Robert Basham IBM SSD Tucson, AZ

Date: October 30, 1996

TO: X3T10 Committee (SCSI)

SUBJECT: Prevent/Allow Setting Outstanding

We have encountered a problem with multiple initiator systems where a Prevent/Allow Medium Removal command has set a prevent from one initiator. That initiator then goes away. The remaining initiator(s) do not know that the prevent is in effect. If they issue a message requiring manual intervention by an operator to a system console, the operator is blocked from doing the requested action (e.g., manually unload and mount a new volume). We have two proposals.

Doc. NO: X3T10/96-266r0

Our first proposal is that an indication be made available, possibly in the Device Configuration mode page, that indicates when at least one prevent is outstanding. We need two fields: one for the volume in the device and one for an attached magazine. These two fields could be the logical OR of the outstanding prevents by type or they could be a count of the prevents by type. In either case, a value of zero means no prevent is outstanding. This information is known by the logical unit already; we just need it reported.

The behavior requested is as follows:

- When the first prevent is set for either type, a Unit Attention, Mode Parameters Changed, is returned to each initiator.
- When the last prevent is removed for either type, a Unit Attention, Mode Parameters Changed, is returned to each initiator.

The second proposal would be to consider adding the prevent/allow control function under the PERSISTENT RESERVE/RELEASE control mechanism. That would permit resetting another initiators prevent condition by type, or all of them.

Robert Basham