Summary of Comments on SCSI Block Commands - 2 (SBC-2)

Author: agilent

Page: 28
Sequence number: 1
Date: 9/2/2004 5:32:07 PM
Type: Note

ACCEPT - DONE (Deleted the figure per another Agilent comment. It was labeled an example and could have been introduced as such, but technical problems dictate that it just be dropped instead).
4.15.3.2 top of page 28: It is technically incorrect dictate the number of bits that the CRC generator processes at one time. I can get the same CRC result with a pure serial generator or processing any number of bits at a time. It is not clear whether this text is stating a requirement or merely giving an example.

Page: 28
Sequence number: 2
Date: 9/2/2004 5:30:55 PM
Type: Note

ACCEPT - DONE (deleted Figure 3 and the text introducing it, which eliminates this issue)
4.15.3.2 top of page 28:
I also object to the use of "word" here as equivalent to two bytes. I don't see any definition of "word" here or in SAM 2. Industry usage on the size of a "word" varies.

Page: 28
Sequence number: 3
Date: 9/2/2004 6:43:46 PM
Type: Note

REVIEW
ACCEPT - DONE (Deleted the figure. It would be correct for a CRC checker to work on 16 bits at a time and provide an extra pad byte of 00h for odd data lengths. It is incorrect for a CRC generator to be constructed this way. Trailing 00hs are only irrelevant to CRC logic when the remainder is zero. This is true for a CRC checker that was fed in the user data + CRC; it is not true for a CRC generator that was only fed in the user data. A CRC generator supporting odd data lengths would have to use a special 8-bit CRC block to handle the last odd byte of data, different than its 16-bit CRC block. Although we could define that all CRC generators pad the data like this, odd block lengths are mainly a theoretical possibility and unlikely to be used in real products (where 512 and 4086 byte block lengths dominate).)
4.15.3.2 top of page 28:
The Figure 3 diagram indicates that an on byte size user field is to be padded out, but that is not indicated in any requirements text and the Figure is an example. This will cause incompatabilities as some will pad for the calculation and some will not follow that example.

Author: brcd

Page: xx
Sequence number: 1
Date: 8/30/2004 5:26:18 PM
Type: Highlight

REJECT (there is not a subset of T10 technical committees that developed and reviewed this standard; the whole T10 did so. Thus which is appropriate as phrased here.)
1 (E) Page: xx Location: Introduction
Problem Description:
"which" s/b "that"
Suggested Solution:
Make requested correction

Page: 3
Sequence number: 6
Date: 8/30/2004 7:53:50 PM
Type: Note

REJECT (this list ends up removed from the ISO version but survives in ANSI. T10 standards have always referred to BSI, JIS, etc. in the "Copies of the following documents may be obtained from ANSI" and there seems to be resistance to removing them there.)
29 (E) Page: 3 Location: 2.1, Table 1
Problem Description:
Remove all those not referenced in this document. For all practical purposes, the only ones referenced are ISO, IEC, INCITS, and maybe ANSI, since there is only one approved reference and 5 approved references under development
Suggested Solution:
Make requested correction

Page: 5
Sequence number: 11
Date: 9/1/2004 6:30:34 PM
Type: Highlight

REJECT (The current definition came from the ANSI T1 Glossary of Telecommunications Terms (http://www.atis.org/tg2k/). Adding "character boundary" doesn't help because "character" is not defined (and in SAS and SATA, means 10 contiguous bits considered as a unit). I don't think that SBC itself has any boundary alignment intrinsic to the definition of byte. If there were an 8 bit field in one of the CDB tables that wrapped from one row to another, it would still be considered an unaligned one byte field.)
17 (E) Page: 5 Location: 3.1.4
Problem Description:
The definition of byte is inconsistent among the different standards. I
have no particular objection to the present definition except that it
does not consider the boundarie alignment requirement for the eight contiguous bits.
Suggested Solution:
I would suggest changing this (and SAM and SPC) to read:
"A sequence of eight contiguous bits considered as a unit and aligned on
character boundary".

Page: 5
Sequence number: 12
Date: 8/30/2004 6:46:00 PM
Type: Note

ACCEPT - DONE
18 (E) Page: 5 Location: 3.1.x
Problem Description:
Several references are missing.
Suggested Solution:
Add "See SAM-3" to:
3.1.10 data-in buffer, 3.1.11 data-out buffer, 3.1.15 domain,
Add "See SPC-3" to:
3.1.14 device type,

Page: 5
Sequence number: 13
Date: 8/30/2004 6:55:18 PM
Type: Note

REJECT (if a term has an acronym, it's listed as
3.1.xx term (ACRONYM): definition." and in the acronym list as
ACRONYM term (see 3.1.xx)
)
19 (E) Page: 5 Location: 3.1.9
Problem Description:
Abbreviations are included in the definitions sections. Include DLIST,
GLIST, CLIST, and PLIST in clause 3.2 only. Do not define them except
in the body of the referenced text.
Suggested Solution:
Make requested correction

Page: 5
Sequence number: 14
Date: 9/2/2004 10:08:45 PM
Type: Note

REVIEW
ACCEPT - DONE (split off basic XOR definition from "XOR operation" definition.

exclusive-or (XOR):
A Boolean arithmetic function on two binary input values that results in an output value of 1 if one and only one of the input values is 1.
XOR operation: Performing an XOR (see 3.1.18) bitwise on two identical-sized multiple-bit input values (e.g., the current value of a logical block and the new value for that logical block). In a storage array implementing a redundancy group (see 3.1.40), the XOR operation is used in error correction algorithms and may be performed by the storage array controller (see 3.1.45) or by the direct-access block devices (see 3.1.15). See 4.14.)
)
20 (T) Page: 5 Location: 3.1.16
Problem Description:
XOR is incorrectly defined. I would propose that the following
definition be used:
"The exclusive-OR function defined for binary arithmetic and logic. The
output value is 1 if one and only one of the input values is 1. In
this document, the exclusive-OR function is used to describe the
operation that creates an output string of bits of length "n" by setting
the "i"th bit of the string equal to the logical XOR of the "i"th bit of
each of two input strings of bits, also of length "n". By extension,
the term is used as an adjective to describe commands that perform this
exclusive-OR function. Such operations can be used to create data
redundancy that allows recovery of damaged data under certain
conditions."
Suggested Solution:
Make the requested correction.
Note that the wording about "does not define the specific polynomial" is
false. It must and does define the behavior of the device during
execution of the XOR commands.

Page: 6
Sequence number: 19
Date: 10/3/2004 3:14:53 PM
Type: Highlight
ACCEPT - DONE (per 04-288 CAP WG and 04-290r1 as "A condition resulting from the events defined by SAM-3 in which the SCSI device performs the hard reset operations described in SAM-3, this standard, and other applicable command standards (see table 9 in 5.1).")
2 (E) Page: 6 Location: 3.1.20
Problem Description:
"A target action in response to a reset event in which the target port performs the operations described in SAM-3." s/b "A target action in response to a reset event that causes the target port to perform the "hard reset" actions described in SAM-3"
Suggested Solution:
Make the requested correction
Make a similar correction in 3.1.24

Page: 6
Sequence number: 20
Date: 9/14/2004 11:03:16 PM
Type: Note
REJECT (agree to define medium as "The material on which data is stored (e.g., a magnetic disk)". The CAP WG discussed obsoleting volatile medium, but the apparent existence of SCSI based RAM disks (e.g. built in system memory by an OS) indicates this should not be done. It was noted that there is no way to tell if a medium is volatile (either via an INQUIRY bit or in the READ CAPACITY data), but since existing users haven't complained about that, there is no reason to add it at this time.
)
21 (T) Page: 6 Location: 3.1.26
Problem Description:
To use this word, you must also define the word "medium". I believe the
intent is allow 3.1.38 and others to implicitly define that. However,
the wording used in 3.1.28 is precisely the wording used for "medium" in
SPC-3. I would propose changing 3.1.28 using the definition from SPC-3
and realphabetizing the item. That wording is:
"medium: A physical entity that stores data in a nonvolatile manner
(retained through a power cycle) in accordance with commands processed by the device server."
Suggested Solution:
Make the requested correction.
Note that the word "non-volatile medium" is used only one place in the
whole document and its meaning is clear there.
Note that the word "volatile medium" is used only one place in the whole document, and it refers to no device of which I am aware. I believe it
should be deleted conceptually.

Page: 6
Sequence number: 21
Date: 9/2/2004 11:43:27 PM
Type: Underline
ACCEPT - DONE
22 (T) Page: 6 Location: 3.1.29 power cycle
Problem Description:
Use the text from SPC-3 instead of this text.
Suggested Solution:
Make requested correction

Page: 6
Sequence number: 22
Date: 10/3/2004 3:14:39 PM
Type: Underline
ACCEPT - DONE (per 04-288 CAP WG and 04-290r1 as "A condition resulting from the events defined by SAM-3 in which the SCSI device performs the power on operations described in SAM-3, this standard, and other applicable command standards (see table 9 in 5.1).")
23 (T) Page: 6 Location: 3.1.30
Problem Description:
Use the text from SPC-3 instead of this text.
Suggested Solution:
Make requested correction

Page: 6
Sequence number: 23
Date: 8/30/2004 7:47:09 PM
Type: Underline
REJECT (term not used in the standard, so is deleted instead)
24 (T) Page: 6 Location: 3.1.33
Problem Description:
Change the definition to: "Medium containing data that cannot be changed
by a SCSI command. The data is applied to the medium by methods outside the scope of this standard"
Suggested Solution:
Make requested correction

Page: 6
Sequence number: 24
Date: 10/3/2004 4:06:05 PM
Type: Note
ACCEPT - DONE (reset event removed, as command set standards don't refer to events)
25 (T) Page: 6 Location: 3.1.35
Problem Description:
Replace the definition of "reset event" with the definition from SAM-3
Suggested Solution:
Make requested correction

Page: 6
Sequence number: 25
Date: 8/30/2004 7:49:18 PM
Type: Note
ACCEPT - DONE (with the SAM-3/SPC-3 editor's suggested text: "Data describing an error or exceptional condition that a device server delivers to an application client in association with CHECK CONDITION status. See SPC-3.")
26 (T) Page: 6 Location: 3.1.36
Problem Description:
Replace the definition of "sense data" with the definition from SPC-3.
Suggested Solution:
Make requested correction

Page: 7
Sequence number: 11
Date: 8/30/2004 7:50:30 PM
Type: Note
ACCEPT - DONE
27 (T) Page: 7 Location: 3.1.41 update
Problem Description:
Remove this definition. It only applies to two usages, both considered
only because they are rendered obsolete. All other usages of the term
do not keep older generations of data, but refer to updates of less than

a complete stripe of data and can be considered a normal English use of the term.
Suggested Solution:
Make requested correction

Page: 7
Sequence number: 12
Date: 10/3/2004 4:05:27 PM
Type: Note
REJECT (this is for things like RAMdisks, which in 04-288 the Sep CAP WG decided to continue to support)
28 (T) Page: 7 Location: 3.1.44 volatile medium
Problem Description:
Remove this definition. It is inconsistent with the SPC definition of medium. What is being referred to as a medium is really a storage area for parameters outside the medium.
Suggested Solution:
Make requested correction

Page: 7
Sequence number: 13
Date: 8/30/2004 7:54:17 PM
Type: Note
ACCEPT - DONE
30 (E) Page: 7 Location: 3.2
Problem Description:
Remove unreferenced abbreviations kbit and Mbit (which are defined incorrectly anyway).
Suggested Solution:
Make requested correction

Page: 10
Sequence number: 29
Date: 8/30/2004 5:40:51 PM
Type: Highlight
REJECT (The usage of which is correct. The entire logical block address is either 4 bytes or 8 bytes. There is not a subset of the logical block address that is 4 bytes or 8 bytes. Added "in length" at the end, though.)
3 (E) Page: 10 Location: 4.2
Problem Description:
"which" s/b "that"
In addition, the text should clarify that it is the logical block address that is 4 or 8 bytes in length by adding the text "in length" at the end of the same sentence.
Suggested Solution:
Make requested correction

Page: 10
Sequence number: 30
Date: 8/31/2004 2:39:47 PM
Type: Strikeout
REVIEW
ACCEPT - DONE (reworded as "The block length is greater than or equal to one byte and should be even. Most direct-access block devices support a block length of 512 bytes and some support additional block lengths (e.g., 520 or 4096 bytes). ")
31 (E) Page: 10 Location: 4.1
Problem Description:
Delete "and may be a multiple of 512 bytes", since it adds no information.
Suggested Solution:
Make requested correction

Page: 10
Sequence number: 31
Date: 8/30/2004 8:06:36 PM
Type: Highlight
REJECT ("additional information" is the standardese phrase for ECC bytes and any other bytes available via WRITE LONG/READ LONG. Perhaps a glossary entry is appropriate, but it cannot be deleted from this sentence.)
32 (T) Page: 10 Location: 4.1
Problem Description:
Delete "and additional information". There is no other SCSI-visible source of additional information, so it should not be mentioned.

Suggested Solution:
Make the requested correction.
The same correction must be made on page 11, clause 4.4, next to last paragraph, last sentence

Page: 10
Sequence number: 32
Date: 10/3/2004 4:07:18 PM
Type: Highlight
REJECT (this means RAMdisks, which in 04-288 the Sep CAP WG decided to continue to support)
33 (T) Page: 10 Location: 4.2
Problem Description:
The text concerning volatility is not correct. There is no volatile media device defined. There are devices with non-volatile caches, but the medium by definition is non-volatile.
Suggested Solution:
Delete second sentence of last paragraph.

Page: 10
Sequence number: 33
Date: 10/3/2004 5:57:17 PM
Type: Highlight
ACCEPT - DONE
34 (T) Page: 10 Location: 4.2
Problem Description:
The last sentence should be changed to read: "The medium on a device may contain vendor specific information that is not addressable through the LBA. Such data may include defect management data and other device management information."
Suggested Solution: Make requested correction

Page: 12
Sequence number: 24
Date: 8/30/2004 7:45:54 PM
Type: Highlight
REJECT (George complains about parenthetical expressions. Which and that are correctly used.)
5 (E) Page: 12 Location: 4.8
Problem Description:
"defects, which may be supplied by the original manufacturer of the device or medium, that" s/b "defects (supplied by the original manufacturer of the device or medium) that"
Suggested Solution:
Make requested correction

Page: 12
Sequence number: 25
Date: 10/3/2004 4:07:51 PM
Type: Note
REJECT (this relates to SCSI based RAMdisks, which in 04-288 the Sep CAP WG decided to continue to support)
35 (T) Page: 12 Location: 4.6
Problem Description:
This is where the non-volatile problem needs to be handled correctly.
Change the second and third paragraph to read as follows:
"Block devices may save mode parameters and other management information on a non-removable media or in a non-volatile memory. Such devices only need to be initialized once.
Those devices without access to a non-removable media or a non-volatile memory may need initialization (possibly including formatting and/or mode parameter initialization) after each logical unit reset or power cycle prior to the processing of read or write operations.
Suggested Solution:
Make requested correction

Page: 12
Sequence number: 26
Date: 8/30/2004 8:12:43 PM
Type: Underline
ACCEPT - DONE (Deleted the sentence. This referred to fields in the Format Device mode page, now obsolete, which let the application control how much space was allocated for remapping of blocks. It called them "defect handling format parameters (TRACKS PER ZONE, ALTERNATE SECTORS PER ZONE, ALTERNATE TRACKS PER ZONE and ALTERNATE TRACKS PER LOGICAL UNIT)"
Although it could still mention the Read-Write Error Recovery mode pages which have bits controlling reallocation, that doesn't seem to be the focus of this paragraph. There is a reference to that mode page below)

Suggested Solution:
Make requested correction

Page: 12
Sequence number: 27
Date: 10/3/2004 3:14:02 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG and 04-310r1, added "Application clients should not send a command with the ORDERED task attribute if it may be processed as if it has a task attribute of HEAD OF QUEUE, because whether the ORDERED task attribute is honored is vendor-specific.")
69 (T) Page: 12 Location: 4.7
Problem Description:
The definition of "implicit head of queue" seems to me to be overreaching. I believe that simple queueing should allow for implicit head of queue, but it concerns me that ORDERED also allows for it. I would prefer to see ORDERED not allowed for those commands if it has no meaning. Alternatively, ORDERED should over-ride the implicit head of queue.
Suggested Solution:
Select proper solution and implement it. Note that this effects SPC-3 also.

Page: 13
Sequence number: 21
Date: 8/30/2004 8:13:52 PM
Type: Highlight
ACCEPT - DONE
37 (E) Page: 13 Location: 4.9
Problem Description:
On the 5th paragraph, "store data that is written to the medium at a later time." s/b "store data that is to be written to the medium at a later time."
Suggested Solution:
Make requested correction

Page: 14
Sequence number: 27
Date: 8/30/2004 8:22:17 PM
Type: Underline
ACCEPT - DONE (In FrameMaker, the cross-reference format must use backslash-space instead of space to make this happen)
38 (E`) Page: 14 Location: 4.10
Problem Description:
"table" should be attached to "3" with a non-breaking space
Suggested Solution:
Make requested correction

Page: 14
Sequence number: 28
Date: 9/1/2004 7:14:25 PM
Type: Underline
ACCEPT - DONE (removed all these sentences. SPC-3 does a better job of describing the reservations model, and there is nothing block specific about this text. SPC-3 has already changed "current task" to "enabled task state" in its equivalent text.)
39 (T) Page: 14 Location: 4.10
Problem Description:
SAM does not define a "current task state". The task may become the "current task" by beginning to transfer data. It may enter the "enabled task state" by being allowed to begin.
I believe what is desired here is "has become the current task for the first time" instead of "has entered the current task state for the first time". That is a measurable time, as opposed to the enabled state, which is outwardly invisible.
Suggested Solution:
Make requested correction

Page: 15
Sequence number: 15
Date: 8/30/2004 8:36:56 PM
Type: Note
ACCEPT - DONE (deleted per an ENDL comment)
40 (T) Page: 15 Location: 4.10

Problem Description:
Note 4 uses the word operation, not previously defined. I believe the intent here is to warn of the danger of interrupting a sequence of commands with a reservation. The note should either be deleted or rewritten to:
"When more than one application client has access to a device server, agreement is required among application clients as to when media is reserved and released. Application clients may interrupt or interfere with each other if such conventions are not followed."
Suggested Solution:
Make requested correction

Page: 16
Sequence number: 12
Date: 8/31/2004 10:23:02 PM
Type: Note
REVIEW
ACCEPT - DONE (getting rid of [B] = Persistent Reservations helps)
41 (E) Page: 16 Location: 4.10, Table 3
Problem Description:
The format of the key is very unclear and it should be reformatted.
Suggested Solution:
Make requested correction

Page: 16
Sequence number: 13
Date: 8/30/2004 9:56:33 PM
Type: Note
REJECT (detailed proposals are welcome for a more useful error handling model for SBC-3. One was suggested during pre-letter ballot review for SBC-2 but nobody bothered to submit one to T10.
The paragraph below table 4 has 3 sentences each describing how the INFORMATION field is filled in for certain errors. I don't think it is improved as 3 paragraphs. The detailed proposal could include the sense data field settings in a better table of error results.)
42 (T) Page: 16 Location: 4.11
Problem Description:
SPC-3 makes it fairly clear that Sense Keys and Additional Sense Codes
are only loosely related. The same ASC/ASCQ may be a HARDWARE ERROR, a RECOVERED ERROR, or a MEDIUM ERROR.
As such, I would propose that Table 4 and the two sentences purporting to explain its purpose be deleted.
The text of the first paragraph after Table 4 should probably be
separated into 3 separate paragraphs describing these 3 error
presentations commonly for all commands. Any others that are common to all commands should also be specified here, but most should only be
specified in the explanation of the command.
Suggested Solution:
Make requested correction

Page: 17
Sequence number: 20
Date: 9/1/2004 3:21:44 PM
Type: Note
ACCEPT - DONE (as "The typical application of a direct-access block device is a magnetic disk device. The medium is a spinning disk with a magnetic material that allows flux changes to be induced and recorded. An actuator positions a read-write head radially across the spinning disk, allowing the device to randomly read or write the information at any radial position. Data is stored by using the write portion of the head to record flux changes and is read by using the read portion of the head to read the recorded data.
The circular path followed by the read-write head at a particular radius is called a track. The track is divided into sectors each containing blocks of stored data. If there are more than one disk spinning on a single axis and the actuator has one or more read-write heads to access the disk surfaces, the collection of tracks at a particular radius is called a cylinder.")
43 (E) Page: 17 Location: 4.12.2
Problem Description:
First and second paragraphs need to be rewritten as:
"The typical application of a direct-access device is a magnetic disk device. The medium is a spinning disk coated with a magnetic material that allows flux changes to be induced and recorded. An actuator positions a read-write head radially across the spinning disk, allowing the device to randomly read or write the information at any radial position. Data is stored by using the write portion of the head to record flux changes and the read portion of the head to read the recorded data.

The circular path followed by the read-write head at a particular radius
is called a track. The track is divided into sectors each containing
blocks of stored data. If there is more than one disk spinning on a
single axis and the actuator has one or more read-write heads for each disk surface, the collection of tracks at a particular radius is called a
cylinder."
Suggested Solution:
Make the requested change.
Note that a lot of this stuff is out of date the way disks are presently
implemented.

Page: 17
Sequence number: 21
Date: 8/30/2004 8:49:13 PM
Type: Note
REJECT (it is a complete list. It was very hard to pick this information out of the command (and mode page) descriptions when adding long LBA support and figuring out which sense data fields were broken, which is when this table was created.)
44 (E) Page: 17 Location: 4.11, Table 5
Problem Description:
Question:
Is table 5 and exhaustive list? If so, is it short enough and simple
enough so that it should be dropped and the information included only in
the command descriptions?
Suggested Solution:
TBD

Page: 17
Sequence number: 22
Date: 9/1/2004 2:07:03 PM
Type: Highlight
ACCEPT - DONE (replaced this sentence and the whole rest of the paragraph with "Sectors may also contain information for accessing, synchronizing, and protecting the integrity of the logical blocks.")
45 (E) Page: 17 Location: 4.12.2
Problem Description:
"A sector may be made up of a header, data, and a trailer" s/b "A sector may contain headers, trailers, data written in logical blocks, and radial servoing information."
Suggested Solution:
Make requested correction

Page: 17
Sequence number: 23
Date: 9/3/2004 9:07:52 AM
Type: Highlight
REJECT (sentences deleted in favor of a simpler sentence: "Sectors may also contain information for accessing, synchronizing, and protecting the integrity of the logical blocks.")
46 (E) Page: 17 Location: 4.12.2
Problem Description:
"The data field begins with a synchronizing field and a data area that
contains user data" s/b "The data field contains a synchronizing field
and a data area that contains an encoding of user data."
Suggested Solution:
Make requested correction

Page: 17
Sequence number: 24
Date: 8/31/2004 10:21:38 PM
Type: Highlight
ACCEPT - DONE (deleted)
47 (E) Page: 17 Location: 4.12.2
Problem Description:
Last sentence on page 17 should read: "Disk devices are non-volatile"
or alternatively be deleted.
Suggested Solution:
Make either correction

Page: 18
Sequence number: 42
Date: 9/1/2004 2:15:45 PM
Type: Underline

REJECT (Write Long provides a bit more than visibility. Reworded paragraph to "The defect management scheme of a disk device may not be discernible through this command set, though some aspects may be evaluated by the application client. The READ LONG command and the WRITE LONG command access the additional information in addition to the user data and protection information, if any, so that defects may be induced by the application client to test the defect detection logic of the direct-access block device. WRITE LONG commands may also be used to emulate unrecoverable logical blocks when generating mirror copies.")
48 (E) Page: 18 Location: 4.12.2
Problem Description:
"though some aspects can be evaluated" s/b "though some aspects may be visible to"
Suggested Solution:
Make requested correction

Page: 18
Sequence number: 43
Date: 8/30/2004 8:56:25 PM
Type: Note
REJECT (The commands are still used extensively to inject errors for test purposes. The contents of the additional information are not too important - just good/bad is. T13 recently discussed adding a WRITE WRONG command into ATA to add this level of testing into that standard, and some of the disk drive companies investigated whether adopting such a command in SCSI would be appropriate. They decided that the current commands work fine as is and changing would be an undo hassle. They did add wording that WRITE LONG and READ LONG can use "transposed" data to simplify their designs.)
49 (T) Page: 18 Location: 4.12.2
Problem Description:
The discussion here of READ LONG and WRITE LONG, together with my
knowledge of modern disk drives beg that I ask whether this usage of
READ LONG and WRITE LONG should be made obsolete.
Suggested Solution:
Make READ LONG and WRITE LONG obsolete unless drive vendors indicate that their self-test program is inadequate to verify the error detection and correction mechanisms and host computer manufacturers and programmers guarantee that they will use the commands in a standard way to supplement the inadequate self-test programs.

Page: 18
Sequence number: 44
Date: 10/3/2004 5:10:31 PM
Type: Note
REJECT (04-288 Sep CAP WG discussed and chose to keep volatile media, which includes RAM disks. True, there should be a bit somewhere (probably in READ CAPACITY) indicating the medium is volatile. Nobody has asked for one, though.)
50 (T) Page: 18 Location: 4.12.3
Problem Description:
The last sentence says "Memory block devices may store less data than
disks or tapes, and may be volatile." There is no marker that describes
the volatility behavior of a memory block device. I assume that means
that this should be rewritten to read "Memory block devices may store
less data than disks or tapes. For compliance with SBC-2, memory block
devices shall be non-volatile."
Suggested Solution:
Make requested correction

Page: 21
Sequence number: 10
Date: 8/30/2004 5:45:22 PM
Type: Underline
ACCEPT - DONE
6 (E) Page: 21 Location: 4.13.1.4
Problem Description:
"which" s/b "that"
Suggested Solution:
Make requested correction

Page: 24
Sequence number: 5
Date: 9/1/2004 4:05:39 PM
Type: Highlight
ACCEPT - DONE (Reworded to use "should" rather than "may" and <= rather than <. New wording is "the power consumed by the SCSI target device should be less than or equal to that consumed than when the logical unit is in the SSU_PC1:Active, SSU_PC2:Idle, or SSU_PC3:Standby states" Also prepared an SPC-3 proposal to use this phrasing.)
51 (T) Page: 24 Location: 4.14.2.6.1
Problem Description:
The stopped state "may consume less power" than when Active, Idle, or
Standby. Then again, it may consume more power. This seems pretty

random to me. I would expect it would drop from "Stopped" to Active, Idle, or Standby using the Power Condition mode page timers if Active, Idle, and/or Standby were a lower power condition. I would then expect it to revert to Stopped when an action at the drive or a Start/Stop command with the proper bit set occurred. That way you won't be stuck in a "stopped" but high power state indefinitely just because someone forgot to emit the proper START/STOP command.
Alternatively, require the stopped state to consume no more power than the standby state.
Suggested Solution:
Make requested correction

Page: 25
Sequence number: 8
Date: 8/30/2004 9:08:39 PM
Type: Highlight
ACCEPT - DONE (as "without accounting for modified data pointers and data alignments may cause false errors when logical blocks are transmitted out of order.")
52 (T) Page: 25 Location: 4.15.1
Problem Description:
Last paragraph should read:
"If the logical unit is formatted with protection information and the EMDP bit is set to one in the Disconnect-Reconnect mode page (see
SPC-3), then checking of the logical block reference tag within the service delivery subsystem without reference to the modified data pointers and logical block alignments causes false errors when logical blocks are transmitted out of order."
Suggested Solution:
Make requested correction

Page: 27
Sequence number: 2
Date: 9/2/2004 5:23:19 PM
Type: Highlight
REJECT (this is a statement of fact, not a choice for which a "shall" requirement is needed. However, the degree of the polynomials is not crucial to the requirements and can be removed. Phrase deleted.)
7 (E) Page: 26 Location: 4.15.3.1
Problem Description:
In table 7, for the R(X) row, the text "The remainder polynomial, which is of degree less than 16." s/b "The remainder polynomial. The polynomial shall be of degree less than 16."
Suggested Solution:
Make the requested correction
Note that this restriction on the polynomial might better be stated in the text.
The same correction needs to be made for P(X).

Page: 29
Sequence number: 23
Date: 8/30/2004 9:10:05 PM
Type: Highlight
ACCEPT - DONE (made the sentence plural)
53 (E) Page: 29 Location: 4.15.5
Problem Description:
"fields are defined" s/b "fields is defined", since the subject is "description".
Suggested Solution:
Make requested correction

Page: 29
Sequence number: 24
Date: 10/3/2004 7:21:17 PM
Type: Note
ACCEPT - DONE (George Penokie agreed to write an SPC-3 proposal 04-281 adding a VPD page field or bit reporting grouping function support. Refer to that GROUP_SUP bit from this section by name.)
54 (T) Page: 29 Location: 4.16
Problem Description:
The grouping function should either be deleted or the following required functionality MUST be defined:

a) The support of the grouping function MUST be defined either in a
mode page or in the INQUIRY command.
b) The maximum number of groups supported MUST be either fixed at 32 OR
a parameter in a mode page MUST indicate the maximum number of groups supported.
c) The capture setup commands and capture information presentation
commands SHOULD be defined. This may not be ready for normative text
yet, but an informative annex is important here so that it doesn't
develop into series of non-interoperable vendor-pair specific solutions
for this function.
Suggested Solution:
Make the requested change or delete the function.

Page: 30
Sequence number: 10
Date: 10/3/2004 3:13:31 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG, no on adding deprecate as a keyword, but yes to add a footnote to READ (6) that mentions that app clients should migrate to READ (10) - copy the sentence from the READ (6) section. Same for WRITE (6).)
63 (T) Page: 30 Location: Table 9
Problem Description:
Propose to create a new type of "Type" called "D" for READ (6) and WRITE
(6). The D type should be called "depricated". The depricated type
should be mandatory for a target to implement in compliance with SBC-2, but should be obsolete for an application client to implement in
compliance with SBC-2. That will allow READ (6) and WRITE (6) to be
made obsolete in the next generation of the standard.
Suggested Solution:
Make requested correction

Page: 31
Sequence number: 3
Date: 8/31/2004 10:39:52 PM
Type: Note
ACCEPT - DONE
56 (T) Page: 31 Location: Table 9
Problem Description:
SYNCHRONIZE CACHE does not apparently deal directly with protection information. I believe the Protection Information column should have no for both the 10 and 16 byte versions
Suggested Solution:
Make requested correction

Page: 31
Sequence number: 4
Date: 10/3/2004 3:23:31 PM
Type: Highlight
ACCEPT - DONE (04-288 CAP WG agreed. It helps operating system software if all LUNs honor REPORT LUNs. This does diverge from the concept of only the REPORT LUNS well-known LUN having to know about the whole target device, but the proponent of that concept seconded the motion to make this change.)
58 (T) Page: 31 Location: Table 9
Problem Description:
REPORT LUNS should be mandatory for direct access devices.
Suggested Solution:
Make requested correction

Page: 33
Sequence number: 8
Date: 8/30/2004 9:17:40 PM
Type: Highlight
ACCEPT - DONE (fixed of to if; reply to other Brocade comment placed with that comment)
55 (E) Page: 33 Location: Table 9
Problem Description:
Item e, "supported of and only if" s/b "supported if and only if", or in
plain English, "supported only if".
Suggested Solution:
Make the requested correction in Brocade 57.

