# PRENTICE COMPUTER CENTRE
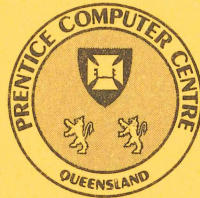
UNIVERSITY OF QUEENSLAND, ST. LUCIA, QUEENSLAND, AUSTRALIA. 4067.

# NEWSLETTER

N-300                                      May 1985

## CONTENTS

Authorized by the Director of the Computer Centre

COMPUTING SUPPORT CENTRE FOR UNIVERSITY OF QUEENSLAND AND GRIFFITH UNIVERSITY

## Principal Service Centres

| | |
|---|---|
| Contract Programming & Feasibility Studies | 3944 |
| System Status Automatic Answering | 3101 |
| General Enquiries & Course Enrolments | 3018 |
| Training & Courses Information | 3021 |
| Dial–up modem numbers | (300 bps)  3772977 |
| | (1200 bps) 3772922 |

## Consulting

| | Mail Box | Extension |
|---|---|---|
| Central HELP Desk | CCHELP | 3025 |
| Distributed Computing and Network HELP Desk | CCDCHELP | 3938 |
| Accounts | | 2188 |
| Operations | | 3212 |
| Program Librarian | | 3943 |

### Engineering and Maintenance

| | Mail Box |
|---|---|
| Development and communications | ENGIN |
| Mini/Micro support | ENGIN |

### Griffith University:

| | |
|---|---|
| Consulting | 7682 |
| Computer Services | 7560 |
| Computing Co-ordinator | 7561 |

### Terminals, CDN & Equipment Pricing

For prices on microcomputers, terminals, line charges, computer bits and pieces, type HELP PRICES on your terminal. This will provide appropriate menus.

# 1. Newsletter Summary

- Two cases have occurred where a malfunction of the airconditioning unit has caused damage to departmental computers. Seek advice from the Centre as such damage is not covered by maintenance contracts.

- We would be grateful if personal computer users could complete a survey form.

- Use of terminals from the home is increasing and more dial-in services are required. The V.23 auto answer dial-in facility provides split speeds — 75 bps for type in and 1200 bps for computer output. The modem cost is around $300. This service will be introduced in the near future.

- An item of interest is a brief description of the 2 Mbits/sec link between Griffith University and the Centre. This installation is the first of its type in Queensland.

- Some information is provided on the Local Area Network Ethernet which has been operational on campus since 1982.

- A new electronic mail system will be introduced as from 1.7.85.

- The Tektronics implementation of the Graphics Kernel System (an international standard for high level graphics functions) has been implemented on the VAX.

- Unfortunately, some users have made unauthorised use of the new Facit letter quality printer. There is a new procedure to gain access to this equipment.

- Details are provided of new training courses.

*Director*
*extension 2189*

# 2. Distributed Computing — Geoffrey Dengate, ext. 3391

## 2.1 Potential Damage to Computer Equipment

Departments are advised to check whether computer equipment (or indeed any valuable scientific equipment) located in an airconditioned room could suffer damage due to faulty airconditioning. For example, a Departmental mini-computer recently suffered water damage when an airconditioning unit, located above the computer system, lost temperature control. The simple solution to this particular problem is the installation of a drip tray under the unit to collect and divert any unwanted water.

The maintenance agreement departments have with the Prentice Computer Centre for computer equipment covers parts and labour for faults due to normal wear and tear operations. It does not cover damage caused by an external event, as outlined above.

*Geoffrey Dengate*
*extension 3391*

## 2.2 Personal Computer Survey

We are often asked by Personal Computer users if we know of any other user on campus who is using a particular package or personal computer similar to their own. In order to be able to answer these questions and to enable us to collate the major applications currently being used on PC's, we have prepared the attached questionnaire. If applicable, please complete the questionnaire (and/or copy and pass on to a colleague who has a PC) and return to PC Survey, Prentice Computer Centre, by 21 June 1985.

The information obtained will be stored using a data base (on a PC of course) and made available to the University community.

If you have any queries please phone David Keenan on ext. 4166 or myself.

*Geoffrey Dengate*
*extension 3391*

# 3. Engineering & Communications Services —
## Graham Rees, ext. 3288

### 3.1 V.23 AA Dial-In Service

There have been many enquiries recently about a V.23 auto answer dial-in facility to supplement the present V.21, V.22 and V.22.bis services. OK you win! We will introduce this service in the very near future — so keep watching this space.

*Graham Rees*
*extension 3288*

### 3.2 High Speed Communications Link between
### St Lucia and Griffith campuses

Recently a 2 Mbits/sec communications link has been installed between the Griffith and St Lucia campuses. Multiplexing equipment at each end of the link is used to provide a number of channels of lower speed:

(a)  A 1.54 Mbits/sec channel to trunk together the MICOMs at Griffith and the Computer Centre.

(b)  A 64 Kbits/sec channel to link together the GRIFIN node and the ANF-10 network at St Lucia — a considerable improvement on the previous 9.6 Kbits/sec channel.

(c)  A 19.2 Kbits/sec channel to multiplex a number of terminals between the Griffith and University of Queensland libraries.

