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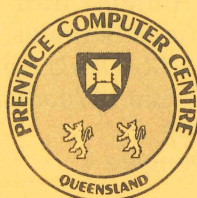
UNIVERSITY OF QUEENSLAND, ST. LUCIA, QUEENSLAND, AUSTRALIA. 4067.

NEWSLETTER

N-316   November 1987

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Authorized by the Director of the Computer Centre

Phone Numbers for Enquiries

External users may dial direct by prefixing these extension numbers with 377.

Management	Extension
Director — *Mr Alan Coulter*	2189
Deputy Director — *Mr John Noad*	3017
Manager, Applications Development — *Ms Sarah Barry*	4281
Manager, Distributed Computing — *Mr Anthony Bird*	3391
Manager, Engineering and Communications Services — *Mr Graham Rees*	3288
Manager, Finance and Administration — *Mr Denis Antonellie*	3963
Manager, Large Systems Software — *Mr Allan Woodland*	4017
Manager, Operations — *Mr Ian Armstrong*	3471
Manager, User Liaison — *Mr Geoffrey Dengate*	3944

Central Services HELP Desk (0830–1630)   CCHELP for electronic mail   **3025**

General Enquiries & Course Enrolments   **3018**

Principal Service Centres

Personal Computer Support Group	4018
Contract Programming & Feasibility Studies — *Ms Sarah Barry*	4281
System Status Automatic Answering	3101
Central Systems Accounts (0830–1630) — *Ms Lyndal Hill*	2188
Program Librarian — *Mr David Molloy*	4075
Operations	3212
Data Entry — *Ms Ngaire Brown*	3967
Dial-up modem numbers	(300 bps) 377 2977
	(2400 and 1200 bps) 377 2922
	(1200/75 bps) 377 2655

Hardware Problem Reporting	Extension	
PC Repairs and Maintenance	3938	†
Communications Fault Reporting	3938	†
Terminal and PDP–11 Fault Reporting	3938	†

Griffith University

External users may dial direct by prefixing these extension numbers with 275.

Director, Centre for Information Technology — *Mr Mike Steel*	7125
Computing Services Manager — *Mr Ian Robertson*	7561
General Enquiries — *Ms Annabel Tyler*	7745
PCC Mainframe Consulting (Tuesday)	7560
Computing Services Area — Science 2	7560

† After 4.45 pm and at weekends, X3938 is serviced by a message recorder. Users wishing to report PC, terminal, communications and other hardware faults can leave their name, number and fault details.

1. Newsletter Summary

- This Newsletter was typeset on an IBM PC using Microsoft Word with additional software developed by the Centre. The typeset output was sent to the Compugraphic typesetter from the PC using Kermit. Details of this new software which makes basic typesetting available to the PC user are given in section 4.3. This is another development by the Centre to support the PC users on campus.

- The programming language C is available for evaluation on the IBM 3083 (UQVM). Allan Woodland would appreciate any feedback on this product.

- SPSS–X, the well known statistical package, and LISREL, a statistical package for the analysis of Linear Structural Relationships are both available on UQVM.

- PDP–10 user files that were skimmed to tape during or before 1983, and have not been accessed since 1983, will be deleted in January 1988. PDP–10 users are requested to check if they want any files retained.

- Users are advised of the automatic expiration of PPN's on the PDP–10 and UIC's on the VAX–11/780 and consequential deletion of files on December 24th unless prior action is taken.

- The PC Support Group is holding fortnightly lunch-time seminars for the remainder of 1987. Details of topics are provided.

- The Personal Computer Support Group has been relocated to level 4 in the Hawken Building. The LaserWriter and Quietwriter printer service is now under the supervision of the Operations Group on level 2. This has allowed the hours of access to be extended to 11p.m.

- Software to allow users to communicate with other institutions on the SPEARNET network is now available on UQVAX. Two other Australian educational institutions are now accessible using SPEARNET.

- The only gateway facility to CSIRONET is available on UQVAX.