Page: 33
Sequence number: 9
Date: 8/30/2004 9:23:30 PM

Type: Note

ACCEPT - DONE (the label X was intended to communicate that meaning in addition to the footnote, but I agree that combining the two meanings makes it clearer, and the "shall not" case was not really covered before.)

57 (T) Page: 33 Location: Table 9

Problem Description:

Items e and f make the referenced commands mandatory if a certain bit is set to one. In fact, the commands happen to be mandatory for SMC-2, but not for SCC-2.

The terminology should be for note e:

If the SCCS bit is set to one in the standard INQUIRY data, these
commands shall be supported as required by SCC-2. If the SCCS bit is
set to zero, these commands shall not be supported.

and for note f should be:

If the MCHGR bit is set to one in the standard INQUIRY DATA, these
commands shall be supported as specified by SMC-2. If the MCHGR bit is set to zero, thse commands shall not be supported.

Suggested Solution:

Make requested correction

Page: 34
Sequence number: 7
Date: 8/30/2004 9:36:02 PM
Type: Underline

ACCEPT - DONE (also done in VPD table and elsewhere)

59 (T) Page: 34 Location: Table 10/11/12

Problem Description:

The values for reserved operation code/service action codes are
"reserved for direct-access devices". In fact, they are reserved in
their respective documents for the future use of any type of device.

Change the text to read simply "Reserved"

Suggested Solution:

Make requested correction

Page: 34
Sequence number: 11
Date: 9/1/2004 9:23:00 AM
Type: Note

REJECT (SPC-3 C.3.5 is the current home of the Service Action CDBs. True, it's an informative annex, not normative. Per ENDL comments, moved this section into an informative annex too, and changed "defined in SPC-3" to "(see SPC-3)".)

60 (T) Page: 34 Location: 5.3

Problem Description:

The SERVICE ACTION IN (16) operation code is supposedly defined in SPC-3 according to the reference. In fact, there is no normative definition
of the 9E that I can find either there or in any of the other expected
fundemental standards. Where is it defined?

Suggested Solution:

Reference the correct document for the definition of SERVICE ACTION IN
(16). If there is not such document, now is the chance to fix SPC-3 so
that it is defined.

Page: 35
Sequence number: 6
Date: 8/30/2004 7:45:47 PM
Type: Highlight

REJECT (this "at which" phrase is used 5 times in the standard and seems clear to me)

8 (E) Page: 35 Location: 5.4.1

Problem Description:

Rewrite the "which" clause to avoid it.

Suggested Solution:

Make requested correction

Page: 36
Sequence number: 13
Date: 10/3/2004 3:28:19 PM
Type: Highlight

ACCEPT - DONE (Sep CAP WG agreed (no vote taken). Made fmtpinfo=0 rto_req=1 result in CC/IR/INVALID FIELD IN CDB. Nothing said about fmtpinfo=0 rto_req=0. fmtpinfo=0 cases as is.)

70 (T) Page: 36 Location: 5.4.1

Problem Description:

The FMTPINFO bit and RTO_REQ bit are dependent. When processing them in the READ CAPACITY command, they are processed independently.

In order to allow the READ CAPACITY command to operate correctly, the RTO_REQ bit should not be ignored when the FMTPINFO bit is set to zero, but rather, if the INQUIRY command indicates the data protection is supported, and the FMTPINFO bit is set to zero, the RTO_REQ bit shall be set to zero. If it is set to one, it should cause an INVALID PARAMETERS IN COMMAND check condition.
Suggested Solution:
Make requested corrections.

Page: 38
Sequence number: 5
Date: 9/1/2004 10:30:06 AM
Type: Underline
ACCEPT - DONE (the entire short parameter list header is used, not a subset of it or a subset of possible headers. Reworded as "The short header (see table nn) is used if...")
9 (E) Page: 38 Location: 5.4.2.2
Problem Description:
"header, which" s/b "header that"
Suggested Solution:
Make the requested correction
A similar change needs to be made just above Table 17.

Page: 43
Sequence number: 4
Date: 8/30/2004 9:45:14 PM
Type: Note
REJECT (I already tried to obsolete this and was rejected. Maybe in SBC-3.)
61 (T) Page: 43 Location: 5.4.2.4.4
Problem Description:
Propose to obsolete Bytes from index format address descriptor. Modern disks do not use it.
Suggested Solution:
Make requested correction

Page: 44
Sequence number: 3
Date: 8/31/2004 11:41:22 AM
Type: Note
REJECT (I already tried to do so and was rejected. Maybe in SBC-3.)
62 (T) Page: 44 Location: 5.4.2.4.5
Problem Description:
Propose to obsolete Physical sectgor format address descriptor. Modern disks do not use it.
Suggested Solution:
Make the requested correction. As a side effect, the "Translate Address" diagnostic pages shall also be made obsolete.

Page: 46
Sequence number: 6
Date: 8/30/2004 5:55:25 PM
Type: Highlight
REJECT (the change turns "group" into an actor that is collecting attributes. As written, it is someting into which attributes are collected. That seems more correct.)
10 (E) Page: 46 Location: 5.7
Problem Description:
"The GROUP NUMBER field specifies the group into which attributes associated with the command should be collected"
s/b "The GROUP NUMBER field specifies the group that collects the attributes associated with the command."
Suggested Solution:
Make requested correction

Page: 48
Sequence number: 7
Date: 8/30/2004 7:45:30 PM
Type: Highlight
ACCEPT - DONE (but kept the which rather than change to that, since there is not a subset of READ(10) commands that provide this capability. Added a comma before the which to help.)
11 (E) Page: 48 Location: 5.9
Problem Description:
"which may address" s/b "that is capable of addressing".
Suggested Solution:

Make requested correction

Page: 50
Sequence number: 5
Date: 10/3/2004 4:33:45 PM
Type: Note

ACCEPT - DONE (No on adding rdprotect before value. The table name is RDPROTECT field and such tables often use "Value" as their key column. A more practical reason is that would force the Value column to be wider, and this table is already too big. Sep CAP WG agreed to change Value to Code, though.
"Shall not" fixed per ENDL comments.)
64 (E) Page: 50 Location: Table 33
Problem Description:
The table needs to be restructured so that it is properly terminated on
a page by page basis. That probably requires dividing it into one or two "values" per page.
The title of the "value" column s/b "RDPROTECT Value".
The term "Shall not" for the Extended INQUIRY Data VPD page column is
unclear. I assume the proper wording is something like "GRD_CHK = X",
"APP_CHK = X", or "REF_CHK = X", depending on the row.
Suggested Solution:
Make requested correction

Page: 52
Sequence number: 14
Date: 8/30/2004 9:53:16 PM
Type: Note

REJECT (targets have always had the option of whether or not to check reserved bits. This note means that a new target has to look to an old application like it selected the option of checking them. That old application has no basis to be setting the bits anyway, so this shouldn't break anything. If the command were allowed, however, then new applications cannot be as sure that their commands are being honored. They can query the READ CAPACITY data, but if some other application reformatted the media and turned off p.i. they'd become out of sync and not know it. There is a comment to add a unit attention which will help that issue. Nevertheless, I plan to leave this as is.)
65 (T) Page: 52 Location: note b
Problem Description:
Unsupported functions were previously reserved bits, and therefore
should be ignored by the target receiving such a command. The READ
should proceed normally. The text should be changed to read:
"If the logical unit does not support protection informaton, the
RDPROTECT field is ignored and the command executes normally."
Suggested Solution:
Make requested correction

Page: 52
Sequence number: 15
Date: 10/3/2004 5:53:26 PM
Type: Note

REJECT (If the ref tag is owned by the application, Bob wants to allow non-32 byte commands to run, but just disable checking of the ref tag. George wants to block the commands from being used altogether (as is). Per 04-288, Sep CAP WG voted 1-4-8 to leave as is.)
66 (T) Page: 52 Location: note i
Problem Description:
The restrictions on the execution of the commands when RTO_EN is set to one are overly restrictive.
The text:
"If the RTO_EN bit is set to one, the device server shall terminate READ (10)/(12)/(16) with rdprotect not set to 000...."
s/b replaced with:
"If the RTO_EN bit is set to one, the device server shall assume for checking purposes that the LOGICAL BLOCK REFERENCE TAG for each block has been set to the value that it would have been set to if the RTO_EN bit were zero and perform the desired checking, if any."
Suggested Solution:
Make the requested correction. Similar corrections are required for the
write commands.

Page: 55
Sequence number: 19
Date: 10/3/2004 6:23:29 PM
Type: Note

REJECT (per Sep CAP WG. Could be added in the future.)
67 (T) Page: 55 Location: 5.13
Problem Description:
The restrictions on the execution of the READ (32) command are overly

restrictive.
The text:
"If the RTO_EN bit is set to 0, this command shall be terminated...."
s/b replaced with:
"If the RTO_EN bit is set to zero in the long read capacity data
(see 5.15), the device server shall perform checking of the data
protection fields as required by the RDPROTECT field. The device server
shall terminate the command with CHECK CONDITION status with a sense key of ABORTED COMMAND and indications of the appropriate protection check if the protection information read by the device server conflicts with the information specified by the parameters in the READ (32) command."
Suggested Solution:
Make the requested correction. Similar corrections are required for the
write commands.

Page: 56
Sequence number: 6
Date: 10/3/2004 7:26:21 PM
Type: Note
ACCEPT - DONE (global change)
68 (E) Page: 56 Location: 5.14, Table 39
Problem Description:
The concept of "short" and "long" is not reflected in the name of the
command. Wherever "short read capacity data" is used, the term "READ
CAPACITY (10) data" should be used. Wherever "long read capacity data"
is used, the term "READ CAPACITY (16) data" should be used.
Suggested Solution:
Make requested corrections.

Page: 58
Sequence number: 2
Date: 8/31/2004 11:40:50 AM
Type: Note
REJECT
71 (T) Page: 60 Location: 5.16
Problem Description:
Brocade 61 and 62 suggest making obsolete two of the formats. It is
claimed that those formats are the ones people need for defect
management in clause 5.16. I propose making obsolete the READ DEFECT DATA commands.
Suggested Solution:
Make requested corrections.

Page: 61
Sequence number: 7
Date: 10/3/2004 6:35:46 PM
Type: Highlight
ACCEPT - DONE (changed to match force unit access wording: "If a cache contains a more recent version of a logical block, the device server shall write the logical block to the medium before reading it.")
72 (T) Page: 61 Location: 5.18
Problem Description:
The text: "The most recent data written, or to be written, in the
addressed field shall be returned." implies that cached data may be
returned, which makes the command useless. The text should be changed
to read: "The most recent data written on the recording media at the
addressed field shall be returned. If the data for the specified
logical block has not yet been stored on the recording media, it shall
be flushed from the cache and stored on the media before the information
is returned from the media."
Suggested Solution:
Make requested corrections.

Page: 63
Sequence number: 3
Date: 9/3/2004 11:52:32 AM
Type: Highlight
REVIEW
REJECT (it's defined in the glossary as default. Although perhaps not the perfect term, I don't think initialized is much better.)
73 (E) Page: 63 Location: 5.20
Problem Description:
The term "default value of FFF..." really is not correct. This is a

marker value that indicates an initialized value that has not been written. I would proposed that the term "initialized value of FFF..." be used instead for all cases describing the protection information.
Suggested Solution:
Make the requested corrections in all applicable locations.

Page: 65
Sequence number: 23
Date: 8/30/2004 5:59:51 PM
Type: Underline
ACCEPT - DONE
12 (E) Page: 65 Location: 5.21
Problem Description:
"It is not an error to specify that the logical unit transition to a power condition in which it currently is." s/b "It is not an error to specify that the logical unit transition to its current power condition".
Suggested Solution:
Make requested correction

Page: 69
Sequence number: 3
Date: 10/3/2004 5:58:26 PM
Type: Note
ACCEPT - DONE
74 (E) Page: 69 Location: Tables 58-60
Problem Description:
The problems previously mentioned, including formatting and the use of "shall not" must also be corrected here.
Suggested Solution:
Make requested corrections.

Page: 71
Sequence number: 9
Date: 10/3/2004 3:50:40 PM
Type: Note
REJECT (per Sep CAP WG, would have to apply to almost all footnotes in the standard; if not would give more weight to the ones that did change and make the others more confusing)
75 (E) Page: 71 Location: Note a (vrprotect, checking pi read from medium)
Problem Description:
Note a, while stated correctly, gives the impression that the indicated failure will always occur, though it only occurs on cases other than case 0. I propose the sentence be pre-fixed with "For these cases, "
Suggested Solution:
Make the requested corrections in all applicable locations.

Page: 71
Sequence number: 10
Date: 10/3/2004 6:19:44 PM
Type: Note
REJECT (that's what the CAP WG decided, reaffirmed in Sep. The application client is not allowed to use FFFFh because of this, and should be warned in 4.16.2. Changing 4.16.2 to say "A logical block application tag field set to FFFFh disables checking of all protection information for the logical block. Otherwise, the contents of the logical block application tag are not defined by this standard. ")
76 (T) Page: 71 Location: Note g (vrprotect, checking pi read from medium)
Problem Description:
This case is interesting and requires careful thought. The logical block application tag field of FFFFh is symptomatic of a block that has not been changed since formatting, but not much else. It may be that there was a choice to set it to FFFFh by the application client. Why should checking be disabled unless all the fields are set to FFFFh?
Suggested Solution:
Please verify that this was the intended action and indicate why? If it needs to be corrected here, there are a number of other tables to also be corrected.

Page: 84
Sequence number: 19
Date: 10/3/2004 6:23:08 PM
Type: Note

REJECT (per Sep CAP WG. Could be added in the future.)
77 (T) Page: 84 Location: 5.32
Problem Description:
The restriction of the RTO_EN to one while using the 32-byte command
appears to be unnecessary. See Brocade 67.
Suggested Solution:
Make the corresponding changes as in Brocade 67.

Page: 85
Sequence number: 13
Date: 10/3/2004 6:22:19 PM
Type: Note
REJECT (If the ref tag is owned by the application, Bob wants to allow non-32 byte commands to run, but just disable checking of the ref tag. George wants to block the commands from being used altogether (as is). Per 04-288, Sep CAP WG voted 1-4-8 to leave as is.)
78 (T) Page: 85 Location: 5.33
Problem Description:
The restrictions requiring the RTO_EN bit to be 0 for the following
commands are overly restrictive, as described in Brocade 66. Note that
for the XDWRITE commands, performing the XDWRITE with no checking is the only way to obtain the necessary XOR function for the case where RTO_EN is equal 1.
WRITE AND VERIFY (10), WRITE AND VERIFY (12), WRITE AND VERIFY (16), WRITE SAME (10), WRITE SAME (16), XDWRITE (10), XDWRITE (32),
XDWRITEREAD (10), XDWRITEREAD (32)
Note that for the XDWRITE and XDWRITEREAD commands, performing the XDWRITE with no checking is the only way to obtain the necessary XOR
function for the case where RTO_EN is equal 1
Suggested Solution:
Make the corresponding changes as in Brocade 66.

Page: 87
Sequence number: 19
Date: 10/3/2004 6:23:43 PM
Type: Note
REJECT (per Sep CAP WG. Could be added in the future.)
79 (T) Page: 87 Location: 5.36
Problem Description:
The restriction of the RTO_EN to one while using the 32-byte command
appears to be unnecessary. See Brocade 67.
Suggested Solution:
Make the corresponding changes as in Brocade 67.

Page: 92
Sequence number: 19
Date: 10/3/2004 6:23:53 PM
Type: Note
REJECT (per Sep CAP WG. Could be added in the future.)
80 (T) Page: 92 Location: 5.41
Problem Description:
The restriction of the RTO_EN to one while using the 32-byte command appears to be unnecessary. See Brocade 67.
Suggested Solution:
Make the corresponding changes as in Brocade 67.

Page: 93
Sequence number: 14
Date: 8/31/2004 8:52:21 PM
Type: Note
REJECT (targets have always had the option of whether or not to check reserved bits. This paragraph means that a new target has to look to an old application like it selected the option of checking them. That old application has no basis to be setting the XORPINFO bit anyway, so this shouldn't break anything. If the command were allowed, however, then new applications cannot be as sure that their commands are being honored. They can query the READ CAPACITY data, but if some other application reformatted the media and turned off p.i. they'd become out of sync and not know it. There is a comment to add a unit attention which will help that issue. Nevertheless, I plan to leave this as is.)
81 (T) Page: 93 Location: 5.42
Problem Description:
The statement: "If the XORPINFO bit is set to one and the device server does not support protection information..." violates the conventions for reserved fields. The device server is not required to check for this condition, since XORPINFO was previously a reserved bit. The command should, under these conditions, be performed exactly as if the XORPINFO was zero.
Note that this does not apply to XDWRITEREAD commands, since they were not defined in a previous standard.

Suggested Solution:
Make requested corrections.

Page: 94
Sequence number: 12
Date: 8/31/2004 11:05:30 AM
Type: Note
REJECT (XDREAD (32) has no substantive text to change. Any resolution to the XDREAD (10) comment will be picked up by XDREAD (32)).
82 (T) Page: 94 Location: 5.43
Problem Description:
See Brocade 81. The same is true for XDREAD (32) if it was contained in
SBC.
Suggested Solution:
Make requested corrections.

Page: 95
Sequence number: 13
Date: 10/6/2004 7:49:43 PM
Type: Highlight
REJECT (For the LBA field, replaced the sentence with "See the LOCK UNLOCK CACHE (10) command (see 5.3) for the definition of the logical block address field." since that definition suffices. For the Transfer Length field, changed to "The transfer length field specifies the number of contiguous logical blocks of data that shall be transferred. " to match the definitions in READ and WRITE. The fact that this command performs an XOR should be clear from the description ahead of the CDB table.)
13 (E) Page: 95 Location: 5.44
Problem Description:
"The LOGICAL BLOCK ADDRESS field specifies the starting LBA of the data on which an XOR operation shall be performed with the data from the medium."
s/b "The LOGICAL BLOCK ADDRESS field specifies the starting LBA of the data that shall be XOR'd with the data from the medium."
Suggested Solution:
Make the requested correction
A similar change needs to be made in the next paragraph for TRANSFER
LENGTH.

Page: 99
Sequence number: 15
Date: 8/31/2004 8:52:57 PM
Type: Note
REJECT (targets have always had the option of whether or not to check reserved bits. This paragraph means that a new target has to look to an old application like it selected the option of checking them. That old application has no basis to be setting the XORPINFO bit anyway, so this shouldn't break anything. If the command were allowed, however, then new applications cannot be as sure that their commands are being honored. They can query the READ CAPACITY data, but if some other application reformatted the media and turned off p.i. they'd become out of sync and not know it. There is a comment to add a unit attention which will help that issue. Nevertheless, I plan to leave this as is.)
83 (T) Page: 99 Location: 5.4.8
Problem Description:
See Brocade 81. The same is true for XPWRITE (32) if it was contained in SBC.
Suggested Solution:
Make requested corrections.

Page: 101
Sequence number: 8
Date: 8/31/2004 11:06:23 AM
Type: Note
REJECT (unfortunately, not yet. Maybe in SBC-3?)
84 (T) Page: 101 Location: 6.1.1
Problem Description:
Are we ready to get rid of the "translate address output/input
diagnostic pages? If so, they should be made obsolete at this time.
Suggested Solution:
Make requested corrections.

Page: 105
Sequence number: 16
Date: 8/31/2004 8:46:49 PM
Type: Note
REVIEW
ACCEPT - DONE (Added some sentences: "The Format Status log page uses the log page format defined in SPC-3." and "The

parameter length field of each log parameter (see SPC-3) contains the length of the corresponding parameter value field and is vendor-specific."
This comment also uncovered a problem in the value of FFh returned if information is not available. In SBC-1 that was phrased as "shall be reported as the value -1 (FFh in all bytes of the log parameter)" which in SBC-2 editing we couldn't parse. Since the parameter length is variable, this meant that each bytes in the parameter value field are supposed to be FFh. Changed that wording to "shall return a value with each byte set to FFh (e.g., if the parameter length field is set to 02h, the parameter value field is set to FFFFh)".
)
85 (E) Page: 105 Location: 6.2.2
Problem Description:
I assume this uses the format from table 186 from SPC-3, but this is not explicitly made clear. Could you please provide a reference indicating something like "See the log page structure and page codes for all device types specified in SPC-3." The structure does not specify a field size for each counter, which implies that it is vendor specific.
Suggested Solution:
Make requested corrections.

Page: 107
Sequence number: 6
Date: 8/31/2004 2:37:43 PM
Type: Note
REJECT (the mechanism does exist, but it is the SWP bit in the Control mode page (defined in SPC-3) not writing the WP bit directly. As noted in a Seagate comment, this needs to be mentioned by SBC-2. Will add:
"When used with the MODE SENSE command, a wp bit set to one indicates that the medium is write-protected. A wp bit set to zero indicates that the medium is not write-protected. When the software write protect (swp) bit in the Control mode page (see SPC-3) is set to one, the wp bit shall be set to one. When the swp bit in the Control mode page is set to zero, the wp bit shall be set to one if the medium is write-protected (e.g., due to mechanisms outside the scope of this standard) or zero if the medium is not write-protected.")
86 (T) Page: 107 Location: Table 101
Problem Description:
The WP bit is specified here, but it is indicated that it cannot be set
with a MODE SELECT command. How then is it set through the SCSI
interface? I did not find an SPC-2 mechanism for setting it and I don't
believe a hardware-only mechanism is appropriate. That leaves only here
to set it. I propose that the first sentence after Table 101 be
corrected to indicate that WP is defined and controlled for disk drives
by this parameter.
Suggested Solution:
Make requested corrections.

Page: 109
Sequence number: 8
Date: 8/30/2004 7:44:59 PM
Type: Highlight
REJECT (That weakens the "to" clause, making it sound like the application client is being demanded to find out the number of blocks regardless of whether it wants to know. To help improve the sentence and clarify its meaning, added a comma before "the application client" and added "rather than the MODE SELECT command" at the end. Same changes applied to each of the 4 sentences.)
14 (E) Page: 109 Location: 6.3.2.2
Problem Description:
"To determine the number of blocks at which the logical unit is
currently formatted the application client shall use the READ CAPACITY command"
s/b "The READ CAPACITY command shall be used to determine the number of blocks currently formatted on the logical unit."
Suggested Solution:
Make the requested correction.
A similar change is required in the last sentence of the sub-clause.
A similar change is required in the last sentence of the first paragraph
on page 111
A similar change is required in the last sentence of the last paragraph
on page 111

Page: 109
Sequence number: 9
Date: 10/3/2004 4:57:19 PM
Type: Highlight
REJECT (rewrite per Sep CAP WG: "A device server shall respond to a MODE SENSE command (see SPC-3) by reporting the number of blocks specified in the number of blocks field sent in the last MODE SELECT command that contained a mode parameter block descriptor. If no MODE SELECT command with a mode parameter block descriptor has been received then the current number of blocks shall be returned. To determine the number of blocks at which the logical unit is currently formatted, the application client shall use the READ CAPACITY command (see 5.13) rather than the MODE SELECT command.

On a MODE SENSE command, the device server may return a value of zero indicating that it does not report the number of blocks in the short LBA mode parameter block descriptor.
On a MODE SENSE command, if the number of logical blocks on the medium exceeds the maximum value that is able to be specified in the number of blocks field, the device server shall return a value of FFFFFFFFh.")
15 (E) Page: 109 Location: 6.3.2.2
Problem Description:
"On a MODE SENSE command, the NUMBER OF BLOCKS field indicates the number of logical blocks on the medium to which the BLOCK LENGTH field applies."
s/b "On a MODE SENSE command, the NUMBER OF BLOCKS field indicates the number of logical blocks on the medium having the length specified by the BLOCK LENGTH field."
Suggested Solution:
Make the requested correction.
A similar change is required in the second paragraph on page 111.

Page: 114
Sequence number: 24
Date: 8/30/2004 7:45:05 PM
Type: Highlight
REJECT (Although Winston Churchill protested the grammar rule that sentences not end in prepositions by saying "This is the sort of English up with which I cannot put." this sentence seems to read fine honoring that rule.)
dangling
16 (E) Page: 114 Location: 6.3.3
Problem Description:
"The NUMBER OF CACHE SEGMENTS field specifies the number of segments into which the device server shall divide the cache." s/b "The NUMBER OF CACHE SEGMENTS field specifies the number of segments that the device server shall divide the cache into."
Suggested Solution:
Make requested correction

Author: elx-bnixon

Page: 1
Sequence number: 2
Date: 8/24/2004 10:28:22 AM
Type: Circle
ACCEPT - DONE
Page 1 Figure 1: In the leftmost box, 1477 s/b/ 14776

Page: 1
Sequence number: 3
Date: 8/24/2004 10:28:40 AM
Type: Strikeout
ACCEPT - DONE
page 1 clause 1: "provide the following" breaks grammatical flow to the items of the following list. Delete it.

Page: 1
Sequence number: 4
Date: 8/24/2004 10:30:24 AM
Type: Strikeout
ACCEPT - DONE (spc3 has this; sam3 does not)
Page 1 Clause 1: "It indicates the applicability of a standard to the implementation of a given transport" does not seem to be relevant to a command set standard. I'm not convinced that it is even true. Delete it.

Page: 3
Sequence number: 3
Date: 8/24/2004 12:41:22 PM
Type: Strikeout
ACCEPT - DONE (also changed two more "NCITS" to "INCITS" in the cover page abstract and the dedication page.)
Page 3 subclause 2.2: For reliable location of documents at the ANSI and INCITS stores, change "ANSI NCITS.318:1998" to "ANSI INCITS 318-1998"

Page: 5
Sequence number: 3
Date: 8/30/2004 9:36:02 AM
Type: Strikeout
ACCEPT - DONE

Page 5 subclause 3.1.17: The definition of extent uses the ambiguous concept of "continuous logical blocks". Change "continuous logical blocks" to "logical blocks occupying contiguous logical block addresses"

Page: 6
Sequence number: 5
Date: 8/24/2004 8:04:20 PM
Type: Highlight
REJECT (it's right after PLIST in the abbreviation list. SACL is being evicted per an ENDL comment, though.)
Page 6 subclause 3.1.39:
SACL is referenced but is not in the abbreviations list. (Yes, I know it is within the next entry in the glossary, but only because I was reading serially through the spec 8-)

Page: 8
Sequence number: 1
Date: 8/25/2004 1:35:02 PM
Type: Strikeout
REJECT (the rule is indeed that a device compliant with this standard must set restricted bits to zero. A device compliant with another standard (eg MMC-4) might set them to non-zero values, but that device is not compliant with this standard. Restricted means if we ever do add functionality in that position, it will probably be the same as in that other standard. Restricted highlights that the bit is not available for arbitrary usage like the Reserved bits, since that would make this standard diverge more from the other standard. If a bit is supported by this standard, it must be named. The definition can point to another standard for details if appropriate.)
Page 8 subclause 3.3.10:The equivalence to reserved in the definition of restricted would force conflict, as this standard would require setting to zero a value that another standard might require to be nonzero.
Change "A restricted bit, byte, word, or field shall be treated as a reserved bit, byte, word or field for the purposes of the requirements defined in this standard"
to
"A restricted bit, byte, word or field shall be set to zero, or in accordance with another SCSI standard. Recipients are not required by this standard to check restricted bits, bytes, words or fields for zero values"

Page: 10
Sequence number: 3
Date: 8/31/2004 10:35:14 PM
Type: Strikeout
ACCEPT - DONE (but sentence later deleted)
Page 10 subclause 4.1: in the second paragraph, "In addition," doesn't add anything. Change "In addition, a logical block length..." to "A logical block length..."

Page: 11
Sequence number: 5
Date: 8/24/2004 10:58:35 AM
Type: Strikeout
ACCEPT - DONE
Page 11 subclause 4.4: in the third line of the fourth regular paragraph, an s/b and

Page: 14
Sequence number: 5
Date: 8/24/2004 8:15:48 PM
Type: Strikeout
ACCEPT - DONE (just kept allows as the verb)
Page 14 subclause 4.9: The last sentence of the paragraph fragment at the top of page 14 has too many consecutive verbs and not enough meaning. Change "The FUA_NV bit
specifies allows the device server" to "The FUA_NV bit specifies whether the device server is allowed"

Page: 15
Sequence number: 2
Date: 8/26/2004 10:56:48 AM
Type: Highlight
REJECT (They don't need to be. In July 1998, Bob Snively (then Sun) was asked to make this change from 98-164r0 to 98-164r1 which established the reservation conflict rules for all the SCSI commands (merged into 98-203r6 and accepted into sbc2r00). These are considered management commands that are often paired with write commands (WRITE LONG, FORMAT UNIT, REASSIGN BLOCKS) which do clearly encounter reservation conflicts. It seems reasonable to require anyone using these commands to obtain the reservation as well. Since the rule has been in place for 6 years it doesn't seem compelling to change it now.)
Page 15 table 3: Why are the READ DEFECT DATA and READ LONG commands conflicted by Write type reservations?

Page: 17
Sequence number: 5
Date: 8/27/2004 5:08:13 PM

Type: Strikeout
ACCEPT - DONE (just deleted "user to issue" rather than detail how they are issued)
Page 17 subclause 4.12.2: In the second paragraph from the bottom of the page, "user" should be "application client". Users, in the common sense of the term, are people, and can't issue SCSI commands.

Page: 20
Sequence number: 4
Date: 8/24/2004 8:40:18 PM
Type: Strikeout
ACCEPT - DONE
Page 20 subclause 4.13.1.2.3: In the fifth line, e.g s/b i.e

Page: 20
Sequence number: 5
Date: 8/27/2004 4:33:29 PM
Type: Strikeout
ACCEPT - DONE (with only one model left, agree this is not helpful as restated)
Page 20 subclause 4.13.1.2.3: The last three sentences appear to be repeating the rest of the subclause. Delete the last three sentences.

