLP-562
19	Run CC Diagnostic Phase 95 To Test PC Function (Three Combinations)	DLP-529
20	Restore Standby CC to Service (RST:CC a!)	-
21	If Office Is Equipped for Mass Announcement Service, Notify Operations Network Administration Center (ONAC) of Expected Time of Update	-
22	If Office Is Set Up for AMA Recording, Save Primary IC and/or OC AMA Data. This Must Be Scheduled To Be Completed Within 2 Hours Prior to Update	
	A. For Offices Which Write AMA Tapes	DLP-547
	B. For Offices Which Do AMA Teleprocessing	
	1. At AT&T 3B Computer ROP: Review Printouts To Determine If AMA Teleprocessing Session Is in Progress or If AMA Session Has Completed Within Past 2 Hours	-
	2. If Session Is in Progress, Wait Until Session Terminates	-
	3. Ensure That NORMAL TERMINATION – NO MORE DATA Was Received on Session Summary Printout for Each AMA Stream Set to Teleprocessing	-
	4. If AMA Session Has Not Completed Within Last 2 Hours, Perform Items 24.B.5 Through 24.B.8; Otherwise, Go to Item 25	-
	5. At MCRT: Enter Message OP:AMA;CONTROLFILE! and Save Printout for Later Reference in Setting Control File Back to Normal	-
	6. Enter Message SET:AMA;CONTROL;a:OPTION TAPE [,TAPEID "b"]! (a = IC or OC and b = Tape Data Set ID, As Required) for Each Stream Set to Teleprocessing	-
7. Save Primary AMA Data on Tape	DLP-547	
8. Enter Message SET:AMA;CONTROL;a:OPTION TP! (a = IC or OC) To Set AMA Control File Back to Teleprocessing	-	
23	All Trunks That Have Been Added During Quiet Period Must Be Set to CAD.DSA State Before Performing Update	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

24	Obtain Informational BWM for Current Generic Concerning Incident Data Set Overwrites From SCANS. Overwrites Are To Be Applied After Update	-
25	If CNI Ring Is Equipped in Office, Perform Items 27 Through 31; Otherwise, End of Procedure	-
26	At MCRT: Depress NORM DISP (PF2) Key and Enter 1106 in Command Mode To Obtain Display Page 1106	-
27	Ensure That RING POS Is NORM and MAJOR STATE Is ACT for Each Equipped CNI Ring Node	-
28	Enter 1107 in Command Mode To Obtain Display Page 1107	-
29	Ensure That One Link Node Is Assigned 1WAY IN and One Link Node 1WAY OUT . Both Link Nodes Must Have HDWR STATE and APPL STATE of ACT . If Four Link Nodes Are Listed, HDWR STATE Must Be ACT and APPL STATE Must Be STBY for Link Nodes Not Assigned 1WAY IN or 1WAY OUT	-
30	Enter 1108 in Command Mode To Obtain Display Page 1108	-
31	Ensure That LINK STATE Is AVL/IS and NODE STATE Is ACT for Each Equipped Signaling Link	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

1	Place Check Mark Beside Each Item or Subitem When Completed, or If Not Required	—
2	Before Starting, Review and Become Familiar With DLP-553	—
3	At MTC Channel, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	—
4	Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary; Save Printout for Trunk Circuit Recovery Verification	—
5	Enter Message OP:OOSUNITS! and Ensure That Required Processor Units Are in Service	—
6	At MCRT, Enter Message INH:DMQ;SRC REX! To Inhibit REX	—
7	Enter Message OP:OOS! and Ensure That Required 3B Computer Units Are in Service	—
8	At MCRT, Verify Data Base To Ensure That LAST ODA TAPE WRITTEN Date Has Tape Date of ODA Tape Previously Loaded in UPDATE File (OP:APPLOAD UPD!)	DLP-549
9	If Critical Overwrites Are Required, Insert Critical Overwrites Into UPDATE File and Save Printout of Overwrites	DLP-538
10	At MCRT, Verify 1A File Hashed Areas for 0 Errors (VER:APPFILE UPD!)	DLP-537
11	Map Dynamic Data From NORMAL File to UPDATE File (LOAD:UPDATE:MAP!)	DLP-550
12	At MCRT, Enter Message COPY:LSNC TOSL! To Update TOSL in UPDATE File	—
13	Prepare MCC for Manual Recovery	DLP-551
14	At MCC Terminal, Depress EA DISP Key To Obtain Display Page EAI	—
15	At MCC Terminal, Enter Poke Command 62 (UPD FILE) (62-UPD FILE Colored Purple on White)	—
16	At MCC Terminal, Determine Which API Is Active by Entering Page 118	—
17	At MCC Terminal, Depress EA DISP Key To Obtain Display Page EAI	—
18	At MCC Terminal, if API0 Is Active Enter Poke Command 42 otherwise enter poke command 43	—
19	At MTC Channel, Enter Message DUMP:CC,ADR 17776332,L 3! To Dump Status of MCC Keys for Support Organization	DLP-552
20	Prepare 1B Processor MCC Terminal For Manual Recovery – Prior To Update	DLP-563
21	Boot 1B Processor	DLP-553

PERFORM ODA UPDATE

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

22	If Attempt To Configure to New System Was Successful, Go to Item 27. If Unsuccessful, Perform Items 23 Through 27	-
23	At MTC Channel, Enter Message UPD:COMMIT;NORMFILE!	-
24	At MCC Terminal, Enter Poke Command 61 (Norm File)	-
25	Analyze, With Help From Support Organization, Printout To Determine Why Update Failed	-
26	After Consulting With Support Organization, Select Option A or B and Proceed As Directed	-
	A. If Update Is To Be Discontinued, End of Procedure. Ensure System Is Operating Properly	-
	B. If Update Is To Be Continued, Proceed As Directed by Support Organization	-
27	If Loaded Network Management Has Different Issue From Previous Network Management, At Next Quarter Hour, Look for "OSOR BURST" Page. At Bottom of BURST Page, Ensure That OSOR SCHEDULES and COUNT DATA BASE Are UPDATED and Not INITIALIZED	-
28	When System Starts To Process Calls (I/O Communications Reestablished), If System Clock Time Data Is Incorrect, Set System Clock	DLP-554
29	At MCC Terminal, Enter 108 to Obtain Display Page 108	-
30	Enter Poke Command 866 (SVC) (866-SVC Colored White on Black)	-
31	If Other Service Circuits Were Listed (Item 30) and Need To Be Restored, At MTC Channel, Enter Message SET:TRKSTAT ACT,CIN a;SUM:TSG! (a = CIN of Service Circuit Group) for Each Group of Circuits With Trunks Out	-
32	At MTC Channel, Enter Message INH:MACLI,CLASS MTCE;REX! To Inhibit REX	-
33	If Any Active TAN-to-TAN Connections Existed Prior to Update, at MTC Channel, Enter Message OP:TANTOTAN! and Verify From Printout That TAN-to-TAN Connections Are Still Established	-
34	If Any Active Large-Scale Nailup Connections Existed Prior to Update, at MTC Channel, Enter Message VER:NAILUP;ALL! and Verify From Printout That Large-Scale Nailup Connections Are Still Established	-
35	At MTC Channel, Enter Message OP:OOSUNITS! and Ensure That Required Processor Units Are in Service	DLP-540
36	Run Audits 43, 44, and 45 (Items 37 Through 40)	-
37	Enter Message AUD:NUM (43,44,45)!	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

38	While Audits Are Running, Continue To Perform Succeeding Items	-
39	If Any Errors Are Detected and NOT Corrected, Inform Support Organization of Audit Results and Follow Their Instructions for Further Action	-
40	During Execution of Audit 43, Scan Output Messages Periodically for Abort Messages	-
41	If Office Arranged for CAMA, Check CAMA Operation	DLP-555
42	If CNI Ring Is Equipped in Office, Perform Items 43 Through 48; Otherwise, Go to Item 49	-
43	At MCRT, Depress NORM DISP (PF2) Key and Enter 1106 in Command Mode To Obtain Display Page 1106	-
44	Ensure That RING POS Is NORM and MAJOR STATE Is ACT for Each Equipped CNI Ring Node	-
45	Enter 1107 in Command Mode to Obtain Display Page 1107	-
46	Ensure That One Link Node Is Assigned 1WAY IN and One Link Node 1WAY OUT . Both Link Nodes Must Have HDWR STATE and APPL STATE of ACT . If Four Link Nodes Are Listed, HDWR STATE Must Be ACT and APPL STATE Must Be STBY for Link Nodes Not Assigned 1WAY IN or 1WAY OUT	-
47	Enter 1108 in Command Mode to Obtain Display Page 1108	-
48	Ensure That LINK STATE Is AVL/IS and NODE STATE Is ACT for Each Equipped Signaling Link	-
49	At MTC Channel, Enter Message OP:MSGRCD,FS! To Clear Recorded Message Area on Disk	-
50	At I/O Terminal Other Than MTC, Set Up Vacant Code Traps, As Required	DLP-556
51	At MTC Channel, Enter Message OP:TSGSTAT;SUM:ALL! To Obtain Trunk Subgroup Status Summary	-
52	If Trunk Subgroup Discrepancies Exist Which Cannot Be Resolved With the Summary Printout, Request TOC To Initiate Request for Detailed Printout of Trunk Subgroup Status	-
53	Request TOC To Initiate Sample Trunk Testing at Each Test Position	-
54	Notify Network Management Center To Begin Checkout of Network Management System	DLP-557
55	Review Maintenance Output Messages; Account for Interrupts, Interjects, and Audit Reports and Compare With Preupdate Office Performance Results	-
56	Compare Count of Ineffective Machine Attempts With Preupdate Level	-
57	If Office Provides CAMA Service, Monitor CAMA Call Activity; Compare With Expected Level	-

DO THE ITEMS BELOW IN THE ORDER LISTED FOR DETAILS, GO TO

58	Determine That Manually Placed Calls and System Placed Test Calls Complete Successfully	-
59	After All Work Centers Have Verified That Satisfactory System Performance Has Been Established, At MTC Channel, Enter Message UPD:COMMIT;UPDFILE!	-
60	At MCC Terminal, Depress EA DISP Key to Obtain Display Page EIA	-
61	At MCC Terminal, Enter Poke Command 62 (UPD FILE) (62-UPD FILE Colored White on Purple)	-
62	At MTC Channel, Enter Message INIT:PUXINIT!	-
63	If Security Call Traps Existed Prior to Update, Request Network Management To Enter Security Call Traps per Local Practice	-
	<i>Note: Writing of long-term storage on tape must be initiated during 7-minute window beginning 4 minutes past any quarter hour</i>	
64	Write Backup Long-Term Storage (LTS) Tape	DLP-544
65	Load Library Packages Required for Normal Local Use Using Office Library Tape	DLP-558
66	At MCC Terminal, Enter 108 to Obtain Display Page 108	-
67	Enter Command 801 (RESTRICT RC) (801-RESTRICT RC Colored White on Black)	-
68	If Office Is CAMA Equipped, Install Any Special CAMA Data per Local Practice, As Required	-
69	Write Backup ODA Tape	DLP-541
70	Write Updated Traffic and Plant Measurement (TPM) Schedule Tape	DLP-545
71	Place TLP Tape in Service	DLP-559
72	If Overwrites Are To Be Installed, Install per Local Practice	-
73	If ODA Update Was Performed and Generic Overwrites Were Applied, Write Generic Tapes (800 BPI)	DLP-560
74	Write Backup Network Management Tape (NWM) (800 BPI)	DLP-561
75	Enter Message ALW:MACLI, CLASS MCTE! To Allow REX	-
76	At MCRT, Enter Message ALW:DMQ;SRC REX! To Allow REX	-

1. The error code that is printed is a 5-digit hex number. The three most significant digits are for an error-code number. These values and their descriptions are listed below. The two least significant digits are a unique sequence number for each failure condition so that the exact location in the program can be determined by developmental organization.

ERROR CODE	EXPLANATION
100	Failure on access of 1ASTAT file
101	UPDATE file is in update mode
102	UPDATE file is unlocked
103	Cannot allocate main memory for merge data
104	Cannot allocate main memory for tape reads
105	Cannot open 1AFILE for reading
106	Cannot open 1AFILE for reading and writing
107	Mismatch of ID tag for tape-only data
108	Failure on seek of 1AFILE
109	Failure on read of 1AFILE
10a	Invalid command line combination
10b	Cannot open tape drive for reading
10c	Cannot read tape
10d	Cannot open scratch file for tape header information
10e	Missing expected EOF
10f	Record size not equal to 1545 bytes
110	Size of ID2FS map on tape not as expected
111	FS address of ID2FS map on tape not as expected
112	MM address of ID2FS map on tape not as expected
113	Size of CS2FS map not as expected

ERROR CODE	EXPLANATION
114	FS address of CS2FS map on tape not as expected
115	MM address of CS2FS map on tape not as expected
116	Size of hash head table on tape not as expected
117	Size of hash sums area on tape not as expected
118	First word in 3-word block header invalid
119	Tape read error or missing EOF
11a	ODA CS2FS map indicates data in all-generic 32K block
11b	Invalid ODA CS2FS map value when generic map has DDB pointer
11c	Start address of FS-only block less than previous end address
11d	Invalid combination for ODA and generic CS2FS maps
11e	FS address for hash head table on tape not as expected
11f	MM address for hash head table on tape not as expected
120	ODA tape hash pointers not in numerical sequence
121	Generic tape hash pointers not in numerical sequence
122	First word in 3-word header for hash sum block invalid
123	Invalid hash pointers
124	Unexpected ID tag on tape
125	Hash collision by data other than generic or ODA
126	Invalid ID tag requested for read tape and write FS
127	Failure on write of 1AFILE
128	Pointer error in ID2FS map for merge data

GENERIC RETROFIT, ODA UPDATE, AND TAPE WRITE ERROR CODES

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ERROR CODE	EXPLANATION
129	Disagreement in ID2FS map data for hash head table addresses
12a	Disagreement in ID2FS map data for tape header addresses
12b	Disagreement in ID2FS map data for ID2FS and CS2FS addresses
12c	Failure on create of UNIX* system file for SYSRBASE
12d	Failure on write of UNIX system file for SYSRBASE
12e	Out-of-range MM address for translation to FS address
12f	Cannot translate valid MM address to FS address
130	Invalid condition in collision block
131	Cannot open tape drive for writing
132	Failure on write to tape
133	Pointer error in ID2FS map
134	Disagreement in ID2FS map for network management addresses
135	Failure on create of UNIX system file for tape-only data
136	Failure on seek of UNIX system file for tape-only data
137	Failure on write of UNIX system file for tape-only data
138	Tape is not the required NWM tape
139	Tape is not an SR tape

ERROR CODE	EXPLANATION
13a	Mismatch on ID2FS map between system and tape
13b	Mismatch on top part of CS2FS map between system and tape
13c	Mismatch on DDB part of CS2FS map between system and tape
13d	Mismatch of OFL generation date and time for system and tape
13e	Failure on seek of difference file
13f	Difference file data greater than 64512 words
140	Inadequate buffer space for difference information
141	Failure to create difference file
142	Failure on open of difference file
143	Failure on write of difference file
144	Error in CS2FS DDB pointer
145	Hash sum error for shared block

* Registered trademark of UNIX System Laboratories, Inc.

1. The error code that is printed is a 5-digit hex number. The three most significant digits are for an error-code number. These values and their descriptions are listed below. The two least significant digits are a unique sequence number for each failure condition so that the exact location in the program can be determined by developmental organization.

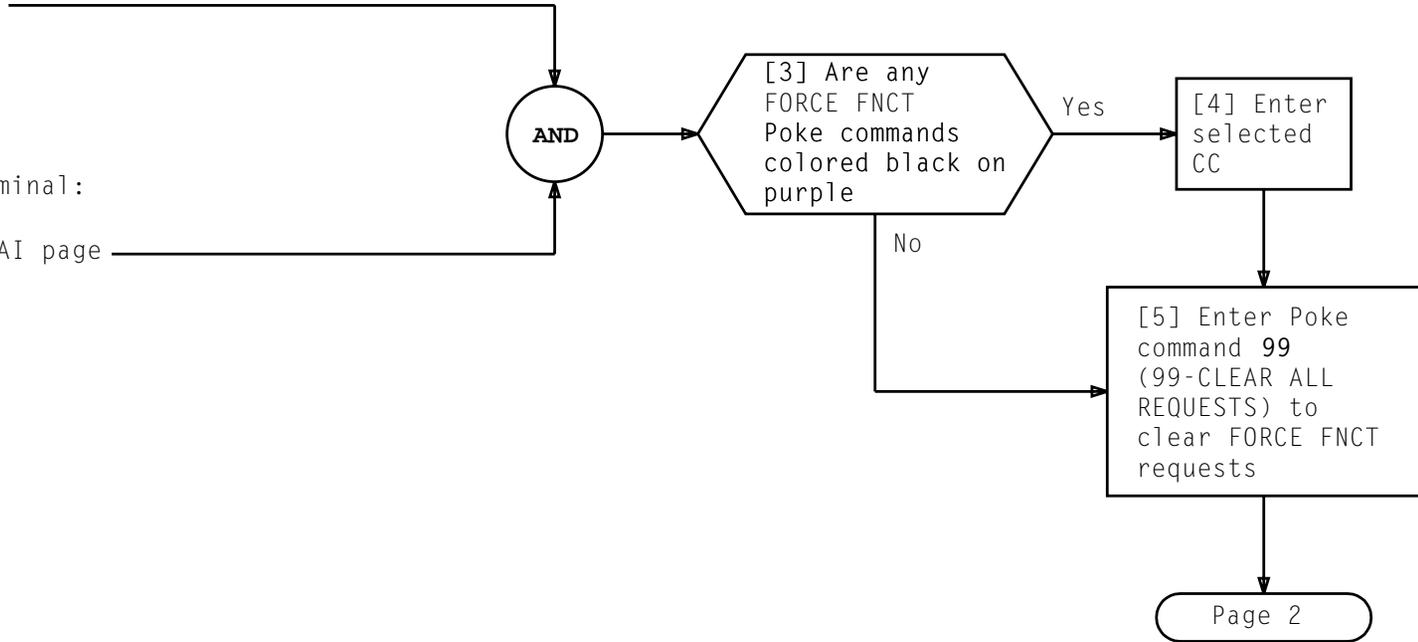
ERROR CODE	EXPLANATION
100	Failure on access of 1ASTAT file
101	UPDATE file is in update mode
103	Cannot allocate main memory for compare
104	Cannot allocate extra main memory for MTRANS compare
105	Cannot open UPDATE for reading
106	Cannot open NORMAL for reading
107	Cannot open temp file for printing output
108	Failure on seek of 1AFILE
109	Failure on read of 1AFILE
10a	Invalid switch condition
10b	Translator pointer error
10c	Out-of-range MM address for translation to FS address
10d	Cannot translate valid MM address to FS address
10e	Read buffer not large enough

[1] Enter 118 to obtain 1B Processor Status, Page 118, and determine the following:

- Standby CC
- Standby PS - MCODE 73
- Standby AUB
- Standby IFB
- Standby PSB
- Standby CSB

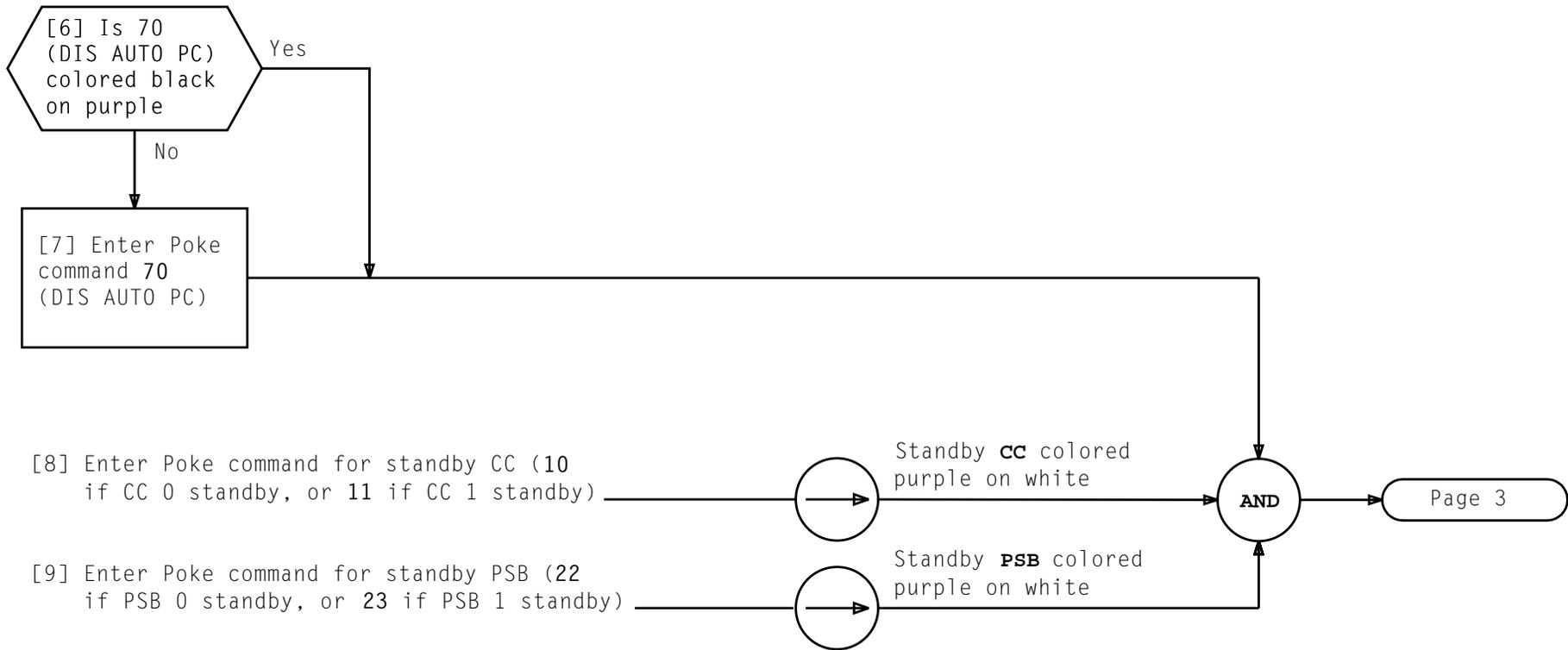
At 1B Processor MCC terminal:

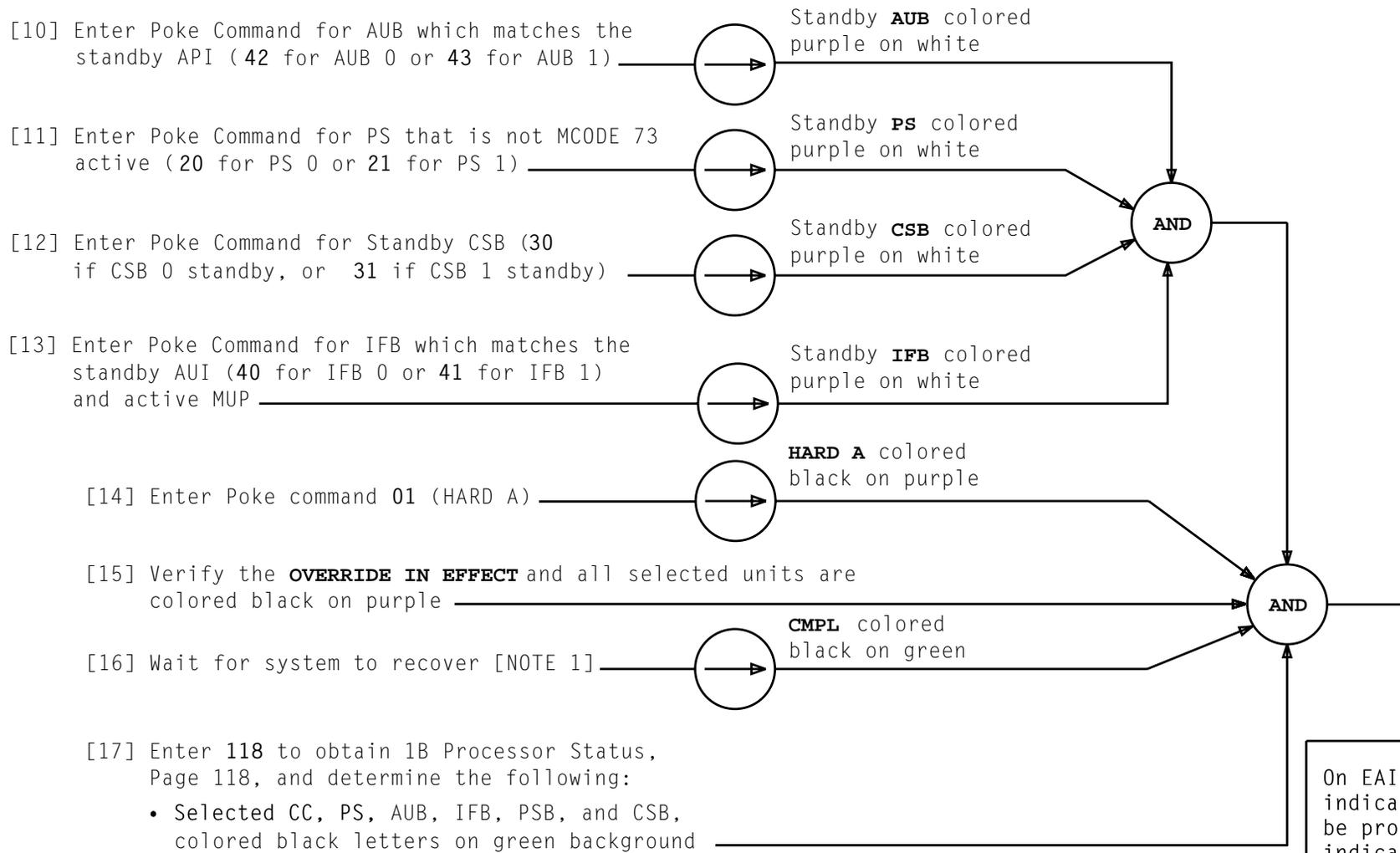
[2] Depress **EA DISP** key to obtain EAI page



PERFORM FORCED PROCESSOR CONFIGURATION RECOVERY TEST

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NOTE 1	
On EAI page indicator 86 should be progressing and indicators 87 and 88 should be blank. If 87 and 88 exhibit data, the data should be recorded and technical assistance sought.	
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PERFORM FORCED PROCESSOR CONFIGURATION RECOVERY TEST

At 1B Processor MCC terminal:

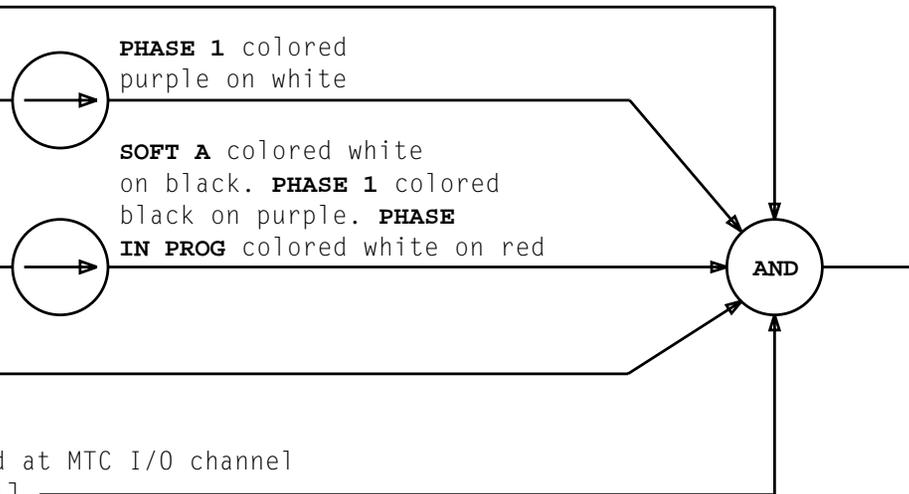
[1] Depress **EA DISP**
key to obtain EAI page

[2] Enter Poke command 51
(PHASE 1)

[3] Enter Poke command 02
(SOFT A)

[4] See NOTE 1. Wait for phase to run

[5] Verify that **CHANNEL IDLE** is printed at MTC I/O channel
followed by a phase message [FIG. 1]



```
CHANNEL IDLE

**29 REPT: PHASE INFORMATION
ACTION REQUESTED BY: MANUAL

ACTION TAKEN: PHASE 1
ACTION REQUESTED: PHASE 1
TRIGGER: 0
TRIGGER CODES: 000
TIME OF ERROR: 14:28:30
DATE: 04/26/92
MFNUM: 00000264
HARDWARE LEVEL: 1

OUTPUT MESSAGES SAVED ON FS: N
PROCESSOR CONFIGURATION RUN: Y
```

Figure 1 - Sample Phase Output Message

NOTE 1	
Time to execute a phase is dependent upon the phase executed and the number of trunks assigned to the office. This time could be from 1 second for phase 1 to several minutes for phase 4. Phase is completed when PHASE - IN PROG lamp goes off	
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[1] Enter 118 to obtain 1B Processor Status Page 118 and determine active CC

[2] At 1B Processor MCC terminal, depress **EA DISP** key to obtain EAI page

[3] Enter Poke command 70 (DIS AUTO PC)

DIS AUTO PC colored black on purple

[4] Enter Poke command 03,00 (SET PC STATE) to reset counter

[5] Enter Poke command 04 (INCREMENT PC)

Note PC state that appears after **PC STATE:**

[6] At MTC I/O channel, verify that B-level interrupt messages are received [FIG. 1]

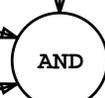
[7] Enter Poke command 03,02 (SET PC STATE)

Note PC state that appears after **PC STATE:**

[8] At MTC I/O Channel, verify that B-level interrupt messages are received and that active CC switched

[9] Enter Poke command 70 (DIS AUTO PC)

PC colored white on black



```
*C PCRV:  BENTRY
00001001  00000013  00000000  00234314  00001777  00000100
00000000  00002000  00001001  15042116  00000002  15042107
00234314  00000003  17210003  23033455  00060301  00001400
54736610  00004531  06000000  00001000  00060301  00001000
```

FIG. 1 - Sample B-Level Interrupt Message

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PERFORM PC TRIGGER TEST

[1] See CAUTION 1. Read entire procedure before proceeding

[2] Enter 118 to obtain 1B Processor Status, Page 118, and determine the active CC

Active CC colored black on green.

At MTC I/O Channel:

[3] If CC 0 is not active, enter message SW:CC! to make CC 0 active

CC0 colored black on green.

[4] Enter message RMV:CC 1!

Output message:
RMV:CC 1 COMPLETED

CC 0 active, and
CC 1 removed from
service

Page 2

AND

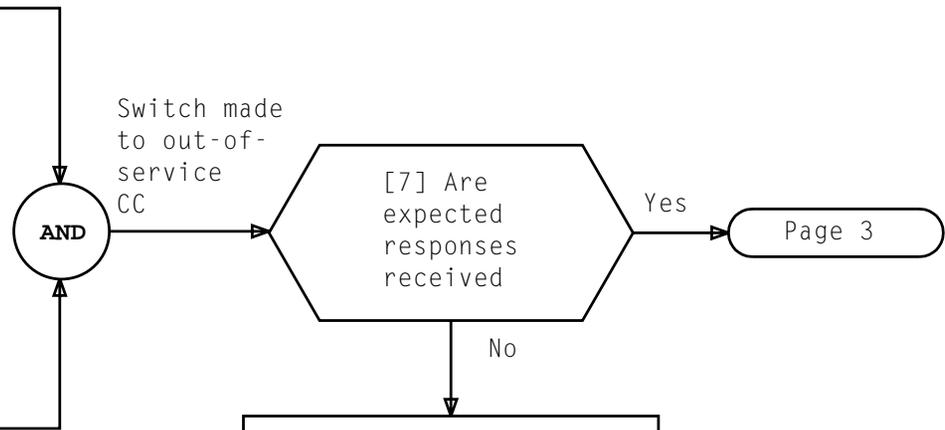
CAUTION 1
If normal conditions are not met, the active CC must be restored to service immediately. Corrective action must be initiated at once

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At **CC 0** power switch:

[5] Remove power from CC 0 (toggle **ROS** switch to **ROS** and depress **MOR** and **OFF** switches together). See NOTE 2

- [6] Immediately verify the following responses occur:
- At 1B Processor Status Page 118, **CC 1 ACTIVE** (colored black on green), **CC 0 POWER** colored white on red
 - At 1B Processor MCC terminal on EIA page, State Counter advances, then resets (goes off)
 - See NOTE 1. System recovers on its own



NOTES

1. Action taken by system to recover may be:
 - Any level of interrupt
 - PC B-Level Interrupt
 - PC Pump Action
 - Phase(s)
 - Any combination of above
2. **MANUAL OVERRIDE** is used in addition to **OFF** so you may power down a unit that is not indicating out-of-service

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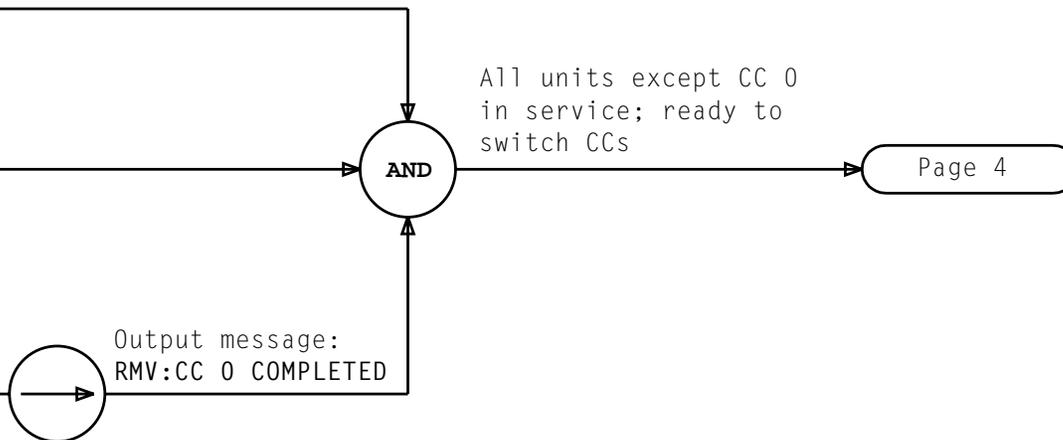
At **CC 0** power switch:

[10] Restore power to CC 0 (depress **ON** pushbutton)

[11] Restore CC 0 to service (toggle **ROS** switch to normal position)

At MTC I/O channel:

[12] See NOTE 3. After all units are back in service, enter message **RMV:CC 0!**



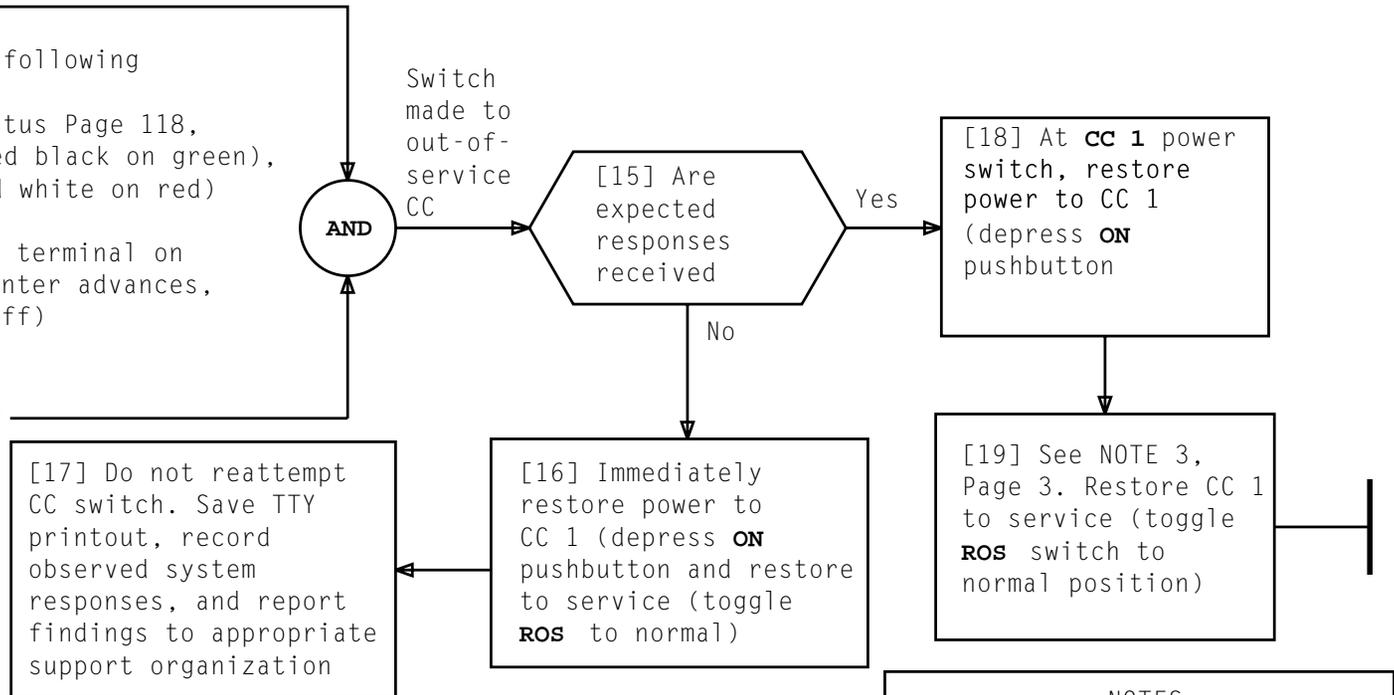
NOTE 3	
A number of units may be removed from service when CC switch is made. It may take several minutes for the system to return all units to service	
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At **CC 1** power switch:

[13] Remove power from **CC 1** (toggle **ROS** switch to **ROS** and depress **OFF** and **MOR** switches). See NOTE 5

[14] Immediately verify the following responses occur:

- At 1B Processor Status Page 118, **CC 0 ACTIVE** (colored black on green), **CC 1 POWER** (colored white on red)
- At 1B Processor MCC terminal on EAI page, state counter advances, then resets (goes off)
- See NOTE 4. System recovers on its own



NOTES

4. Action taken by system to recover may be:

- Any lever of interrupt
- PC B-Lever Interrupt
- PC Pump Action
- Phase(s)
- Any combination of above

5. MANUAL OVERRIDE is used in addition to OFF so you may power down a unit that is not indicating out-of-service

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[1] Obtain NWM tape and verify that write enable ring is removed

[2] Mount NWM tape on available tape transport [DLP-543]

[3] At TTY, enter following messages in Form Enter:
 SET:TUC a;FUNCTION AUT!
 ALW:TUC a:RO!
 AUD:NWM;xxx!
 STOP:AUD;NWM!

Output message:
 SET:TUC a;
 TAPE MOUNTED ON TUC
 TAPE TYPE:NWM
 . .
 . .
 . .

[4] Send SET:TUC a;FUNCTION AUT!

OK TO PROCESS TAPE?

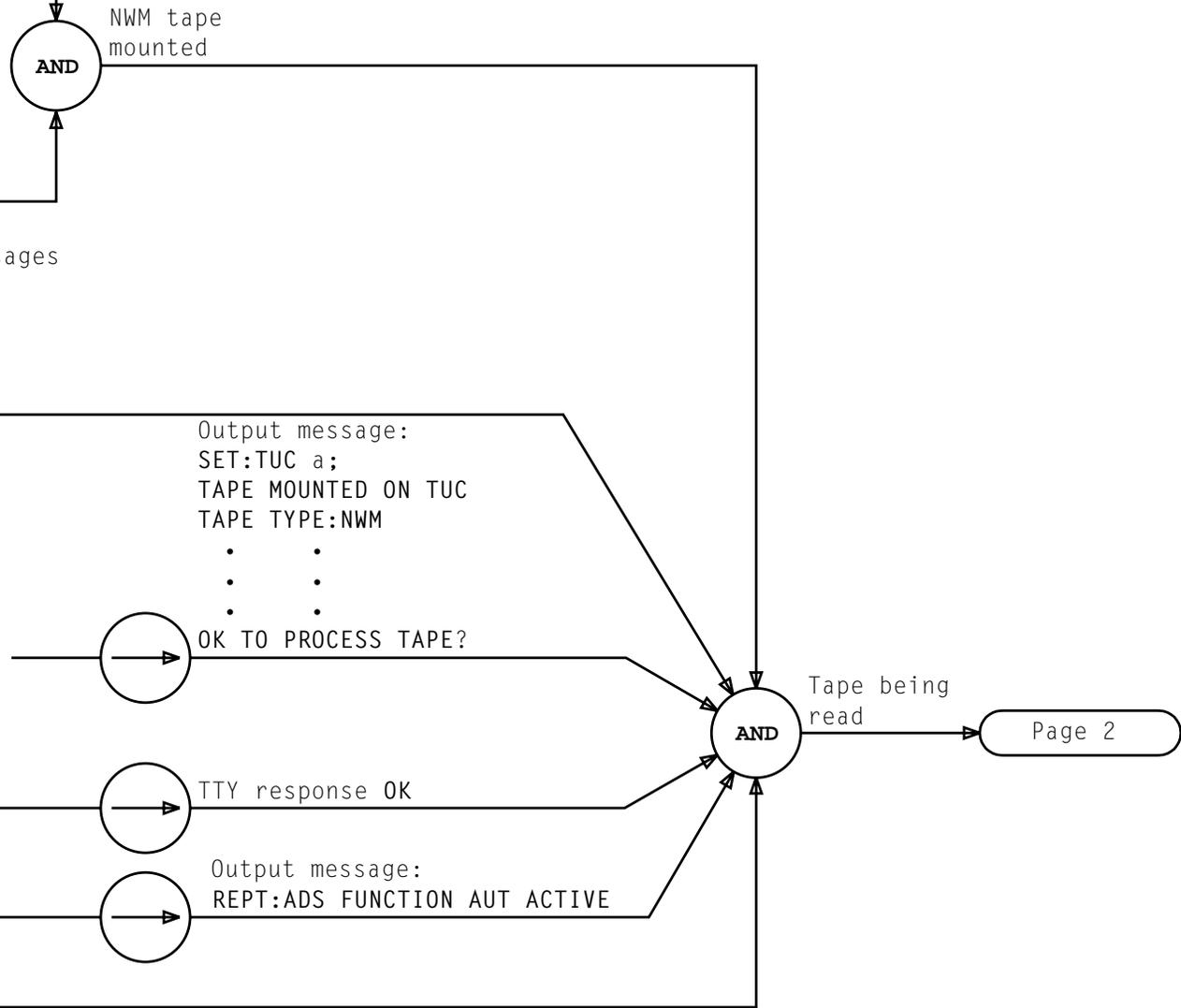
[5] After ensuring that correct tape is mounted, send ALW:TUC a:RO!

TTY response OK

[6] Send AUD:NWM;UCL!

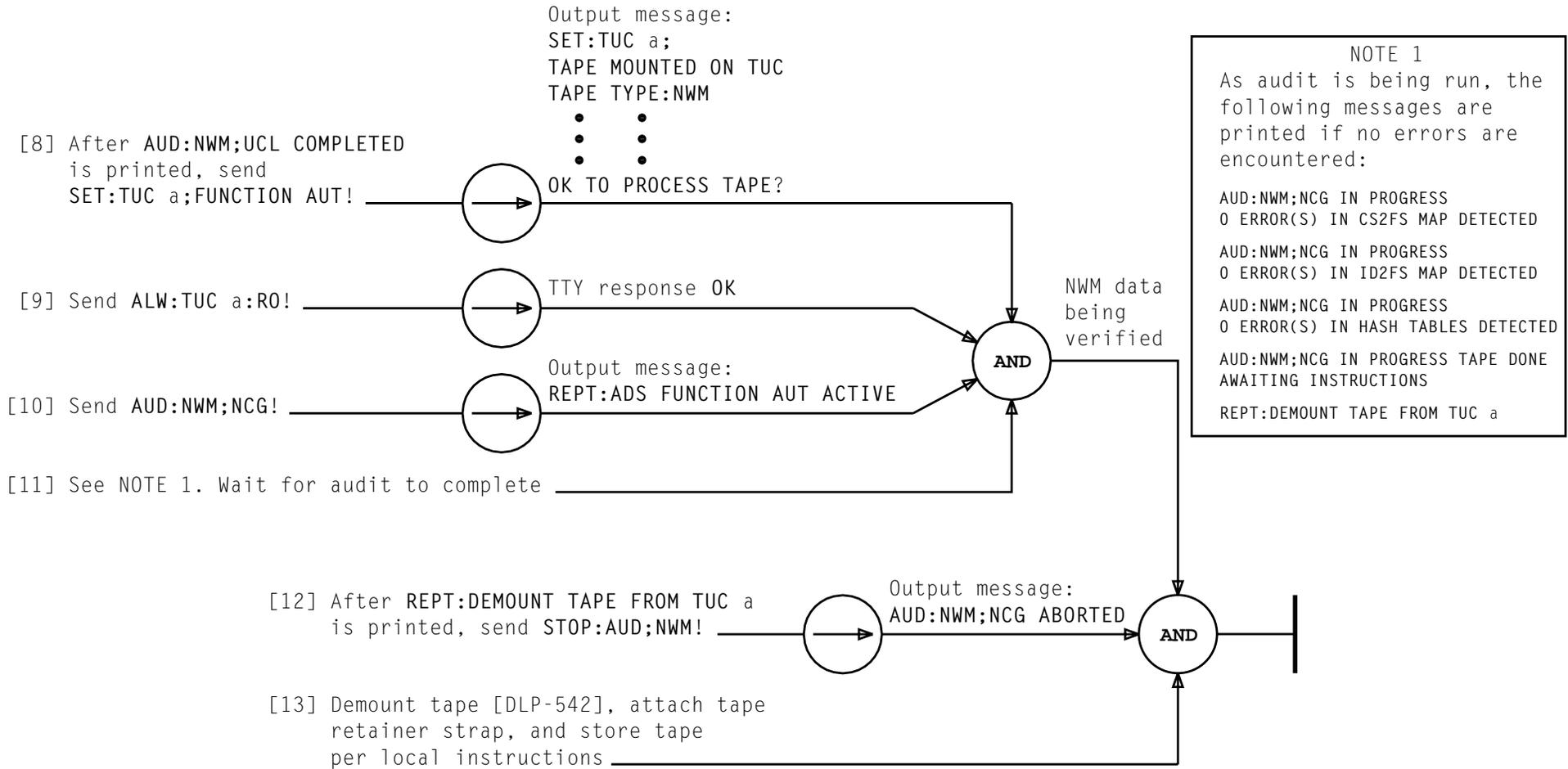
Output message:
 REPT:ADS FUNCTION AUT ACTIVE

[7] Wait for tape to be read



LOAD NETWORK MANAGEMENT (NWM) DATA AND VERIFY

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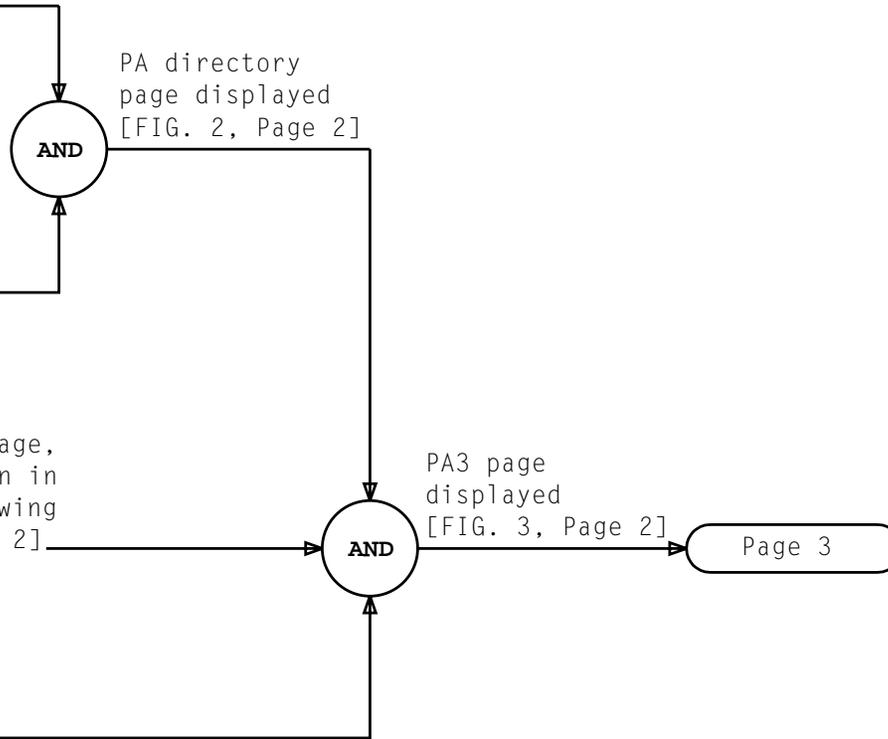


[1] On CN directory page, type PA
within brackets preceding
DIRECTORY [FIG. 1, Page 2]

[2] Depress **SEND** key

[3] On PA directory page,
type plus (+) sign in
parentheses following
PA3 [FIG. 2, Page 2]

[4] Depress **SEND** key



```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL

[PA] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN STEP 1

Figure 1 - Sample CN-Generic Control Directory Page

INSERT IN STEP 3

```

[ ] PAGE                [ ] DIRECTORY
PA2 ( ) SINGLE INSEP/DESEP LISTING
PA3 (+)
PA4 ( )
PA5 ( ) WORLD TRAFFIC PATTERNS

CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

Figure 2 - Sample PA-Traffic Patterns Directory Page

```

PA1 TRAFFIC PATTERN OVERVIEW          DATA TIME 12:00          SENT AT 12:14:57
      TO      TO      TO      TO      TO      TO
      FOR REG HOME REG SUBTEND HOME TCA INTRNATL AT
FOR REG 0%( ) 0%( ) 0%( ) 0%( ) 0%( ) INSEP DESEP CALLS HT
HOME REG 0%( ) 0%( ) 0%( ) 0%( ) 0%( )
SUBTEND 0%( ) 0%( ) 0%( ) 0%( ) 0%( )

```

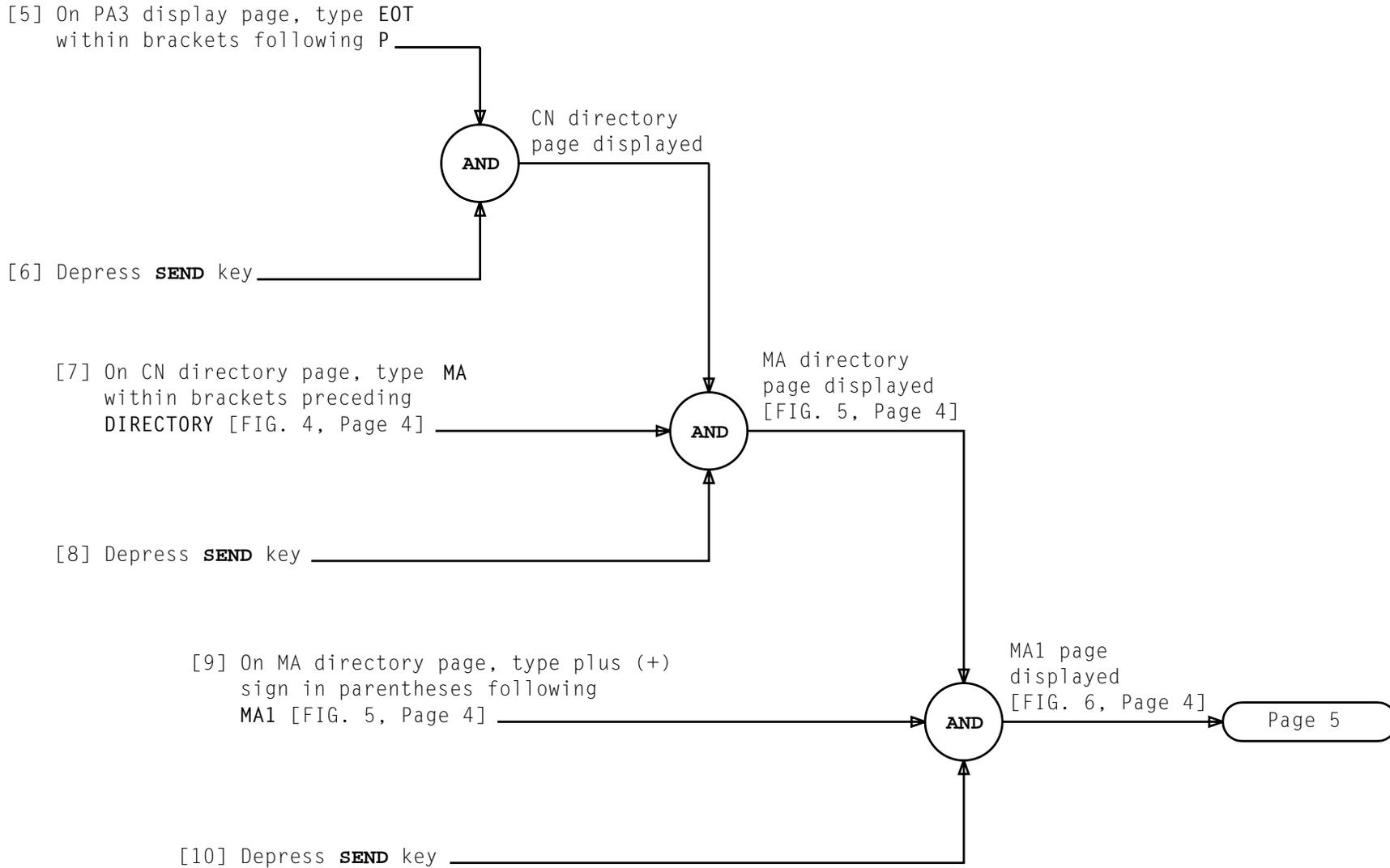
```

      FOR REG HOME REG SUBTEND HOME TCA INTRNATL
INCOMING 0 0 0 0 0 FRWD( ) PART
OUTGOING 0 0 0 0 0 BKWD( ) OF
PART[ ]
15-MIN( ) HOUR( ) S 0 TOTAL CALLS SWITCHED
01/20/81 RESTART( ) DIRECTORY[ ] P[ ]

```

Figure 3 - Sample PA1-Traffic Pattern Overview Display Page

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PERFORM NON-GENERIC DIRECTORY PAGE TESTS

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```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL

[MA] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN STEP 7

Figure 4 - Sample CN-Generic Control Directory Page

INSERT IN STEP 9

```

[ ] PAGE
MA1 (+) IMA OVER VIEW
MA2 ( ) SUMMARY: NC,TIMEOUTS & OUT FAIL
MA3 ( ) SUMMARY: CONTROLS & CAMA QUEUE
MA4 ( ) SUMMARY: INTERNAL QUEUE

[ ] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

Figure 5 - Sample MA-Machine Analysis Directory Page

```

MA1 IMA OVERVIEW                DATA TIME 14:45                SENT AT 14:48:19
-----
NC ( ) !INT Q( ) !TIME- !VAC/ ! INC FAIL ! HR 16512
AOB ! COA !OUTS( ) !IWK ( ) !NON-
NCI ! CQO ! NSD ! IWS !CAMA ( ) !CAMA ( ) ! ANN COUNT %IS
NCT ! DED ! XST ! VCA ! CTO ! CPE !
GLR ! DQA ! ! ! IAD ! CST ! NCA 0 0.0

CAMAC ( )
OQA ! - - - - - ! PST3 ! PER2 ! ! IMA[ ] AT
OQO ! 1 = DP-OP ! PST4 ! PER3 ! ! IS
RQA ! 2 = DP-EQ ! ! PER4 ! !
! 3 = MF-OP ! ! ! ! %IMA COUNT
! 4 = MF-EQ ! ! ! ! !THLD BASE
-----
DSG ABOVE FOR SUMMARY GO TO TSG-IMA( ) DOC-RCVD( ) OCR-INV( ) MACH-SUM( )
01/19/81 RESTART( ) DIRECTORY[ ] P[ ]

```

Figure 6 - Sample MA1-Network Management IMA Overview Display Page

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On MA1 display page:

[11] Type EOT within
brackets following P

[12] Depress
SEND key

On CN directory page:

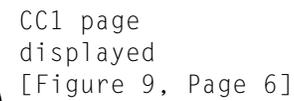
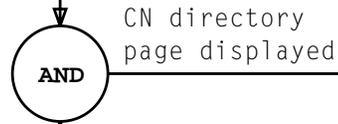
[13] Type CC within brackets
preceding DIRECTORY
[Figure 7, Page 6]

[14] Depress **SEND** key

On CC directory page:

[15] Type plus (+) sign in
parentheses following CC1
[Figure 8, Page 6]

[16] Depress **SEND** key



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```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL

[CC] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN
STEP 13

Figure 7 - Sample CN-Generic Control Directory Page

INSERT IN
STEP 15

```

[ ] PAGE
CC1 (+) NPA EXCEPTIONS OVERVIEW
CC2 ( ) NPA COMPLETIONS OVERVIEW
CC3 ( ) NPA TREND BY REGION
CC4 ( ) 3-DIGIT CODE INVENTORY

[ ] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

Figure 8 - Sample CC-Code Completions Directory Page

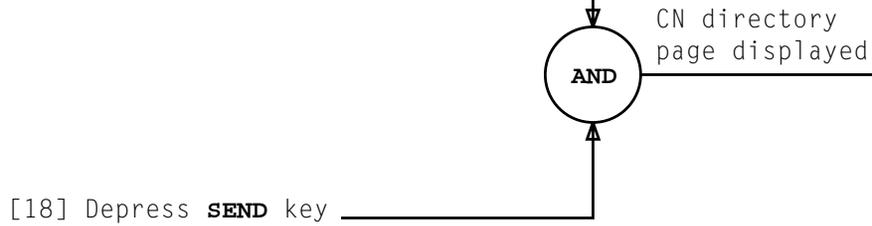
CC1	NPA EXCEPTIONS OVERVIEW				DATA TIME 14:14				SENT AT 14:19:00				
THRESHOLDS			SAC	DENVER	----	NORWAY	----	PTSBGH	---	WH PLAINS	--	REGINA	
	%IMA	%INA	206	208	217	515	216	201	518	204			
RED	50	85	209	303	218	605	304	203	603	306			
AMBER	30	75	408	307	219	608	313	207	607	403			
WHITE	15	65	415	406	308	612	412	212	617	604			
NPA[]	TREND		SANBO	713	----	ST LOUIS	215	318	809	705			
AT	%		213	806	314	618	301	404	813	709			
MA	%IMA	INA	714	817	316	816	302	504	904	807			
NEW			805	905	417	901	609	601	912	819			
2ND			903	915	501	913	703	615	919	902			
3RD				918	502		717						
							804						
01/20/81 RESTART() DIRECTORY[] P[]													

Figure 9 - Sample CC1-NPA Exceptions Overview Display Page

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On CC1 display page:

[17] Type EOT within
brackets following P

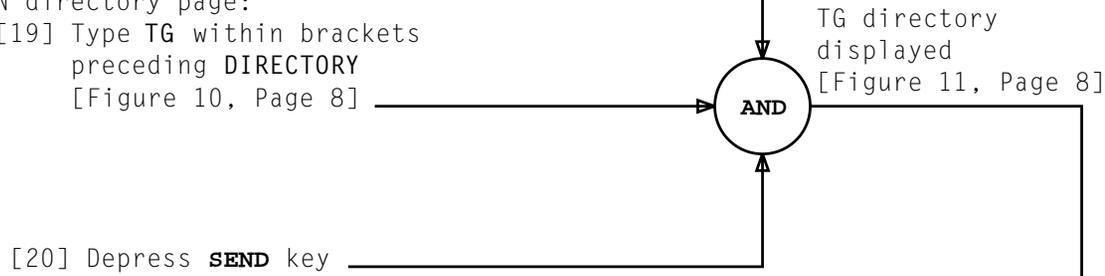


On CN directory page:

[19] Type TG within brackets
preceding DIRECTORY
[Figure 10, Page 8]

[20] Depress SEND key

TG directory
displayed
[Figure 11, Page 8]

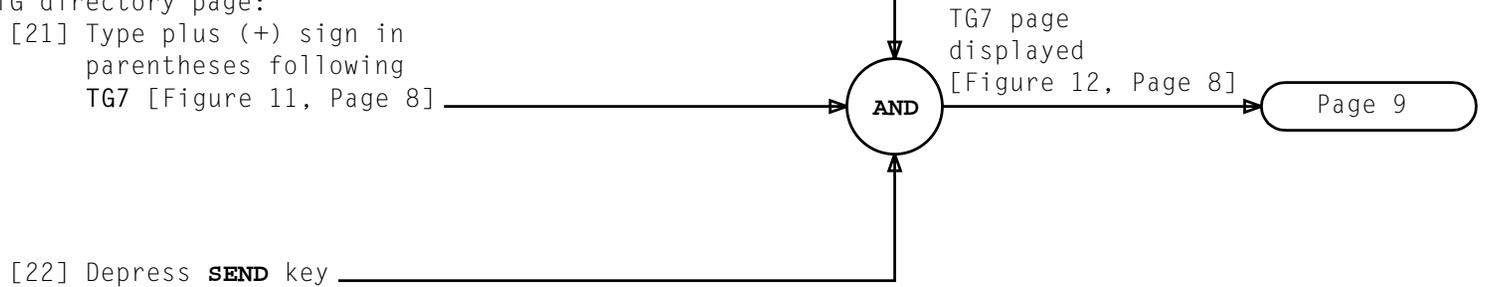


On TG directory page:

[21] Type plus (+) sign in
parentheses following
TG7 [Figure 11, Page 8]

[22] Depress SEND key

TG7 page
displayed
[Figure 12, Page 8]



PERFORM NON-GENERIC DIRECTORY PAGE TESTS

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```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL

[TG] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN STEP 19

Figure 10 - Sample CN-Generic Control Directory Page

```

[ ] PAGE                [ ] DIRECTORY
TG2 ( ) NETWORKS NC SERIES 2
TG3 (+) STORED NETWORKS SERIES 1
TG4 ( ) STORED NETWORKS SERIES 2
TG5 ( ) NETWORK ANALYSIS
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN STEP 21

Figure 11 - Sample TG-Trunk Subgroup Directory Page

```

TG1 NETWORKS NC SERIES 1          DATA TIME 14:20          SENT AT 14:20:27
SUBT IT  1  TOLL COMP  2  TOLL COMP  3  TOLL COMP  4  TOLL COMP  5
* ASHEBORO ! * ADVN XA99F ! * GNBO FR668 ! * OLTW XA924 ! * WNSL AR764
* ELKIN    ! * ARSN MA421 ! * GNBO H069A ! * PRHL XA562 ! * WNSL CL766
* HIGH POINT ! * BURL DA22F ! * GNBO LA28A ! * QKGP XA994 ! * WNSL FI72F
* MT AIRY  ! * BURL EL584 ! * GNBO MC62A ! * RDVL MA34A ! * WNSL FI72G
* SILER CITY ! * BURL HA578 ! * GNBO PL674 ! * RDVL SI951 ! * WNSL FI723

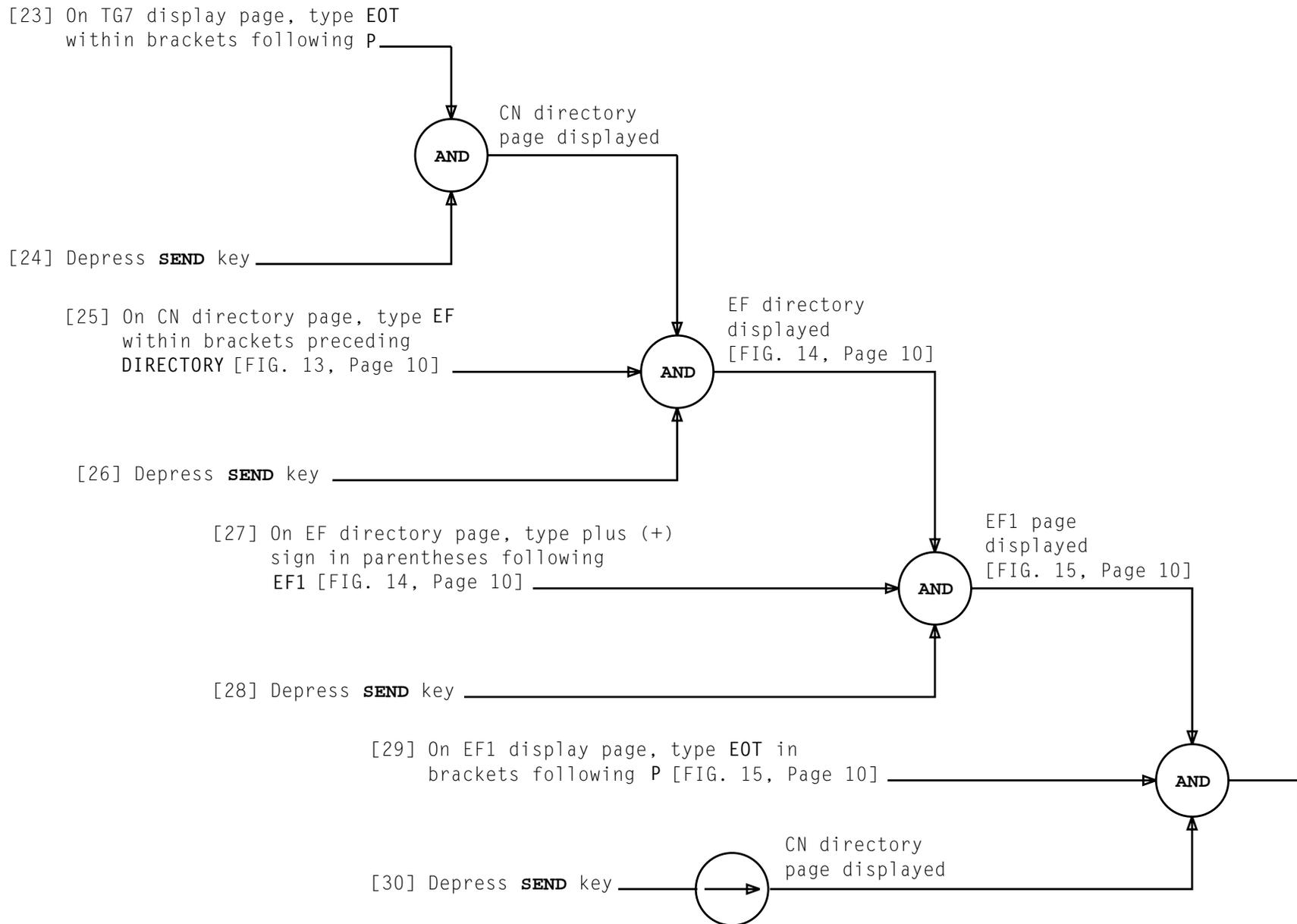
* ROCKY MT ! * GNBO AS29A ! * MEBN XA56F ! * TMLK XA364 !
! * GNBO AS85A ! * MNTI MA656 ! * WKTW XA595 !
! * GNBO EU37F ! * NWBO XA66A ! * WLCV XA591 !

