waiting to use the magnetic tape is identical to the flow of those using the Fastrand drum. A queue of tape users is maintained by the level 15 and level 16 routines. Unlike boom movement, however, tape movement without information transfer is always performed on level 4.

It would, of course, be impermissible for either the tape users or the drum users to monopolize the Data Channel, and the order of priorities necessary to prevent this is administered by the level 4 routines as follows.

      A. The "best" tape user ready for level 1 has priority over all other Data Channel users.

      B. The "best" drum user ready for level 4 has priority of access to the level 4 routines.

Thus, even if there are user programs waiting for both the tapes and the drum, the drum users will be made ready for use of the Data Channel while the tape system is using it, and vice versa. The load on the tape system is normally quite light, and this alternation of Data Channel use has proved to be a satisfactory solution, although heavier tape use might necessitate a more complex scheme.