Page: 26
Sequence number: 1
Date: 8/27/2004 12:52:34 PM
Type: Strikeout
REVIEW
REJECT (Yes, it does appear in the application client data buffer. Each logical block in that buffer has protection information appended to it. The wording is not very clear, though.
Changed to: ...the logical block reference tag field in the first logical block in the app client data buffer shall contain the least significant four bytes of the LBA contained in the LBA field of the command. (deleting "associated with the logical block"))
Page 26 subclause 4.16.2: In the last paragraph, the wording strongly suggests the LOGICAL BLOCK REFERENCE TAG appears in the application client data buffer. In the second sentence change "contain" to "have a LOGICAL BLOCK REFERENCE TAG value equal to", in the third sentence change "contain" to "have", and in the fourth sentence change "contains" to "has". For consistency.

Page: 26
Sequence number: 2
Date: 8/27/2004 12:52:16 PM
Type: Strikeout
REJECT
(part of prior comment)
Change "contain" to "have"

Page: 26
Sequence number: 3
Date: 8/27/2004 12:52:27 PM
Type: Strikeout
REJECT (see earlier comment)
(part of prior comment)
change "contains" to "has"

Page: 60
Sequence number: 3
Date: 9/1/2004 3:29:41 PM
Type: Highlight
ACCEPT - DONE (see ENDL comment - "but contains" changing to "but the allocation length field contains".
Also changing "SCSI device has assigned" to "device server has to report".
Also changing "exceed the capability of the allocation length field size" to "exceed the maximum value that is able to be specified in the allocation length field" twice in this paragraph.)
Page 60 subclause 5.16: I can't make sense of the first sentence of the second paragraph on page 60: how can the number of address descriptors the SCSI device has assigned contain a value that is insufficient to transfer all of the address descriptors? Isn't the "number ... assigned" the same as "all"? Also, the third sentence seems to contradict note 16.

Author: ENDL Texas

Page: v
Sequence number: 2

Date: 8/24/2004 7:55:01 PM
Type: Note
REJECT (since Gene worked on this standard for 3 revisions it seems appropriate.)
SPI-4 was dedicated to Gene Milligan. But it appears that the practice ended with SPI-5. Is it appropriate to reinstate the practice now? Probably not.

Page: v
Sequence number: 3
Date: 8/24/2004 7:55:34 PM
Type: Highlight
REJECT (it names his family's recommended charity)
<<Memorial gifts may be made to Habitat for Humanity.>> It seems unlikely the Habitat for Humanity has maintained a memorial account for Gene Milligan for all the years that have passed since his passing in 2001. If the dedication is kept, this sentence should be removed.

Page: vi
Sequence number: 3
Date: 8/24/2004 8:44:51 PM
Type: Note
ACCEPT - DONE (see LSI comment)
Remove Revision Information before submitting dpANS to Public Review.

Page: xi
Sequence number: 1
Date: 8/24/2004 3:33:21 PM
Type: Note
ACCEPT - TODO
Remove change bars before submitting dpANS to Public Review.

Page: xi
Sequence number: 2
Date: 8/24/2004 3:33:38 PM
Type: Note
REJECT (ANSI and ISO accepted this for SAS)
Per ISO style guide, the table of contents should use only two levels of indenting, Clauses and Sub-Clauses.

Page: xxi
Sequence number: 1
Date: 8/25/2004 1:09:43 PM
Type: Highlight
ACCEPT - DONE
<<Clause 4 (Models)>> [s/b] <<Clause 4 (Direct-access block device type model)>> Unlike SBC, there is only one device-type model in SBC-2.

Page: 1
Sequence number: 5
Date: 8/25/2004 1:11:33 PM
Type: Highlight
ACCEPT - DONE (deleted "pertaining to the SCSI block device class")
<<The clauses of this standard pertaining to the SCSI block device class, implemented in conjunction with the applicable clauses of SPC-3, fully specify the standard command set for SCSI block devices.>> I cannot find any clauses in this standard that apply to devices other than SCSI block device. This needs rewording.

Page: 1
Sequence number: 6
Date: 8/25/2004 7:56:51 PM
Type: Strikeout
ACCEPT - DONE
<<Define commands to manage the operation of SCSI block devices;>> What is the difference between this list entry and the previous one <<Define commands unique to the type of SCSI block device;>>? The second, redundant entry should be deleted.

Page: 1
Sequence number: 7
Date: 8/25/2004 1:12:47 PM
Type: Highlight
ACCEPT - DONE (changed to "to the direct-access block device type")
<<SCSI block device>> [s/b] <<direct-access>

Page: 1

Sequence number: 8
Date: 8/25/2004 1:13:32 PM
Type: Strikeout
ACCEPT - DONE
<<Define the differences between types of SCSI block devices>> Since there is only one type of SCSI block device defined by this standard, this list entry should be deleted.

Page: 3
Sequence number: 4
Date: 8/24/2004 8:00:03 PM
Type: Highlight
ACCEPT - DONE
<<ITUT>> [s/b] <<ITU-T>>

Page: 5
Sequence number: 5
Date: 9/1/2004 7:52:08 PM
Type: Note
ACCEPT - DONE
Add <<See SAM-3.>> as the last sentence in the definitions of data-in buffer, data-out buffer, and domain.

Page: 5
Sequence number: 7
Date: 8/25/2004 1:06:17 PM
Type: Note
REVIEW
ACCEPT - DONE
Add a glossary entry for error correcting code (ECC)

Page: 5
Sequence number: 8
Date: 10/6/2004 7:40:49 PM
Type: Note
REJECT (accepted in r15a but revoked in 15b. Did reword all wording in suggested areas though.)
Several changes are proposed to use 'extent' as defined here. If the proposed changes are not made, then the glossary entry for 'extent' should be deleted because it is not referenced anywhere in this standard (as currently written).

Page: 6
Sequence number: 6
Date: 10/3/2004 3:14:31 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG and 04-290r1 as "A condition resulting from the events defined by SAM-3 in which the SCSI device performs the power on operations described in SAM-3, this standard, and other applicable command standards (see table 9 in 5.1)."). I_T nexus loss event not added, as command set standards don't use that term.)
Add glossary entry for I_T nexus loss event.

Page: 6
Sequence number: 7
Date: 8/26/2004 1:19:32 PM
Type: Highlight
REJECT (it's not obvious to me that media is a plural of medium. Adding medium entry instead.)
<<3.1.26 media: Plural of medium.>> There is no glossary entry for medium, meaning that medium is used in its normal English usage. It would seem that media is likewise used in its normal English usage. Remove this unnecessary glossary entry.

Page: 6
Sequence number: 8
Date: 8/25/2004 1:25:23 PM
Type: Highlight
REJECT ("power on" is another defined phrase, so is good to use as part of this phrase)
<<Power being removed followed by power on.>> [s/b] <<Power being removed and reinstated.>>

Page: 6
Sequence number: 9
Date: 8/24/2004 8:06:20 PM
Type: Strikeout
ACCEPT - DONE
<<3.1.33 read-only medium: Medium that is not capable of being changed. The medium contains data prepared in a manner not defined by this standard.>> The term read-only medium is not used anywhere in this standard. This glossary entry should be removed.

Page: 6
Sequence number: 10
Date: 9/2/2004 11:39:02 PM
Type: Highlight
REVIEW
ACCEPT - DONE (deleted; command sets don't need event definitions)
The definition of reset event is not consistent with SAM-3. Update the definition to be consistent with SAM-3, probably by emulating the definition of logical unit reset event.

Page: 6
Sequence number: 11
Date: 8/25/2004 1:17:17 PM
Type: Highlight
ACCEPT - DONE
<<Data describing an error or exceptional condition that a device server delivers to an application client.>> [s/b] <<<<Data describing an error or exceptional condition that a device server delivers to an application client in association with a CHECK CONDITION status.>>

Page: 6
Sequence number: 12
Date: 10/3/2004 4:06:15 PM
Type: Strikeout
ACCEPT - DONE (it is used in the definition of storage array controller. Merged this definition into that definition so this term is no longer needed.)
<<3.1.40 storage array conversion layer (SACL): Converts input logical unit numbers to output logical unit numbers and may convert input LBAs to output LBAs. See SCC-2.>> Neither storage array conversion layer nor SACL are used anywhere in this standard. This glossary entry should be deleted.

Page: 7
Sequence number: 3
Date: 8/24/2004 8:08:09 PM
Type: Strikeout
ACCEPT - DONE (but it was used in the definition of storage array controller. The definitions were merged.)
<<SACL storage array conversion layer (see 3.1.40)>> SACL is not used anywhere in this standard. This acronym should be deleted.

Page: 7
Sequence number: 5
Date: 8/24/2004 8:07:40 PM
Type: Strikeout
ACCEPT - DONE
kbit is not used anywhere in this standard. Delete this acronym.

Page: 7
Sequence number: 6
Date: 8/24/2004 8:07:34 PM
Type: Strikeout
ACCEPT - DONE
Mbit is not used anywhere in this standard. Delete this acronym.

Page: 7
Sequence number: 7
Date: 8/24/2004 8:06:54 PM
Type: Strikeout
ACCEPT - DONE
<<ID identifier>> ID is not used anywhere in this standard. Delete this acronym.

Page: 7
Sequence number: 8
Date: 8/25/2004 1:05:24 PM
Type: Highlight
ACCEPT - DONE
<<ECC error correcting code>> [s/b] <<ECC error correcting code (see 3.1.xx)>>

Page: 9
Sequence number: 1
Date: 8/25/2004 1:36:18 PM
Type: Highlight

ACCEPT - DONE (changed all the 64-bit FF...FF... numbers to use underscore rather than space. Noted on other ENDL comments.)
<<Underscores may be included in hexadecimal values to increase readability or delineate field boundaries (e.g., FD8C_FA23h).>> All instances of "increased readability found in this standard use spaces, not underscores. If maintenance of the underscore convention is desired, deviations from it have been marked in other comments. Otherwise, it might be easier to change the convention.

Page: 10
Sequence number: 6
Date: 8/25/2004 1:10:05 PM
Type: Highlight
ACCEPT - DONE
<<4 Models>> [s/b] <<4 Direct-access block device type model>> Unlike SBC, there is only one device-type model in SBC-2.

Page: 10
Sequence number: 7
Date: 8/25/2004 1:36:49 PM
Type: Highlight
ACCEPT - DONE (without the word SCSI)
<<SCSI block devices>> [s/b] <<SCSI direct-access block devices>>

Page: 10
Sequence number: 8
Date: 8/25/2004 1:37:24 PM
Type: Highlight
REJECT (flexible disk support is obsolete)
<<rigid disks and removable rigid disks>> [s/b] <<rigid disks, removable rigid disks, and removable flexible disks>>

Page: 10
Sequence number: 9
Date: 8/25/2004 1:38:11 PM
Type: Highlight
REJECT (there is no rule prohibiting it from being one byte.)
<<almost always greater>> [s/b] <<greater>>

Page: 10
Sequence number: 10
Date: 8/25/2004 1:38:47 PM
Type: Highlight
ACCEPT - DONE (also per Emulex comment)
<<In addition, a>> [s/b] <<A>>

Page: 10
Sequence number: 11
Date: 8/25/2004 1:41:45 PM
Type: Note
REJECT (with the two preceding sentences removed, merged this into the previous paragraph instead)
Start a new paragraph for <<The block length does not include the length of protection information and additional information, if any, that are associated with the logical block.>>

Page: 10
Sequence number: 12
Date: 8/25/2004 1:41:06 PM
Type: Strikeout
ACCEPT - DONE (deleted next sentence too per ENDL comment)
<<Each logical block has a block length associated with it.>> This sentence repeats what was said in the previous paragraph. It should be deleted.

Page: 10
Sequence number: 14
Date: 8/25/2004 1:42:38 PM
Type: Strikeout
ACCEPT - DONE
<<Other commands issued by the application client may also cause write and read operations to occur.>> This sentence is unnecessary because the use of e.g. in the previous sentence clearly indicates that the cited commands are just examples. This sentence should be deleted.

Page: 10
Sequence number: 15

Date: 8/25/2004 1:43:32 PM
Type: Highlight
ACCEPT - DONE
<<on the medium>> [s/b] <<to the medium>> for consistence with the description of read operations.

Page: 10
Sequence number: 16
Date: 8/25/2004 1:47:09 PM
Type: Highlight
ACCEPT - DONE
<<controller>> [s/b] <<device server>>

Page: 10
Sequence number: 17
Date: 8/25/2004 1:48:15 PM
Type: Highlight
ACCEPT - DONE
<<If the block device implements cache memory, either volatile or non-volatile, it ensures that all logical blocks of the medium contain the most recent user data and protection information, if any, prior to permitting unmounting of the removable medium.>> This sentence should be moved to a paragraph by itself, preferably immediately preceding this paragraph in which it currently appears.

Page: 10
Sequence number: 18
Date: 8/25/2004 1:46:35 PM
Type: Highlight
ACCEPT - DONE ("are able to be")
<<can be read>> [s/b] <<are capable of being read>>

Page: 11
Sequence number: 7
Date: 8/25/2004 1:48:39 PM
Type: Highlight
ACCEPT - DONE
<<may be done>> [s/b] <<may be accomplished>>

Page: 11
Sequence number: 8
Date: 8/25/2004 1:49:23 PM
Type: Highlight
ACCEPT - DONE ("the direct-access block device type logical unit")
<<the logical unit>> [s/b] <<the block device logical unit>>

Page: 11
Sequence number: 9
Date: 8/25/2004 1:50:20 PM
Type: Highlight
ACCEPT - DONE (but the i.e. placed before "is permitted")
<<permitted (element 0)>> [s/b] <<permitted (i.e., element 0)>>

Page: 11
Sequence number: 10
Date: 8/25/2004 2:25:11 PM
Type: Highlight
ACCEPT - DONE
<<medium controller>> [s/b] <<device server>>

Page: 11
Sequence number: 11
Date: 8/25/2004 2:25:49 PM
Type: Highlight
ACCEPT - DONE
<<data and the>> [s/b] <<data, the>>

Page: 11
Sequence number: 12
Date: 8/25/2004 2:26:26 PM
Type: Highlight
ACCEPT - DONE

<<be issued>> [s/b] <<be used>>

Page: 11
Sequence number: 14
Date: 8/25/2004 2:28:54 PM
Type: Highlight
ACCEPT - DONE
<<block lengths that are>> [s/b] <<block length that is>>

Page: 11
Sequence number: 15
Date: 8/25/2004 2:29:50 PM
Type: Highlight
ACCEPT - DONE
<<variable block lengths>> [s/b] <<changeable block lengths>>

Page: 11
Sequence number: 16
Date: 8/27/2004 5:41:59 PM
Type: Highlight
ACCEPT - DONE
<<mounted. Such a block device, with a volume not mounted,>> [s/b] <<mounted and other conditions are met (see 4.12). A block device that is not ready>>

Page: 11
Sequence number: 17
Date: 8/25/2004 2:31:17 PM
Type: Highlight
REJECT (it could be ready after the cache is operational, even though medium transfers might not be going yet)
<<can be processed>> [s/b] <<are able to transfer data to or from the medium>>

Page: 12
Sequence number: 7
Date: 8/27/2004 5:27:52 PM
Type: Highlight
ACCEPT - DONE (but sentence deleted later)
<<with MODE SELECT>> [s/b] <<with a MODE SELECT command>>

Page: 12
Sequence number: 8
Date: 8/25/2004 2:32:32 PM
Type: Highlight
REJECT (changed "bring" to "make". Reluctant to call ready a "state")
<<device ready>> [s/b] <<device to the ready state>>

Page: 12
Sequence number: 10
Date: 8/27/2004 5:28:17 PM
Type: Highlight
ACCEPT - DONE
<<reissued>> [s/b] <<issued>>

Page: 12
Sequence number: 11
Date: 8/27/2004 5:29:10 PM
Type: Highlight
ACCEPT - DONE (as "defined by this standard")
<<this command set>> [s/b] <<this standard>>

Page: 12
Sequence number: 13
Date: 8/25/2004 2:34:04 PM
Type: Highlight
ACCEPT - DONE
<<they do not appear in a logical block>> [s/b] <<they do not affect any logical blocks>>

Page: 12
Sequence number: 14
Date: 8/25/2004 2:35:22 PM

Type: Strikeout
ACCEPT - DONE
<<The algorithm may be controlled by the application client, using options in the FORMAT UNIT command.>> This sentence is redundant with the paragraph that precedes it and should be deleted.

Page: 12
Sequence number: 15
Date: 8/25/2004 2:36:08 PM
Type: Highlight
REJECT (the entire list may be supplied, not a subset)
<<which>> [s/b] <<that>>

Page: 12
Sequence number: 16
Date: 8/25/2004 2:38:42 PM
Type: Highlight
ACCEPT - DONE
<<device server (to reference
while formatting)>> [s/b] <<device server for reference during formatting>>

Page: 12
Sequence number: 17
Date: 8/25/2004 2:38:14 PM
Type: Highlight
ACCEPT - DONE
<<be subject to change >> [s/b] <<be changed>>

Page: 12
Sequence number: 18
Date: 8/31/2004 10:28:59 PM
Type: Highlight
REJECT (changed to "defects that cause..." instead. I think using "may" in this case would be wrong; it's not like we're trying to grant permission to a device to lose data. "can" per the ISO standard definition is the ideal word, reflecting something that happens which is not under direction of this standard but which devices compliant with this standard have to tolerate. Since this is the only "can" left, I'll agree to delete it rather than add it to the glossary.)
<<can>> [s/b] <<may>>

Page: 13
Sequence number: 7
Date: 8/30/2004 8:55:40 AM
Type: Highlight
ACCEPT - DONE (sentence deleted; 5.4.2.2 now mentions that the "Data defect list" is called the DLIST)
<<If the DEFECT LIST LENGTH field in the parameter list header is set to zero, there is no DLIST>> this statement belongs in 5.4.2.2, not in the model.

Page: 13
Sequence number: 8
Date: 8/25/2004 10:46:52 AM
Type: Highlight
ACCEPT - DONE
<<theprevious>> [s/b] <<the previous>>

Page: 13
Sequence number: 9
Date: 8/26/2004 2:28:13 PM
Type: Highlight
REJECT (deleting sentence instead)
<<can>> [s/b] <<may>>

Page: 13
Sequence number: 10
Date: 8/26/2004 2:05:38 PM
Type: Highlight
ACCEPT - DONE (just deleted "can" altogether so it inherits the may earlier in the sentence)
<<can>> [s/b] <<may>>

Page: 13
Sequence number: 11
Date: 8/27/2004 5:21:27 PM

Type: Highlight
REJECT (this is not always true.)
<<Some block devices>> [s/b] <<Block devices>>

Page: 13
Sequence number: 12
Date: 8/27/2004 5:21:51 PM
Type: Highlight
ACCEPT - DONE
<<Some block devices implement>> [s/b] <<Block devices may implement>>

Page: 13
Sequence number: 13
Date: 8/27/2004 5:22:10 PM
Type: Strikeout
ACCEPT - DONE
Delete <<usually>>

Page: 13
Sequence number: 14
Date: 8/27/2004 5:22:47 PM
Type: Note
ACCEPT - DONE
The 3rd and 4th paragraphs in this subclause should be the 2nd and 3rd paragraphs.

Page: 13
Sequence number: 15
Date: 8/27/2004 5:24:29 PM
Type: Highlight
REJECT (an i.e. would not clearly apply to the whole phrase "store data..." especially since the verb sense doesn't match store vs. cachING.)
<<at a later time. This is called write-back caching.>> [s/b] <<at a later time (i.e., write-back caching).>>

Page: 13
Sequence number: 16
Date: 8/27/2004 5:25:54 PM
Type: Highlight
ACCEPT - DONE
<<this bit>> [s/b] <<the DPO bit>> [twice in this paragraph]

Page: 13
Sequence number: 17
Date: 8/27/2004 5:25:56 PM
Type: Highlight
ACCEPT - DONE
<<this bit>> [s/b] <<the DPO bit>> [twice in this paragraph]

Page: 13
Sequence number: 18
Date: 8/27/2004 5:26:33 PM
Type: Highlight
ACCEPT - DONE
<<Sometimes the application client may want to have the>> [s/b] <<Application clients may request that>>

Page: 13
Sequence number: 44
Date: 9/3/2004 12:16:57 PM
Type: Highlight
ACCEPT - DONE
<<In order to detect these errors, the VERIFY and WRITE AND VERIFY commands are provided.>> [s/b] <<The VERIFY and WRITE AND VERIFY commands may be used to detect these errors.>>

Page: 14
Sequence number: 6
Date: 9/3/2004 9:06:45 AM
Type: Highlight
REVIEW
ACCEPT - DONE (as "Application clients may use the force unit access non-volatile cache (fua_nv) bit in the CDB of commands performing write or read operations to specify that the device server may access a non-volatile cache, if any, rather than the

medium, if the fua bit is set to zero. For a write operation, an fua_nv bit set to one with the fua bit set to zero allows the device server to complete the data write to non-volatile cache rather than the medium before completing the command. For a read operation, an fua_nv bit set to one with the fua bit set to zero allows the device server to retrieve the logical blocks from the non-volatile cache rather than the medium.")
<<The FUA_NV bit specifies allows the device server to access a non-volatile cache rather than the medium.>> This topic belongs in a separate paragraph and the description should be as complete as that given for the FUA bit.

Page: 14
Sequence number: 7
Date: 9/3/2004 9:06:36 AM
Type: Note
ACCEPT - DONE (added "and the fua bit is set to zero" throughout the new FUA_NV discussion. There is no reason to mention DPO and FUA_NV interaction.)
What happens when the DPO and FUA_NV bits are both set to one? What happens when the DPO, FUA, AND FUA_NV bits are all set to one? The model is not complete.

Page: 14
Sequence number: 8
Date: 8/27/2004 5:45:14 PM
Type: Highlight
ACCEPT - DONE
<<WRITE AND VERIFY>> [s/b] <<WRITE AND VERIFY command>>

Page: 14
Sequence number: 10
Date: 8/30/2004 8:58:03 AM
Type: Highlight
ACCEPT - DONE
<<LOCK UNLOCK CACHE command (see 5.5) controls>> [s/b] <<LOCK UNLOCK CACHE(10) command (see 5.5) and LOCK UNLOCK CACHE(16) command (see 5.6) control>>

Page: 14
Sequence number: 11
Date: 8/30/2004 8:58:48 AM
Type: Highlight
ACCEPT - DONE
<<PRE-FETCH command (see 5.7) causes>> [s/b] <<PRE-FETCH(10) command (see 5.7) and PRE-FETCH(16) command (see 5.8) cause>>

Page: 14
Sequence number: 12
Date: 8/30/2004 8:59:31 AM
Type: Highlight
ACCEPT - DONE
<<SYNCHRONIZE CACHE command (see 5.22) forces>> [s/b] <<SYNCHRONIZE CACHE(10) command (see 5.22) SYNCHRONIZE CACHE(16) command (see 5.23) forces force>>

Page: 14
Sequence number: 13
Date: 8/26/2004 9:57:55 AM
Type: Highlight
ACCEPT - DONE
<<the data cache>> [s/b] <<cache memory>> to use the defined term [twice in the a,b,c list]

Page: 14
Sequence number: 14
Date: 8/26/2004 9:57:57 AM
Type: Highlight
ACCEPT - DONE
<<the data cache>> [s/b] <<cache memory>> to use the defined term [twice in the a,b,c list]

Page: 14
Sequence number: 15
Date: 8/26/2004 9:54:25 AM
Type: Highlight
ACCEPT - DONE
<<pending write data>> [s/b] <<write data in cache memory>>

Page: 14

Sequence number: 16
Date: 8/26/2004 9:55:14 AM
Type: Highlight
ACCEPT - DONE
<<stored in>> [s/b] <<written to>>

Page: 14
Sequence number: 17
Date: 8/30/2004 8:59:57 AM
Type: Highlight
ACCEPT - DONE
<<This command>> [s/b] <<These commands>>

Page: 14
Sequence number: 18
Date: 8/26/2004 9:54:59 AM
Type: Highlight
ACCEPT - DONE
<<was written>> [s/b] <<is written>>

Page: 14
Sequence number: 19
Date: 8/26/2004 9:55:50 AM
Type: Highlight
ACCEPT - DONE
<<(see 6.3.3) writeable by the MODE SELECT command>> [s/b] <<(see 6.3.3), writeable by the MODE SELECT command,>>
[i.e., add two commas]

Page: 14
Sequence number: 20
Date: 8/26/2004 9:58:54 AM
Type: Highlight
REJECT (deleting "and handles ..." instead)
<<basic elements of cache replacement algorithms>> [s/b] <<basic features of the cache replacement algorithms>>

Page: 14
Sequence number: 21
Date: 8/24/2004 7:31:31 PM
Type: Strikeout
ACCEPT - DONE (moved to obsolete list in section 1)
<<Extent reservations and RESERVE/RELEASE reservations have been made obsolete in SPC-3 and in this standard.>> This statement belongs in clause 1, not here.

Page: 14
Sequence number: 22
Date: 8/24/2004 7:31:59 PM
Type: Highlight
ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [2 times in this paragraph]

Page: 14
Sequence number: 23
Date: 8/24/2004 7:32:01 PM
Type: Highlight
ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [2 times in this paragraph]

Page: 15
Sequence number: 3
Date: 8/31/2004 10:24:00 PM
Type: Square
ACCEPT - DONE (back to old table format)
There should be a double line at the bottom of the first page of table 3.

Page: 15
Sequence number: 4
Date: 8/24/2004 7:27:59 PM
Type: Strikeout
ACCEPT - DONE

The UPDATE BLOCK command is not defined by this standard. Remove the UPDATE BLOCK command from table 3.

Page: 15
Sequence number: 5
Date: 8/24/2004 7:27:53 PM
Type: Strikeout
ACCEPT - DONE
The READ UPDATED BLOCK command is not defined by this standard. Remove the READ UPDATED BLOCK command from table 3.

Page: 15
Sequence number: 6
Date: 8/24/2004 7:29:12 PM
Type: Strikeout
ACCEPT - DONE
Since only persistent reservations are covered by this standard, the use of <<[B]>> should be removed from the table 3 heading and the key.

Page: 15
Sequence number: 7
Date: 8/24/2004 7:29:54 PM
Type: Highlight
ACCEPT - DONE
It the table 3 heading, <<initiator>> [s/b] <<I_T nexus>> [4 times

Page: 15
Sequence number: 8
Date: 8/24/2004 7:29:55 PM
Type: Highlight
ACCEPT - DONE
It the table 3 heading, <<initiator>> [s/b] <<I_T nexus>> [4 times

Page: 15
Sequence number: 9
Date: 8/24/2004 7:29:59 PM
Type: Highlight
ACCEPT - DONE
It the table 3 heading, <<initiator>> [s/b] <<I_T nexus>> [4 times

Page: 15
Sequence number: 10
Date: 8/24/2004 7:29:57 PM
Type: Highlight
ACCEPT - DONE
It the table 3 heading, <<initiator>> [s/b] <<I_T nexus>> [4 times

Page: 15
Sequence number: 11
Date: 8/24/2004 7:26:43 PM
Type: Strikeout
ACCEPT - DONE
<<NOTE 4 - When a system is integrated with more than one application client, agreement is required between the application clients as to how media is reserved and released during operations, otherwise, an application client may be locked out of access to a logical unit in the middle of an operation.>> The third paragraph from the bottom of the previous page explicitly says that this note is false. Delete the note.

Page: 15
Sequence number: 12
Date: 8/24/2004 7:27:19 PM
Type: Strikeout
ACCEPT - DONE
The ERASE (10)/(12) commands are not defined by this standard. Remove the ERASE (10)/(12) commands from table 3.

Page: 15
Sequence number: 13
Date: 8/24/2004 7:27:29 PM
Type: Strikeout
ACCEPT - DONE
The MEDIUM SCAN command is not defined by this standard. Remove the MEDIUM SCAN command from table 3.

Page: 15
Sequence number: 14
Date: 8/24/2004 7:27:42 PM
Type: Strikeout
ACCEPT - DONE
The READ GENERATION command is not defined by this standard. Remove the READ GENERATION command from table 3.

Page: 16
Sequence number: 2
Date: 8/26/2004 10:57:27 AM
Type: Strikeout
ACCEPT - DONE
Delete B = Persistent Reservations

Page: 16
Sequence number: 3
Date: 8/31/2004 10:23:44 PM
Type: Square
REJECT (SAS didn't have to do that, and many of these tables have more footnotes than main body)
Per the ISO style guide, the table 3 key must appear every page on which the table appears (i.e., it needs to be a table footer row)

Page: 16
Sequence number: 4
Date: 8/24/2004 7:33:49 PM
Type: Highlight
ACCEPT - DONE
<<appropriate>> [s/b] <<specified>>

Page: 16
Sequence number: 5
Date: 8/24/2004 7:33:07 PM
Type: Highlight
ACCEPT - DONE
<<conditions in>> [s/b] <<conditions listed in>>

Page: 16
Sequence number: 6
Date: 8/24/2004 7:35:00 PM
Type: Highlight
ACCEPT - DONE ("access or reference" since this has to cover things like prefetch and synchronize cache which might not access the LBA)
<<When an invalid LBA is encountered,>> [s/b] <<When a command attempts to access an invalid LBA,>>

Page: 16
Sequence number: 7
Date: 8/26/2004 10:58:10 AM
Type: Highlight
ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [4 times in the table 3 footnotes]

Page: 16
Sequence number: 8
Date: 8/26/2004 10:58:14 AM
Type: Highlight
ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [4 times in the table 3 footnotes]

Page: 16
Sequence number: 9
Date: 8/26/2004 10:58:18 AM
Type: Highlight
ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [4 times in the table 3 footnotes]

Page: 16
Sequence number: 10
Date: 8/26/2004 10:58:16 AM
Type: Highlight

ACCEPT - DONE
<<initiators>> [s/b] <<I_T nexuses>> [4 times in the table 3 footnotes]

Page: 17
Sequence number: 6
Date: 8/31/2004 10:12:52 PM
Type: Highlight
ACCEPT - DONE (complete rewrite per Brocade comment)
<<can be>> [s/b] <<is capable of being>>

Page: 17
Sequence number: 7
Date: 8/24/2004 7:36:00 PM
Type: Highlight
ACCEPT - DONE (slightly differently)
<<but the sense data contains an INFORMATION field value or COMMAND-SPECIFIC INFORMATION field value too large for the fixed format sense data>> [s/b]
<<but the values to be placed in the sense data include a value that is too large to fit in the fixed format INFORMATION field or COMMAND-SPECIFIC INFORMATION field >>

Page: 17
Sequence number: 8
Date: 10/3/2004 4:16:05 PM
Type: Highlight
ACCEPT - DONE ("Medium examples")
<<4.12 Examples>> [s/b] <<4.12 Direct-access device examples>>

Page: 17
Sequence number: 9
Date: 8/26/2004 11:25:18 AM
Type: Highlight
REJECT (I always put the parent clause name before "overview")
<<4.12.1 Examples overview>> [s/b] <<4.12.1 Overview>>

Page: 17
Sequence number: 10
Date: 8/24/2004 7:36:26 PM
Type: Highlight
ACCEPT - DONE
<<is done>> [s/b] <<is accomplished>>

Page: 17
Sequence number: 11
Date: 8/24/2004 7:36:48 PM
Type: Highlight
ACCEPT - DONE
<<head, and a rotating disk.>> [s/b] <<head with respect to a rotating disk>>

Page: 17
Sequence number: 12
Date: 8/30/2004 10:47:21 AM
Type: Highlight
ACCEPT - DONE (as "Some disk devices (e.g., removable disks) require a START STOP UNIT command (see 5.19) and/or a MODE MEDIUM ATTACHED command (see SMC-2) to bring the logical unit to the ready state.")
<<load or start commands>> [s/b] <<a START STOP UNIT command>>

Page: 17
Sequence number: 13
Date: 8/26/2004 11:27:21 AM
Type: Strikeout
ACCEPT - DONE
<<A disk device may have to be formatted prior to the initial access. Exceptions to this are devices that are formatted at the factory. A disk device format may create headers for each sector and initialize the data field. The MODE SELECT command is often used prior to formatting to establish the geometry (e.g., logical block length) and defect management scheme.>> This information is covered better in 4.6. Delete everything in this paragraph except the last sentence.