TRANSFER NETWORK ANALYSIS( )
INDEX [ ] TO NETWORK TREND( )
01/20/81 RESTART( ) DIRECTORY[ ] P[ ]

```

Figure 12 - Sample TG1-NC Network Display Page

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PERFORM NON-GENERIC DIRECTORY PAGE TESTS

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```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL
[EF] DIRECTORY
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

INSERT IN STEP 25

Figure 13 - Sample CN-Generic Control Directory Page

INSERT IN STEP 27

```

[ ] PAGE                [ ] DIRECTORY
EF1 (+) OSOR SCHEDULE MODIFICATION 1
EF2 ( ) OSOR SCHEDULE MODIFICATION 2
EF3 ( )
EF4 ( ) SEPARATIONS SUMMARY ASSIGNMENTS
EF5 ( ) MSR PART 2 THRESHOLDS
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS

```

Figure 14 - Sample EF-OSOR Schedule Directory Page

```

EF1 OSOR SCHEDULE MODIFICATION 1      DATA TIME 15:18      SENT AT 15:18:17
NAME          TYPE          PART OF DAY
( ) MPR1      ( ) INTNL      ( ) HOURLY      ( ) 0000-1100
( ) MPR2      ( ) THRLD      ( ) DAILY       ( ) 1200-1100
( ) MLSS      ( ) DEMAND      ( ) DAY TO HOUR ( ) 0030-1130
( ) MSR1      ( ) MONTH TO DATE ( ) 1230-2330
( ) MSR2
( ) SEPSUM      MLSSDMD DATA TIME [ ]
( ) NSPMP      ( ) INHIBIT      TIME SUN MON TUE WED THU FRI SAT
( ) MPR3      ( ) TRF1          ( ) ( ) ( ) ( ) ( ) ( ) ( )
CHANNELS
( ) TRF1      ( ) - ( ) - ( ) - ( ) - ( ) - ( ) - ( )
( ) TCA2      ( ) ( ) ( ) ( ) ( ) ( ) ( )
( ) SREC2      ( ) ( ) ( ) ( ) ( ) ( ) ( )
01/19/81 RESTART ( )   DIRECTORY [ ] P[ ]

```

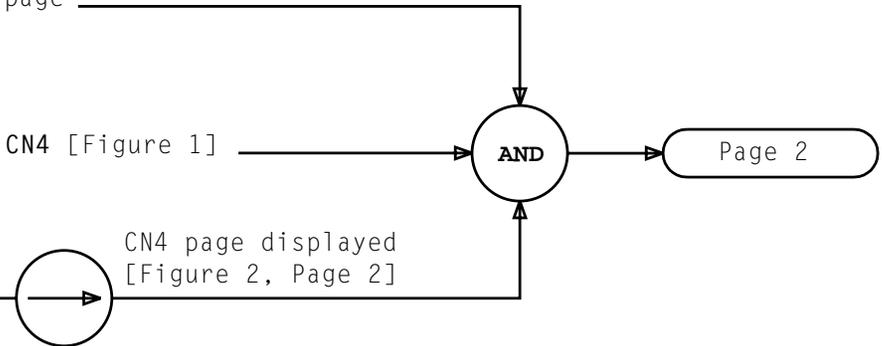
Figure 15 - Sample EF1-OSOR Schedule Modification Display Page

[1] If generic control (CN) page is not being displayed, call up CN page

On CN directory page:

[2] Type plus (+) sign in parentheses following CN4 [Figure 1]

[3] Depress **SEND** key



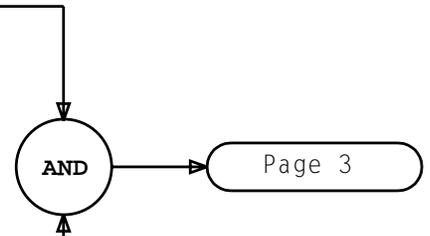
```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
[ ] DIRECTORY
CN1 ( ) DOMESTIC CODE BLOCK/THRESH CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE           CN CONTROL INPUT
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL       CN THRESHOLD INPUT
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL     PA TRAFFIC PATTERNS
CN6 ( ) INT'L CODE BLOCK/HTR CONTROL         MA IMA DATA
CN7 ( ) INT'L GENERAL CONTROL CHANGE         CC CODE COMPLETIONS
CN8 ( ) MAS/GAP CONTROL & INVENTORY          TG TRUNK SUBGROUPS
CN9 ( )                                       MA MATCHING STATUS
CN10 ( )
CN11 ( ) EXCEPTION PANEL 30 SEC THRESHOLDS   EF ENTRY FORMS
CN12 ( ) EXCEPTION PANEL 5 MIN THRESHOLDS
CN13 ( ) EXCEPTION PANEL 15 MIN THRESHOLDS
CN14 ( )
CN15 ( )
  
```

Figure 1 - Sample Generic Control (CN) Directory Page

On CN4 display page:

[4] Type plus (+) sign in parentheses following
DOC MC3 TRANSMIT TEST ON [Figure 2]



[5] If S appears in any entry of ACTIVE column, type plus (+) sign in adjacent parentheses

INSERT IN
STEP 4

```

CN04 DOMESTIC GENERAL CONTROL CHANGE   DATA TIME           SENT AT 14:38:42
-----
                ACTIVE
...REMOVE      CODE BLOCK ( )
                REROUTE  ( )
MANUAL         SKIP      ( )
CONTROLS:      CANCEL TO ( )
                CANCEL FROM ( )
                TSAR     ( )

                INHIBIT AUTO
...OUTGOING AUTO DOC ( ) (S)
...INTERNAL HTR CONTROL ( ) (S)

...DOC MC3 TRANSMIT TEST ON (+)
...LAMP TEST    ON ( ) OFF ( )

                HTR LIST
                THRESHOLDS
                NOT COMPLETE

                AC          %FC
...SET HTR LIST (1-9999) (1-100)
THRESHOLDS:    [ ] FNPA[ ]
                [ ] HNXX[ ]
                (AC ATTEMPT
                COUNT,
                FC=FAILURE (0.1-1.0)
                COUNT) DELTA AC [ ]
                DELTA FC [ ]

                [ ]
                [ ]
..SELECT HTR NPA CODES [ ]
FOR 6 DIGIT RESOLUTION [ ]
                [ ]
                [ ]

-----
EXEC ( )           01/20/81   RESTART( )   DIRECTORY[ ]   P[ ]
  
```

Figure 2 - Sample CN4 General Control Change Display Page

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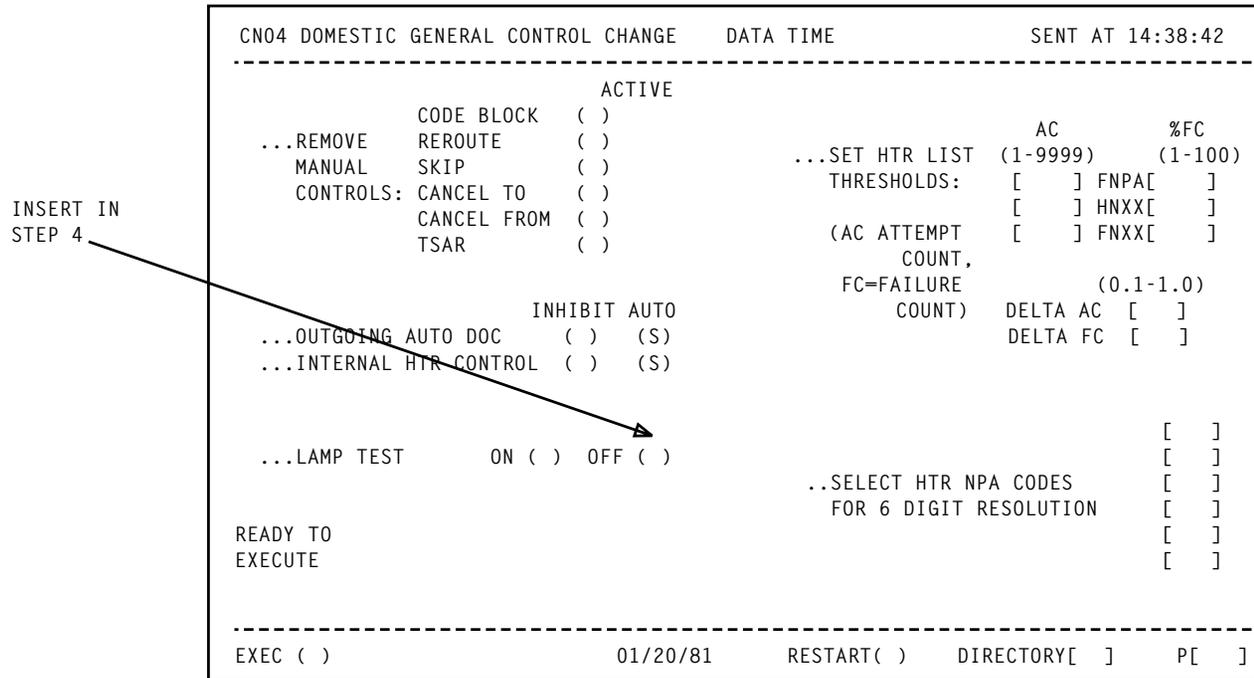
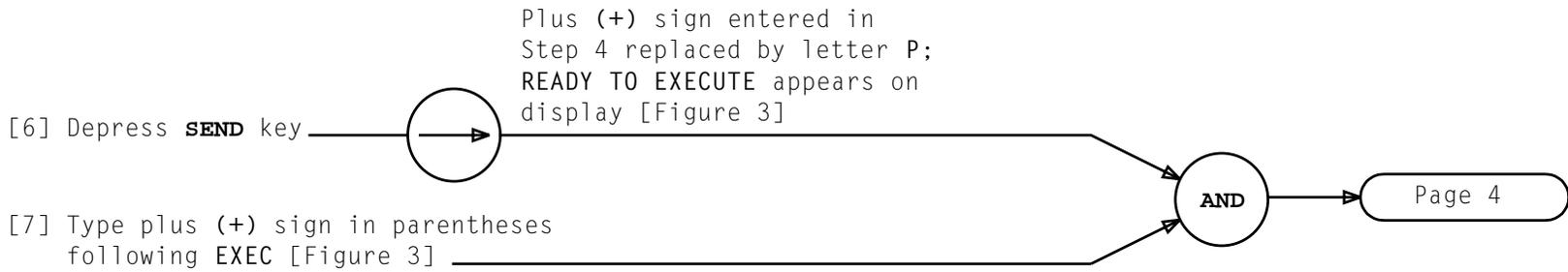
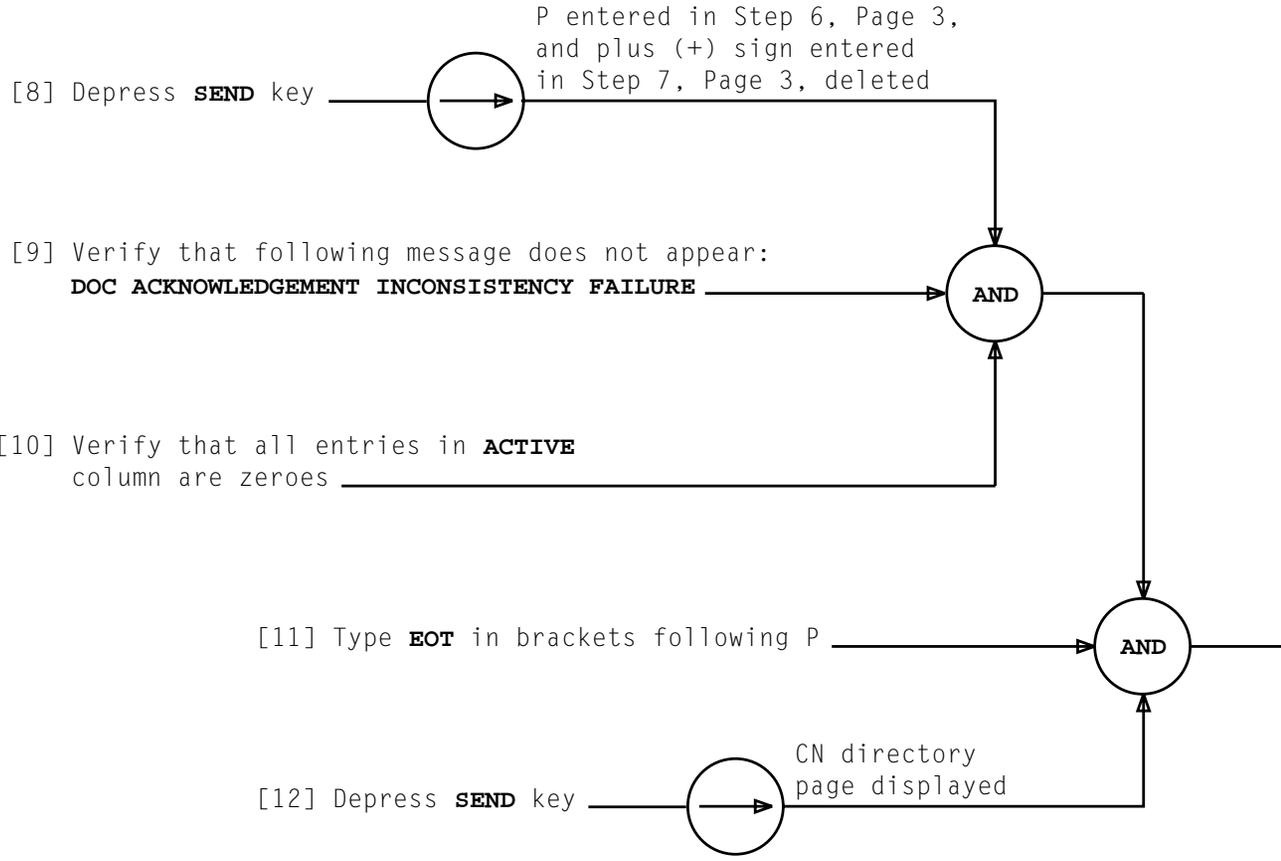


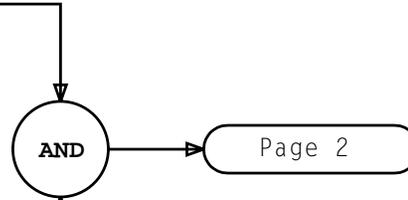
Figure 3 - Sample General Control Change Page Display



PERFORM DYNAMIC OVERLOAD CONTROL (DOC) TRANSMISSION TEST

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[1] If Generic Control (CN) page is not being displayed, call up CN page



[2] On CN directory page, type plus (+) sign in parentheses following CN4 [Figure 1]

```

[ ] PAGE                EXC / LLP 0 023 T 1237 X 022
                                                                [ ] DIRECTORY
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL
CN2 ( ) OUTGOING TRUNK CONTROL PAGE
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL
CN6 ( ) INT'L CODE BLOCK/HTR CONTROL
CN7 ( ) INT'L GENERAL CONTROL CHANGE
CN8 ( ) MAS/GAP CONTROL & INVENTORY
CN9 ( )
CN10 ( )
CN11 ( ) EXCEPTION PANEL 30 SEC THRESHOLDS
CN12 ( ) EXCEPTION PANEL 5 MIN THRESHOLDS
CN13 ( ) EXCEPTION PANEL 15 MIN THRESHOLDS
CN14 ( )
CN15 ( )
CN CONTROL INPUT
CN THRESHOLD INPUT
PA TRAFFIC PATTERNS
MA IMA DATA
CC CODE COMPLETIONS
TG TRUNK SUBGROUPS
MA MATCHING STATUS
EF ENTRY FORMS
  
```

Figure 1 - Sample Generic Control (CN) Directory Page

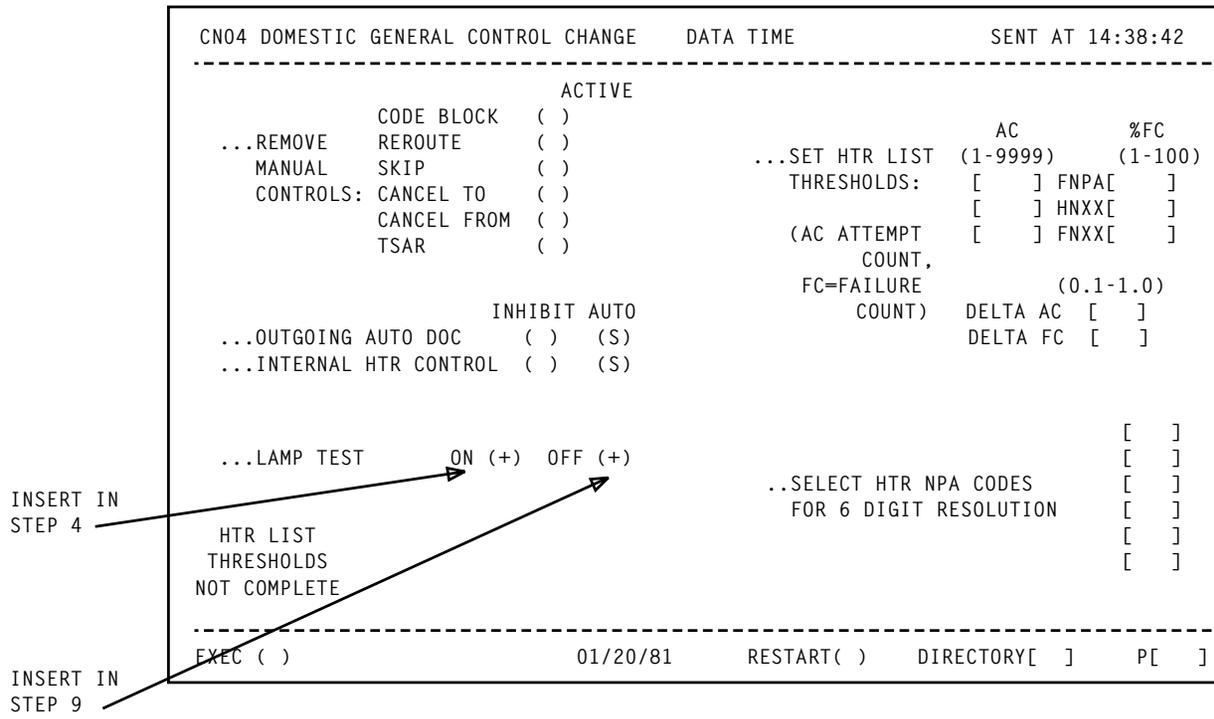
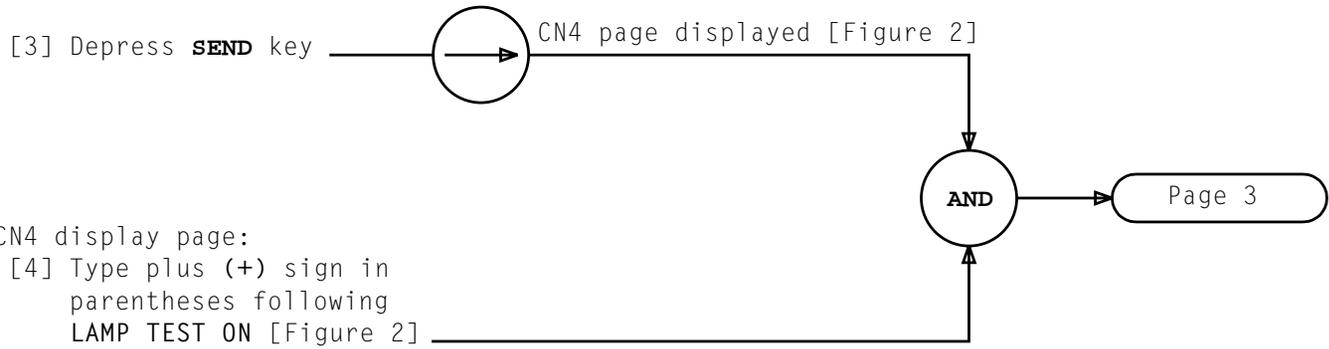


Figure 2 – Sample General Control Change Display Page

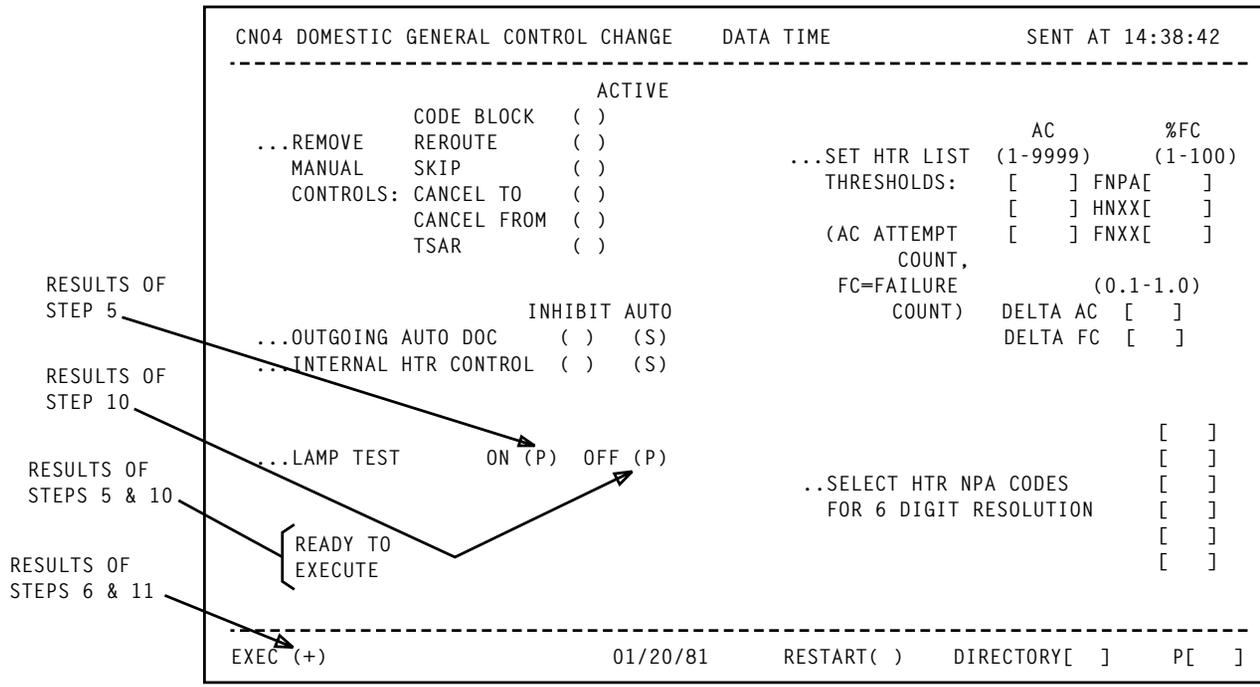
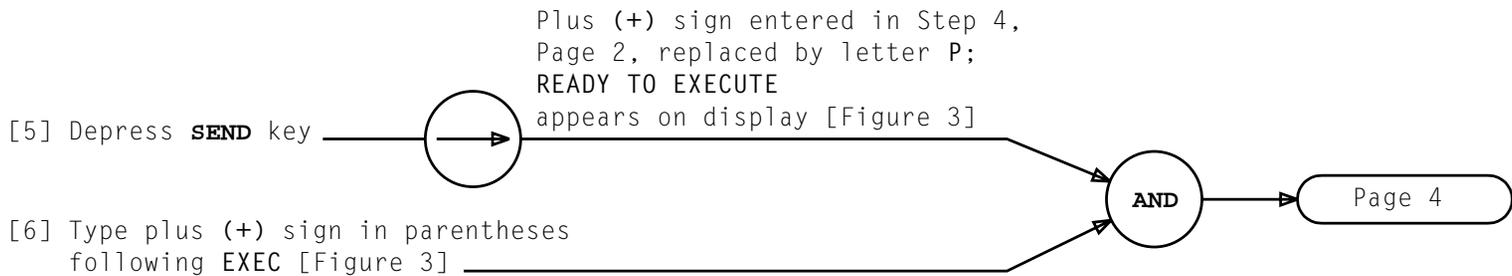


Figure 3 - Sample General Control Change Page Display

[7] Depress **SEND** key

[8] Ensure the following actions take place:

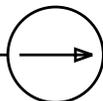
- Letter P entered in Step 5, Page 3, deleted
- Plus (+) sign entered in Step 6, Page 3, deleted
- All NM Display panel (both local and remote) numeric readouts display numeral 8
- All NM Display panel audible alarms sound
- All NM Display panel lamps (except **ALARM OFF**) are lighted

On CN4 display page:

[9] Type plus (+) sign in parentheses following LAMP TEST OFF [Figure 2, Page 2]

Plus (+) sign entered in Step 9 replaced by letter P; READY TO EXECUTE appears on display [Figure 3, Page 3]

[10] Depress **SEND** key



AND

Page 5

[11] Type plus (+) sign within parentheses following
EXEC [Figure 3, Page 3]

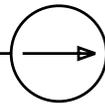
[12] Depress **SEND** key

[13] Ensure the following actions take place:

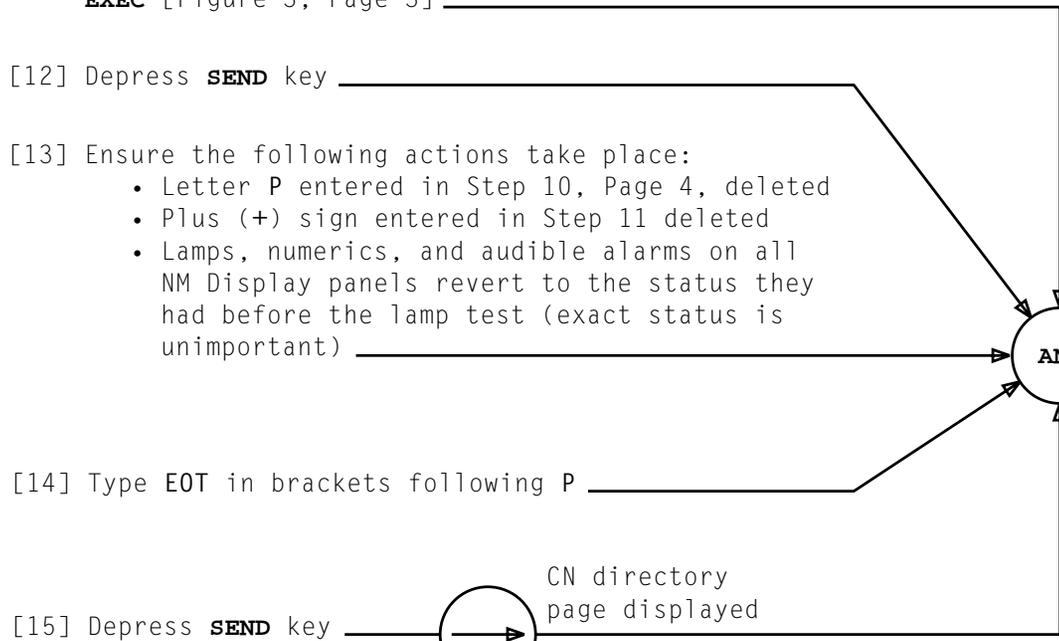
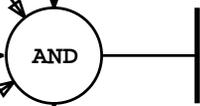
- Letter P entered in Step 10, Page 4, deleted
- Plus (+) sign entered in Step 11 deleted
- Lamps, numerics, and audible alarms on all NM Display panels revert to the status they had before the lamp test (exact status is unimportant)

[14] Type EOT in brackets following P

[15] Depress **SEND** key



CN directory
page displayed



PERFORM NETWORK MANAGEMENT DISPLAY (NMD) PANEL TEST

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[1] If Generic Control (CN) page is not being displayed, call up CN page

On CN directory page:

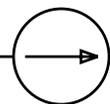
[2] Type EF in brackets preceding DIRECTORY [Figure 1]

[3] Depress **SEND** key

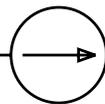
On EF schedule directory:

[4] Type plus (+) sign in parentheses following EF1 [Figure 2, Page 2]

[5] Depress **SEND** key



EF directory displayed [Figure 2, Page 2]



EF1 page displayed [Figure 3, Page 2]



Page 2

INSERT IN STEP 2

```

[ ] PAGE          EXC / LLP 0 023T 1237 X 022
[EF] DIRECTORY
CN1 ( ) DOMESTIC CODE BLOCK/HTR CONTROL      CN CONTROL INPUT
CN2 ( ) OUTGOING TRUNK CONTROL PAGE           CN THRESHOLD INPUT
CN3 ( ) DOMESTIC INCOMING TRUNK CONTROL
CN4 ( ) DOMESTIC GENERAL CONTROL CHANGE
CN5 ( ) DOMESTIC BATCH CODE BLOCK CONTROL     PA TRAFFIC PATTERNS
CN6 ( ) INT'L CODE BLOCK/HTR CONTROL          MA IMA DATA
CN7 ( ) INT'L GENERAL CONTROL CHANGE          CC CODE COMPLETIONS
CN8 ( ) MAS/GAP CONTROL & INVENTORY           TG TRUNK SUBGROUPS
CN9 ( )                                         MA MACHINE STATUS
  
```

Figure 1 - Sample Generic Control (CN) Directory Page

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INSERT IN
STEP 4

[]	PAGE	[]	DIRECTORY
EF1	(+)	OSOR SCHEDULE MODIFICATION 1	
EF2	()	OSOR SCHEDULE MODIFICATION 2	CN CONTROL INPUT
EF3	()		CN THRESHOLD INPUT
EF4	()	SEPARATIONS SUMMARY ASSIGNMENTS	
EF5	()	MSR PART 2 THRESHOLDS	PA TRAFFIC PATTERNS
EF6	()		MA IMA DATA
EF7	()		CC CODE COMPLETIONS

Figure 2 - Sample EF-OSOR Schedule Directory

INSERT IN
STEP 6

EF1	OSOR SCHEDULE MODIFICATION 1	DATA TIME 15:05	SENT AT 15:05:16
	NAME	TYPE	PART OF DAY
	(+) MPR1 () INTNL () HOURLY () 0000-1100		
	() MPR2 () THRLD () DAILY () 1200-2300		
	() MLSS () DEMAND () DAY TO HOUR () 0030-1130		
	() MSR1 () MONTH TO DATE () 1230-2330		
	() MSR2		
	() SEPSUM		
	() NSPMP	MLSSDMD DATA TIME []	
	() MPR3		
	() INHIBIT	TIME	SUN MON TUE WED THU FRI SAT
	CHANNELS		() () () () () () ()
	(+) TRF1		() () () () () () ()
	(+) SREC1		() () () () () () ()
	(+) MTC		() () () () () () ()
	(+) TRF2		() () () () () () ()
	(+) NMPR1		() () () () () () ()
	() NMPR2		() () () () () () ()
	() TCA1		() () () () () () ()
	() TCA2		() () () () () () ()
	() SREC2		() () () () () () ()
			() () () () () () ()
	MON	01/19/81	RESTART() DIRECTORY [] P[]

Figure 3 - Sample EF1-OSOR Schedule Modification Display Page

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[6] On EF1 display page, type plus (+) sign in parentheses preceding MPR1

[7] Depress SEND key

Plus (+) sign appears in front of all channels receiving MPR1 report

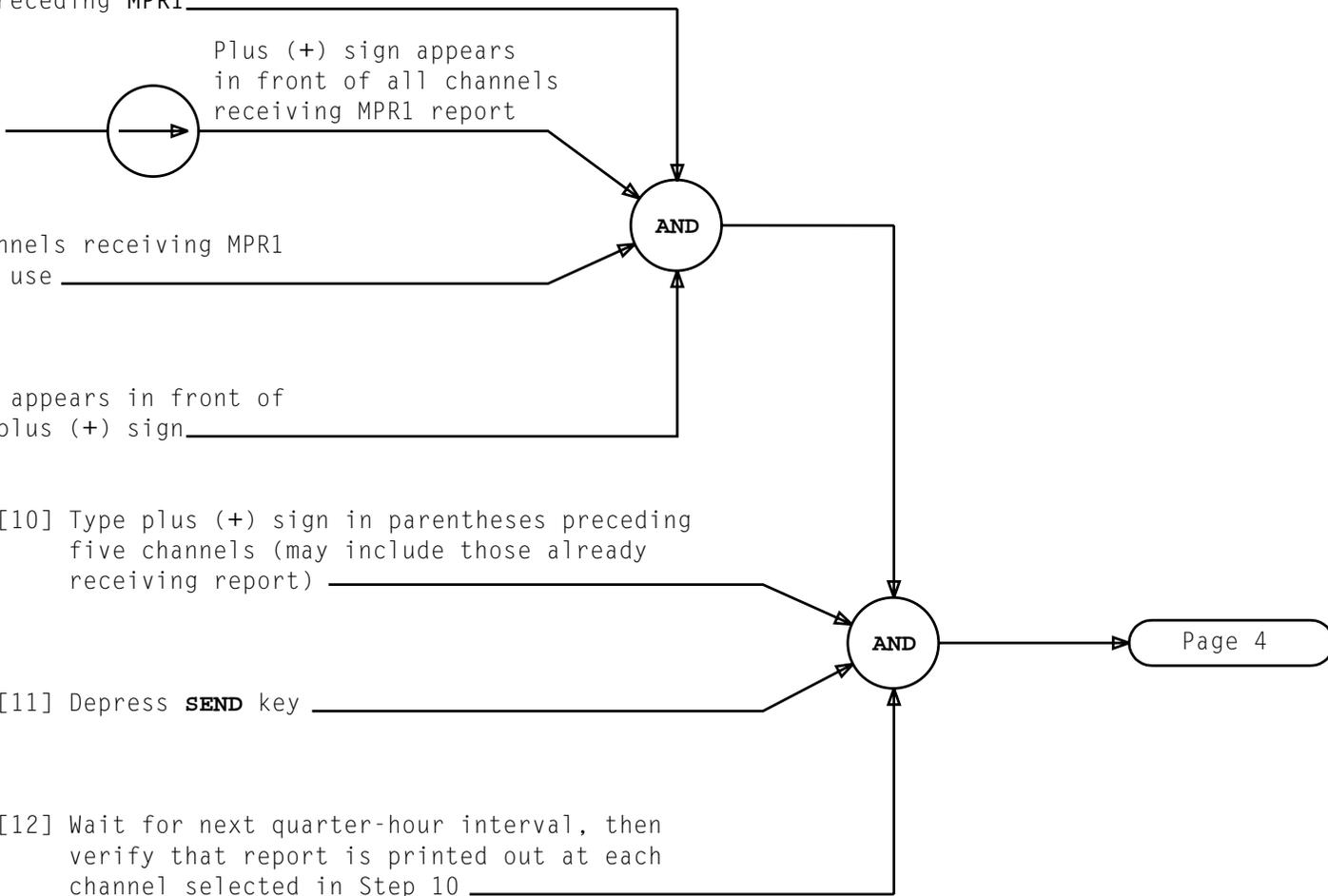
[8] Make note of channels receiving MPR1 report for later use

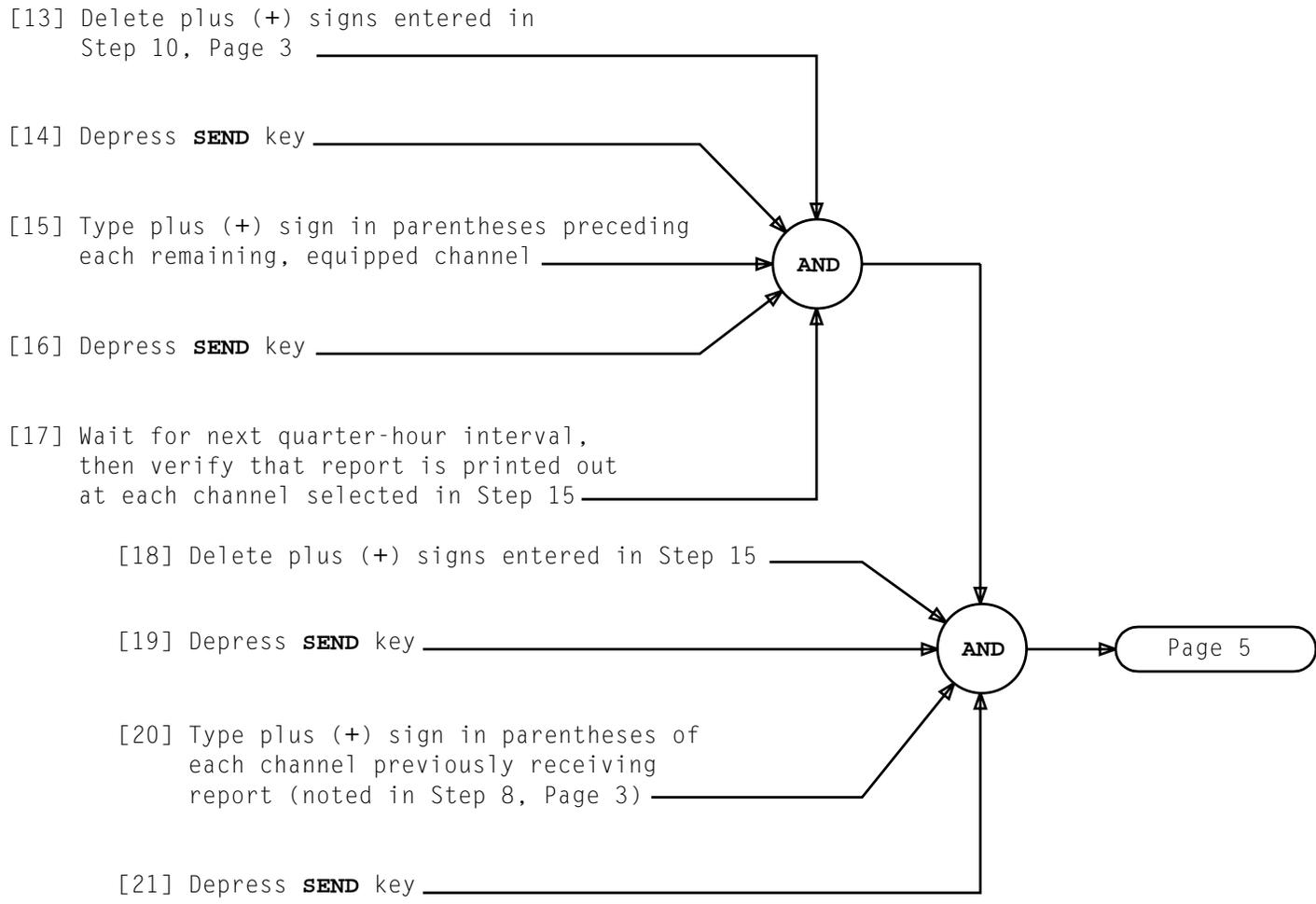
[9] If plus (+) sign appears in front of INHIBIT, delete plus (+) sign

[10] Type plus (+) sign in parentheses preceding five channels (may include those already receiving report)

[11] Depress SEND key

[12] Wait for next quarter-hour interval, then verify that report is printed out at each channel selected in Step 10



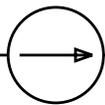


[22] If parentheses preceding **INHIBIT** contained plus (+) sign [Step 9, Page 3], type plus (+) sign in parentheses

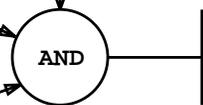
[23] Depress **SEND** key

[24] Type EOT in brackets following P

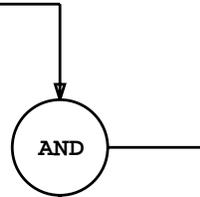
[25] Depress **SEND** key



CN directory page displayed



[1] Reproduce this DLP as necessary to list all I/O channels in the office



[2] Using office engineering records, fill in TABLE A for all I/O channels in office (top line is sample entry)

TABLE A OFFICE I/O CHANNEL EQUIPAGE LIST					
CHANNEL NAME	CHANNEL LOCATION	I/O MEMBER NUMBER		FLN OF IOUS	BACKUP CHANNEL
		IOUS	IOUC		
MTC	MOC	0	0	09004.11	SREC1
SREC1					

PREPARE OFFICE I/O CHANNEL EQUIPAGE LIST

[1] Select first entry on Office I/O Channel Equipage List [DLP-510]

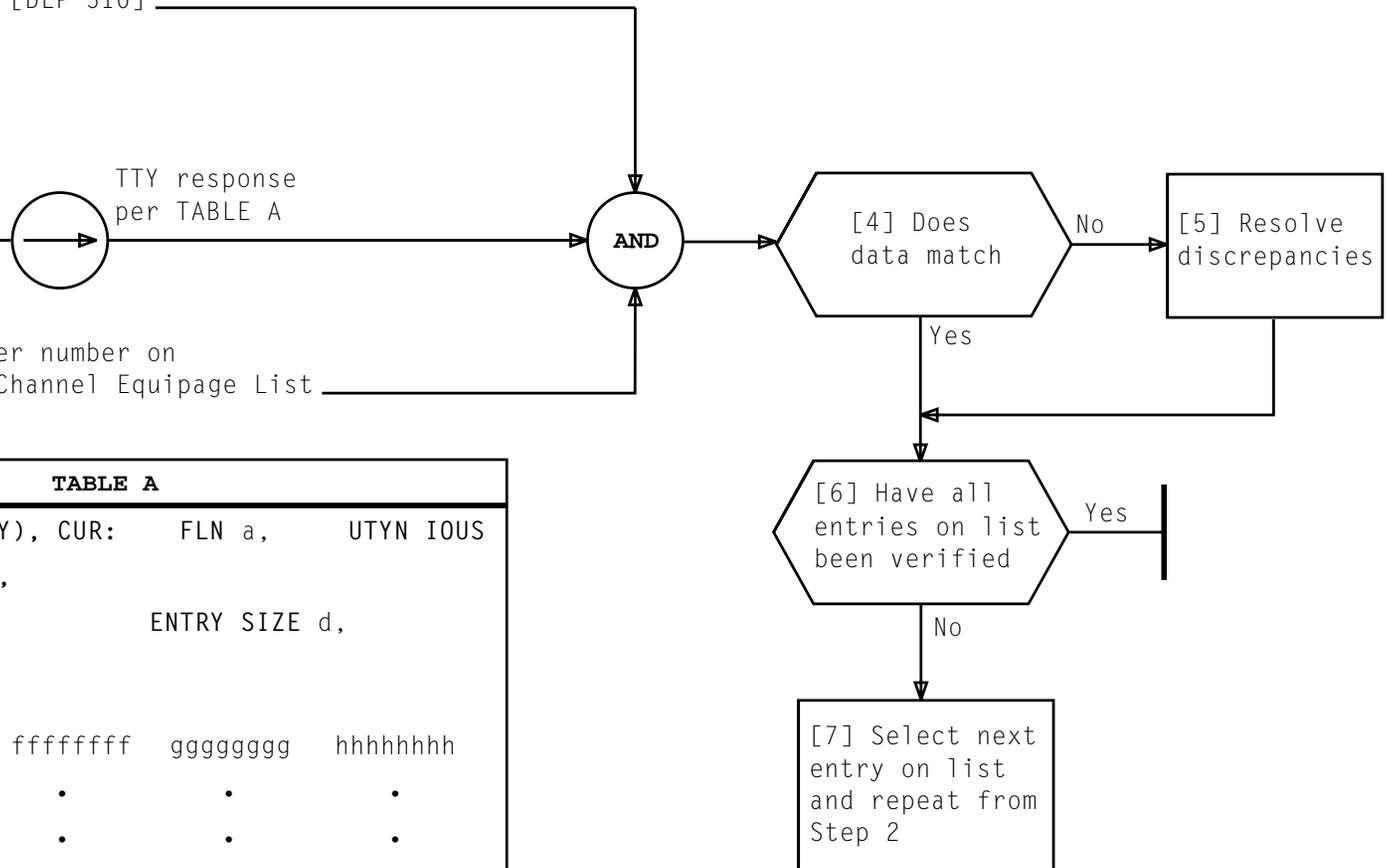
At TTY:

[2] Enter message
 VER:UTYPE:IOUS a,ENTRY!
 (a = IOUS member number)

TTY response per TABLE A

[3] Compare FLN and IOUS member number on printout with Office I/O Channel Equipage List

TABLE A				
VER:UTMN;OPT (ENTRY),	CUR: FLN a,	UTYN IOUS		
MEMN b	ME OPER,			
ENTRY ADDRESS c,		ENTRY SIZE d,		
CUR				
WORD 0	eeeeeeee	ffffffff	gggggggg	hhhhhhhh
.
.
.
.
WORD 50
a = Frame location number				
b = Member number				



VERIFY CHANNEL ASSIGNMENTS

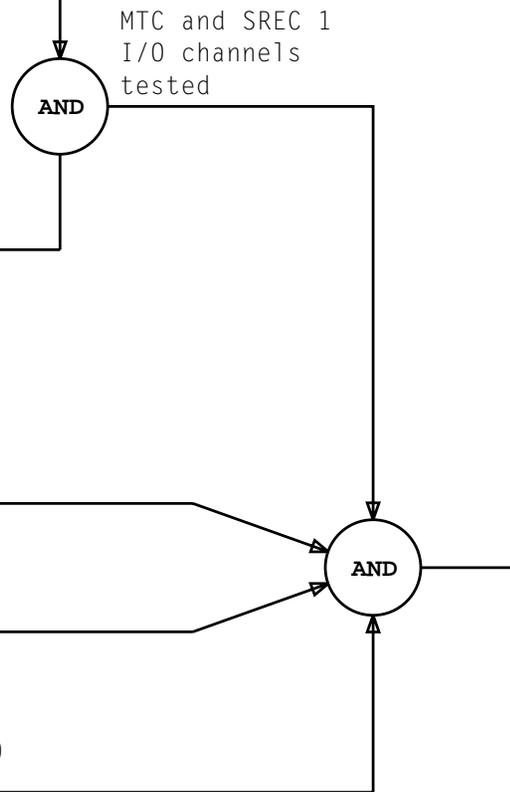
[1] See NOTE 1. At MTC I/O channel, enter each input message listed in TABLE A, Page 2, and verify that messages are accepted

[2] See NOTE 1. At SREC1 I/O channel, enter each input message listed in TABLE A, Page 2, and verify that messages are accepted

[3] Select another I/O channel and enter each input message listed in TABLE A, Page 2

[4] Using TABLE A, Page 2, determine if message should be accepted or rejected

[5] Repeat from Step 3 until all equipped I/O channels have been tested



NOTE 1	
Response to input messages that are accepted may be "OK", "PF" or an output message showing completion of request. Response to messages that are rejected is "?C", channel not valid for this message	
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PERFORM MESSAGE ACCEPT AND REJECT TESTS

TABLE A									
INPUT MESSAGES (CLASS)	I/O CHANNELS								
	MTC	SREC1	SREC2	BELT1,2	RCDT1-3	RCREC	TCA1-10	TEC1-5	TRF1,2
OP:LIBSTAT,FS! (ALL)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED
OP:DUSTATUS! (PMTC)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	Rejected	Rejected	Rejected	Rejected	Rejected
OP:CGASTAT! (TMTc)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	Rejected	Rejected	ACCEPTED	ACCEPTED	Rejected
OP:MEASTSI! (TRFM)	ACCEPTED	ACCEPTED	ACCEPTED	Rejected	Rejected	ACCEPTED	Rejected	Rejected	ACCEPTED
OP:TLPQUEUE;ALL! (PUMTC)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	Rejected	Rejected	Rejected	ACCEPTED	Rejected
OP:RCRORNU! (RC)	ACCEPTED	ACCEPTED	Rejected	Rejected	ACCEPTED	ACCEPTED	Rejected	Rejected	Rejected
VER:MEMORY:CORE! (VER)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED
OP:ALMSTAT! (ALL)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED
OP:MACLI,CLASS MTCE! (PUMTC)	ACCEPTED	ACCEPTED	ACCEPTED	ACCEPTED	Rejected	Rejected	Rejected	ACCEPTED	Rejected
OP:RCTORNU! (RC)	ACCEPTED	ACCEPTED	Rejected	Rejected	ACCEPTED	ACCEPTED	Rejected	Rejected	Rejected

At 1B Processor MCC terminal:

[1] Enter **108** to obtain System
Status Page 108

[2] Enter poke command **830** (IOUS) → **IOUS** colored white on black
Out-of-service report
is printed

[3] Enter poke command **831** (IOUC) → **IOUC** colored white on black
Out-of-service report
is printed

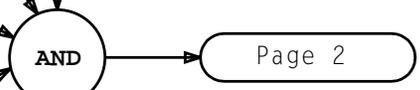
At MTC channel:

[4] Enter message
DGN:IOUS 0, IOUC 0! to remove
MTC channel from service → Output message at SREC1:
DGN:IOUS 0,IOUC 0 COMPLETED ATP
RST:IOUS 0 IOUC 0 STOPPED OOS DIAGNOSE

At 1B Processor MCC terminal:

[5] On System Status Page 108,
enter poke command **830** (IOUS)
to verify MTC channel is out-
of-service → Output message at SREC1:
OP:OOSUNITS IOUS
IOUS 0,IOUC 0
IOUS colored white on red

[6] Enter poke command **831** (IOUC)
to verify MTC channel is
out-of-service → **IOUC** colored
white on red



TEST MTC BACKUP CHANNEL

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At SREC1 channel:

[7] Enter message
RST:IOUS 0, IOUC 0! to restore
MTC channel to service

Output message at SREC1:
DGN:IOUS 0,IOUC 0 COMPLETED ATP
RST:IOUS 0,IOUC 0 COMPLETED

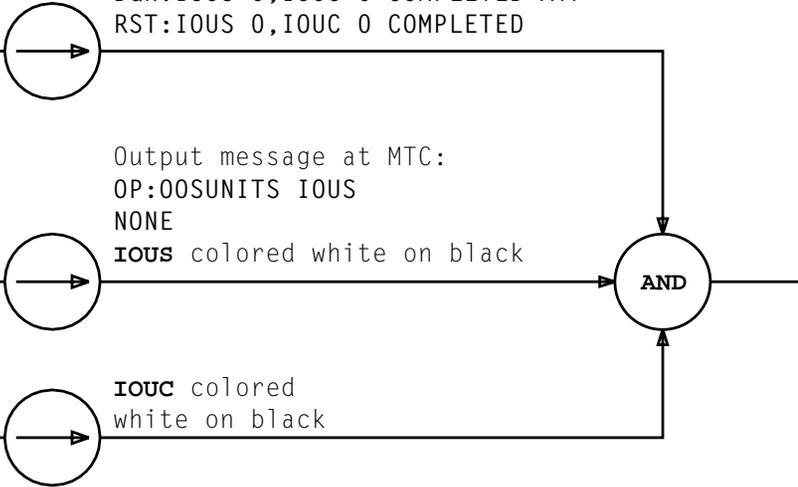
At 1B Processor MCC terminal:

[8] On System Status Page 108,
enter poke command 830 (IOUS)
to verify MTC channel restored
to service

Output message at MTC:
OP:OOSUNITS IOUS
NONE
IOUS colored white on black

[9] Enter poke command 831 (IOUC)
to verify MTC channel restored
to service

IOUC colored
white on black



[1] Obtain blank or erasable tape and ensure that write enable ring is attached

[2] Select available tape transport for mounting tape to be written. Demount tape if one is mounted [DLP-542]

[3] Mount blank tape [DLP-543]

[4] Enter message SET:TUC a;FUNCTION CPY!
a = TUC member number

[5] After ensuring from tape header information that it is okay to write on tape, enter message
ALW:TUC a:RW!

[6] Read CAUTION 1.
Enter message COPY:ODA;TAPE:VFY!

AND

Tape Mounted

Output message:
SET:TUC a;
TAPE MOUNTED ON TUC
TAPE TYPE: bbb
:
:
OK TO PROCESS TAPE?

AND

Tape is writing

Page 2

Output message:
REPT:ADS FUNCTION CPY ACTIVE

CAUTION 1
If the COPY function results in a REPT:ADS PROCEDURAL ERROR or aborts, the following message should be entered ASAP, to avoid data mutilation:
CLR:ADSFUNC CPY!

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WRITE ODA TAPE

[7] See NOTE 1. Wait for writing and verification of tape to complete

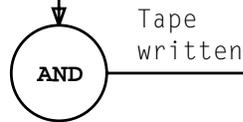
[8] After REPT:DEMOUNT TAPE FROM TUC a is printed, demount tape [DLP-542]

[9] Remove write enable ring and mount tape on another tape transport [DLP-543]

[10] Enter message
SET:TUC a;FUNCTION AUT!

[11] Enter message ALW:TUC a:RO!

[12] Enter message AUD:ODA;NCG!



Output message:
SET:TUC a;
TAPE MOUNTED ON TUC
TAPE TYPE:ODA
:
:
:
OK TO PROCESS TAPE?

TTY response:
OK

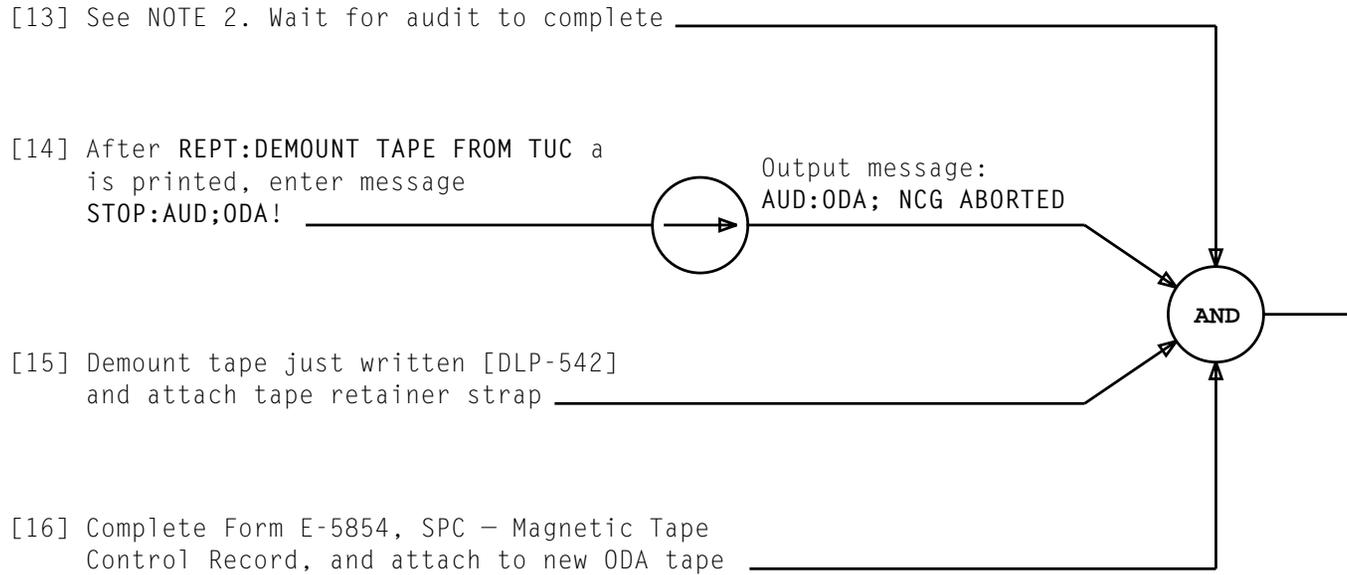
Output message:
REPT:ADS FUNCTION AUT ACTIVE



Page 3

NOTE 1
After ODA tape is written, COPY:ODA; TAPE COMPL date and time, are printed. Tape will then rewind and be verified. After the verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

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NOTE 2
 As audit is being run, the following messages are printed if no errors are encountered:
 AUD:ODA;NCG IN PROGRESS
 0 ERROR(S) IN CS2FS MAP DETECTED
 AUD:ODA;NCG IN PROGRESS
 0 ERROR(S) IN ID2FS MAP DETECTED
 AUD:ODA;NCG IN PROGRESS
 0 ERROR(S) IN HASH TABLES DETECTED
 AUD:ODA;NCG IN PROGRESS TAPE DONE
 AWAITING INSTRUCTIONS
 REPT:DEMOUNT TAPE FROM TUC a

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At MTC channel:

[1] Enter message

DGN:IOUS a,IOUC b;RDT SREC1,RAW!
to remove BELT1 channel from service
and to redirect messages to SREC1
a = IOUS for BELT1
b = IOUC for BELT1 [DLP-510]

Output messages at SREC1:
DGN:IOUS a, IOUC b PH c ATP
DGN:IOUS a, IOUC b COMPLETED ATP

SREC1
messages
printed
out at
MTC channel

[2] Enter message

RMV:IOUS 1,IOUC 0!
to remove SREC1 channel from service

Output message at MTC:
RMV:IOUS 1, IOUC 0 COMPLETED

[3] Enter message

DGN:IOUS a,IOUC b;RDT SREC1,RAW!
and note that output messages are printed
out at MTC channel

Output messages at MTC:
DGN:IOUS a, IOUC b PH c ATP
DGN:IOUS a, IOUC b COMPLETED ATP

[4] Enter message

RST:IOUS 1,IOUC 0!
to restore SREC1

Output message at MTC:
DGN:IOUS 1, IOUC 0 COMPLETED ATP
RST:IOUS 1, IOUC 0 COMPLETED

[5] Enter message

RST:IOUS a,IOUC b!
to restore BELT1
ab = IOUS and IOUC for
BELT1 (same as Step 1)

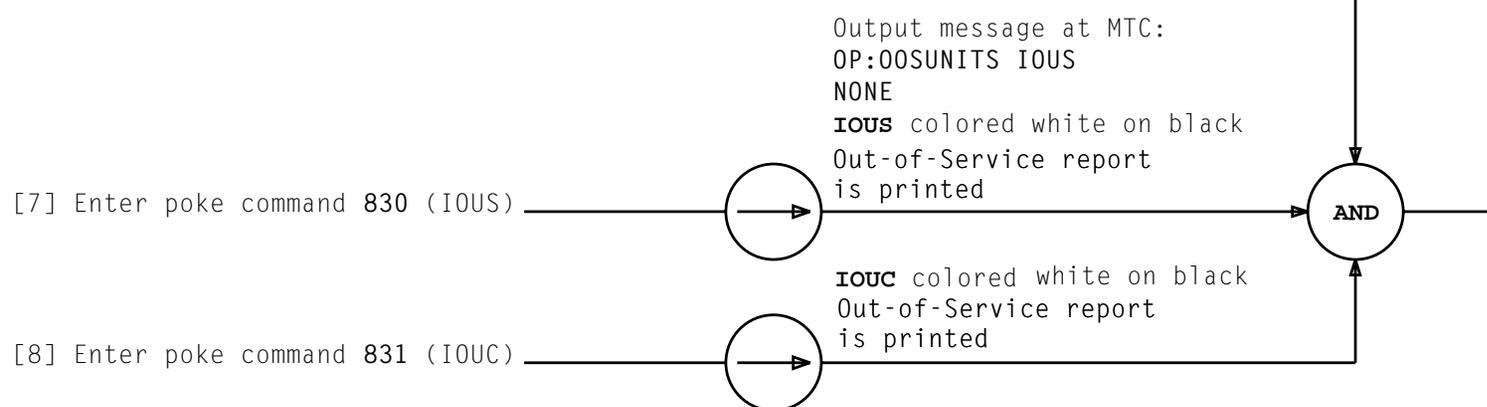
Output message at MTC:
DGN:IOUS a,IOUC b COMPLETED ATP
RST:IOUS a,IOUC b COMPLETED

Page 2

TEST SREC1 BACKUP CHANNEL

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At 1B Processor MCC terminal:
[6] Enter 108 to obtain System
Status Page 108



[1] From office I/O Channel Equipage list [DLP-510], select channel that is equipped with a backup channel and note its backup channel

At MTC channel:

[2] Enter message:
DGN:IOUS 1,IOUC 0;RDT a,RAW!
 to remove SRECl from service and redirect messages to another channel
 a = Channel selected in Step 1

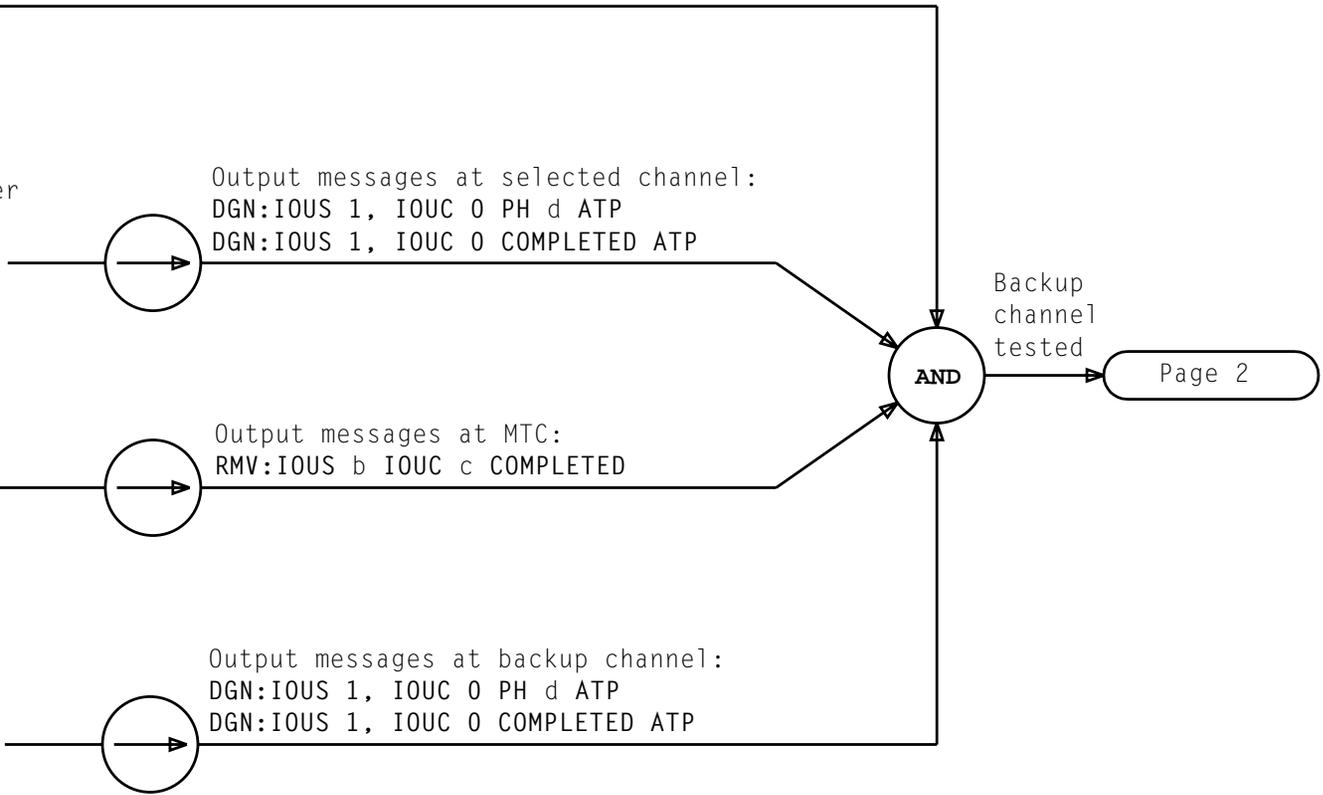
Output messages at selected channel:
 DGN:IOUS 1, IOUC 0 PH d ATP
 DGN:IOUS 1, IOUC 0 COMPLETED ATP

[3] Enter message
RMV:IOUS b,IOUC c! to remove selected channel from service
 b = IOUS of selected channel
 c = IOUC of selected channel

Output messages at MTC:
 RMV:IOUS b IOUC c COMPLETED

[4] Enter message
DGN:IOUS 1,IOUC 0;RDT c,RAW!
 and note that output messages are printed out on backup channel to selected channel
 c = Channel selected in Step 1

Output messages at backup channel:
 DGN:IOUS 1, IOUC 0 PH d ATP
 DGN:IOUS 1, IOUC 0 COMPLETED ATP



At 1B Processor MCC terminal:

[5] Enter 108 to obtain System
Status Page 108

[6] Enter poke command 830 (IOUS)
to verify that SREC1 and channel
selected in Step 1 (Page 1) are
out-of-service

Output message at MTC:
OP:OOSUNITS IOUS
IOUS 1, IOUC 0
IOUS a, IOUC b
IOUS colored white on red

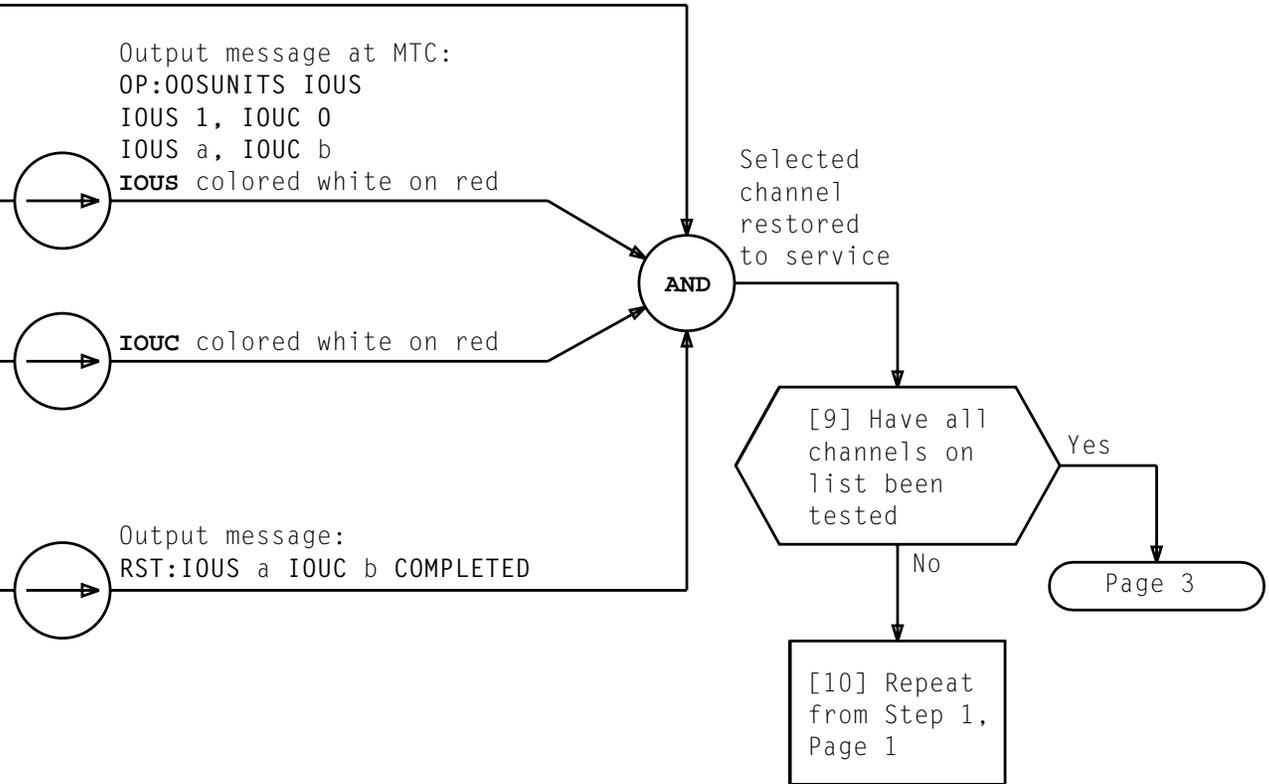
[7] Enter poke command 831 (IOUC)
to verify that SREC1 and channel
selected in Step 1 (Page 1) are
out-of-service

IOUC colored white on red

At MTC channel:

[8] Enter message RST:IOUS a,IOUS b!
to restore selected channel
to service
a = IOUS of selected channel
b = IOUC of selected channel

Output message:
RST:IOUS a IOUC b COMPLETED



[11] Enter message,
RST:IOUS 1,IOUC 0!
to restore SREC1

Output message:
DGN:IOUS 1 IOUC 0 COMPLETED ATP
RST:IOUS 1 IOUC 0 COMPLETED

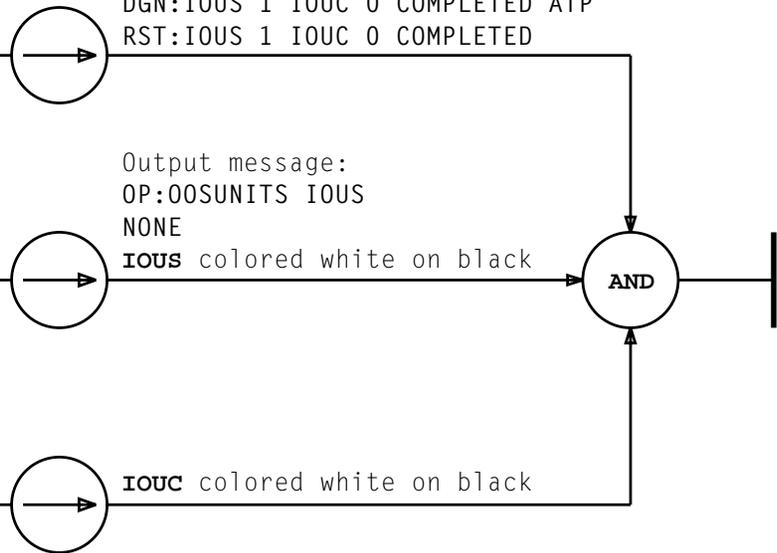
At 1B Processor MCC terminal
on System Status Page 108:

[12] Enter poke command 830 (IOUS) to
verify that all channels have
been restored to service

Output message:
OP:00SUNITS IOUS
NONE
IOUS colored white on black

[13] Enter poke command 831 (IOUC)

IOUC colored white on black



At SREC1 I/O channel:

[1] Enter message
VER:RDB:RDBI a-b!
 to locate an active In-Chain
 routing data block (RDB)
 a-b = Range of routing data block
 indexes (RDBI); for example, 1-10

[2] Enter message
OP:RCFORM 500!

On CRT displayed RC Form 500:

[3] Following **RC:RDB;NEW;**, enter TST

[4] Following RDBI, enter an unused index number

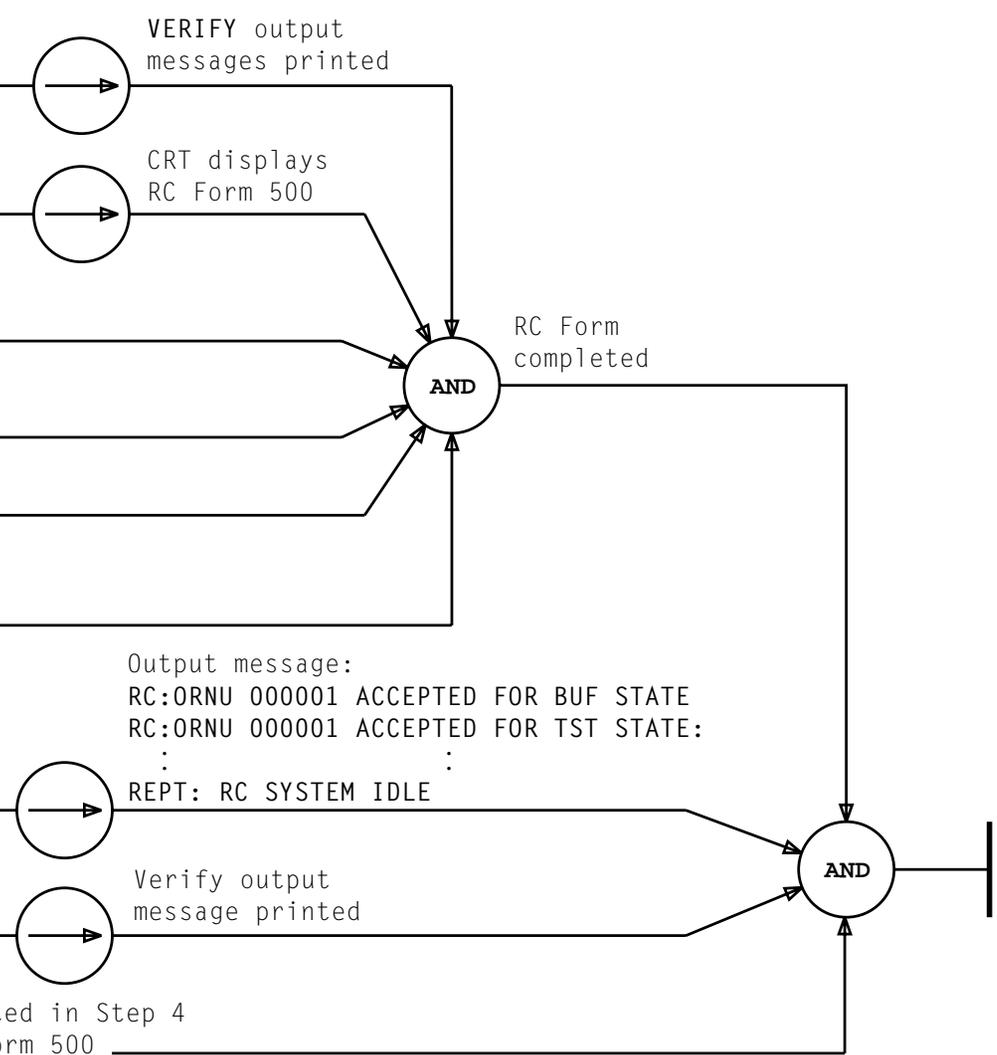
[5] Following ORNU, enter 000001

[6] Complete remainder of RC Form 500 using
 information from RDB selected in Step 1

[7] Depress **SEND** key

[8] Enter message
VER:RDB;INA:RDBI a!
 a = Same RDBI as used in Step 4

[9] Verify from output message that RDBI selected in Step 4
 now contains recent change created on RC Form 500



INPUT AND VERIFY DUMMY RECENT CHANGE FOR ROLLBACK WITH A PHASE

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At 1B Processor MCC terminal:

[1] Enter 108 to obtain System Status Page 108

[2] Verify that RC-ACTIVITY status message is not present

[3] Depress **EA DISP** key to obtain EAI page

[4] Verify that **DIRECT DATA INSERT-CONTENTS** is blank

[5] Enter 120 to obtain Data Display Page 120

[6] Verify that **DATA INSERT SECTION 1** and **DATA INSERT SECTION 2** indicators (line 16) are blank

AND

