#### EDINBURGH REGIONAL COMPUTING CENTRE.

Minutes of meeting of the Program Library Sub-Committee held on Friday 14th June 1968 at 3.30 p.m. in the William Robertson Building.

#### PRESENT:

Prof. D.J. Finney (in the Chair)

Prof. P. Vandome

Mr. D.N. Allum

Mr. R.E. Day

Dr. J. Fulton

Dr. F.R. Himsworth

Mr. D. Kershaw

Mr. D.T. Muxworthy

Dr. H.H. Robertson (I.C.I. Management Services)

Miss. B. Stokoe (Atlas Computer Laboratory)

Dr. G.E. Thomas

### 1. MINUTES OF PREVIOUS MEETING

There were no comments on the minutes of the previous meeting, held on the 19th April 1968.

#### 2.. NEW DOCUMENTS

Copies of the following documents produced by E.R.C.C. since the previous meeting were distributed to members of the sub-committee:

- 1. E.R.C.C. Subject Headings.
- 2. Documentation 68/5: Programs and routines available from Edinburgh Regional Computing Centre.
- 3. Index to programs and routines available at Edinburgh Regional Computing Centre.
- 4. I.C.I. Procedures Library: Procedures Available: K Autocode.
- 5. I.C.I. Procedures Library: Procedures Available: FORTRAN.
- 6. Harwell Subroutine Library.
- 7. Some KDF9 programs available from E.R.C.C. users.

In nos. 2 & 4-7 the routines were arranged according to the classification in no. 1.

The committee were anxious that the costs involved in circulating program abstracts should be minimized and recommended that distribution should be less frequent than at present.

# 3. PROGRAMS FROM UNIVERSITY DEPARTMENTS

The committee considered the problem of encouraging users to submit programs of general interest to the library. About a dozen relatively heavy KDF9 users had been contacted and only one showed any willingness to submit programs (see document 7, paragraph 2 above). It was however pointed out that this was an inopportune time of year to make such requests.

Miss Stokoe doubted whether many programs written in the university would be of general interest. Similar attempts to obtain programs at the Atlas Laboratory had largely been ignored. Staff at Chilton do approach heavy users of the Atlas and are able to put users in contact with each other.

Dr. Robertson said that I.C.I. distributed a Programmer's Bulletin in which all new programs were briefly described. The E.R.C.C. abstracts were intended to parallel this. The committee approved of the I.C.I. practice of including occasional review articles in certain program areas but were concerned that the amount of literature circulated should not be so great that it would never be read.

It was suggested that User involvement with the library could be initiated by requiring all members of Mathematics, Statistics and Computer Science departments to complete abstract forms for new programs. This would not commit people to provide full documentation later. Further consideration of this subject was postponed until the next meeting.

- 4. THE I.C.I. PROCEDURE LIBRARY
- Dr. Robertson described the I.C.I. procedures library of 59 routines. Of these all are available in K-autocode and about two-thirds in each of PL/1 and Fortran. The programs are rigorously documented and thoroughly tested. I.C.I. have co-operated with the SHARE organization in testing programs. This subject caused some discussion: it was arranged that Dr. Robertson would send a copy of the SHARE test standards to Mr. Day for study at E.R.C.C.
- I.C.I. are writing software to check the usage of individual library and routines so that total usage over a period of time can be determined. The I.C.I. program library committee will then be more able to decide where new programming effort should be concentrated.
- 5. ATLAS LIBRARY EXPERIENCE.

Miss Stokoe circulated a document, "Notes on the Present Experience of the Atlas Laboratory in the Use of Library Routines", together with some examples of Chilton program descriptions. It was said that almost all work at Chilton was concerned with the Atlas. It was the policy never to give source programs to library users and never to use open-ended programs. It was not possible on the Atlas to detect use of a library program as Dr. Robertson had described.

6. RELATIONS BETWEEN CHILTON, E.R.C.C. AND INDUSTRY.

It was recommended that the E.R.C.C. catalogue should be made generally available in Edinburgh. It was suggested that the catalogue be extended to cover Atlas and I.C.I. material but this could overload the catalogue create an unwelcome profusion of 'equal' programs.

Miss Stokoe said that there would be no objection to Chilton routines in the catalogue and she was asked to send appropriate documentation. The committee would welcome the I.C.I. procedure library being available to E.R.C.C. users, initially in Fortran on a 360 and later on the system 4. It was decided that this matter should be referred to the Executive Committee and Computer Board.

There have been suggestions that the Atlas Laboratory should provide a central university Fortran subroutine library service. Miss Stokoe was not confident that the facilities at Chilton were adequate for this.

7. ACCEPTABILITY OF E.R.C.C. STANDARDS AT OTHER ESTABLISHMENTS
The E.R.C.C. classification system is based on that of IFIP, with various insertions;
both programs and documents are classified by the same system. I.C.I. have their own
well-established system. E.R.C.C. documentation standards are very similar to those of
I.C.I. which have recently been submitted to SHARE and have received favourable
comments. The Centre is in touch with a lecturer who is preparing an M.Phil thesis on
program documentation.

Chilton are currently reviewing documentation and validation procedures; Chilton systems must always be compatible with those of Harwell.

## 8. DATE OF NEXT MEETING

The chairman said that it was hoped to consider survey programs at the next meeting, provided documentation was available to committee members beforehand. The committee would also consider the abstracts, the transfer of material to class 1 and progress with the catalogue. The next meeting would be held on Tuesday, 24th September, 1968 at 3.30 p.m.

(signed D.J. Finney, 1 October 1968)