APPENDIX B : ERROR REPORTS

Introduction

During the execution of control commands, processors and utilities (i.e. programs) errors may occur which result in the output of error reports on the console typewriter or printer. Reports which are unique to particular control commands, processors or utilities are described in sections 6.12, 8.2.4, 8.3.4 and 9.1 of this Manual. Reports which may be output during the execution of **any** type of program are described in this appendix.

Abort Reports

When a program is aborted a report may be output on the device with file code /1 (standard for console typewriter) or file code /2 (standard for printer) specifying the following:

* The location at which the program abort occurred:
  PROG ABORTED AT XXXX

* The reason for the abort:
  NOT WIRED INSTRUCTION
  OVERFLOW IN SIMULATION ROUTINE SAVE AREA
  BUFFER AREA DESTROYED
  TOO MANY SCHEDULED LABELS
  OPERATOR ABORT
  BUFFER ALLOCATION OVERFLOW
  DISK OVERFLOW
  DISK QUEUE OVERFLOW
  MEMORY OVERFLOW DURING LOADING PHASE

* The contents of the PSW and the registers at the moment of the abort.

Peripheral Unit Error Report

When an error occurs during an I/O operation on a peripheral unit the following report is output on the device with file code /1 (standard for console typewriter):

  PU ⊔ device-name,status-code,RY

where:

device-name	identifies the peripheral device (see section 4.1)
status-code	indicates the type of error (see status code section below)
RY	indicates that the user may retry the operation.

The user may respond to such a report with an RY control message (retry an I/O operation) or an RD control message (release device). See section 7.4.

Disk Error Report

When an error occurs during an I/O operation on a disk unit the following report is output on the device with file code /1 (standard for console typewriter):

  DKER ⊔ unit-address ⊔ location ⊔ status-code

where:

unit-address   identifies the disk unit (second two digits of device name — see section 4.2).

location   indicates in a single number the cylinder, track and sector number at which the error occurred.

status-code   indicates the type of error (see status code section below).

Status Codes

The status code is printed as a hexadecimal representation of a 16 bit status word. The code must be translated into binary form before it is analysed by the user. The analysis of the resulting binary word is described below.

The following tables show the significance of each bit in the word. The bits are numbered from 0 to 15. The leftmost bit is counted as 0. If bits 0 and 1 are both set to 1 the Software Status Table should be referred to. Otherwise the Control Unit Status Table should be referred to.

Software Status Table

Bit set to 1	Significance
0	See remaining bits
1	See remaining bits
2—10	Not significant
11	Function unknown or not compatible with device
12	Buffer size is illegal
13	Buffer address is illegal
14	Device attached to other program
15	Illegal file code or non-existing

Control Unit Status Table

Bit set to 1	Significance	TY	CR	DK	LP	TK	MT
0	—						
1	ready			X		X	X
2	rewind						X
3	tape mark has been read					X	X
4	no data					X	
5	on cylinder load point			X		X	X
6	seek error			X			
6	write unable					X	X
7	A or B side					X	
8	Device address			X		X	X
9	Device address			X		X	X
10	EOT					X	
11	program error			X		X	X
12	Incorrect length		X	X		X	X
13	Parity error					X	
13	Data fault		X	X			X
14	throughput error	X	X	X		X	X
15	not operable	X	X	X	X	X	X

where:

TY is console typewriter
CR is card reader
DK is disk
LP is line printer
TK is cassette unit
MT is mag. tape unit