- Background information on some new staff members and staff absences is provided.

- Details of PC and mainframe courses are provided. Three Microsoft Word workshops have been added to the course list for the remainder of 1987.

Geoffrey Dengate
ext. 3944

2. Large Systems Software — Allan Woodland, ext. 4017

2.1 IBM C available on UQVM

IBM C for System/370 (5713–AAH) is available for evaluation on the IBM 3083 (UQVM).

Its flexibility permits the programmer to easily accommodate the task of dealing with machine-level entities at a low-level, while at the same time, providing the high-level control and data structures associated with modern, structured, programming languages. The C language itself is small. Functions not provided in the language are provided by the C library.

Major features of The IBM C Compiler for System/370 include:

- Compatibility options for UNIX and Kernighan & Ritchie type conversion rules.

- Provides access to native commands via the system function.

- Call interface to Basic Assembler Language (BAL) subprograms.

- The IBM C Compiler for System 370 allows for the migration of a large number of existing C applications to System/370.

The C language combines low-level machine access with high-level control and data structures. This allows for:

- Production of efficient programs.

- Reduced maintenance costs due to

  - Possible code reuse.

  - Type checking of function arguments provided.

  - Greater clarity within application programs can be easily achieved, when compared with other methods, such as BAL.

More information on IBM C for System/370 is documented online in the CC INFO file, which can be viewed by issuing the command **CC ?** or **INFO CC**.

References:

SC09-1128 *IBM C Language Reference Manual*
SC09-1130 *IBM C Compiler User's Guide for VM/CMS*
GC09-1139 *IBM C Licensed Program Specifications (VM/CMS)*

Mario Bono
ext. 4407

2.2 SPSS-X on UQVM

The Statistical Package SPSS—X(TM) Release 2.2 for VM/CMS is available on the IBM 3083 system.

SPSS–X is a comprehensive tool for the management and statistical analysis of data, and the production of reports.

An SPSS–X job requires
   a)   a command file containing the SPSS–X commands and
   b)   a data file
and produces
   c)   an output file and
   d)   system files depending on the complexity of the job.

1. Data Definition
    The data is defined as a set of variables measured for a set of cases. These variables may be manipulated and transformed to new variables if required.

2. File Management
    SPSS–X provides commands for combining multiple files into a single analysis file, for splitting the active file into subgroups for processing, sorting, and for saving and retrieving the system files.

3. Statistical Procedures
    Listed are only *some* of the analyses available : FREQUENCIES, CROSSTABS, PEARSON CORR, REGRESSION, FACTOR, DISCRIMINANT, SURVIVAL, ANOVA, MANOVA, LOGLINEAR.

4. The INFO command (within SPSS–X)
   Information available via the INFO command includes "local" documentation for using SPSS–X at this site and update information for changes and enhancements to procedures and facilities documented after completion of the second edition of the *SPSS-X User's guide.*

5. There is no interactive mode in this release.

   For information on running SPSS–X, type **SPSSX ?** or **INFO SPSSX**.

   SPSS–X usually requires a virtual machine size of only 1.5M to execute, although very large or complex jobs may require more.

Reference:

SPSS-X User's Guide, 2nd Edition. SPSS Inc., 1986. This comprehensive manual contains complete operational documentation for the SPSS-X system and is designed to be both a guide and a reference text. (The HELP DESK has a copy of this manual available for brief consultation).

Helen Bergen
ext. 3022

2.3 Analysis of Linear Structural Relationships package on UQVM

LISREL Version VI is now available on UQVM (IBM 3083). LISREL is a statistical package for analysis of Linear Structural Relationships by Maximum Likelihood, Instrumental Variables, and Least Squares Methods.

Some applications that have used LISREL are given as follows:

- Estimating the Disattenuated Correlation
- The Rod and Frame Test
- A Circumplex Model
- Regression of GNP
- Educational Attainment
- Intergenerational Social Mobility
- Role Behaviour of Farm Managers
- Social Status and Social Participation
- Testing Psychometric Assumptions

For more information, enter **LISREL ?** or **INFO LISREL**.