Page: 18
Sequence number: 8
Date: 8/26/2004 1:13:50 PM

Type: Highlight
ACCEPT - DONE
<<domain>> [s/b] <<domain (see 3.1.15)>>

Page: 18
Sequence number: 9
Date: 8/31/2004 10:08:41 PM
Type: Highlight
ACCEPT - DONE
<<can>> [s/b] <<may>>

Page: 18
Sequence number: 10
Date: 8/27/2004 5:46:43 PM
Type: Strikeout
ACCEPT - DONE (There used to be control of how many sectors or tracks were reserved for defect management in the Format Device mode page, but that's obsolete now)
<<The device server may reserve some sectors and tracks for recording defect lists and for reassigning defective blocks.>> Is the discussion of sectors and tracks appropriate in SBC-2? This sentence can be deleted because its concepts are covered in 4.8.

Page: 18
Sequence number: 11
Date: 8/27/2004 5:47:53 PM
Type: Highlight
ACCEPT - DONE (as "access the additional data in addition to the user data and protection information, if any, ")
<<user data and checksum>> [s/b] <<user data and ECC>>

Page: 18
Sequence number: 12
Date: 8/27/2004 5:48:21 PM
Type: Highlight
ACCEPT - DONE (as "the direct-access block device")
<<the device server>> [s/b] <<the disk device>>

Page: 18
Sequence number: 13
Date: 8/27/2004 5:49:07 PM
Type: Highlight
REJECT (just eliminating the quotes per IBM comment)
<<“mirror copies.”>> [s/b] <<block-for-block copies of disk devices.>>

Page: 18
Sequence number: 14
Date: 8/26/2004 12:41:30 PM
Type: Highlight
ACCEPT - DONE (without "within complex computer systems")
<<Memory media includes logical units that are traditionally used for primary storage within computer systems, such as solid state static or dynamic random access memories (e.g., SRAM, DRAM, or Flash).>> [s/b] <<Memory media is based on solid state static or dynamic random access memories (e.g., SRAM, DRAM, or Flash). Memory media logical units may be used for fast-access storage within complex computer systems.>>

Page: 18
Sequence number: 20
Date: 8/27/2004 5:49:35 PM
Type: Highlight
ACCEPT - DONE
<<storage array controller>> [s/b] <<storage array controller (see 3.1.39)>>

Page: 18
Sequence number: 21
Date: 8/27/2004 1:35:47 PM
Type: Highlight
REJECT (change used to supported)
<<used by this model>> [s/b] <<of interest to the model in this standard>>

Page: 18
Sequence number: 22
Date: 8/27/2004 1:37:25 PM
Type: Highlight

ACCEPT - DONE
<<exclusive-or (XOR)>> [s/b] <<XOR (see3.1.16) >>

Page: 18
Sequence number: 23
Date: 8/27/2004 5:50:07 PM
Type: Highlight
REJECT (sentence totally reworded and XOR-protected data upgraded to a glossary term)
<<array known as protected data>> [s/b] <<array (i.e., the protected data)>>

Page: 18
Sequence number: 24
Date: 8/27/2004 1:26:12 PM
Type: Highlight
ACCEPT - DONE ("direct-access block devices")
Global in this subclause
<<storage devices>> [s/b] <<block devices>> & <<storage device>> [s/b] <<block device>> [3 instances]

Page: 18
Sequence number: 25
Date: 8/27/2004 1:26:02 PM
Type: Highlight
ACCEPT - DONE ("direct-access block devices". Also changed singular to plural)
Global in this subclause
<<storage devices>> [s/b] <<block devices>> & <<storage device>> [s/b] <<block device>> [3 instances]

Page: 18
Sequence number: 26
Date: 8/27/2004 1:25:59 PM
Type: Highlight
ACCEPT - DONE ("direct-access block devices". Also changed singular to plural)
Global in this subclause
<<storage devices>> [s/b] <<block devices>> & <<storage device>> [s/b] <<block device>> [3 instances]

Page: 18
Sequence number: 27
Date: 8/27/2004 1:31:29 PM
Type: Highlight
ACCEPT - DONE
<<interconnect>> [s/b] <<service delivery subsystem>> Post letter ballot SAM-3 will no longer define interconnect.

Page: 18
Sequence number: 28
Date: 8/27/2004 1:35:01 PM
Type: Highlight
REJECT (This is an example of when the previously mentioned "may" is the case. It leads to comparison with the "In contrast" list below.)
<<For example, when>> Should begin as a new paragraph and [s/b] <<When>>

Page: 18
Sequence number: 29
Date: 8/27/2004 1:42:56 PM
Type: Highlight
ACCEPT - DONE (as "Command sequences for each of these operations use the device server to perform the necessary XOR functions.")
<<A command sequence for each of these operations is defined for the following operating modes. The command sequences use the device server to perform the XOR functions needed for the major operations.>>
[s/b]
<<Command sequences defined for each of these operations use the device server to perform the XOR functions.>>
Alternatively, specific details may be added describing "the following operating modes".

Page: 18
Sequence number: 30
Date: 8/24/2004 7:09:10 PM
Type: Highlight
ACCEPT - DONE
<<READ and WRITE commands>> [s/b] <<READ commands and WRITE commands>>

Page: 18

Sequence number: 31
Date: 8/27/2004 1:44:53 PM
Type: Highlight
REJECT
<<by the>> [s/b] <<to the>>

Page: 18
Sequence number: 32
Date: 8/27/2004 5:51:43 PM
Type: Strikeout
REJECT (regenerate uses READ and rebuild uses WRITE, but all operations do not use both commands. Don't want to list the details here.)
<<for certain operations>> explains nothing and should be deleted.

Page: 18
Sequence number: 33
Date: 8/27/2004 4:59:57 PM
Type: Highlight
ACCEPT - DONE (with some mods per other comments)
There is a 4.13.1 but no 4.13.2.
Change from:
4.13 Model for XOR commands
4.13.1 Model for XOR commands overview
4.13.1.1 Storage array controller supervised XOR operations
4.13.1.1.1 Storage array controller supervised XOR operations overview
4.13.1.1.2 Update write operation (storage array controller supervised)
4.13.1.1.3 Regenerate operation (storage array controller supervised)
4.13.1.1.4 Rebuild operation (storage array controller supervised)
4.13.1.2 Additional array subsystem considerations
4.13.1.2.1 Additional array subsystem considerations overview
4.13.1.2.2 Buffer full status handling
4.13.1.2.3 Access to an inconsistent stripe
4.13.1.3 Error handling considerations
4.13.1.3.1 Error handling considerations overview
4.13.1.3.2 Primary errors - errors resulting directly from the primary command
4.13.1.4 XOR data retention requirements
to:
4.13 Model for XOR commands
4.13.1 Model for XOR commands overview
4.13.2 Storage array controller supervised XOR operations
4.13.2.1 Storage array controller supervised XOR operations overview
4.13.2.2 Update write operation
4.13.2.3 Regenerate operation
4.13.2.4 Rebuild operation
4.13.3 Additional array subsystem considerations
4.13.3.1 Additional array subsystem considerations overview
4.13.3.2 Buffer full status handling
4.13.3.3 Access to an inconsistent stripe
4.13.4 Error handling considerations
4.13.4.1 Error handling considerations overview
4.13.4.2 Primary errors - errors resulting directly from the primary command
4.13.5 XOR data retention requirements

Page: 19
Sequence number: 4
Date: 8/24/2004 7:10:26 PM
Type: Strikeout
ACCEPT - DONE
<<(storage array controller supervised)>> adds no value to this (and two other subclause headings and be deleted [3 times].

Page: 19
Sequence number: 5
Date: 8/24/2004 7:10:15 PM
Type: Strikeout
ACCEPT - DONE
delete (...)

Page: 19
Sequence number: 6

Date: 8/24/2004 7:10:18 PM
Type: Strikeout
ACCEPT - DONE
delete (...)

Page: 19
Sequence number: 7
Date: 8/27/2004 3:49:17 PM
Type: Highlight
ACCEPT - DONE ("updates the check data on the parity disk")
<<parity information>> [s/b] <<XOR data>>

Page: 19
Sequence number: 8
Date: 8/27/2004 3:47:26 PM
Type: Highlight
ACCEPT - DONE
<<a logical block,>> [s/b] <<one or more logical blocks>>

Page: 19
Sequence number: 9
Date: 8/27/2004 3:47:44 PM
Type: Highlight
REJECT (deleting instead; confusing to mention here)
<<protection information>> [s/b] <<protection information (see 3.1.32)>>

Page: 19
Sequence number: 10
Date: 8/27/2004 3:49:46 PM
Type: Highlight
ACCEPT - DONE (XOR-protected data)
<<user data>> [s/b] <<user data and protection information (see 3.1.32)>>

Page: 19
Sequence number: 11
Date: 8/27/2004 3:46:49 PM
Type: Highlight
ACCEPT - DONE
<<is done>> [s/b] <<is accomplished>>

Page: 19
Sequence number: 12
Date: 8/27/2004 3:45:23 PM
Type: Highlight
ACCEPT - DONE
<<bit set>> [s/b] <<bit set to one>>

Page: 19
Sequence number: 13
Date: 8/27/2004 3:46:27 PM
Type: Highlight
ACCEPT - DONE
<<step 2>> [s/b] <<step 2)>> for consistency with the sentence that follows the 1,2,3 list.

Page: 19
Sequence number: 14
Date: 8/27/2004 3:50:20 PM
Type: Highlight
ACCEPT - DONE
<<devices (except the failed device) in the redundancy group>> [s/b] <<devices in the redundancy group except the failed device>>

Page: 19
Sequence number: 15
Date: 8/27/2004 3:45:36 PM
Type: Highlight
ACCEPT - DONE
<<XDWRITEREAD command may be sent to the device.>> [s/b] <<XDWRITEREAD command with the DISABLE WRITE bit set to one may be used.>>

Page: 19
Sequence number: 16
Date: 8/27/2004 3:52:46 PM
Type: Note
ACCEPT - DONE (although there's no way to apply this same change to the Rebuild list below, because that has a step 5) afterwards)
Start a new paragraph not in the 1,2,3 list for <<The intermediate XOR data returned by the last XDREAD command is the regenerated user data for the failed device.>> This information is not part of step 4. It is not part of the step-wise algorithm.

Page: 19
Sequence number: 17
Date: 8/27/2004 3:53:21 PM
Type: Highlight
ACCEPT - DONE
<<The sequence is as follows:>> [s/b] <<The number of steps is dependent on the number of devices in the redundancy group, but the sequence is as follows:>>

Page: 19
Sequence number: 18
Date: 8/27/2004 3:46:19 PM
Type: Highlight
ACCEPT - DONE
<<step 2>> [s/b] <<step 2)>> for consistency with the sentence that follows the 1,2,3 list.

Page: 19
Sequence number: 19
Date: 8/27/2004 3:50:46 PM
Type: Highlight
ACCEPT - DONE
<<devices (except the failed device) in the redundancy group>> [s/b] <<devices in the redundancy group except the failed device>>

Page: 19
Sequence number: 20
Date: 8/27/2004 3:44:45 PM
Type: Highlight
ACCEPT - DONE
<<step 4>> [s/b] <<step 4)>> for consistency with the sentence that follows the 1,2,3 list.

Page: 19
Sequence number: 21
Date: 8/27/2004 3:45:53 PM
Type: Highlight
ACCEPT - DONE
<<XDWRITEREAD command may be sent to the device.>> [s/b] <<XDWRITEREAD command with the DISABLE WRITE bit set to one may be used.>>

Page: 20
Sequence number: 6
Date: 8/27/2004 5:03:52 PM
Type: Highlight
REJECT (deleting this section)
<<subsystem, but describes>> [s/b] <<subsystem and describes>>

Page: 20
Sequence number: 8
Date: 8/27/2004 4:17:35 PM
Type: Highlight
ACCEPT - DONE (as "Depending on the size of the device’s buffer and the size of the XOR data, the may consume all of the device’s internal buffer space. When all of the device’s internal buffer space ...)
<<This locks up part or all (depending on the size of the device’s buffer and the size of the XOR data) of the device’s buffer space.>> [s/b] <<Depending on the size of the device’s buffer and the size of the XOR data, this allocates all or part of the device's buffer space in a manner that the device is unable to control until receipt of the XDREAD command.>>

Page: 20
Sequence number: 9
Date: 8/27/2004 4:18:06 PM
Type: Highlight
REJECT ("a new command" is singular)
<<that command>> [s/b] <<those commands>>

Page: 20
Sequence number: 10
Date: 8/27/2004 4:18:53 PM
Type: Highlight
ACCEPT - DONE (with "use" rather than "allocation")
<<freed for other commands>> [s/b] <<freed for allocation by other commands>>

Page: 20
Sequence number: 11
Date: 8/27/2004 4:19:39 PM
Type: Highlight
REJECT (but deleting this phrase)
<<is a>> [s/b] <<is in a>>

Page: 20
Sequence number: 12
Date: 8/27/2004 4:22:29 PM
Type: Highlight
ACCEPT - DONE
<<may retry the command in the same manner that a command ending with TASK SET FULL status would be retried including>>
[s/b] <<may retry the command in the same manner that it would a command that returns a TASK SET FULL status, including>>

Page: 20
Sequence number: 13
Date: 8/27/2004 4:28:31 PM
Type: Highlight
ACCEPT - DONE (The SAC's XDWRITEs are subject to getting these BUFFER FULLs that XDWRITEREADs probably will not encounter. Nevertheless, agree to remove the multiple commands phrase.)
<<buffer full condition. The storage array controller may issue multiple XDWRITEREAD commands, since the device controls when it accepts more write data and provides read data.>>
[s/b] <<buffer full condition, since the device controls when it accepts more write data and provides read data.>> The storage array controller may issue multiple XDWRITE commands too. There is nothing special about XDWRITEREAD in that regard.

Page: 20
Sequence number: 14
Date: 8/27/2004 4:29:27 PM
Type: Note
ACCEPT - DONE
Insert a paragraph break before <<When the storage array controller issues ...>> to separate the definitions from the model.

Page: 20
Sequence number: 15
Date: 8/27/2004 4:29:42 PM
Type: Note
ACCEPT - DONE
Insert a paragraph break before <<The storage controller shall...>> to separate the model from the requirements.

Page: 20
Sequence number: 16
Date: 8/24/2004 7:52:30 PM
Type: Highlight
ACCEPT - DONE
<<make sure>> [s/b] <<ensure>>

Page: 20
Sequence number: 17
Date: 8/27/2004 4:34:05 PM
Type: Note
REJECT (but this becomes the end of the section per other ENDL comment)
Insert a paragraph break before <<A storage array controller...>> because I think one is needed.

Page: 20
Sequence number: 18
Date: 8/27/2004 4:33:43 PM
Type: Highlight
REJECT (but sentence deleted)
<<in one case>> [s/b] <<in one case that is specific to the commands described by this model>>

Page: 20
Sequence number: 19
Date: 8/27/2004 4:34:18 PM
Type: Highlight
ACCEPT - DONE (but later deleted)
<<XDWRITE>> [s/b] <<XDWRITE command>>

Page: 20
Sequence number: 20
Date: 8/27/2004 4:34:35 PM
Type: Highlight
REJECT (but sentence deleted)
<<has been updated>> [s/b] <<may have been updated>> This change is suggested in an attempt to clarify what is different between WRITE and XDWRITE.

Page: 20
Sequence number: 21
Date: 8/27/2004 4:35:57 PM
Type: Highlight
ACCEPT - DONE
<<not addressed by this standard>> [s/b] <<beyond the scope of this standard>>

Page: 20
Sequence number: 22
Date: 8/27/2004 4:35:43 PM
Type: Highlight
ACCEPT - DONE
<<failing device and the extent of the failure, then limit access>> [s/b] <<failing device, the scope of the failure, and limit access>> Note 'extent' a glossary defined term in this standard.

Page: 20
Sequence number: 23
Date: 8/30/2004 9:00:58 AM
Type: Highlight
ACCEPT - DONE
<<strips of consecutively addressed storage from>> [s/b] <<extents (see 3.1.7) on>>

Page: 20
Sequence number: 24
Date: 8/30/2004 9:01:04 AM
Type: Strikeout
ACCEPT - DONE
<<A strip is an equal division of the storage capacity in a set of consecutively addressed LBAs on a single block device.>> If the change in the previous sentence is accepted, then there is no need for a definition of strip and this sentence/definition can be deleted.

Page: 20
Sequence number: 25
Date: 8/27/2004 4:21:51 PM
Type: Highlight
REVIEW
ACCEPT - DONE (although it's unusual to use "initiator device" that is probably OK. Is a SAC a device or a port?)
<<initiator>> [s/b] <<initiator device>>

Page: 21
Sequence number: 3
Date: 8/24/2004 7:07:24 PM
Type: Highlight
ACCEPT - DONE
<<while awaiting>> [s/b] <<awaiting>>

Page: 21
Sequence number: 4
Date: 8/27/2004 4:41:54 PM
Type: Highlight
ACCEPT - DONE
<<I_T nexus loss involving the initiator which sent>> [s/b] <<an I_T nexus loss event associated with the I_T nexus that sent>>

Page: 21

Sequence number: 5
Date: 8/27/2004 4:40:04 PM
Type: Highlight
REJECT ("logical unit reset" means that. Command descriptions are supposed to use the simple terms only. Hard reset (and power on) both trigger logical unit reset so don't need to be mentioned since this is a list of positive causes for an event. "one of the following events occurs" that introduces the list is not using the word "event" in the SAM-3 sense.)
<<logical unit reset>> [s/b] <<a logical unit reset event or hard reset event>>

Page: 21
Sequence number: 6
Date: 9/3/2004 9:18:42 AM
Type: Highlight
REVIEW
ACCEPT - DONE (it's redundant to include LOGICAL UNIT RESET in the bottom list since item b) already covers that, so not including it.
Also added "If the XOR data is lost and the application client still wants to perform the XOR operation, it is required to resent the XDWRITE command after one of those events."
Note that ABORT TASK of the XDREAD command, CLEAR TASK SET, and ABORT TASK SET are very odd reasons to clear the XOR data buffer. Task set status normally doesn't affect buffers like this. This could impact transport protocol recommendations for how to recover from errors in command delivery (e.g. if COMMAND frame delivery of an XDREAD is uncertain and the application client sends an ABORT TASK and resends the command, that will clear the XOR buffer if the XDREAD was indeed received but will not clear it if the XDREAD was not received.)
<<d) CLEAR TASK SET;
e) ABORT TASK if the task matches the pending XDREAD; or
f) ABORT TASK SET.>>
[s/b]
<<d) processing of any of the following task management functions (see SAM-3):
A) LOGICAL UNIT RESET;
B) CLEAR TASK SET;
C) ABORT TASK SET; or
D) ABORT TASK for a pending XDREAD.>>

Page: 21
Sequence number: 7
Date: 8/24/2004 7:11:53 PM
Type: Highlight
ACCEPT - DONE
<<any START STOP UNIT command's power condition specification>> [s/b] <<the power condition specified by any START STOP UNIT>>

Page: 21
Sequence number: 8
Date: 8/24/2004 7:12:11 PM
Type: Highlight
ACCEPT - DONE
<<initiator>> [s/b] <<application client>>

Page: 23
Sequence number: 1
Date: 8/24/2004 7:12:44 PM
Type: Highlight
ACCEPT - DONE
<<STANDBY);>> [s/b] <<STANDBY;>>

Page: 24
Sequence number: 1
Date: 8/24/2004 7:13:20 PM
Type: Highlight
ACCEPT - DONE
<<and expired>> [s/b] <<and zero>> for consistency with 4.14.2.3.3

Page: 24
Sequence number: 2
Date: 8/24/2004 5:09:28 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 24

Sequence number: 3
Date: 8/24/2004 5:09:34 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 25
Sequence number: 1
Date: 8/27/2004 1:12:44 PM
Type: Highlight
ACCEPT - DONE
<<any object along the I_T_L nexus>> [s/b] <<any object associated with the I_T_L nexus>>

Page: 25
Sequence number: 2
Date: 8/24/2004 7:14:35 PM
Type: Highlight
ACCEPT - DONE
<<(e.g., write to medium, store in non-volatile memory, recalculate on read back)>> [s/b] <<(e.g., written to medium, stored in non-volatile memory, recalculated on read back)>> to maintain consistency with the modified verb 'retained'

Page: 25
Sequence number: 3
Date: 8/24/2004 7:16:23 PM
Type: Highlight
ACCEPT - DONE
<<overwritten (e.g., power loss, hard reset, logical unit reset, and I_T nexus loss have no effect on the retention of protection information)>> This is not an example. Change to <<overwritten. Power loss, hard reset, logical unit reset, and I_T nexus loss _shall_ have no effect on the retention of protection information.>>

Page: 25
Sequence number: 4
Date: 8/27/2004 12:59:51 PM
Type: Highlight
ACCEPT - DONE ("data-in buffer and/or data-out buffer" to accommodate bidirectional commands)
<<application client buffer>> [2 instances in this paragraph] is not a glossary defined term, either in this standard or in SAM-3. Either
A) change to <<data-in buffer and data-out buffer>>,
B) change the first occurrence to <<application client buffer (i.e., the data-in buffer or data-out buffer), or
C) add a glossary entry for application client buffer reading approximately as follows <<3.1.x application client buffer: Either a data-in buffer or a data-out buffer.>>

Page: 25
Sequence number: 5
Date: 8/27/2004 12:59:54 PM
Type: Highlight
ACCEPT - DONE ("data-in buffer and/or data-out buffer" to accommodate bidirectional commands)

Page: 26
Sequence number: 4
Date: 8/24/2004 7:17:14 PM
Type: Highlight
ACCEPT - DONE (glossary entry too)
<<CRC>> add CRC to the abbreviations list in 3.2

Page: 26
Sequence number: 5
Date: 8/27/2004 1:00:03 PM
Type: Highlight
ACCEPT - DONE ("data-in buffer and/or data-out buffer" to accommodate bidirectional commands)
<<application client data buffer>> [2 instances in this paragraph] is not a glossary defined term, either in this standard or in SAM-3. Either
A) change to <<data-in buffer and data-out buffer>>,
B) change the first occurrence to <<application client data buffer (i.e., the data-in buffer or data-out buffer), or
C) add a glossary entry for application client buffer reading approximately as follows <<3.1.x application client buffer: Either a data-in buffer or a data-out buffer.>> and change the two occurrences of <<application client data buffer>> to <<application client buffer>

Page: 26

Sequence number: 6
Date: 8/27/2004 1:00:12 PM
Type: Highlight
ACCEPT - DONE ("data-in buffer and/or data-out buffer" to accommodate bidirectional commands)
fix application client data buffer

Page: 27
Sequence number: 1
Date: 8/24/2004 7:19:24 PM
Type: Square
ACCEPT - DONE (but this seems mostly like a repeat of the previous sentence)
<<polynomials.>> [s/b] <<polynomials used to generate the logical block guard from the contents of the USER DATA field.>>

Page: 29
Sequence number: 1
Date: 8/24/2004 7:19:52 PM
Type: Highlight
ACCEPT - DONE
<<Several test cases>> [s/b] <<Several CRC test cases>>

Page: 29
Sequence number: 2
Date: 8/24/2004 7:20:20 PM
Type: Square
ACCEPT - DONE
The first letters of entries in this 1,2,3 list should be lower case for consistency with previous lists in this standard.

Page: 29
Sequence number: 3
Date: 8/24/2004 7:21:19 PM
Type: Highlight
ACCEPT - DONE
<<supported then>> [s/b] <<supported, then>>

Page: 29
Sequence number: 4
Date: 8/24/2004 7:21:08 PM
Type: Highlight
ACCEPT - DONE
<<information then>> [s/b] <<information, then>> [2 times in this 1,2,3 list

Page: 29
Sequence number: 5
Date: 8/24/2004 7:21:01 PM
Type: Highlight
ACCEPT - DONE
add ,

Page: 29
Sequence number: 6
Date: 8/27/2004 12:42:31 PM
Type: Highlight
ACCEPT - DONE ("return the length")
<<that result in the return of the length>> [s/b] <<that return of the length>>

Page: 29
Sequence number: 7
Date: 9/1/2004 10:28:19 AM
Type: Highlight
ACCEPT - DONE (It's inconsistent to use USER DATA field but then "protection information" in one sentence. Since this is in 4.15 where the field names are introduced, I will make the change but add an i.e. list with the p.i. field names as well: "the length of the user data field and shall not include the length of the protection information (i.e., the logical block guard field, the logical block application tag field, and the logical block reference tag field)")
<<user data>> [s/b] <<USER DATA field>>

Page: 29
Sequence number: 9
Date: 8/24/2004 7:24:51 PM
Type: Highlight

ACCEPT - DONE
<<An example of how grouping could be used would be if two applications use a subsystem;>> [s/b] <<As an example of how grouping functions could be used consider a subsystem composed of two applications;>> Note: any change the removes the 'if' is acceptable. This example not close to an if/then situation.

Page: 30
Sequence number: 4
Date: 8/25/2004 8:09:44 PM
Type: Highlight
ACCEPT - DONE
<<protection information>> [s/b] <<protection information (see 4.15)>>

Page: 33
Sequence number: 5
Date: 8/31/2004 9:52:13 PM
Type: Note
ACCEPT - DONE (but disagree with footnotes on every page. SAS didn't have to do that.)
Per the ISO style guide, the table footnotes and notes must appear at the bottom of every page containing table 9. The table notes must appear first and must be separated from the table footnotes by the same separator (i.e., a double line) that separates the header from the body of the table. Also the double line must be present on the bottom of each continuation page of the table.

Page: 33
Sequence number: 6
Date: 8/26/2004 7:35:20 PM
Type: Highlight
ACCEPT - DONE
<<remaining operation codes for direct-access devices>> [s/b] <<operation codes for direct-access devices not specified in this table>>

Page: 35
Sequence number: 2
Date: 8/25/2004 3:59:21 PM
Type: Highlight
REJECT
<<received in the last mode parameter block descriptor (see 6.3.2) in a MODE SELECT command (see SPC-3)>> [s/b]
<<processed by the most recent MODE SELECT command (see SPC-3) that included a parameter block descriptor (see 6.3.2)>>

Page: 35
Sequence number: 3
Date: 8/25/2004 4:00:09 PM
Type: Highlight
REJECT (but changed to follow global convention)
<<READY and>> [s/b] <<READY, and>>

Page: 35
Sequence number: 4
Date: 9/1/2004 8:03:00 PM
Type: Highlight
ACCEPT - DONE ("attempting to enter into the task set" per IBM suggestion)
<<new commands>> [s/b] <<commands entered into the task set after the FORMAT UNIT command>>

Page: 35
Sequence number: 5
Date: 8/24/2004 5:11:18 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 36
Sequence number: 2
Date: 8/25/2004 4:02:32 PM
Type: Highlight
ACCEPT - DONE (also added to set to zero sentence preceding)
<<A FMTPINFO bit set to one specifies that the device server shall>> [s/b] <<A FMTPINFO bit set to one specifies that the device server shall enable the use of protection information (see 4.15) and>>

Page: 36
Sequence number: 3
Date: 8/25/2004 4:06:52 PM

Type: Highlight
ACCEPT - DONE
<<LOGICAL BLOCK REFERENCE TAG field in protection information (see 4.15).>> [s/b]
<<LOGICAL BLOCK REFERENCE TAG field in protection information (see 4.15.2).>> i.e., application client ownership of the logical block reference tag is discussed only in 4.15.2 and a more direct reference will be more valuable to the reader

Page: 36
Sequence number: 4
Date: 8/25/2004 9:46:59 AM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFF FFFFFFFFh>> [s/b] <<FFFFFFFF_FFFFFFFFh>> as per the conventions stated in 3.4.

Page: 36
Sequence number: 8
Date: 8/24/2004 5:11:50 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 36
Sequence number: 9
Date: 8/24/2004 5:10:27 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>> [2 times on this page]

Page: 36
Sequence number: 10
Date: 8/24/2004 5:11:44 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 37
Sequence number: 1
Date: 8/25/2004 4:10:30 PM
Type: Highlight
REJECT (just changed this to "not available" instead)
<<N/A>> add N/A to the abbreviations in 3.2

Page: 37
Sequence number: 2
Date: 8/25/2004 3:56:56 PM
Type: Highlight
REJECT (but changed each "> 0" to "Nonzero")
<< > >> add > to the list of symbols in 3.2

Page: 37
Sequence number: 3
Date: 8/25/2004 3:57:49 PM
Type: Highlight
ACCEPT - DONE
In table 14 <<All remaining codes are reserved.>> [s/b] <<Reserved>> The 'All others' in the same row takes care of everything else. See table 21 for an example.

Page: 37
Sequence number: 4
Date: 8/31/2004 9:47:11 PM
Type: Note
ACCEPT - DONE (converted the "table note" into a footnote on the "Comments" column heading and deleted the word "Notes")
Per the ISO style guide, in table 14 the table notes must appear first and must be separated from the table footnotes by a double line. The word Notes: must not appear above the table footnotes (per the ISO style guide) because that might cause the reader to believe that the table footnotes are not normative.

Page: 38
Sequence number: 1
Date: 8/26/2004 7:29:36 PM
Type: Highlight

ACCEPT - DONE
<<map out of>> [s/b] <<exclude from>>

Page: 38
Sequence number: 2
Date: 8/25/2004 4:11:35 PM
Type: Highlight
ACCEPT - DONE (as "control parameters")
<<control bits>> [s/b] <<control information>> There is at least one field in each parameter list header format.

