

- (1) there is an empty user core, or
- (2) the swapping drum is not busy and has a free field, or
- (3) the Fastrand is not being used for a swap and has a free field.

Programs which are already in core are not considered to be either accessible or inaccessible.

Programs are separated into three distinct groups on the basis of status. Programs which need computing (central processor) time are in runnable status. For these programs, the queues are sufficient to determine allocation of time. Some programs, however, are waiting for the completion of a noncomputational event; the event may be input or output to a Teletype or other peripheral device, use of the I-O Processor (IOP), the passage of a predetermined amount of time, etc. These programs are in hung status but will return to runnable status as soon as the necessary event is completed. The third status, called wanted, includes programs which require special attention because

- (1) the user has typed the function BREAK at his Teletype, demanding suspension of his program, or
- (2) the program is wanted for examination by the Executive debugging system, or
- (3) the program has been hung, waiting for its turn to use the IOP and the IOP is now ready for it.

Finally, on the basis of queue level and location, the Swapper