References:

The *LISREL VI User's Guide* is available at the Help Desk.

Jack Cheng

(Jack Cheng is no longer employed at the Prentice Computer Centre. For further information please contact the HELP DESK — Editor)

2.4 Where is Edward Lindsay?

Edward, a programmer with the Large Systems Software Section, has taken leave to travel to the UK to accompany his wife Kristen, who is doing a higher degree at the University of Surrey. Edward hopes to gain additional experience while in the UK. He returns in August 1988.

Geoffrey Dengate
ext. 3944

3. Operations — Ian Armstrong, ext. 3471

3.1 Skimmed Files on the KL

Prior to 1984, it was the practice on the KL system to skim to tape files from both offline and online storage which hadn't been accessed for a significant period of time. No skims have been performed since December 1983.

It is now planned to delete all these skimmed files from tape on 4 January 1988. To find out what files you have on skim tapes use the command **TDIR**. See **HELP TDIR** for details. If you have any files which should be retained, please contact me.

Ian Armstrong
ext. 3471

3.2 Expiry Date for Computer Accounts

On 24 December each year all PPNs on the DEC-10 and UICs on the VAX–11/780 expire, unless the Centre has been notified in writing that a PPN/UIC is required for another year. The term "expire" means that all files owned by that PPN/UIC, both on-line and off-line, are deleted, any balance of commitment is credited to the user account(s), and the PPN/UIC and charge codes are deleted from the system.

It is imperative that if you intend to keep using your account for the following year you must complete the "change of expiry date" form, prior to 24 December each year. Separate forms for KL and VAX accounts are at the Batch Station. Copies of these are attached to this newsletter.

We do this not to make life difficult for you, but merely to keep disk space clear and overheads down. Each year many people leave the University, go away on the Special Studies programme or finish post graduate research and omit to notify us that they have finished with their account. Expiring accounts is our way, then, of keeping the systems operating efficiently for the user's continued benefit.

Userids on the IBM are currently set up with an expiry date nominated by the client. The date specified remains in force unless altered using the normal AUTH-UQVM form.

Lyndal Hill
ext. 2188

4. Distributed Computing — Tony Bird, ext. 3391

4.1 Lunch time Seminars

During the remainder of 1987 the PC Support Group proposes to hold a series of lunch time seminars on topics likely to be of interest to PC users.

Details of the series are as follows:

Wednesday 11-11-87 Typesetting for Microsoft WORD
Wednesday 25-11-87 PlatOPUS — The Electronic Bulletin Board Service
Wednesday   2-12-87 Printer Connectivity
Wednesday 16-12-87 Communications Packages — An Overview

Seminars will be in Course Room 2 and commence at 1 p.m. Booking is not required.

Tony Bird
ext. 3391

4.2 Self-Relocating PC Support Groups

You know that the PC Support Group is highly dynamic, operating at the forefront of technology, always on the move... And just to keep up with that image, we've shifted our location.

Previously, we were in Room 120 of the Hawken Building (a.k.a. the old Credit Union). The group is now located in Room 418 of the Hawken Building — at the other end of the building farthest from the lift. Our new phone number is ext. 4018. Mr Alan Langdon, our Systems Engineer, also has a new phone number, ext. 3940. If you have difficulties in contacting us, phone ext. 3018 and leave a message.

Some of the facilities provided are PCs for demonstration, advice on hardware or software to buy, plus expertise on some of the more common software packages — such as WORDPERFECT. A library of PC related magazines is available for perusal. Hire of IBM PCs or Macintoshes is also performed through the PC Support Group. We are open from 9am–12noon and 1pm–5pm.

The LaserWriter and Quietwriter service (once part of the PC Support Group) is now functioning in the accounts/enquiries area, Room 211 of the Hawken Building. Hours of operation are 8.30am until 11.00pm, Monday to Friday. After 4.30pm, you will have to ask at the Batch Station (Room 210) to get into the printer facilities.

