# REMOTE MEMORY ADMINISTRATION POSITION (RMAP) OPERATING PROCEDURES

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ÓNITENITO

#### 1. GENERAL

1.01 This section provides operating procedures for the Remote Memory Administration Position (RMAP) (Fig. 1). It describes position operations and operation of position equipment for maintenance purposes.

**1.02** Whenever this section is reissued, the reasons for reissue will be listed in this paragraph.

**1.03** Refer to Section 190-521-202 for methods of isolating troubles.

1.04 Part 2 of this section is structured for system operation, and Part 3 contains detailed position operations. When performing position operations, it may or may not be necessary to refer to Part 3 for detailed procedures (depending on experience level). References to Part 3 are given in Part 2 but can be disregarded when not needed.

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# 2. POSITION OPERATION

# A. Position Startup

- (1) Install a history and pending disk in the disk drive (Part 3I).
- (2) Perform the VT100 video display terminal startup (Part 3E).
- (3) Start up the 43 Receive-Only Printer (ROP) (Part 3M).
- (4) Start up the processor (Part 3A).

## **B.** Verification of Position Operation

- (1) Verify that the disk drive is operating properly (Part 3J).
- (2) Verify that the VT100 video display terminal is operational (Part 3F).
- (3) Verify that the 43 ROP is operational (Part 3N).
- (4) Verify that the processor is operational (Part 3B).

# C. Connecting To an ESS

#### **Dedicated Switching Arrangement**

Refer to local instructions.

# **Restricted Centrex Arrangement**

- If a high-speed data link is used (1200 BAUD), press the HS button on the data set. The button should lock and the HS lamp should light. If low-speed data link is used (under 1200 BAUD), proceed to Step (2).
- (2) Press the TALK button on the telephone set. Lift the receiver and, when dial tone is heard, dial the telephone number of the ESS office to which the RC message is to be sent.
- (3) When a high pitched tone is heard, press the red DATA button on the telephone set.The DATA button is now lighted and the TALK button returned to the up position.

(4) Hang up the telephone receiver. The connection is now made.

# D. Disconnecting From an ESS

- (1) Lift the receiver off hook.
- (2) Press the TALK button on the telephone set.
- (3) Place the telephone receiver on-hook. The TALK lamp extinguished and the call is disconnected.

#### E. Position Stop and Shutdown

## Normal Stop

- (1) Perform a processor shutdown (Part 3C).
  - (2) Remove the disks from the disk drive (Part 3K).

## Power Shutdown

- (1) Perform a processor shutdown (Part 3C).
- (2) Perform a processor power shutdown (Part 3D).
- (3) Perform a VT100 video display terminal shutdown (Part 3H).
- (4) Perform a 43 ROP shutdown (Part 3P).

# F. Recovery From Power Failure

2.01 The procedure for isolating power failure is outlined in Section 190-521-202. To recover from power failure, perform the Position Startup procedure in A and the Power Failure Recovery procedure in the Administrator Procedural Manual.

#### 3. COMPONENT OPERATION

#### PDP-11/03 PROCESSOR

#### A. Startup

**3.01** To power up and start up the PDP-11/03 processor, proceed as follows:

*Note:* The floppy disk unit should have disks installed.

- (1) At the 871A power controller, set the OFF/REMOTE ON/LOCAL ON switch to the REMOTE ON position.
- (2) Check to ensure that the MAIN POWER breaker is in the 1 (on) position. Normally, this breaker will be left in the 1 (on) position and the AUX ON/OFF switch will be used to power the RMAP up and down.
- (3) At the front panel (Fig. 2), set the AUX ON/OFF switch to the ON position.
- (4) Place the HALT switch in the UP position.
- (5) Lift and then release the RESTART switch.

#### **B.** Verification of Operation

3.02 When the processor is operational, the PWR OK and RUN lamps on processor panel are lighted. If processor PWR OK lamp is not lighted, refer to Section 190-521-202 for trouble sectionalizing procedures. If the RUN lamp is not lighted, repeat the processor startup procedure (A) and verify that the correct disk(s) are loaded.