Page: 38
Sequence number: 3
Date: 8/25/2004 4:11:46 PM
Type: Highlight
ACCEPT - DONE
<<these bits>> [s/b] <<these headers>>

Page: 38
Sequence number: 4
Date: 9/1/2004 10:59:06 AM
Type: Highlight
ACCEPT - DONE (the entire short parameter list header is used, not a subset of it or a subset of possible headers. Reworded as "The short header (see table nn) is used if...")
<<which>> [s/b] <<that>>

Page: 39
Sequence number: 1
Date: 9/1/2004 10:30:23 AM
Type: Highlight
ACCEPT - DONE (the entire long parameter list header is used, not a subset of it or a subset of possible headers. Reworded as "The long header (see table nn) is used if...")
<<which>> [s/b] <<that>>

Page: 39
Sequence number: 2
Date: 8/25/2004 4:15:37 PM
Type: Highlight
ACCEPT - DONE
<<bits in this paragraph>> [s/b] <<bits listed in this paragraph>>

Page: 39
Sequence number: 3
Date: 8/25/2004 4:15:51 PM
Type: Highlight
ACCEPT - DONE
<<the setting of>> [s/b] <<the values of>>

Page: 39
Sequence number: 4
Date: 8/30/2004 11:38:05 AM
Type: Highlight
ACCEPT - DONE
<<perform the action>> [s/b] <<take the action>>

Page: 39
Sequence number: 6
Date: 8/25/2004 4:20:52 PM
Type: Strikeout
ACCEPT - DONE
<<while processing the FORMAT UNIT command>> If this phrase is necessary here, then it is necessary in every sentence defining every behavior of the FORMAT UNIT command. Better to delete it once than to add it everywhere.

Page: 39
Sequence number: 7
Date: 8/25/2004 4:25:25 PM
Type: Highlight
ACCEPT - DONE (not for consistency, just proper English. "not ...nor" is wrong unless it says "not able to.. nor is able to")
<<nor>> [s/b] <<or>> for consistency with the DPRY bit definition

Page: 39
Sequence number: 8
Date: 8/25/2004 4:22:54 PM
Type: Highlight
ACCEPT - DONE
<<the first condition>> [s/b] <<the condition described in item a)>> [2 times, in this paragraph and the next]

Page: 39
Sequence number: 9
Date: 8/25/2004 4:23:18 PM
Type: Highlight
ACCEPT - DONE
<<the second condition>> [s/b] <<the condition described in item b)>> [2 times, in this paragraph and the next]

Page: 39
Sequence number: 10
Date: 8/25/2004 4:23:04 PM
Type: Highlight
ACCEPT - DONE
first to a)

Page: 39
Sequence number: 11
Date: 8/25/2004 4:23:11 PM
Type: Highlight
ACCEPT - DONE
second to b)

Page: 40
Sequence number: 1
Date: 8/25/2004 2:45:35 PM
Type: Strikeout
ACCEPT - DONE
<<in the parameter list header>> All the fields described in this subclause are in the parameter list header. Delete this redundant information.

Page: 40
Sequence number: 3
Date: 8/24/2004 5:13:59 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 40
Sequence number: 4
Date: 8/24/2004 5:13:53 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 41
Sequence number: 1
Date: 8/25/2004 2:45:56 PM
Type: Highlight
ACCEPT - DONE
<<(i.e.>> [s/b] <<(i.e.,>>

Page: 42
Sequence number: 3
Date: 10/3/2004 4:42:36 PM
Type: Highlight
ACCEPT - DONE
<<table 20>> [s/b] <<table 19>> The IP modifier field is described in table 19, not table 20.

Page: 42
Sequence number: 4
Date: 8/31/2004 9:41:11 PM
Type: Strikeout
ACCEPT - DONE

<<Notes:>> This line should be deleted since (per the ISO style guide) in indicates that the paragraphs below it are not normative, as opposed to the normative paragraphs that appear as table footnoted in table 20.

Page: 43
Sequence number: 1
Date: 8/30/2004 9:02:20 AM
Type: Highlight
ACCEPT - DONE
<<value above the capacity>> [s/b] <<value that is greater than the capacity>> [2 times, once here and once in 5.4.2.4.3]

Page: 43
Sequence number: 2
Date: 8/30/2004 9:02:34 AM
Type: Highlight
ACCEPT - DONE
value above the capacity s/b greater than

Page: 43
Sequence number: 3
Date: 8/26/2004 7:26:19 PM
Type: Strikeout
ACCEPT - DONE
<<by this descriptor>> should be deleted for consistency with the description of the SECTOR NUMBER field in 5.4.2.4.5.

Page: 44
Sequence number: 1
Date: 8/24/2004 7:51:04 PM
Type: Highlight
ACCEPT - DONE
<<a sector>> [s/b] <<one sector>> for consistency with the 'one track' phrase earlier in this sentence.

Page: 44
Sequence number: 2
Date: 10/6/2004 7:41:35 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent (see 3.1.17)>>

Page: 45
Sequence number: 2
Date: 10/6/2004 7:41:44 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent>> [4 times in this subclause on this page]

Page: 45
Sequence number: 3
Date: 10/6/2004 7:41:49 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent>> [4 times in this subclause on this page]

Page: 45
Sequence number: 4
Date: 10/6/2004 7:41:56 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent>> [4 times in this subclause on this page]

Page: 45
Sequence number: 5
Date: 10/6/2004 7:42:01 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent>> [4 times in this subclause on this page]

Page: 45
Sequence number: 6
Date: 10/6/2004 7:42:12 PM

Type: Highlight
REJECT
<<range>> [s/b] <<extent (see 3.1.17)>>

Page: 45
Sequence number: 7
Date: 10/6/2004 7:42:22 PM
Type: Highlight
REJECT
<<contiguous logical blocks within the range>> [s/b] <<logical blocks in the extent>>

Page: 45
Sequence number: 8
Date: 8/30/2004 9:05:42 AM
Type: Highlight
ACCEPT - DONE (as "from the one specified in the logical block address field to the last logical block on the medium")
<<range contains all remaining logical blocks>> [s/b] <<extent contains all logical blocks from the one specified in the LOGICAL BLOCK ADDRESS field to the largest valued LBA>>

Page: 45
Sequence number: 9
Date: 8/24/2004 4:42:16 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>> Standards describe things, but more importantly they define things.

Page: 45
Sequence number: 11
Date: 8/31/2004 9:37:13 PM
Type: Highlight
ACCEPT - DONE (but see other comments on this paragraph; this implies difficult functionality)
<<initiator port>> [s/b] <<I_T nexus>> and <<initiator ports>> [s/b] <<I_T nexuses> [3 instances total in this paragraph]

Page: 45
Sequence number: 12
Date: 8/31/2004 9:37:11 PM
Type: Highlight
ACCEPT - DONE (but see other comments on this paragraph; this implies difficult functionality)
<<initiator port>> [s/b] <<I_T nexus>> and <<initiator ports>> [s/b] <<I_T nexuses> [3 instances total in this paragraph]

Page: 46
Sequence number: 1
Date: 8/25/2004 4:53:36 PM
Type: Strikeout
ACCEPT - DONE
<<block device's>> What other cache memory would it be? Delete this unnecessary phrase.

Page: 46
Sequence number: 2
Date: 8/30/2004 9:08:12 AM
Type: Highlight
ACCEPT - DONE (as "from the one specified in the logical block address field to the last logical block on the medium")
<<all remaining logical blocks>> [s/b] <<all logical blocks from the one specified in the LOGICAL BLOCK ADDRESS field to the largest valued LBA>>

Page: 46
Sequence number: 3
Date: 8/24/2004 7:51:37 PM
Type: Highlight
ACCEPT - DONE
<<ine>> [s/b] <<one>>

Page: 46
Sequence number: 4
Date: 8/24/2004 5:02:34 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>> Unless there is more than one definition of the LOGICAL BLOCK ADDRESS field

Page: 47
Sequence number: 1
Date: 8/25/2004 4:54:17 PM
Type: Highlight
ACCEPT - DONE
<<addressed logical block>> [s/b] <<addressed logical blocks>>

Page: 47
Sequence number: 2
Date: 8/24/2004 4:42:25 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 48
Sequence number: 2
Date: 8/24/2004 7:48:34 PM
Type: Note
ACCEPT - DONE (reordered)
It seem like note 10 should precede note 9 so that it is closer to the definition of the TRANSFER LENGTH field.

Page: 48
Sequence number: 3
Date: 8/24/2004 7:49:59 PM
Type: Highlight
ACCEPT - DONE
<<The LOGICAL BLOCK ADDRESS field specifies the logical block where the read operation shall begin.>> [s/b] <<See the LOCK UNLOCK CACHE (10) command (see 5.5) for a definition of the LOGICAL BLOCK ADDRESS field.>>

Page: 49
Sequence number: 1
Date: 8/24/2004 7:46:47 PM
Type: Highlight
REJECT (inconsistently commented, and doesn't seem to clarify anything. How else would an error be reported but with CHECK CONDITION?)
<<the sense key shall>> [s/b] <<the status shall be CHECK CONDITION and the sense key shall>>

Page: 49
Sequence number: 2
Date: 8/24/2004 4:43:22 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 50
Sequence number: 1
Date: 9/3/2004 9:27:32 AM
Type: Square
ACCEPT - DONE (back to old table format)
Per the ISO style guide, there should be a double line at the bottom of each page in table 33.

Page: 50
Sequence number: 2
Date: 8/24/2004 4:43:43 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 50
Sequence number: 3
Date: 8/24/2004 4:43:56 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 52
Sequence number: 4
Date: 8/24/2004 7:46:57 PM
Type: Highlight

REJECT (inconsistently commented, and doesn't seem to clarify anything. How else would an error be reported but with CHECK CONDITION?)
<<the sense key shall>> [s/b] <<the status shall be CHECK CONDITION and the sense key shall>>

Page: 52
Sequence number: 5
Date: 8/30/2004 9:09:00 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>>

Page: 52
Sequence number: 6
Date: 8/24/2004 4:44:52 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 52
Sequence number: 7
Date: 8/24/2004 5:14:22 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 52
Sequence number: 8
Date: 8/24/2004 5:14:29 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>> [2 times on this page]

Page: 52
Sequence number: 9
Date: 8/27/2004 6:00:08 PM
Type: Highlight
ACCEPT - DONE
of to set to

Page: 52
Sequence number: 10
Date: 8/24/2004 7:41:10 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 52
Sequence number: 11
Date: 8/24/2004 7:41:12 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 53
Sequence number: 1
Date: 8/25/2004 6:08:05 PM
Type: Highlight
ACCEPT - DONE
<<first>> is redundant with <<before>> Delete one or the other. [2 times in table 34]

Page: 53
Sequence number: 2
Date: 8/25/2004 6:08:14 PM
Type: Highlight
ACCEPT - DONE
<<first>> is redundant with <<before>> Delete one or the other. [2 times in table 34]

Page: 53
Sequence number: 3

Date: 8/25/2004 6:08:08 PM
Type: Highlight
ACCEPT - DONE
<<first>> is redundant with <<before>> Delete one or the other. [2 times in table 34]

Page: 53
Sequence number: 4
Date: 8/25/2004 6:08:12 PM
Type: Highlight
ACCEPT - DONE
<<first>> is redundant with <<before>> Delete one or the other. [2 times in table 34]

Page: 53
Sequence number: 5
Date: 8/30/2004 9:09:58 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 6
Date: 8/30/2004 9:10:04 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 7
Date: 8/30/2004 9:10:30 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 8
Date: 8/30/2004 9:10:35 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 9
Date: 8/30/2004 9:10:40 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 10
Date: 8/30/2004 9:10:25 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 11
Date: 8/30/2004 9:10:20 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53
Sequence number: 12
Date: 8/30/2004 9:10:16 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 53

Sequence number: 13
Date: 8/30/2004 9:10:09 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [9 times in this table]

Page: 54
Sequence number: 1
Date: 8/24/2004 4:45:06 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 54
Sequence number: 2
Date: 8/24/2004 4:45:16 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 54
Sequence number: 3
Date: 8/25/2004 11:24:00 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 54
Sequence number: 4
Date: 8/25/2004 11:24:19 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 55
Sequence number: 2
Date: 9/3/2004 11:36:12 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<checking enables and requirements>> [s/b] <<checking requirements>> [2 times in this paragraph]

Page: 55
Sequence number: 3
Date: 10/6/2004 7:43:17 PM
Type: Highlight
REJECT
<<of the range of logical blocks>> [s/b] <<in the extent (3.1.17)>>

Page: 55
Sequence number: 4
Date: 8/30/2004 9:16:10 AM
Type: Highlight
REJECT (deleting sentence)
checking enables and requirements

Page: 55
Sequence number: 5
Date: 10/6/2004 7:43:29 PM
Type: Strikeout
REJECT (it could be viewed as setting a mask that applies to all subsequent commands.)
<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 55
Sequence number: 6
Date: 10/6/2004 7:43:53 PM
Type: Strikeout
ACCEPT - DONE (it could be viewed as setting a mask that applies to all subsequent commands. Nevertheless, deleted it here.)

<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 55
Sequence number: 7
Date: 8/24/2004 4:45:28 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 55
Sequence number: 8
Date: 8/30/2004 9:16:19 AM
Type: Highlight
REJECT (deleting sentence)
<<a definition description>> [s/b] <<the definition>>

Page: 55
Sequence number: 9
Date: 8/24/2004 5:14:58 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 55
Sequence number: 10
Date: 9/3/2004 11:36:30 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<are controlled by>> [s/b] <<are specified by>>

Page: 56
Sequence number: 1
Date: 8/25/2004 6:12:27 PM
Type: Strikeout
REJECT (it could be viewed as setting a mask that applies to all subsequent commands.)
<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 56
Sequence number: 2
Date: 8/24/2004 5:03:31 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 57
Sequence number: 1
Date: 8/24/2004 4:46:07 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 57
Sequence number: 2
Date: 8/24/2004 5:04:19 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 57
Sequence number: 3
Date: 8/25/2004 6:14:09 PM
Type: Highlight
ACCEPT - DONE (also added "to retrieve the long read capacity data" and add a (see 5.15) after READ CAPACITY (16))
<<initiator>> [s/b] <<application client>>

Page: 58
Sequence number: 1
Date: 8/25/2004 9:47:08 AM
Type: Highlight

ACCEPT - DONE
<<FFFFFFFF FFFFFFFEh>> [s/b] <<FFFFFFFF_FFFFFFFEh>> per the conventions in 3.4.

Page: 59
Sequence number: 2
Date: 8/25/2004 6:16:58 PM
Type: Highlight
ACCEPT - DONE
<<default format (see the DEFECT LIST FORMAT field in the defect list header)>> [s/b] <<default format and indicate that format in the DEFECT LIST FORMAT field (see table 43)>>

Page: 59
Sequence number: 3
Date: 8/25/2004 6:28:38 PM
Type: Highlight
REVIEW
ACCEPT - DONE (It is restating a rule mentioned in the definition of the address descriptors that for the READ DEFECT DATA command, those types of address descriptors contain vendor-specific data. They don't necessarily contain a valid LBA even if they point below the capacity.
Reworded to "If the device server returns short block format address descriptors (see 5.4.2.4.2) or long block format address descriptors (see 5.4.2.4.3), the address descriptors contain vendor-specific values."
Moved NOTE 15 into position after that.
Changed the remainder of the paragraph to "If the device server returns physical sector format address descriptors (see 5.4.2.4.5), it may or may not include defects in areas not accessible to the application client. If the device server returns bytes from index format address descriptors (see 5.4.2.4.4), it shall return a complete list of the defects. A complete list of the defects may include defects in areas not within the capacity returned in the READ CAPACITY command.")
<<Short block format address descriptors and long block format address descriptors returned with this command are vendor-specific.>> The intent of this sentence is unclear. Maybe <<The use of short block format address descriptors and long block format address descriptors by this command is vendor-specific.>> is correct, maybe not.

Page: 60
Sequence number: 4
Date: 8/25/2004 6:46:26 PM
Type: Highlight
ACCEPT - DONE
<<but contains>> [s/b] <<but the ALLOCATION LENGTH field contains>>

Page: 60
Sequence number: 5
Date: 8/25/2004 6:45:35 PM
Type: Highlight
ACCEPT - DONE
<<create a CHECK CONDITION status>> [s/b] <<return a CHECK CONDITION status>>

Page: 60
Sequence number: 6
Date: 8/25/2004 6:44:55 PM
Type: Strikeout
ACCEPT - DONE
<<The application client may determine the exact number of the defects by dividing the DEFECT LIST LENGTH by the length of a single address descriptor for the returned format.>> Delete this. The second sentence on this page says the same thing better.

Page: 60
Sequence number: 7
Date: 8/25/2004 6:31:31 PM
Type: Highlight
ACCEPT - DONE (but moved to 5.17 rather than 5.16)
<<READ DEFECT DATA (10) command with an ALLOCATION LENGTH of four>> [s/b] <<READ DEFECT DATA (12) command with an ALLOCATION LENGTH of eight>> since READ DEFECT DATA(12) has a greater probability of being able to represent the defect list in the capacity of the ALLOCATION LENGTH field.

Page: 60
Sequence number: 9
Date: 8/25/2004 6:44:27 PM
Type: Highlight
REJECT (this is part of the sequence of paragraphs describing the fields or field-like cells in table 43)
<<The address descriptors>> [s/b] <<The address descriptors (see 5.4.2.4)>>

Page: 60

Sequence number: 10
Date: 8/24/2004 4:46:36 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 61
Sequence number: 1
Date: 8/24/2004 5:01:25 PM
Type: Highlight
ACCEPT - DONE
<<See the description of the READ DEFECT DATA (10) list header (see 5.16) for a description of the fields in this header.>> [s/b] <<See the READ DEFECT DATA (10) command for the definition the fields in this defect list.>>

Page: 61
Sequence number: 2
Date: 8/25/2004 6:49:57 PM
Type: Highlight
ACCEPT - DONE
<<The data passed>> [s/b] <<The data transferred>>

Page: 61
Sequence number: 3
Date: 8/31/2004 8:54:41 PM
Type: Highlight
REJECT (yes, the "extent" is one. The reference seems to work fine. Added "(i.e., the size of the extent (see 3.1.19) is one logical block)" in the command introduction which might help.)
<<See the LOCK UNLOCK CACHE (10) command (see 5.5) for a definition of the LOGICAL BLOCK ADDRESS field.>>
The LOCK UNLOCK CACHE(10) defines the LOGICAL BLOCK ADDRESS field as specifying the first logical block in an extent. That definition is correct for READ LONG only if the length of the extent is one. It is not clear that a reference to 5.5 is appropriate here.

Page: 62
Sequence number: 3
Date: 8/26/2004 7:22:42 PM
Type: Highlight
REJECT (not stated that way for other commands like READ, READ DEFECT DATA, etc. although their smaller command also defines the larger command's data contents)
<<See the READ LONG (10) command (see 5.18) for a description of the fields in this command.>> [s/b] <<See the READ LONG (10) command (see 5.18) for the definition of the fields in this command and the data transferred by this command.>>

Page: 62
Sequence number: 4
Date: 8/25/2004 7:15:54 PM
Type: Highlight
ACCEPT - DONE
<<the defective logical blocks>> [s/b] <<defective logical blocks>>

Page: 62
Sequence number: 5
Date: 8/30/2004 9:26:42 AM
Type: Highlight
ACCEPT - DONE
<<GLIST if such a list is supported>> [s/b] <<GLIST, if the list is supported>> or <<GLIST, if supported>>

Page: 62
Sequence number: 6
Date: 8/26/2004 7:21:16 PM
Type: Note
ACCEPT - DONE (changed "Address descriptor(s)" to "LBA(s) in table 49 and changed address descriptor to LBA everywhere else in this section.)
[Global in REASSIGN BLOCKS] Since the address descriptors used by REASSIGN BLOCKS are not the same as the address descriptors used by FORMAT UNIT, READ DEFECT DATA, and elsewhere, consideration should be given to changing the name. 'Logical block address descriptor' is one possibility.

Page: 62
Sequence number: 7
Date: 8/25/2004 7:03:28 PM
Type: Highlight

ACCEPT - DONE (removed "or logical block" and changed "address descriptor" to "LBA")
<<More than one physical or logical block may be relocated by each address descriptor sent by the application client.>> This sentence is not strictly correct. Since "each address descriptor" can specify exactly one logical block, it seems unlikely that more than one logical block can be relocated in response to one (aka "each") address descriptor.

Page: 62
Sequence number: 8
Date: 8/25/2004 7:04:03 PM
Type: Highlight
REJECT (just going to call them "LBAs" and get rid of misused "address descriptor" term)
<<list that contains the LBAs>> [s/b] <<list that contains address descriptors [or whatever] identifying the LBAs>>

Page: 63
Sequence number: 2
Date: 8/25/2004 9:47:18 AM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFF FFFFFFFFh>> [s/b] <<FFFFFFFF_FFFFFFFFh>> for consistency with 3.4

Page: 64
Sequence number: 2
Date: 8/25/2004 6:56:51 PM
Type: Highlight
REJECT (none of the formats always contain LBAs. The block formats often do. Each address format descriptions describe how sorting by ascending order works.)
<<ascending order>> [s/b] <<ascending order by LBA value>>

Page: 64
Sequence number: 3
Date: 8/25/2004 9:47:29 AM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFF FFFFFFFFh>> [s/b] <<FFFFFFFF_FFFFFFFFh>> for consistency with 3.4

Page: 64
Sequence number: 4
Date: 8/25/2004 7:10:49 PM
Type: Highlight
REJECT (when reassigning an LBA, it is reasonable to expect an error when trying to read that LBA. This is talking about an error that shows up in some LBA not in the list - that's unexpected.)
<<unexpected unrecoverable read error>> [s/b] <<unrecoverable read error>> Surely, errors are never expected.

Page: 64
Sequence number: 5
Date: 8/25/2004 7:12:45 PM
Type: Note
REJECT (this is just recommended software behavior, not important for interoperability.)
It seems like note 18 should not be a note.

Page: 64
Sequence number: 6
Date: 8/25/2004 7:17:17 PM
Type: Highlight
REJECT (deleted instead)
<<certain>> [s/b] <<specified>>

Page: 64
Sequence number: 7
Date: 8/25/2004 7:19:12 PM
Type: Highlight
ACCEPT - DONE
<<unit, the same as they would do in response to a SYNCHRONIZE CACHE command with the SYNC_NV bit set to zero (see 5.22), prior>> [s/b]
<<unit (e.g., as they would do in response to a SYNCHRONIZE CACHE command with the SYNC_NV bit set to zero (see 5.22)) prior>>

Page: 64
Sequence number: 8
Date: 8/25/2004 7:20:02 PM

Type: Highlight
ACCEPT - DONE
<<a hard drive stops its spindle motor>> [s/b] <<the rotating media spindle motor is stopped>> for consistency with 4.12

Page: 64
Sequence number: 9
Date: 8/25/2004 7:18:05 PM
Type: Highlight
ACCEPT - DONE
<<The START STOP UNIT command provides>> [s/b] <<The START STOP UNIT command (see table 52) provides>> Also delete the paragraph immediately before table 52 ... for consistency with the other command descriptions in this standard

Page: 64
Sequence number: 10
Date: 8/25/2004 7:20:19 PM
Type: Strikeout
ACCEPT - DONE
Delete line - add (see table xx) above

Page: 65
Sequence number: 2
Date: 8/25/2004 7:22:29 PM
Type: Highlight
REJECT (removing the s elsewhere)
<<POWER CONDITION>> [s/b] <<POWER CONDITIONS>> as per table 52 and other text in this subclause

Page: 65
Sequence number: 3
Date: 8/31/2004 1:38:48 PM
Type: Strikeout
ACCEPT - DONE
Delete <<optional>> Since I can find no way to omit the POWER CONDITIONS field from the CDB, it seems unlikely that the field is optional.

Page: 65
Sequence number: 4
Date: 8/25/2004 7:48:06 PM
Type: Note
REJECT (it should honor normal reserved value in a named field rules)
The device server may ignore the contents of the POWER CONDITIONS field.

Page: 65
Sequence number: 5
Date: 8/25/2004 7:49:25 PM
Type: Highlight
ACCEPT - DONE
<<has>> [s/b] <<contains>>

Page: 65
Sequence number: 6
Date: 8/25/2004 7:49:48 PM
Type: Highlight
ACCEPT - DONE
<<0h then>> [s/b] <<0h, then>> i.e., add a comma between the if clause and the then clause

Page: 65
Sequence number: 7
Date: 8/25/2004 7:49:05 PM
Type: Highlight
ACCEPT - DONE (as "Process the ... bits.")
<<are valid>> [s/b] <<shall be processed>>

Page: 65
Sequence number: 8
Date: 8/25/2004 7:43:11 PM
Type: Highlight
ACCEPT - DONE (also changed "if they are active" to fix the singular/plural problem)
<<idle condition and standby condition timers>> [s/b] <<idle condition timer and standby condition timer>>

Page: 65
Sequence number: 9
Date: 8/25/2004 7:39:39 PM
Type: Highlight
REVIEW
ACCEPT - DONE (slightly confusing in that this refers to future commands)
<<START STOP UNIT command's most recent power condition setting>> [s/b] <<specified power condition>> for consistency with item a) in the same list

Page: 65
Sequence number: 10
Date: 8/25/2004 7:26:26 PM
Type: Highlight
ACCEPT - DONE
<<is issued>> [s/b] <<is received>> or <<is processed>> [3 times on this page]

Page: 65
Sequence number: 11
Date: 8/25/2004 7:26:27 PM
Type: Highlight
ACCEPT - DONE
<<is issued>> [s/b] <<is received>> or <<is processed>> [3 times on this page]

Page: 65
Sequence number: 12
Date: 8/25/2004 7:26:29 PM
Type: Highlight
ACCEPT - DONE
<<is issued>> [s/b] <<is received>> or <<is processed>> [3 times on this page]

Page: 65
Sequence number: 13
Date: 8/25/2004 7:40:46 PM
Type: Highlight
ACCEPT - DONE
<<selected>> [s/b] <<specified>> [2 times in list entry a)]

Page: 65
Sequence number: 14
Date: 8/25/2004 7:33:07 PM
Type: Highlight
REJECT (logical unit reset means all that. Command descriptions are supposed to use the simple terms only.)
<<command or a logical unit reset>> [s/b] <<command, a logical unit reset event, or receipt of a LOGICAL UNIT RESET task management function>>

Page: 65
Sequence number: 15
Date: 8/25/2004 7:33:16 PM
Type: Highlight
REJECT (logical unit reset means all that. Command descriptions are supposed to use the simple terms only.)
<<or a logical unit reset occurs>> [s/b] <<a LOGICAL UNIT RESET task management function is received, or a logical unit reset event occurs>>

Page: 65
Sequence number: 16
Date: 8/25/2004 7:40:48 PM
Type: Highlight
ACCEPT - DONE
<<selected>> [s/b] <<specified>> [2 times in list entry a)]

Page: 65
Sequence number: 17
Date: 8/25/2004 7:41:11 PM
Type: Highlight
ACCEPT - DONE (fixed per LSI comment)
<<a power condition in which it currently is>> [s/b] <<the same power condition that is currently in effect>>

Page: 66
Sequence number: 1

Date: 8/25/2004 7:46:38 PM
Type: Note
ACCEPT - DONE (as "disable the idle condition timer if it is active (see SPC-3), and disable the standby condition timer if it is active (see SPC-3).")
Either add <<(see SPC-3)>> here Or delete (see SPC-3) from the paragraph defining LU_CONTROL on the previous page.

Page: 66
Sequence number: 2
Date: 8/25/2004 7:46:51 PM
Type: Highlight
ACCEPT - DONE (as "enable the idle condition timer if it is active (see SPC-3), and enable the standby condition timer if it is active (see SPC-3).")
<<activated>> [s/b] <<active>> for consistency with terminology used everywhere else in this subclause

Page: 66
Sequence number: 3
Date: 10/6/2004 7:44:43 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent (see 3.1.17)>>

Page: 66
Sequence number: 4
Date: 8/31/2004 9:30:33 PM
Type: Highlight
REJECT (getting rid of memory globally instead)
<<cache>> [s/b] <<cache memory>>

Page: 66
Sequence number: 5
Date: 8/25/2004 7:51:47 PM
Type: Highlight
REJECT (will delete the sentence instead)
<<implicitly by>> [s/b] <<to be performed as part of >>

Page: 66
Sequence number: 6
Date: 8/25/2004 7:51:51 PM
Type: Highlight
REJECT (will delete the sentence instead)
<<SCSI functions>> [s/b] <<functions>>

Page: 66
Sequence number: 7
Date: 8/25/2004 7:51:42 PM
Type: Highlight
REJECT (will delete the sentence instead)
<<in other clauses of>> [s/b] <<elsewhere in>> strictly speaking the current wording prohibits requirements for SYNCHRONIZE CACHE usage from appearing anywhere in this clause, i.e., clause 5, and invalidates statements made in the START STOP UNIT command definition.

Page: 66
Sequence number: 8
Date: 8/24/2004 4:47:30 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 66
Sequence number: 9
Date: 8/24/2004 4:47:24 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 66
Sequence number: 10
Date: 8/25/2004 8:01:35 PM
Type: Highlight

ACCEPT - DONE
<<The SYNC_NV bit specifies>> [s/b] <<The SYNC_NV bit (see table 55) specifies>> and Delete <<and is described in table 55>> at the end of the sentence.

Page: 66
Sequence number: 11
Date: 8/25/2004 8:01:38 PM
Type: Strikeout
ACCEPT - DONE
<<The SYNC_NV bit specifies>> [s/b] <<The SYNC_NV bit (see table 55) specifies>> and Delete <<and is described in table 55>> at the end of the sentence.

Page: 66
Sequence number: 12
Date: 8/25/2004 8:00:49 PM
Type: Highlight
REJECT (other cells in this table have periods)
<<No requirement.>> Remove period from the end of this non-sentence.

Page: 67
Sequence number: 1
Date: 8/24/2004 4:47:42 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 67
Sequence number: 2
Date: 8/31/2004 9:30:09 PM
Type: Note
ACCEPT - DONE (no reason. Replaced with the usual pointer.)
Why is the LOCK UNLOCK CACHE (10) command (see 5.5) definition for the NUMBER OF BLOCKS field incorrect for SYNCHRONIZE CACHE(10)?