Bookings for printers can now be made on ext. 3020, 8.30am to 4.30pm.

Mark Williams
ext. 4288

4.3 Typesetting from Microsoft WORD

What happens when a wordprocessor user on a PC needs output quality beyond that provided by laser printers, namely typeset quality? The task may be as simple as preparing a business card, or as complex as preparing the camera ready copy for an entire book. The problem is that the Centre's Compugraphic 8400 typesetter is accessible only through mainframe typesetting packages. If a PC user is to transfer an existing document to such a package much, if not all, of the formatting done so carefully on the original wordprocessor, is lost.

Software recently developed within the Centre solves this problem for users of Microsoft WORD on IBM PCs and clones. Called MWSETTER, the product gives the WORD user access to a variety of commonly used Compugraphic fonts from within WORD, and uses the normal, familiar, command set of WORD to control typesetter functions. All document formatting is preserved. Documents prepared for output to an Apple Laserwriter (previously the highest quality output device the Centre could offer PC users) can be typeset successfully with minimal alteration.

MWSETTER consists of two parts. The first is a new printer driver, which gives WORD details of the fonts and pointsizes available, as well as width information used during text justification. The second is a conversion program which translates the Postscript like output of the driver into the native code of the typesetter. This translated file is then transferred to a mainframe for final output.

The current release of MWSETTER supports the following Compugraphic fonts in 16 pointsizes ranging from 6 point to 72 point. In each case the normal, italic, bold and bold-italic variants are available.

Univers Medium
Univers Extrabold Expanded
Helios
English Times
Century Schoolbook
Mallard

The extended ASCII character set contains a wondrous collection of bits and pieces such as accented foreign characters, some of the greek alphabet, arrows, mathematical symbols etc. It is quite frustrating that, while these characters are represented on-screen in WORD, many will not normally print correctly. MWSETTER attempts, where possible, to output some representation of all the on-screen characters, borrowing from other Compugraphic fonts where necessary. That part of the extended ASCII set which represents border characters is of limited use in proportionally spaced typefaces, so here MWSETTER stores more of the Greek alphabet and other characters necessary for correct typesetting such as em dashes, en dashes, daggers etc.

MWSETTER is available, without charge, from the PC Support Group at the Centre. Just bring along a floppy disk for your copy. The distribution disk includes documentation and style sheet examples. (Style sheets are worth thinking about, since they give users with limited typographic skills the ability to generate complex documents using predefined formats.)

Users with KL–10 or VAX accounts can transfer typesetter files directly to a mainframe for output using Kermit. For PC users without existing accounts the Centre can typeset your files directly from floppy disk. The disk you provide should contain only the files you wish typeset, processed by MWSETTER so that they are ready for output. Simply bring your disk to the HELP DESK. Users of this service are charged at the standard rate for the bromide used (currently 0.6 cents per mm) plus a nominal handling/transfer charge. Until the Centre has assessed the level of interest in this service and determined our true costs, this handling charge will be set at $1.00 per file.

For a demonstration of MWSETTER just keep reading this newsletter. This month's edition was prepared using only Microsoft WORD and MWSETTER – apart from the logo on the front cover. The font used is Mallard.

John Currie
ext. 4429

4.4 Microsoft WORD Workshops

Elsewhere in this newsletter you will find details of a series of three Microsoft WORD workshops. These workshops are aimed at existing WORD users wishing to use more advanced aspects of the package. Those attending should already be familiar with the basics of WORD running on IBM PCs or clones.

The first session deals with increasing productivity through the use of style sheets and glossaries. The second introduces the typographic concepts needed to use printers such as the Apple Laserwriter more effectively. The Compugraphic typesetter interface MWSETTER will be included. The third workshop is, to some extent, open to negotiation. I had intended to introduce outlining, but if users come up with a more relevant topic beforehand, this can be changed. Those attending will get plenty of hands-on experience during the sessions.

