Oct 4, 57

Subject: A routine for gathering statistics on existing 704 problems.

The trend toward the use of half word instructions for STRETCH has resulted in a machine structure more like that of the 704 (eg, one index, one operation, & one address in floating point orders.) Of course there are important differences in the area of indexing, etc, but by and large one can expect STRETCH codes to have a strong family resemblance to 704 codes for the same type of problem.

For this reason (and because practically everyone has said at one time or another that it should be done) I suggest that an interpretive routine be written which will enable one to take an existing 704 code and rapidly compile statistics concerning the use of various instructions. It is particularly important to be able to do this analysis on large 704 codes such as the Los Alamos hydrodynamics problems which will more closely resemble the problems we expect to be run on STRETCH.