## ENDL TEXAS

Date: 1 April 2002 To: T10 Technical Committee From: Ralph O. Weber Subject: SBC-2, SSC-2, SMC-2 & OSD Support for All Registrants Persistent Reservations

T10/02-065r2 SPC-3 Persistent reservations corrections contains corrections covering the All Registrants type reservations that should be reflected in other command set documents. SBC-2, SSC-2, and SMC-2 all have taken text from an SPC-2 annex that needs to be corrected. OSD cloned the text and likewise needs corrections.

Two corrections are needed:

- 1. Addition of "all registrants" to a sentence describing the reservations conflicts tables;
- 2. Replacement of the description for how reservations are checked; and
- 3. Changes to the column headings and keys for the reservations conflicts tables.

The changes are shown below, using the text from the processor command set model as a basis. The required changes in the command set documents mentioned above should be (but might not be) identical to those shown. Deleted text is shown in red with strike throughs, added text is in red, and text that is known to differ from one command set to the next is in blue.

## Change 1

**allowed:** Commands issued by initiators not holding the reservation or by initiators not registered when a registrants only persistent reservation is present should complete normally.

**conflict:** Commands issued by initiators not holding the reservation or by initiators not registered when a registrants only persistent reservation is present shall not be performed and the device server shall terminate the command with a RESERVATION CONFLICT status.

Commands from initiators holding a reservation should complete normally. The behavior of commands from registered initiators when a registrants only <u>or all registrants</u> persistent reservation is present is specified in table 1.

## Change 2

A command that does not explicitly write the medium shall be checked for reservation conflicts before the command enters the enabled task state for the first time. Once the command has entered the enabled task state, it shall not be terminated with a RESERVATION CONFLICT due to a subsequent reservation.

A command that explicitly writes the medium shall be checked for reservation conflicts before the device server modifies the medium or cache as a result of the command. Once the command has modified the medium, it shall not be terminated with a RESERVATION CONFLICT due to a subsequent reservation.

An unlinked command shall be checked for reservation conflicts before the task containing that command enters the enabled task state. The reservation state as it exists when the first command in a group of linked commands enters the enabled task state shall be used in checking for reservation conflicts for all the commands in the task. Once a task has entered the enabled task state, the command or commands comprising that task shall not be terminated with a RESERVATION CONFLICT due to a subsequent reservation. Any command in a group of linked commands that changes the reservation state shall be the last command in the group.

## Change 3

Command	Addressed LU is reserved by another initiator [A]	Addressed LU has this type of persistent reservation held by another initiator [B]				
		From any initiator		From registered	From initiator not registered	
		Write Excl	Excl Access	initiator R <mark>R</mark> all types)	Write Excl – R <mark>R</mark>	Excl Acc- ess – R <u>R</u>
RECEIVE	Conflict	Allowed	Conflict	Allowed	Allowed	Conflict
SEND	Conflict	Conflict	Conflict	Allowed	Conflict	Conflict
Key: LU=Logical Unit, Excl=Exclusive, RR=Registrants Only or All Registrants						

Table 1 — XXX commands that are allowed in the presence of various reservations

Note: The change in the column headings and key is from "RO" to "RR"