The multiplexing equipment allows up to a total of 128 channels by Time Division Multiplexing including asynchronous, synchronous and voice so the facility is very flexible.

The link actually runs at 2.048 Mbits/sec and is provided by Telecom. This was the first of this type of link to be installed by Telecom in Brisbane so has created a great deal of interest, particularly in the performance and reliability areas which thus far have been good.

*Graham Rees*
*extension 3288*

### 3.3 Ethernet

Ethernet is a LAN (Local Area Network) technology which allows the interconnection of a large number of computers (more than 1000) at high speed (at least 1 Mbit/sec) over reasonable distances (less than 2.8 Km). The Ethernet is a baseband coaxial cable based system operating a raw speed of 10 Mbits/sec. The Centre has operated a pilot Ethernet since late 1982 for evaluation purposes and now links a number of computer systems including UQVAX (PCC VAX 780), PHVAX (Physics VAX 750) and EXSTUD (External Studies VAX 750).

The Ethernet at this stage has only been used to carry DECnet traffic although it can be used to carry a number of different communications protocols simultaneously.

In tests done by the Computer Centre files have been transferred between two VAXes over Ethernet at rates of over 450,000 bits/sec.

Ethernet interfaces exist for a wide variety of computers including all the PDP-11 and VAX computers.

The cost of connecting to Ethernet is about $6000 for a Unibus machine and $2500 for QBus and, in both cases, the annual rental is $1000. The Ethernet coaxial cable should be in place by the end of this year, however more urgent connections could be accommodated if required.

There are also a variety of Terminal Servers available which connect to Ethernet and have provision for from 8 to 48 lines suitable for terminals and personal computers. These Servers vary in price from about $350 to $700 per connected terminal. This is a very economical way of increasing terminal access to any computer system also connected to Ethernet.

For further information contact Graham Rees, extension 3288 or Arthur Hartwig, extension 4079.

*Graham Rees*
*extension 3288*

### 3.4 New Mail System for the DECsystem-10

As described in the March edition of the newsletter a new mail system will become the system standard version on Monday 1st July. On Sunday 30th June all mail still in the current mail system will be converted over to the new system. Users are referred to the March edition of the newsletter for further details.

*Extensions to the New Mail System*

New facilities have been added to the mail system and these are:

1.  A DECsystem-10 user may send mail to a user on any VAX/VMS system connected to the network. The DECsystem-10 user specifies the VAX/VMS user in the form user@host, e.g. CCHELP@UQVAX.

3

2. A user of any VAX/VMS system connected to the network may send mail to a DECsystem-10 user by specifying that mail is to be sent to UQKL10:: user, e.g. UQKL10::ZUPP to send to user whose name is ZUPP or UQKL10::[100,176] to send to the user whose ppn is [100,176].

3. Very limited mail exchange facilities between the DECsystem-10 and CMS on the IBM are available. It may be possible to provide better facilities in the future. Mail may be sent from a DECsystem-10 user to a CMS user by addressing it to user@UQVM, e.g. CCHELP@UQVM. Note though that if you specify an invalid user name you will not be informed that your mail has not been delivered. CMS users may send mail to certain DECsystem-10 users by addressing the mail to 1::user AT UQVAX where the user must be able to be specified completely or uniquely in 5 characters. Again, no error message can be returned to the CMS user if the DECsystem-10 user specification was invalid or ambiguous. In short there is a way for CMS users and DECsystem-10 users to exchange mail but it should be considered unsuitable for general users though particular users may obtain satisfactory service. It is hoped to provide a more satisfactory service in the not too distant future.

*Arthur Hartwig*
*extension 4079*

# 4. Central Computing Facilities — Allan Woodland, ext. 4017

## 4.1 Systems Software and Extensions

### 4.1.1 GKS on the VAX

GKS (Graphics Kernel System) is an international standard describing high level graphics functions.

TEKGKS — a Tektronics implementation of GKS is up and running on UQVAX::. Essentially it is a set of subroutines for manipulating graphic entities and workstations. It will run on most Tektronics workstations except the 4010 series.

A Users Manual and a Reference Guide are held for reference only in the Batch Station in the Hawken Building.

You can link TEKGKS routines to your program by using the following command.

    $LINK myprog,SYS$SYSROOT:[TEKGKS]SGKS/LIB

There are also some demo programs on the above directory. If there are any queries give me a call.

*Porl Gordon*
*extension 2953*

## 4.2 Operations

### 4.2.1 Letter Quality Printer

The Facit letter quality printer has been relocated in Room 15 of the Eastern Hut (Building 15 on the University map). Access to the room is by key only.

4

Bookings must be made prior to use of the Facit by phoning extension 3024 or calling to the Hawken Batch Station. Because of increasing high demand for letter quality printing for the originally intended use (i.e. the production of theses, reports and manuals), bookings have had to be restricted to Honours or Postgraduate Students and University Staff.

Persons booking the Facit will be required to provide some form of proof that they fall into one of the above categories, i.e. student card, payroll slip, etc. Having satisfied this requirement the intending user will be supplied with a key to room 15, a daisy wheel and a ribbon in exchange for one of the following as a deposit:-

1.  student card
2.  drivers licence
3.  cash deposit $5.