Page: 67
Sequence number: 3
Date: 10/6/2004 7:44:54 PM
Type: Highlight
REJECT
<<range>> [s/b] <<extent>> [3 times on this page]

Page: 67
Sequence number: 4
Date: 10/6/2004 7:45:12 PM
Type: Highlight
REJECT
<<contiguous logical blocks within the range>> [s/b] <<logical blocks in the extent>>

Page: 67
Sequence number: 5
Date: 10/6/2004 7:45:04 PM
Type: Highlight
REJECT
range s/b extent

Page: 67
Sequence number: 6
Date: 10/6/2004 7:44:59 PM
Type: Highlight
REJECT
range s/b extent

Page: 67
Sequence number: 7
Date: 8/30/2004 10:07:22 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>>

Page: 67
Sequence number: 8
Date: 8/26/2004 9:14:18 AM
Type: Highlight
REJECT (deleting sentence instead)
<<implicitly by>> [s/b] <<to be performed as part of >>

Page: 67
Sequence number: 9
Date: 8/26/2004 9:14:23 AM
Type: Highlight
REJECT (deleting sentence instead)
<<SCSI functions>> [s/b] <<functions>>

Page: 67
Sequence number: 10
Date: 8/26/2004 9:14:28 AM
Type: Highlight
REJECT (deleting sentence instead)
<<in other clauses of>> [s/b] <<elsewhere in>>

Page: 67
Sequence number: 11
Date: 8/26/2004 8:51:05 AM
Type: Highlight
ACCEPT - DONE
<<log read capacity data>> [s/b] <<long read capacity data>>

Page: 68
Sequence number: 1
Date: 8/24/2004 4:48:22 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>> [2 times in this paragraph]

Page: 68
Sequence number: 2
Date: 8/24/2004 4:48:39 PM
Type: Highlight
ACCEPT - DONE
description s/b definition

Page: 68
Sequence number: 3
Date: 8/24/2004 4:48:29 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 68
Sequence number: 4
Date: 8/24/2004 5:15:26 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 68
Sequence number: 5
Date: 8/24/2004 5:15:19 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 68
Sequence number: 6
Date: 8/26/2004 6:58:18 PM
Type: Highlight
ACCEPT - DONE
<<If the MODE SELECT command is implemented, and the Verify Error Recovery mode page (see 6.3.5) is also implemented,>>

[s/b] <<If the Verify Error Recovery mode page (see 6.3.5) is implemented,>> for consistency with the rest of the standard

Page: 68
Sequence number: 7
Date: 8/26/2004 6:58:25 PM
Type: Highlight
ACCEPT - DONE
<<specifies>> [s/b] <<specify>> to match the number of the sentence subject (i.e., settings)

Page: 68
Sequence number: 8
Date: 8/25/2004 11:24:28 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 69
Sequence number: 2
Date: 9/3/2004 11:52:47 AM
Type: Square
ACCEPT - DONE (back to old table format)
There should be a double line at the bottom of each page of table 58, table 60, and table 61.

Page: 71
Sequence number: 2
Date: 8/24/2004 4:49:49 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 71
Sequence number: 3
Date: 8/24/2004 5:15:49 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 71
Sequence number: 4
Date: 8/24/2004 5:15:56 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 71
Sequence number: 5
Date: 8/24/2004 7:41:21 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 71
Sequence number: 6
Date: 8/24/2004 7:41:25 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 72
Sequence number: 2
Date: 8/24/2004 4:49:58 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 72
Sequence number: 3
Date: 8/24/2004 5:16:24 PM

Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 72
Sequence number: 4
Date: 8/24/2004 5:16:16 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 72
Sequence number: 5
Date: 8/24/2004 7:41:35 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 72
Sequence number: 6
Date: 8/24/2004 7:41:38 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 74
Sequence number: 1
Date: 8/24/2004 5:16:46 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 74
Sequence number: 2
Date: 8/24/2004 5:16:52 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 74
Sequence number: 3
Date: 8/24/2004 7:41:46 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 74
Sequence number: 4
Date: 8/24/2004 7:41:50 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 76
Sequence number: 1
Date: 8/24/2004 5:17:10 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 76
Sequence number: 2
Date: 8/24/2004 5:17:17 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 76
Sequence number: 3

Date: 8/24/2004 7:41:59 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 76
Sequence number: 4
Date: 8/24/2004 7:42:02 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 76
Sequence number: 5
Date: 8/26/2004 8:53:07 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<log read capacity data>> [s/b] <<long read capacity data>>

Page: 77
Sequence number: 1
Date: 8/24/2004 4:50:10 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 77
Sequence number: 2
Date: 8/24/2004 4:50:19 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 77
Sequence number: 3
Date: 8/26/2004 8:51:48 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<sense key of>> [s/b] <<sense key set to>>

Page: 77
Sequence number: 4
Date: 8/26/2004 8:52:33 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<sense key of>> [s/b] <<sense key set to>>

Page: 77
Sequence number: 5
Date: 8/26/2004 8:51:52 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 77
Sequence number: 6
Date: 8/26/2004 8:52:37 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<additional sense code of>> [s/b] <<additional sense code set to>>

Page: 77
Sequence number: 7
Date: 8/26/2004 8:52:52 AM
Type: Highlight
ACCEPT - DONE (but sentence later deleted)
<<log read capacity data>> [s/b] <<long read capacity data>>

Page: 77

Sequence number: 8
Date: 8/25/2004 11:24:44 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.) <<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 77
Sequence number: 9
Date: 8/25/2004 11:24:52 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.) <<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 78
Sequence number: 2
Date: 8/24/2004 4:50:28 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 78
Sequence number: 3
Date: 8/26/2004 8:56:45 AM
Type: Highlight
ACCEPT - DONE (but paragraph later deleted)
<<sense key of>> [s/b] <<sense key set to>>

Page: 78
Sequence number: 4
Date: 8/26/2004 4:45:16 PM
Type: Note
ACCEPT - DONE
The text describing the RTO_EN bit appears between the subclause heading and the CDB format table for all the other VERIFY(n) commands. Be consistent.

Page: 78
Sequence number: 5
Date: 8/30/2004 9:24:34 AM
Type: Highlight
ACCEPT - DONE
<<checking enables and requirements>> [s/b] <<checking requirements>> [2 times in this paragraph]

Page: 78
Sequence number: 6
Date: 8/30/2004 9:18:01 AM
Type: Highlight
REJECT (deleting sentence)
checking enables and requirements

Page: 78
Sequence number: 7
Date: 10/6/2004 7:46:02 PM
Type: Strikeout
REJECT
<<for this command>> What other command would it be? Delete this.

Page: 78
Sequence number: 8
Date: 8/30/2004 9:33:18 AM
Type: Highlight
ACCEPT - DONE
<<of the range of logical blocks>> [s/b] <<in the extent (3.1.17)>> [on this page and the next]

Page: 78
Sequence number: 9
Date: 8/30/2004 9:17:53 AM
Type: Highlight

REJECT (deleting sentence)
<<a definition description>> [s/b] <<the definition>>

Page: 78
Sequence number: 10
Date: 8/24/2004 7:43:39 PM
Type: Highlight
ACCEPT - DONE
<<are controlled by>> [s/b] <<are specified by>>

Page: 79
Sequence number: 1
Date: 10/6/2004 7:46:33 PM
Type: Strikeout
ACCEPT - DONE
Delete <<for this command>>

Page: 79
Sequence number: 2
Date: 8/26/2004 7:09:12 PM
Type: Highlight
ACCEPT - DONE
<<The LOGICAL BLOCK ADDRESS field specifies the logical block where the write operation shall begin.>> [s/b] <<See the LOCK UNLOCK CACHE (10) command (see 5.5) for a definition of the LOGICAL BLOCK ADDRESS field.>>

Page: 79
Sequence number: 3
Date: 8/25/2004 8:07:24 PM
Type: Highlight
ACCEPT - DONE
<<the logical block>> [s/b] <<each logical block>>

Page: 79
Sequence number: 4
Date: 8/25/2004 8:06:31 PM
Type: Highlight
ACCEPT - DONE
<<LBA if>> [s/b] <<LBA, if>>

Page: 79
Sequence number: 5
Date: 8/25/2004 8:06:25 PM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFFh if>> [s/b] <<FFFFFFFFh, if>>

Page: 79
Sequence number: 6
Date: 8/25/2004 8:06:15 PM
Type: Highlight
ACCEPT - DONE
<<FFFFh if>> [s/b] <<FFFFh, if>>

Page: 79
Sequence number: 7
Date: 8/25/2004 8:06:20 PM
Type: Highlight
ACCEPT - DONE
<<any value if>> [s/b] <<any value, if>> This text was what surfaced the need for commas, as I read it.

Page: 80
Sequence number: 1
Date: 8/24/2004 4:51:15 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 80
Sequence number: 2

Date: 8/24/2004 4:51:00 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>> [2 times in this paragraph]

Page: 80
Sequence number: 3
Date: 8/24/2004 4:51:09 PM
Type: Highlight
ACCEPT - DONE
a s/b the

Page: 80
Sequence number: 4
Date: 8/24/2004 6:51:56 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 80
Sequence number: 5
Date: 8/30/2004 10:08:23 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [4 times in this table]

Page: 80
Sequence number: 6
Date: 8/30/2004 10:08:29 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [4 times in this table]

Page: 80
Sequence number: 7
Date: 8/30/2004 10:08:34 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [4 times in this table]

Page: 80
Sequence number: 8
Date: 8/30/2004 10:08:41 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [4 times in this table]

Page: 80
Sequence number: 9
Date: 8/30/2004 10:08:47 AM
Type: Highlight
ACCEPT - DONE
<<cache>> [s/b] <<cache memory>> [4 times in this table]

Page: 80
Sequence number: 10
Date: 8/26/2004 7:06:25 PM
Type: Highlight
ACCEPT - DONE
<<The force unit access (FUA and FUA_NV) bits are defined in table 67.>> [s/b] <<The force unit access (FUA) and force unit access nonvolatile cache (FUA_NV) bits are defined in table 67.>> Note: the suggested replacement text is a cut and paste from the READ(10) command, with only the table number changed.

Page: 81
Sequence number: 3
Date: 8/25/2004 8:04:49 PM
Type: Note
ACCEPT - DONE (moved WRPROTECT up so it's in big-endian and left-to-right order)
In READ(10), the RDPROTECT field is described before the FUA bits. Here the reverse is true. Be consistent.

Page: 81
Sequence number: 4
Date: 9/3/2004 11:54:04 AM
Type: Square
ACCEPT - DONE (back to old table format)
There should be a double line at the bottom of each page of table 68.

Page: 82
Sequence number: 3
Date: 8/24/2004 5:18:48 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>> [2 times on this page]

Page: 82
Sequence number: 4
Date: 8/24/2004 5:19:25 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 82
Sequence number: 5
Date: 8/24/2004 5:18:55 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>> [2 times on this page]

Page: 82
Sequence number: 6
Date: 8/24/2004 5:19:14 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 82
Sequence number: 7
Date: 8/24/2004 7:40:14 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 82
Sequence number: 8
Date: 8/24/2004 7:40:20 PM
Type: Highlight
ACCEPT - DONE
<<fail>> [s/b] <<terminate>> [2 times on this page]

Page: 83
Sequence number: 1
Date: 8/24/2004 4:51:58 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 83
Sequence number: 2
Date: 8/24/2004 4:52:05 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 83
Sequence number: 3
Date: 8/24/2004 6:52:02 PM
Type: Highlight
ACCEPT - DONE

<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>> [2 times on this page]

Page: 83
Sequence number: 4
Date: 8/24/2004 6:52:09 PM
Type: Highlight
ACCEPT - DONE
required s/b specified

Page: 83
Sequence number: 5
Date: 8/25/2004 11:25:04 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 83
Sequence number: 6
Date: 8/25/2004 11:25:11 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 84
Sequence number: 2
Date: 8/24/2004 4:52:17 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 84
Sequence number: 3
Date: 8/24/2004 5:19:48 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 84
Sequence number: 4
Date: 8/30/2004 9:19:32 AM
Type: Highlight
REJECT (deleting sentence)
<<a definition description>> [s/b] <<the definition>>

Page: 84
Sequence number: 5
Date: 10/6/2004 7:47:18 PM
Type: Highlight
REJECT
<<of the range of logical blocks>> [s/b] <<in the extent (3.1.17)>>

Page: 84
Sequence number: 6
Date: 8/30/2004 10:09:37 AM
Type: Strikeout
ACCEPT - DONE
<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 84
Sequence number: 7
Date: 8/30/2004 10:09:43 AM
Type: Strikeout
ACCEPT - DONE
for this command

Page: 84
Sequence number: 8

Date: 8/30/2004 9:24:43 AM
Type: Highlight
ACCEPT - DONE
<<checking enables and requirements>> [s/b] <<checking requirements>> [2 times in this paragraph]

Page: 84
Sequence number: 9
Date: 8/30/2004 9:19:48 AM
Type: Highlight
REJECT (deleting sentence)
checking enables and requirements

Page: 84
Sequence number: 10
Date: 8/24/2004 7:43:47 PM
Type: Highlight
ACCEPT - DONE
<<are controlled by>> [s/b] <<are specified by>>

Page: 85
Sequence number: 3
Date: 8/24/2004 4:52:58 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>> [2 times in this paragraph]

Page: 85
Sequence number: 4
Date: 8/24/2004 4:53:15 PM
Type: Highlight
ACCEPT - DONE
description s/b definition

Page: 85
Sequence number: 5
Date: 8/24/2004 4:52:52 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>> [2 times in this paragraph]

Page: 85
Sequence number: 6
Date: 8/24/2004 4:53:05 PM
Type: Highlight
ACCEPT - DONE
a s/b the

Page: 85
Sequence number: 7
Date: 8/24/2004 5:20:07 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 85
Sequence number: 8
Date: 8/24/2004 6:52:19 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>> [2 times on this page]

Page: 85
Sequence number: 9
Date: 8/26/2004 6:57:43 PM
Type: Highlight
ACCEPT - DONE
<<If the MODE SELECT command is implemented, and the Verify Error Recovery mode page (see 6.3.5) is also implemented,>>
[s/b] <<If the Verify Error Recovery mode page (see 6.3.5) is implemented,>>

Page: 85
Sequence number: 10
Date: 8/24/2004 6:52:41 PM
Type: Highlight
ACCEPT - DONE
required s/b specified

Page: 86
Sequence number: 2
Date: 8/24/2004 4:53:39 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 86
Sequence number: 3
Date: 8/24/2004 4:54:09 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 86
Sequence number: 4
Date: 8/31/2004 10:41:29 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 86
Sequence number: 5
Date: 8/24/2004 5:20:38 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 86
Sequence number: 6
Date: 8/24/2004 6:52:50 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 86
Sequence number: 7
Date: 8/25/2004 11:25:33 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 86
Sequence number: 8
Date: 8/25/2004 11:25:28 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 87
Sequence number: 4
Date: 8/24/2004 4:54:43 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 87
Sequence number: 5
Date: 8/24/2004 5:20:55 PM
Type: Highlight

ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 87
Sequence number: 6
Date: 8/30/2004 9:20:37 AM
Type: Highlight
REJECT (deleting sentence)
<<a definition description>> [s/b] <<the definition>>

Page: 87
Sequence number: 7
Date: 8/30/2004 9:24:51 AM
Type: Highlight
ACCEPT - DONE
<<checking enables and requirements>> [s/b] <<checking requirements>> [2 times in this paragraph]

Page: 87
Sequence number: 8
Date: 8/30/2004 9:20:26 AM
Type: Highlight
REJECT (deleting sentence)
fix "checking enables and requirements"

Page: 87
Sequence number: 9
Date: 8/24/2004 7:43:55 PM
Type: Highlight
ACCEPT - DONE
<<are controlled by>> [s/b] <<are specified by>>

Page: 87
Sequence number: 10
Date: 10/6/2004 7:47:54 PM
Type: Highlight
REJECT
<<of the range of logical blocks>> [s/b] <<in the extent (3.1.17)>>

Page: 87
Sequence number: 11
Date: 8/30/2004 10:10:00 AM
Type: Strikeout
ACCEPT - DONE
<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 87
Sequence number: 12
Date: 8/30/2004 10:10:06 AM
Type: Strikeout
ACCEPT - DONE
for this command

Page: 88
Sequence number: 4
Date: 8/26/2004 6:55:54 PM
Type: Highlight
REJECT (but note deleted by hpq comment) <<can>> [s/b] <<may>>

Page: 88
Sequence number: 5
Date: 10/6/2004 7:48:27 PM
Type: Highlight
REJECT (yes, the "extent" is one. The reference seems to work fine)
<<See the LOCK UNLOCK CACHE (10) command (see 5.5) for a definition of the LOGICAL BLOCK ADDRESS field.>> The LOCK UNLOCK CACHE(10) defines the LOGICAL BLOCK ADDRESS field as specifying the first logical block in an extent. That definition is correct for WRITE LONG only if the length of the extent is one. It is not clear that a reference to 5.5 is appropriate here.

Page: 89
Sequence number: 2

Date: 8/24/2004 4:55:31 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 89
Sequence number: 3
Date: 8/24/2004 4:55:38 PM
Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>>

Page: 89
Sequence number: 4
Date: 8/24/2004 5:21:20 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 89
Sequence number: 5
Date: 8/26/2004 6:45:23 PM
Type: Highlight
REJECT (we don't mention that that for other commands, although it's just as true for READ (12) to READ (10), READ DEFECT DATA (12) to READ DEFECT DATA (10), etc.)
<<See the WRITE LONG (10) command (see 5.18) for a description of the fields in this command.>> [s/b] <<See the WRITE LONG (10) command (see 5.18) for the definition of the fields in this command and the data transferred by this command.>>

Page: 89
Sequence number: 6
Date: 8/24/2004 6:52:57 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 90
Sequence number: 3
Date: 8/25/2004 9:47:40 AM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFF FFFFFFFFh>> [s/b] <<FFFFFFFF_FFFFFFFFh>> for consistency with 3.4

Page: 90
Sequence number: 4
Date: 8/26/2004 4:28:58 PM
Type: Highlight
ACCEPT - DONE (as "Into each of the subsequent logical blocks, the device server shall place into the LOGICAL BLOCK REFERENCE TAG field the value of the previous logical block's LOGICAL BLOCK REFERENCE TAG field plus one.")
<<Into each of the following logical blocks>> [s/b] <<For each subsequent logical block>> Otherwise the use of "into" is redundant in the sentence.

Page: 90
Sequence number: 6
Date: 8/30/2004 10:13:11 AM
Type: Highlight
ACCEPT - DONE (as " from the one specified in the logical block address field to the last logical block on the medium")
<<all the remaining logical blocks on the medium>> [s/b] <<all the logical blocks from the one specified in the LOGICAL BLOCK ADDRESS field to the largest valued LBA>>

Page: 90
Sequence number: 7
Date: 8/24/2004 6:53:05 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 91
Sequence number: 1
Date: 8/24/2004 4:55:50 PM

Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 91
Sequence number: 2
Date: 8/24/2004 5:21:54 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 92
Sequence number: 4
Date: 8/24/2004 4:56:34 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 92
Sequence number: 5
Date: 8/30/2004 9:21:47 AM
Type: Highlight
ACCEPT - DONE (but sentence deleted)
<<a>> [s/b] <<the>>

Page: 92
Sequence number: 6
Date: 8/24/2004 5:22:14 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 92
Sequence number: 7
Date: 8/24/2004 7:44:03 PM
Type: Highlight
ACCEPT - DONE
<<are controlled by>> [s/b] <<are specified by>>

Page: 92
Sequence number: 8
Date: 8/30/2004 10:10:16 AM
Type: Highlight
ACCEPT - DONE
<<of the range of logical blocks>> [s/b] <<in the extent (3.1.17)>>

Page: 92
Sequence number: 9
Date: 8/26/2004 6:12:56 PM
Type: Strikeout
REVIEW
ACCEPT - DONE (reworded as "contains a value that is expected in the logical block application tag field of the protection information of each logical block with the logical block application tag mask field value applied.")
<<for this command>> What other command would it be? Delete this. [2 times on this page]

Page: 92
Sequence number: 10
Date: 8/30/2004 10:10:22 AM
Type: Strikeout
ACCEPT - DONE
delete "for this command"

Page: 92
Sequence number: 11
Date: 8/30/2004 9:24:59 AM
Type: Highlight
ACCEPT - DONE
<<checking enables and requirements>> [s/b] <<checking requirements>> [2 times in this paragraph]

Page: 92
Sequence number: 12
Date: 8/30/2004 9:21:21 AM
Type: Highlight
REJECT (deleting sentence)
fix checking enables and requirements

Page: 93
Sequence number: 2
Date: 8/24/2004 4:56:45 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 93
Sequence number: 3
Date: 8/24/2004 5:22:44 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>> [2 times in this paragraph]

Page: 93
Sequence number: 4
Date: 8/24/2004 5:22:57 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 93
Sequence number: 5
Date: 8/24/2004 5:22:50 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>> [2 times in this paragraph]

Page: 93
Sequence number: 6
Date: 8/24/2004 5:23:05 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 93
Sequence number: 7
Date: 8/24/2004 7:04:17 PM
Type: Highlight
ACCEPT - DONE
<<target transfer to the initiator>> [s/b] <<device server transfer to the application client>>

Page: 93
Sequence number: 8
Date: 8/24/2004 6:53:13 PM
Type: Highlight
ACCEPT - DONE
<<as required by the XORPINFO bit>> [s/b] <<as specified by the XORPINFO bit>>

Page: 93
Sequence number: 9
Date: 8/26/2004 6:31:22 PM
Type: Highlight
ACCEPT - DONE ("device server shall terminate")
<<is terminated>> [s/b] <<shall be terminated>>

Page: 93
Sequence number: 10
Date: 8/24/2004 6:58:28 PM
Type: Highlight
ACCEPT - DONE
<<fields>> [s/b] <<protection information fields>>

Page: 93
Sequence number: 11
Date: 8/26/2004 6:30:19 PM
Type: Note
ACCEPT - DONE (actually 3 times)
Insert new paragraph for consistency with XPWRITE command definition. [2 times on this page]

Page: 93
Sequence number: 12
Date: 8/26/2004 6:30:21 PM
Type: Note
ACCEPT - DONE (actually 3 times)
Insert new paragraph for consistency with XPWRITE command definition. [2 times on this page]

Page: 94
Sequence number: 3
Date: 8/24/2004 4:56:55 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 94
Sequence number: 4
Date: 8/24/2004 7:04:26 PM
Type: Highlight
ACCEPT - DONE
<<target transfer to the initiator>> [s/b] <<device server transfer to the application client>>

Page: 94
Sequence number: 5
Date: 8/24/2004 6:53:18 PM
Type: Highlight
ACCEPT - DONE
<<as required by the XORPINFO bit>> [s/b] <<as specified by the XORPINFO bit>>

Page: 94
Sequence number: 6
Date: 8/25/2004 8:08:31 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>> [2 times in this paragraph]

Page: 94
Sequence number: 7
Date: 8/24/2004 6:53:24 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 94
Sequence number: 8
Date: 8/24/2004 7:01:12 PM
Type: Highlight
ACCEPT - DONE
target s/b device server

Page: 95
Sequence number: 2
Date: 8/24/2004 4:57:43 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 95
Sequence number: 3
Date: 8/24/2004 4:57:30 PM
Type: Highlight
ACCEPT - DONE

<<a>> [s/b] <<the>> [1 time each in this paragraph and the next]

Page: 95
Sequence number: 4
Date: 8/24/2004 4:57:37 PM
Type: Highlight
ACCEPT - DONE
a s/b the

Page: 95
Sequence number: 5
Date: 8/26/2004 6:32:49 PM
Type: Note
ACCEPT - DONE
The first three paragraphs after table 84 should be agglomerated into one paragraph, for consistency with the rest of the standard.

Page: 95
Sequence number: 6
Date: 8/24/2004 5:23:31 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 95
Sequence number: 7
Date: 8/24/2004 7:02:32 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>> [2 times in this paragraph]

Page: 95
Sequence number: 8
Date: 8/24/2004 7:02:16 PM
Type: Highlight
ACCEPT - DONE
target s/b device server

Page: 95
Sequence number: 9
Date: 8/24/2004 6:53:30 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 96
Sequence number: 2
Date: 8/24/2004 4:58:05 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 96
Sequence number: 3
Date: 8/24/2004 5:23:55 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 96
Sequence number: 4
Date: 8/24/2004 7:02:57 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>>

Page: 96
Sequence number: 5
Date: 8/24/2004 6:53:37 PM
Type: Highlight

ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 97
Sequence number: 2
Date: 8/24/2004 4:58:23 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 97
Sequence number: 3
Date: 8/24/2004 5:24:20 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 97
Sequence number: 4
Date: 8/24/2004 7:03:08 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>>

Page: 97
Sequence number: 5
Date: 8/24/2004 6:53:44 PM
Type: Highlight
ACCEPT - DONE
<<as required by the WRPROTECT field>> [s/b] <<as specified by the WRPROTECT field>>

Page: 98
Sequence number: 2
Date: 8/24/2004 4:59:13 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 98
Sequence number: 3
Date: 8/24/2004 5:24:28 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 98
Sequence number: 4
Date: 8/24/2004 7:00:35 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>>

Page: 98
Sequence number: 5
Date: 8/24/2004 6:53:52 PM
Type: Highlight
ACCEPT - DONE
<<as required by the XORPINFO bit>> [s/b] <<as specified by the XORPINFO bit>>

Page: 99
Sequence number: 1
Date: 8/24/2004 4:59:37 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 99
Sequence number: 2
Date: 8/31/2004 10:41:09 PM

Type: Highlight
ACCEPT - DONE
<<a>> [s/b] <<the>> [2 times in this paragraph]

Page: 99
Sequence number: 3
Date: 8/24/2004 4:59:30 PM
Type: Highlight
ACCEPT - DONE
a s/b the

Page: 99
Sequence number: 4
Date: 8/24/2004 5:25:12 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>> [3 times on this page]

Page: 99
Sequence number: 5
Date: 8/24/2004 5:25:33 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 99
Sequence number: 6
Date: 8/24/2004 5:25:34 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 99
Sequence number: 7
Date: 8/24/2004 5:25:18 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>> [3 times on this page]

Page: 99
Sequence number: 8
Date: 8/24/2004 5:25:29 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 99
Sequence number: 9
Date: 8/24/2004 5:25:31 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 99
Sequence number: 10
Date: 8/24/2004 6:57:55 PM
Type: Highlight
ACCEPT - DONE
<<fields>> [s/b] <<protection information fields>>

Page: 99
Sequence number: 11
Date: 8/24/2004 6:59:31 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>> [2 times on this page]

Page: 99
Sequence number: 12

Date: 8/24/2004 6:59:52 PM
Type: Highlight
ACCEPT - DONE
target s/b device server

Page: 100
Sequence number: 2
Date: 8/24/2004 4:29:50 PM
Type: Highlight
ACCEPT - DONE
<<for a description>> [s/b] <<for the definition>>

Page: 100
Sequence number: 3
Date: 8/24/2004 6:53:57 PM
Type: Highlight
ACCEPT - DONE
<<as required by the XORPINFO bit>> [s/b] <<as specified by the XORPINFO bit>>

Page: 101
Sequence number: 2
Date: 8/24/2004 4:21:23 PM
Type: Highlight
ACCEPT - DONE
<<passed>> [s/b] <<sent>> I would have said <<transferred>> but <<sent>> is more consistent with the usage of <<returned>> later in this paragraph.

Page: 101
Sequence number: 3
Date: 8/24/2004 4:23:18 PM
Type: Highlight
ACCEPT - DONE (reworded sentence)
<<page sent>> [s/b] <<page (see table 19) is sent>> for consistency with the next sentence.

Page: 102
Sequence number: 2
Date: 8/25/2004 9:14:16 AM
Type: Highlight
ACCEPT - DONE
<<address>> [s/b] <<address descriptor>>

Page: 103
Sequence number: 1
Date: 8/24/2004 4:19:24 PM
Type: Strikeout
ACCEPT - DONE
Delete <<different>> because it adds no value.

Page: 105
Sequence number: 4
Date: 8/24/2004 4:07:01 PM
Type: Highlight
ACCEPT - DONE
<<Vendor-specific parameters>> [s/b] <<Vendor-specific>>

Page: 105
Sequence number: 5
Date: 8/24/2004 4:07:44 PM
Type: Highlight
ACCEPT - DONE
<<FORMAT DATA OUT field>> [s/b] <<Format DATA OUT parameter>>

Page: 105
Sequence number: 6
Date: 8/24/2004 4:11:20 PM
Type: Highlight
ACCEPT - DONE
<<of the most recently successful>> [s/b] <<from the most recent successful>>

Page: 105
Sequence number: 8
Date: 8/24/2004 4:17:55 PM
Type: Highlight
ACCEPT - DONE
<<GROWN DEFECTS DURING CERTIFICATION field>> [s/b] <<grown defects during certification parameter>>

Page: 105
Sequence number: 9
Date: 8/24/2004 4:12:26 PM
Type: Highlight
ACCEPT - DONE
<<last>> [s/b] <<most recent>>

Page: 105
Sequence number: 10
Date: 8/24/2004 4:17:45 PM
Type: Highlight
ACCEPT - DONE
<<TOTAL BLOCKS REALLOCATED DURING FORMAT field>> [s/b] <<total blocks reallocated during format parameter>>

Page: 105
Sequence number: 12
Date: 8/25/2004 9:43:11 AM
Type: Highlight
REJECT ("usage minutes" is the key noun here, being defined by the i.e. Added "minutes with" after the i.e. to clarify the English a bit.)
<<minutes (i.e., power applied regardless of power state)>> [s/b] <<minutes with power applied regardless of power state>>

Page: 105
Sequence number: 13
Date: 8/25/2004 9:43:35 AM
Type: Highlight
REJECT (if anything, location seems more important than manner. I think both words are helpful.)
<<manner and location>> [s/b] <<manner>>

Page: 105
Sequence number: 14
Date: 8/24/2004 4:15:41 PM
Type: Highlight
ACCEPT - DONE
<<reflect no such information being available>> [s/b] <<indicate that no such information is available>>

Page: 106
Sequence number: 2
Date: 8/24/2004 4:04:43 PM
Type: Highlight
ACCEPT - DONE
<<defined in table 95>> [s/b] <<(see table 95)>>

Page: 106
Sequence number: 3
Date: 8/24/2004 4:06:00 PM
Type: Highlight
ACCEPT - DONE (wiped out outer parens instead)
<<(either permanently or temporarily, e.g.,>> [s/b] <<(either permanently or temporarily (e.g.,>>

Page: 111
Sequence number: 1
Date: 8/25/2004 9:46:35 AM
Type: Highlight
ACCEPT - DONE
<<FFFFFFFF FFFFFFFFh>> [s/b] <<FFFFFFFF_FFFFFFFFh>> for consistency with 3.4 [2 times on this page]

Page: 111
Sequence number: 2
Date: 8/25/2004 9:46:41 AM
Type: Highlight
ACCEPT - DONE

2nd FF_FF comment

Page: 112
Sequence number: 4
Date: 8/24/2004 3:54:34 PM
Type: Highlight
ACCEPT - DONE (made into a)b) list along with IBM comment)
<<use the>> [s/b] <<use either the>> to help the "dependent on" phrase make more sense

Page: 113
Sequence number: 5
Date: 8/24/2004 3:51:14 PM
Type: Highlight
ACCEPT - DONE (it has its own table now per IBM comment)
<<WRITE RETENTION PRIORITY field>> [s/b] <<WRITE RETENTION PRIORITY field (see table 106)>>

Page: 113
Sequence number: 6
Date: 8/24/2004 3:50:09 PM
Type: Highlight
ACCEPT - DONE
<<last>> [s/b] <<most recent>>

Page: 113
Sequence number: 7
Date: 8/24/2004 3:50:29 PM
Type: Highlight
ACCEPT - DONE
<<remaining>> [s/b] <<following>>

Page: 113
Sequence number: 8
Date: 8/25/2004 10:18:20 AM
Type: Highlight
ACCEPT - DONE
<<the current>> [s/b] <<a>>

Page: 113
Sequence number: 9
Date: 8/31/2004 6:50:01 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
<<cache>> [s/b] <<cache memory>> [2 times in this paragraph]

Page: 113
Sequence number: 10
Date: 8/31/2004 6:50:05 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
<<cache>> [s/b] <<cache memory>> [2 times in this paragraph]

Page: 114
Sequence number: 6
Date: 8/25/2004 10:49:29 AM
Type: Strikeout
ACCEPT - DONE (changed "the previous" to "a")
Delete <<previous>> I do not think any replacement wording is needed, but if some is it would be <<most recent>>

Page: 114
Sequence number: 7
Date: 8/31/2004 6:40:06 PM
Type: Highlight
ACCEPT - DONE (as "when it reaches the last logical block on the medium")
<<before exceeding the end of>> [s/b] <<largest LBA on>>

Page: 114
Sequence number: 8
Date: 8/25/2004 10:52:49 AM
Type: Strikeout

REJECT (but changed "the current READ command" to "that subsequent command" to tie it into the previous sentence. The original READ which triggered the prefetch cannot return an error any more. This is referring to another read that occurs.)
Delete <<current>>

Page: 114
Sequence number: 9
Date: 8/25/2004 10:53:06 AM
Type: Highlight
ACCEPT - DONE
<<rules for reporting deferred errors>> [s/b] <<rules for reporting deferred errors (see SPC-3)>>

Page: 114
Sequence number: 10
Date: 8/30/2004 10:42:03 AM
Type: Highlight
REJECT ("enters the enabled state" instead)
<<ready to be processed>> [s/b] <<in the task set>>

Page: 114
Sequence number: 11
Date: 8/25/2004 10:54:14 AM
Type: Strikeout
ACCEPT - DONE
Delete <<into the cache>> Pre-fetch is defined to use cache memory (see previous page) and besides "cache" s/b "cache memory"

Page: 114
Sequence number: 12
Date: 8/25/2004 10:58:36 AM
Type: Note
REVIEW
REJECT ("useful" sounds like a note to me)
Perhaps note 24 should not be a note.