Since these sessions are workshops for existing users who should already have access to a copy of WORD, rather than formal courses for new users, the Centre has not arranged multiple software licences at this stage. If you wish to participate in the hands-on aspects of these sessions it will therefore be necessary for you to bring your own copy of the software.

Users interested in learning the basics of WORD should try the tutorial package included with WORD. It's the best I've found so far for a PC based package and well worth the effort.

John Currie
ext. 4429

5. Engineering and Communications Services
— Graham Rees, ext. 3288

5.1 Spearnet Software

SPEARNET software has been installed on the node UQVAX. This software allows the user to communicate with all machines currently on SPEARNET (the South Pacific Education And Research NETwork) in Australia and New Zealand, and JANET (Joint Academic NETwork) in the U.K.

Supported facilities include electronic mail, file transfer, remote login, and a site directory service. The service is conducted over direct connections, and mail delivery is typically almost instantaneous if the remote machine is operational at the time.

For more information, type **HELP SPEARNET** on node UQVAX.

Mark Williams
ext. 4079

5.2 New Spearnet Sites

SPEARNET continues to grow. The University of Western Australia and South Australian College of Advanced Education are now fully operating members of SPEARNET. Their site names on the DEC–10 are (respectively) AU.UWA and AU.SACAE.

Arthur Hartwig
ext. 4079

5.3 Removal of the CSIRONET ↔ ANF–10 Gateway

The May 1987 issue of the newsletter announced the proposed removal of the gateway between CSIRONET and the University's ANF–10 network. The gateway was taken out of service on Monday 18th September 1987. CSIRONET gateway facilities are still available on node UQVAX.

Arthur Hartwig
ext. 4079

5.4 Where is Danny Smith?

For those of you who do not already know, Danny is on leave until December 1988. He has been fortunate in gaining a one year appointment as a Research Assistant at Rutherford Laboratories in the UK.

Rutherford Laboratories is a publicly funded research laboratory in Oxfordshire specialising in computing, high energy physics, and atomic energy. Danny will be rubbing shoulders with eminent researchers in these fields.

Danny will be working on electronic messaging systems including X.400 and the knowledge and experience he gains will be most valuable to us when he returns.

Geoffrey Dengate
ext. 3944

6. Applications Development — Sarah Barry, ext. 4281

6.1 New Staff

Applications Development appointed three new staff members at the end of July; Stathey Tsigounis and Michal Andrusiewicz in the programming arena, and Miguel Peirano as a full-time compositor.

Stathey is from Queensland. He was educated at the University of Queensland in the early 1970s. He completed a Diploma in Teaching in 1975 but decided to change to computing instead of teaching. He has over 11 years experience in computing with both the public and private sector. His immediate past experience was with legal data bases.

Michal is Polish, educated at Warsaw University in the Mathematics and Mechanics Faculty. He has 13 years of programming experience; both in commercial systems and lecturing in Computer Science and Numerical Methods. He has a great deal of experience with the UNIX operating system and C. He migrated to Australia from South Africa in June this year.

Miguel fills a position that has been sorely needed for some time. He is a compositor, someone who turns manuscripts into books (with some help from the computer). His interest has never been far from publishing ever since he got a job and board from a surrealist publishing house in Buenos Aires at 17. He graduated as a Geographer (!) from James Cook University but instead of following a career in this subject, he spent years setting up printing presses and typesetters, first at the Students Union there, and later more widely. In the course of this pursuit he learned the arts of composition and the new horizons afforded by computers in text processing and composition. He is also interested in amateur microcomputer networks and tries to remain involved with the Centre's Bulletin Board "Platopus". If you would like an argument on the comparative advantages of typefaces, see Miguel.