On return of the key, daisy wheel and ribbon the user's deposit will be returned. The current usage cost is $2 per hour.

<div style="text-align:right">

*Denis Antonellie*      *Allan Woodland*
*extension 3963*        *extension 4017*

</div>

# 5. Applications Development — Tony Bird, ext. 3944

## 5.1 Information Concerning Courses

**Enrolments for all courses may be made by phoning extension 3018.**

The following schedule of courses has tentatively been arranged for the period June — August, 1985:

### June

| | |
|---|---|
| Elementary BASIC Programming | June 3-7<br>5 half days 9-12 each day |
| SPSS | June 3-7<br>5 half days 1-4.30 each day |
| Conversion to IBM | June 11-13<br>3 half days 9-12 each day |
| Introduction to IBM | June 18-21<br>4 half days 9-12 each day |
| Introduction to PDP-10 (GU) | June 18-21<br>4 half days 9-12 each day |
| Conversion to IBM (GU) | June 18-20<br>3 half days 1-4 each day |
| SQL | June 24-28<br>5 half days 9-12 each day |
| RUNOFF | June 24-28<br>5 half days 1-4 each day |
| Introduction to IBM (GU) | June 24-27<br>4 half days 9-12 each day |
| SPSS (GU) | June 24-28<br>5 half days 1-4.30 each day |

## July

| SAS | July 1-5<br>5 half days 9-12 each day |
| RUNOFF (GU) | July 1-5<br>5 half days 1-4 each day |
| 1022 | July 8-12<br>5 half days 9-12 each day |
| SCRIPT | July 8-12<br>5 half days 1-4 each day |
| SQL (GU) | July 8-12<br>5 half days 1-4 each day |
| Introduction to IBM | July 16-19<br>4 half days 9-12 each day |
| Conversion to IBM | July 23-25<br>3 half days 9-12 each day |
| Introduction to PDP-10 | July 29-August 1<br>4 half days 1-4 each day |

## August

| Introduction to IBM | August 6-9<br>4 half days 9-12 each day |
| SPSS | August 12-16<br>5 half days 9-12.30 each day |
| SQL | August 19-23<br>5 half days 9-12 each day |

**General Notes:**

1. Intending users of the PDP-10 system must be familiar with the content of the course *Introduction to PDP-10* (i.e. terminal usage, file-management, editing) before attending other PDP-10 courses.

2. In corresponding fashion, for the IBM system, users should have attended either *Conversion to IBM* (for previous PDP-10 users) or *Introduction to IBM* (for completely new users) before attending other IBM courses.

3. Courses held at St Lucia (with the exception of CAD/CAM courses) are conducted in the Computer Centre's teaching area near the Physics Annexe. Courses designated (GU) are held in Room 1.49, East Wing, SIA Building at Griffith University.

4. Staff and post-graduate students are admitted free to courses; all others pay at the rate of $10.00 per half-day session.

5. Enrolments for all courses may be made by phoning ext. 3018.

*Barry Maher*
*extension 3021*

# 6. Miscellaneous

## 6.1 Departmental Equipment for Sale

Diablo 1620 letter quality printer purchased new June 1978; as is, where is — no maintenance. Best offer.

Written offers to:

"Diablo"
Prentice Computer Centre
University of Queensland

The Solar Energy Research Centre has a WATANABE WX 4671 (MIPLOT) plotter for sale. Single pen, takes A3 paper, Centronics-like interface. Best offer. Contact Dr E.M. Gray on extension 4039.

## 6.2 Wanted Sirius

Secondhand Sirius wanted. Contact Bob Lester on extension 3305.

# PERSONAL COMPUTER SURVEY

**May 1985**

**Please complete one of these forms for each personal computer in your care, including any you expect to have in the near future. Please Return these forms as soon as possible, addressed to P C survey, Prentice Computer Centre.**

Campus or Location: _____

Department: _____

Contact person: _____ Phone _____

Make and Model: _____

(Please tick the nearest response, or none if you do not have such a device)

Memory size:     64Kb □    128Kb □    256Kb □    512Kb □    1Mb □

Hard disk drive:    5Mb □    10Mb □    15Mb □    20Mb □

Colour Monitor:      □

Printer:    Dot matrix □     Near Letter Quality □     Letter quality □

Special interfaces: _____

Operating Systems used:    (In order of most use.) (Including version numbers.)

_____    _____

_____    _____

Major Uses:

     Word Processing □      Data Base □      Spreadsheet □

     Computer Aided Learning □      Data Collection □      Instrument Control □

     Other □ _____

Major Software Packages or Languages used:

_____    _____

_____    _____

_____    _____

Kermit versions used:    (If you use a version of the Kermit file transfer program this will be shown on the screen when you start Kermit.)

_____    _____

(Apple II only) - Type of serial interface card:

     CCS or Apple Communications □      Apple Super-serial □

Access to Central Facilities (Micom):

     Not used □    by Direct Terminal Line □    by Telephone and Modem □

Any other relevant information:

_____