

October 9, 1964

CTSS BULLETIN #55

SUBJECT: MAD - A New Improved Version

Purpose

A new compiler from the University of Michigan is now available which more closely implements the language described in the MAD Manual, November 1963.

Restrictions

Because of some I/O changes, a new library must be used in order to execute programs compiled by the new MAD. (See USAGE)

This version of MAD is available only as CTEST8. Sometime in the near future, it will replace the MAD command.

What's New?

Three items described in the MAD Manual, November 1963, which are not available in the current version, are now available in CTEST8.

- 1) Simplified input-output statements (page 37).
- 2) Definition of operations (page 100).
- 3) Abbreviations (page 98).

Three additional improvements have been made to the compiler:

- 1) External functions save and restore index registers 1 and 2.
- 2) Listing files may be created upon request, "(LIST)".
- 3) A special symbol table file may be requested "(SYMB)".

References

MAD Manual, November 1963.

Usage

Call Sequence: CTEST8 PROG (LIST) (SYMB)

Prog is a file called PROG MAD which is to be translated.

(LIST) is an optional parameter requesting a listing file.  
A line marked file called PROG BCD will be created.

(SYMB) is an optional parameter requesting a symbol table  
file. Only if compilation is successful, will the  
file called PROG SYMTAB be created. This is a special  
file which will be useful shortly with the new MAD  
debugging routines.

The order of (LIST) and (SYMB) is not important.

Because of the I/O change, a new library must be used to  
execute programs compiled by the new MAD. This library may be  
copied from the public files by

```
COPY P MADLIB BSS
```

and used as a library during loading as an argument to the loader

```
LOAD PRPG (LIBE) MADLIB
```

In order for loading to take place correctly, the MADLIB BSS  
file must be searched as a library file and must be given before  
the regular library is searched, i.e., before NEED, etc. might  
be typed.

If it is preferred not to copy the MADLIB file from comfil P,  
then one may use a test loader, "CTEST3". This loader loads from  
common files by using the parameter "CFLn" where n is the comfil  
number (1,2,3,...,P). However, this loader requires a first  
argument to define the type of load desired, such as "LOAD",  
"NCLoad", "VL0AD". An example of its use for a regular load  
would be:

```
CTEST3 LOAD PRPG (CFLP) (LIBE) MADLIB (CFLO) MYLIB
```

where "(CFLO)" sets back to my file directory and MYLIB BSS is a BSS  
file that will be loaded completely. More information about CTEST3  
can be found in MAC-M-169.