#### C. Shutdown

3.03 To halt the program, operate the DELETE key (graceful stop) or CTRL/keys (abort). The program that is running will stop, and the cursor will return to the NEXT COMMAND line. Then enter the QUIT command. Do not use the HALT switch on the processor. The RMAP system software is not configured to use the halt signal. If HALT is used, a restart will have to be used to restore the RMAP, and an audit of the data base may have to be run.

### D. Power Shutdown

**3.04** After performing the processor shutdown procedure at the front panel, set the AUX ON/OFF switch to OFF.

#### VT100 VIDEO DISPLAY TERMINAL

#### E. Startup

3.05 The video display terminal is started by operating the power switch to the up position. The switch is located at the lower right side on the back of the unit (viewing the unit from the back). If it is started following maintenance, the administrator should verify that the options are set per the Administrative Procedural Manual, section RMAP Terminal Hardware: VT100.

# F. Verification of Operation

3.06 When the terminal is operational, about 60 seconds after power switch is operated, the screen brightens, cursor appears, and the ON LINE lamp lights. The RMAP will now accept commands entered through the keyboard. If the terminal is not operational, proceed to paragraph 3.07.

#### G. Recovery From Troubles

- **3.07** If the terminal appears not to be operational, proceed as follows:
  - Adjust the screen brightness, operate SETUP key, and then ↑ key to increase brightness
  - or  $\downarrow$  key to decrease brightness.
  - (2) Go from local condition to on-line condition as follows:
    - Depress SETUP key.
    - Depress 4 key (key for number).
    - Depress SETUP key again.
  - (3) To clear other problems which may exist, operate SETUP key, 0 (zero/reset) key, and then SETUP key again.
  - (4) The administrator should check that the options in the VT100 are set per Administrative Procedural Manual, section RMAP Terminal Hardware VT100.
  - (5) If Steps (1) through (4) do not clear the problems, call the computer maintenance organization.

#### H. Shutdown

3.08 Normally, the terminal should be left on but

plugged into one of the switched outlets on the back of the RMAP power supply. When the RMAP is turned off, the terminal will also be turned off.

# RX-02 DISK DRIVE

- I. Installation of Disks
- **3.09** The following procedures describe disk installation:

Caution: Do not open drive(s) while it is in operation and being accessed by the processor. Data may be incorrectly recorded resulting in data loss and requiring an audit to be run by RMAP.

**Note:** The disk is contained in a black jacket. The disk and the jacket are installed in the disk drive. The disk and jacket are stored in an envelope when not installed in the disk drive.

- Depress the pushbutton at front of disk unit (Fig. 3). The spring-loaded front cover will open.
- (2) The disk may easily be inserted. Insert the disk with the label up (the jacket seams down), ensuring that it is seated on the drive spindle.
- (3) Close the cover. The cover will automatically lock when the bar is pushed down. An audible click will be heard when it is locked in place.

#### J. Verification of Operation

3.10 Verify that the disk drive is operational by monitoring the system for proper operation. Listen for audible clicking sounds which indicate the head is moving over the disk.

#### K. Removal of Disks

- 3.11 The following procedures describe disk removal:
  - (1) Perform procedures in C Shutdown.

Caution: See Caution in paragraph 3.09.

(2) Depress the pushbutton at front of disk unit (Fig. 3). The spring loaded front cover will open. (3) The disk may be removed by lifting the disk and jacket to clear the spindle.

#### . Care of Disks

3.12 To prolong the disk life and prevent errors when recording or reading, reasonable care should be taken when handling the media. The following handling recommendations should be followed to prevent unnecessary loss of data or interruptions of system operations:

- Do not write on the envelope or jacket containing the disk. Write any information on a label prior to affixing it to the disk jacket.
- Do not use paper clips on the disk.
- Do not use writing instruments, such as lead or grease pencils, that leave flakes on the jacket of the media.
- Do not touch the disk surface exposed in the disk slot or index hole.
- Do not clean the disk in any manner.
- Keep the disk away from the CRT, magnets, or tools that may have become magnetized. Any disk exposed to a magnetic field may lose information.
- Do not expose the disk to a heat source or sunlight.
- Always return the disk to the envelope supplied with it to protect the disk from dust and dirt. Disks not being used should be stored in a file box, if possible.
- When the disk is in use, protect the empty envelope from liquids, dust, and metallic materials.
- Do not place heavy items on the disk.
- Do not store disks on top of computer cabinets or in places where dirt can be blown by fans into the disk interior.
- If a disk has been exposed to temperatures outside the operating range, allow 5 minutes for thermal stabilization before use. The

disk should be removed from its packaging during this time.