```
graph LR; S1[1] --> AND((AND)); S2[2] --> AND; S3[3] --> AND; S4[4] --> AND; S5[5] --> AND; S6[6] --> AND; AND --> P2([Page 2]);
```

Page 2

PERFORM RECENT CHANGE ROLLBACK VIA MANUAL REQUEST FOR PHASE 3

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At 1B Processor MCC terminal:

[7] Enter poke command 940
(940,XX - DATA 0)

DATA INSERT 1 indicator
displays last parameter
entered or changed

[8] Enter poke command 950
(950,XX - DATA 0)

DATA INSERT 2 indicator
displays last parameter
entered or changed

[9] Depress **EA DISP** key to obtain
EAI page

[10] Enter poke command 84
(84 - MODIFY RECV)

84-MODIFY RECV indicator
colored purple on white

[11] Enter poke command 401/400
(401/400,XX - SET & RESET XX)

Contents of **DIRECT DATA INSERT-
CONTENTS** switch from 0 to 1 and
from 1 to 0

[12] Enter poke command 53
(53 - PHASE 3)

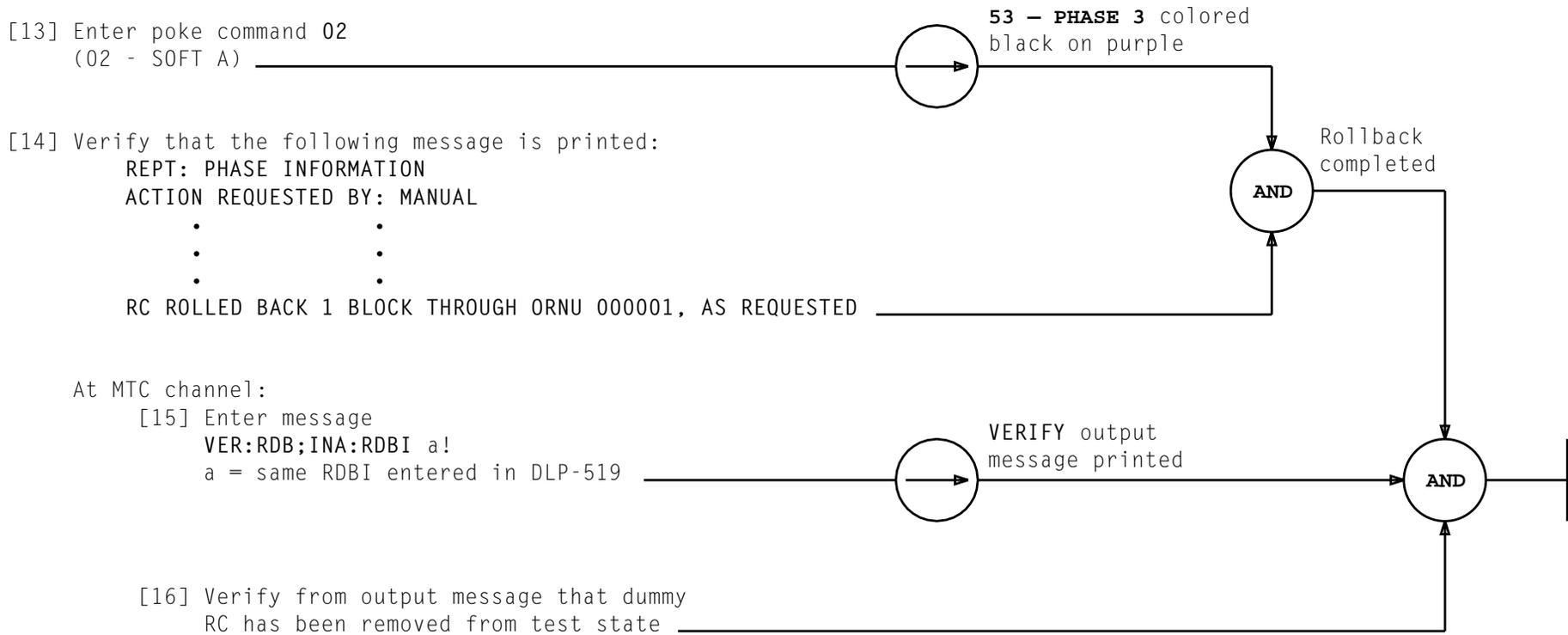
53-PHASE 3 colored
purple on white

AND

Page 3

PERFORM RECENT CHANGE ROLLBACK VIA MANUAL REQUEST FOR PHASE 3

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At SREC1 TTY:

[1] Enter

.Sxxx where xxx is the file
number of the first ORNU on
the diskette

Output message:
RC:ORNU 1 ACCEPTED FOR BUF STATE

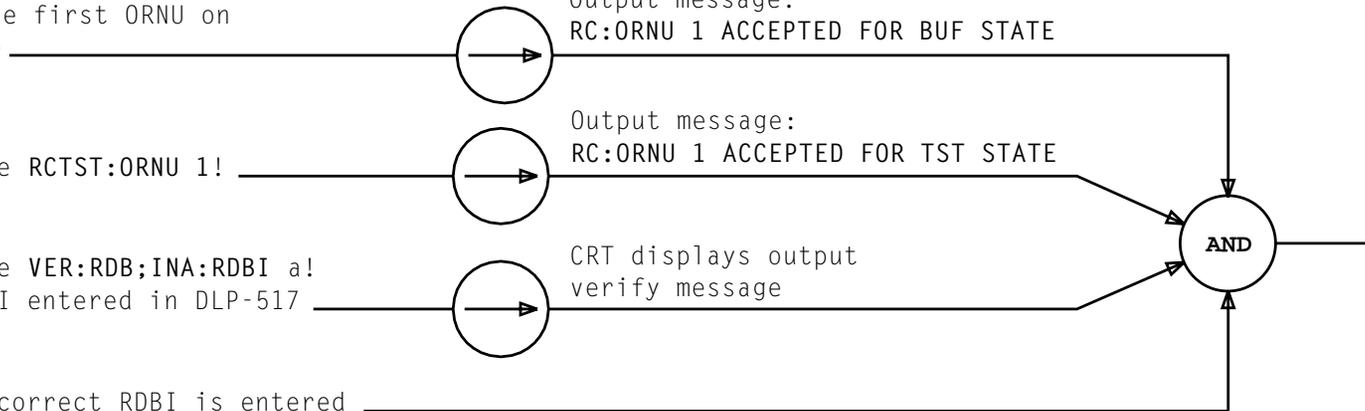
[2] Enter message RCTST:ORNU 1!

Output message:
RC:ORNU 1 ACCEPTED FOR TST STATE

[3] Enter message VER:RDB;INA:RDBI a!
a = Same RDBI entered in DLP-517

CRT displays output
verify message

[4] Verify that correct RDBI is entered



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At SREC1 Channel:

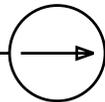
[1] Enter message

VER:RDB:RDBI 8064!

to verify that the subtranslator
whose First Routing Data Block Index
is 8064 is not used

[2] Enter message

OP:RCFORM 512!



CRT displays
RC Form 512

On CRT displayed RC FORM 512:

[3] Following **RC:RDB;NEW;OPT (RDBIGRP)**,

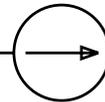
enter **ACT**

[4] Following **FRDBI**, enter **8064**

[5] Following **ORNU**, enter **000002**

RC:ORNU 000002 ACCEPTED FOR BUF STATE
RC:ORNU 000002 ACCEPTED FOR TST STATE
RC:ORNU 000002 ACCEPTED FOR ACT STATE
:
:
:

[6] Depress **SEND** key



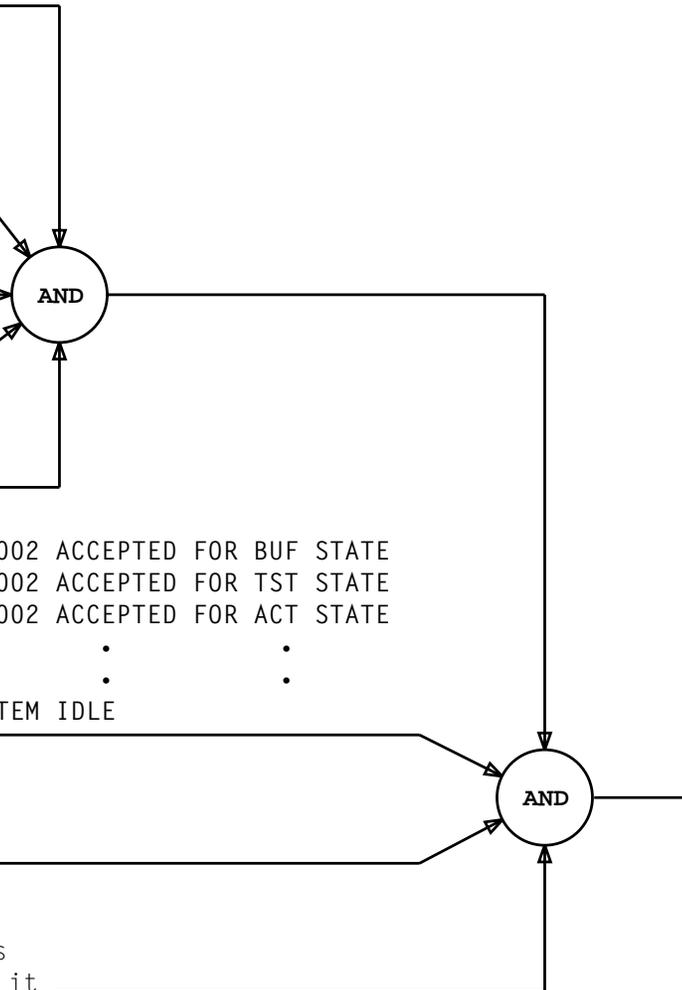
REPT:RC SYSTEM IDLE

[7] Enter message

VER:RDB:RDBI 8064!

[8] Verify from output message that RDBI 8064 is

used but has no trunk subgroups assigned to it



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At 1B Processor MCC terminal:

[1] Enter 108 to obtain System
Status Page 108

[2] Enter poke command 801
(801 - RESTRICT RC)

801 - RESTRICT RC
colored black
on white

At SREC1 channel:

[3] Read NOTE 1.
Enter message RCCNL:ROLLBACK!
to roll back dummy recent
change

[4] Verify following output message:
REPT:RCCNL TTY ROLLBACK INITIATED

TABLE A	
OUTPUT MESSAGE	REASON FOR OUTPUT
RCCNL:ROLLBACK NOT STARTED ROLLBACK AREA EMPTY	To report there is no rollback block to roll back
RCCNL:ROLLBACK NOT STARTED RESTRICT RC TO MOC KEY NOT OPERATED	To report the RESTRICT RECENT CHANGES is not operated at MCC
RCCNL:ROLLBACK NOT STARTED ROLLBACK OF THE NEXT BLOCK IS RESTRICTED	To report a recent change restriction is present on the rollback block
RCCNL:ROLLBACK NOT STARTED FAILURE a, ADDRESS b, c	To report a rollback area is locked out of the hash table

AND

[5] Is REPT:RC WARNING
RC ROLLED BACK a BLOCKS
THROUGH ORNU b AS
REQUESTED output message
received for dummy
recent change

No

Yes

[6] Determine from
TABLE A the reason
for failure according
to output message
received

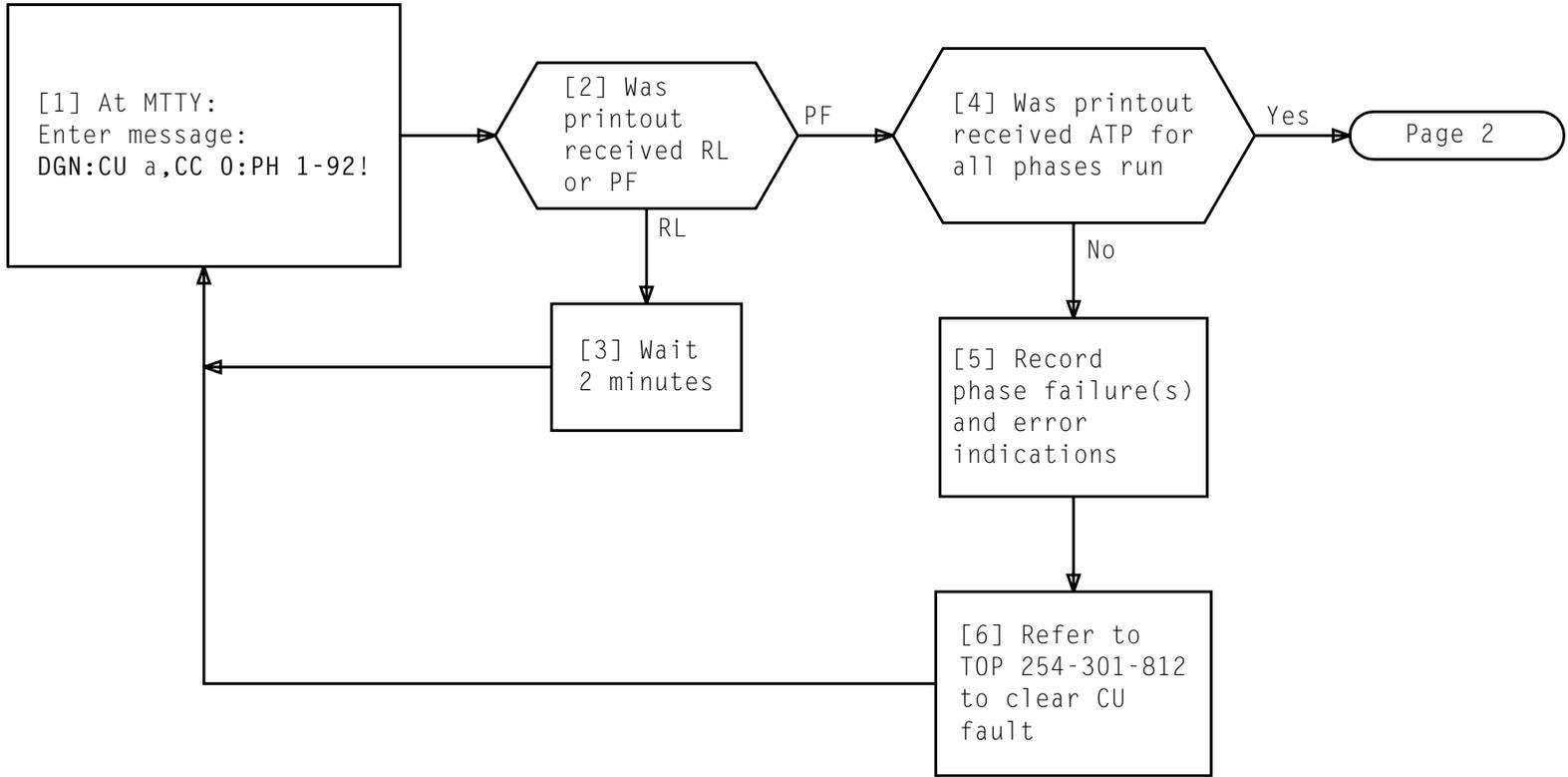
[7] At 1B Processor
MCC terminal: enter
poke command 801
(RESTRICT RC)

[8] Verify that
801 - RESTRICT RC
indicator colored
white on black

NOTE 1
This message rolls
back the recent
change that was last
entered successfully
in the system

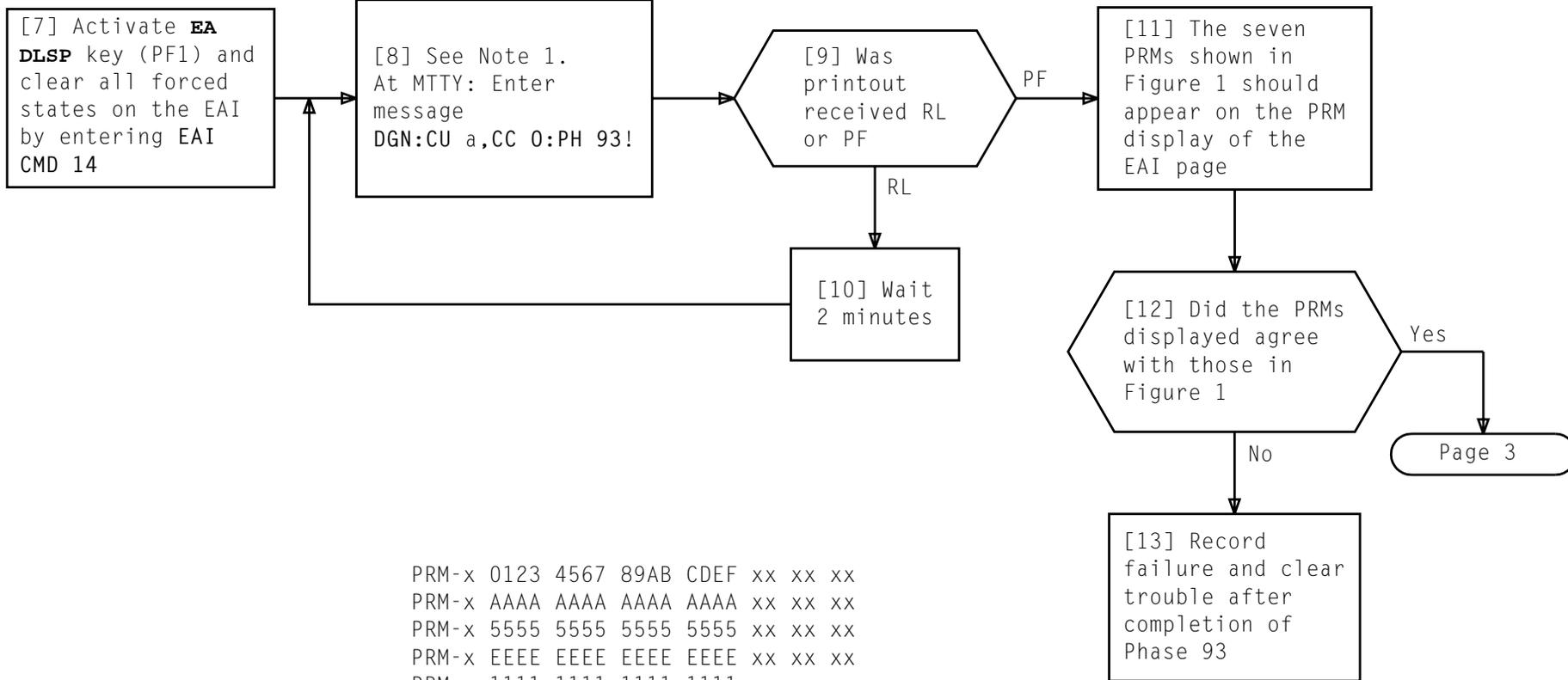
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PERFORM RECENT CHANGE ROLLBACK USING AN INPUT MESSAGE



PERFORM CONTROL UNIT DEMAND DIAGNOSTICS ON APS

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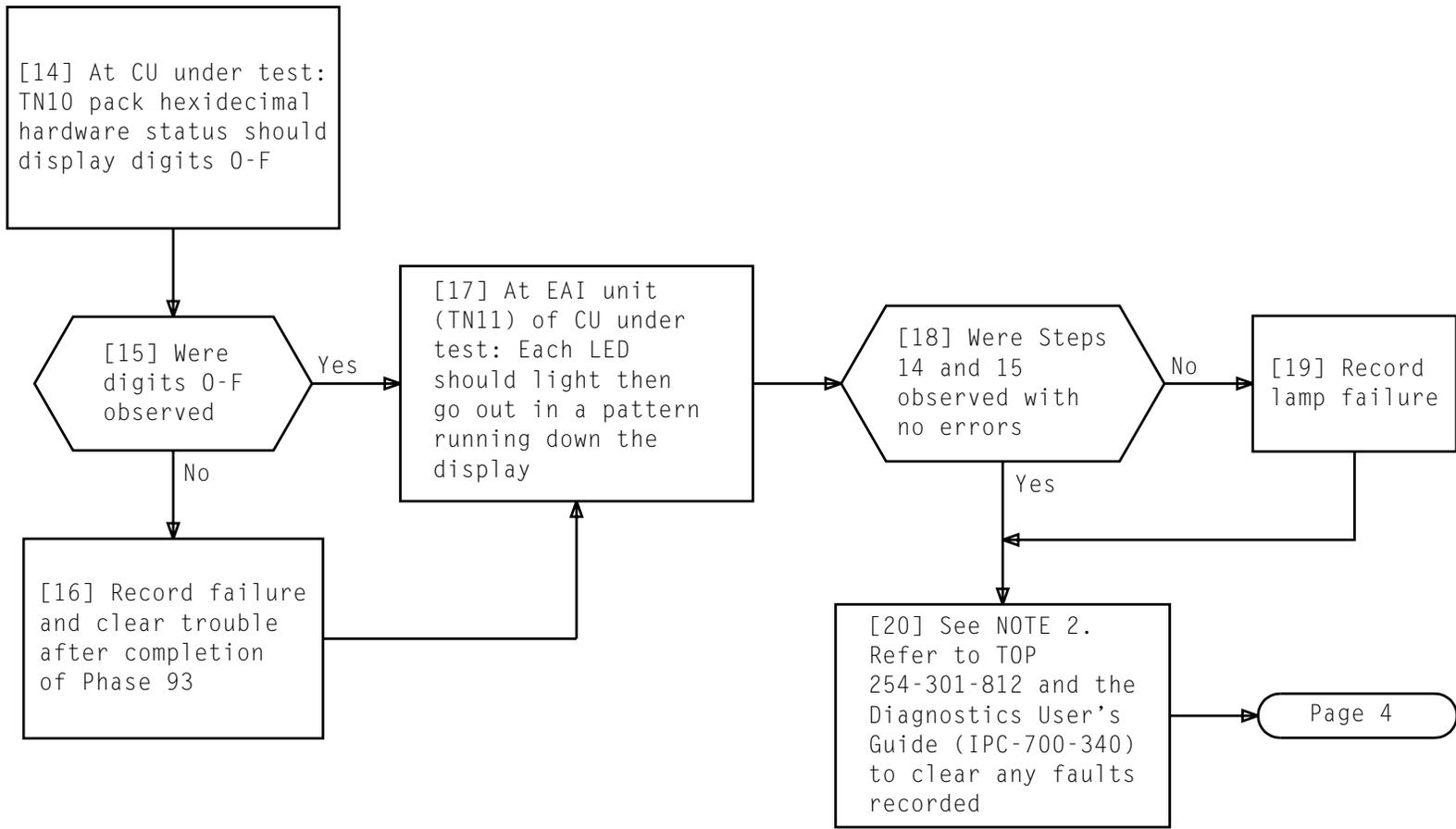
```

PRM-x 0123 4567 89AB CDEF xx xx xx
PRM-x AAAA AAAA AAAA AAAA xx xx xx
PRM-x 5555 5555 5555 5555 xx xx xx
PRM-x EEEE EEEE EEEE EEEE xx xx xx
PRM-x 1111 1111 1111 1111 xx xx xx
PRM-x 0000 0000 0000 0000 xx xx xx
PRM-x FFFF FFFF FFFF FFFF xx xx xx
  
```

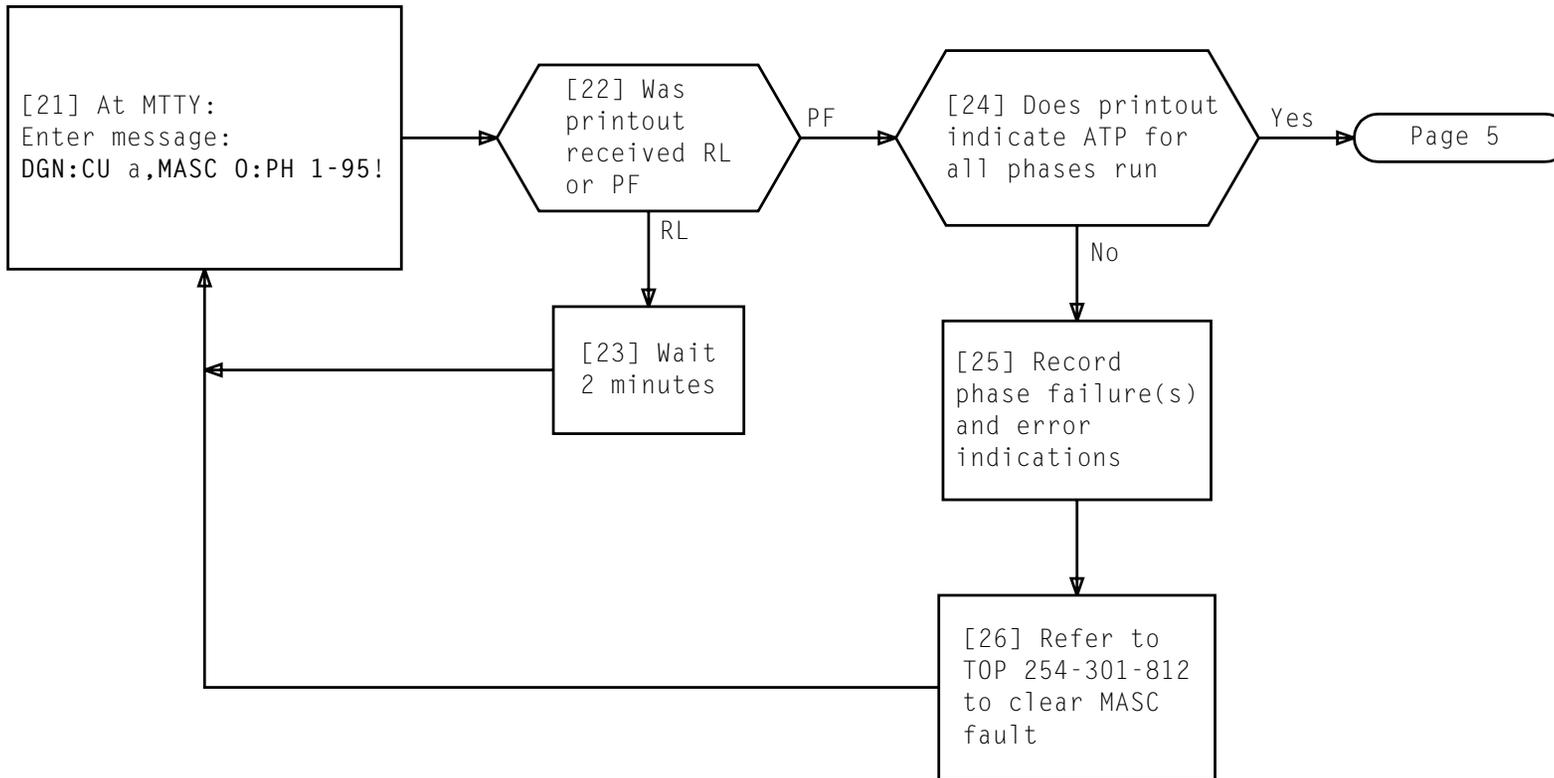
Figure 1 - PRM Display

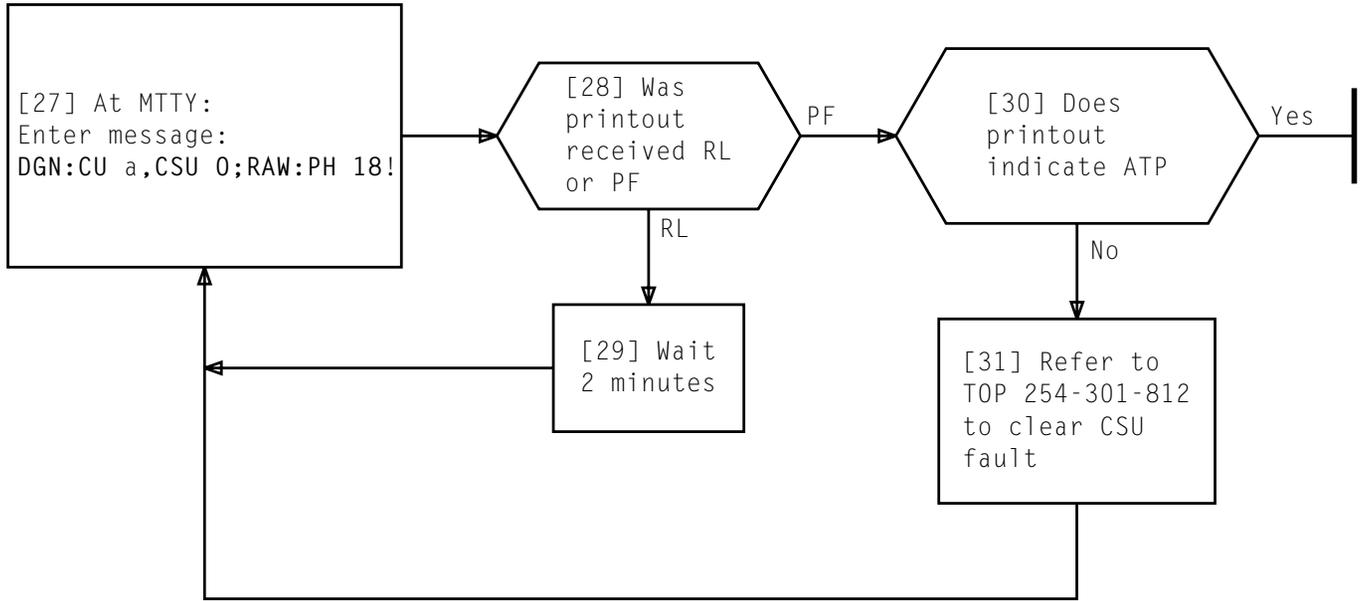
NOTE 1
 Read Steps 8 through 21 to become familiar with Phase 93 and the observations to be made while performing this phase. This phase may require two people

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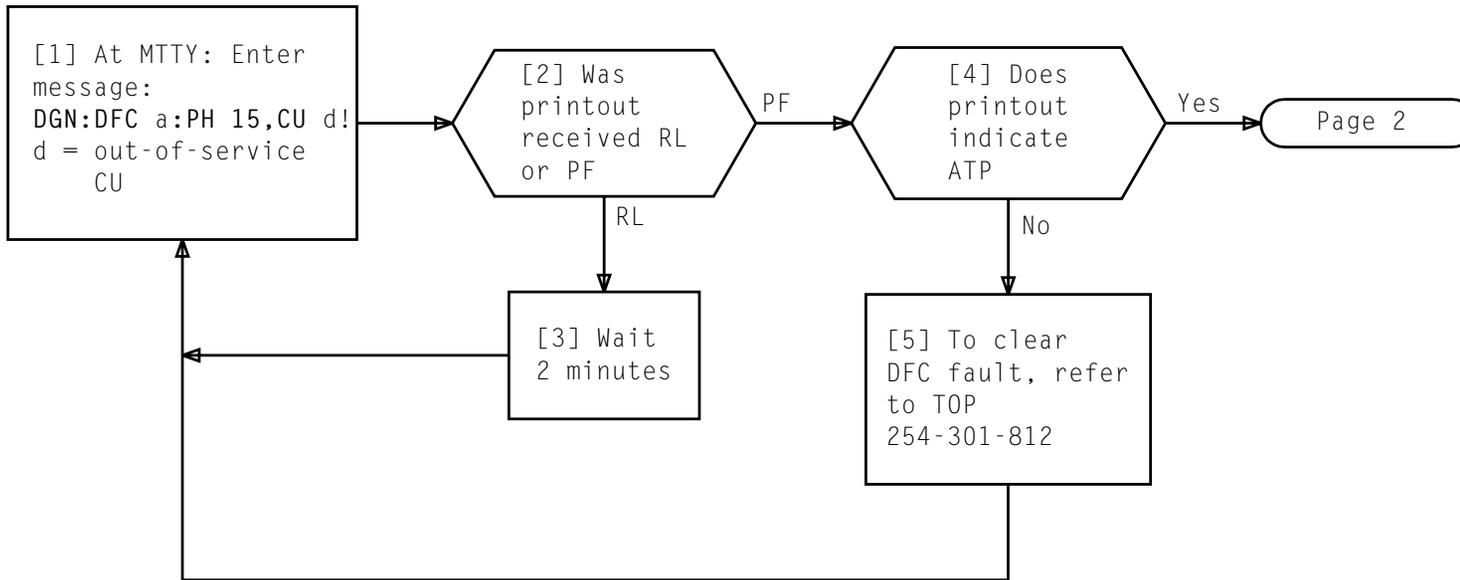
NOTE 2	
Since any failure is indicated visually, the phase may run ATP in spite of display faults	
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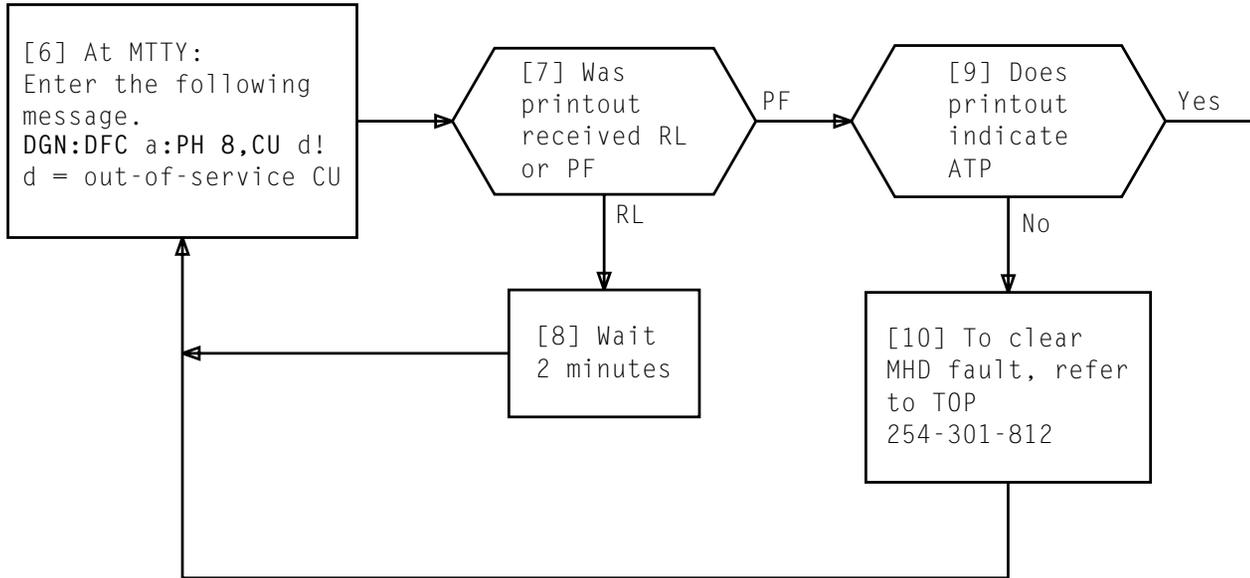


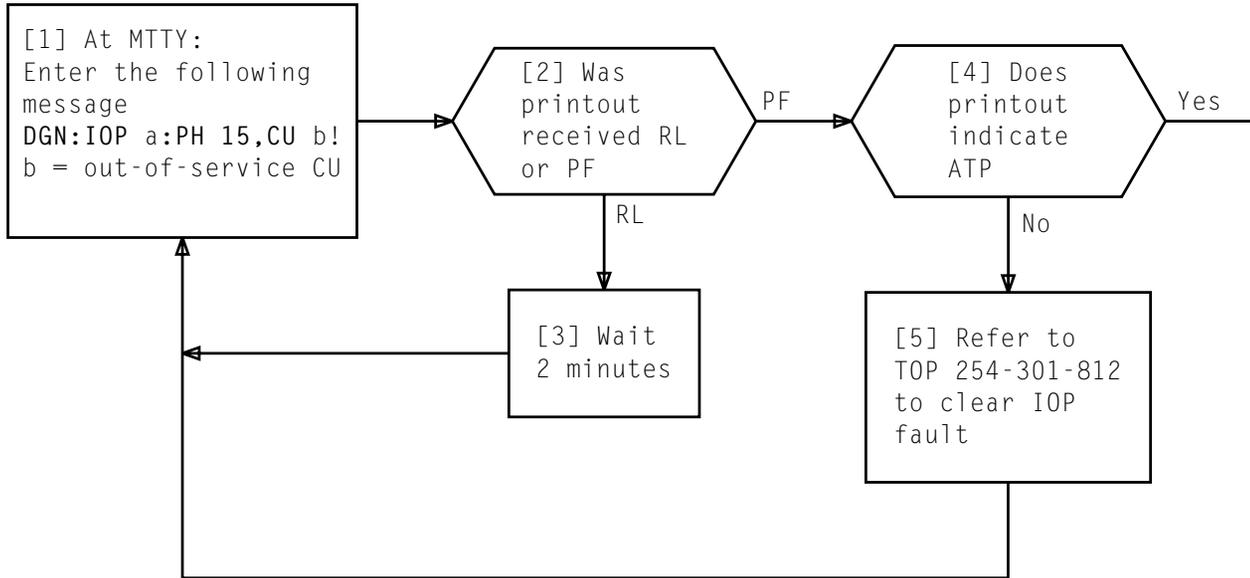


PERFORM CONTROL UNIT DEMAND DIAGNOSTICS ON APS

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1. Operate **EA DISP** key to obtain EAI Page
2. If the Channel Is Not in the MSG Mode, Operate the **CMD/MSG** Key
3. Test Force On-Line (FONL) Functions
 - 3.1 Determine OOS units by entering **OP:00S**
 - 3.2 Restore all OOS units (**RST:a b**)
 - 3.3 Operate **CMD/MSG** key to place the channel in the CMD mode
 - 3.4 Enter command **10** to force CU 0 on-line and CU 1 off-line. If CU 1 is active, this step may result in CU recovery
 - 3.5 Operate **NORM/DISP** key and verify that CU 0 is forced active and CU 1 is unavailable. Go to Page 102
 - 3.6 Operate **EA DISP** key
 - 3.7 Enter command **11** to force CU 1 on-line and CU 0 off-line. Wait before proceeding
Response: After CU recovery, CU 1 should be forced active and CU 0 should be unavailable
 - 3.8 Enter command **13** to remove forces and allow automatic processor recovery
 - 3.9 Operate **NORM/DISP** key and verify that CU 0 is manually OOS and CU 1 is active
 - 3.10 Restore CU 0 by entering command **200**
 - 3.11 When CU 0 is restored, enter command **12** to force the active CU (CU 1) on-line and force the standby CU (CU 0) off-line

- 3.12 Enter the following commands:
 - (a) **20:** Forces both processors to access their primary disk on a boot
 - (b) **24:** Inhibits the sanity timer from expiring and initiating automatic processor recovery action
 - (c) **26:** Releases any trapped PRMs and causes the next failure PRM to be displayed in reverse video and remain displayed until released
- 3.13 Enter command **14** and verify that all forces, sets, and timer inhibits are removed and PRM trap remains set
- 3.14 Restore OOS CU by entering **RST:a b**

4. Test Manual Boot Functions

- 4.1 Enter command **50** to initialize the application software

Response: The following expected errors are received:

```

REPT: APDRV FAULT CODE e0
REPT: API 1, ERR 1a0
REPT: API 0, ERR 1a0
REPT: API 0, ERR 1a1
REPT: API 1, ERR 1a1

```

Go to Page 2

4.2 Enter command 51 to initialize the DMERT operating system

Response: START OF CU-0 RECOVERY
START OF CU-1 RECOVERY

.
.
.

REPT PHASE 1 IN PROGRESS

4.3 Enter command 52 to force bootstrapping of the DMERT operating system from disk

Response: START OF CU-0 RECOVERY
START OF CU-1 RECOVERY

.
.
.

REPT PHASE 2 IN PROGRESS

4.4 Enter command 53 (Same as Step 4.3 plus reloads equipment configuration data)

Response: START OF CU-0 RECOVERY
START OF CU-1 RECOVERY

.
.
.

REPT PHASE 3 IN PROGRESS

4.5 Enter command 54 (Same as Step 4.4 plus clears the memory)

Response: START OF CU-0 RECOVERY
START OF CU-1 RECOVERY

.
.
.

REPT PHASE 4 IN PROGRESS

5. If the System Is Not Running on the Root Operating System, Enter Commands 31 and 54

Response: CMD 31 allows the processor to initialize from the Root operating system on the boot (CMD 54)

6. Place the Channel in the MSG Mode (**CMD/MSG**), and Enter the Following Message: **OP:00S**

Response: Printout received of the out-of-service (OOS) units

7. Restore All OOS Units Which Appear on the Printout in Step 4 (RST:a,b)

8. Test the CUs Configuration With the MHDs Under the Root Operating System

8.1 Enter command 10 to force CU 0 on-line

8.2 Enter the following commands to test CU 0's configuration to its primary disk:

(a) 20: Forces the on-line CU (CU 0) to select its primary disk (MHD 0) on a boot

(b) 54: Boots the system (initialization level 4)

Response: System is initialized from the Root operating system on MHD 0. Verify output message:

REPT CFTSHL TERMINAL IN SERVICE

Go to Page 3

- 8.3 Enter the following commands to test CU 0's configuration to its secondary disk:
- (a) **22:** Forces the on-line CU (CU 0) to select its secondary disk (MHD 1) on a boot
 - (b) **54:** Boots the system (initialization level 4)
- Response:* System is initialized from the Root operating system on MHD 1. Verify output message:
REPT CFTSHL TERMINAL IN SERVICE
- 8.4 Enter command **11** to force CU 1 on-line
- 8.5 Enter the following commands to test CU 1's configuration to its primary disk:
- (a) **20:** Forces the on-line CU (CU 1) to select its primary disk (MHD 1) on a boot
 - (b) **54:** Boots the system (initialization level 4)
- Response:* System is initialized from the Root operating system on MHD 1. Verify output message:
REPT CFTSHL TERMINAL IN SERVICE
- 8.6 Enter the following commands to test CU 1's configuration to its secondary disk:
- (a) **22:** Forces the on-line CU (CU 1) to select its secondary disk (MHD 0) on a boot
 - (b) **54:** Boots the system (initialization level 4)
- Response:* System is initialized from the Root operating system on MHD 0. Verify output message:
REPT CFTSHL TERMINAL IN SERVICE

9. Test the CUs Configuration With the MHDs Under the Broot (Backup Root) Operating System
- 9.1 Enter commands **30** and **54** to boot the system to the Broot operating system
 - 9.2 Repeat Step 8 substituting Broot for Root
10. Test the Ability of the System to Operate Under Minimum Configuration
- 10.1 Enter the following commands:
 - (a) **32:** Forces the system to initialize only the DMERT operating system on a boot
 - (b) **54:** Boots the system to minimum configuration*Response:* After system recovery, the load name changes to STDCR 3B/DMERT 2.0.8
 - 10.2 Repeat Step 8 substituting Min Config for Root
11. Enter Commands **31** and **54**
- Response:* System is booted back to the Root operating system
12. Initialize All Craft Related Processes in the Active CU by Entering Command **15**
- Response:* **REPT CFTSHL TERMINAL IN SERVICE**
- End of procedure

[1] Mount 2400-foot tape on available 3B computer tape drive (write-enable ring attached)
 [DLP-532]

At MCRT:

[2] Enter message
DUMP:FILE:ALL, FN"/etc/pdtspec"! and ensure that printout in TABLE A is received

[3] Enter message
COPY:BKDISK;START:SRC"/dev/vtoc",TD"/dev/mtX8",TPSIZE 2200!
 X = tape drive number (Step 1)

[4] Wait for
COPY BKDSK DISMOUNT GENERIC TAPE LABEL AND MOUNT NEXT TAPE message

[5] Demount tape [DLP-531], label rt0 1 tape per local practice and remove write ring from tape

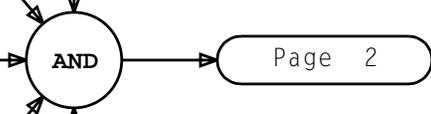


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP FILE ALL COMPLETED /dev/lboot /dev/vtoc /dev/boot /dev/root /dev/etc /dev/db

[6] Mount 2400-foot tape on same tape drive (write-enable ring attached) [DLP-532]

[7] At MCRT: Enter message COPY:BKDISK;ACK:TFSIZE 2200!

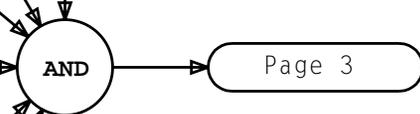
[8] Wait for COPY BKDISK DISMOUNT GENERIC TAPE LABEL AND MOUNT NEXT TAPE message

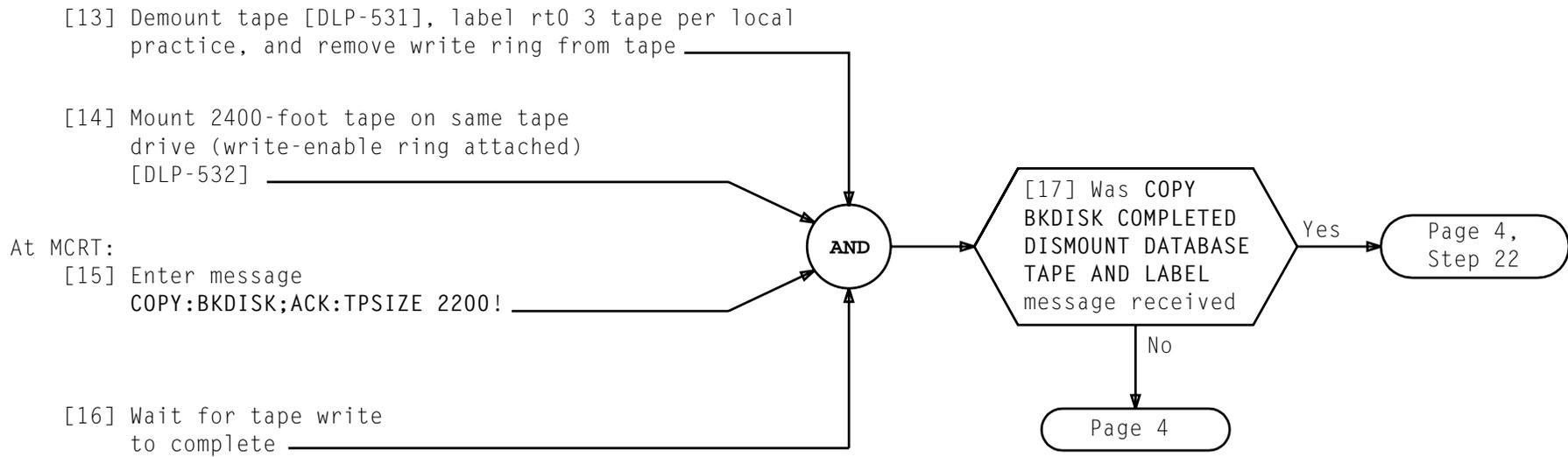
[9] Demount tape [DLP-531], label rt0 2 tape per local practice, and remove write ring from tape

[10] Mount 2400-foot tape on same tape drive (write-enable ring attached) [DLP-532]

[11] At MCRT: Enter message COPY:BKDISK;ACK:TFSIZE 2200!

[12] Wait for COPY BKDISK DISMOUNT GENERIC TAPE LABEL AND MOUNT NEXT TAPE message





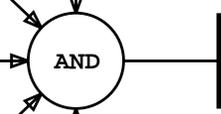
[18] Demount tape [DLP-531], label rt0 4 tape per local practice,
and remove write ring from tape _____

[19] Mount 2400-foot tape on same tape
drive (write-enable ring attached)
[DLP-532] _____

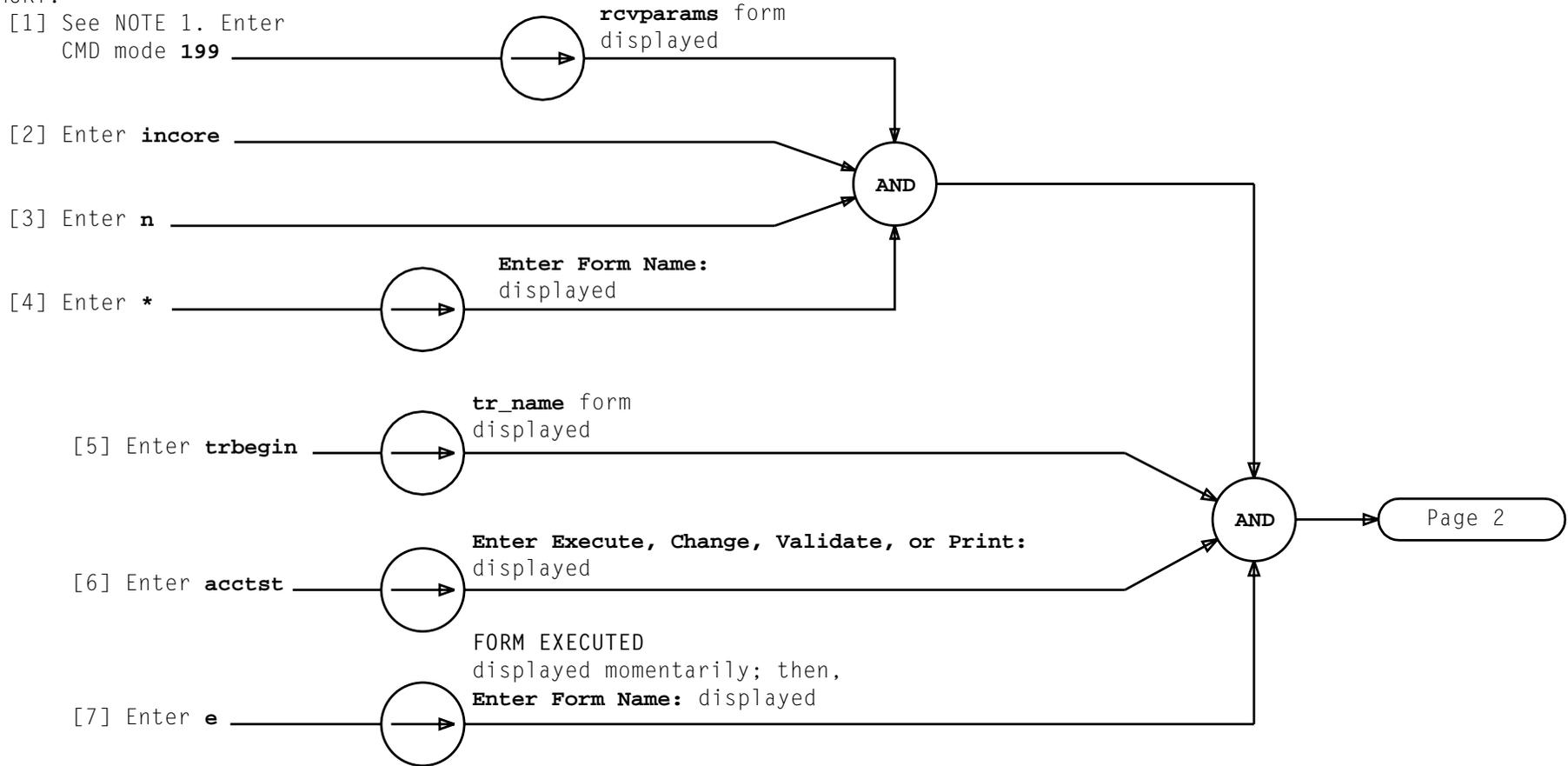
[20] At MCRT: Enter message
COPY:BKDISK;ACK:TFSIZE 2200! _____

[21] Wait for
COPY BKDISK COMPLETED DISMOUNT DATABASE TAPE AND LABEL
message _____

[22] Demount tape [DLP-531], label db tape per local practice,
and remove write ring from tape _____

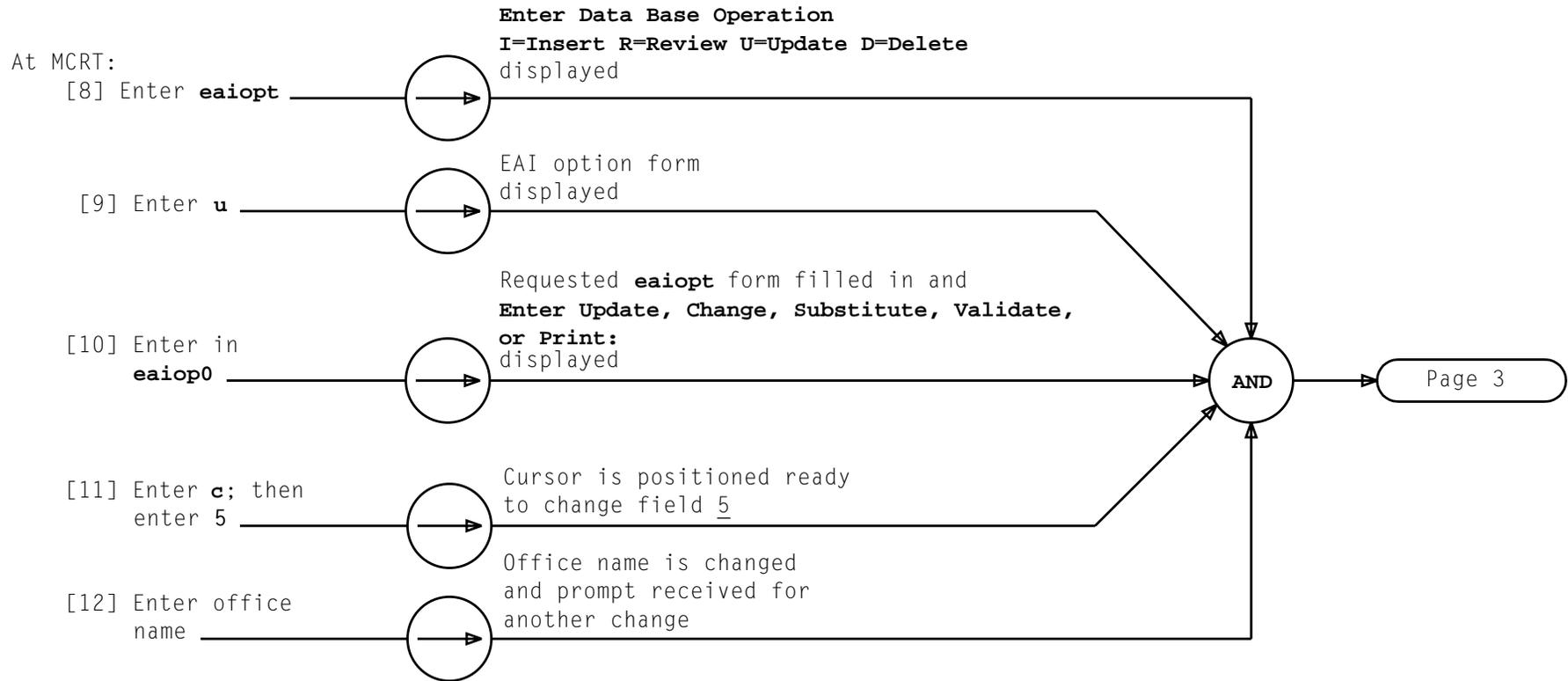


At MCRT:



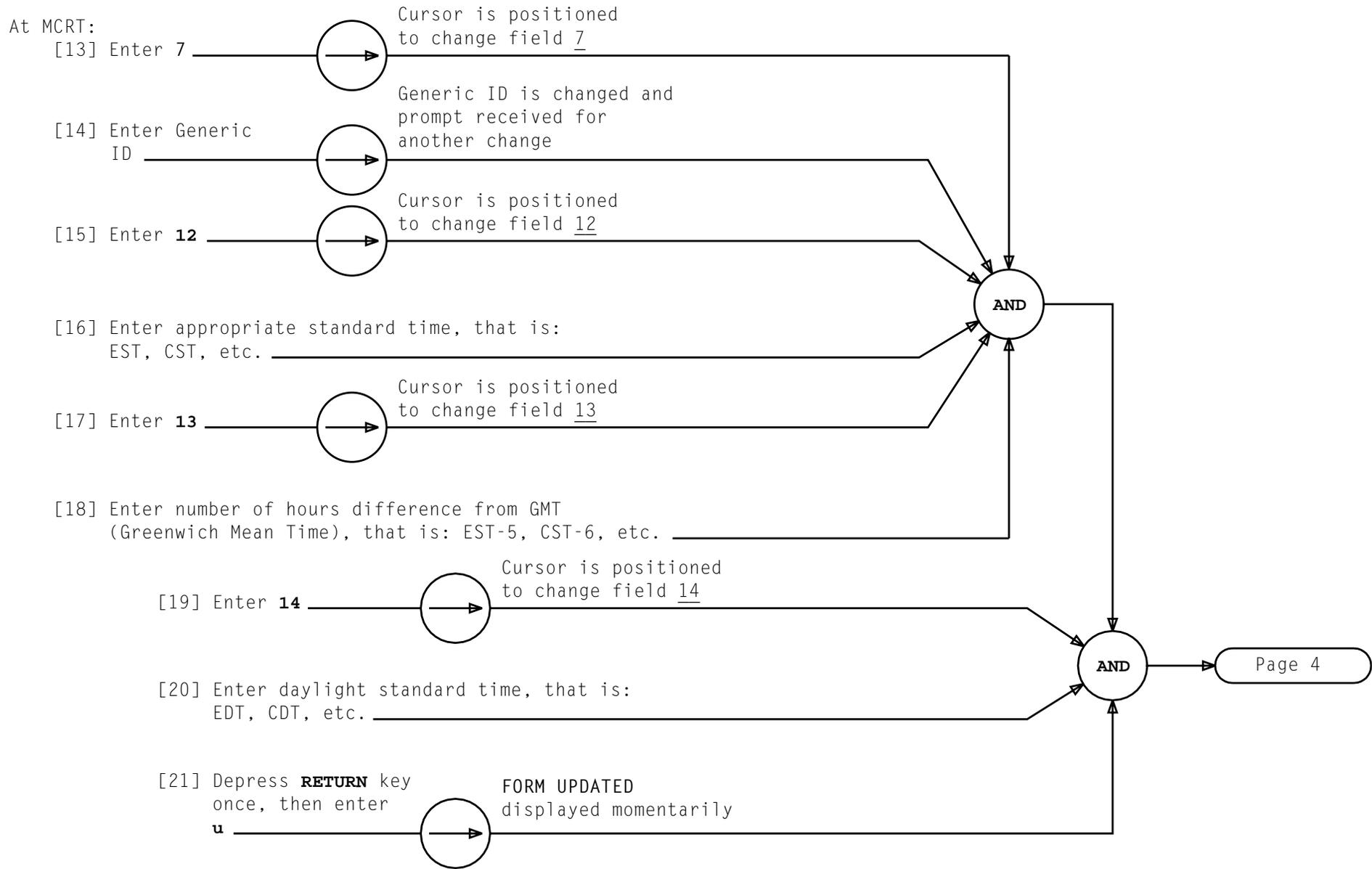
**ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID,
AND TIME ZONE ON APS**

NOTE 1	
An output message should be received before proceeding to the next step.	
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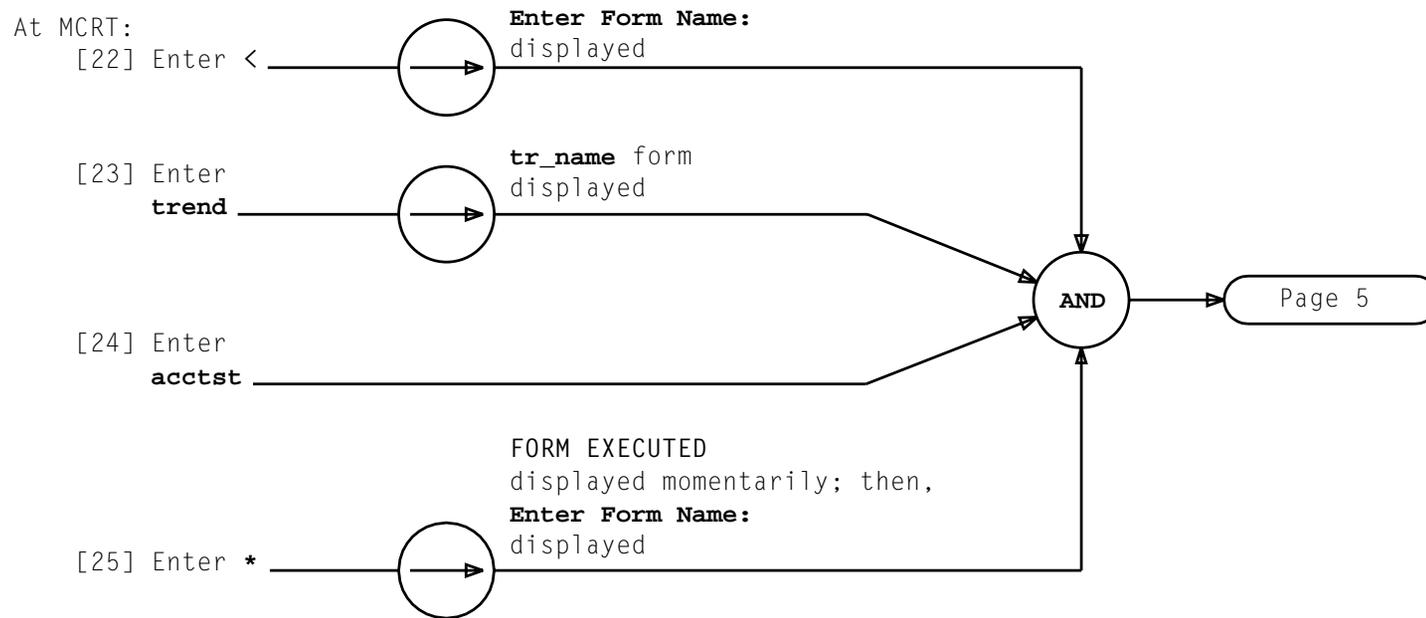
**ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID,
 AND TIME ZONE ON APS**

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ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID, AND TIME ZONE ON APS

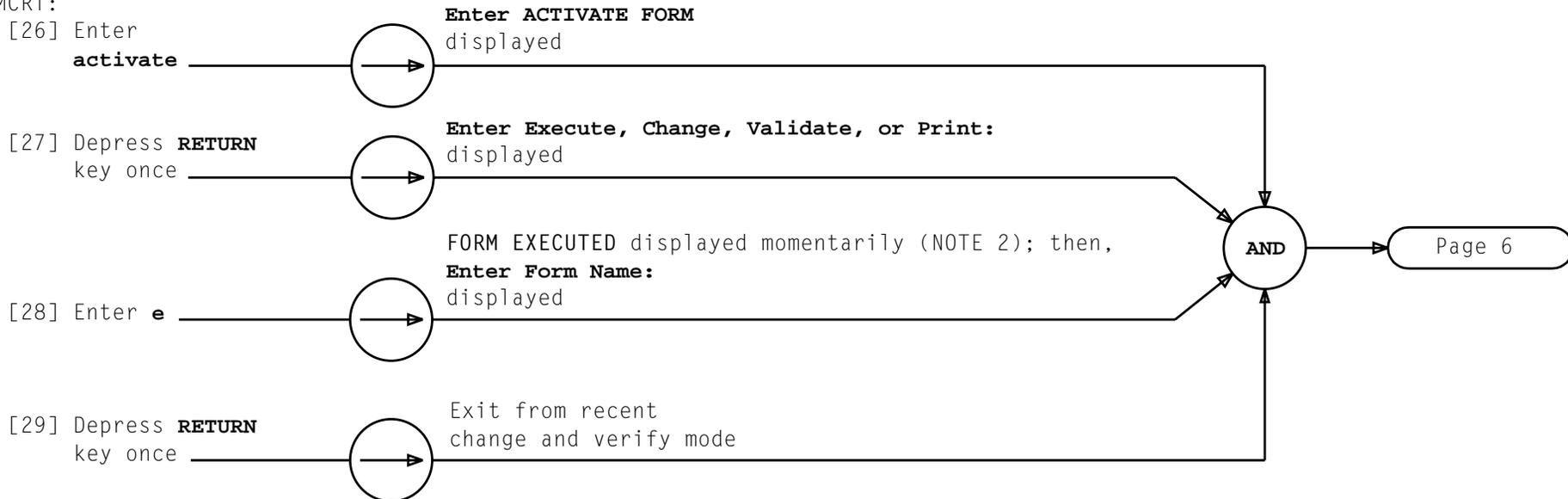
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ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID,
AND TIME ZONE ON APS

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At MCRT:



NOTE 2 It may take several minutes before FORM EXECUTED is displayed	
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ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID, AND TIME ZONE ON APS

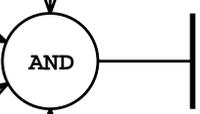
At MCRT:

[30] On EAI page, enter **15** _____

[31] If new office name and Generic ID are
on EAI page, continue on; if office
name and/or Generic ID do not appear
on EAI page, seek assistance _____

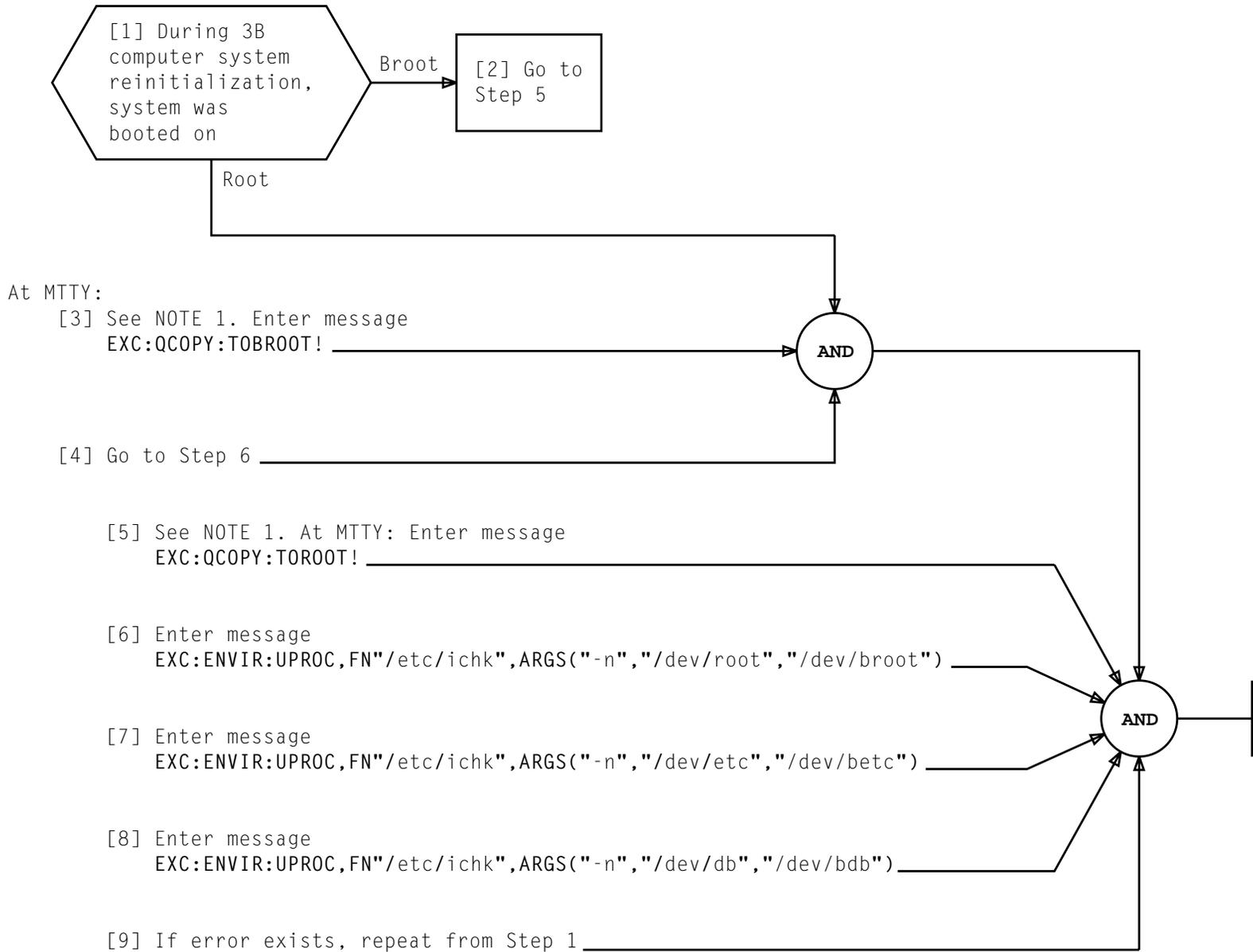
[32] If the time zone was changed, the 3B must
be rebooted by entering **52** at EAI page _____

[33] Allow system to recover _____



**ENTER RECENT CHANGE TO CHANGE OFFICE NAME, GENERIC ID,
AND TIME ZONE ON APS**

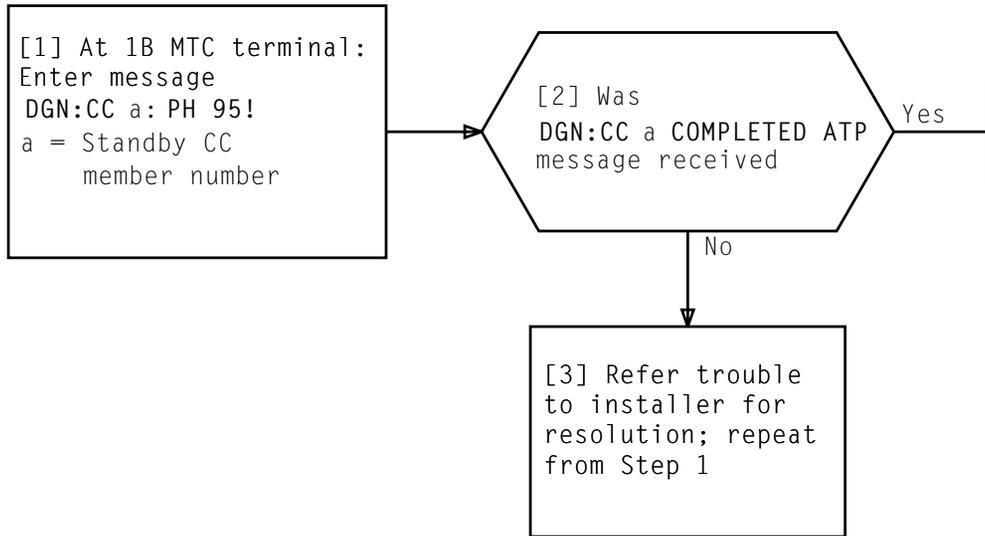
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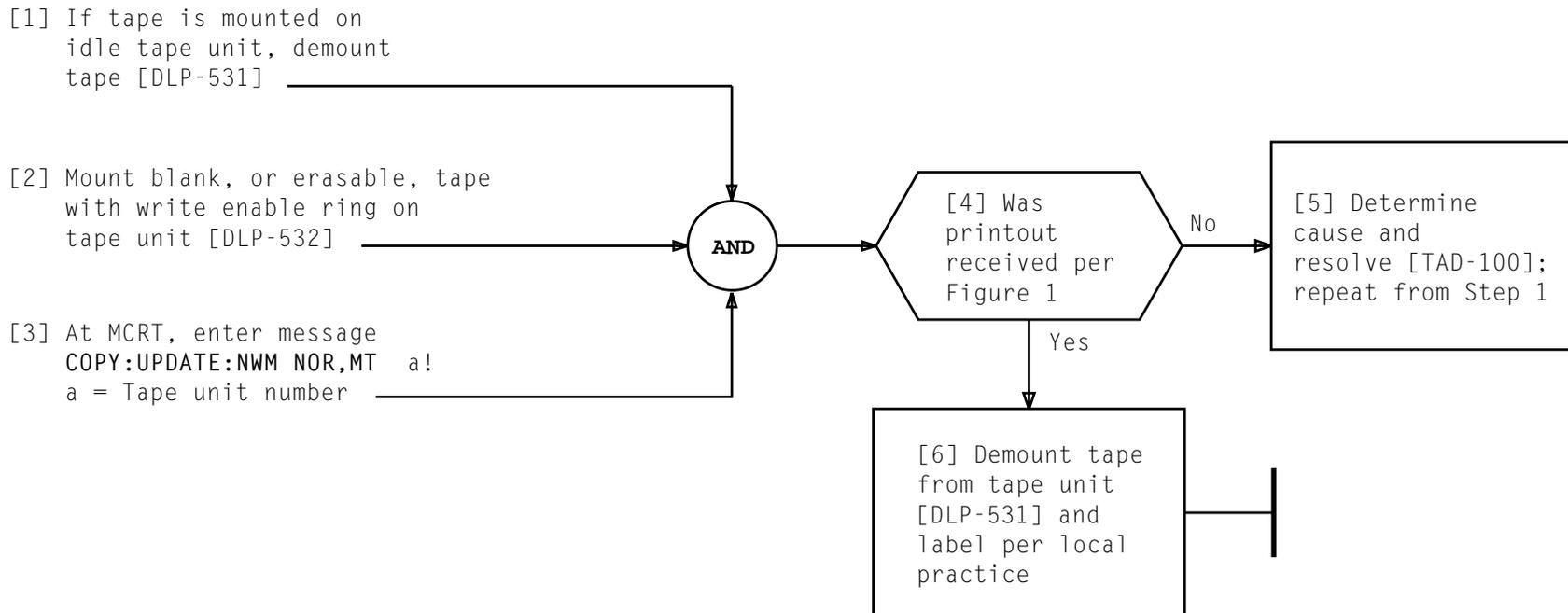


NOTE 1
 EXC:ENVIR:UPROC
 COMPLETE message
 should display
 before proceeding
 to next step

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COPY PARTITIONS 2, 4, 13, AND 16 ON APS





COPY NWM FROM NORMAL FILE

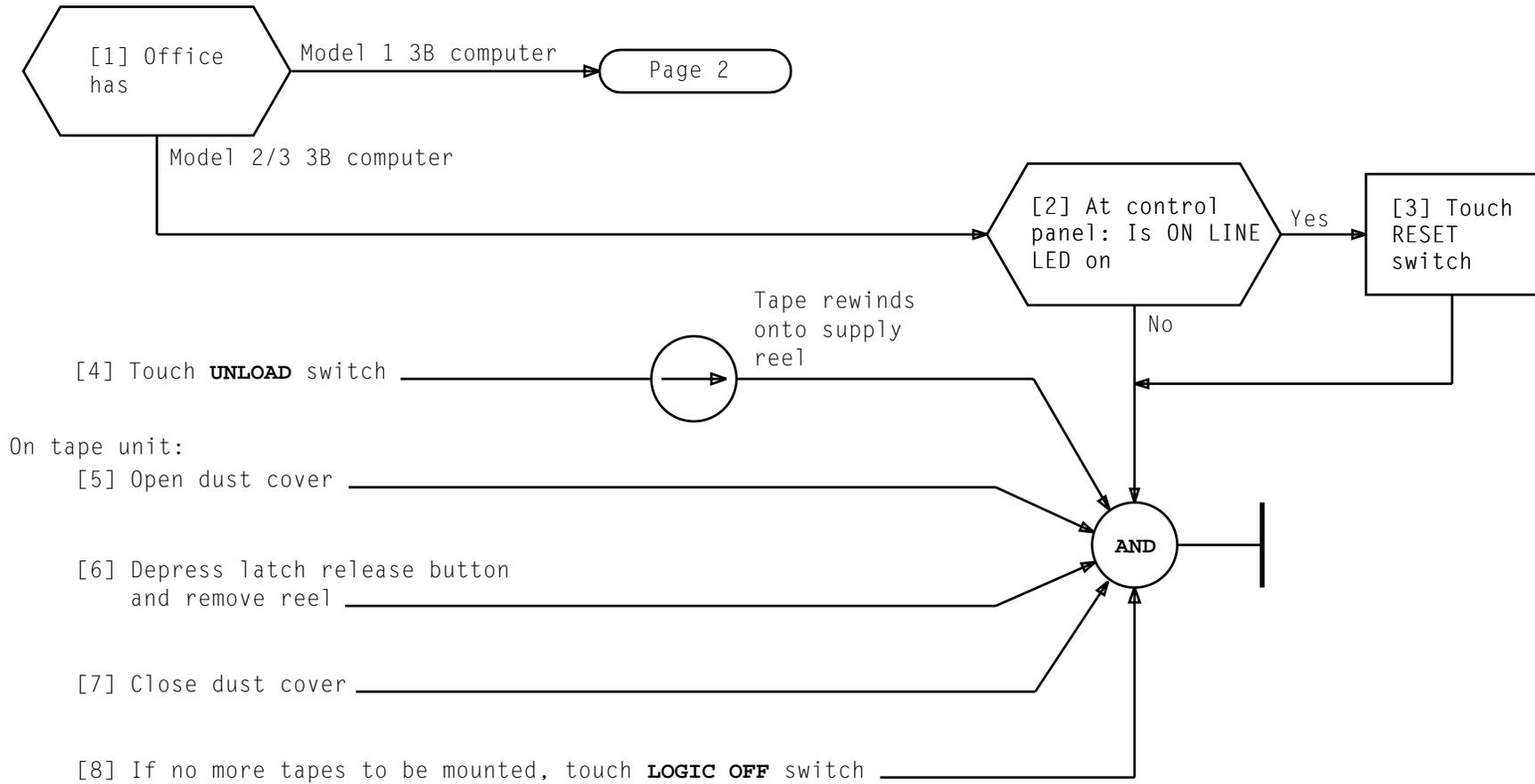
TAPE FILE 10 WRITTEN FROM FS*

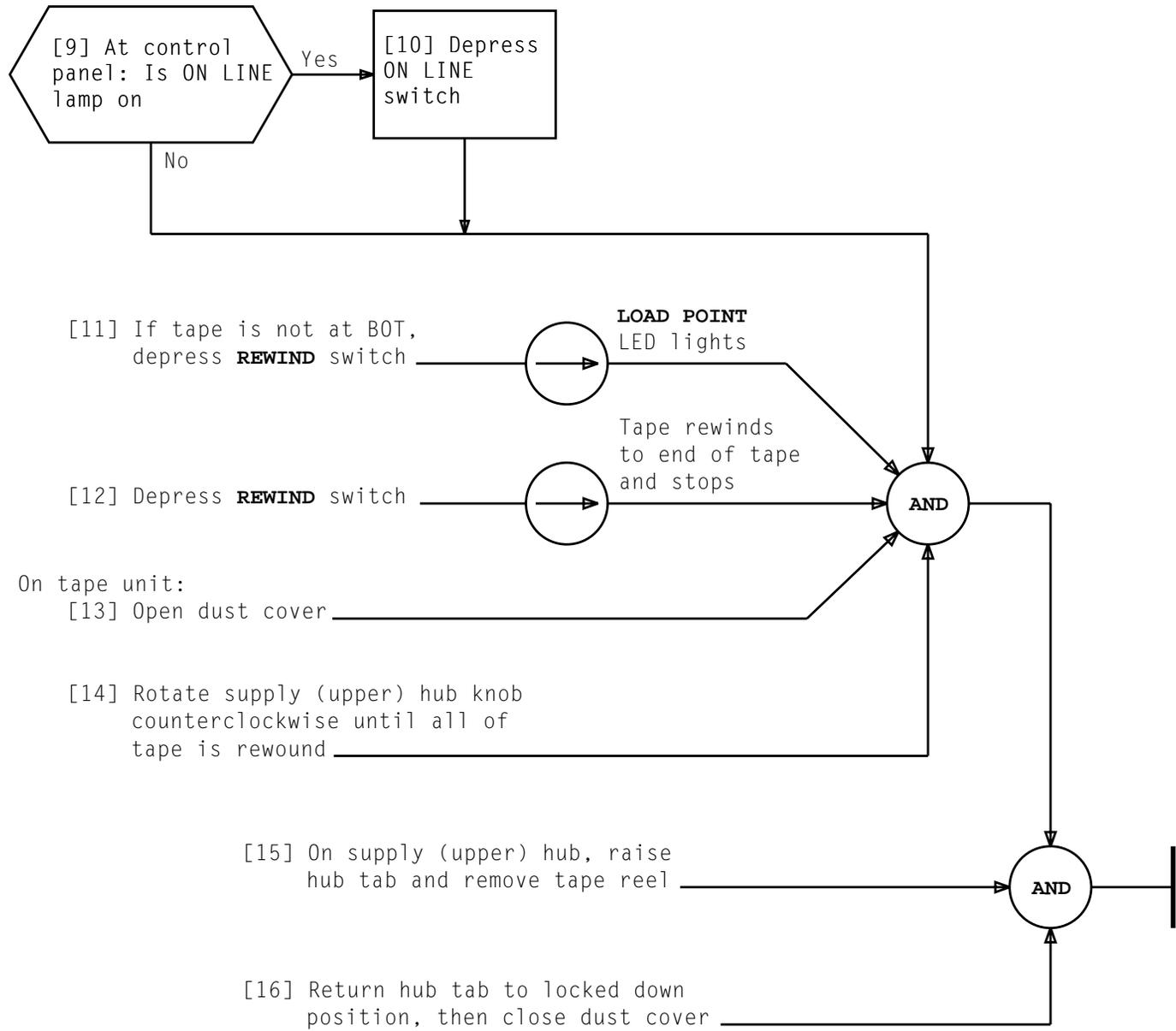
NWM TAPE WRITTEN

* MAY NOT BE RECEIVED

Figure 1 - Sample NWM Tape
Write Printout

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DEMOUNT TAPE ON TAPE UNIT ON APS

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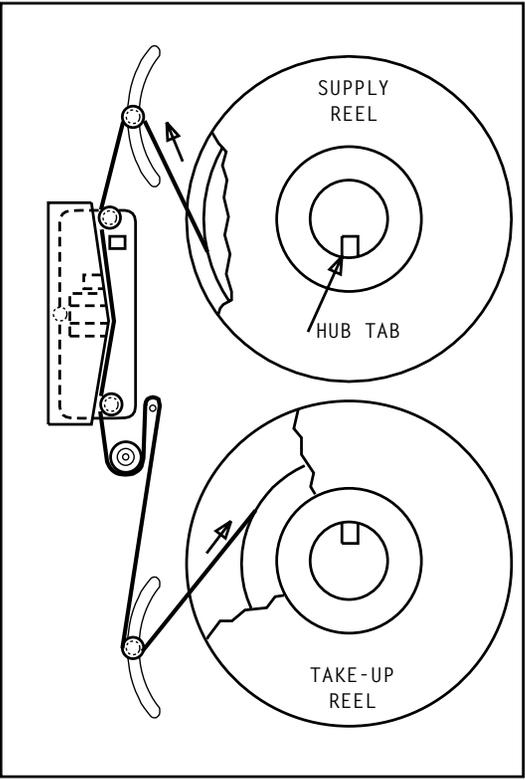
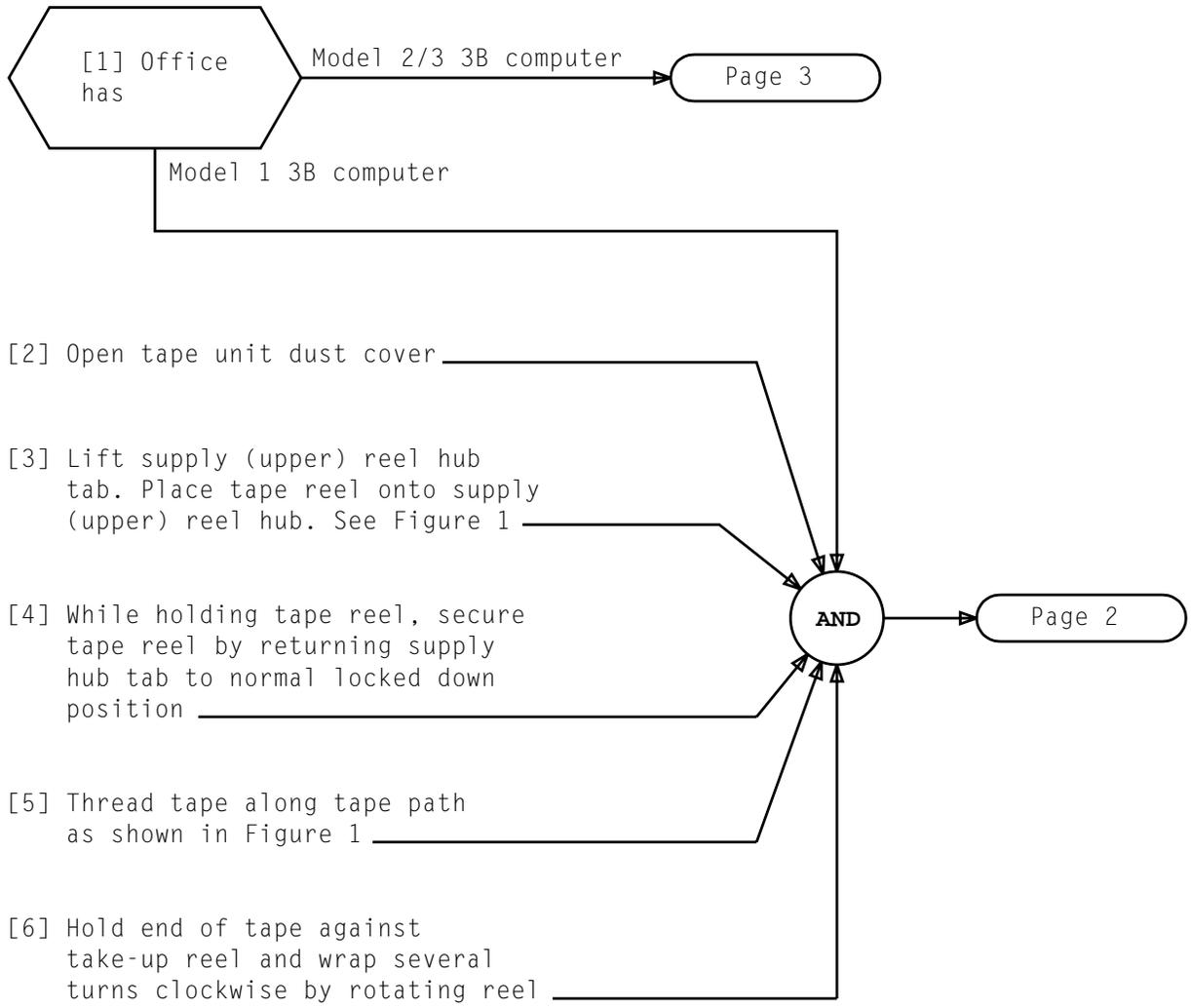
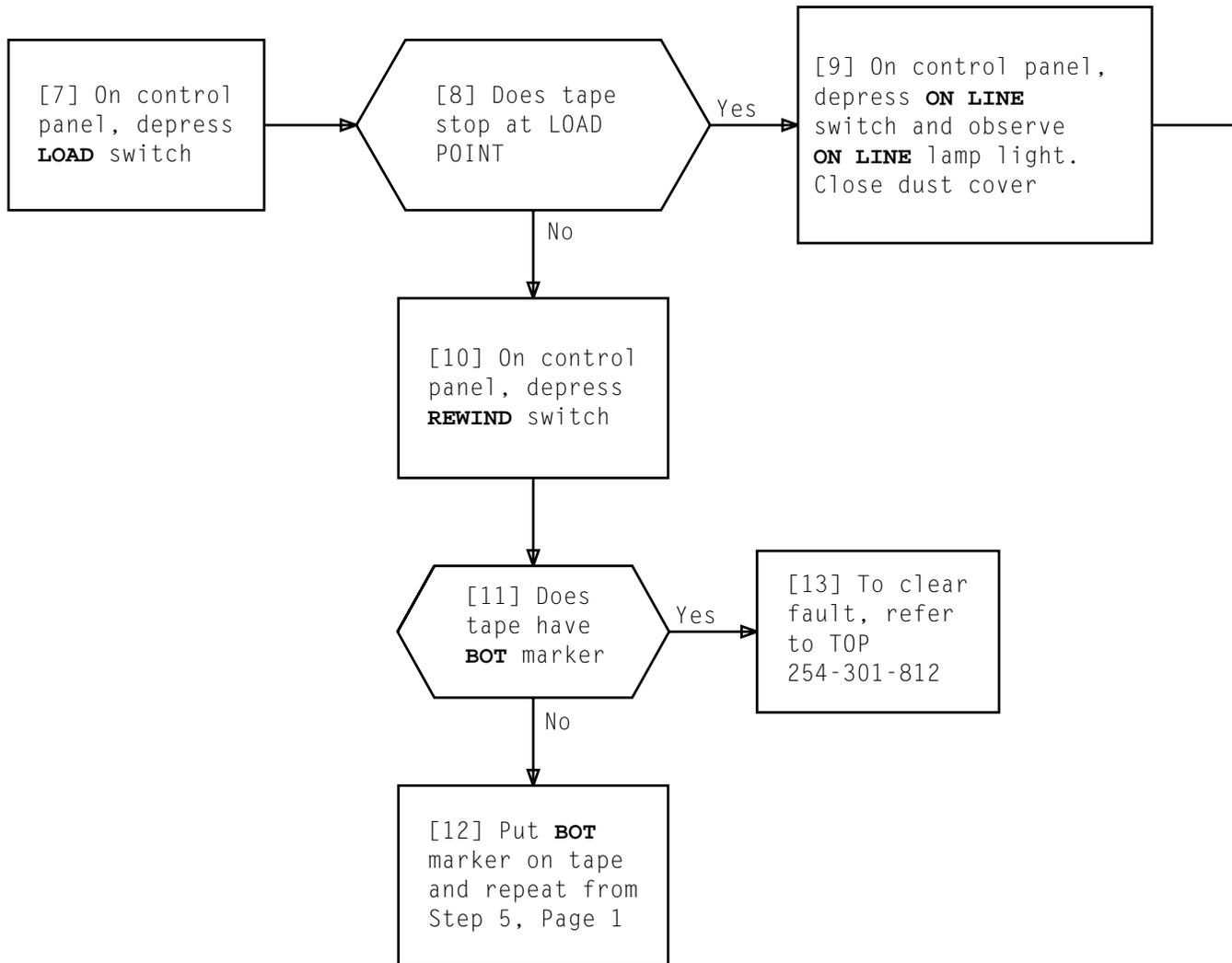


Figure 1

MOUNT TAPE ON TAPE UNIT ON APS

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[14] If tape is to be written, attach write enable ring on supply reel

[15] If **LOGIC OFF** LED lighted, touch **LOGIC ON** switch

[16] Open dust cover and verify circuit breaker at side 1

[17] See Figure 2. Place supply reel on hub and depress hub latch

[18] Thread tape from bottom of supply reel along path as shown in Figure 2

[19] Hold end of tape against take-up reel and wrap several turns clockwise by rotating reel; then close dust cover

[20] At control panel, touch **LOAD/REWIND** switch

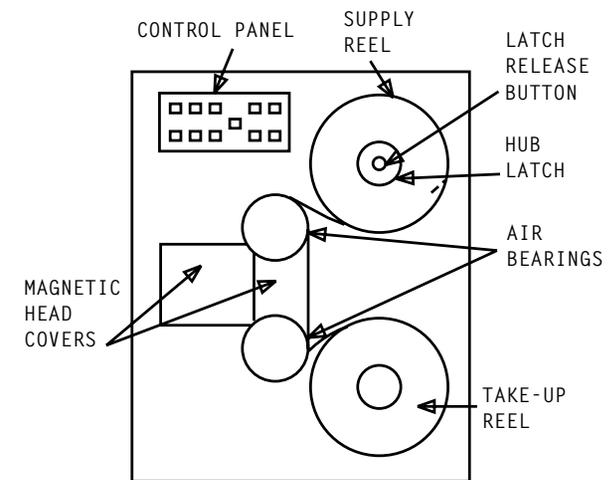
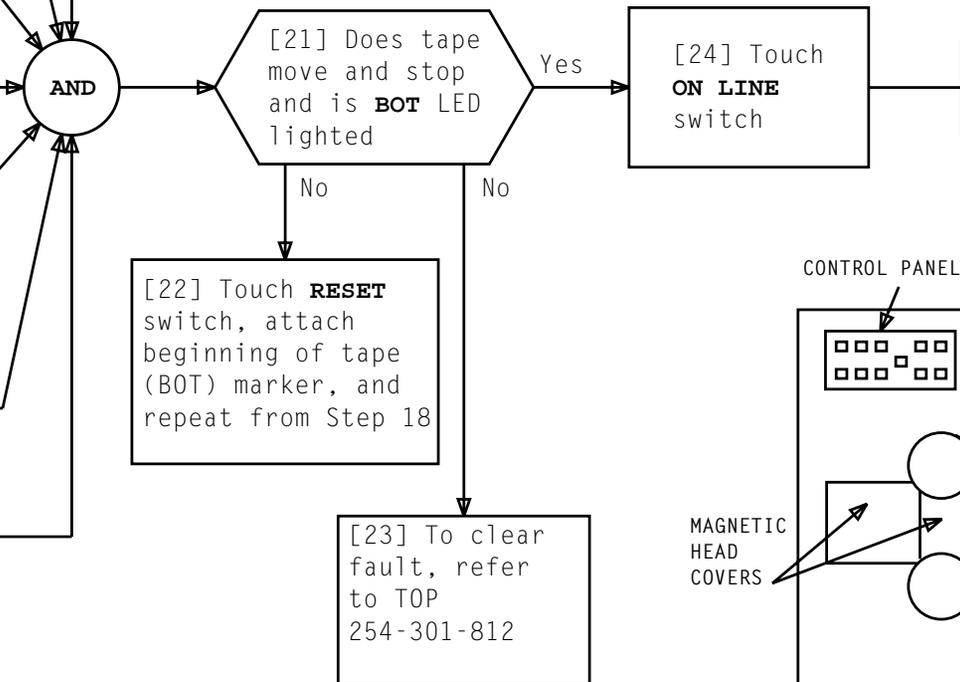
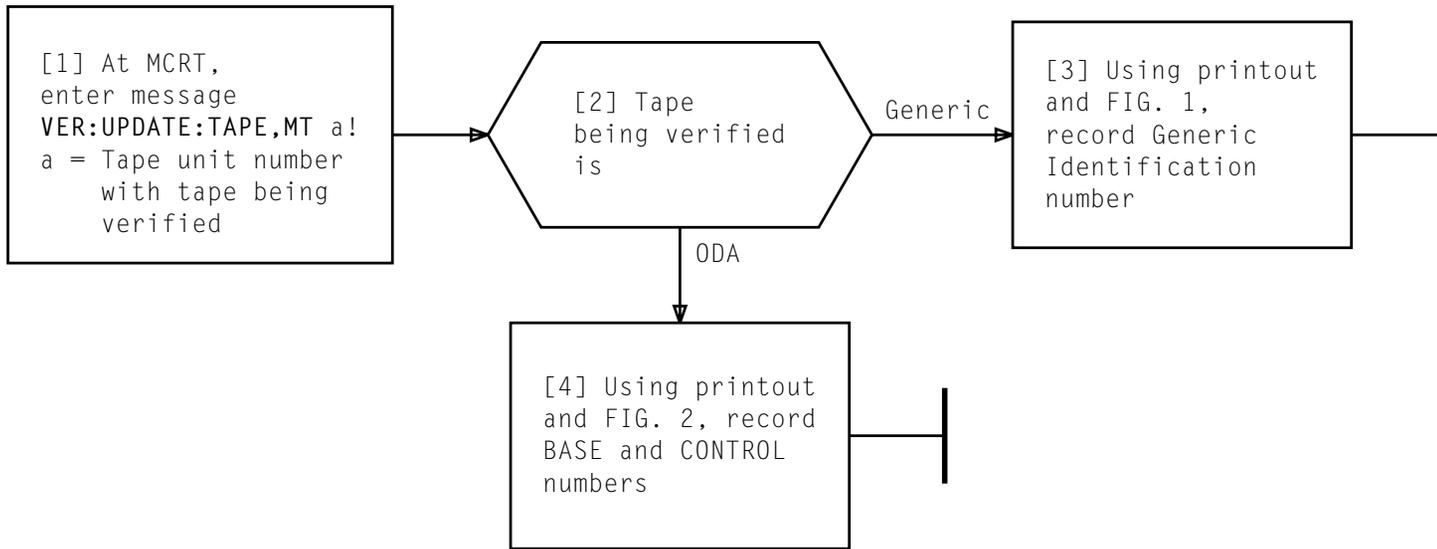


Figure 2

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TAPE TYPE: GEN
 GENERIC 4E<14>4A.01 ← Record This Value
 MOST RECENT OFL GENERATION: YR 89,MON 03,DAY 04 AT 11:28
 THIS TAPE WRITTEN: YR 89,MON 03,DAY 04 AT 17:19
 FS IDS: 0000000000000010,TAPE IDS: 0000000011111111
 PARTL UPD FLG: 0,PHASE REQD: 0001000

FIG. 1 – Sample Generic Tape Header Printout

TAPE TYPE: ODA
 BASE 908F,CONTROL H0 ← Record These Values
 ORIGINAL GENERIC 4E<G14>.4R
 MOST RECENT OFL GENERATION: YR 89,MON 03,DAY 05 AT 16:23
 THIS TAPE WRITTEN: YR 89,MON 03,DAY 09 AT 08:23
 FS IDS: 0000000000001000,TAPE IDS: 0000000011110100
 PRTL UPD FLG: 0,PHASE REQD: 0001000

FIG. 2 – Sample ODA Tape Header Printout

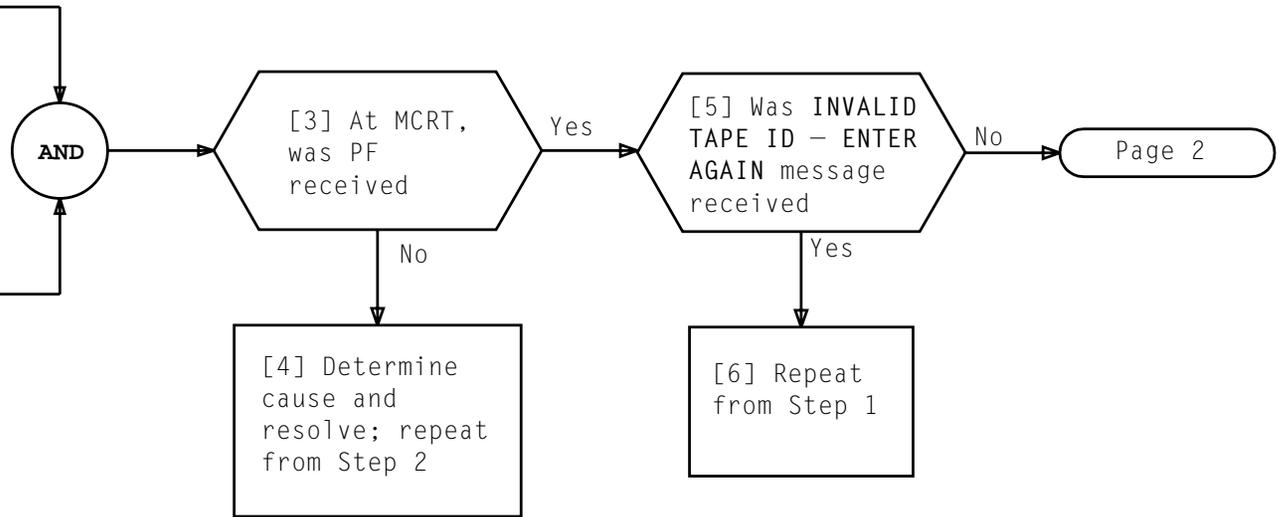
RECORD TAPE HEADER INFORMATION

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[1] Determine BASE and CONTROL numbers recorded earlier

At MCRT:

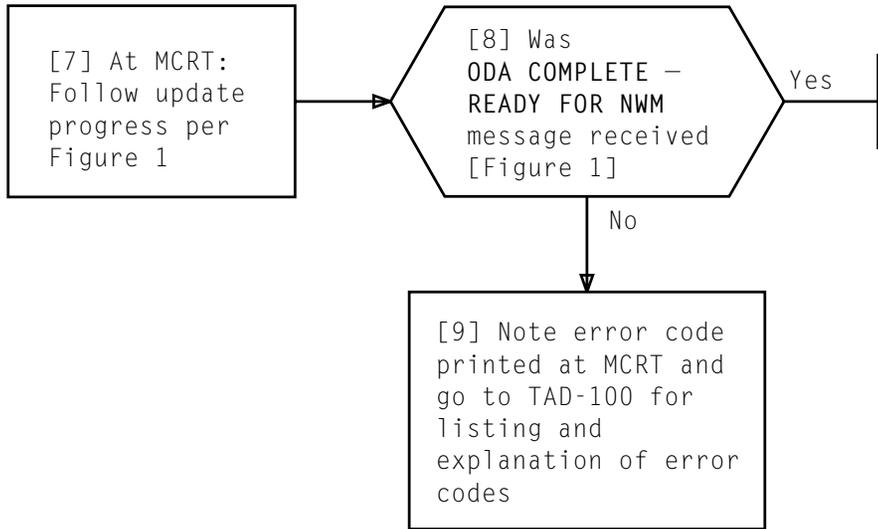
[2] See NOTE 1. Enter message
LOAD:UPDATE:ODA "ab",MT c!
(See NOTE 2)



NOTES

1. ODA tape does not start loading immediately after LOAD:UPDATE . . . message is entered. There is a 5-minute delay while 1AFILE is copied into UPDATE file
2. a = BASE number (Step 1). Must be 4 characters long. Spaces are used after base number if not 4 characters long
b = CONTROL number (Step 1). Must be 2 characters long. Space is used after CONTROL number if not 2 characters long
c = Tape unit number with ODA tape mounted

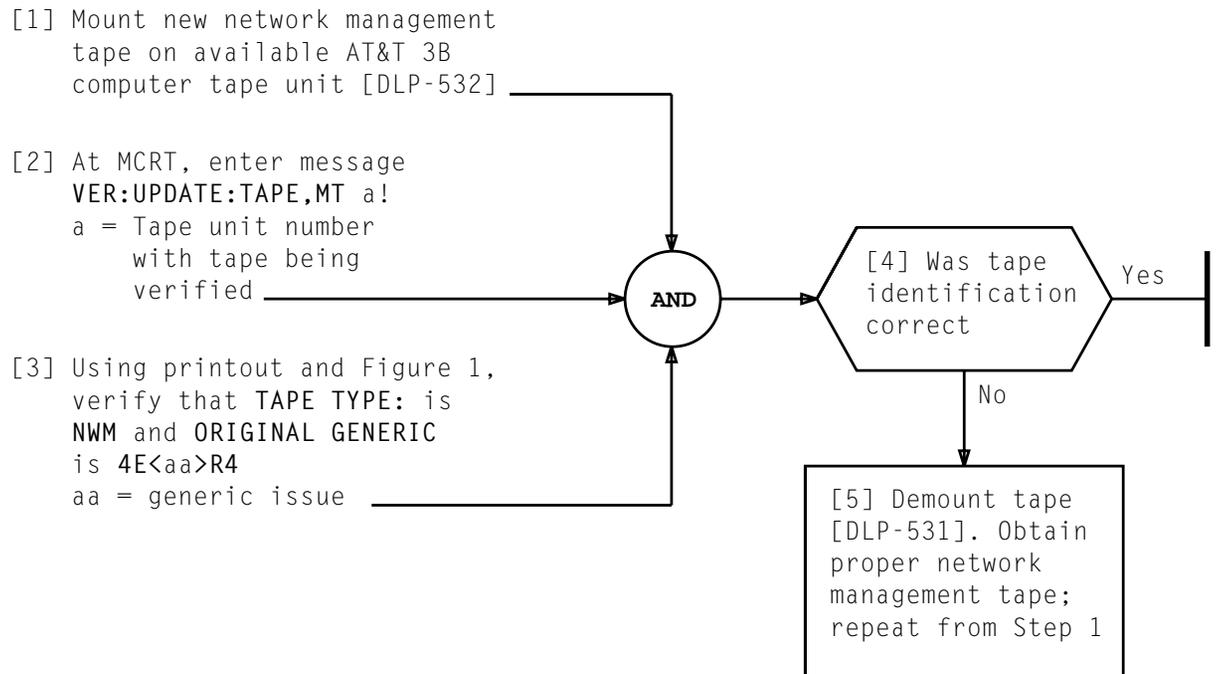
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```

ODA UPDATE
/etc/vcp /dev/1afile1 /dev/1afile0 65536 > /dev/null
TAPE HEADER
•
•
•
TPE FILE 10 LOADED TO FS
•
TAPE FILE n LOADED TO FS
ODA COMPLETE - READY FOR NWM
  
```

Figure 1 - Sample ODA Load Printout



```

TAPE TYPE: NWM
ORIGINAL GENERIC 4E<14>R4
MOST RECENT OFL GENERATION: YR 89,MON 03,DAY 06 AT 08:30
THIS TAPE WRITTEN: YR 89,MON 03,DAY 06 AT 12:40
FS IDS: 0000000010000000,TAPE IDS: 0000000011110100
PRTL UPD FLG: 0,PHASE REQD: 0000000
  
```

Figure 1 - Sample Network Management Tape Header Printout

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[1] See NOTES 1 and 2.

