MAINDEC: -Ø8-DIRXB-D-D

TITLE: -PX8/PX91 DATA RELIABILITY/EXERCISER PROGRAM

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DATE: -MAY ,1976
MAINTAINER: -DIAGNOSTIC E

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ABSTRACT

2 REQUIREMENTS

2.2

EQUIPMENT
STORAGE
PRELIMINARY DIAGNOSTIC PROGRAMS

LOADING PRODEEDURE

STARTING PROCEDURE

STARTING ADDRESS LOCATIONS OPERATOR ACTION

PROGRAM ACTION
TEST PARAMATER SELECTIONS

4.4.1 4.4.2 DISKETTE DRIVE PATTERNS, TESTS, AND SEQUENCES

OPERATING PROCEDURE

ERROR DETECTION

PROGRAM DEFINITIONS OF:

6.1.1 WRITE ERROR

READ ERROR (CRC)
CRC AND DATA ERROR
NO CRC BUT DATA ERROR
CRC BUT NO DATA ERROR

6.1.5.1 SUMCHECK ERROR

6.1.6 6.1.7 SEEK ERROR PARITY ERROR

6.2 DIFINITIVE ERROR CODES

UNEXPECTED OR MISSING ERROR CONDITIONS:

6.3

MISSING D.D. MARK UNEXPECTED D.D. MARK MISSING ERROR FLAG

6,3,2 6,3,3 6,3,4 6,3,5

UNEXPECTED RX01 IRQ DEVICE TEST HUNG

6.4 SYSTEM FAILURES: (UNKNOWN IRQ)

SEQ 0002

## ERROR REPORTING

SEQ 0003

- 7.1.2 7.1.1
- EXAMPLES
  ERROR RECOVERY
  FATAL ERROR RECOVERY

# MANUAL INTERVENTION

8.1.1 FIELD ENGINEERING TROUBLE SHORTING AIDS 8.1.2 RESTRICTIONS

8.2 COMPATABILITY VERIFICATION

#### 9. PARAMETER DESCRIPTION

PATTERN (PDP) DESCRIPTION
TEST (TTT) DESCRIPTION
SEQUENCE (SSS) DESCRIPTION
MODE (M) 8/12 BIT DESCRIPTION
DELETED DATA (D) DESCRIPTION

10. CONSOLE PACKAGE ADDENDUM

11. APT-8 INTERFACE

12. PROGRAM LISTING

#### ABSTRACT

ASSOCIATED WITH THE RX01 DISKETTE MICROPROCESSOR CONTROLLER, AND RX8 PERTAINING TO THE DATA RELIABILITY OF THE DISKETTE DRIVE(S) THAT ARE THIS PROGRAM IS DESIGNED FOR THE COLLECTION OF STATISTICAL INFORMATION

THE CATEGORIES OF STATISTICAL INFORMATION ACCUMULATED ARE:

INTERFACE,

- COMPLETED PASSES OF THE PROGRAM
- (B) PROGRAM RESTARTS (BOTH MANUAL AND PROGRAMMED AUTOMATIC)
- 3 INTERUM STATISTICAL REPORTS
- g RECOVERABLE AND NON-RECOVERABLE (PER DISKETTE) OF:
- WRITE ERROR
- (2) READ ERROR
- (4) CRC AND DATA ERROR NO CRC BUT DATA ERROR
- (5) CRC BUT NO DATA ERROR
- (6) SEEK ERROR
- PARITY ERROR
- (F)
- TOTAL WRITES/READS (PER DISKETTE)
  TRACK ACCESS (ACTUATOR MOVEMENTS TO THAT TRACK)
- 9 SELF ACCESS (WITH NO ACTUATOR MOVEMENTS TO THAT TRACK)
- CONTROL FAILURES WHICH RESTARTS THE PROGRAM: ALL ERRORS (PER TRACK/PER DISKETTE) EXCLUDING "UNEXPECTED"
- UNEXPECTED RX01 INTERRUPT REQUEST
- MISSING ERROR FLAG
- DEVICE TEST HUNG

#### REVISION D

THIS REVISION CONTAINS THE CODE FOR THE CONSOLE PACKAGE.
THE CODE FOR SELECTING THE DEVICE CODES FOR THE CONTROLLER
HAS BEEN CHANGED TO ALOW DEVICE CODE SELECTION VIA SWITCH REGISTER INTERFACES FOR THE APT-8 SYSTEM HAVE BEEN PROVIDED ALLOWING THIS DIAGNOSTIC TO RUN UNDER APT-8.

THE REAL TIME CLOCK ROUTINE AND ANY DECIMAL ROUTINES HAVE BEEN DELETED SETTINGS. CONSERVE SPACE.

### 2. REGUL...

2.1 EQUIPMENT

PDP-8/E TYPE GENERATION COMPUTER WITH 4K OF CORE, CONSOLE SWITCHES,

TELETYPE, AND AN RX01 DISKETTE SUBSYSTEM.