Page: 114
Sequence number: 14
Date: 8/26/2004 3:03:48 PM
Type: Highlight
REJECT (obsoleting field instead)
<<buffer function>> [s/b] <<buffer function (e.g., [insert an example of a buffer function here]>>

Page: 114
Sequence number: 15
Date: 8/26/2004 3:04:00 PM
Type: Highlight
REJECT (obsoleting field instead)
<<caching functions in the other segments need not be>> [s/b] <<other uses of cache memory are not>>

Page: 114
Sequence number: 16
Date: 8/26/2004 3:04:21 PM
Type: Highlight
REJECT (obsoleting field instead)
<<SCSI buffer function>> [s/b] <<buffer function>>

Page: 115
Sequence number: 4
Date: 8/25/2004 11:25:47 AM
Type: Highlight
REJECT (different meaning. Here, the bit is known to be owned by MMC-4. In table 93, restricted is used for a page only assigned to some other committee but that the SPC-3 editor asked that SBC avoid using. It's not owned by SPC-3 itself.)
<<Restricted for MMC-4>> [s/b] <<Restricted (see MMC-4)>> for consistency with table 93.

Page: 115
Sequence number: 5
Date: 8/24/2004 3:49:00 PM
Type: Highlight
ACCEPT - DONE
<<to be performed during write operations>> [s/b] <<of defective logical blocks during write operations>> to be consistent with the previous sentence

Page: 116
Sequence number: 7
Date: 8/24/2004 3:47:32 PM
Type: Highlight
ACCEPT - DONE
<<of mis-detection>> [s/b] <<of error mis-detection>>

Page: 116
Sequence number: 8
Date: 8/24/2004 3:47:59 PM
Type: Note
REJECT (table 108 converted to normal text; note moved next to the EER paragraph)
In keeping with the usage elsewhere in this standard, note 26 should be a table footnote in table 108.

Page: 117
Sequence number: 7
Date: 8/24/2004 6:42:11 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>> [2 times on this page]

Page: 117
Sequence number: 8
Date: 8/24/2004 6:42:21 PM
Type: Highlight
ACCEPT - DONE
of s/b set to

Page: 118
Sequence number: 6
Date: 8/24/2004 5:26:37 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 119
Sequence number: 4
Date: 8/24/2004 3:40:27 PM
Type: Highlight
ACCEPT - DONE (made into two paragraphs per IBM comment)
<<READ and WRITE RETRY COUNT fields>> [s/b] <<READ RETRY COUNT field and WRITE RETRY COUNT field>>

Page: 119
Sequence number: 5
Date: 8/24/2004 3:46:09 PM
Type: Strikeout
ACCEPT - DONE
Delete <<If the RETRY COUNT field and the RECOVERY TIME LIMIT field are both specified in a MODE SELECT command, the field that requires the least time for data error recovery actions shall have priority.>> The last sentence in the section says the same thing.

Page: 119
Sequence number: 6
Date: 8/24/2004 3:45:21 PM
Type: Highlight
ACCEPT - DONE (also same change done in Verify section 6.3.5)
<<If both RETRY COUNT and RECOVERY TIME LIMIT are specified, the field>> [s/b] <<When choosing between retry counts and recovery time limits, the condition>>

Page: 119
Sequence number: 7
Date: 8/24/2004 3:42:49 PM
Type: Strikeout
ACCEPT - DONE
Delete <<If the verify retry count and the VERIFY RECOVERY TIME LIMIT are both specified, the one that requires the least time for data error recovery actions shall have priority.>> The last sentence of the next paragraph says the same thing.

Page: 119

Sequence number: 8
Date: 8/25/2004 11:34:59 AM
Type: Note
ACCEPT - DONE (also genericized the wording to match that in 6.3.4)
Insert a paragraph break for consistency with the Read-Write Error Recovery mode page definition.

Page: 119
Sequence number: 9
Date: 8/25/2004 11:33:37 AM
Type: Note
REVIEW
ACCEPT - DONE (added to 6.3.4 too, with field names corrected for that context)
Is note 27 necessary? If it is, does it belong 6.3.4 too?

Page: 120
Sequence number: 5
Date: 8/24/2004 3:38:54 PM
Type: Highlight
ACCEPT - DONE
<<target>> [s/b] <<device server>> [2 times on this page]

Page: 120
Sequence number: 6
Date: 8/24/2004 3:40:00 PM
Type: Highlight
ACCEPT - DONE
<<is sent to the logical unit,>> [s/b] <<is received,>>

Page: 120
Sequence number: 7
Date: 8/24/2004 3:39:32 PM
Type: Highlight
REJECT (changed to device server per IBM comment instead)
Change target to logical unit

Page: 120
Sequence number: 8
Date: 8/24/2004 3:38:24 PM
Type: Highlight
ACCEPT - DONE
<<initiator>> [s/b] <<application client>>

Page: 121
Sequence number: 4
Date: 8/24/2004 3:36:22 PM
Type: Highlight
ACCEPT - DONE
<<sense key of>> [s/b] <<sense key set to>>

Page: 121
Sequence number: 5
Date: 8/24/2004 3:36:31 PM
Type: Highlight
ACCEPT - DONE
<<additional sense code of>> [s/b] <<additional sense code set to>>

Author: ENDL Texas [Technical]

Page: 5
Sequence number: 6
Date: 8/30/2004 6:57:54 PM
Type: Highlight
ACCEPT - DONE (XOR arithmetic is the same as polynomial arithmetic in modulo 2 space. Some RAID controllers implement more complicated XOR schemes than a XOR b XOR c = parity (e.g. for RAID-6). Nevertheless, deleting the sentence seems harmless.)
<<In this standard the term encompasses the entire algorithm but does not define the specific polynomial.>> ??? How does a

polynomial relate to an XOR function? Delete <<but does not define the specific polynomial>>

Page: 7
Sequence number: 4
Date: 8/24/2004 8:42:31 PM
Type: Strikeout
ACCEPT - DONE (the term "generation" means it was an optical term. Potentially confusing with "update write" in the RAID section, so good to eliminate it.)
<<3.1.41 update: To write new data to a logical block without destroying the previous data. After a logical block has been updated, a normal read returns the most recent generation of the data. Earlier generations are still available after the update.>> This definition appears to be specific to optical memory devices which are obsolete in this standard. This definition should be deleted.

Page: 7
Sequence number: 9
Date: 10/3/2004 4:05:08 PM
Type: Note
ACCEPT - DONE (taken from SAS)
Add either a glossary entry or keyword definition for 'vendor specific'.

Page: 10
Sequence number: 13
Date: 8/25/2004 1:40:44 PM
Type: Highlight
ACCEPT - DONE (with the mode parameter block descriptor cleanup it was decided that varying block lengths over the logical unit would be prohibited. Now there is just one block length for the whole medium. Deleted both sentences.)
<<This means that the block length for the medium can change from logical block to logical block. However, for simplicity the block length typically remains constant over the entire capacity of the medium.>> Is it really true that different logical blocks can have different block lengths (as opposed to different physical block lengths)? If so, is this under the control of the application client via a FORMAT UNIT command? 6.3.1 says that there is only one mode descriptor for the entire logical unit, so it seems unlikely that the cited statements are true. Probably, these two sentences should be deleted. If not, they should be changed to <<The block length for the medium may change from one logical block to next. For simplicity descriptions in this standard assume that the block length typically remains constant over the entire capacity of the medium.>>

Page: 11
Sequence number: 13
Date: 8/25/2004 2:29:25 PM
Type: Highlight
REJECT (but deleted the sentence instead.)
<<Each logical block has a
block length associated with it.>> [s/b] <<All logical blocks have the same logical block length associated with them.>>

Page: 12
Sequence number: 9
Date: 8/25/2004 7:33:57 PM
Type: Highlight
REJECT (logical unit reset means that. Command descriptions are supposed to use the simple terms only.)
<<logical unit reset>> [s/b] <<logical unit reset event>>

Page: 12
Sequence number: 12
Date: 8/27/2004 5:39:43 PM
Type: Highlight
REVIEW
ACCEPT - DONE (Deleted the sentence. This referred to fields in the Format Device mode page, now obsolete, which let the application control how much space was allocated for remapping of blocks. It called them "defect handling format parameters (TRACKS PER ZONE, ALTERNATE SECTORS PER ZONE, ALTERNATE TRACKS PER
ZONE and ALTERNATE TRACKS PER LOGICAL UNIT)"
Although it could still mention the Read-Write Error Recovery mode pages which have bits controlling reallocation, that doesn't seem to be the focus of this paragraph. There is a reference to that mode page below)
<<Some block devices provide the application client control through use of the mode parameters.>> Control of what? Mode parameters in what mode pages? Add specific details and cross references.

Page: 14
Sequence number: 9
Date: 8/26/2004 9:43:37 AM
Type: Strikeout
REJECT (section 4.9 is about caching, so this is important. I will merge this sentence and the one that follows into the preceding one though as "both a forced unit access and a synchronize cache operation are implied, since the logical blocks are being verified as being stored on the medium.")

<<Furthermore, a synchronize cache operation is also implied to write unwritten logical blocks still in the cache memory.>> This sentence seems unrelated to the topic being discussed in this paragraph. Since the SYNCHRONIZE CACHE command is covered later in this subclause, this sentence should be deleted.

Page: 18
Sequence number: 15
Date: 9/12/2004 6:39:59 PM
Type: Note
REVIEW
ACCEPT - DONE (added "A memory media-based direct-access block device is ready after power on, and does not require a START STOP UNIT command to bring the logical unit to a ready state.")
When is memory media ready? This is explained for rotating media, why not for memory media?

Page: 18
Sequence number: 16
Date: 9/12/2004 6:43:51 PM
Type: Note
REVIEW
REJECT (deleted the mention of removable from the "Rotating media" section rather than add mention here. In the Removable medium with attached medium changer section, added the sentence "A logical unit may require a MOVE MEDIUM ATTACHED command to become ready.")
Is memory media removable? This is discussed for rotating media, why not for memory media?

Page: 18
Sequence number: 17
Date: 9/12/2004 6:45:17 PM
Type: Note
REVIEW
ACCEPT - DONE (added: "The defect management scheme (e.g., ECC bytes) may be accessible to the application client with the READ LONG command and the WRITE LONG command (see 4.8)." For memory medium, it is possible that all the ECC bytes are exposed, so this paragraph can be a bit stronger than "defect management scheme may not be discernable... manage some aspects" used in the rotating media section.)
How does memory media manage defects? This is summarized for rotating media, why not for memory media?

Page: 18
Sequence number: 18
Date: 10/3/2004 7:18:38 PM
Type: Note
ACCEPT - DONE (rename 4.12 to "Medium examples" not "device examples" so there is no reason to discuss things other than the medium.)
Should the relationship between rotating media and cache memory be discussed?

Page: 18
Sequence number: 19
Date: 9/12/2004 6:47:13 PM
Type: Note
REVIEW
REJECT (it may or may not. A disk drive made of flash ROM certainly could have an SRAM based cache. I don't see any reason to mention cache here, though.)
Does memory media use cache memory?

Page: 20
Sequence number: 7
Date: 8/27/2004 4:15:49 PM
Type: Highlight
REJECT (change to "retains". There's no way to forget the data except for various reset events.)
<<has an obligation to retain>> [s/b] <<should retain>>

Page: 21
Sequence number: 2
Date: 8/27/2004 5:00:19 PM
Type: Strikeout
ACCEPT - DONE (this is not related to SCC-2. This is leftover from third party XOR commands, where the primary command was something like REBUILD or REGENERATE and the secondary commands are the READs, WRITEs, XPWRITEs, etc. that the disk drive itself issues. Deleted the whole section.)
<<Subclause 4.13.1.3.2 Primary errors - errors resulting directly from the primary command>> This entire subclause belongs in SCC-2 not in SBC-2. If the subclause is not remove then something must be done about <The first class of errors ...>> because there is no second class of errors. Next, 'primary target' and 'secondary command' must be defined. Then, 'parity error' should be changed to 'service delivery subsystem error'. Finally, it must be explained how the result of a service delivery subsystem error

during the transfer of a status byte can effectively be changed to a CHECK CONDITIONS status. If the subclause is deleted (as recommended), then the heading for <<4.13.1.3.1 Error handling considerations overview>> should also be removed.

Page: 29
Sequence number: 8
Date: 8/24/2004 7:23:29 PM
Type: Highlight
REVIEW
ACCEPT - DONE (but maybe deleting it would be better. It's not exactly an example either.)
<<outside the scope of this standard (i.e., the>> [s/b] <<outside the scope of this standard (e.g., the>> ... assuming that the transmission of collected information is not the only thing that is outside the scope of this standard

Page: 33
Sequence number: 4
Date: 8/30/2004 11:34:57 AM
Type: Highlight
ACCEPT - DONE (removed from here)
<<If either PERSISTENT RESERVE IN or PERSISTENT RESERVE OUT is implemented, both shall be implemented.>> This requirement belongs in SPC-3, not in SBC-2.

Page: 34
Sequence number: 1
Date: 8/30/2004 10:30:20 AM
Type: Highlight
ACCEPT - DONE
<<5.2 Variable length CDBs>> This subclause belongs in an informative annex.

Page: 34
Sequence number: 2
Date: 8/30/2004 10:30:28 AM
Type: Highlight
REVIEW
ACCEPT - DONE
<<5.3 Service action CDBs>> This subclause belongs in an informative annex.

Page: 36
Sequence number: 5
Date: 10/3/2004 6:13:58 PM
Type: Highlight
ACCEPT - DONE (per Sep CAP WG, delete the sentence instead.)
<<buffer. The source of defect information is not specified.>> [s/b] <<buffer and the source of defect information, if any, is outside the scope of this standard.>>

Page: 36
Sequence number: 6
Date: 8/25/2004 4:07:53 PM
Type: Note
ACCEPT - DONE
[add at the end of the LONGLIST paragraph] If the FMTDATA bit is set to zero, the contents of the LONGLIST bit shall be ignored.

Page: 36
Sequence number: 7
Date: 10/3/2004 6:13:06 PM
Type: Note
ACCEPT - DONE (also change case "0 0" in table 14 to "0 any")
[add a new paragraph after the second a,b list]] If the FMTDATA bit is set to zero, the contents of the CMPLST bit shall be ignored.

Page: 39
Sequence number: 5
Date: 8/25/2004 4:19:45 PM
Type: Highlight
REJECT (This sentence is somewhat unnecessary as the PLIST is never allowed to change by definition. Added a paragraph break before the "set to one" sentence and changed this to "shall not be deleted.")
<<The PLIST is not deleted.>> [s/b] <<The PLIST shall not be altered based on the value of the DPRY bit.>>

Page: 40
Sequence number: 2
Date: 8/25/2004 4:26:58 PM
Type: Strikeout

ACCEPT - DONE (it was apparently appropriate enough for SCSI-2 and SBC-1. Nevertheless, deleted)
<<The length of the defect list varies with the format of the address descriptors.>> This statement is not appropriate in a T10 standard and should be deleted.

Page: 45
Sequence number: 10
Date: 8/31/2004 9:37:21 PM
Type: Highlight
ACCEPT - DONE (but see other comments on this paragraph; this implies difficult functionality)
<<initiator port>> [s/b] <<I_T nexus>> and <<initiator ports>> [s/b] <<I_T nexuses> [3 instances total in this paragraph]

Page: 51
Sequence number: 1
Date: 8/25/2004 6:04:58 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 60
Sequence number: 8
Date: 8/25/2004 6:42:42 PM
Type: Note
REJECT (T10 specifically chose not to worry about exceeding READ DEFECT DATA (12) capability when READ DEFECT DATA (12) was added. A CHECK CONDITION in that case will mean there are too many defects and a new T10 proposal is necessary. Partial defect lists are not supported either - there was once an additional sense code indicating such, but returning CHECK CONDITION with valid data was deemed to be a bad idea. 99-258r0 (George Penokie) started with the partial list approach, but 99-258r2 ended up putting the CHECK CONDITION approach into SBC-2 revision 1.)
Is note 16 really useful? If the size of the defect list exceeds the allocation length of a READ DEFECT DATA(12) command, there is no way at all to determine the number of defects.

Page: 69
Sequence number: 1
Date: 8/25/2004 6:06:02 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 90
Sequence number: 5
Date: 9/1/2004 11:00:30 AM
Type: Highlight
ACCEPT - DONE (as "The device server shall replace the first four bytes of the block received from the data-out buffer with the least significant four
bytes of the LBA of the block being written, ending with the least significant byte (e.g., if the LBA is 77665544_33221100h, 33221100h is written with 33h written first and 00h written last).")
<<The device server shall replace the first four bytes of the block received from the application client data-out buffer with the least significant four bytes of the LBA of the block being written. The most significant byte of the four bytes shall be written first.>>
If the least significant four bytes are written, how can the most significant <<four bytes>> be written first?

Page: 105
Sequence number: 7
Date: 8/24/2004 4:18:54 PM
Type: Highlight
REVIEW (make sure this isn't cumulative)
ACCEPT - DONE
<<a FORMAT UNIT command>> [s/b] <<the most recent successful FORMAT UNIT command>>

Page: 105
Sequence number: 11
Date: 8/25/2004 9:39:45 AM
Type: Note
REVIEW
ACCEPT - DONE (Broken since 91-106r4 added this log page into sbc-r01. The During Format parameter contains the New Blocks definition and the correct During Format definition is missing.

Changing to "The Total Blocks Reallocated During Format parameter is a count of the total number of blocks that were reallocated during the most recent successful FORMAT UNIT command.
The Total New Blocks Reallocated parameter is a count of the total number of blocks that have been reallocated since the completion of the most recent successful FORMAT UNIT command.")
Some text appears to be missing. 1) There is no description for the total new blocks reallocated parameter. 2) The existing definition of the total blocks reallocated during format parameter would fit better as the definition of the total new blocks reallocated parameter.

Page: 113
Sequence number: 11
Date: 8/25/2004 10:15:31 AM
Type: Note
REVIEW
ACCEPT - DONE (that statement was in SCSI-2 and seems to only apply to the disable pre-fetch transfer length field, the minimum pre-fetch field, the maximum pre-fetch field, and the maximum pre-fetch ceiling field. 90-024r4 added more fields to the page but didn't show the old text alongside the new text and probably didn't notice this statement. sbc-r01 just appended the new fields at the end of the section. Added the four field names to this sentence.)
<<All the following parameters give an indication to the device server how it should manage the cache based on the last READ command.>> Is this statement true for any of the following fields: FSW, LBCSS, DRA, NUMBER OF CACHE SEGMENTS, CACHE SEGMENT SIZE, NV_DIS, or NON CACHE SEGMENT SIZE? It appears that fields have been appended to the page contents since the time that this statement was written.

Page: 113
Sequence number: 12
Date: 8/25/2004 10:16:28 AM
Type: Note
REVIEW
ACCEPT - DONE (see ENDL comment two sentences earlier. Changed to "These fields" to refer to explicit list now in the corrected previous sentence.)
<<All the remaining caching parameters are only recommendations to the device server ...>> Is this statement true for any of the following fields: FSW, LBCSS, DRA, NUMBER OF CACHE SEGMENTS, CACHE SEGMENT SIZE, NV_DIS, or NON CACHE SEGMENT SIZE? It appears that fields have been appended to the page contents since the time that this statement was written.

Page: 114
Sequence number: 13
Date: 8/25/2004 10:40:07 AM
Type: Highlight
ACCEPT - DONE
<<bytes>> [s/b] <<bytes, if the LBCSS bit is set to zero, or in logical blocks if the LBCSS bit is set to one>>

Author: hpq-relliott

Page: iv
Sequence number: 1
Date: 8/24/2004 10:27:12 AM
Type: Highlight
ACCEPT - DONE
ANSI page
Change 2003 to 2004

Page: 10
Sequence number: 5
Date: 10/3/2004 6:09:53 PM
Type: Note
ACCEPT - DONE (in the Initialization subclause, add "A direct-access block device may become format corrupt after processing a MODE SELECT command that changes parameters related to the medium format. During this time, the device server may terminate medium access commands with CHECK CONDITION status with the sense key set to NOT READY and the appropriate additional sense code for the condition.")
4 Models
Need to mention format corrupted and the additional sense code that results from media access commands when the medium is in that state.

Page: 11
Sequence number: 6
Date: 10/3/2004 3:56:13 PM
Type: Note

ACCEPT - DONE (per 04-288 CAP WG as a "should")
4.4 Logical blocks
Add a unit attention and a new additional sense code CAPACITY DATA HAS CHANGED whenever any of the READ CAPACITY data changes (number of blocks, block size, or various protection information settings).
e.g. after a MODE SELECT or a MODE SELECT or a vendor-specific action

Page: 18
Sequence number: 7
Date: 8/27/2004 4:56:58 PM
Type: Note
ACCEPT - DONE
4.13 Model for XOR commands
Move 4.13.1.nn to 4.13.2, 4.13.3, etc. to eliminate hanging paragraph and unnecessary nesting

Page: 30
Sequence number: 2
Date: 10/3/2004 3:13:38 PM
Type: Note
REJECT (04-288 CAP WG decided to make them optional instead)
5.1 Commands overview
To require that SBC-2 devices support long LBAs and deprecate usage of short LBAs...
a) change READ (6) and READ (10) from mandatory to optional in
table 9 and in note 9
b) change READ CAPACITY (10) from mandatory to optional in table 9
c) mark each of these commands as mandatory in table 9 if any of their smaller counterparts are implemented (the same rule that currently
exists for WRITE (16)):
LOCK UNLOCK CACHE (16)
PRE-FETCH (16)
READ DEFECT DATA (12)
READ LONG (16)
SYNCHRONIZE CACHE (16)
VERIFY (16)
WRITE AND VERIFY (16)
WRITE LONG (16)
WRITE SAME (16)
XDREAD (32)
XDWRITE (32)
XDWRITEREAD (32)
XPWRITE (32)

Page: 30
Sequence number: 3
Date: 10/3/2004 3:13:44 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG)
5.1 Commands overview
To not require that SBC-2 devices support long LBAs...
a) change READ (16) from mandatory to optional in
table 9
b) change WRITE (16) from mandatory (if any WRITE is supported) to optional in table 9 and remove footnote d

Page: 88
Sequence number: 3
Date: 8/26/2004 6:55:16 PM
Type: Strikeout
REVIEW
ACCEPT - DONE
5.37 WRITE LONG (10) command
Delete "NOTE 21 - Any other bytes that can be corrected by ECC should be included (e.g., a data synchronization mark within the area covered by ECC). A READ LONG command may be issued before issuing a WRITE LONG command."
Let READ LONG define the complete contents of the data.

Page: 108
Sequence number: 1
Date: 8/24/2004 4:04:13 PM
Type: Highlight
ACCEPT - DONE
6.3.1 Mode parameters overview

Table 102
after "Management" add "mode page"

Page: 109
Sequence number: 5
Date: 8/24/2004 4:03:56 PM
Type: Highlight
ACCEPT - DONE
6.3.2.1 Mode parameter block descriptors overview
After:
A unit attention condition
add:
with an additional sense code set to MODE PARAMETERS CHANGED

Author: ibm - George Penokie

Page: vi
Sequence number: 1
Date: 8/24/2004 8:44:43 PM
Type: Highlight
ACCEPT - DONE (see lsi comment)
Revision Information
This section needs to be removed before going to public review.

Page: 1
Sequence number: 1
Date: 8/24/2004 10:31:54 AM
Type: Strikeout
REJECT (but made it a standalone sentence not a parenthetical sentence. The bit is not really "obsolete" - it just continues to be reserved for the remaining device type)
1 Scope
This information is not necessary << (this bit was formerly reserved for direct-access device types, so is just marked reserved in this standard); >>

Page: 3
Sequence number: 1
Date: 8/24/2004 10:33:39 AM
Type: Highlight
ACCEPT - DONE (also got rid of "including")
2.1 Normative references overview
This should be << (e.g., including BSI, JIS, and DIN).

Page: 3
Sequence number: 2
Date: 8/24/2004 10:33:14 AM
Type: Highlight
ACCEPT - DONE (as e.g. not i.e.)
2.1 Normative references overview
This should be << (i.e., ISO, IEC, CEN/CENELEC, ITUT); >>

Page: 5
Sequence number: 1
Date: 8/24/2004 10:45:53 AM
Type: Highlight
ACCEPT - DONE
3.1.8 command descriptor block (CDB):
This should be << server. See SPC-3. >>. The space is missing.

Page: 6
Sequence number: 1
Date: 10/3/2004 4:06:25 PM
Type: Highlight
ACCEPT - DONE (deleted; command sets don't need event definitions)
3.1.25 logical unit reset event:
This << logical unit as described in SAM-3. >> should be << logical unit. See SAM-3. >>

Page: 6
Sequence number: 2
Date: 8/24/2004 10:48:07 AM
Type: Highlight
ACCEPT - DONE
3.1.28 non-volatile medium:
This << cycles. An example of this is a disk within a device that stores data as magnetic field changes that do not require device power to exist. >> should be << cycles (e.g., a disk within a device that stores data as magnetic field changes that do not require device power to exist). >>

Page: 7
Sequence number: 1
Date: 8/24/2004 10:50:24 AM
Type: Highlight
ACCEPT - DONE
3.1.44 volatile medium:
This << power cycles. An example of this is a silicon memory device that loses data written to it if device power is lost. >> should be << power cycles (e.g.,a silicon memory device that loses data written to it if device power is lost). >>

Page: 10
Sequence number: 1
Date: 8/25/2004 1:46:23 PM
Type: Highlight
ACCEPT - DONE
4.2 Direct-access device type model overview
This << and can be read without >> should be << and are able to be read without >>

Page: 10
Sequence number: 2
Date: 8/24/2004 10:54:59 AM
Type: Highlight
ACCEPT - DONE
4.3.1 Removable medium overview
This << cartridge (or jacket) to prevent >> should be << cartridge or jacket to prevent >>

Page: 11
Sequence number: 1
Date: 9/9/2004 4:59:55 PM
Type: Strikeout
ACCEPT - DONE
(The rules are definitely in SMC-2 and are not needed here. Since George protested a second time in r15a, will go ahead and delete).
4.3.2 Removable medium with an attached medium changer
This << Only one medium transport element is permitted (element 0) and only one data transfer element is permitted. >> should be deleted as it not relevant to this standard and should instead be in SMC-2.

Page: 11
Sequence number: 2
Date: 8/25/2004 2:26:11 PM
Type: Highlight
ACCEPT - DONE
4.4 Logical blocks
This << A READ CAPACITY command may be issued to determine the value of [n-1]. >> should be changed to << A READ CAPACITY command should be issued to determine the value of [n-1]. >>. The reason is that we are trying to encourage the use of READ CAPACITY.

Page: 11
Sequence number: 3
Date: 8/25/2004 2:28:45 PM
Type: Highlight
REJECT (there's only one block length now. Changed to "The read capacity data returned by the READ CAPACITY command" since 5.14 uses the term "read capacity data")
4.4 Logical blocks
This << The READ CAPACITY data (see 5.14) describes the block lengths that are
used on the medium. >> should be << The parameter data returned by the READ CAPACITY command (see 5.14) describes the block lengths that are
used on the medium. >>

Page: 11

Sequence number: 4
Date: 8/25/2004 2:31:35 PM
Type: Highlight
ACCEPT - DONE (as "device server is capable of processing")
4.5 Ready state
This << commands can be processed. >> should be << commands are able to be processed. >>

Page: 12
Sequence number: 1
Date: 8/24/2004 11:06:46 AM
Type: Highlight
REJECT (changed "geometry and performance characteristics" to "the format (e.g., block size)". If we remove the sentence, then there's no mention here of MODE SELECT and the remaining sentence you want to keep in note 3 is out of place.)
4.6 Initialization
This << Parameters related to the geometry and performance characteristics may be set with the MODE SELECT command prior to the format operation. >> is not really true now that we have eliminated the geometry and the format device mode pages, therefore it should be deleted.