At MCRT, enter message

LOAD:UPDATE:CONT NWM,MT a!

a = Tape unit number with network management tape mounted

[2] Observe printout and determine if any TABLE A response was received

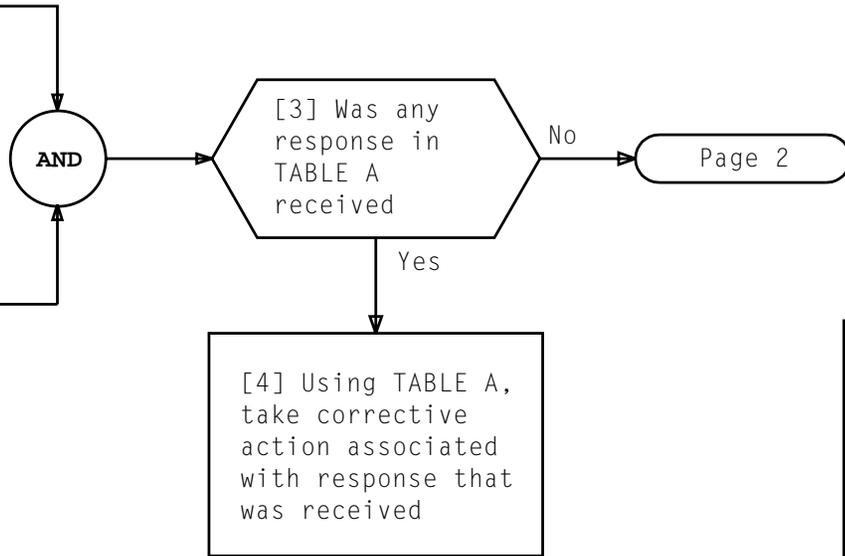
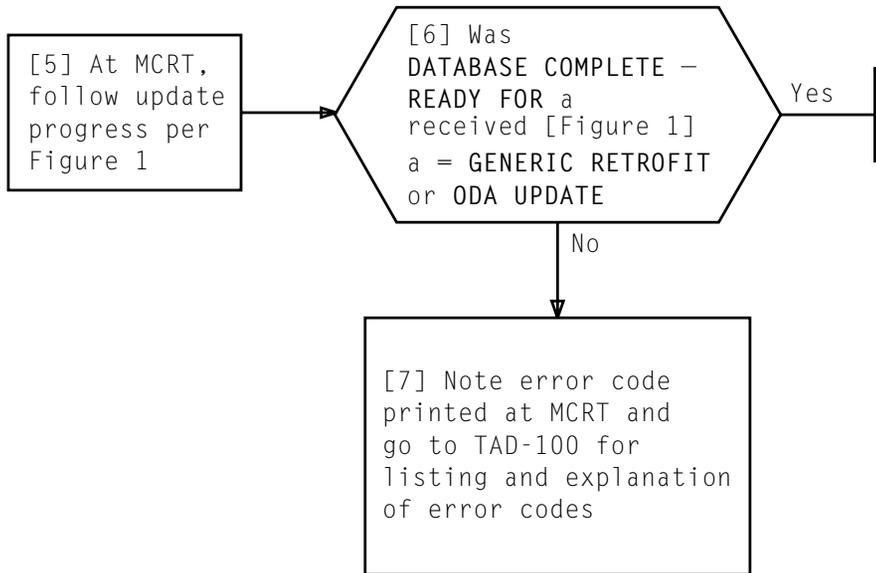


TABLE A	
RESPONSE	CORRECTIVE ACTION
TAPE DRIVE NOT READY – CORRECT AND ENTER AGAIN	Correct tape drive problem and repeat from Step 2
WRONG GENERIC – CHANGE TAPE AND ENTER AGAIN	Demount wrong network management tape. Obtain correct tape and mount on tape drive. Repeat from Step 2
INVALID COMMAND - ENTER AGAIN	Repeat from Step 2

NOTES	
1. When network management is loaded satisfactorily, system completes building data base	
2. After receiving MAPPING DYNAMIC DATA FROM NORMAL FILE output message, WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR may be received. System automatically maps dynamic data when in proper window	
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```