#### **43 RECEIVE-ONLY PRINTER**

#### M. Startup

3.13 Depress the upper half of the ON/OFF switch located at the right rear of the ROP. The printer head will move fully left and perform one line feed. The DATA lamp (Fig. 4) will light if no alarm condition exists. Controls and indicators are shown in Table A.

## N. Verification of Operation

3.14 The RMAP is operational when the DATA lamp is lighted. If the TERM READY lamp lights and the DATA lamp does not light, check the cabling to the RMAP, and verify that the RMAP is on. The RMAP automatically puts the ROP into the data mode. Check to determine if there is enough paper in the ROP. Also, run the printer test to see if ribbon is printing dark enough.

#### **O. Recovery From Troubles**

#### Clearing Alarm

- (1) Check to ensure cover is closed.
- (2) Check to see if ROP is out of paper.

#### **Installing** Paper

3.15 If paper-out condition occurs (ALARM lamp lights) while data is being received, wait until DATA lamp extinguishes. If DATA lamp is lighted and no data is being received, to prevent disconnecting call, either open cover or turn off power. Install new paper as follows:

- (1) Pull and latch up the paper-out sensing lever (located at the left of platen).
- (2) Lift rear edge of paper separator and tilt it forward.
- (3) Place new supply of paper in position.
- (4) Fold back first sheet and feed paper over deflector and behind paper separator. Line

- up sprocket holes on leading edge of both sides of paper with sprocket pins.
- (5) Insert paper under rear side of platen and release paper separator.
- (6) Using the platen knob, advance the paper to the paper guide.

*Note:* With power off, platen is free rolling.

- (7) Lift paper guide. This unlatches the paper-out sensing lever.
- (8) Using the platen knob, advance the paper under the paper guide and close the guide.
- (9) Turn on power or depress RESET key as appropriate to restore terminal to ready or data mode.

# Installing Ribbon

- (1) Turn power off and open the cover.
- (2) Release the print head by pulling white locking handle (located beside print head) fully forward. Manually center the printing head.
- (3) Grasp and lift the cartridge containing the used ribbon and discard it. (The cartridge is held in place magnetically.)
- (4) Holding new cartridge over rollers (at the left side), engage ribbon on rollers and pull cartridge toward right side of terminal.
- (5) Pass the ribbon between print head and carriage rollers.
- (6) Place the cartridge into the two locating holes in ribbon bracket.
- (7) Position the print head against the ribbon and lock in place by pushing the locking handle to the rear. Check that the ribbon is properly positioned in all four rollers and on print head.
- (8) Close the cover and restore power.

# P. Shutdown

**3.16** Normally, the power to the ROP should be left turned on, and the power plug connected

into a switched outlet on the RMAP power controller. When RMAP is turned off, the ROP is also turned off. There is also an ON/OFF switch located on the back of the ROP.



Fig. 1-Remote Memory Administration Position (RMAP)



Fig. 2-PDP-11/03 Processor



Fig. 3—Floppy Disk Unit



Fig. 4—Receive-Only Printer

# TABLE A

# OPERATIONAL CONTROLS AND STATUS INDICATORS FOR 43 RECEIVE-ONLY PRINTER

CONTROL OR INDICATOR	FUNCTION					
RESET (Key only)	Places terminal in terminal ready mode or data mode. Clears alarm condition following paper replacement or closing of cover. Gives a line feed.					
PRINTER TEST (Key only)	Initiates a test that consists of continuous printing of the 94-character printed set. Depression of the PRINTER TEST key initiates the test and turns on the ALARM lamp. As long as this key is depressed, it keeps running the test.					
TERM READY (Lamp only)	On power up, the lamp flashes and goes out. If the lamp stays on, there is a problem in cable, RMAP, or printer.					
DATA (Lamp only)	Once the printer is powered up, the lamp should light and stay lighted.					
ALARM (Lamp only)	When lamp is lighted, this indicates an alarm condition. Alarm conditions are paper-out, cover open, and printer test.					