TO: T10 Membership
FROM: Paul A. Suhler, Certance
DATE: 23 April 2003
SUBJECT: T10/03-095r3, ADC Requested Recovery Log Page

Revision 3:
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Revision 2:
- Key clearing of requested recovery procedures to setting of INXTN in VHF data.
- Key setting of RRQST to availability of recovery procedure.
- Modified recovery procedure descriptions.

Revision 1:
- Changed the parameter to one or more recovery procedures, each of which will consist of one or more actions.
- Added recovery procedures.
- Modified description of the RRQST field.

Revision 0:
- Page defined with a single parameter containing a one-byte RECOVERY ACTION field.

Changes for clause 6.1.2.2 :

The recovery requested (RRQST) field shall be set to one to indicate that the drive has detected an error and that ~~a recommended or requested recovery procedure is~~ one or more requested recovery procedures are available via the Requested Recovery log page. A value of zero indicates that ~~it does not~~ no recovery procedure is requested. This field shall remain set to one as long as a recovery procedure is available.

NOTE 6 The recovery procedure in the log page may indicate "none." ~~or "unknown."~~

Clause 6.1.4:

6.1.4 Requested Recovery log page

Table x describes the optional Requested Recovery log page, which contains the Recovery Procedures log parameter. When the drive is unable to complete an action, such as a medium load or unload, it may set the RRQST bit in the Very High Frequency Data log parameter to request that the automation device perform a recovery action. The automation device can obtain a list of alternative requested recovery procedures by reading this log page.

When multiple recovery procedures are available, the most preferred procedure shall be the first in the list, in byte 7, and the other procedures are listed in decreasing order of preference. The automation device may select any procedure for execution, regardless of position in the list.

Each recovery procedure consists of one or more actions to be performed. When the INXTN field of the VHF data (*cross reference*) is set to one, the parameter shall report only the "Recovery not requested" procedure. If a failure occurs in performing one of the actions in a procedure, an appropriate list of requested recovery procedures may be reported.

Table x – Requested Recovery log page

Bit Byte	7	6	5	4	3	2	1	0
0	Reserved		PAGE CODE (13h)					
1	PAGE LENGTH (n-2)							
2								

3	PARAMETER CODE (0000h)						
4							
5	DU (1)	DS (1)	TSD (1)	ETC (0)	TMC (0)	LBIN (1)	LP (1)
6	PARAMETER LENGTH (n-6)						
7	most preferred recovery procedure						
…							
	least preferred recovery procedure						

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

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

Table y – Recovery procedures

Recovery Action	Description
00h	Recovery not requested
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	No recovery action defined. Contact service organization
0Ah	Issue UNLOAD command, remove, and quarantine medium
0Bh	Do not insert medium. Contact service organization
0Ch	Issue UNLOAD command, remove medium, and contact service organization
0Dh – 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 requested) shall be reported.

If the requested recovery procedure 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 procedure is 09h (Contact service organization), then the automation device shall not issue a load or unload command or attempt to manipulate the medium physically.

If the requested recovery procedure is 0Ah (Issue UNLOAD command, remove, and quarantine medium), then the medium should not be loaded in a data transfer device.

If the requested recovery procedure is 0Bh (Do not insert medium), a non-recoverable error has occurred and insertion of a medium may cause damage. When this recovery procedure is requested, then the Robotic Access Allowed (RAA) field in the Very High Frequency Data shall be set to zero, and no other recovery procedures shall be reported.

If the requested recovery procedure is 0Ch (Issue UNLOAD command, remove medium, and contact service organization), a non-recoverable error has occurred and insertion of a new medium may cause damage. When this recovery procedure is requested and the medium is accordingly removed, then the Robotic Access Allowed (RAA) field in the Very High Frequency Data shall be set to zero, and no other recovery procedures shall be reported.