TAPE HEADER
.
.
.
TAPE FILE 10 LOADED TO FS
NWM COMPLETE
WRITE MERGE DATA AND ZERO FS AREAS
MAPPING DYNAMIC DATA FROM NORMAL FILE
DATABASE COMPLETE - READY FOR a
  
```

Figure 1 - Sample Network Management Load Printout

[1] At MCRT, enter message
VER:APPFILE UPD!

[2] Read NOTE 1. Observe printout
for 0 errors per TABLE A

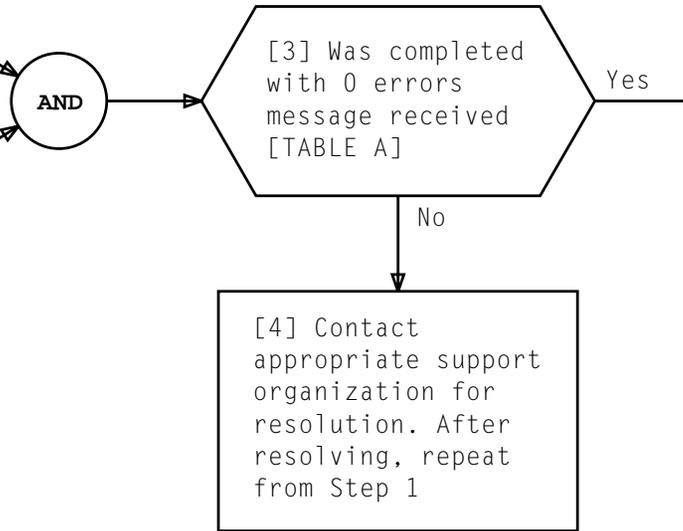


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	VER:APPFILE STARTED, /dev/1afileX (X = 0 or 1) VER:APPFILE /dev/1afileX MERGE AREA, MSG IP, 0 ERRORS DETECTED VER:APPFILE /dev/1afileX ID 1, MSG IP, 0 ERRORS DETECTED (Generic Area) VER:APPFILE /dev/1afileX ID 2, MSG IP, 0 ERRORS DETECTED (Library Area) VER:APPFILE /dev/1afileX ID 3, MSG IP, 0 ERRORS DETECTED (ODA Area) VER:APPFILE /dev/1afileX ID 7, MSG IP, 0 ERRORS DETECTED (Network Management Area) VER:APPFILE /dev/1afileX ID 11, MSG IP, 0 ERRORS DETECTED (RC Rollback Area) VER:APPFILE /dev/1afileX ID 12, MSG IP, 0 ERRORS DETECTED (Traffic and Plant Management Area) VER:APPFILE /dev/1afileX COMPLETED, 0 ERRORS DETECTED

NOTE 1	
It takes approximately 15 minutes for verify to complete	
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VERIFY 1AFILE HASHED AREAS

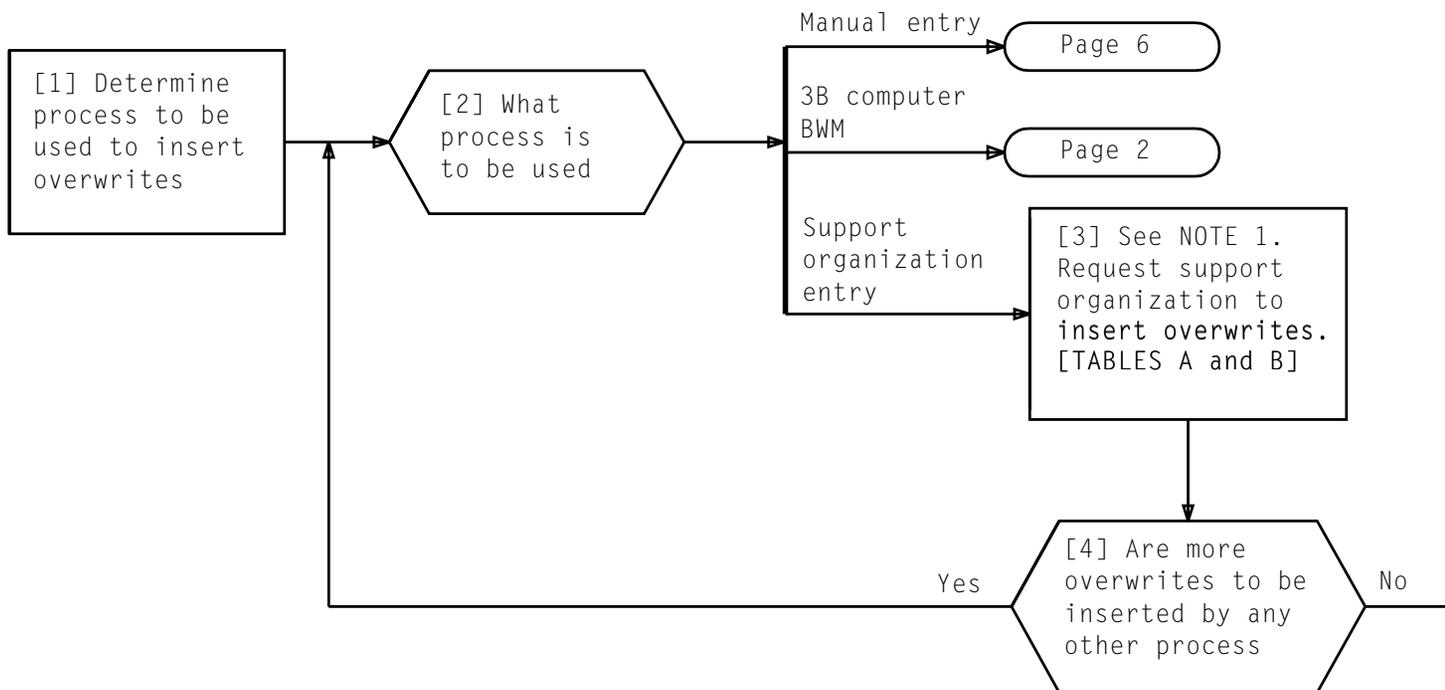
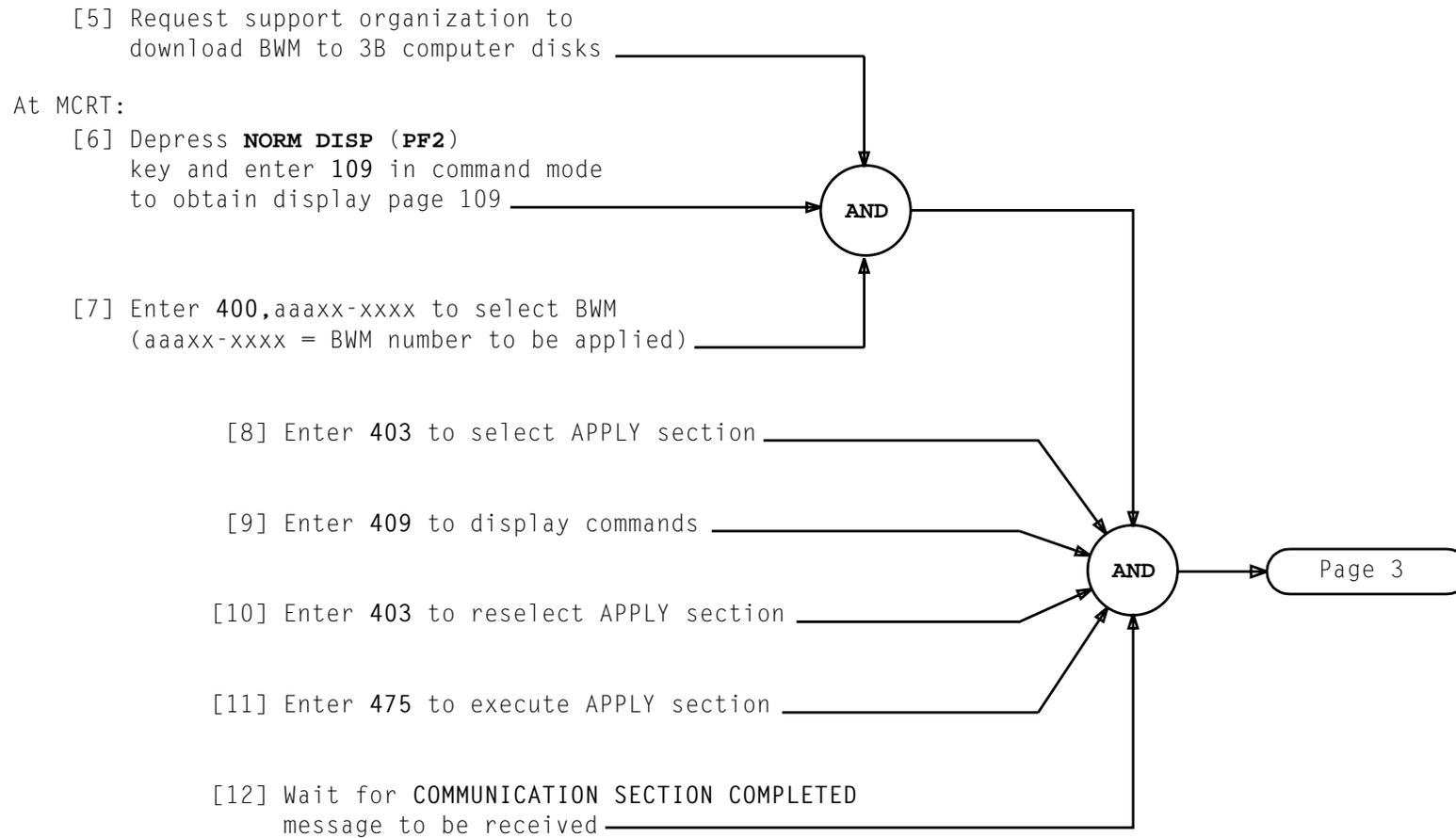


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:OSOW:MMADR a,DATA b[,OLDDATA c]! a = Main memory address (octal) for data to be changed b = Data (octal) to be changed; or if a list, enclose with parentheses and separate with commas c = Expected value in octal of old data; if b is a list, then c must be a list of same format and size

TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	IN:OSOW:FSADR a,DATA b[,OLDDATA c]! a = Disk address (octal) for data to be changed b = Data (octal) to be changed; or if a list, enclose with parentheses and separate with commas c = Expected value in octal of old data; if b is a list, c must be a list of same format and size

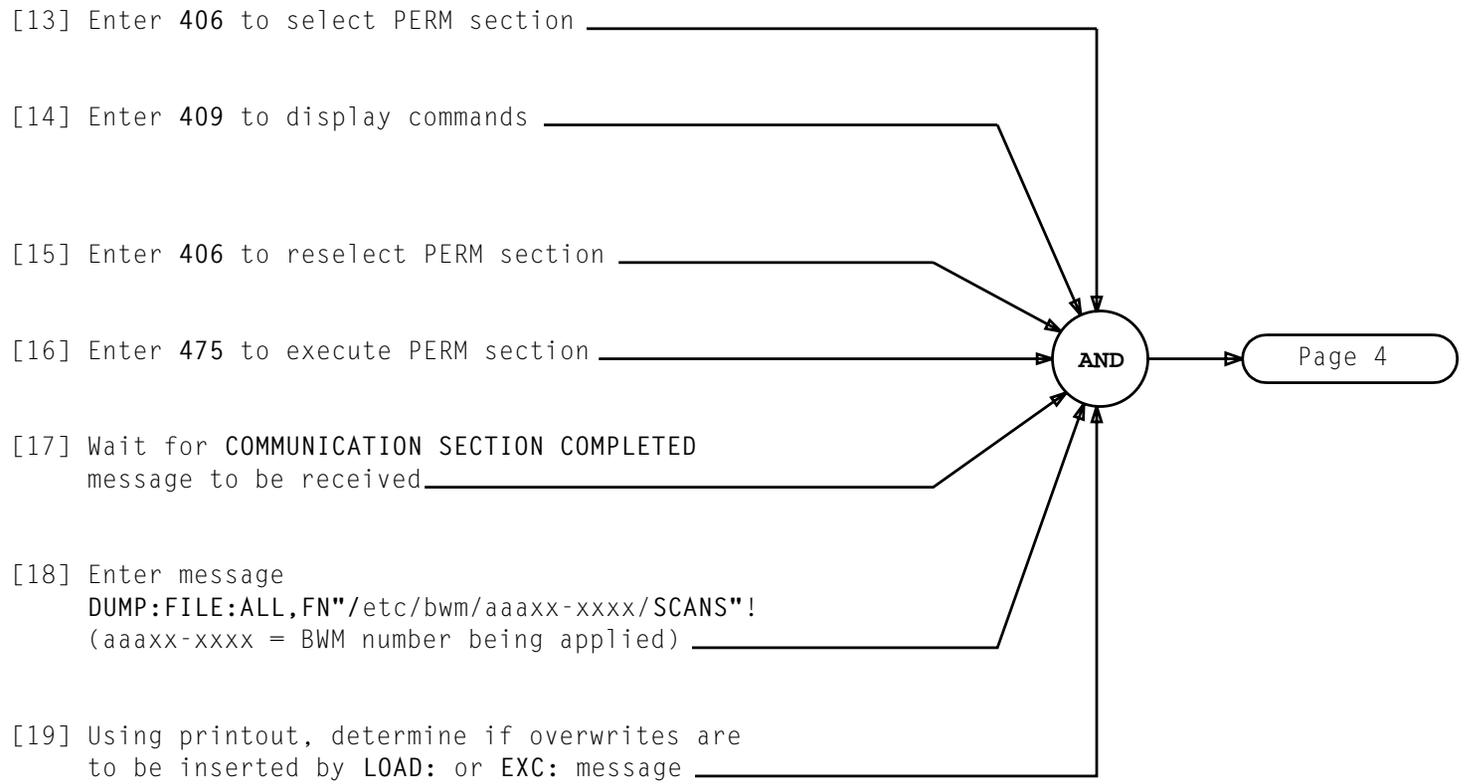
NOTE 1 Overwrites from support organization must be in form of the referenced tables	
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INSERT CRITICAL OVERWRITES INTO UPDATE FILE ON APS

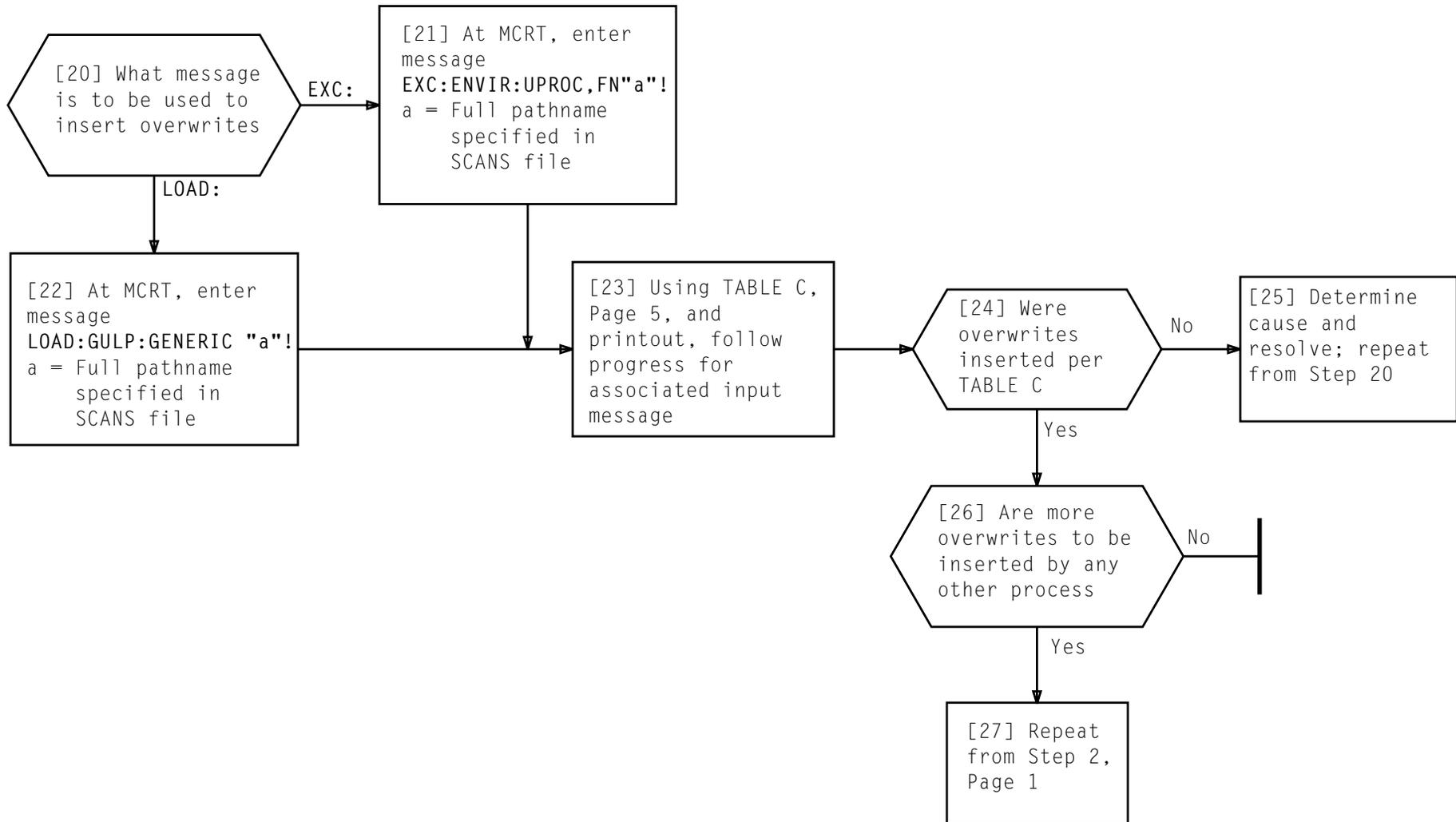
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At MCRT:



INSERT CRITICAL OVERWRITES INTO UPDATE FILE ON APS

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TABLE C	
EXC: INPUT MESSAGE	LOAD: INPUT MESSAGE
OUTPUT MESSAGE	OUTPUT MESSAGE
IN:OSOW:START! READY FOR OVERWRITE DATA IN:OSOW:a b,DATA c! IN:OSBUF:COMPLETED MM ADR FS ADR ID OLD DATA NEW DATA vvvvvvvv wwwwwww xx yyyyyyyy zzzzzzzz ready for overwrite data . . . IN:OSOW:UPD[,HASHSUM d]! EXC ENV UPROC COMPLETED OVERWRITE DATA WRITTEN TO UPDATE FILE	BUILDING OW BUFFER – OW BLOCK 1 BUILDING OW BUFFER – OW BLOCK 2 . . . DATABASE UPDATED WITH OVERWRITES
a = MMADR or FSADR b = Main memory or disk address for data being changed c = Data being changed d = Hashsum value v = Main memory address w = Translated file system address x = ID y = Old data z = New data	

INSERT CRITICAL OVERWRITES INTO UPDATE FILE ON APS

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[28] Collect and list overwrite(s) to be inserted into 4Eaa generic or ODA loaded in update file
 aa = generic issue

At MCRT:

[29] Enter message
 IN:OSOW:START! [NOTE 2]



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[30] Insert overwrite(s) into buffer area using input message in TABLE A, Page 1 (main memory overwrite) or TABLE B, Page 1 (FS only overwrite) [NOTE 3]

NOTES	
2. Overwrite process times out after 20 minutes of inactivity	
3. Input of OLDDATA is not required; but if information is available, it should be entered to ensure that right data is being changed	
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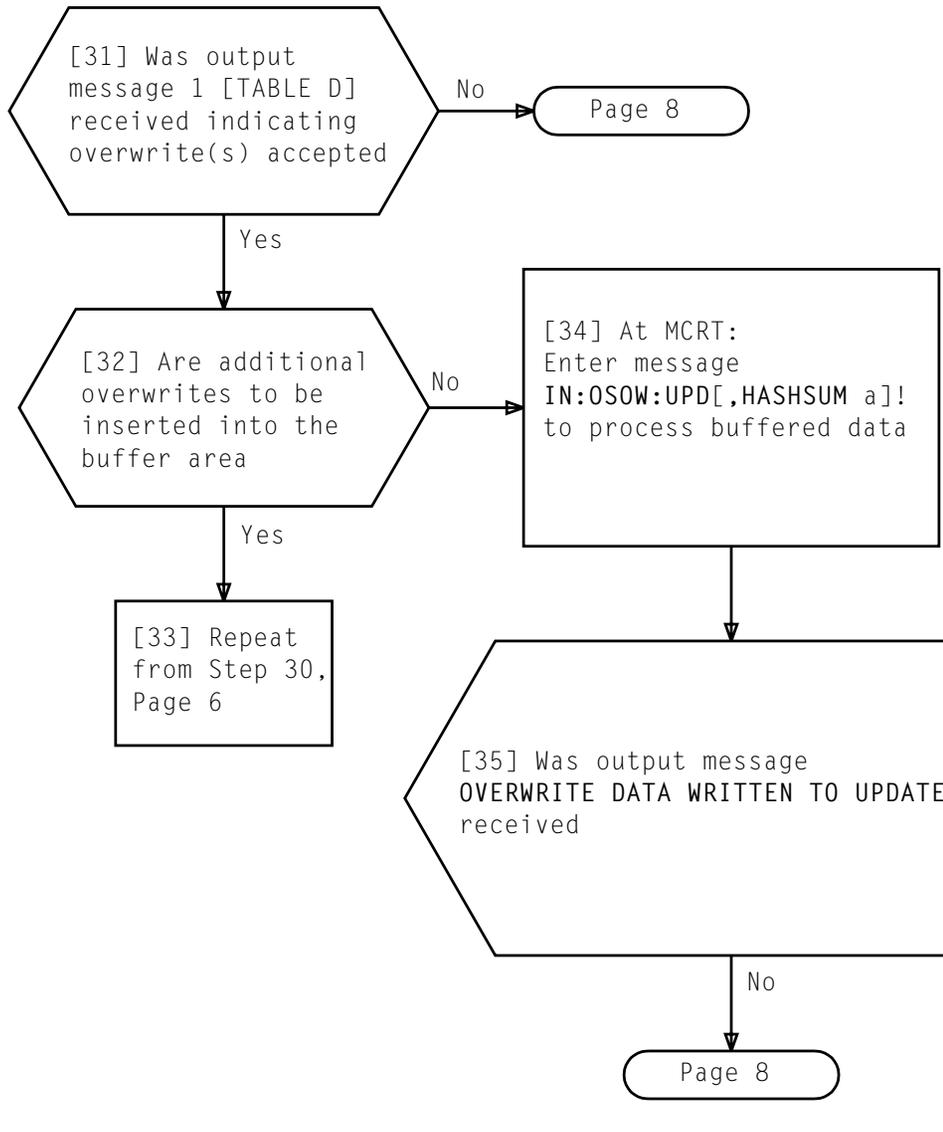
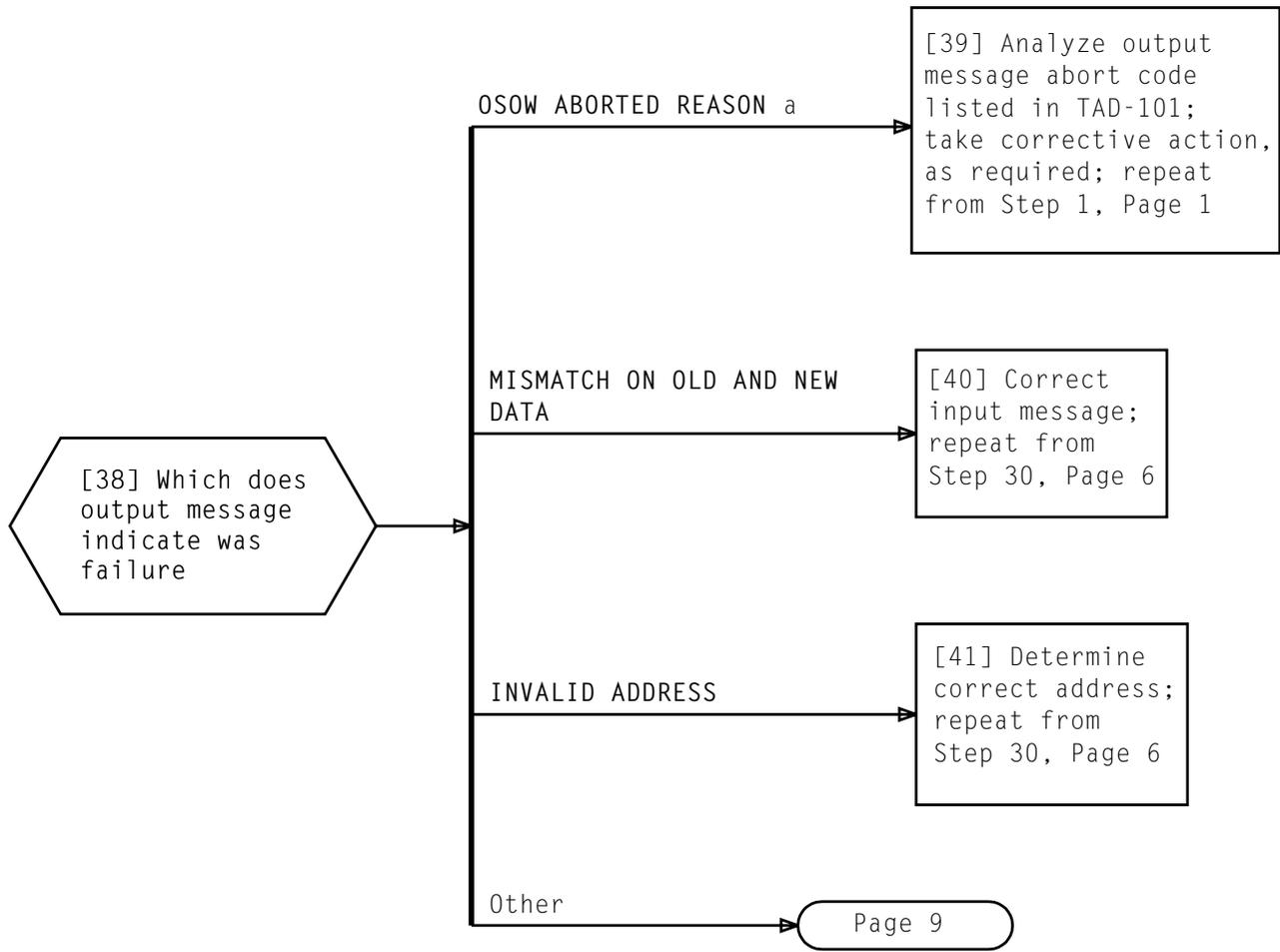
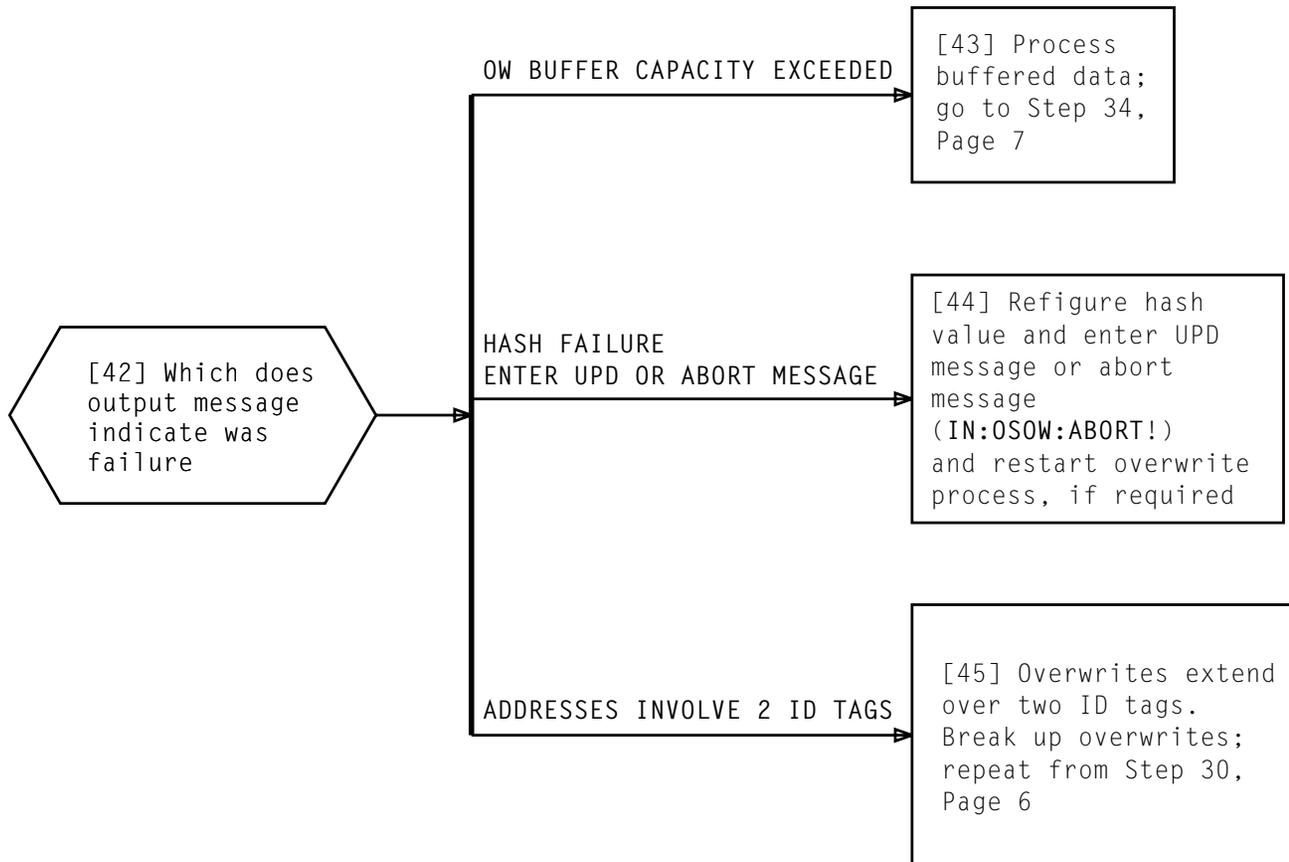


TABLE D	
MESSAGE NUMBER	OUTPUT MESSAGE
1	IN:OSBUF:COMPLETED MM ADR FS ADR ID OLD DATA NEW DATA xxxxxxxx yyyyyyyy zz aaaaaaa bbbbbbbb READY FOR OVERWRITE DATA x = Main memory address of data to be changed y = Translated file system address for main memory overwrite or file system address of file system only data being changed z = ID (decimal) a = Old data (or list of old data) b = New data (or list of new data)



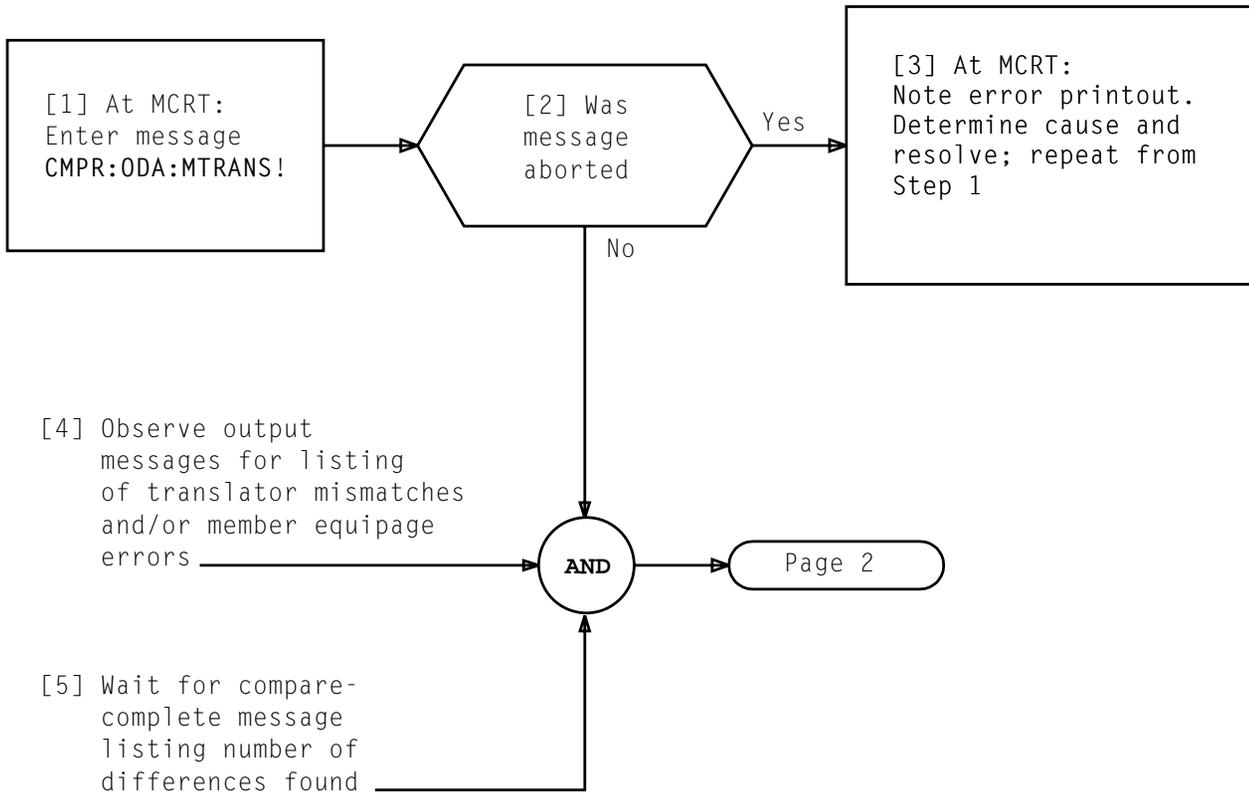
INSERT CRITICAL OVERWRITES INTO UPDATE FILE ON APS

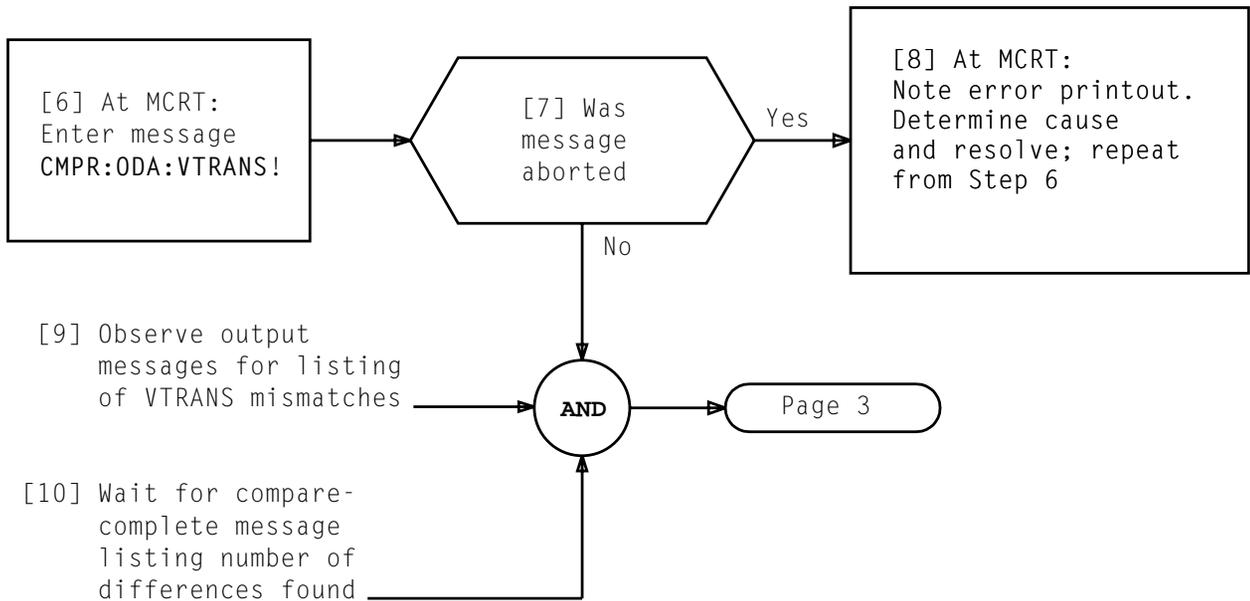
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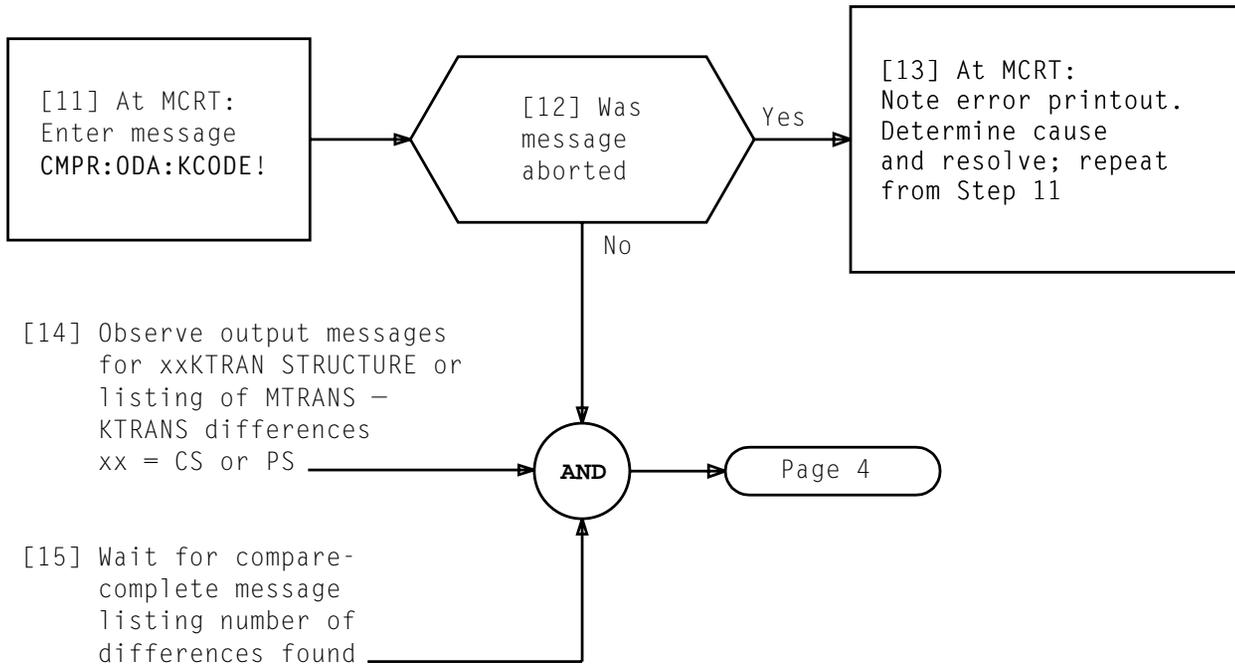


INSERT CRITICAL OVERWRITES INTO UPDATE FILE ON APS

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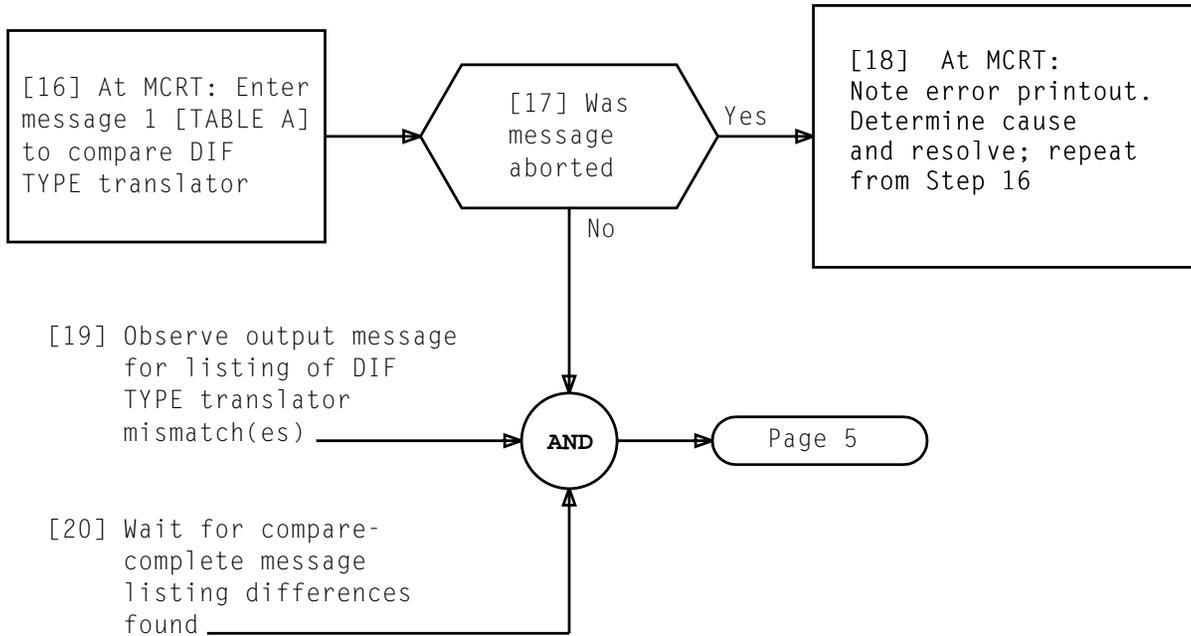


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR TBS,00SADR TBS,L 32!

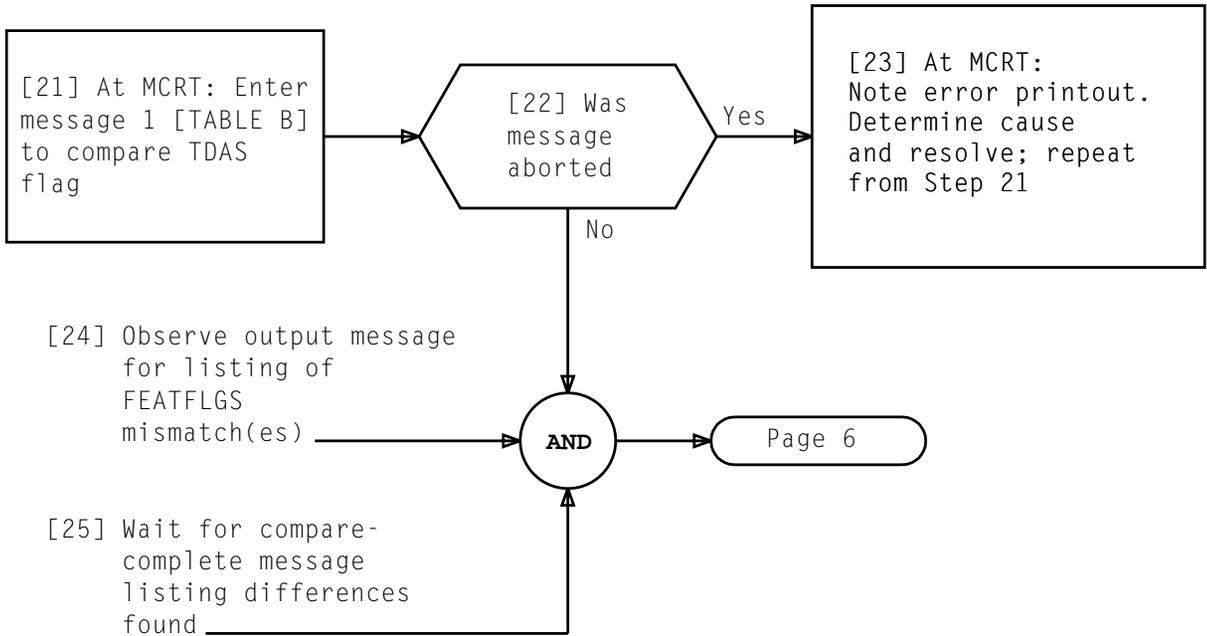


TABLE B	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR TBS,00SADR TBS,MASK 2!

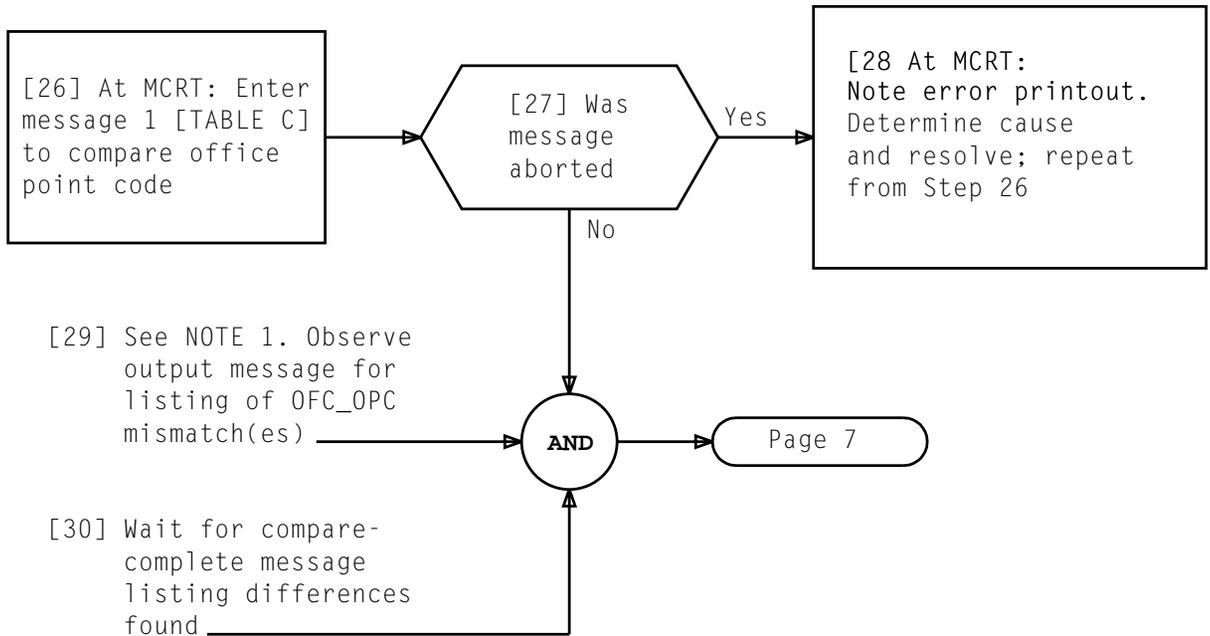


TABLE C	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR TBS,00SADR TBS!

NOTE 1 Expect mismatch if point code is being changed	
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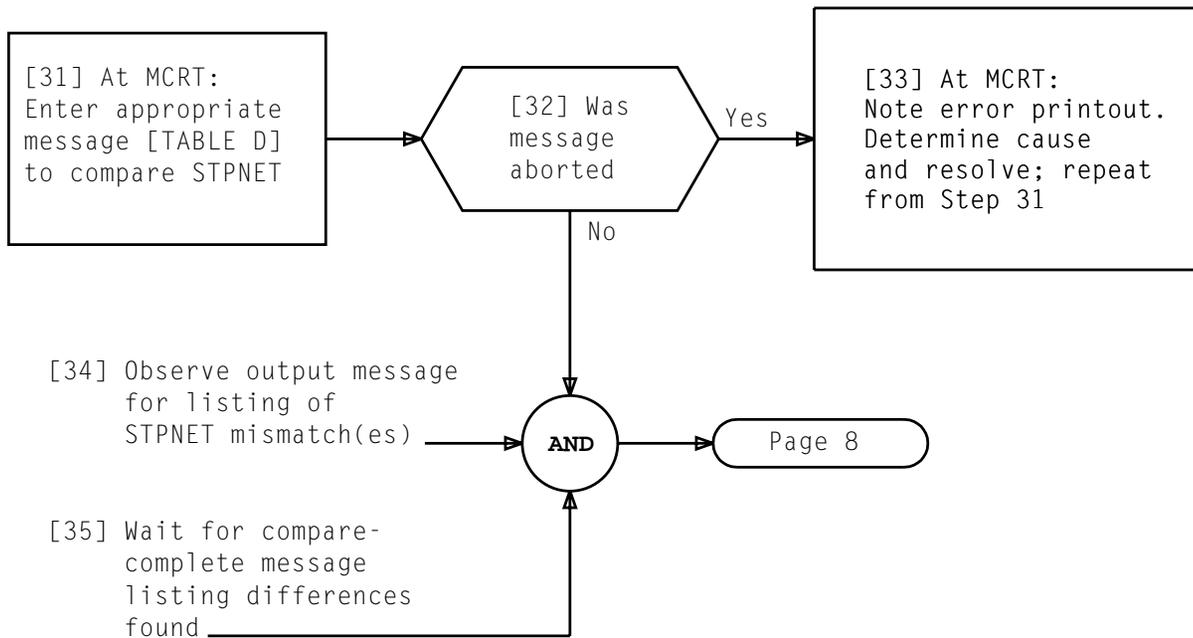


TABLE D	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR TBS,00SADR TBS, MASK 37777!

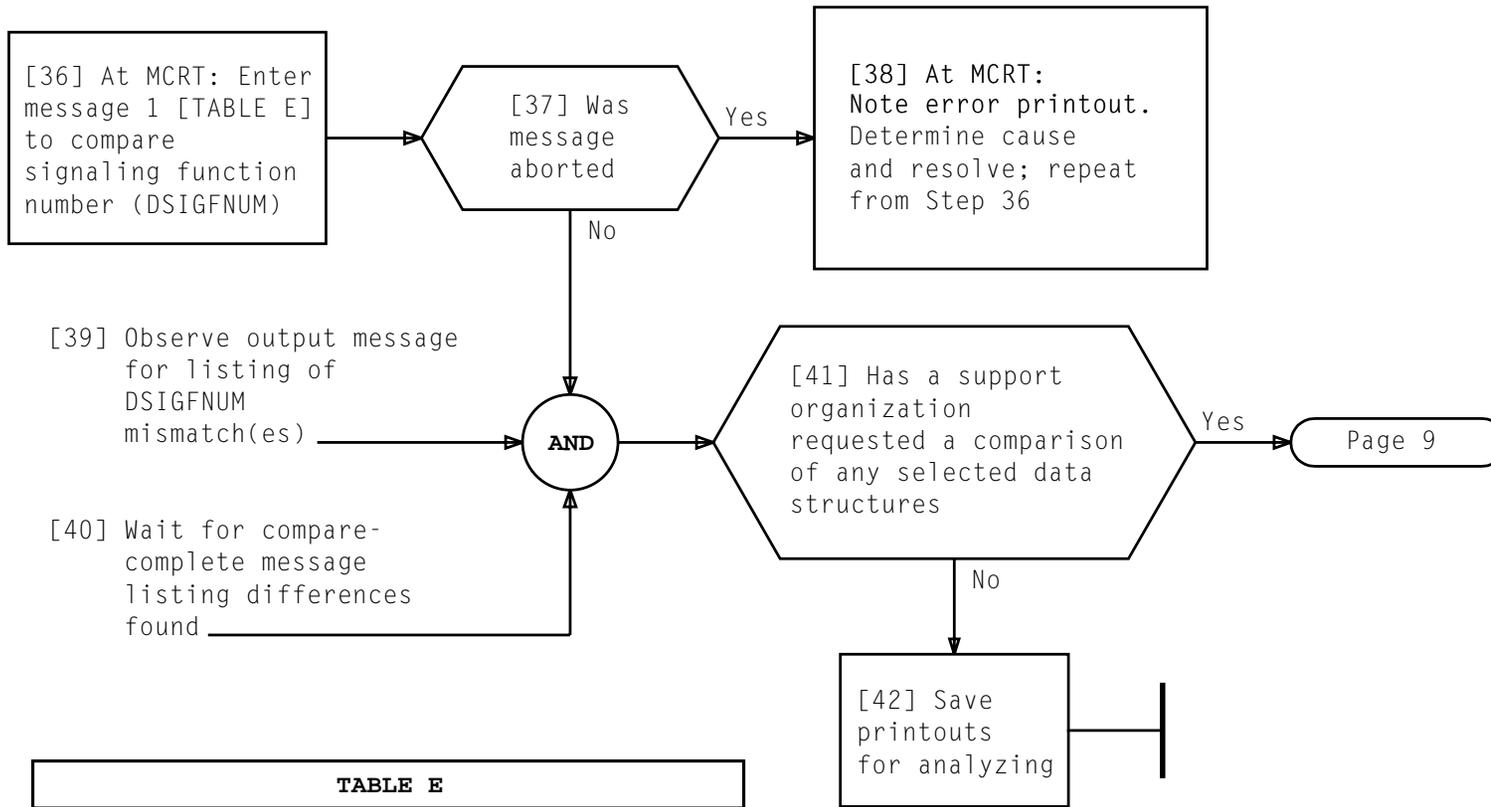
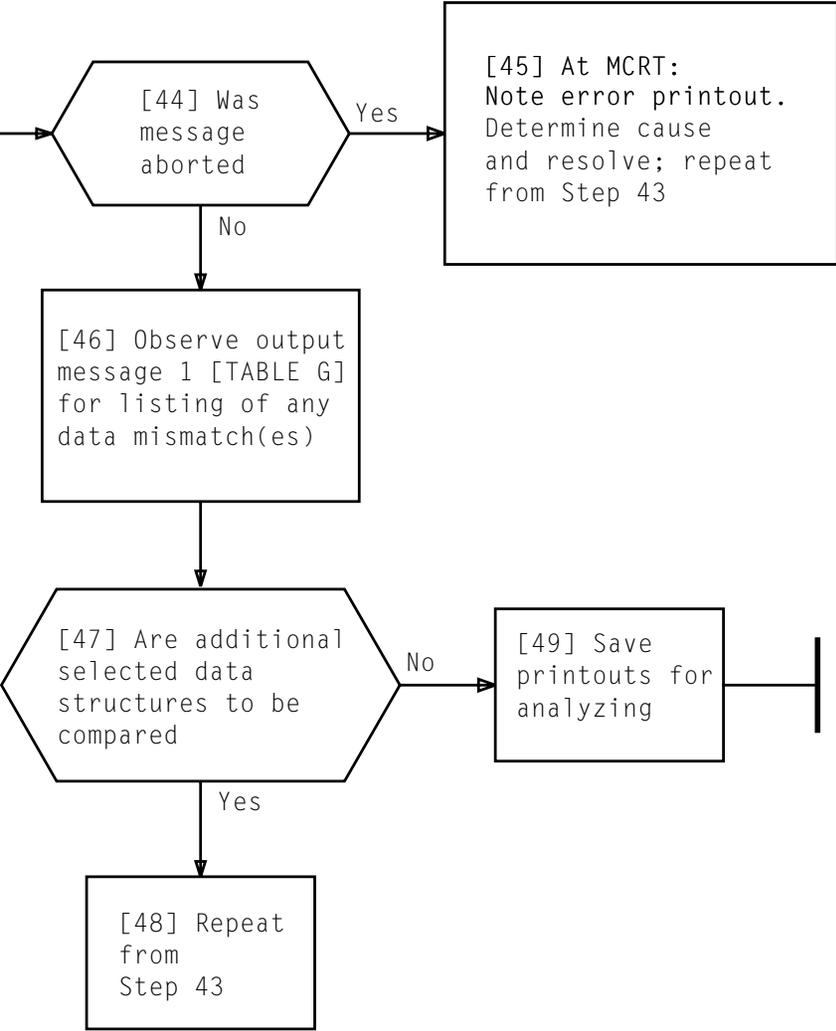


TABLE E	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR TBS,00SADR TBS!

[43] At MCRT: Enter message 1 [TABLE F] for compare of selected data structure

TABLE F	
MESSAGE NUMBER	INPUT MESSAGE
1	CMPR:ODA:SPCL,ACTADR a,0OSADR b[,MASK c] [,L d]! a = Octal address in main active memory b = Octal address in main OOS memory c = Octal mask of data to be compared; default is 7777777 d = Length in decimal; default is 1

TABLE G	
MESSAGE NUMBER	OUTPUT MESSAGE
1	CMPR:ODA FOR DEMAND STRUCTURE NG OLD NEW ADR xxxxxxxx ADR yyyyyyy WORD# DATA WORD# DATA n vvvvvvvv n wwwwwwww • • • • • • • • • • n • n • • n = Translator word number (octal) v = Data being compared in old ODA w = Data being compared in new ODA x = Address being compared in old ODA y = Address being compared in new ODA

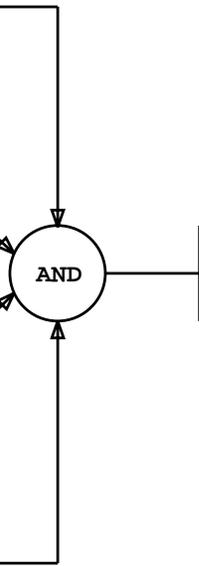


[1] Refer to TABLE A, Page 2, for minimum hardware in-service requirements for update

[2] Enter message to obtain list of out-of-service units, OP:OOSUNITS!

[3] Conditionally restore each unit on out-of-service list required for update, using restore message

[4] See NOTE 1. Remove power from any operational unit which fails diagnostics



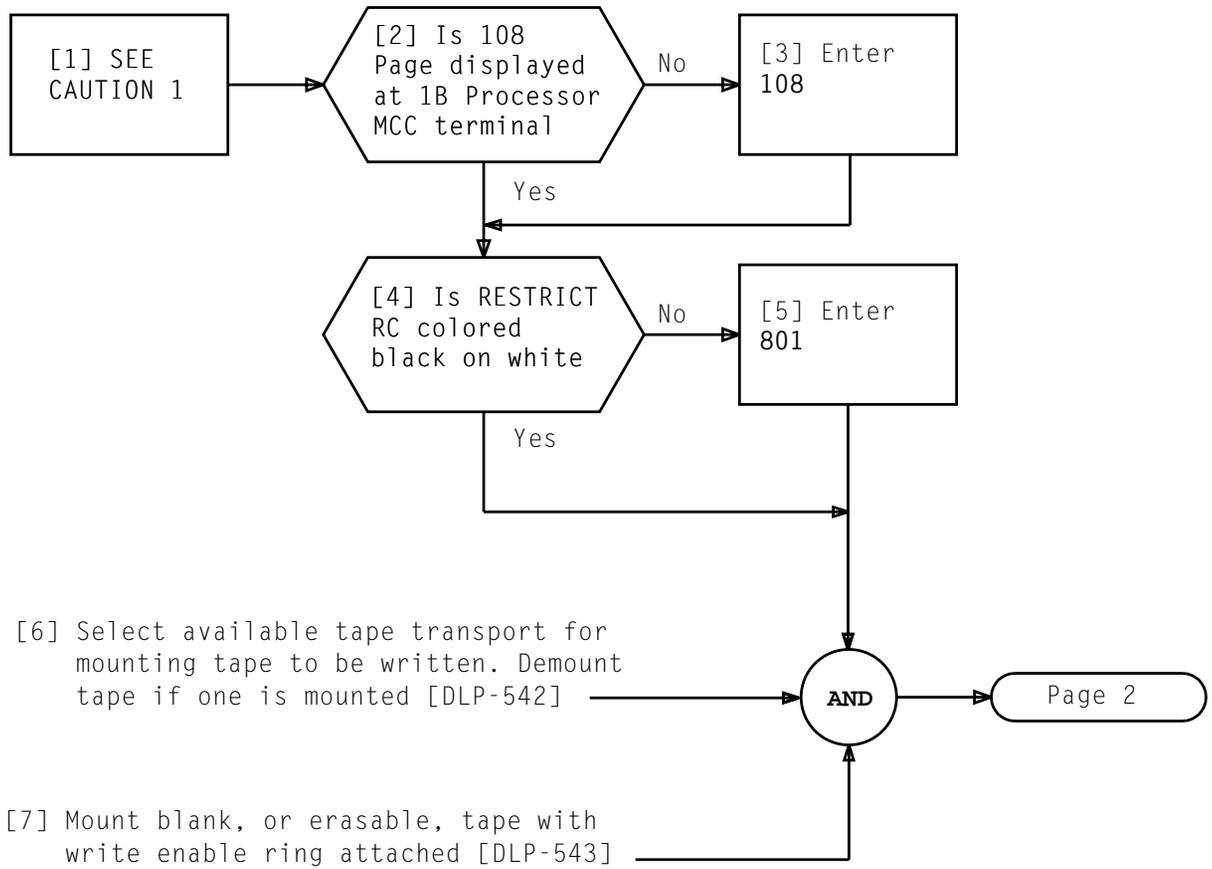
NOTE 1	
If an actual update, only remove power from units in trouble. When verifying tape compatibility, do not remove power from out-of-service units	
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TABLE A

1B PROCESSOR EQUIPMENT		PERIPHERAL EQUIPMENT	
UNIT	MINIMUM REQUIREMENTS (NOTE)	UNIT	MINIMUM REQUIREMENTS*
CC	Operating full duplex	TSI	Dedicated TSI operating duplex. All other TSIs in service with no more than one controller out of service
PS	All in service	TMS	All in service operating in duplex
CS	No more than one store out of service	PUB	Both peripheral unit buses in service
DUS	DUS 0 and 1 in service. Must have run diagnostics ATP including system reinitialization phase	NCLK	All four clock chains in service
IOUS	All IOUSs and all essential I/O channels in service	VIF/DT/DIF	All in service. No more than one VIF/DT/DIF controller out of service (excluding TSI caused). No more than one VIU/DTU/DIU out of service in any one VIF/DT/DIF
TUC	Office requirements plus two available for update	NM	The network management function must be fully operational (to be used as a tool for evaluating office performance in new generic issue).
BUSES	All buses in service operating in duplex (CSB, PSB, PUB, IFB, AUB)	EST	All ESTs in service and operating duplex
API	APIs duplex and in service	TGR	All TGRs in service and operating duplex
3B20D computer	Fully duplexed	SCS	All SCSs in service and operating duplex
SP	Base SPs operating full duplex. All other SPs in service with no more than one controller out of service		
AUI	Both in service		
SSD	Both in service		
MUP	At least one in service		

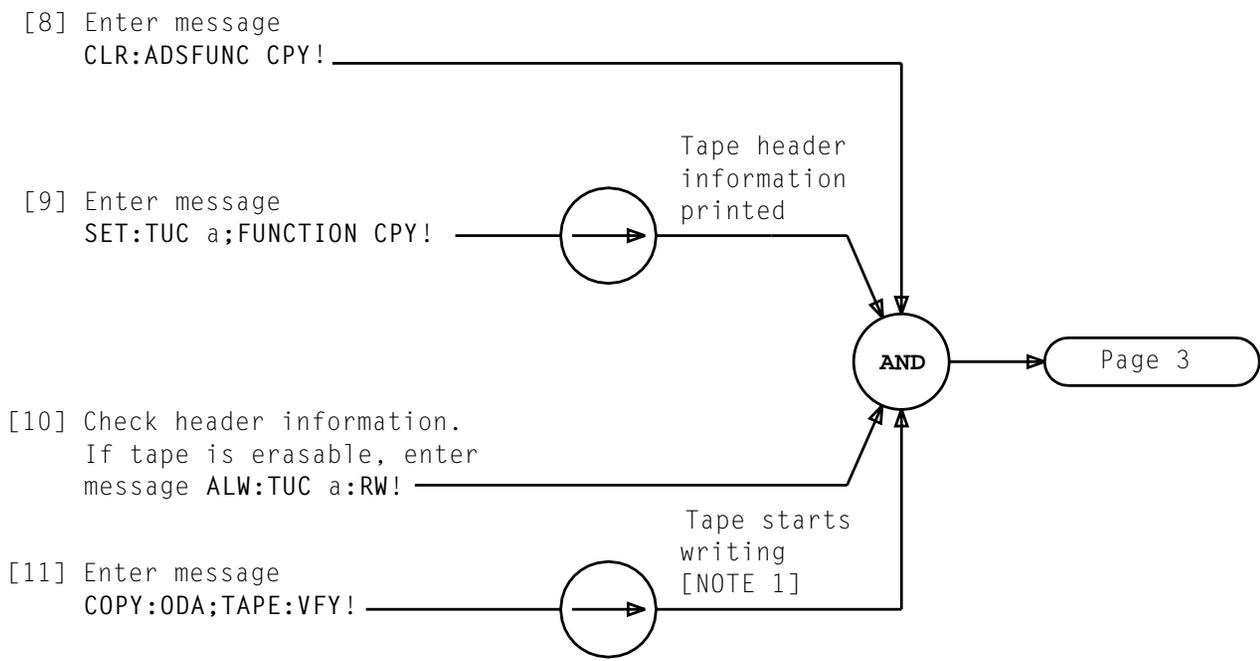
*Any operational unit left out of service must be powered down

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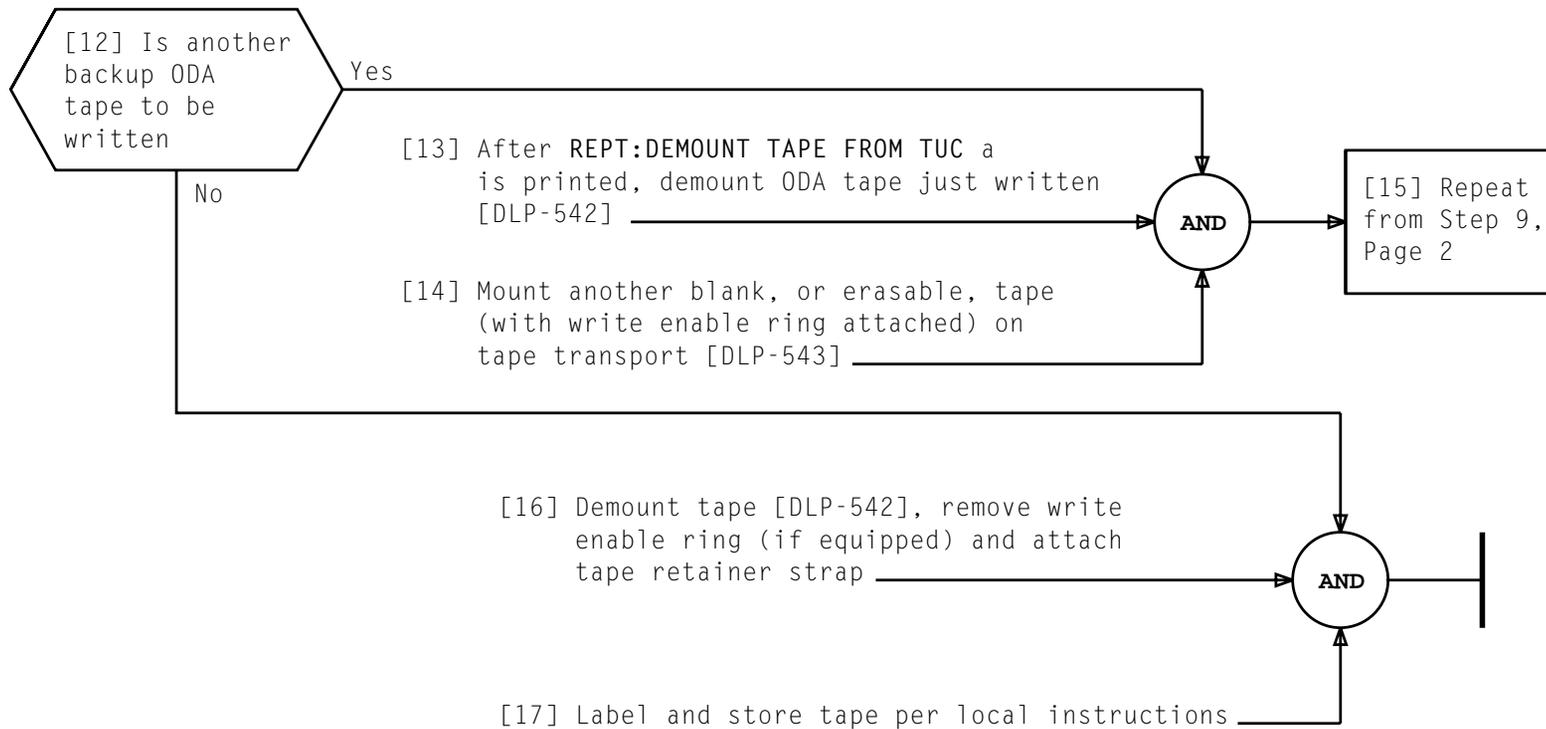
*CAUTION 1
 Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods*

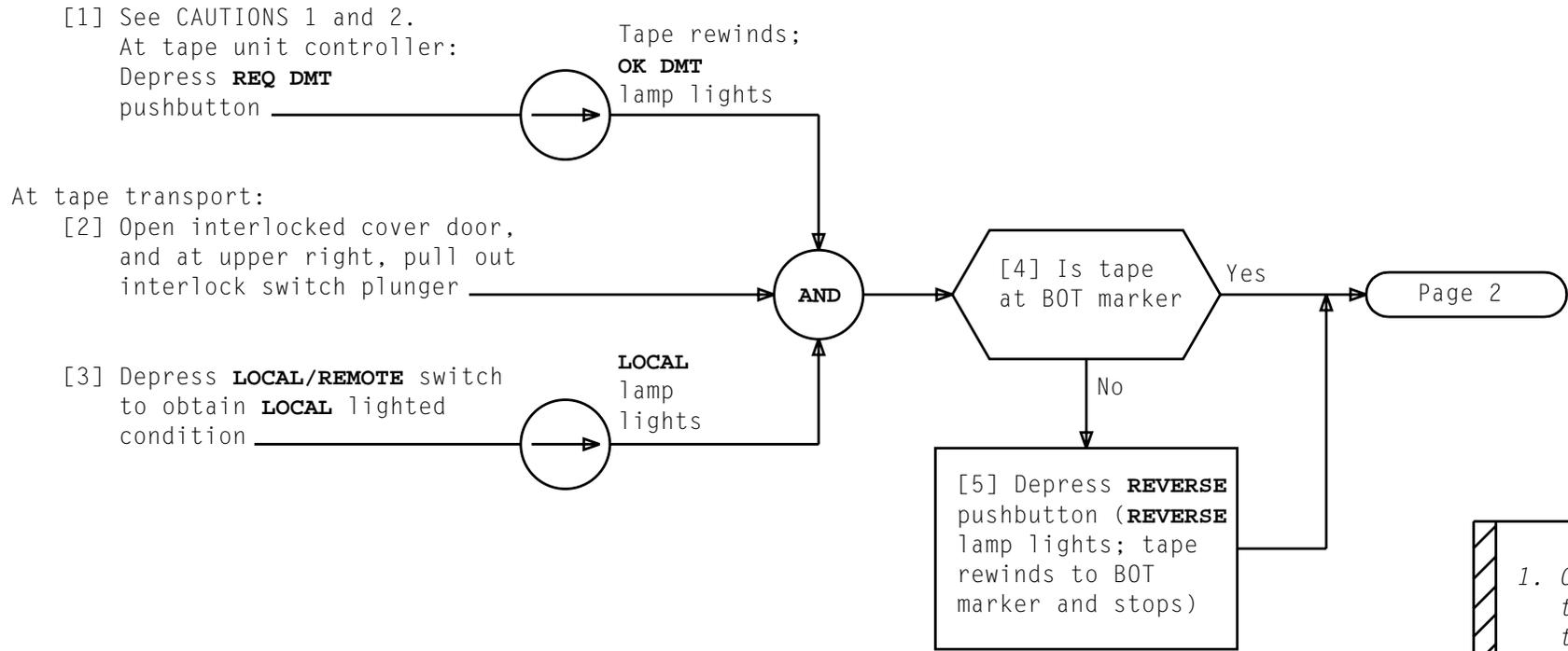
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NOTE 1
 After ODA tape is written,
 COPY:ODA;TAPE COMPL date
 and time are printed.
 Tape then rewinds and
 is verified. After
 verification is completed,
 COPY:VFY;TAPE COMPL
 is printed followed by
 REPT:DEMOUNT TAPE FROM
 TUC a

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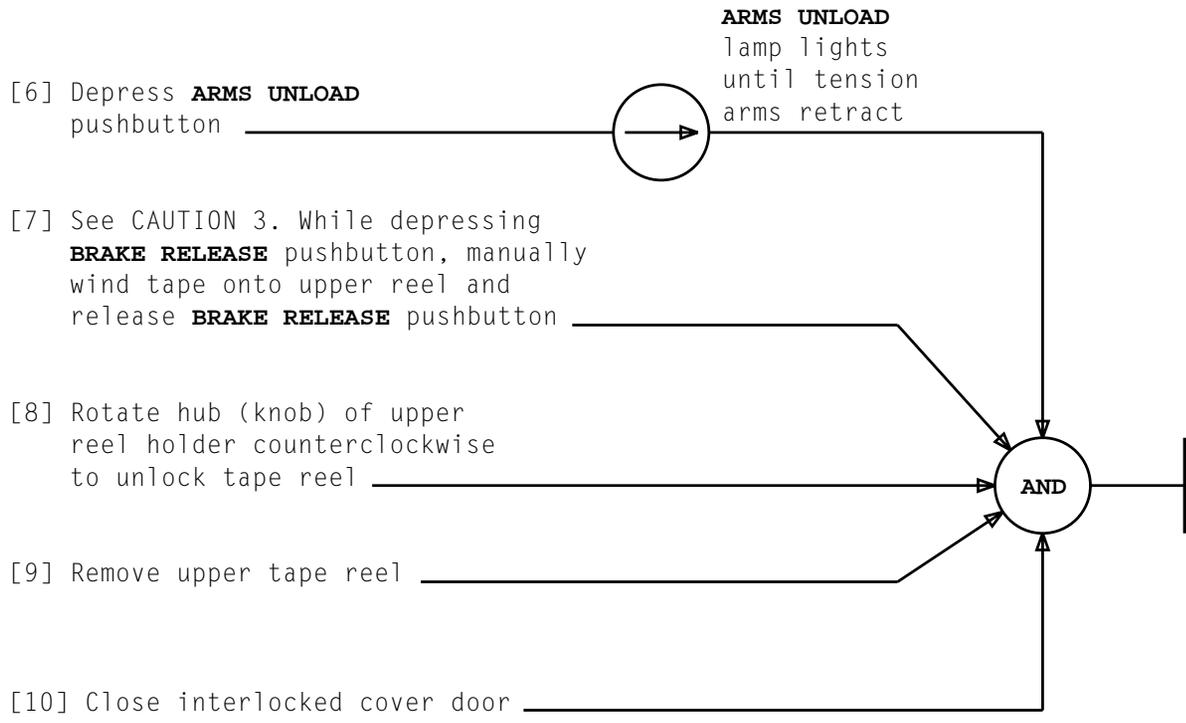




CAUTIONS

1. Cycling tape transport or tape unit controller with tape over read/write heads may scramble data on tape
2. If tape is being demounted due to faulty tape unit, proper tape unit maintenance documentation should be used

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CAUTION 3
Pulling or dragging last 2 feet of tape across heads may contaminate heads

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At tape transport:

[1] Open interlocked cover door;
at upper right of tape
transport, pull out interlock
plunger

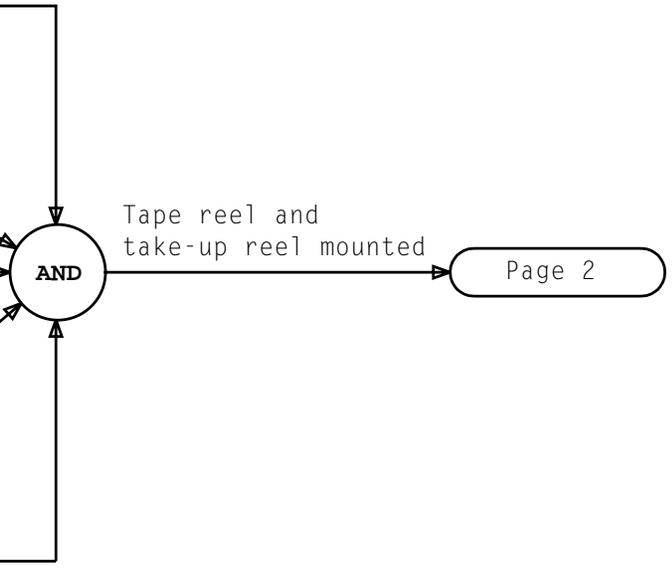
[2] Operate **LOCAL/REMOTE**
switch to obtain **LOCAL**
lighted condition



[3] Verify that empty lower (take-up) tape reel is
same size or larger than tape reel to be mounted

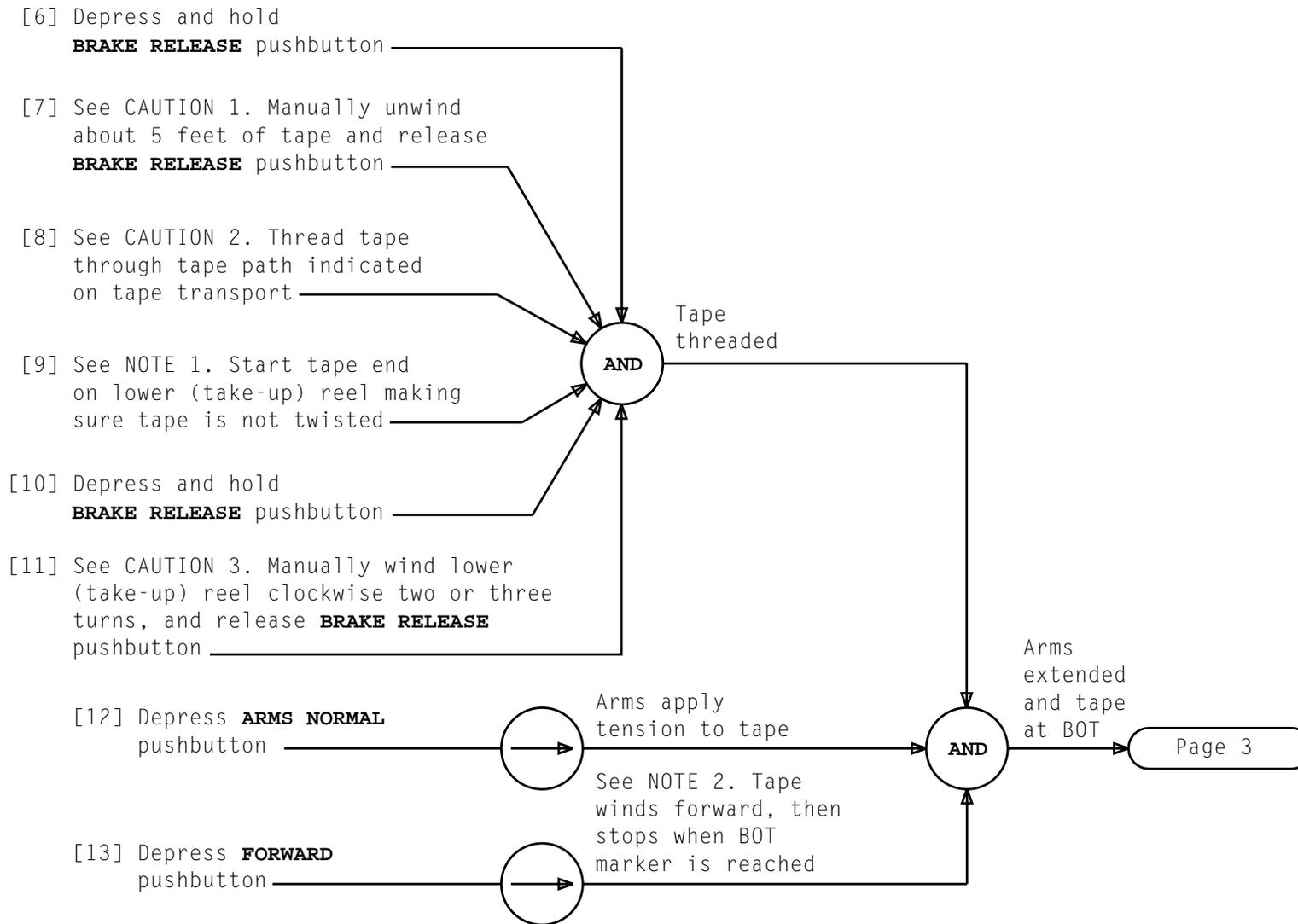
[4] With hub (knob) of upper reel in
counterclockwise position, mount reel
with tape on reel holder

[5] Rotate hub (knob) of upper reel clockwise
to detent to lock tape reel securely



MOUNT TAPE ON TAPE TRANSPORT

