C.S.I.R.O. COMPUTING RESEARCH SECTION

NEWSLETTER NO. 8 - 1.1.66





AUSTRALIAN COMPUTER CONFERENCE, CANBERRA, 1966

The conference will be held in the two theatres of the Canberra Theatre Centre during the week Monday 16th May to Friday 20th May, 1966. Leaflets containing general information and registration forms are available from your local C.R.S. centre.

II 3600

CHANGES TO THE HARDWARE CONFIGURATION

During January there will be modifications to the hardware layout at Canberra. These changes are required to incorporate the new system units of magnetic drums and display devices. While this work will be scheduled so that a minimum of interference takes place with the normal routine it is only to be expected that some delays may occur during the month.

PUBLISHED PAPERS

The Computing Research Section would like reprints of all published papers which include reference to work performed on one or other of the network computers. The reprints should be sent to the Librarian, Computing Research Section, CSIRO, P.O. Box 109, Canberra, A.C.T.

CONTROL DATA 3400/3600 FORTRAN REFERENCE MANUAL. PUB.NO.60132900

A new Fortran Manual has been issued by Control Data for machines using the 5.1 Fortran system. The system presently used at Canberra is Fortran 4.3. The new manual does NOT therefore supersede Pub. No. 60053700.

The majority of manual supplements required for the Fortran Manual (60053700) are also required by the new publication. In addition a manual supplement advising the differences between the two manuals is being prepared.

CHANGE OF NAME. CANBERRA COMPUTER SOCIETY

Following the amalgamation of the various computer societies in Australia the new name of the local society is Australian Computer Society, Canberra Branch.

STAFF

Dr. W.T. Williams who was a visitor to the section in January - February 1965 has now joined the professional staff of the C.R.S. at Canberra.

III 3200

GENERAL

User Program Library System for CDC 3200

A system has been developed for use on the CDC 3200 whereby programs may be stored in compiled form on a magnetic tape (called a user library tape) and any program can be loaded into store from this tape and execution initiated. This system has several advantages. Firstly, program cards are eliminated from jobs, thus making card decks smaller and easier to handle, and avoids effects of wear on cards of frequently used programs. Secondly, it is no longer necessary to make copies of a program deck, thus eliminating the risk of errors in the copying process. Only one card deck acting as a master deck needs to be kept for each program. Thirdly, repeated compilation of programs is eliminated.

To call a program into store from the user library can require as few as 7 control cards and one data card. In this system the user library contains a caller program used for searching the library for a requested program, a table of contents (program names) followed by the compiled versions of the programs named in the table. Usually the first program is a library modification program called LIBMAKE which is loaded just as any other program on the tape when it becomes necessary to produce a fresh library tape. So far the operations of program addition, deletion and sequence rearrangement are possible with LIBMAKE. It is hoped that the operations of insertion and replacement will soon be possible. Whenever LIBMAKE produces a new library, a table of contents is printed.

Further information regarding this system may be obtained by contacting E.R. Hill, Division of Radiophysics.

SECTION PUBLICATIONS

Library Accession List No. 5 - August 1965 - Oct. 1965

Library Accession List No. 6 - November, 1965

Manual Supplement No. 21 - ADDITIONAL FEATURES TO 3200 FORTRAN. (Ref. Pub. No. 60057600). J. Tindale, C.R.S., Melbourne.

Manual Supplement No. 20 - Still under preparation.

Technical Note No. 15 - RECOMMENDATIONS FOR WRITING COMPATIBLE 3200/3600 FORTRAN. J.J. Russell, C.R.S. Melbourne.

Subroutine Write-up

F4 CSIR EVAL) Eigenvalues and

F4 CSIR EVEC) eigenvectors of a real symmetric matrix. D.R. Ross, C.R.S. Adelaide.

1. ADELAIDE

A two day seminar "Computing in the C.S.I.R.O." will be held in Adelaide on the 8th and 9th of February.

Further details from D.C. Knight, phone 235511.

2. MELBOURNE

A one day seminar "Computing in the C.S.I.R.O." will be held in Melbourne on the 18th of February.

Further details from J.J. Russell, phone 5446757.

Basic Fortran Course:

February 14th - 18th. Details from J.J. Russell

3. SYDNEY

Staff: Miss J. Hayhurst and Mr. N. Walker have now joined the professional staff of the C.R.S. at Sydney.