

UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date : Week ended 23 September 1971
Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Friday	17 Sept	System hang up System failure System failure System failure	Monitor reloaded 	Offline 1540-1622. Offline 1720-1738. Offline 1819-1826. Offline 1904-1910.
Monday	20 Sept	Bell on CTY ringing Unscheduled CDR maintenance System failure	Monitor reloaded 	Offline 1040-1104. Offline 1459-1608. Offline 1820-1850.
Tuesday	21 Sept	System failure System failure Unscheduled CDR maintenance System failure	 	Offline 1403-1419. Offline 1457-1500. Offline 2020-2045. Offline 2205-2315.
Wednesday	22 Sept	System failure System failure System failure	 	Offline 1545-1600. Offline 1755-1804. Offline 2025-2033.
Thursday	23 Sept	Unscheduled CDR maintenance System failure System failure	 	Offline 1025-1120. Offline 1847-1906. Offline 2120-2124.

Schedule for forthcoming week: Maintenance 0700-0900, 2300-2400.
Operations 1000-2215.

1.2 GE-225 System

Schedule for forthcoming week: Maintenance 0700-0900, 2000-2130.
Operations 0900-2000, 2130-2400.

2. NEW FORTRAN OPERATING SYSTEM

A new FORTRAN Operating System will be implemented on the PDP-10 on Monday 27 September. Full details of the new system are given in the attached special edition of the newsletter.

3. DECODE ERROR

When running a program from an area other than your own, for example in BATCH, a card of the form

```
.256.filename/REL
```

should not have a space between the second dot and the name of the file. The insertion of a space yields wrong results. A portion of the command is incorrectly taken as the first data record.

4. OVERLAY COMMAND ERROR

The command

```
.OVERLAY( $\emptyset$ )filename
```

gives the message 'OVERLAY SUBROUTINE NOT FOUND' at loading. To overcome this, users should compile the main program first, and thus have it on the load list when the first overlay command is given. This error will be fixed shortly.

5. USE OF REWIND, ENDFILE AND CALL RELEASE STATEMENTS

With the increased use of disk files, many users have reported getting the monitor message,

```
ERROR IN JOB n  
ADDRESS CHECK FOR DEVICE DSK; UWO AT USER location
```

This has in some cases been traced to excessive use of CALL RELEASE (n) statements which release the device but do not reclaim the memory locations used for buffers.

ENDFILE n statements should be used if the assignment of a filename to the logical device is not to be broken.

If another file is to be accessed on the logical unit, the programmer should use REWIND n.

For further details on the REWIND n and ENDFILE n statements, see the FORTRAN manual, MNT-5, and the Computer Centre Bulletin Vol 4, p 122.

6. DEPARTMENT OF COMPUTER SCIENCE SEMINAR

A Data-Oriented Addressing System

Dr. P.M. Fenwick

(Research Fellow, Australian National University Computer Centre)

Synopsis:

The design of a computer addressing system involves the consideration of factors such as character addressing v word addressing and the extent of the indexing and indirect addressing facilities. Problems can arise, especially in small computers, when the physical address is much larger than can be accommodated in the address part of an instruction.

After a brief discussion of the difficulties which arise when conventional addressing techniques are used in conjunction with data items of various lengths, and of the situations in which indexing and indirect addressing are actually needed, a new addressing system will be proposed. Important features of the proposed system are:-

- (i) The address is compact - a field of 11 or 12 bits is adequate for almost any size of memory
- (ii) The address includes a definition of the data type, so that conflicts between operation and operand modes are largely eliminated.

Location: G13, Engineering Building
Time: Wednesday 6th October, 2.00 p.m.

All interested are welcome.

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