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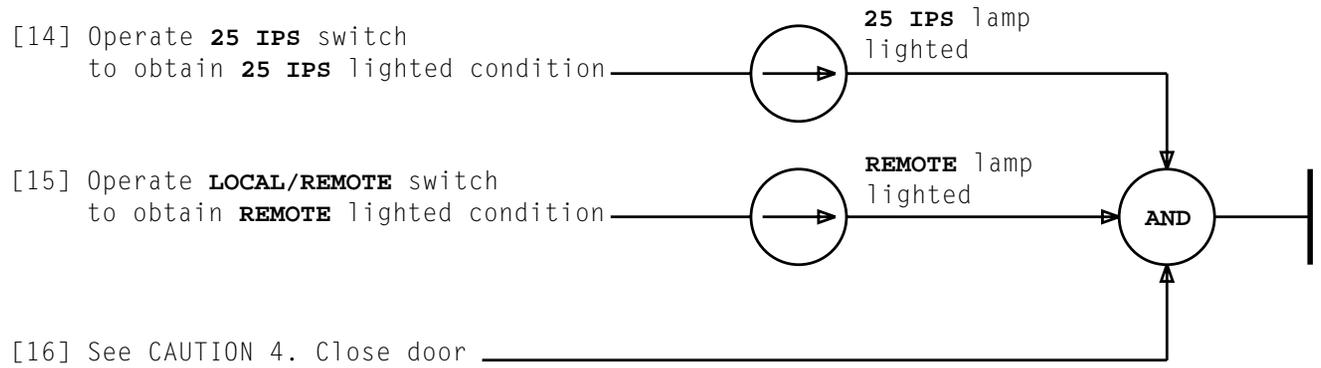
NOTES

- To start tape on take-up reel, it may help to moisten tape end (moistened fingers) and stick it to reel axle
- Tape may not stop at BOT marker if fast forward is depressed

CAUTIONS

- Contamination of tape by contact with floor damages tape heads
- Do not touch tape head surfaces; body oils contaminate tape
- If tape is not properly aligned along rollers and guides or is too loose, it may be damaged

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MOUNT TAPE ON TAPE TRANSPORT

<i>CAUTION 4 Closing tape transport door in harsh manner may upset alignment</i>	
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[1] Mount a blank or erasable tape with write enable ring attached on AT&T 3B computer tape unit [DLP-532]

[2] See NOTE 1. At MCRT: Enter message COPY:APPTAPE:LTS,MT a!
a = Tape unit number with tape mounted

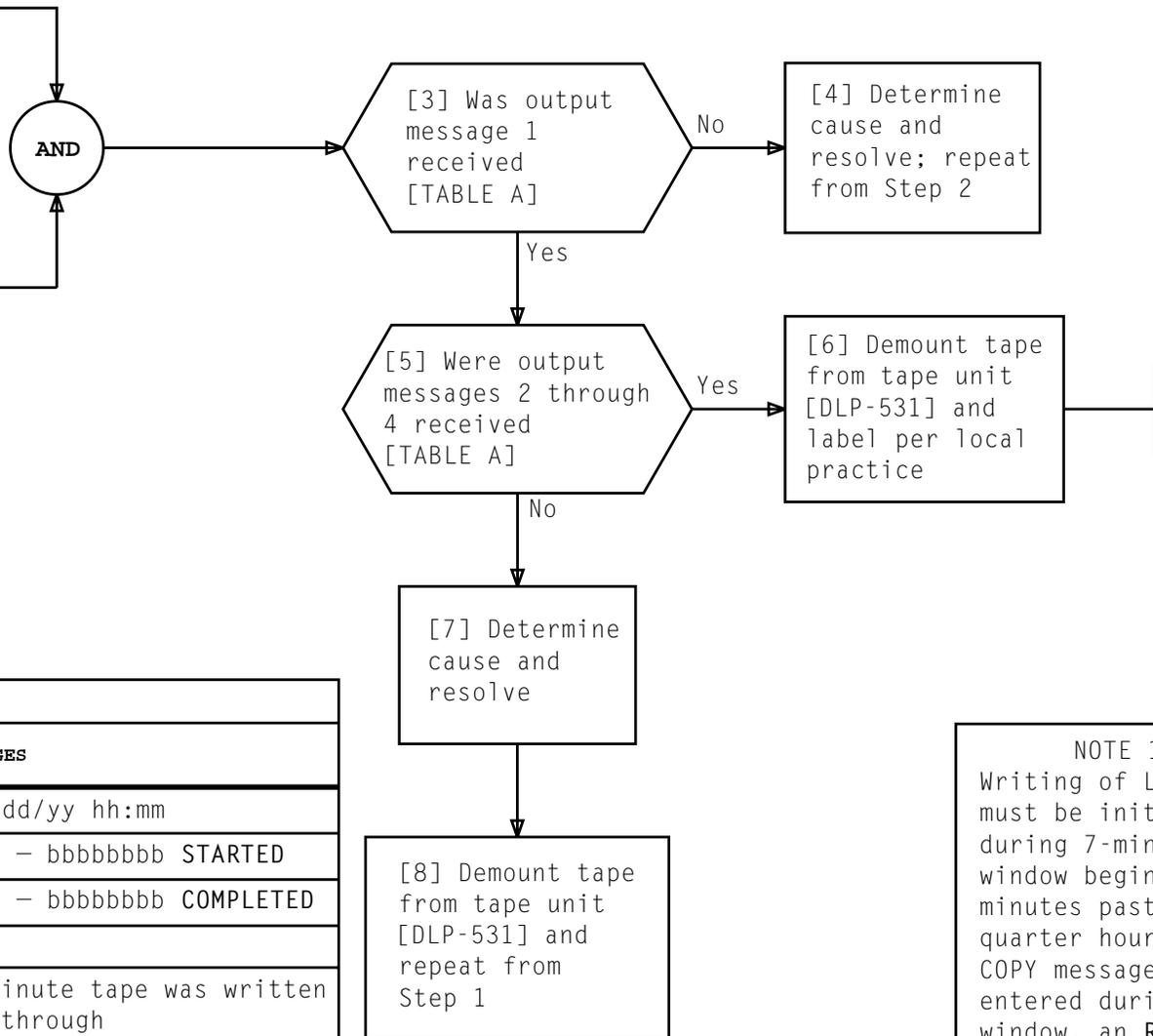


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: LTS, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb COMPLETED
4	APPTAPE COMPLETED
mm/dd/yy hh:mm = month/day/year hour:minute tape was written aaaaaaaaa = starting LTS address through bbbbbbbb = ending LTS address written	

NOTE 1
Writing of LTS tape must be initiated during 7-minute window beginning 4 minutes past any quarter hour. If COPY message is not entered during this window, an RL is received

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[1] See CAUTION 1. Inform MAC to not make any traffic scheduling changes while tape writing is in progress

[2] Select available tape transport for mounting tape to be written. Demount tape if one is mounted [DLP-542]

[3] Mount blank, or erasable, tape with write enable ring attached [DLP-543]

At TTY:

[4] Enter message
CLR:ADSFUNC CPY!

[5] Enter message
SET:TUC a;FUNCTION CPY!

[6] Check header information.
If tape is blank or erasable,
enter message ALW:TUC a:RW!

[7] Enter message
COPY:TPM;TAPE:VFY!

Inhibits set
and tape
mounted

AND

Tape header
information
printed

AND

Tape
writing
started

Page 2

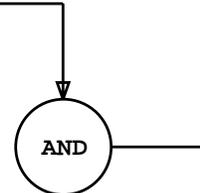
Writing of
tape begins
[NOTE 1]

NOTE 1
After TPM tape is written, COPY:TPM;TAPE COMPL date and time are printed. The tape then rewinds and is verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT: DEMOUNT TAPE FROM TUC a

CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

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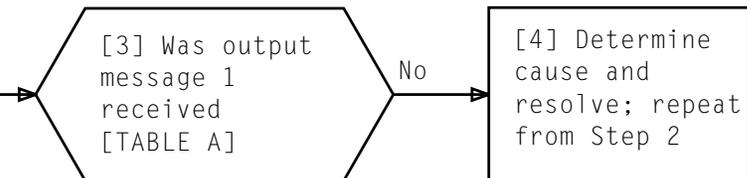
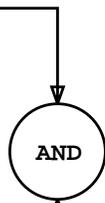
[8] After tape has been written
and verified and REPT:DEMOUNT
TAPE FROM TUC a is printed, demount
tape just written [DLP-542] and
remove write enable ring



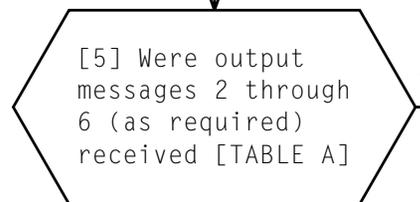
[9] Label and store tape per local instructions

[1] Mount a blank, or erasable, tape with write enable ring attached on AT&T 3B computer tape unit [DLP-532]

[2] At MCRT, enter message COPY:APPTAPE:TOSL,MT a!
a = Tape unit number with tape mounted



[4] Determine cause and resolve; repeat from Step 2



[6] Demount tape from tape unit [DLP-531] and label per local practice

[7] Determine cause and resolve

[8] Demount tape from tape unit [DLP-531] and repeat from Step 1

TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGES
1	APPTAPE TYPE: TOSL, WRITTEN mm/dd/yy hh:mm
2	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb STARTED
3	APPTAPE ADDRESS RANGE aaaaaaaaa - bbbbbbbb COMPLETED
4*	APPTAPE ADDRESS RANGE cccccccc - dddddddd STARTED
5*	APPTAPE ADDRESS RANGE cccccccc - dddddddd COMPLETED
6	APPTAPE COMPLETED
* Only received if office has Mass Status Table (MST) mm/dd/yy hh:mm = month/day/year hour:minute tape was written aaaaaaaaa = starting TOSL address through bbbbbbbb = ending TOSL address written cccccccc = starting MST address through dddddddd = ending MST address written	

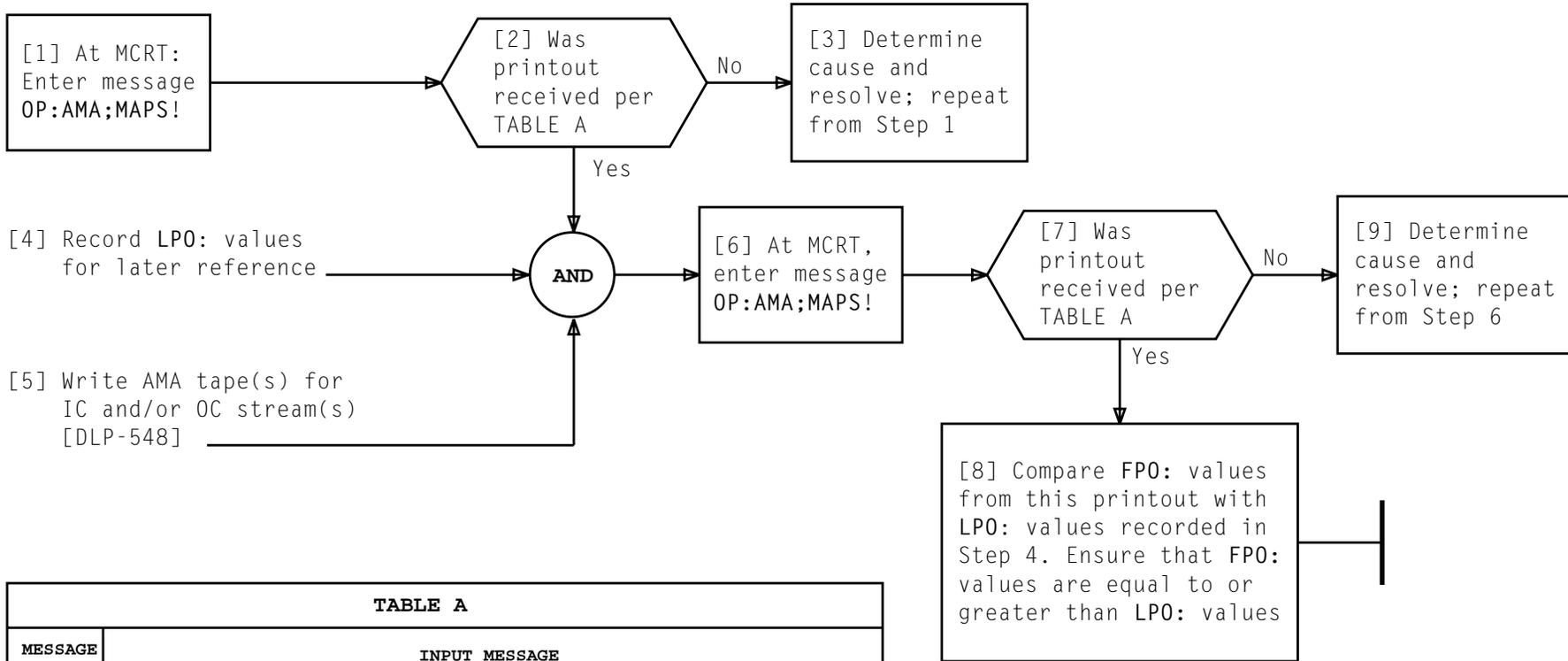


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	REPT AMA DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number AMA data being written
2	PARTITION b DISK MAP: FPO: c LPO: d FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ b = Equipped partition number c = Read value to be recorded after AMA write d = Write value to be recorded before AMA write
3	Message 2 is repeated for each equipped partition

SAVE PRIMARY AMA DATA ON TAPE ON APS

[1] Mount AMA tape, supplied by RAO, with write ring attached on in-service AT&T 3B computer tape drive [DLP-532]

[2] At MCRT: Enter message for appropriate stream
 VER:AMATAPE;MT a:b!
 a = Tape drive number
 b = IC or OC

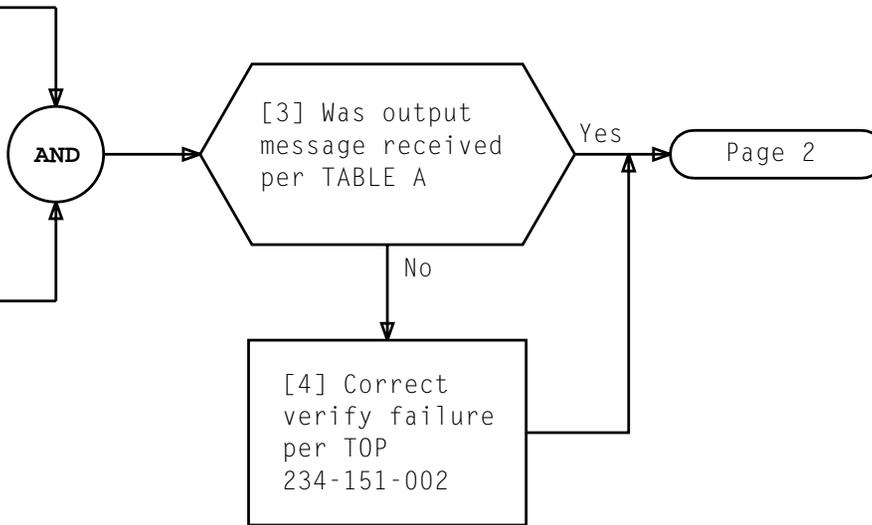
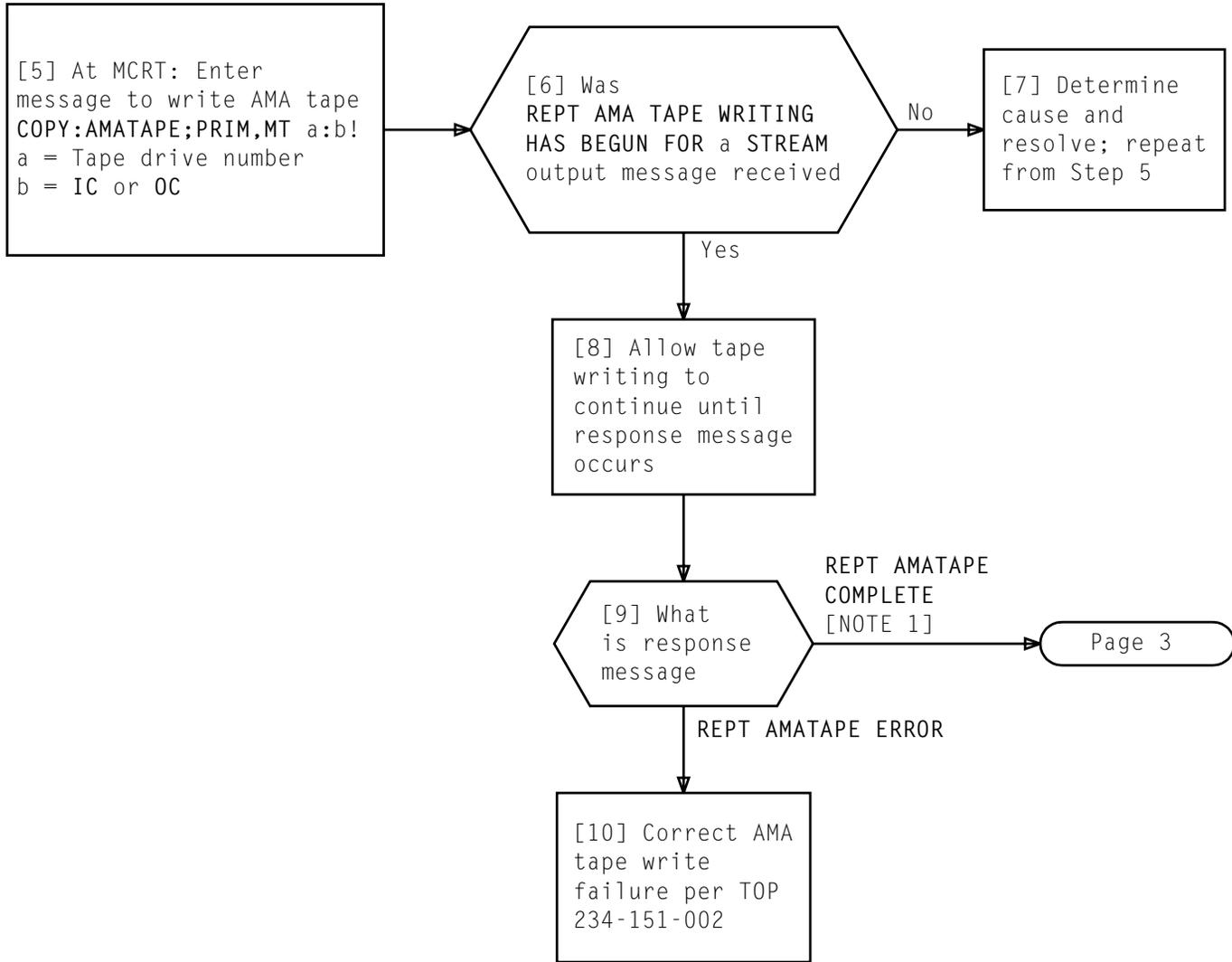
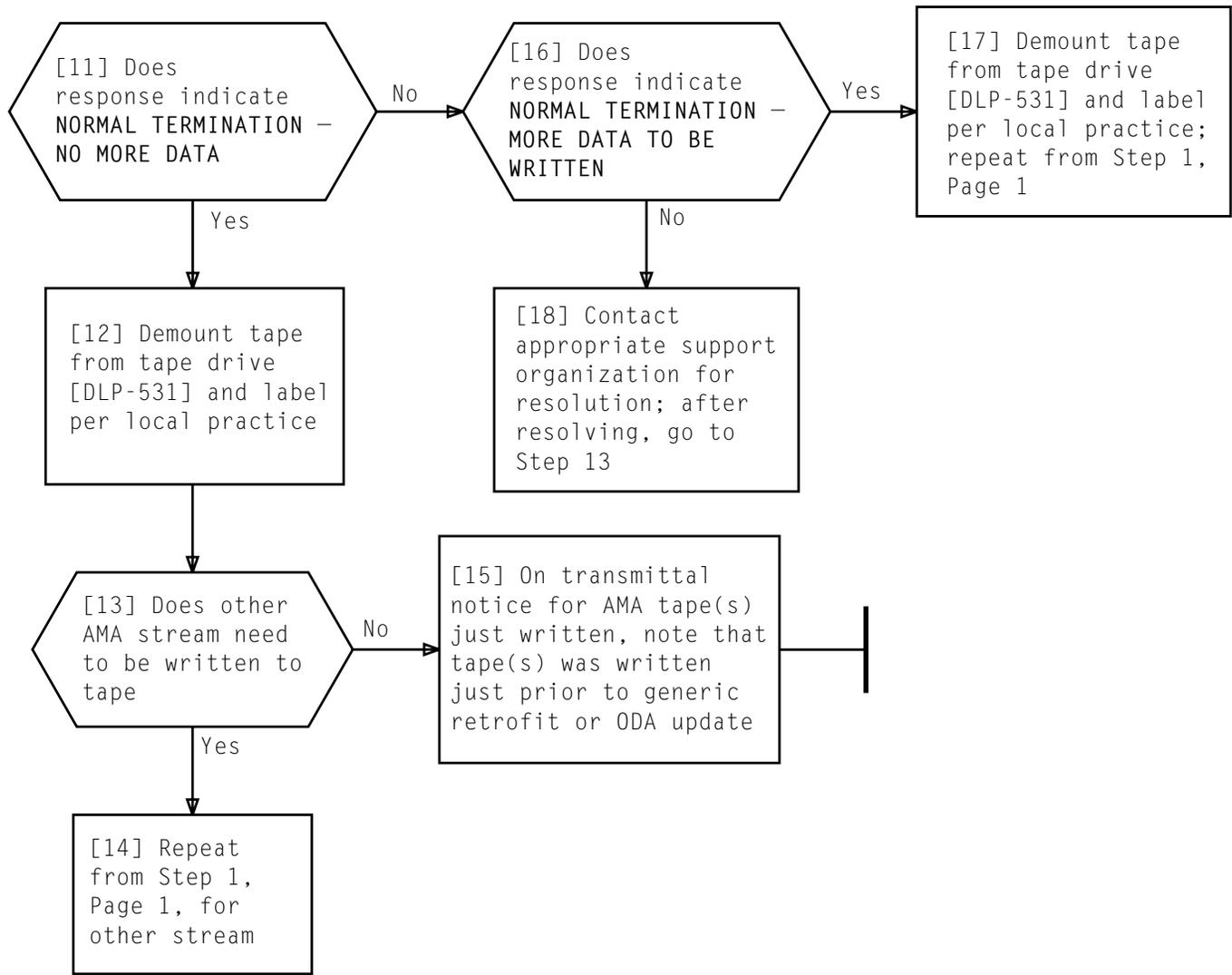


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMATAPE VERIFY FOR a STREAM VOL SER NUMBER b DATA SET ID c EXPIRATION DATE d-e TAPE DRIVE NUMBER f AMA TAPE CAN BE WRITTEN a = IC or OC b = Tape serial number c = Data set ID d = Year of expiration date e = Day of expiration (1 through 365) f = Tape drive number

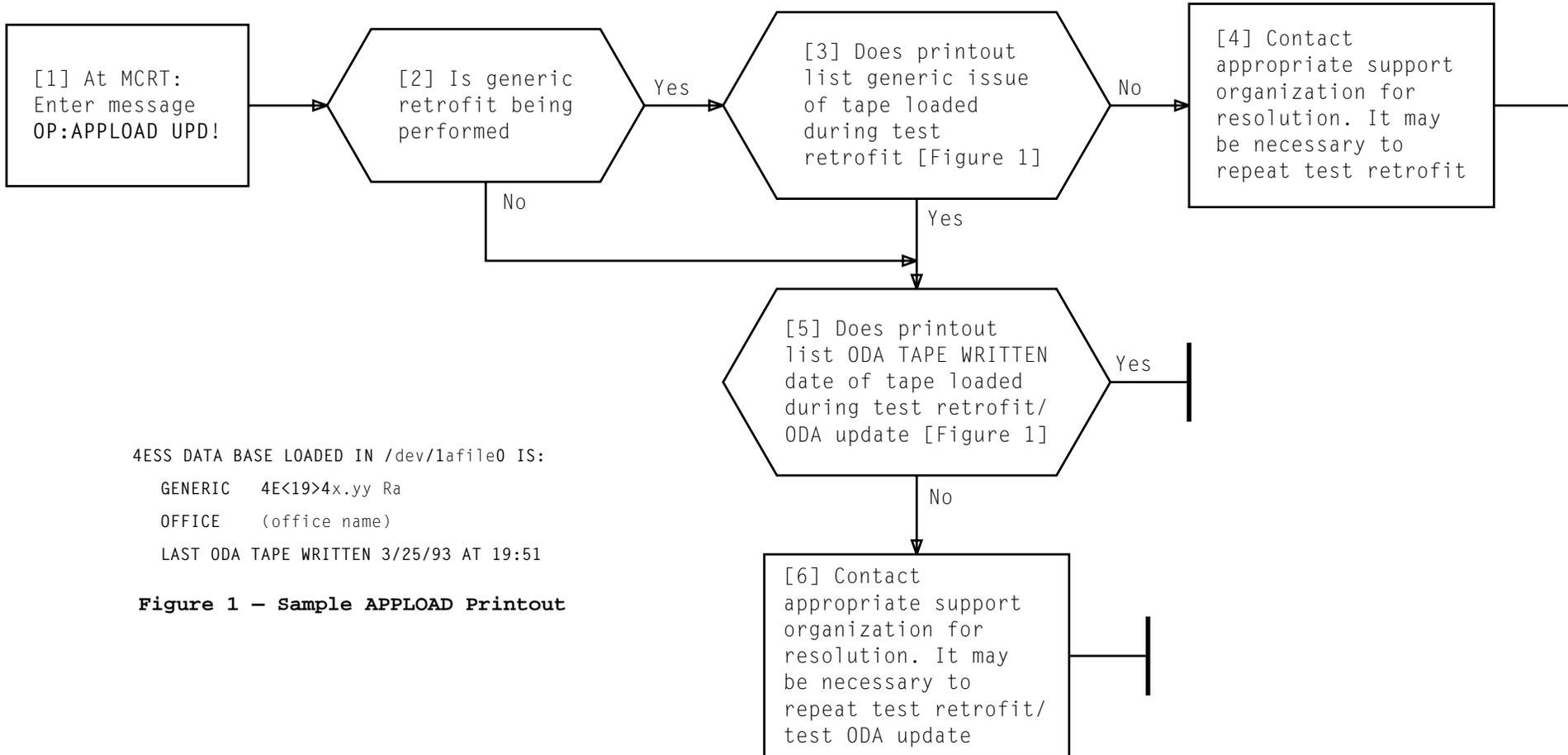


NOTE 1	
Output message contains detailed data of AMA tape	
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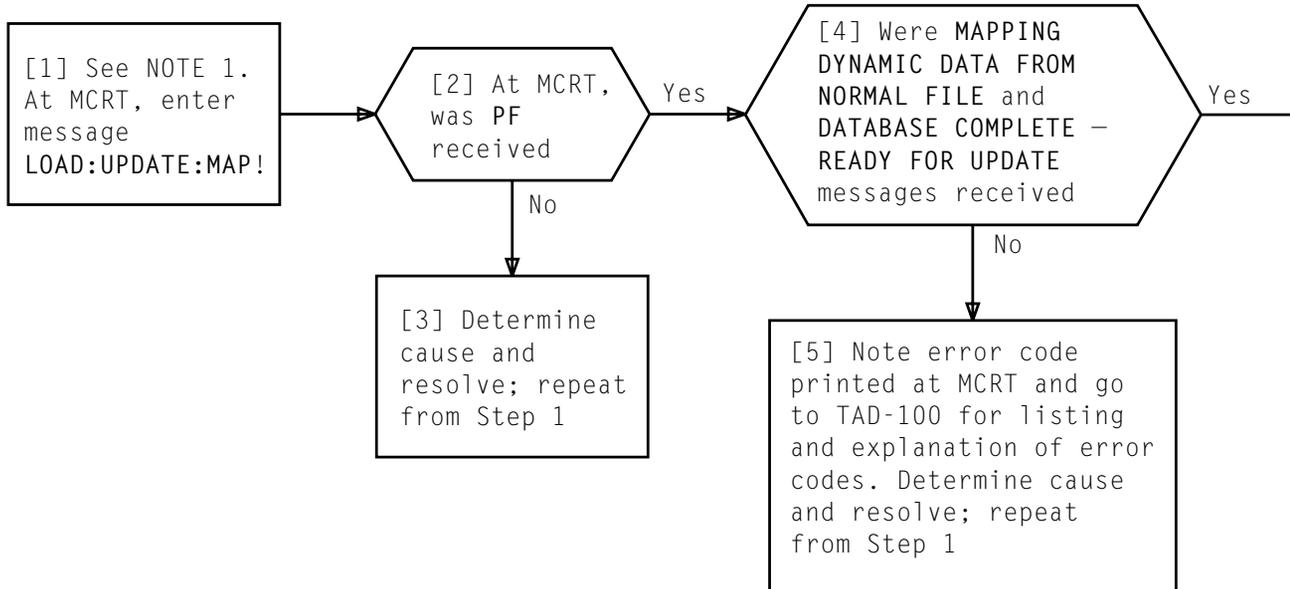
WRITE AMA TAPE(S) ON APS

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4ESS DATA BASE LOADED IN /dev/1afile0 IS:
 GENERIC 4E<19>4x.yy Ra
 OFFICE (office name)
 LAST ODA TAPE WRITTEN 3/25/93 AT 19:51

Figure 1 - Sample APPLOAD Printout



NOTE 1	
WAITING FOR 4 TO 13 MINUTES PAST QUARTER HOUR output message may be received. System automatically maps dynamic data when in proper window	
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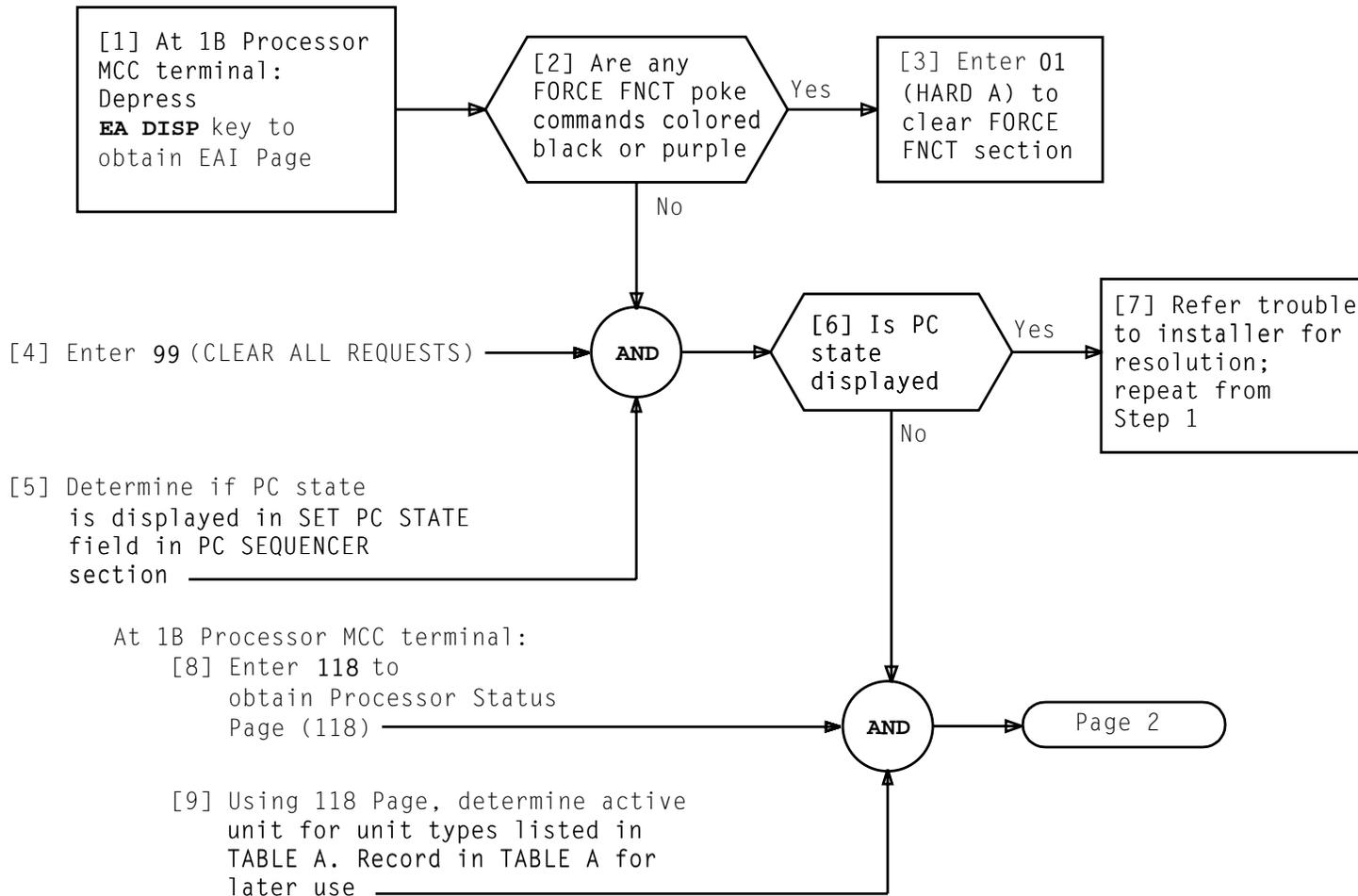


TABLE A	
UNIT TYPE	MEMBER NUMBER
CC	
PS	
PSB	
CSB	
IFB	
API	

PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY - PRIOR TO UPDATE

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At 1B Processor MCC terminal:

[10] Depress **EA DISP** key to obtain
EAI Page

[11] Enter poke comand for active
CC (10 for CC 0 or 11 for CC 1)

Active CC colored
purple on white

[12] Enter poke comand for active
PS (20 for PS 0 or 21
for PS 1)

Active PS colored
purple on white

[13] Enter poke comand for active
PSB (22 for PSB 0 or 23
for PSB 1)

Active PSB colored
purple on white

[14] Enter poke comand for active
CSB (30 for CSB 0 or 31
for CSB 1)

Active CSB colored
purple on white

[15] Enter poke comand for active
IFB (40 for IFB 0 or 41
for PSB 1)

Active IFB colored
purple on white

[16] Enter poke comand for active
AUB (42 for API 0 active or 43
if API 1 active)

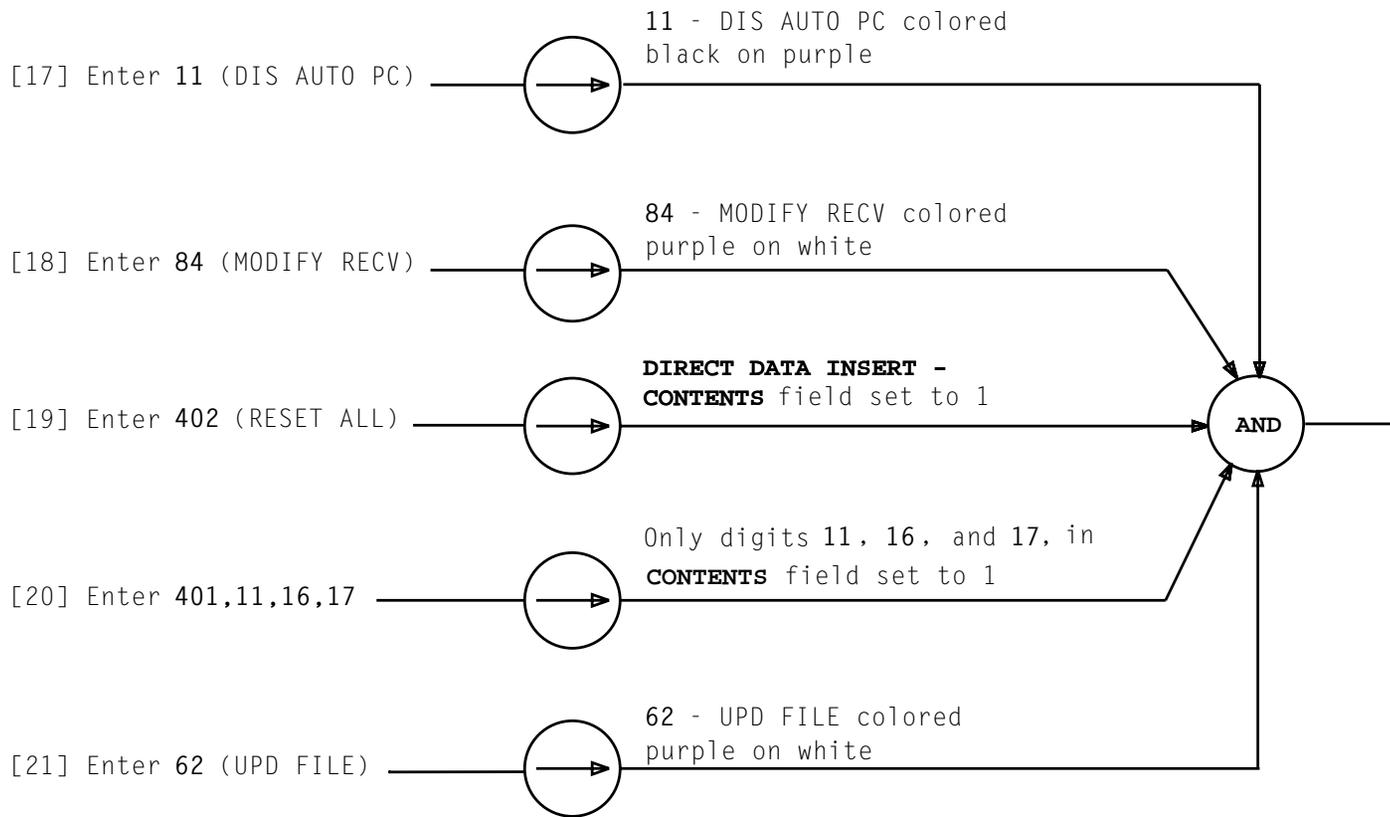
Active AUB colored
purple on white

AND

Page 3

**PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY -
PRIOR TO UPDATE**

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**PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY -
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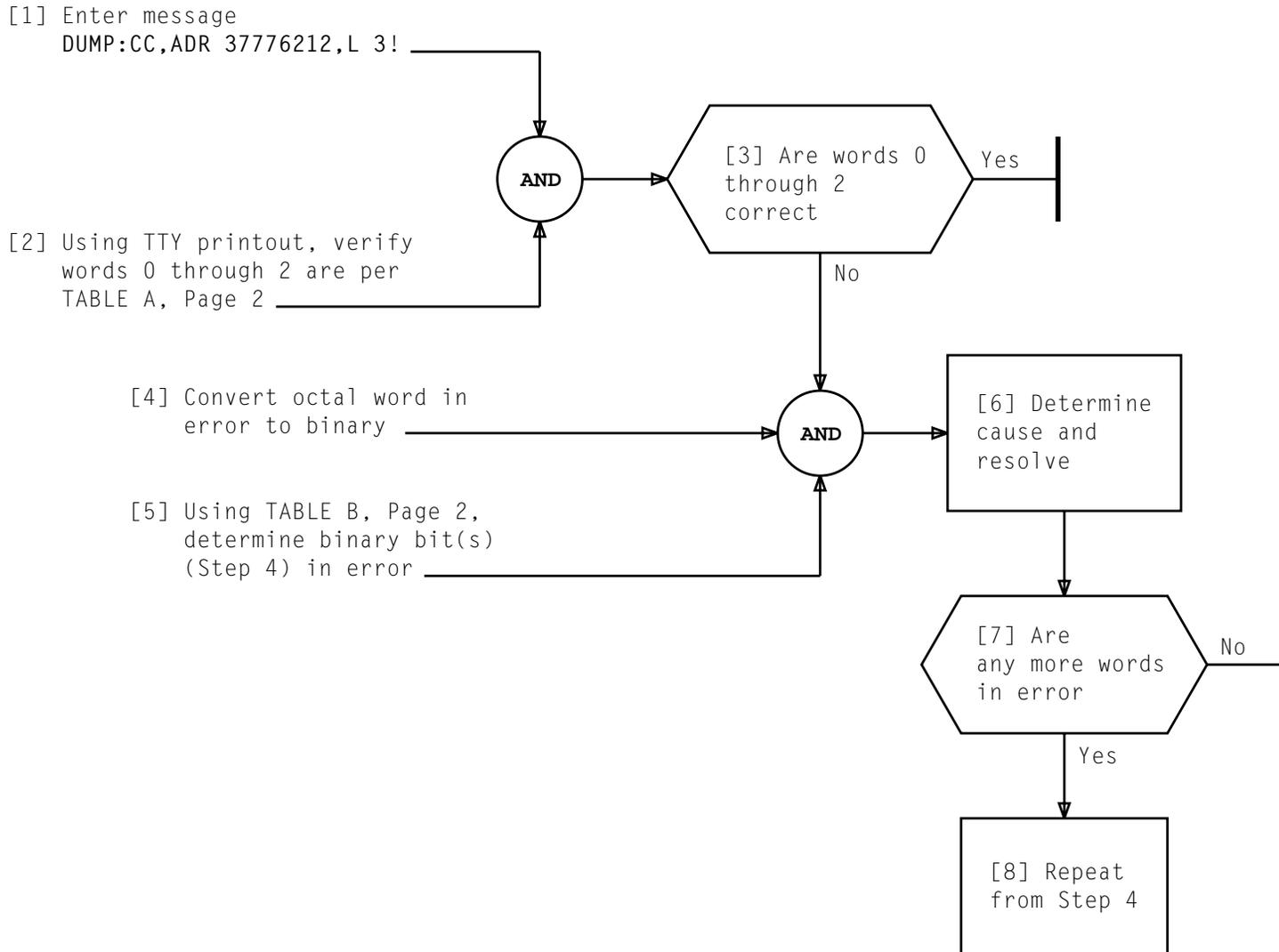


TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	DUMP:CC,INDIR 0,ADR 37776212,INC +0 COMPLETED 37776212 46010000 000dccba 00600000 \WORD 0\ \WORD 1\ \WORD 2\
	a = 1 - BLOCK 0 PS 0 depressed 2 - VARIABLE PS 0 depressed 4 - VARIABLE PS 1 depressed b = 3 - DISABLE AUTO PC and CC 0 depressed 5 - DISABLE AUTO PC and CC 1 depressed cc = 05 - AU BUS 0 and PS BUS 0 depressed 06 - AU BUS 1 and PS BUS 0 depressed 11 - AU BUS 0 and PS BUS 1 depressed 12 - AU BUS 1 and PS BUS 1 depressed d = 0 or 1

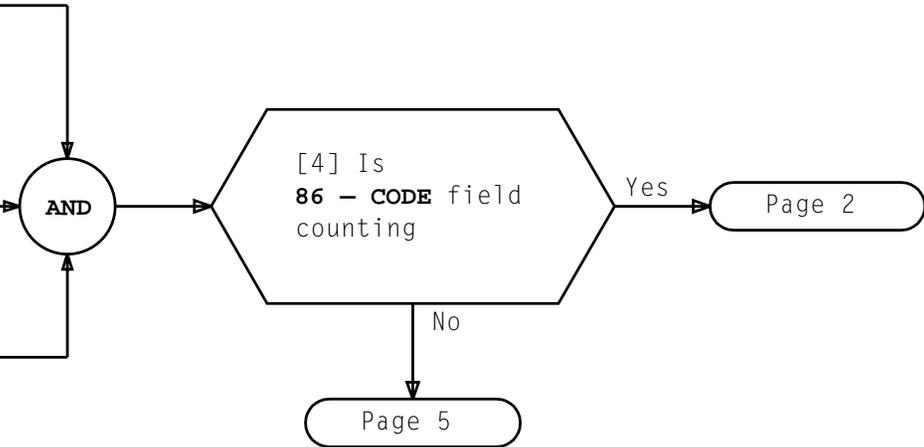
TABLE B		
WORD	BINARY BIT	ASSOCIATED EAI POKE COMMANDS
0	10	84 - MODIFY RECV
	14	62 - UPD FILE
1	0	10 - CC 0
	1	11 - CC 1
	2	20 - PS 0
	3	21 - PS 1
	4	NA
	5	NA
	6	22 - PSB 0
	7	23 - PSB 1
	8	30 - CSB 0
	9	31 - CSB 1
	10	40 - IFB 0
	11	41 - IFB 1
	12	42 - AUB 0
	13	43 - AUB 1
22	70 - DIS AUTO PC	
2	16	401/400, 00-SET/RESET 00
	17	401/400, XX-SET/RESET XX

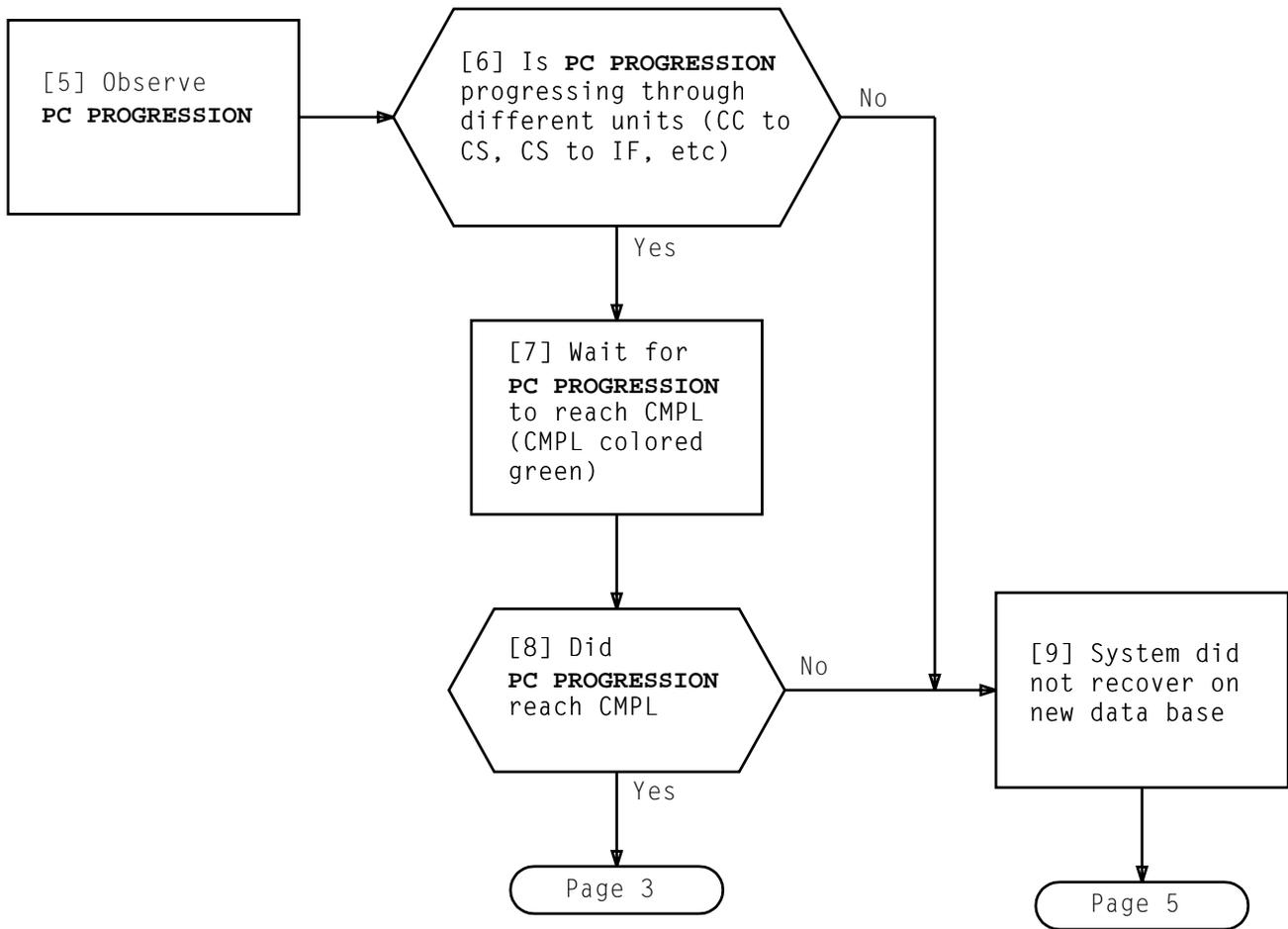
At 1B Processor MCC terminal:

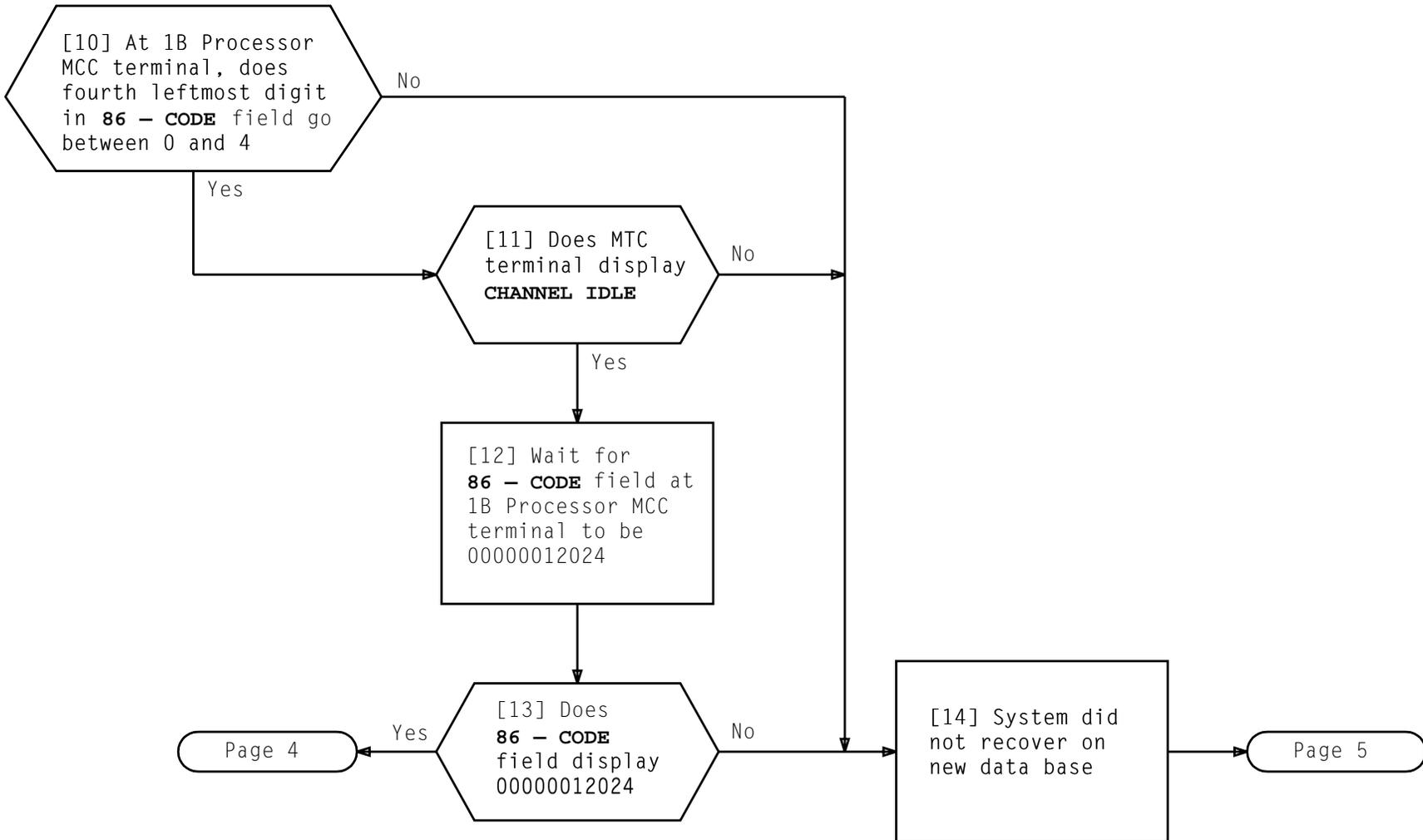
[1] If EAI page is not displayed,
depress **EA DISP** key

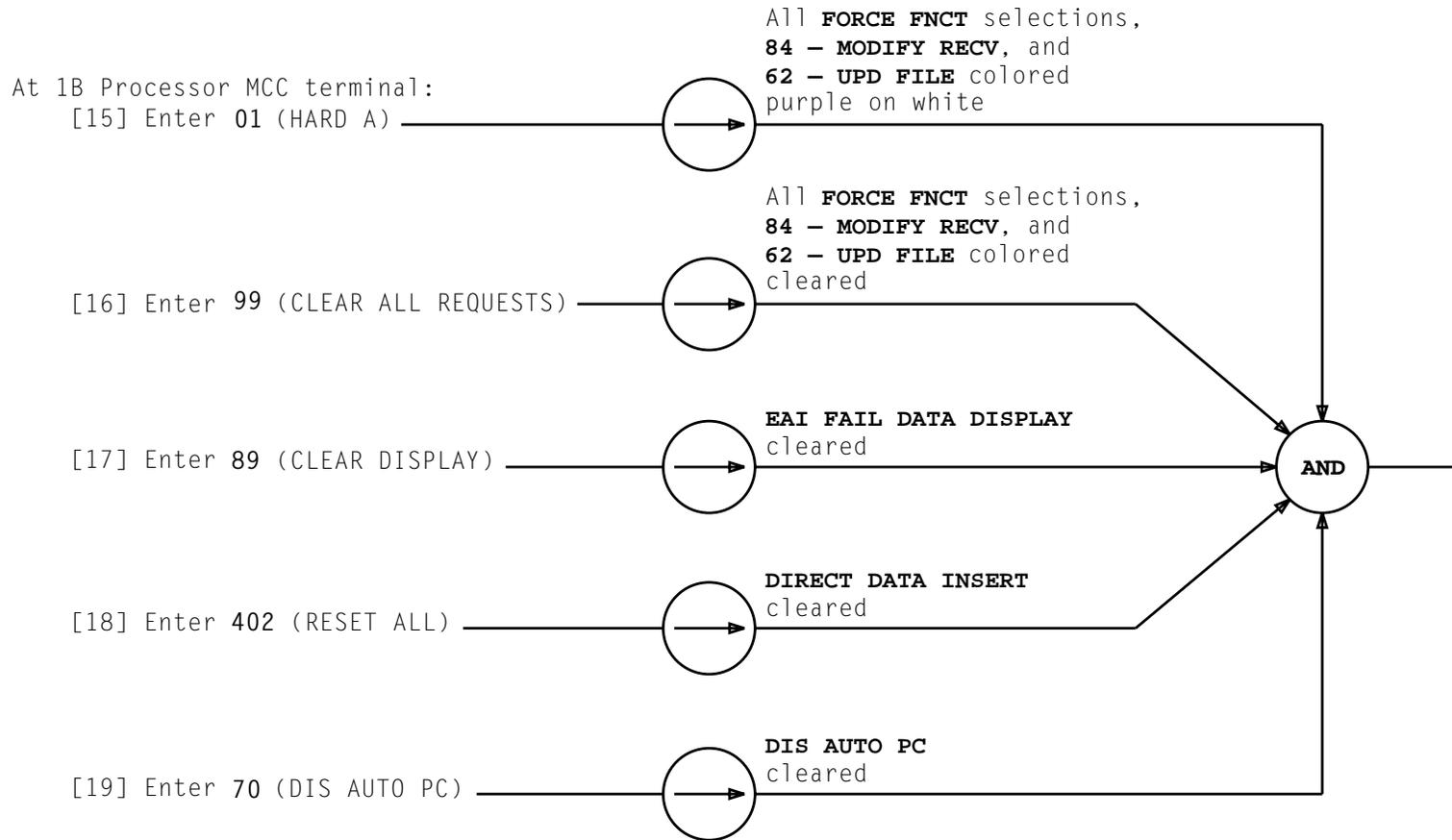
[2] Enter 01 (HARD A) to initiate
boot of 1B Processor from
UPDATE file

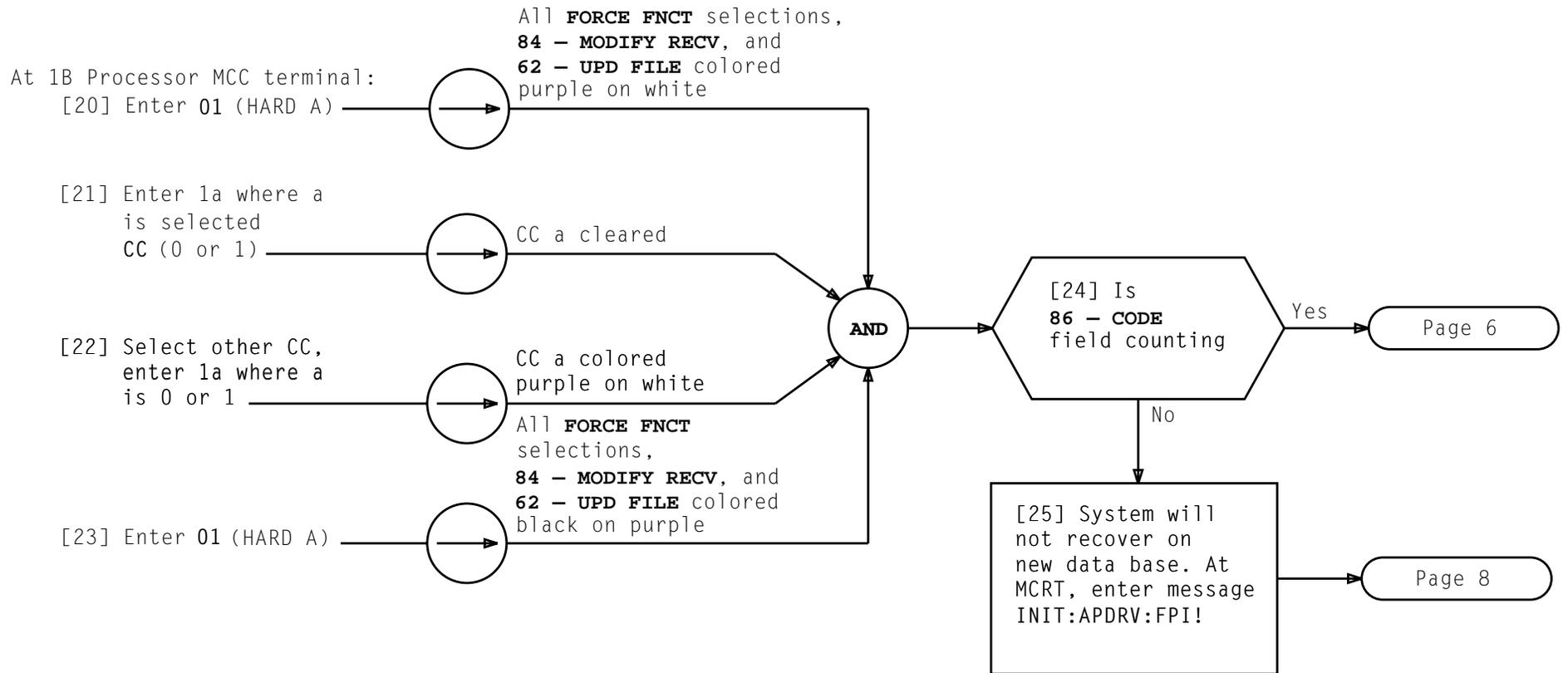
[3] Observe **86 - CODE** field

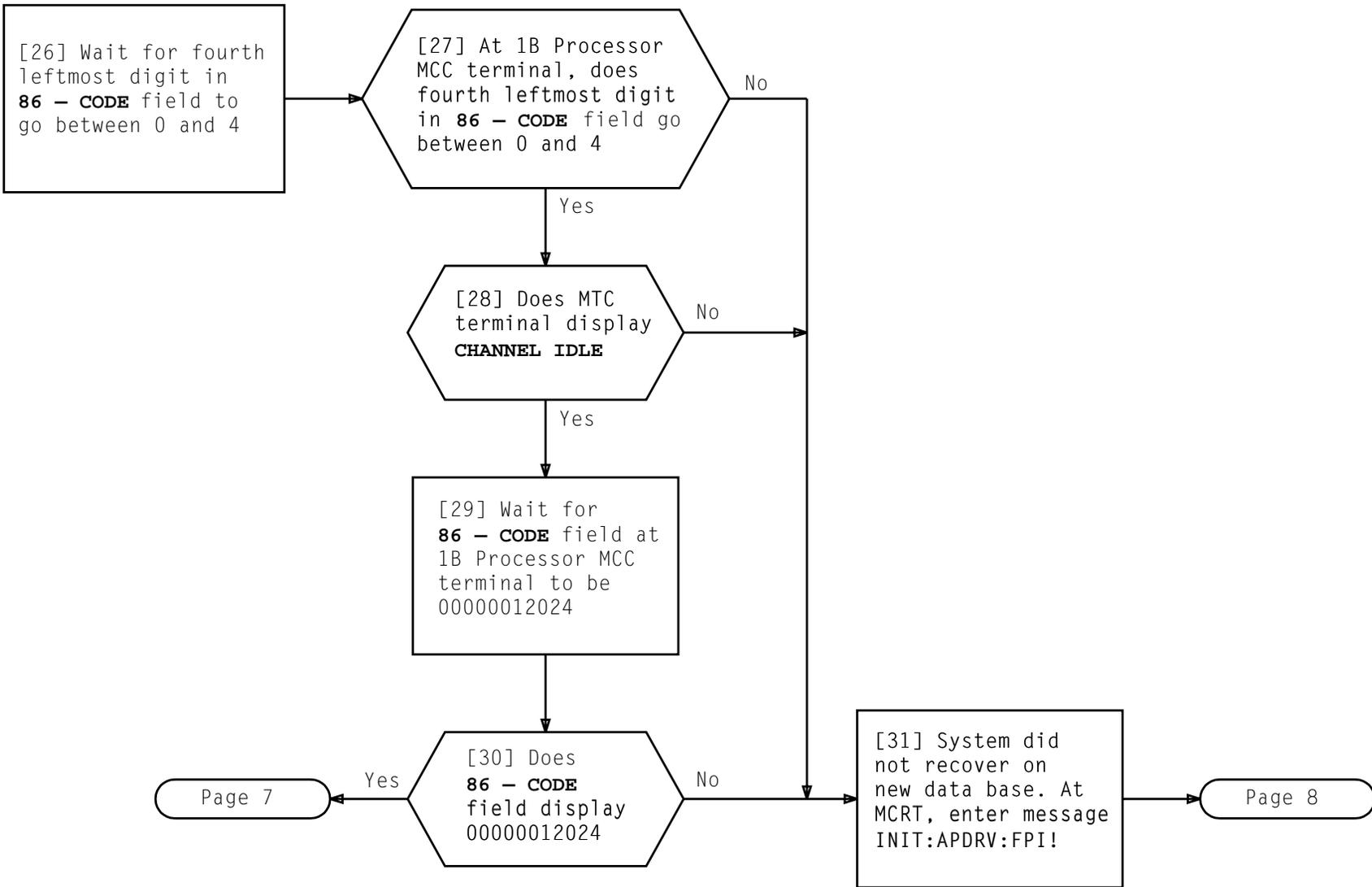


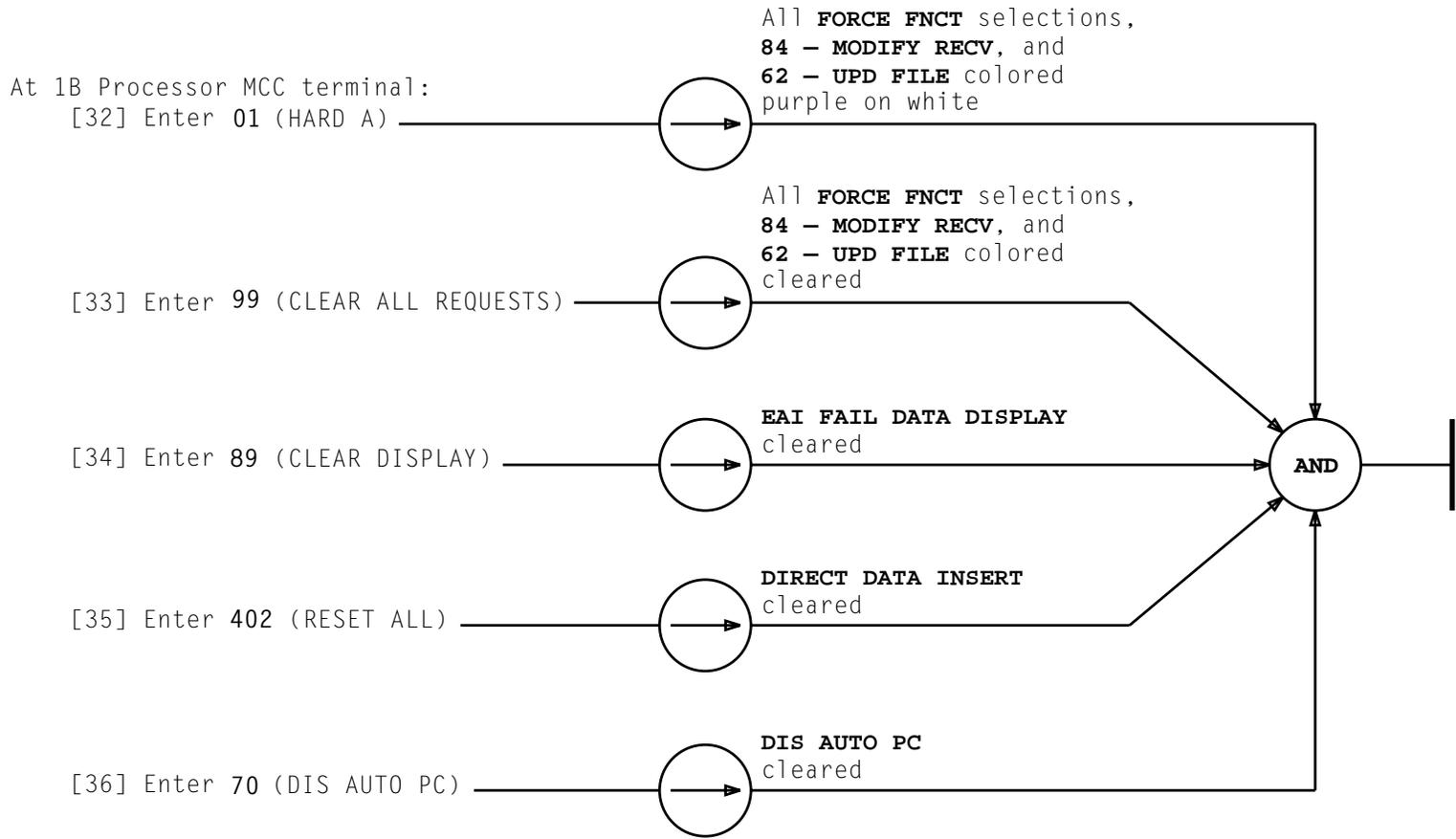


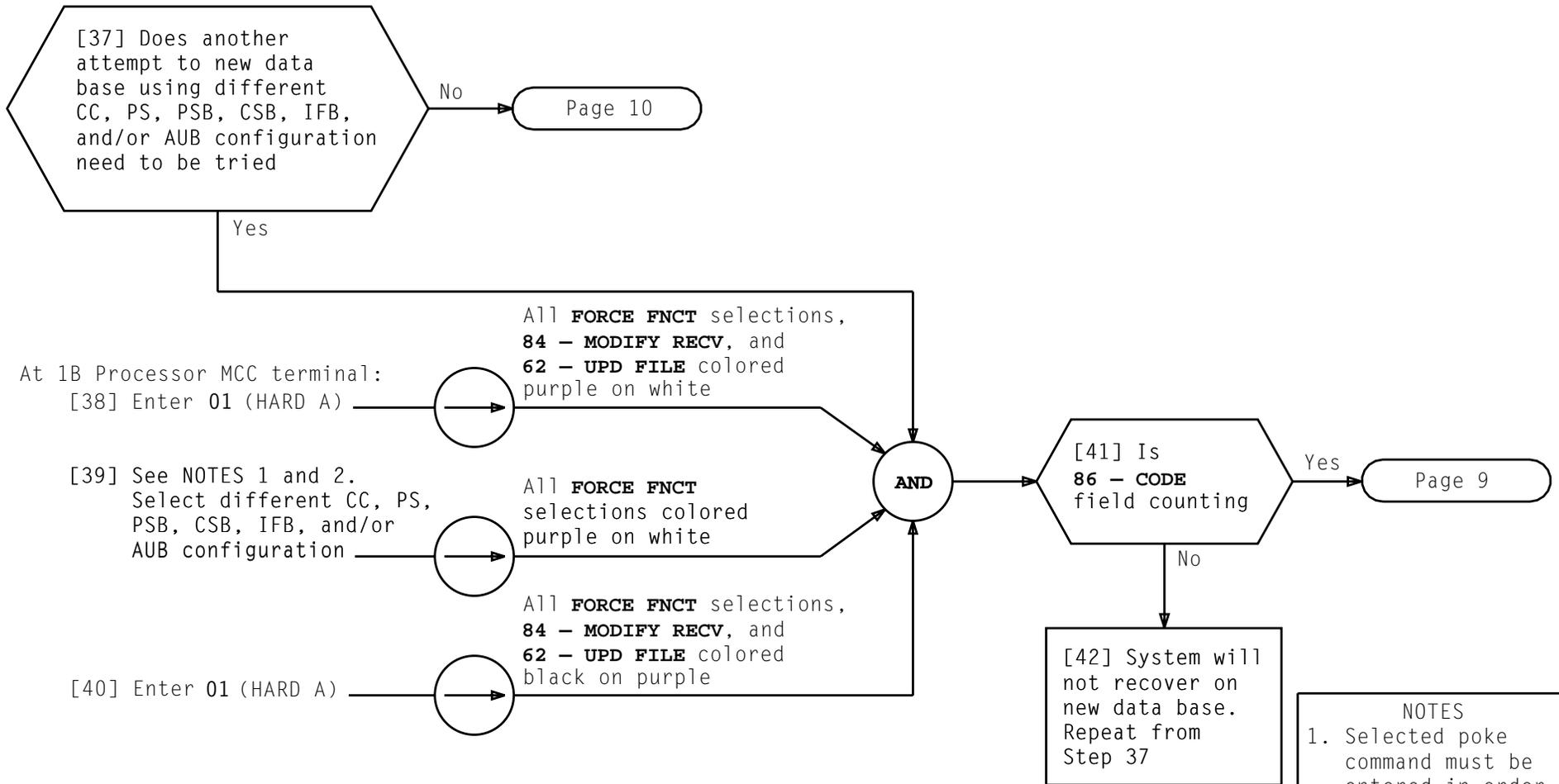








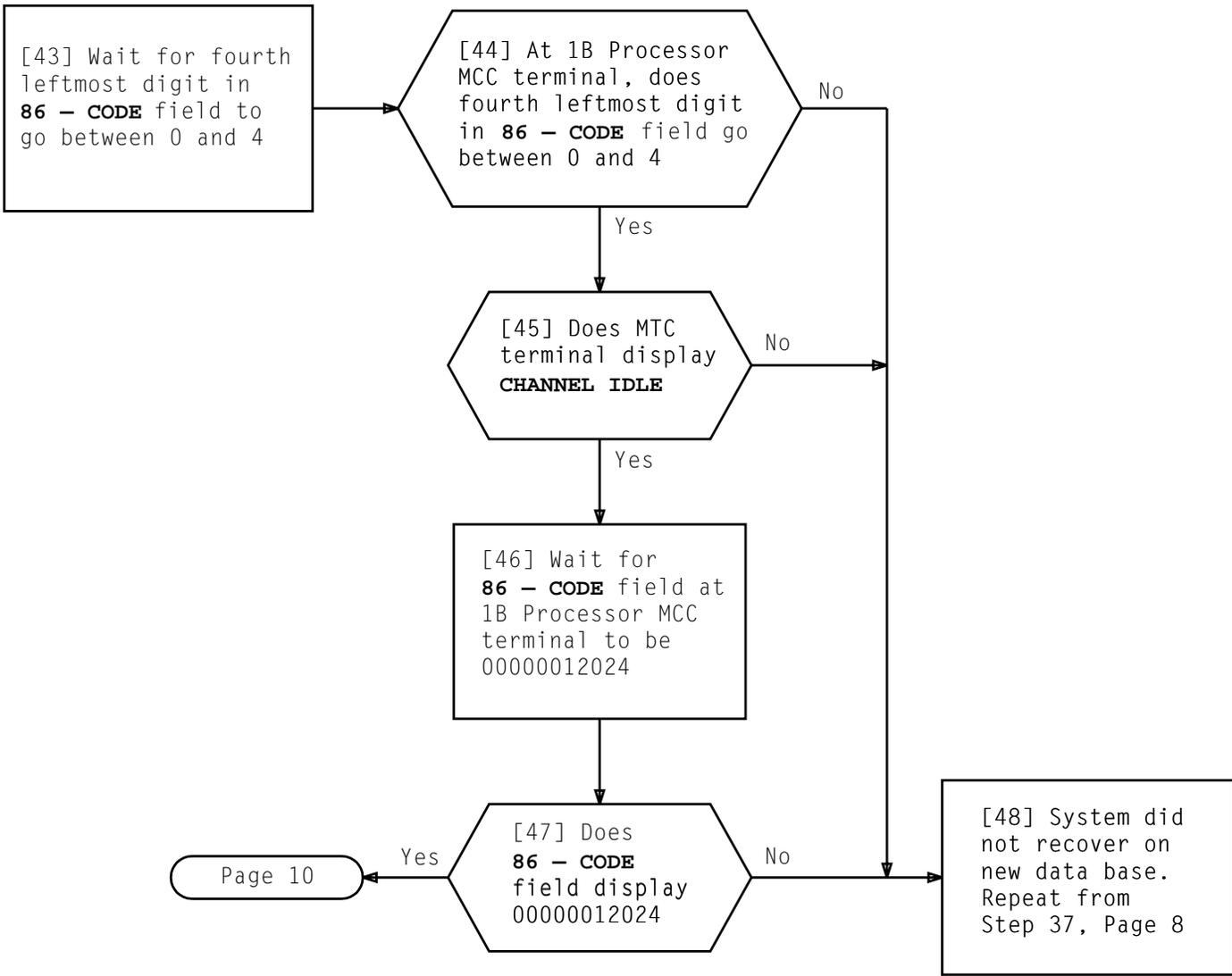


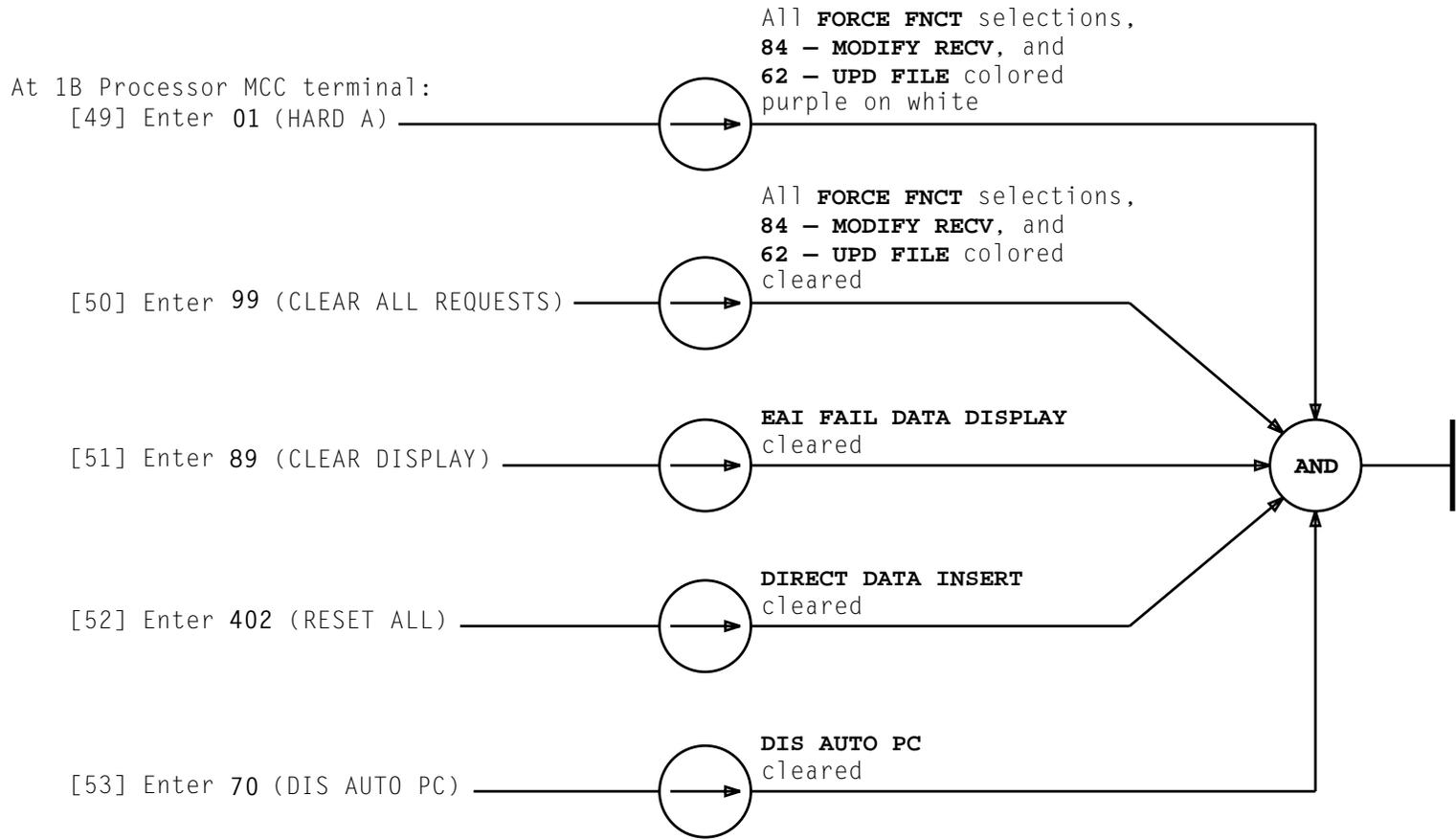


NOTES

1. Selected poke command must be entered in order to be cleared before selecting opposite unit
2. IFB and MUP must be same (0 and 0, 1 and 1). If not, MUP must be switched

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[1] Type, but do not send, partially completed message
SET:CLK:DAY a,DATE b,TIME ccdd!

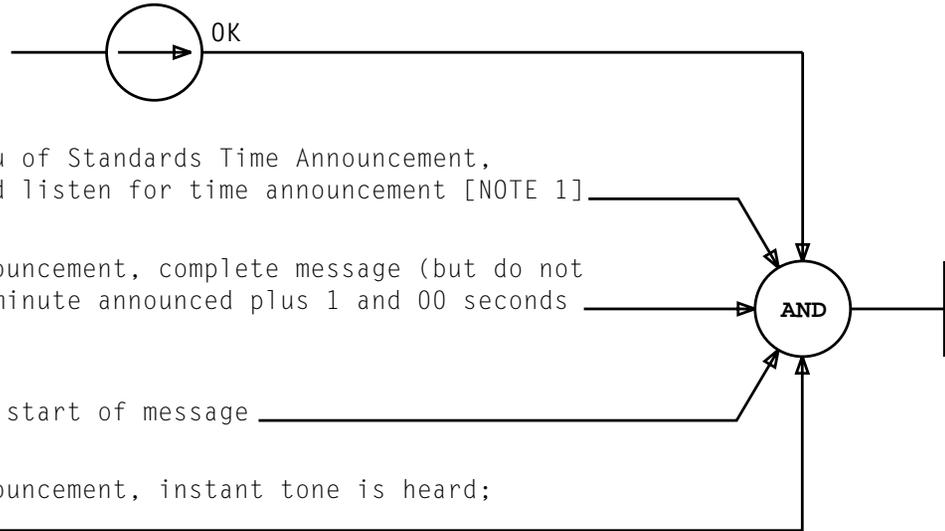
(Complete everything except minutes and seconds)

a = Day (SUN, MON, TUE, etc.)

b = Date (6-digit number - mmddyy)

cc = Hour

dd = Minute



[2] Call U. S. Bureau of Standards Time Announcement,
303-499-7111, and listen for time announcement [NOTE 1]

[3] At next time announcement, complete message (but do not
send) by adding minute announced plus 1 and 00 seconds

[4] Return cursor to start of message

[5] At next time announcement, instant tone is heard;
depress **SEND** key

NOTE 1

Time announcements
are made every
minute on the minute.
Hours announced are
in Greenwich Mean
Time

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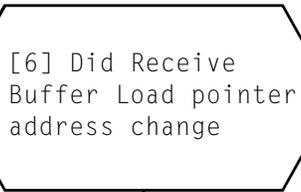
[1] See NOTE 1. At MCRT,
enter message
OP:AMA;PTRS!

[2] Using printout and Figure 1,
record receive buffer
load pointer address

[3] Wait a few minutes
before continuing

[4] At MCRT, enter message
OP:AMA;PTRS!

[5] Using printout and Figure 1,
observe receive buffer
load pointer address value
and compare with value
recorded in Step 2



Yes

Page 2

No

[7] Contact appropriate
support organization
for resolution. After
resolving, repeat from
Step 1

