C.S.I.R.O.

COMPUTING RESEARCH SECTION

NEWSLETTER NO. 16 - 1.9.66

I. GENERAL

Publications Issued This Month

- NL Newsletter No. 16.
- TM Technical Note No. 17 Paper Tape Facilities on the Control Data 3200. D. Ross, C.R.S., Adelaide.
- ** TM Memorandum No. 5. The DAD System for the Fortran User. T. Pearcey, C.R.S., Canberra.
- ** M2 Manual Supplement No. 25. 3200 Fortran Manual Index. D. Ross, C.R.S. Adelaide.
- ** M2 Manual Supplement No. 26. 3200 Magnetic Tape

 Labelling and Equipping. D.C. Knight, C.R.S. Adelaide.

The publication marked ** may not be included in your envelope. In the case of Memorandum No. 5 there have been delays which were beyond the control of the Computing Research Section. Should this particular publication not be ready in time it will be issued as a separate publication as soon as it is ready.

Other New Publications This Month CSIR Subroutines

Q4 CSIR AUTOPLOT/QUIKPLOT

Authors: R.H. Hudson, G. Masters & D. Ross.

This write-up describes the two compatible routines which produce automatic plotting on the graph plotters or on the line printer.

G1 CSIR STATAN

Authors: R.I. Tilley & J.W. Spencer.

Describes a routine for general statistical analysis including the calculation of the mean, standard deviation, variance, standard error of the mean and coefficient of variation.

Mailing List

The mailing list now has 430 entries. Of these 217 are within the C.S.I.R.O. The number of Newsletters despatched this month was 650.

Overlay Control Cards

The SCOPE format for overlay control cards - viz.

11, 0, 7, 9 in column 1 - will not be recognised by DAD.

Overlay control cards will be the same as any other control cards and will have 7, 9 or * in column 1.

This change is made necessary because jobs sent from the subsidiaries to Canberra containing 3200 decks for punching may contain the combination 11, 0, 7, 9 and may therefore be handled wrongly.

Workshops on the Use of the Keyboard Consoles

On Thursdays 8th, 15th, 22nd and 29th September at 2.00 p.m. Application Form, Misc. Pub. No. 9 is enclosed for Canberra users.

II. 3600

Paper Tape on the 3600

Users should note that non-standard code paper tape records are of 20-words length, so that if paper tape data is input by BUFFER IN from Fortran, the buffer length should be 20 words.

If the leader of a non-standard code document is part of the same physical tape as the document, care should be taken to provide 6-8 inches of run out (or other odd parity characters) after the leader, otherwise difficulties may occur due to detection of parity error by the paper tape reader.

III. 3200

As from 1st September, 1966, the 3600 job stacks originating from subsidiary areas will be run under the DAD system in Canberra.

This changeover has been accompanied by the following amendments to facilities for the subsidiary user.

1. 3200/3600 Equipment Declarations

All equipment declaration control cards (9EQUIP) originating from subsidiary users, whether intended for the 3200 or 3600 computers, should be in general comply with DAD rules.

In particular labels should be declared wherever appropriate. Full details of the Equip card formats are given in Manual Supplement No. 26 and C.R.S. Memorandum No. 5.

2. 3200 Magnetic Tape Labelling

In order to achieve greater compatibility with the 3600 DAD system, and to avoid any difficulty with future 3200 system modifications, all subsidiary users are advised to create labelled magnetic tapes.

A label writing subroutine (LABEL32), and a label checking function (LABCK32) have been included in the 3200 SCOPE/FORTRAN library. Similarly named dummy routines have also been added to the 3600 library for compatibility.

Details of these routines, and their use can be found in Manual Supplement No. 26.

The labels are written in the standard 3600 SCOPE 6 format.

3. <u>3200 FORTRAN</u>

Blank cards are now completely arbitrary inside and between FORTRAN programs and subroutines.

Also the control cards ${}_{0}^{7}FTN$ and SCOPE may be used in place of the normal ${}_{0}^{7}FORTRAN$ and FINIS.