Sarah Barry
ext. 4281

7. User Liaison — Geoffrey Dengate, ext. 3944

7.1 Information Concerning Courses

Enrolments for all courses may be made by phoning extension 3018. The following courses will be offered during the period November 2–December 17, 1987:

November

•	Introduction to IBM3083E	November 2–5 4 half-days 1–4pm each day
‡	Introduction to WORDPERFECT	November 2–5 4 half-days 1–4pm each day
‡	Introduction to MS/PCDOS	November 3–5 3 half-days 9–12am each day
•	Introduction to SQL	November 9–13 5 half-days 1–4pm each day
‡	Introduction to DBASE III	November 10–12 3 half-days 9–12am each day
‡	Microsoft WORD Workshop (Productivity Aids)	November 10 1 half-day 1–4pm

‡	PC-to-Mainframe Communications	November 16 1 half-day 9–12am
†	Introduction to VAX	November 17–19 3 half-days 9–12am each day
‡	PC Overview	November 18 1 half-day 9–12am
†•	Introduction to SPSS–X	November 23–27 5 half-days 1–4pm each day
‡	Microsoft WORD Workshop (Advanced Printing)	November 24 1 half-day 1–4pm
‡	Desk-Top Publishing Overview	November 25 1 half-day 9–12am
‡	Introduction to Programming in BASIC	November 30–December 4 5 half-days 9–12am each day
•	Introduction to SAS	November 30–December 4 5 half-days 1–4pm each day
‡	Introduction to WORDPERFECT	November 30–December 3 4 half-days 1–4pm each day

December

	Typesetting (on KL–10)	December 7–11 5 half-days 9–12am each day
‡	Introduction to MS/PCDOS	December 8–10 3 half-days 9–12am each day
‡	Microsoft WORD Workshop (Outlining)	December 8 1 half-day 1–4pm
†•	Introduction to Programming in FORTRAN	December 14–18 5 full days 9–12am + 1–4pm each day
‡	Introduction to DBASE III	December 15–17 3 half-days 9–12am each day

• denotes IBM course   † denotes VAX course   ‡ denotes PC course
If marked †• please indicate when enrolling whether you would prefer your course account to be established on the VAX or IBM machine.

General Notes:

1. It is expected that users attending courses on specific packages (SQL, SAS, SPSS–X, DBASE III, etc) will be familiar with keyboard-usage, file-management and editing on the relevant machine (IBM, VAX or PC). Attendance at such short courses without this background provides many problems, as all courses are hands-on. Introductory courses are given frequently to allow familiarity with the fundamentals before attending courses on particular application packages.

2. All courses will be held in the Centre's teaching rooms near the Physics Annexe — the mainframe courses in Course Room 1 and the micro-computer courses in Course Room 2.

3. Staff, post-graduate students and kit-owners are admitted free to courses. The charge is $10.00 per half-day session for other internal users; $17.00 per half-day session for affiliated users; and $37.00 per half-day session for external users.

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

Barry Maher/Nick Evans
ext. 3021

‡   Introduction to DBASE III   December 15–17
                                                   3 half-days 9–12am each day

   •   denotes IBM course
   †   denotes VAX course
   ‡   denotes PC course
      If marked †• please indicate when enrolling whether you would prefer your course account to be established on the VAX or IBM machine.

General Notes:

1.   It is expected that users attending courses on specific packages (SQL, SAS, SPSS–X, DBASE III, etc) will be familiar with keyboard-usage, file-management and editing on the relevant machine (IBM, VAX or PC). Attendance at such short courses without this background provides many problems, as all courses are hands-on. Introductory courses are given frequently to allow familiarity with the fundamentals before attending courses on particular application packages.

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Barry Maher/Nick Evans
ext. 3021

PRENTICE COMPUTER CENTRE

CHANGE OF VAX USERNAME EXPIRY DATE TO 24–DEC–1988

DEPARTMENT:...

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SIGNATURE (Financial Delegate): ....

★ PLEASE RETURN AS SOON AS POSSIBLE — 24th DECEMBER IS **TOO LATE!** ★

PRENTICE COMPUTER CENTRE

CHANGE OF KL–10 PPN EXPIRY DATE TO 24–DEC–1988

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SIGNATURE (Financial Delegate): ....

★ PLEASE RETURN AS SOON AS POSSIBLE — 24th DECEMBER IS **TOO LATE!** ★