```

REPT AMA POINTERS INFORMATION
Receive Buffer Unload pointer:
pasnum 0 offset 52284 address 508988
Receive Buffer Load pointer:
pasnum 0 offset 50008 address 506712
.
.
  
```

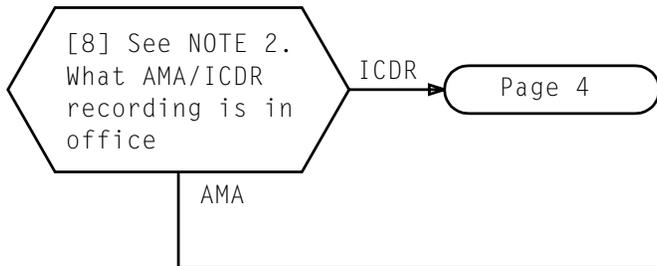
506712

Record This Value

Figure 1 - Sample Output Message

NOTE 1
OP: input message
in Steps 1 and 4
must be entered
during an 11-minute
window starting 2
minutes past any
quarter hour.
Tracer records are
sent on the quarter
hour

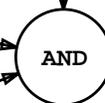
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[9] At MCRT, enter message OP:AMA;MAPS! _____

[10] Using printout and TABLE A, determine partition number associated with WRITE PARTITION for each stream (IC/OC) being recorded _____

[11] Using printout and TABLE A, record LPO: value(s) under PARTITION DISK MAP: associated with partition(s) determined in Step 10 _____

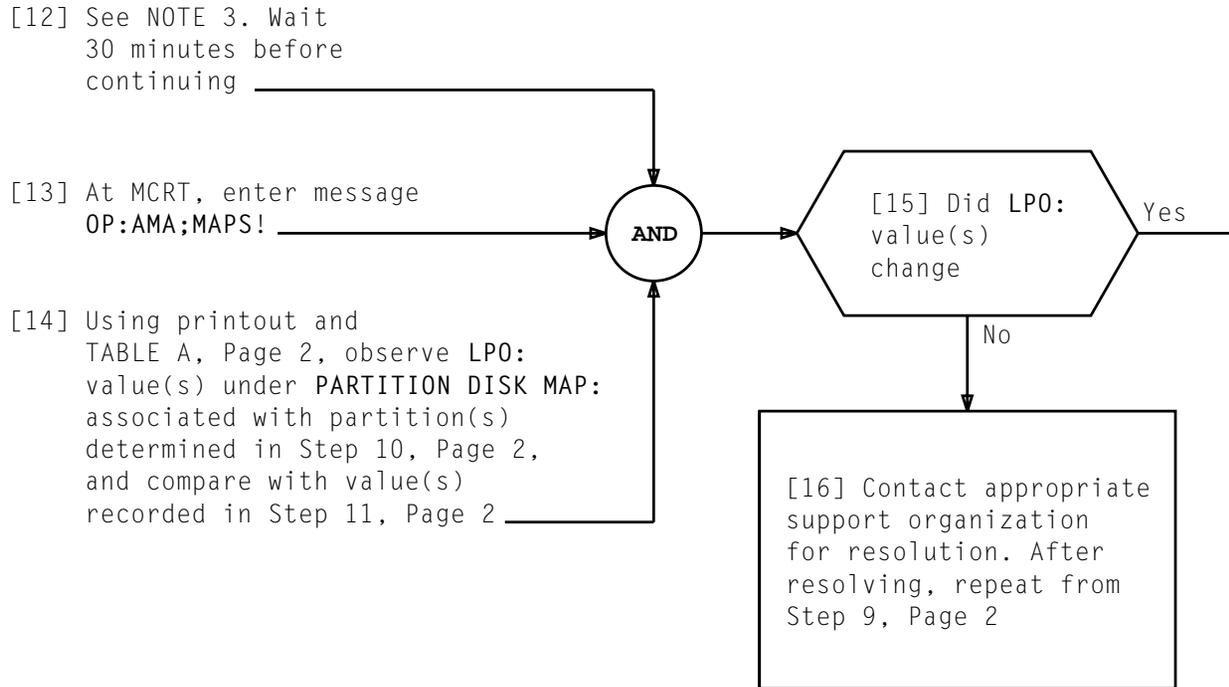


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TABLE A	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT AMA DISK MAPS FOR a STREAM WRITE PARTITION b READ PARTITION a = IC or OC b = Partition number AMA data being written
2	Message 1 is repeated for each stream
3	PARTITION c DISK MAP: FPO: _____ LPO: d FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ c = Equipped partition number d = AMA record count
4	Message 3 is repeated for each equipped partition

NOTE 2 If AMA and ICDR data is being recorded, Steps 9 through 16 and Steps 17 through 24 can be performed simultaneously	
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CHECK CAMA AND/OR ICDR OPERATION

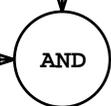


NOTE 3	
Data accumulates in a big buffer before it is split and written to disk. If only tracer records are being recorded, it would take approximately 2 hours before LPO: value would change. If a lot of AMA data is recorded, 30-minute wait may not be necessary. Other post retrofit activities can be performed during wait period	
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[17] At MCRT, enter message
OP:ICDR;MAPS!

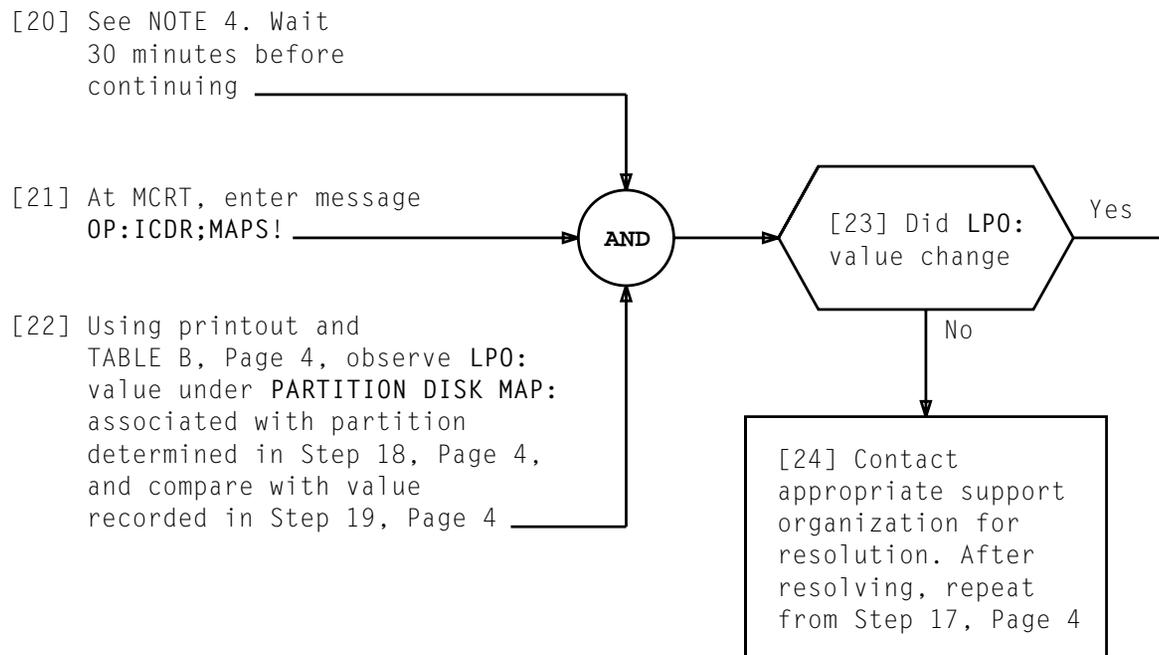
[18] Using printout and
TABLE A, Page 2,
determine partition
number associated with
WRITE PARTITION

[19] Using printout and
TABLE B, record LPO:
value under
PARTITION DISK MAP:
associated with
partition determined
in Step 18



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TABLE B	
MESSAGE NUMBER	OUTPUT MESSAGE
1	REPT ICDR DISK MAPS WRITE PARTITION a READ PARTITION a = Partition number ICDR data being written
2	PARTITION b DISK MAP: FPO: _____ LPO: c FPS: _____ LPS: _____ FSO: _____ LSO: _____ FSS: _____ LSS: _____ FBO: _____ LBO: _____ FBS: _____ LBS: _____ b = Equipped partition number c = ICDR record count
3	Message 2 is repeated for each equipped partition



NOTE 4	
Data accumulates in a big buffer before it is split and written to disk. If only tracer records are being recorded, it would take approximately 2 hours before LPO: value would change. If a lot of ICDR data is recorded, 30-minute wait may not be necessary. Other post retrofit activities can be performed during wait period	
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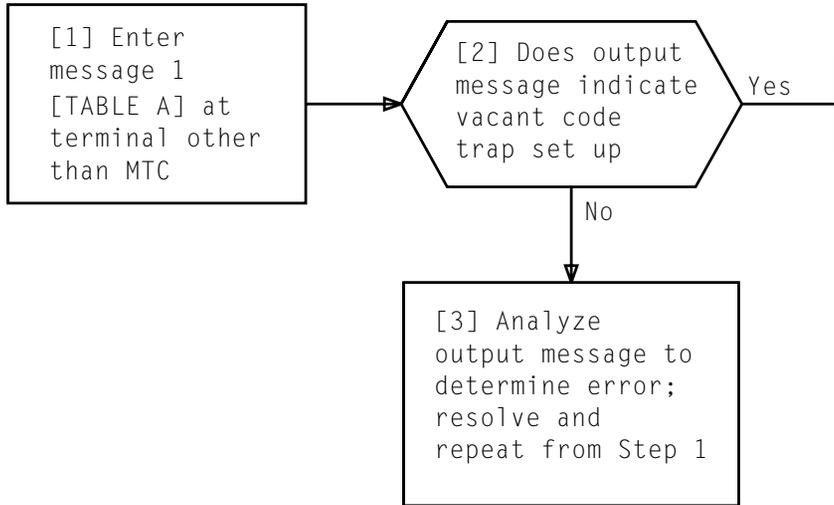
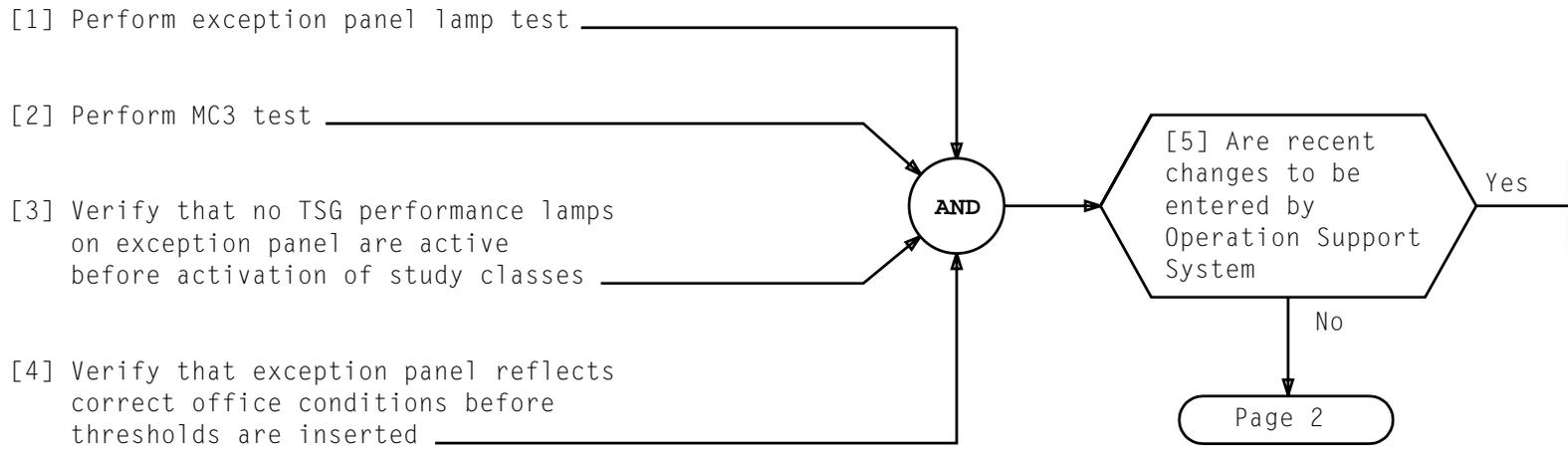
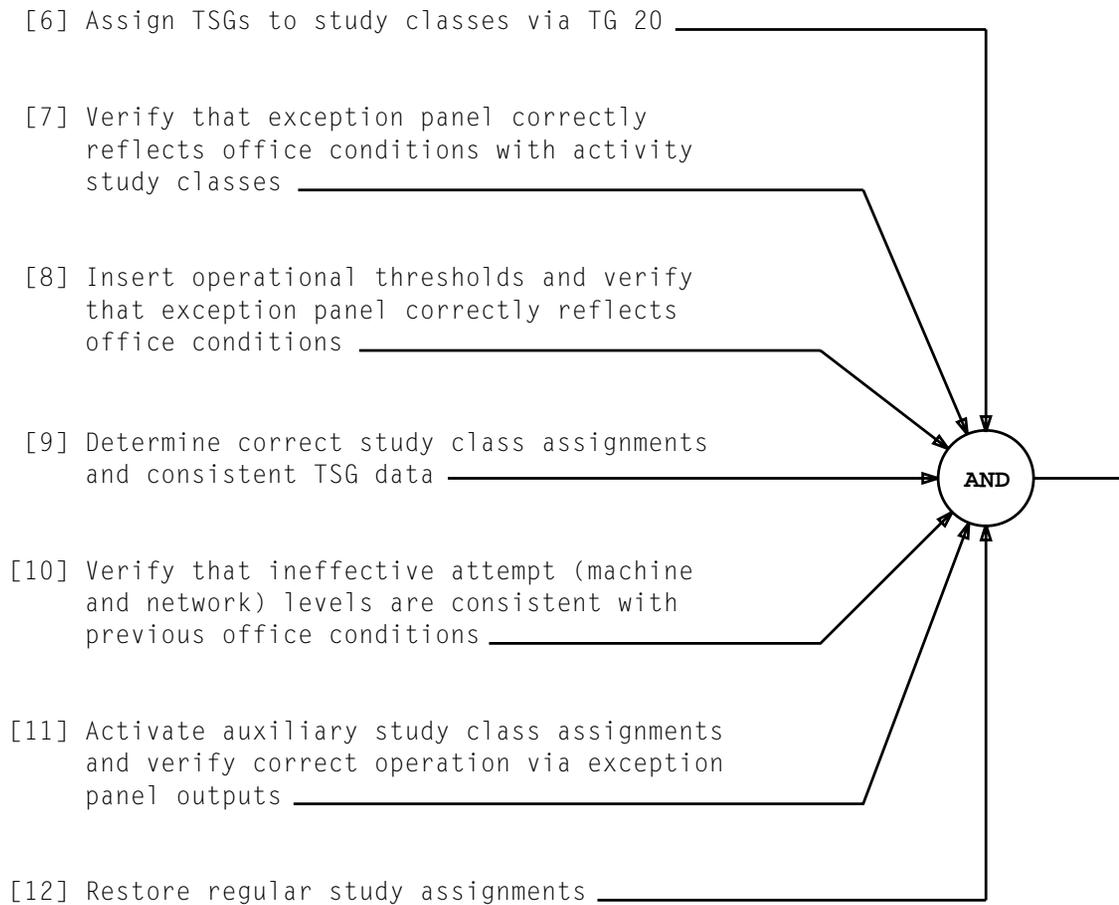


TABLE A	
MESSAGE NUMBER	INPUT MESSAGE
1	MON:IAOFC,NEW;ADD:IA (VCA,NCA,PDA,PER),TIMEON hhmm,COUT! hhmm = Hour (00 to 23) and minute (00 to 59) which specifies time trap is to start collecting data





[1] Mount library tape for appropriate generic on idle tape transport [DLP-543]

[2] Enter message
SET:TUC a;FUNCTION LIB!
to set TUC to library function

Tape header printed

[3] Verify from tape header that generic issue is correct for library package to be loaded

AND

[4] Enter message
ALW:TUC a:RO!

TTY response OK

[5] Read NOTE 1. Enter message
LOAD:LIBSYS,FS;TAPE:PKG a!
a = Library package name(s)

REPT:ADS FUNCTION LIB ACTIVE

[6] Read NOTE 2. Was output message
LOAD:LIBSYS COMPLETED received

Yes

No

[7] Was output message
LOAD:LIBSYS STOPPED
PKG SIZE ERROR received

Yes

Page 3

No

Page 2

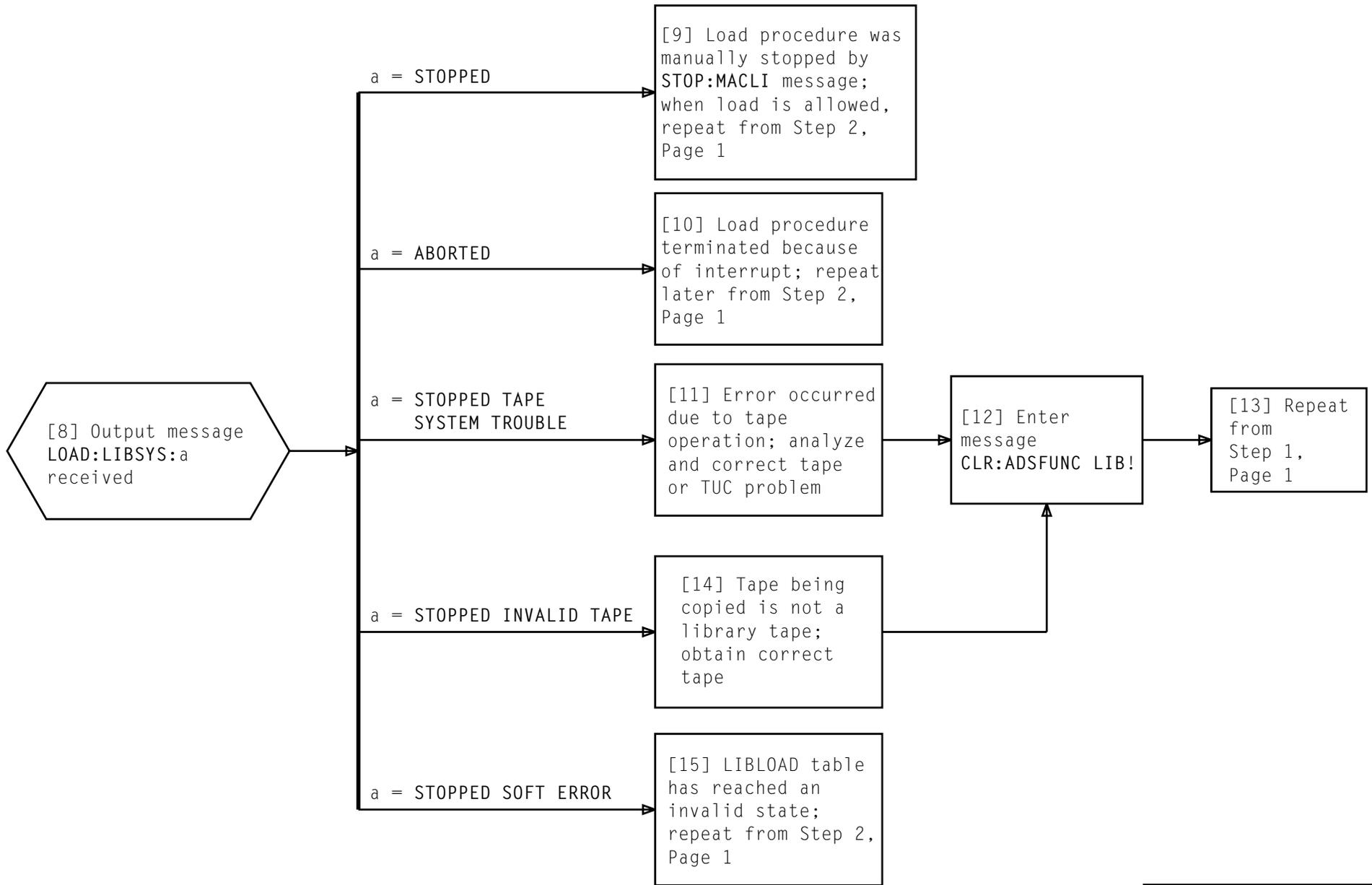
NOTES

1. Multiple library packages (maximum of 4) may be loaded at one time by separating with commas and enclosing in parentheses
2. System does not respond COMPLETED until tape is loaded

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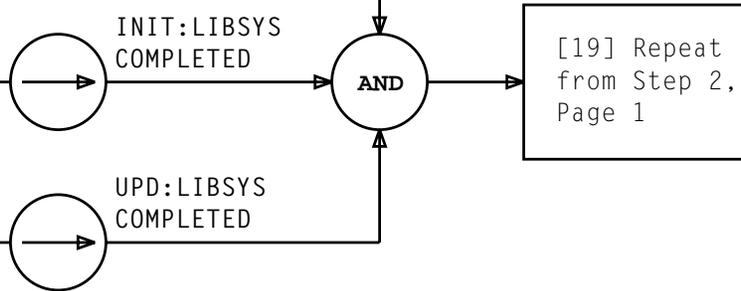
LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

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[16] Enter message
OP:LIBSTAT,FS! and
identify library packages that
will not be required for retrofit
or ODA update processes

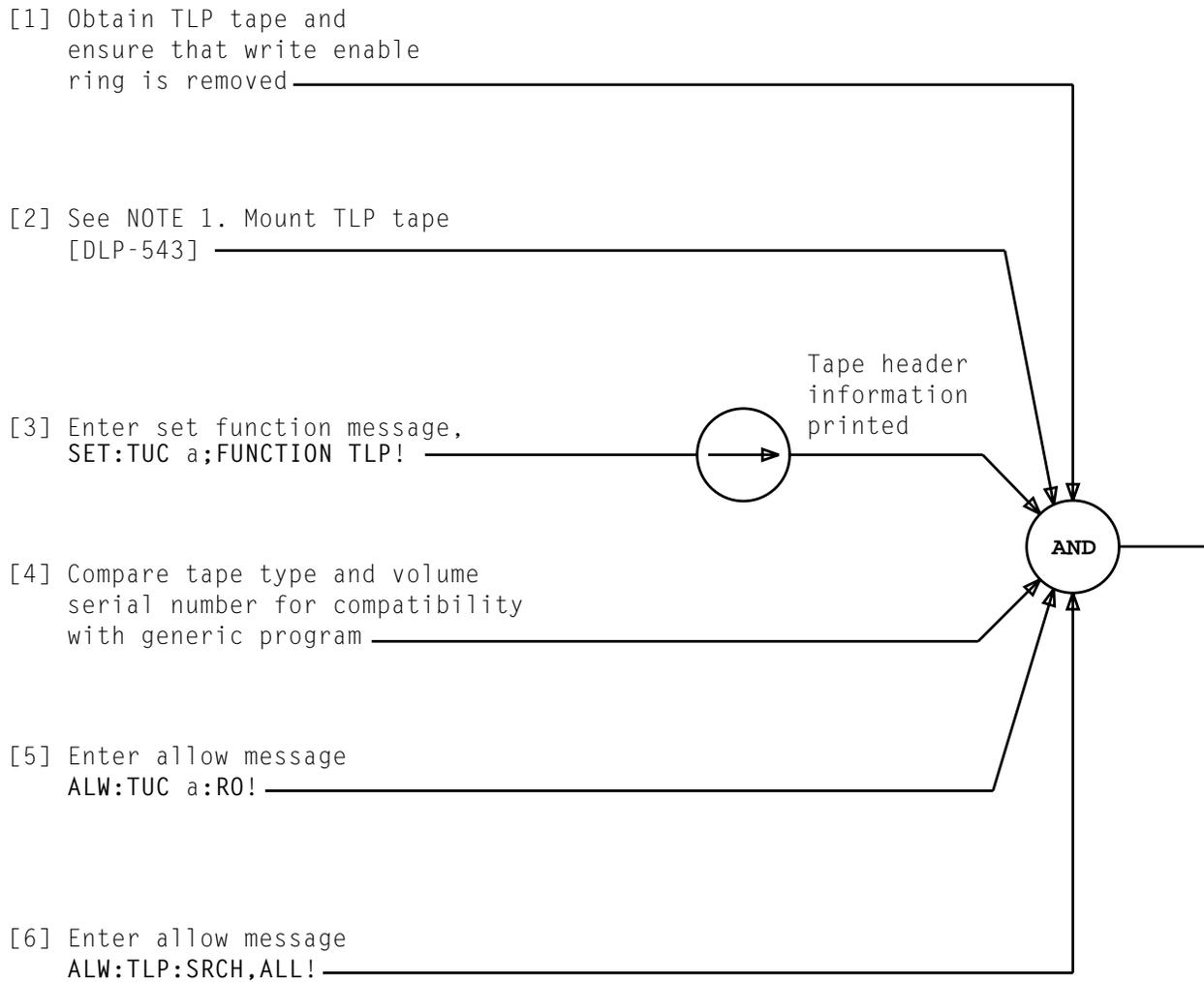
[17] Enter message
INIT:LIBSYS,PKG a!
to remove a library package
a = Library package identified
in previous step

[18] Enter message
UPD:LIBSYS!
to repack library packages



LOAD LIBRARY PROGRAM PACKAGE(S) FROM TAPE ONTO DISK

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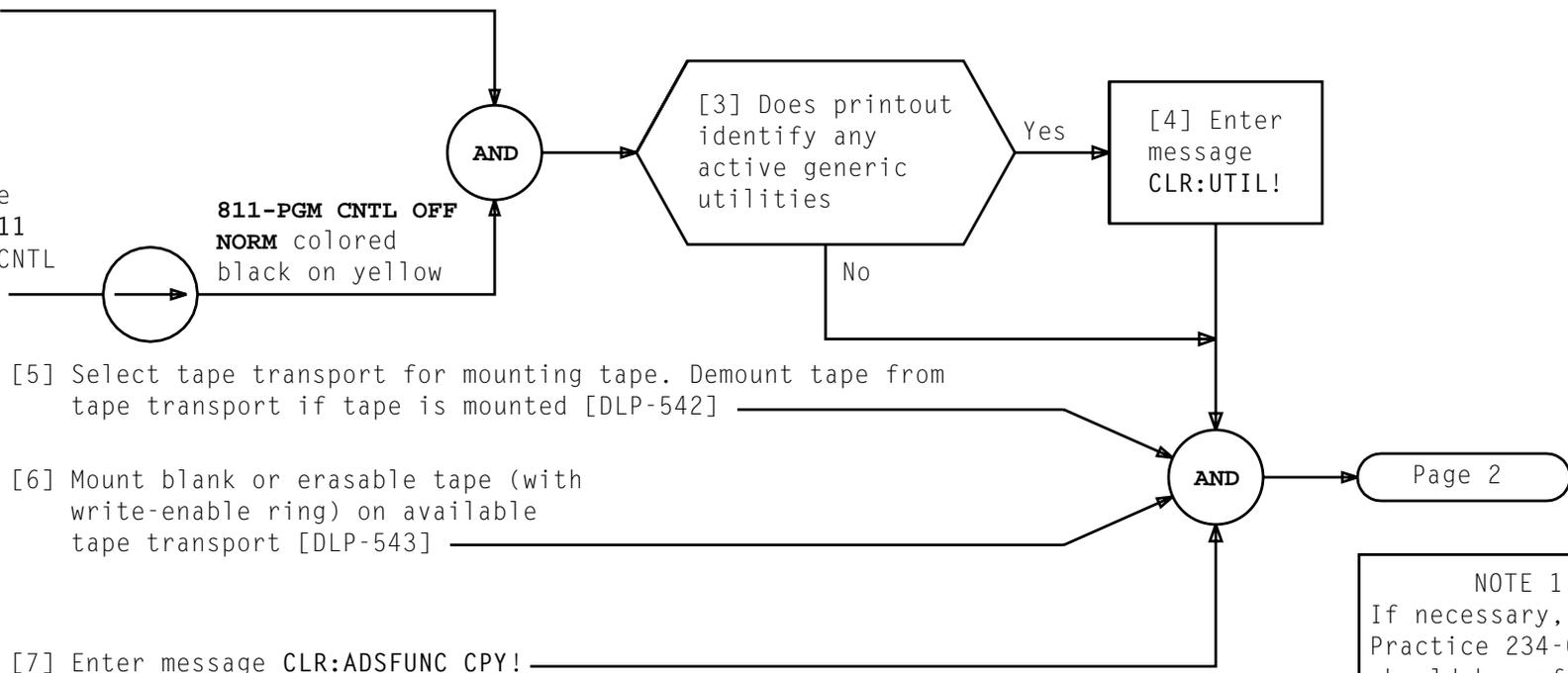
PLACE TLP TAPE IN SERVICE

NOTE 1	
Local procedures dictate tape units on which TLP tape can be mounted	
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At 1B Processor MCC terminal:

- [1] See CAUTION 1 and NOTE 1. Enter
108 to obtain System Status
Page 108

- [2] Enter poke
command 811
(811-PGM CNTL
OFF NORM)



- [5] Select tape transport for mounting tape. Demount tape from tape transport if tape is mounted [DLP-542]

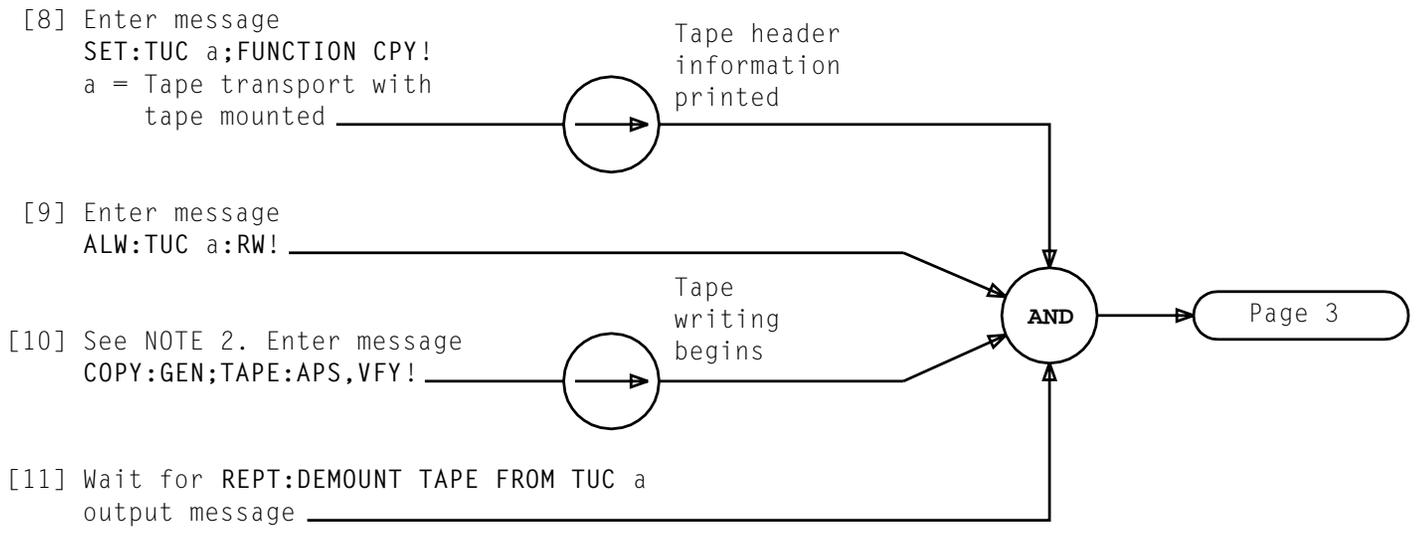
- [6] Mount blank or erasable tape (with write-enable ring) on available tape transport [DLP-543]

- [7] Enter message CLR:ADSFUNC CPY!

NOTE 1
If necessary, AT&T Practice 234-020-010 should be referenced for tape storage requirements and procedures

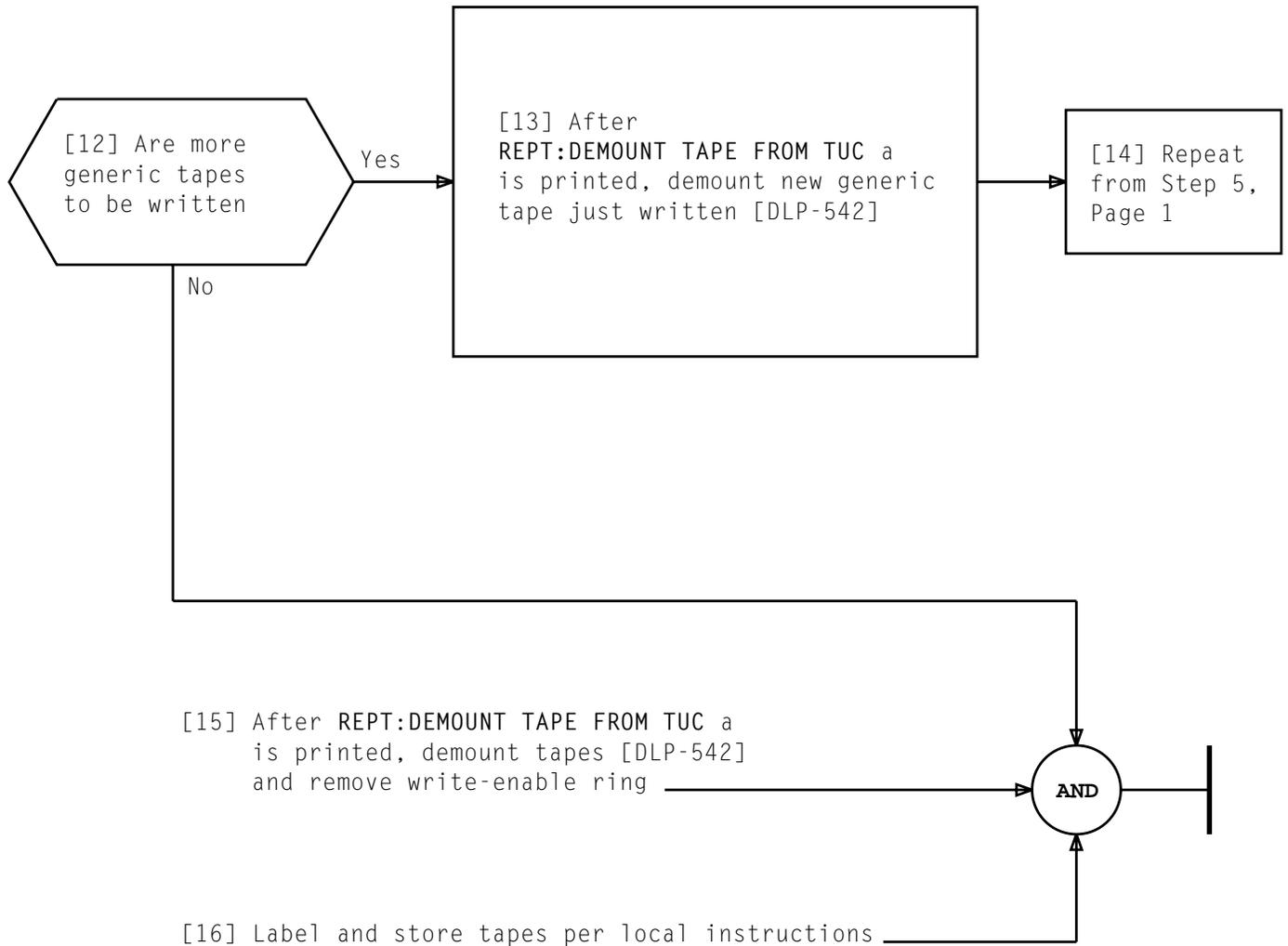
CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

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NOTE 2
 After generic tape is written, tape will rewind and be verified. After verification has been completed, REPT:DEMOUNT TAPE FROM TUC a message is received

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WRITE GENERIC TAPE(S) (TWRP WRITE - 800 BPI)

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[1] See CAUTION 1. Inform Network Management Center not to make changes to the NWM data base via Page CN20 while tape writing is in progress

[2] Select available tape transport for mounting tape to be written. Demount tape if one is mounted [DLP-542]

[3] Mount blank, or erasable, tape with write-enable ring attached [DLP-543]

At TTY:

[4] Enter message
CLR:ADSFUNC CPY!

[5] Enter message
SET:TUC a;FUNCTION CPY!

[6] Check header information.
If tape is blank or erasable,
enter message ALW:TUC a:RW!

[7] Enter message
COPY: NWM;TAPE:VFY!

Inhibits set
and tape
mounted

Tape header
information
printed

Writing of
tape begins
[NOTE 1]

Tape
writing
started

Page 2

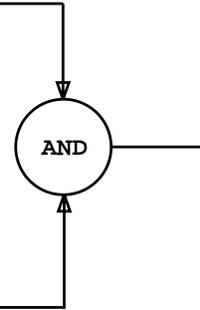
NOTE 1
After network management tape is written, COPY:NWM;TAPE COMPL date and time are printed. The tape then rewinds and is verified. After verification has been completed, COPY:VFY;TAPE COMPL is printed followed by REPT:DEMOUNT TAPE FROM TUC a

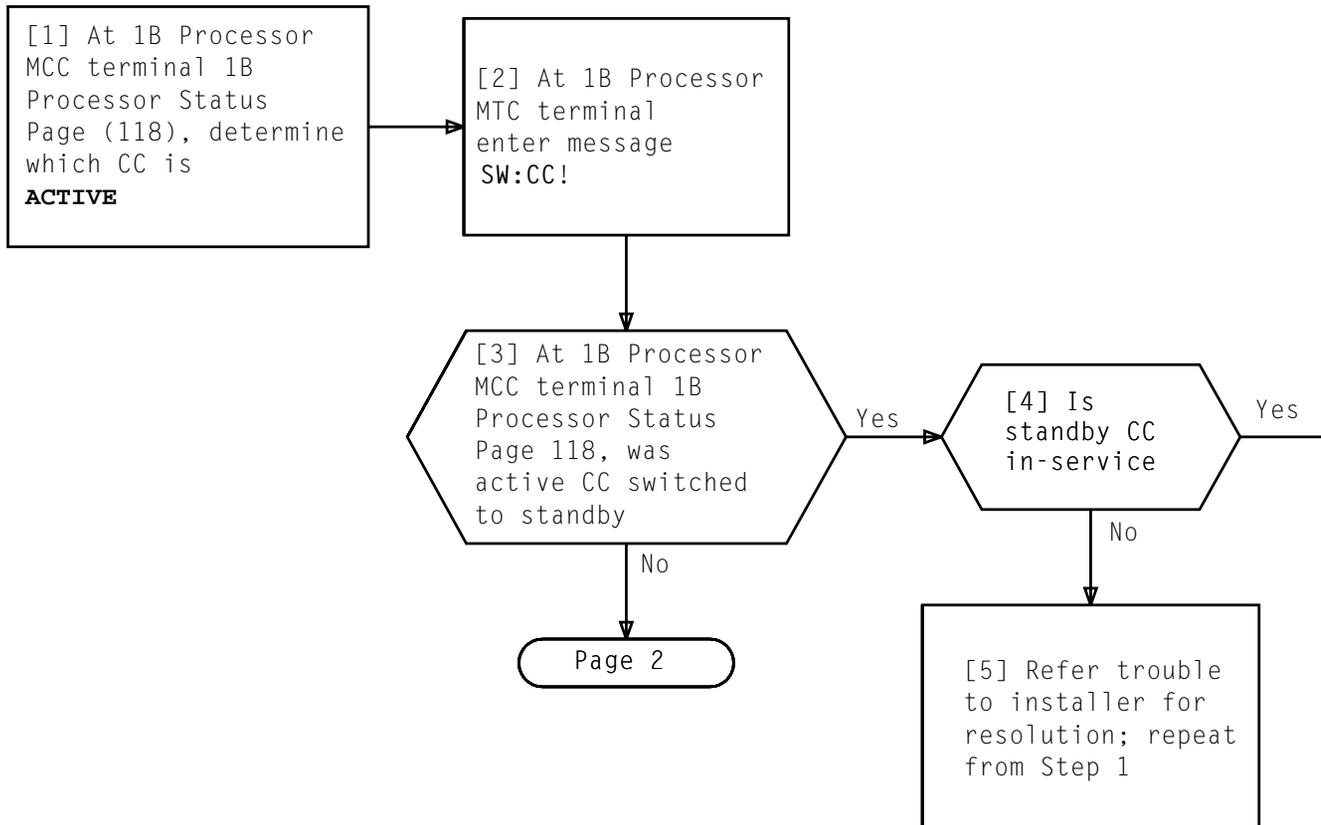
CAUTION 1
Certain system audits are inhibited during tape writing; therefore, tape writing should be done during light traffic periods

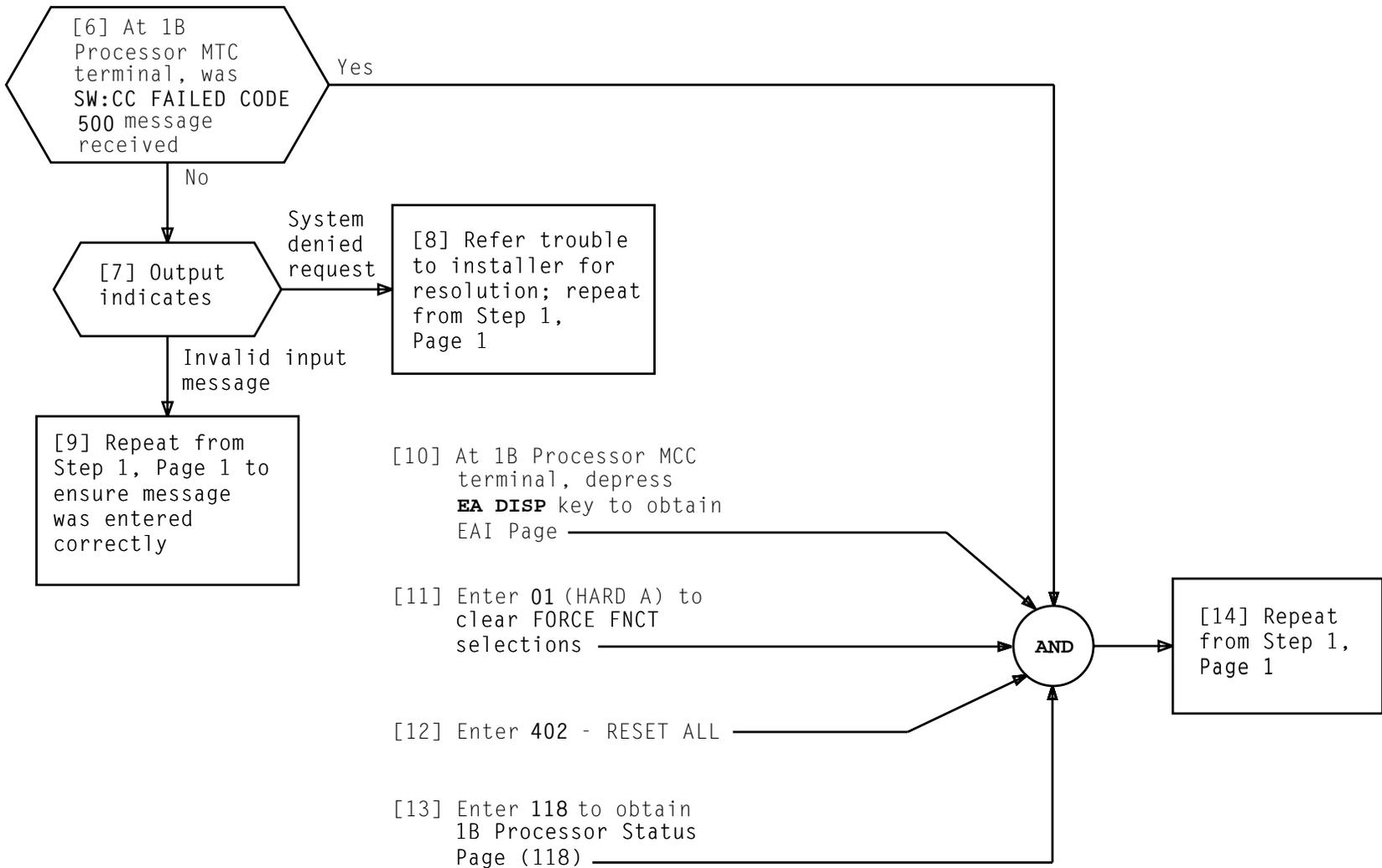
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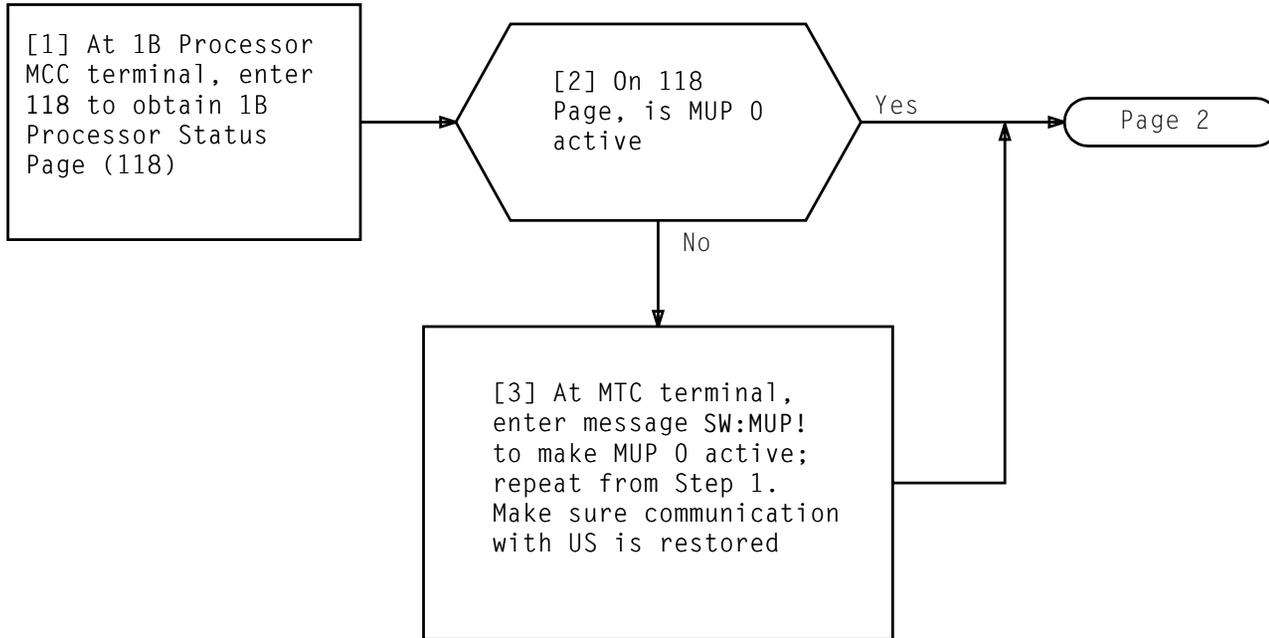
[8] After tape has been written
and verified and REPT:DEMOUNT
TAPE FROM TUC a is printed, demount
tape just written [DLP-542] and
remove write-enable ring

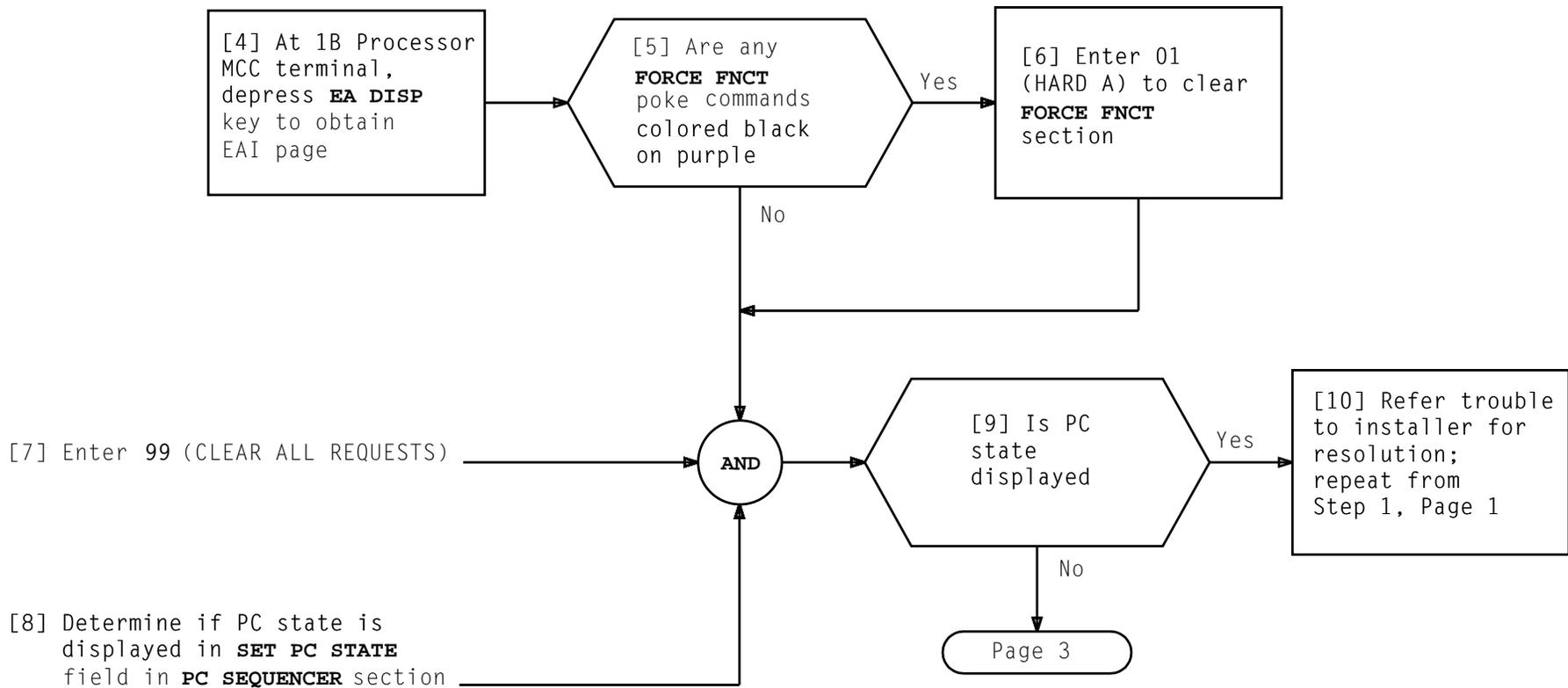
[9] Label and store tape per
local instructions

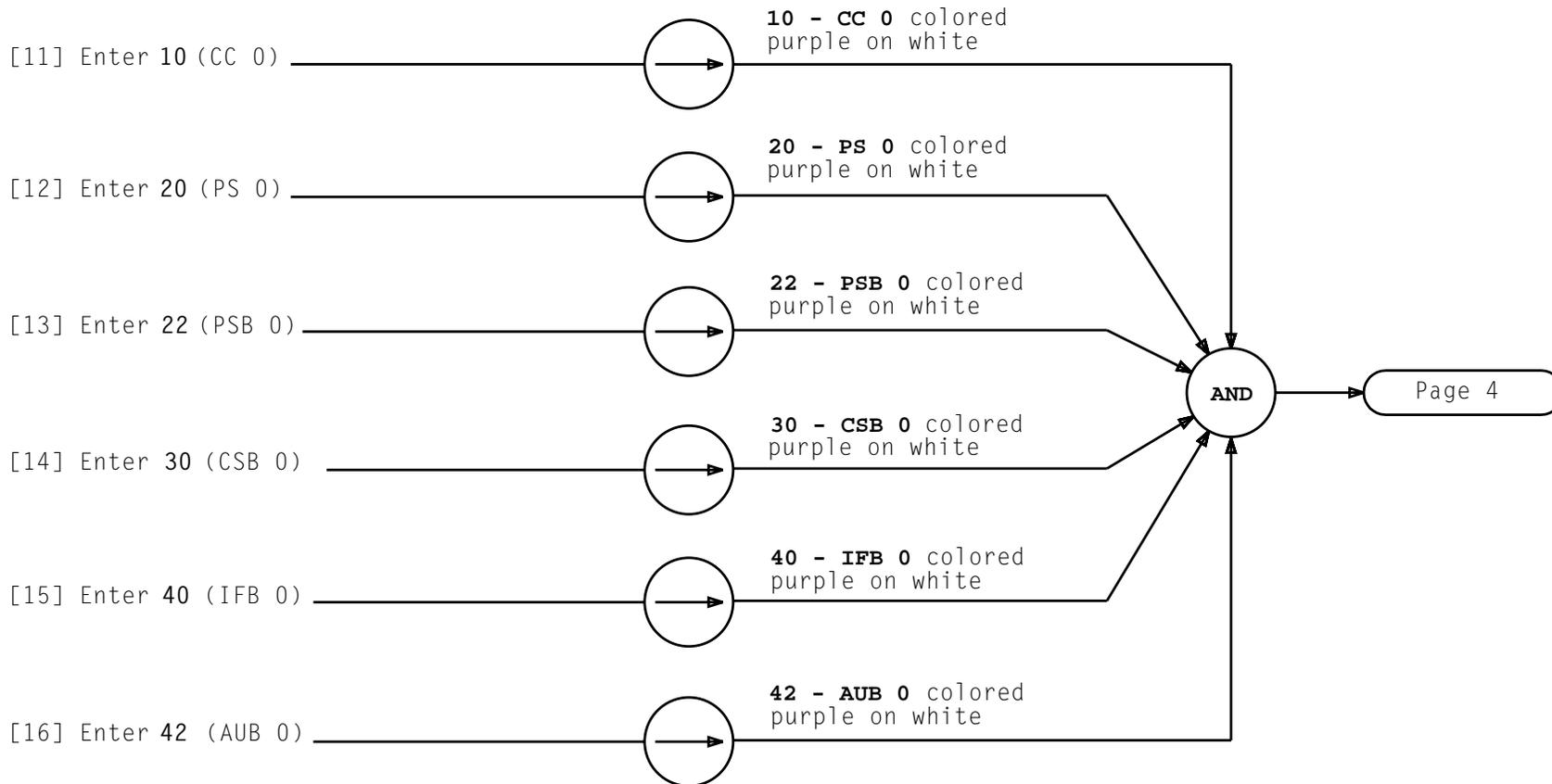






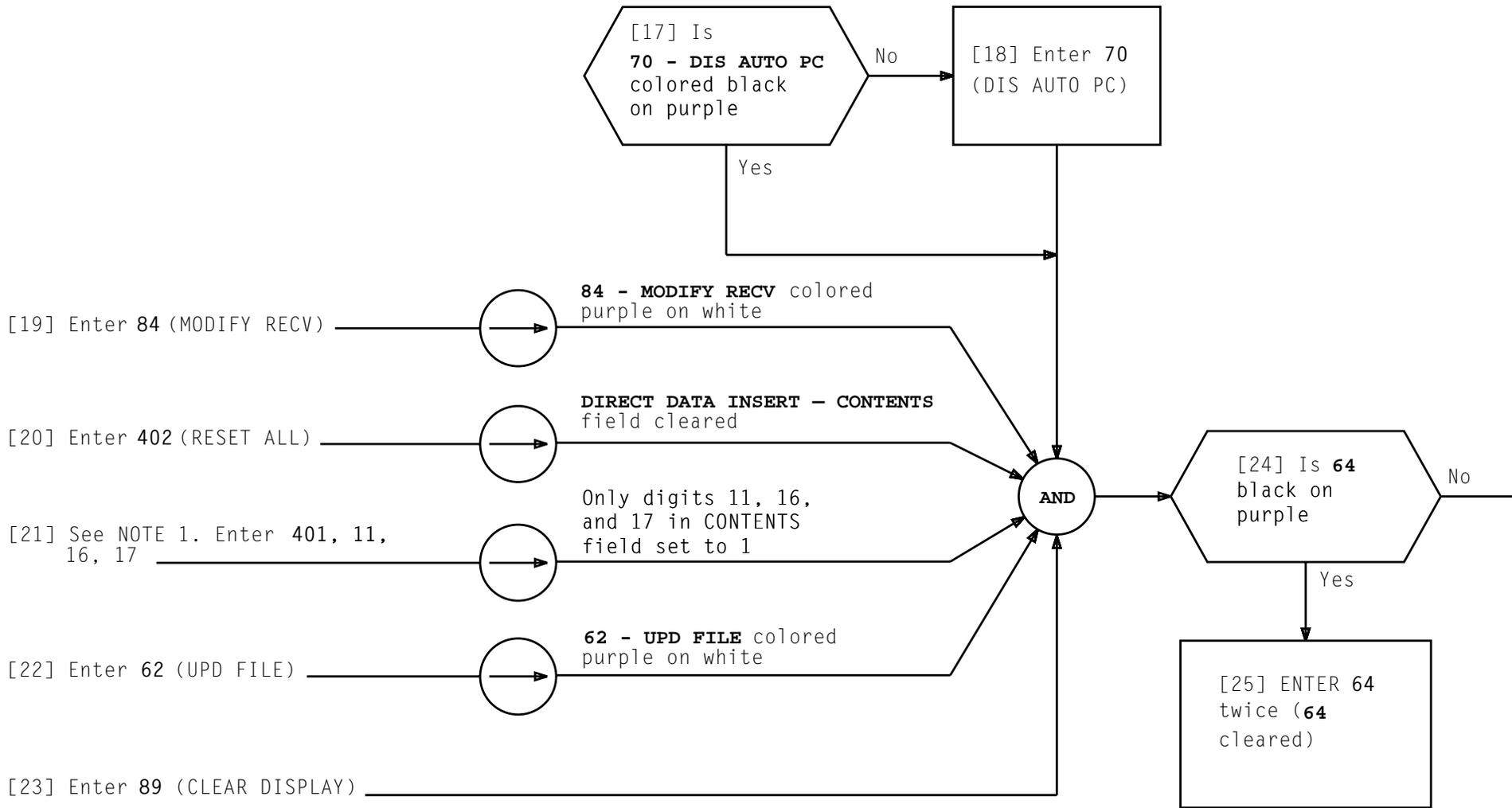






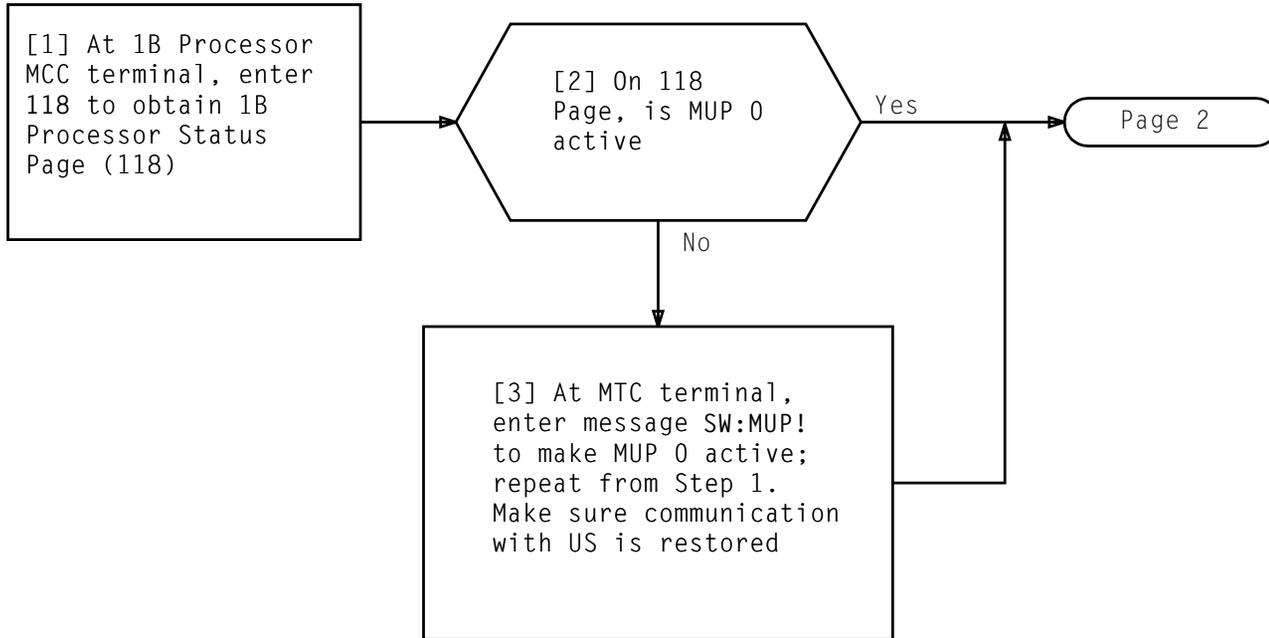
PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY - PRIOR TO UPDATE

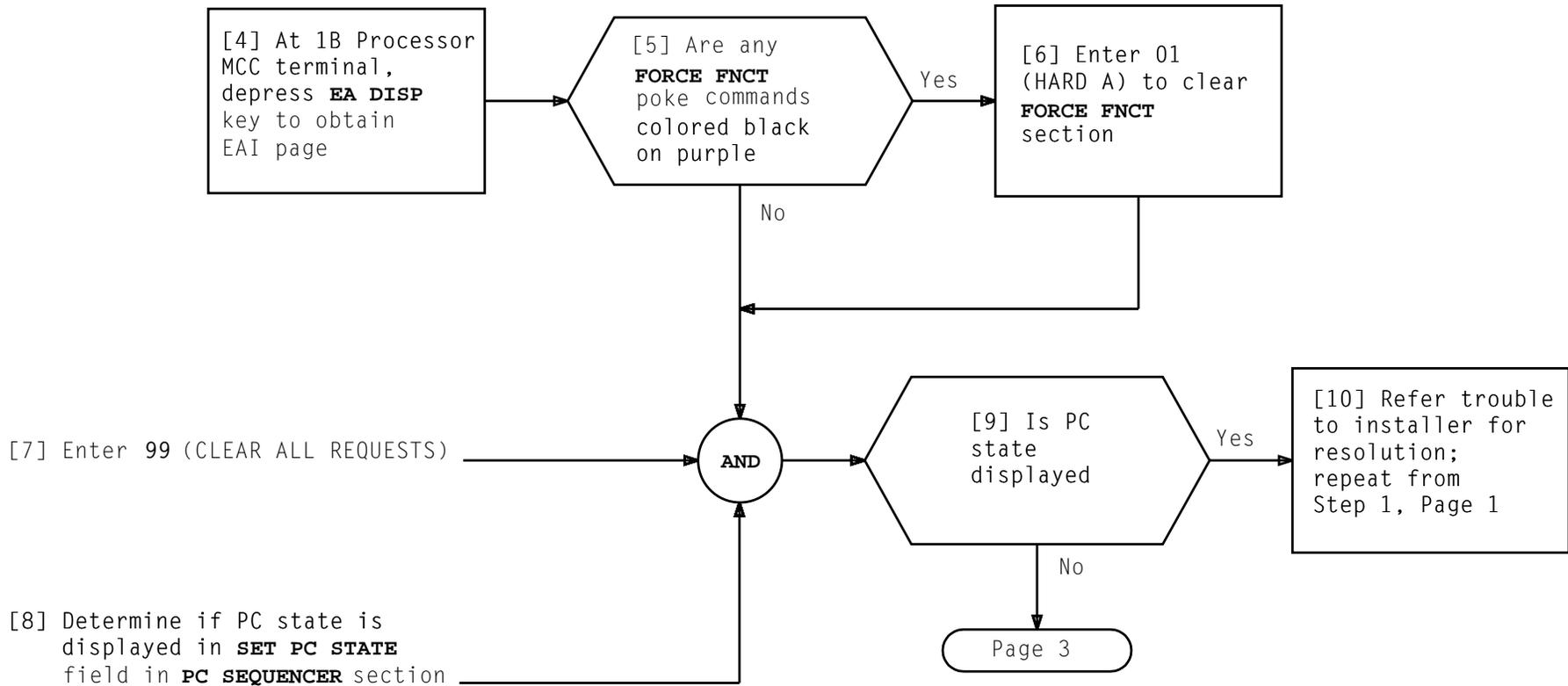
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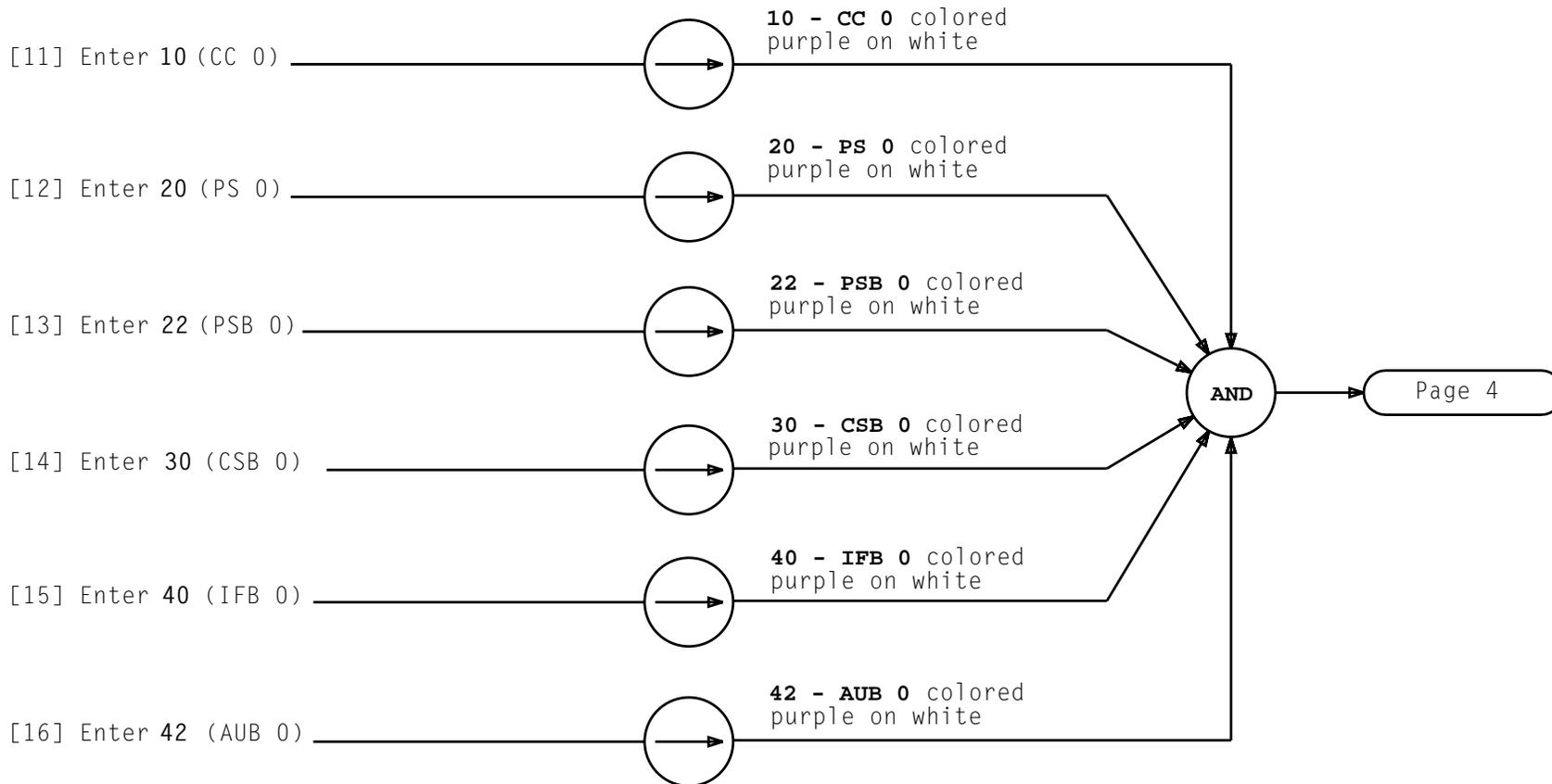


NOTE 1	
Selections with their meanings can be seen on 119 page	
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PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY - PRIOR TO UPDATE

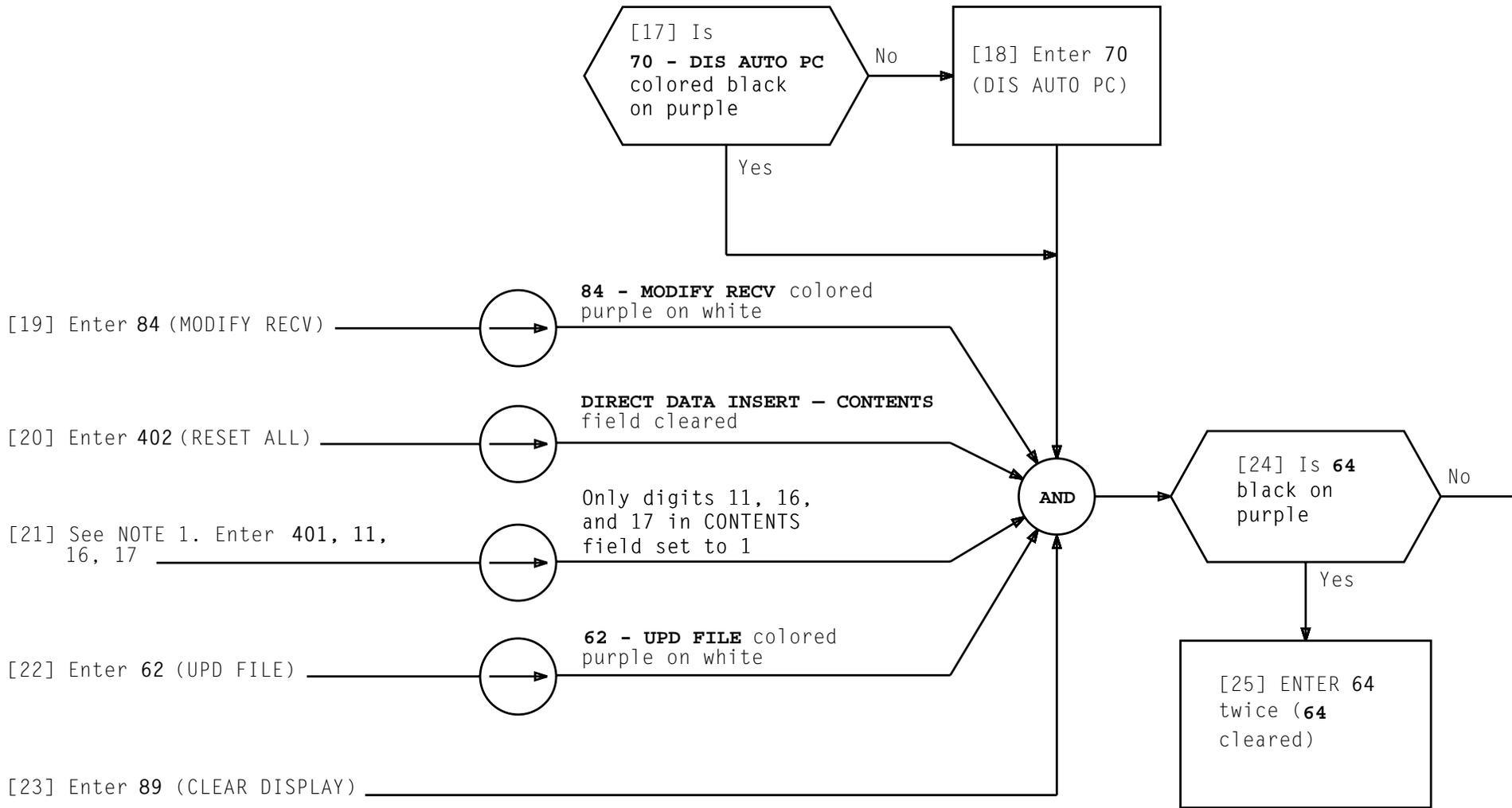






PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY - PRIOR TO UPDATE

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NOTE 1	
Selections with their meanings can be seen on 119 page	
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PREPARE 1B PROCESSOR MCC TERMINAL FOR MANUAL RECOVERY - PRIOR TO UPDATE

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
• IXL-001 • NTP-002 • NTP-003 • NTP-004 • NTP-005		• DLP-521 • DLP-522 • DLP-523 • DLP-524 • DLP-525		• DLP-556 • DLP-557 • DLP-558 • DLP-559 • DLP-560							
• NTP-006 • NTP-007 • NTP-008 • NTP-009 • NTP-010		• DLP-526 • DLP-527 • DLP-528 • DLP-529 • DLP-530		• DLP-561 • DLP-562 • DLP-563 DLP-564 CKL-891							
• NTP-011 • NTP-012 • TAD-100 • TAD-101 • DLP-500		• DLP-531 • DLP-532 • DLP-533 • DLP-534 • DLP-535		TNG-893							
• DLP-501 • DLP-502 • DLP-503 • DLP-504 • DLP-505		• DLP-536 • DLP-537 • DLP-538 • DLP-539 • DLP-540									
• DLP-506 • DLP-507 • DLP-508 • DLP-509 • DLP-510		• DLP-541 • DLP-542 • DLP-543 • DLP-544 • DLP-545									
• DLP-511 • DLP-512 • DLP-513 • DLP-514 • DLP-515		• DLP-546 • DLP-547 • DLP-548 • DLP-549 • DLP-550									
• DLP-516 • DLP-517 • DLP-518 • DLP-519 • DLP-520		• DLP-551 • DLP-552 • DLP-553 • DLP-554 • DLP-555									

• REVISED OR ADDED ITEM

□ CANCELED ITEM

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CKL

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CHECKLIST