TO: T10 Membership
FROM: Paul A. Suhler, Seagate Removable Storage Solutions, LLC
DATE: 4 March 2003
SUBJECT: T10/03-095r0, ADC Requested Recovery Log Page

Revision 0:

- Page defined with a single parameter containing a one-byte RECOVERY ACTION field.

6.1.4   Requested Recovery log page

Table x describes the Requested Recovery log page, which contains the Recovery Action log parameter. When the drive is unable to complete an action, such as a medium load or unload, it can set the RRQST bit in the Very High Frequency Data log parameter to prompt the automation device to perform a recovery action. The automation device can obtain the requested recovery action by reading the Requested Recovery log page.

Recovery may require a series of actions. In such a case, after all but the final action the data transfer device shall set the RRQST bit in the VHF Data log parameter and report the next action in the Recovery Action log parameter.

Table x – Requested Recovery log page

Bit Byte	7	6	5	4	3	2	1	0
0	Reserved		PAGE CODE (13h)					
1		PAGE LENGTH (05h)						
2								
3		PARAMETER CODE (0000h)						
4								
5	DU (1)	DS (1)	TSD (1)	ETC (0)	TMC (0)		LBIN (1)	LP (1)
6	PARAMETER LENGTH (01h)							
7	RECOVERY ACTION							

The PAGE LENGTH field shall be set to 0005h to allow the transfer of the complete log page.

The PARAMETER CODE field shall be set to 0000h to indicate the single Recovery Action log parameter.

The PARAMETER LENGTH field shall be set to 01h to allow transfer of the complete parameter.

The values reported in the RECOVERY ACTION field are defined in Table y.

Table y – Recovery actions

Recovery Action	Description
00h	Recovery not required
01h	No recovery action defined
02h	Push cartridge
03h	Remove and re-insert cartridge
04h	Issue UNLOAD command, remove, and re-insert medium
05h	Cycle power to data transfer device
06h	Issue LOAD command
07h	Issue UNLOAD command
08h	Issue Logical Unit Reset request
09h	Manual removal of medium is required
0Ah – 07Fh	Reserved
80h – FFh	Vendor Unique actions

If the Requested Recovery log page is requested when the RRQST field in the Very High Frequency Data log parameter is zero, then a recovery action of 00h (Recovery not required) shall be reported.

If the requested recovery action will cause the data transfer device to eject the medium, the automation device shall ensure that there will not be a conflict with the motion of a medium transport element before initiating that recovery action.

If the requested recovery action is 08H (Manual removal of medium is required), then the automation device shall not issue a load or unload command or attempt to manipulate the medium physically.

Editor's Notes:

1. Is the prohibition against physical manipulation – intended to mean poking the cartridge with the robot – too severe? Some library vendor may decide that they want to do that.

2. Do we need an explanation for every action?