

CAL TIME-SHARING SYSTEM

General Discussion of the Initial User Version
of CAL TSS, Available around 15 March '71

STATE OF CAL TSS

1) The whole project could conceivably be cancelled because of computer center funding difficulties, but on the assumption that it is not cancelled, we proceed to discuss its availability, past, present, and future.

2) A version of CAL TSS has been in use by the programming staff (and a very few selected users) for about a year. This version is not suitable for general use because:

- a) many of its features are temporary and change rapidly
- b) there is no protection of one user from another
- c) it will only support about 10 users.

This version of the system demonstrates some degree of usefulness and reliability of the system.

3) On about 15 March, a new version of CAL TSS will become available which will to some extent alleviate the above problems:

- a) the command processor and file accessing mechanism will be in substantially final form
- b) protection of one user's files from unauthorized manipulation by another user will be ~~manipulated~~ implemented
- c) it will probably support about 30 users initially, more as it is tuned up.

This version of the system will have its own problems:

- a) the algorithms controlling allocation of space are incomplete and crude (it may even be possible to lock up early incarnations of this version)

b) accounting algorithms are not yet developed

c) the mechanism which will allow the system to support more users by "swapping out" big users is not yet developed.

4) Subsequent versions of CAL TSS will solve the above problems without causing serious dislocations of user code (and user habits!) developed on the 15 March version.

CURRENT CAL TSS FACILITIES

- 1) User data and code can be kept in named files on the system.
- 2) Files can be created, manipulated, executed, deleted, etc., in an interactive manner from remote teletypes.
- 3) Available software includes:
 - a) a TEXT EDITOR, which can scan text files for given character combinations and make insertions, deletions, and changes;
 - b) an interactive BASIC processor;
 - c) a SCOPE SIMULATOR, which gives access to many of the facilities available under SCOPE:
 - i) RUN Fortran
 - ii) COMPASS
 - iii) SNOBOL
 - iv) loader, SCOPE file set utilities, etc.;
 - d) a COMMAND PROCESSOR/DEBUGGER, which enables a user to create, debug, and run his own code as well as access other system facilities;
 - e) a PRINTER DRIVER, giving access to the line printer.

ACCESS TO CAL TSS

1) Physical connection. There is potential for 256 lines into the 6400 B system, which is the machine on which CAL TSS runs. Each line can be hard-wired to a teletype or connected to a dial-up line available to teletypes with dial-up modems. Decisions as to the allocation of the 256 available lines *are* currently being made, so if you wish to connect a teletype to the system, contact Ken Hebert.

The computer center has a small number (about 10) of teletypes currently connected to the system. These may be made available to users who don't have their own teletype.

2) Use of CAL TSS. The 15 March version of the system will be available to users on some regularly scheduled basis, possibly 2PM to 6PM daily. This is a developmental system and it is hoped to have users with a spirit of adventure and cooperation. Since this version of the system incorporates much new and untried software, use of the system will be free until it proves reliable (and, incidentally, until we get our charging algorithm straightened out). Development of the charging algorithm and other system software will be influenced by experience gained during this trial period. Casual experimental use and demonstrations will be available informally, but apply to Ken Hebert if you would like to use the system regularly.