Page: 12
Sequence number: 2
Date: 8/24/2004 11:00:01 AM
Type: Strikeout
ACCEPT - DONE
4.6 Initialization
This << After changing the mode parameter block descriptor with MODE SELECT, the new values do not become effective until FORMAT UNIT command completes. >> is a gross oversimplification that is not accurate in all cases. The best thing to do is delete it as everything is correctly defined in the mode page header descriptions.

Page: 12
Sequence number: 3
Date: 8/31/2004 10:28:51 PM
Type: Highlight
REJECT (changed to "defects that cause..." instead. I think using "may" in this case would be wrong; it's not like we're trying to grant permission to a device to lose data. "can" per the ISO standard definition is the ideal word, reflecting something that happens which is not under direction of this standard but which devices compliant with this standard have to tolerate. Since this is the only "can" left, I'll agree to delete it rather than add it to the glossary.)
4.8 Medium defects
This << defects that can cause user data >> should be << defects that may cause user data >>

Page: 12
Sequence number: 4
Date: 8/25/2004 2:37:48 PM
Type: Strikeout
REJECT (took out parens per ENDL comment)
4.8 Medium defects
This << (to reference while formatting) >> states no useful information and should be deleted or at least made into an (e.g., ...) to indicate an example of what it could be used for.

Page: 13
Sequence number: 1
Date: 8/26/2004 2:28:06 PM
Type: Highlight
REJECT (deleting sentence instead)
4.8 Medium defects
This << this manner can be specified in the >> should be << this manner may be specified in the >>

Page: 13
Sequence number: 2
Date: 8/26/2004 2:05:05 PM
Type: Highlight
ACCEPT - DONE (just deleting "can" works here)
4.9 Cache memory
This << block and can increase the overall data >> should be << block and may increase the overall data >>

Page: 13
Sequence number: 3
Date: 8/26/2004 2:04:34 PM
Type: Highlight
ACCEPT - DONE

4.9 Cache memory
This << VERIFY and WRITE AND VERIFY commands >> should be << VERIFY command or WRITE AND VERIFY command >>

Page: 14
Sequence number: 1
Date: 8/26/2004 9:59:28 AM
Type: Highlight
ACCEPT - DONE
4.9 Cache memory
This << VERIFY command or WRITE AND VERIFY >> should be << VERIFY command or WRITE AND VERIFY command >>

Page: 14
Sequence number: 2
Date: 9/1/2004 7:15:05 PM
Type: Highlight
REJECT (it's actually the enabled task state. Deleted all these sentences because SPC-3 defines this behavior in much more detail.)
4.10 Reservations
This << enters the current task state for the first time. >> should be << enters the current task state (see SAM-3) for the first time. >>

Page: 15
Sequence number: 1
Date: 8/31/2004 10:25:05 PM
Type: Note
REJECT (Restored the lines at the bottom. However, including footnotes on each page makes each page look like a complete table; only the part n of m hints that it is not, and often there are more footnotes than main body, and SAS didn't have to do that.)
Table 3
Global
Having tables with footnotes were the footnote do no occur at every page break makes it difficult to the reader to find the footnote or even know if there are any footnote. The footnotes should be changed to appear on every page. Also, not have a line at the end of each page break is confusing. It looks like something is missing from the table.

Page: 16
Sequence number: 1
Date: 8/24/2004 11:11:07 AM
Type: Highlight
ACCEPT - DONE
4.11 Error reporting
This << a READ LONG or WRITE LONG command did >> should be << a READ LONG command or WRITE LONG command did >>

Page: 17
Sequence number: 1
Date: 8/30/2004 8:48:57 PM
Type: Note
ACCEPT - DONE (also READ LONG and WRITE LONG use "commands" and given two references each)
4.11 Error reporting
Table 5
All the command names should have << command >> after them.

Page: 17
Sequence number: 2
Date: 8/27/2004 5:07:27 PM
Type: Highlight
REJECT (but added a)b) list and reworded)
4.12.1 Examples overview
The statement << The following examples show some typical variations >> should be << This clause describes examples of some typical variations >>

Page: 17
Sequence number: 3
Date: 8/31/2004 10:13:00 PM
Type: Highlight
ACCEPT - DONE (complete rewrite per Brocade comment)
4.12.2 Rotating media
This << tracks that can be accessed without >> should be << tracks that are accessed without >>

Page: 17

Sequence number: 4
Date: 8/26/2004 11:27:45 AM
Type: Highlight
REJECT (deleting the whole paragraph, except for the last sentence, instead per ENDL comment)
4.12.2 Rotating media
This <<formatted at the factory. >> should be << formatted by the manufacture. >>

Page: 18
Sequence number: 1
Date: 9/1/2004 2:16:39 PM
Type: Highlight
ACCEPT - DONE ("control" is a bit strong without the Format Control mode page fields that used to exist.
New wording is: "The defect management scheme of a disk device may not be discernible through this command set, though some aspects may be evaluated by the application client. The READ LONG command and the WRITE LONG command access the additional information in addition to the user data and protection information, if any, so that defects may be induced by the application client to test the defect detection logic of the direct-access block device. WRITE LONG commands may also be used to emulate unrecoverable logical blocks when generating mirror copies.")
4.12.2 Rotating media
This <<some aspects can be evaluated and controlled >> should be << some aspects may be evaluated and controlled >>

Page: 18
Sequence number: 2
Date: 8/31/2004 10:07:34 PM
Type: Highlight
ACCEPT - DONE
4.12.2 Rotating media
This << The READ LONG and WRITE LONG commands >> should be << The READ LONG command and WRITE LONG command >>

Page: 18
Sequence number: 3
Date: 8/27/2004 5:48:38 PM
Type: Highlight
ACCEPT - DONE
4.12.2 Rotating media
This << when generating mirror
copies.” >> should be << when generating mirror copies. >> as there is no reason to quote that phrase.

Page: 18
Sequence number: 4
Date: 8/24/2004 7:08:29 PM
Type: Highlight
ACCEPT - DONE (without the abc list)
4.13.1.1.1 Storage array controller supervised XOR operations overview
This << XDWRITE, XPWRITE, and XDREAD.>> should be an a,b,c list or at least << XDWRITE command, XPWRITE command, and XDREAD command.>>

Page: 18
Sequence number: 5
Date: 8/24/2004 7:08:54 PM
Type: Highlight
ACCEPT - DONE
4.13.1.1.1 Storage array controller supervised XOR operations overview
This << XDWRITE followed by XDREAD.>> should be << XDWRITE command followed by XDREAD command.>>

Page: 18
Sequence number: 6
Date: 8/24/2004 11:13:59 AM
Type: Highlight
ACCEPT - DONE
4.13.1.1.1 Storage array controller supervised XOR operations overview
This << uses READ and WRITE commands for >> should be << uses READ commands and WRITE commands for >>

Page: 19
Sequence number: 1
Date: 8/24/2004 11:14:38 AM
Type: Highlight
ACCEPT - DONE
4.13.1.1.2 Update write operation (storage array controller supervised)

This << XOR data (received in the previous XDREAD command) to the >> should be << XOR data (i.e., XOR data received in the previous XDREAD command) to the >>

Page: 19
Sequence number: 2
Date: 8/27/2004 3:50:38 PM
Type: Highlight
ACCEPT - DONE (without commas since except is important and moving except to the end)
4.13.1.1.3 Regenerate operation (storage array controller supervised)
This << all devices (except the failed device) in the redundancy >> should be << all devices, except the failed device, in the redundancy

Page: 19
Sequence number: 3
Date: 8/27/2004 3:50:54 PM
Type: Highlight
ACCEPT - DONE (without commas since the except is important and moving except to the end)
4.13.1.1.4 Rebuild operation (storage array controller supervised)
This << all devices (except the failed device) in the redundancy >> should be << all devices, except the failed device, in the redundancy

Page: 20
Sequence number: 1
Date: 8/27/2004 5:03:43 PM
Type: Highlight
REJECT (deleting this section)
4.13.1.2.1 Additional array subsystem considerations overview
This << to any array subsystem, but describes how use of the XOR >> does not read very well. I think it should be << to any array subsystem, and describes how use of the XOR >>

Page: 20
Sequence number: 2
Date: 8/27/2004 5:02:35 PM
Type: Highlight
ACCEPT - DONE (but getting rid of "lock up" terminology per an ENDL comment. New wording is "Depending on the size of the device's buffer and the size of the XOR data, this may consume all of the device's internal buffer space.")
4.13.1.2.2 Buffer full status handling
This << This locks up part or all (depending on the size of the devices buffer and the size of the XOR data) of the device's buffer space. >> should be << Depending on the size of the device's buffer and the size of the XOR data, this locks up part or all of the device's buffer space. >>

Page: 20
Sequence number: 3
Date: 8/27/2004 5:03:09 PM
Type: Highlight
ACCEPT - DONE (just removed the parens, since it's not really an ie or an eg)
4.13.1.2.3 Access to an inconsistent stripe
This << updated (making the stripe consistent again). >> should be << updated (i.e., making the stripe consistent again). >>

Page: 21
Sequence number: 1
Date: 8/27/2004 5:04:41 PM
Type: Highlight
REJECT (but section deleted)
4.13.1.3.2 Primary errors - errors resulting directly from the primary command
This << primary command (primary target) and are not due >> should be << primary command (i.e., primary target) and are not due >>

Page: 22
Sequence number: 1
Date: 8/27/2004 1:21:30 PM
Type: Highlight
REJECT (At this time, all the states do have new output transitions to the Stopped state, which is only described in this standard, and some but not all have new input transitions that are only described in this standard. So, we could take out the "may." However, it's possible that SPC someday defines some new states that are NOT affected by this standard, and the note would be wrong if it didn't use "may". I will leave the may but add "(e.g., a transition to or from a state described in this standard)" to try to explain what these additional characteristics are.)
4.14.2.1 START STOP UNIT and power conditions state machine overview
Figure 2

This << but may have additional characteristics unique to this standard. >> sounds like we don't know what our own standards have in them. Either SPC-3 have additional characteristics or not. I think the <<may>> should be deleted.

Page: 22
Sequence number: 2
Date: 8/24/2004 11:16:54 AM
Type: Highlight
ACCEPT - DONE
4.14.2.2.1 SSU_PC0:Powered_on state description
This << This logical unit shall enter this >> should be << The logical unit shall enter this >>

Page: 30
Sequence number: 1
Date: 10/3/2004 4:24:26 PM
Type: Highlight
ACCEPT - DONE (per 04-288 CAP WG vote to accept this misguided comment)
5.1 Commands for direct-access devices overview
This << indicated by the “Protection information” column. >> should be << indicated by the protection information column. >>

Page: 33
Sequence number: 1
Date: 8/30/2004 11:36:56 AM
Type: Highlight
ACCEPT - DONE (but note later deleted by ENDL comment)
5.1 Commands for direct-access devices overview
Table 9
This << If either PERSISTENT RESERVE IN or PERSISTENT RESERVE OUT is implemented, >> should be << If either PERSISTENT RESERVE IN command or PERSISTENT RESERVE OUT command is implemented, >>

Page: 33
Sequence number: 2
Date: 8/26/2004 7:36:03 PM
Type: Highlight
ACCEPT - DONE
5.1 Commands for direct-access devices overview
Table 9
This << If any of WRITE (6)/(10)/(12) is implemented, WRITE (16) shall also be >> should be << If any of WRITE (6)/(10)/(12) command is implemented, the WRITE (16) command shall also be >>

Page: 35
Sequence number: 1
Date: 8/24/2004 5:11:05 PM
Type: Highlight
ACCEPT - DONE
5.4.1 FORMAT UNIT command overview
This << new commands except INQUIRY, REPORT LUNS, and REQUEST SENSE with a CHECK >> should be << new commands except INQUIRY command, REPORT LUNS command , and REQUEST SENSE command with a CHECK >>

Page: 42
Sequence number: 1
Date: 8/24/2004 11:19:30 AM
Type: Highlight
ACCEPT - DONE
5.4.2.4.1 Address descriptor formats overview
This << SEND DIAGNOSTIC and RECEIVE DIAGNOSTIC RESULTS commands. >> should be << SEND DIAGNOSTIC command and RECEIVE DIAGNOSTIC RESULTS command. >>

Page: 42
Sequence number: 2
Date: 8/24/2004 11:19:44 AM
Type: Highlight
ACCEPT - DONE
5.4.2.4.1 Address descriptor formats overview
This << the FORMAT UNIT and READ DEFECT DATA commands; >> should be << the FORMAT UNIT command and READ DEFECT DATA command; >>

Page: 45
Sequence number: 1
Date: 8/24/2004 11:20:20 AM

Type: Highlight
ACCEPT - DONE
5.5 LOCK UNLOCK CACHE (10) command
This << memory are actually locked. >> should be << memory are locked. >>

Page: 48
Sequence number: 1
Date: 8/25/2004 4:55:12 PM
Type: Highlight
REJECT
5.9 READ (6) command
This << READ (6) command; however, no default values are >> should be << READ (6) command. However, no default values are >>

Page: 52
Sequence number: 1
Date: 8/24/2004 11:21:51 AM
Type: Highlight
ACCEPT - DONE (but keeping the "and" rather than changing to "or" - there's no choice here)
5.10 READ (10) command
Table 33
This << READ (10), READ (12),and READ (16) commands with >> should be << a READ (10) command, READ (12) command, or READ (16) command with >>

Page: 52
Sequence number: 2
Date: 8/24/2004 11:22:07 AM
Type: Highlight
ACCEPT - DONE (but keeping the and not changing to or - there's no choice here)
5.10 READ (10) command
Table 33
This << READ (10), READ (12), and READ (16) commands >> should be << the READ (10) command, READ (12) command, or READ (16) command >>

Page: 55
Sequence number: 1
Date: 9/3/2004 11:35:58 AM
Type: Note
REVIEW
ACCEPT - DONE (rewrote ref tag paragraph as:
"When checking of the logical block reference tag field is enabled (see table 30 in 5.8), the expected initial logical block reference tag field contains the value of the logical block reference tag field expected in the protection information of the first logical block of the extent (see 3.1.19) instead of a value based on the LBA (see 4.16.2)."
rewrote app tag paragraph as:
"When checking of the logical block application tag field is enabled (see table 30 in 5.8), the logical block application mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask field bit set to one enables the checking of the corresponding bit in the expected logical block application tag field with the logical block application tag field in the protection information."
Note same comment in VERIFY (32), WRITE AND VERIFY (32), and WRITE SAME (32).
)
5.13 READ (32) command
For the LOGICAL BLOCK APPLICATION TAG and the LOGICAL BLOCK REFERENCE TAG there is no indication as to whether the same value that is received is checked against all the LBAs that are read or if it is incremented in some fashion for each LBA. The current definition seems to imply there is only one value for all the LBAs that are read. This needs to be made clear.

Page: 59
Sequence number: 1
Date: 8/25/2004 6:17:33 PM
Type: Highlight
REJECT (it's worse than this comment thought; see ENDL comment for the proper resolution)
5.16 READ DEFECT DATA (10) command
This is a bad reference as I have no idea where to look for this << (see the DEFECT LIST FORMAT field in the defect list header). >> it should be << (see table x.x.x for the DEFECT LIST FORMAT field). >>

Page: 60
Sequence number: 1
Date: 8/25/2004 6:49:29 PM
Type: Highlight
ACCEPT - DONE (changed to "device server has to report")

5.16 READ DEFECT DATA (10) command
This << SCSI device >> should be << logical unit >>.

Page: 60
Sequence number: 2
Date: 8/25/2004 6:48:40 PM
Type: Highlight
REVIEW
ACCEPT - DONE (change to "device server has to report" twice in the paragraph)
5.16 READ DEFECT DATA (10) command
This << SCSI device >> should be << logical unit >>.

Page: 62
Sequence number: 1
Date: 8/30/2004 3:10:04 PM
Type: Highlight
ACCEPT - DONE (as "It is not required for the ECC bytes to be at the end of the user data or protection information, if any; however, the ECC bytes should be in the same order as they are on the medium.")
5.18 READ LONG (10) command
This << the data bytes; however, they should be in the same >> should be << the data bytes. However, they should be in the same >>

Page: 62
Sequence number: 2
Date: 8/26/2004 7:14:19 PM
Type: Highlight
ACCEPT - DONE
5.20 REASSIGN BLOCKS command
This << protection information, if present, >> should be << protection information, if any, >> as it is everywhere else.

Page: 63
Sequence number: 1
Date: 8/26/2004 7:14:25 PM
Type: Highlight
ACCEPT - DONE
5.20 REASSIGN BLOCKS command
This << protection information, if present, >> should be << protection information, if any, >> as it is everywhere else.

Page: 64
Sequence number: 1
Date: 8/25/2004 7:12:50 PM
Type: Highlight
REJECT (this is just recommended software behavior, not important for interoperability.)
5.20 REASSIGN BLOCKS command
NOTE 18
This note looks like it should be part of the main text instead of a note.

Page: 72
Sequence number: 1
Date: 8/30/2004 11:13:38 AM
Type: Highlight
ACCEPT - DONE (copying the modified note h from the previous table. "If the rto_en bit is set to zero in the long read capacity data (see 5.13)(i.e., the command is a VERIFY (10) command, a VERIFY (12) command, or a VERIFY (16) command), the device server shall check the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a VERIFY (32) command), the device server shall check the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2).")
5.24 VERIFY (10) command
Table 59; 000b value
The REF_CHK = 1 should have footnote reference to the following footnote:
If the RTO_EN bit is set to zero in the long read capacity data (see 5.15), the device server checks the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the RTO_EN bit is set to one, the device server checks the logical block reference tag only if it has knowledge of the contents of the LOGICAL BLOCK REFERENCE TAG field. The method for acquiring this knowledge is not defined by this standard.

Page: 78
Sequence number: 1
Date: 10/6/2004 7:45:52 PM
Type: Highlight
REVIEW

ACCEPT - DONE (rewrite ref tag paragraph as:
"When checking of the logical block reference tag field is enabled (see table xx), the expected initial logical block reference tag field contains the value of the logical block reference tag field expected in the protection information of the first logical block accessed by the command instead of a value based on the LBA (see 4.16.2)."
rewrote app tag paragraph as:
"When checking of the logical block application tag field is enabled (see table 30 in 5.8), the logical block application mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask field bit set to one enables the checking of the corresponding bit in the expected logical block application tag field with the logical block application tag field in the protection information.")
5.27 VERIFY (32) command
For the LOGICAL BLOCK APPLICATION TAG and the LOGICAL BLOCK REFERENCE TAG there is no indication as to whether the same value that is received is checked against all the LBAs that are verified or if it is incremented in some fashion for each LBA. The current definition seems to imply there is only one value for all the LBAs that are verified. This needs to be made clear.

Page: 82
Sequence number: 1
Date: 8/24/2004 11:27:41 AM
Type: Highlight
ACCEPT - DONE (keeping and rather than or)
5.29 WRITE (10) command
This <<one, WRITE (10), WRITE (12),and WRITE (16) commands with the WRPROTECT field >> should be << <<one, a WRITE (10) command, WRITE (12) command, or WRITE (16) command with the WRPROTECT field >>

Page: 82
Sequence number: 2
Date: 8/24/2004 11:27:30 AM
Type: Highlight
ACCEPT - DONE (keeping and rather than or)
5.29 WRITE (10) command
This << terminate WRITE (10), WRITE (12), and WRITE (16) commands >> should be << terminate the WRITE (10) command, WRITE (12) command, or WRITE (16) command >>

Page: 84
Sequence number: 1
Date: 10/6/2004 7:47:10 PM
Type: Note
REVIEW
ACCEPT - DONE (rewrote ref tag paragraph as:
"When checking of the logical block reference tag field is enabled (see table xx in xx), the expected initial logical block reference tag field contains the value of the logical block reference tag field expected in the protection information of the first logical block accessed by the command instead of a value based on the LBA (see 4.16.2)."
rewrote app tag paragraph as:
"When checking of the logical block application tag field is enabled (see table 30 in 5.8), the logical block application mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask field bit set to one enables the checking of the corresponding bit in the expected logical block application tag field with the logical block application tag field in the protection information."
note same comment in READ (32) VERIFY (32) WRITE SAME (32) and WRITE AND VERIFY (32))
5.32 WRITE (32) command
For the LOGICAL BLOCK APPLICATION TAG and the LOGICAL BLOCK REFERENCE TAG there is no indication as to whether the same value that is received is checked against all the LBAs that are read or if it is incremented in some fashion for each LBA. The current definition seems to imply there is only one value for all the LBAs that are read. This needs to be made clear.

Page: 85
Sequence number: 1
Date: 8/26/2004 3:24:45 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.33 WRITE AND VERIFY (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 85
Sequence number: 2
Date: 8/24/2004 11:28:46 AM
Type: Highlight
REJECT (that makes it seem that including data is possibly not required by wrprotect field and medium format)
5.34 WRITE AND VERIFY (12) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 86
Sequence number: 1
Date: 8/26/2004 3:25:10 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.35 WRITE AND VERIFY (16) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 87
Sequence number: 1
Date: 8/31/2004 8:57:38 PM
Type: Note
ACCEPT - DONE (Incorporated the first part as "Data includes user data and may include protection information, as specified by the wrprotect field and the medium format." and added the missing sentence.)
5.36 WRITE AND VERIFY (32) command
This << protection information, if any. >> should be << protection information, if any, as required by the WRPROTECT field and the medium format. The data is only transferred once from the application client to the device server. >>

Page: 87
Sequence number: 2
Date: 8/26/2004 4:48:00 PM
Type: Highlight
ACCEPT - DONE
5.36 WRITE AND VERIFY (32) command
This paragraph << If the RTO_EN bit is set to zero in the long read capacity data (see 5.15), the device server shall terminate the command with CHECK CONDITION status with a sense key of ILLEGAL REQUEST and an additional sense code set to INVALID COMMAND OPERATION CODE. If the RTO_EN bit is set to one, the device server may process the command. >> should be move to above table 75. That would make the WRITE AND VERIFY (32) the same format as the other WRITE AND VERIFY commands.

Page: 87
Sequence number: 3
Date: 10/6/2004 7:47:45 PM
Type: Note
REVIEW
ACCEPT - DONE (rewrote ref tag paragraph as:
"When checking of the logical block reference tag field is enabled (see table xx in xx), the expected initial logical block reference tag field contains the value of the logical block reference tag field expected in the protection information of the first logical block instead of a value based on the LBA (see 4.16.2)."
rewrote app tag paragraph as:
"When checking of the logical block application tag field is enabled (see table 30 in 5.8), the logical block application mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask field bit set to one enables the checking of the corresponding bit in the expected logical block application tag field with the logical block application tag field in the protection information."
5.36 WRITE AND VERIFY (32) command
For the LOGICAL BLOCK APPLICATION TAG and the LOGICAL BLOCK REFERENCE TAG there is no indication as to whether the same value that is received is checked against all the LBAs that are verified or if it is incremented in some fashion for each LBA. The current definition seems to imply there is only one value for all the LBAs that are verified. This needs to be made clear.

Page: 88
Sequence number: 1
Date: 8/26/2004 6:55:41 PM
Type: Highlight
REJECT (but note deleted per hpq comment)
5.37 WRITE LONG (10) command
Note 21
This << Any other bytes that can be corrected by ECC >> should be << Any other bytes that are able to be corrected by ECC >>

Page: 88
Sequence number: 2
Date: 8/26/2004 6:54:53 PM
Type: Strikeout
ACCEPT - DONE
5.37 WRITE LONG (10) command
The term << exactly >> should be deleted as it adds nothing.

Page: 89
Sequence number: 1

Date: 8/26/2004 3:25:59 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.39 WRITE SAME (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 90
Sequence number: 1
Date: 8/31/2004 10:41:46 PM
Type: Note
ACCEPT - DONE (and made all the 3 fields into an a)b)c) list so they all fall under "If the medium is formatted with protection information")
5.39 WRITE SAME (10) command
table 79, row 0 0
There is nothing said about what value should be placed in the Data Block Guard field. This should be fixed. A statement like this should be added <<The data block guard received in the single block of data shall be placed in the DATA BLOCK GUARD field of each logical block. >>

Page: 90
Sequence number: 2
Date: 8/26/2004 3:26:09 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.40 WRITE SAME (16) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 92
Sequence number: 1
Date: 8/26/2004 3:26:27 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.41 WRITE SAME (32) command
This << protection information, if any. >> should be << protection information, if any, as required by the WRPROTECT field and the medium format. >>

Page: 92
Sequence number: 2
Date: 8/26/2004 4:48:33 PM
Type: Highlight
ACCEPT - DONE
5.41 WRITE SAME (32) command
This paragraph << If the RTO_EN bit is set to zero in the long read capacity data (see 5.15), the device server shall terminate the command with CHECK CONDITION status with a sense key of ILLEGAL REQUEST and an additional sense code set to INVALID COMMAND OPERATION CODE. If the RTO_EN bit is set to one, the device server may process the command. >> should be move to above table 81. That would make the WRITE AND VERIFY (32) the same format as the other WRITE AND VERIFY commands.

Page: 92
Sequence number: 3
Date: 10/6/2004 7:49:03 PM
Type: Note
REVIEW
ACCEPT - DONE (rewrote ref tag paragraph as:
"When checking of the logical block reference tag field is enabled (see table xx in xx), the expected initial logical block reference tag field contains the value of the logical block reference tag field expected in the protection information of the first logical block of the extent (see 3.1.19) instead of a value based on the LBA (see 4.16.2)."
rewrote app tag paragraph as:
"When checking of the logical block application tag field is enabled (see table 30 in 5.8), the logical block application mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block. A logical block application tag mask field bit set to one enables the checking of the corresponding bit in the expected logical block application tag field with the logical block application tag field in the protection information."
5.41 WRITE SAME(32) command
For the LOGICAL BLOCK APPLICATION TAG and the LOGICAL BLOCK REFERENCE TAG there is no indication as to whether the same value that is received is written to all the LBAs to be written or if it is incremented in some fashion for each LBA. The current definition seems to imply there is only one value for all the LBAs that are written. This needs to be made clear.

Page: 93
Sequence number: 1
Date: 8/26/2004 3:26:49 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the xorpinfo bit and the medium format.")
5.42 XDREAD (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 94
Sequence number: 1
Date: 8/26/2004 3:26:58 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the xorpinfo bit and the medium format.")
5.4.3 XDREAD (32) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 94
Sequence number: 2
Date: 8/26/2004 3:27:12 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.44 XDWRITE (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 95
Sequence number: 1
Date: 8/26/2004 3:27:27 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field and the medium format.")
5.45 XDWRITE (32) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 96
Sequence number: 1
Date: 8/26/2004 3:27:45 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field, the xorpinfo bit, and the medium format.")
5.46 XDWRITEREAD (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 97
Sequence number: 1
Date: 8/26/2004 3:28:01 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the wrprotect field, the xorpinfo bit, and the medium format.")
5.47 XDWRITEREAD (32) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 98
Sequence number: 1
Date: 8/26/2004 3:28:11 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the xorpinfo bit and the medium format.")
5.48 XPWRITE (10) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 100
Sequence number: 1
Date: 8/26/2004 3:28:23 PM
Type: Highlight
ACCEPT - DONE (to
"and may include protection information, as specified by the xorpinfo bit and the medium format.")

5.49 XPWRITE (32) command
This << data and includes protection information as >> should be << data and protection information, if any, as >>

Page: 101
Sequence number: 1
Date: 8/24/2004 4:21:10 PM
Type: Highlight
ACCEPT - DONE
6.1.2 Translate Address Output diagnostic page
This << command (see 5.4.2.4) - a short block format address, a long block format address, a physical sector format address, or a bytes from index format address - into any >> should be << command (see 5.4.2.4) (i.e., a short block format address, a long block format address, a physical sector format address, or a bytes from index format address) into any >>

Page: 102
Sequence number: 1
Date: 8/24/2004 4:19:53 PM
Type: Highlight
ACCEPT - DONE (with "or" added)
6.1.3 Translate Address Input diagnostic page
This << vendor reserved area, etc.). >> should be << vendor reserved area). >>

Page: 104
Sequence number: 1
Date: 8/24/2004 12:40:58 PM
Type: Highlight
REJECT ("most recent" is clearer than "last" which could be interpreted as "final". Changed to "recently" though to match the other sentences.)
6.2.2 Format Status log page
This << the most recent successful FORMAT UNIT command >> should be << the last successful FORMAT UNIT command >>

Page: 105
Sequence number: 1
Date: 8/24/2004 11:30:56 AM
Type: Highlight
REJECT ("most recent" is clearer than "last" which could be interpreted as "final")
6.2.2 Format Status log page
This << the most recent FORMAT UNIT command >> should be << the last FORMAT UNIT command >>

Page: 105
Sequence number: 2
Date: 8/24/2004 4:11:54 PM
Type: Highlight
REJECT ("most recently" is clearer than "last" which could be interpreted as "final". Changed recently to recent, though.)
6.2.2 Format Status log page
This << the most recently successful FORMAT UNIT command >> should be << the last successful FORMAT UNIT command >>

Page: 105
Sequence number: 3
Date: 8/24/2004 4:12:08 PM
Type: Highlight
REJECT ("most recently" is clearer than "last" which could be interpreted as "final". Changed recently to recent, though.)
6.2.2 Format Status log page
This << the most recently successful FORMAT UNIT command >> should be << the last successful FORMAT UNIT command >>

Page: 106
Sequence number: 1
Date: 8/24/2004 4:05:36 PM
Type: Highlight
ACCEPT - DONE
6.2.3 Non-volatile Cache log page
Table 98
This << Non-volatile cache is volatile (either permanently or temporarily, e.g., if batteries need to be recharged). >> should be << Non-volatile cache is either permanently or temporarily volatile (e.g., if batteries need to be recharged). >>

Page: 109
Sequence number: 1
Date: 8/24/2004 4:01:46 PM
Type: Highlight
ACCEPT - DONE (but changed the 2nd device server into it)

6.3.2.1 Mode parameter block descriptors overview
This << If it returns a mode >> should be << If the device server returns a mode >>

Page: 109
Sequence number: 2
Date: 8/24/2004 4:01:59 PM
Type: Highlight
ACCEPT - DONE (but changed the 2nd device server to it)
6.3.2.1 Mode parameter block descriptors overview
This << If it returns a mode >> should be << If the device server returns a mode >>

Page: 109
Sequence number: 3
Date: 8/25/2004 9:44:56 AM
Type: Highlight
ACCEPT - DONE (the quote and suggested resolution is wrong. However, changed "it" to "application client", and the 2nd "application client" to "it")
6.3.2.1 Mode parameter block descriptors overview
This << If it returns a mode >> should be << If the device server returns a mode >>

Page: 109
Sequence number: 4
Date: 8/25/2004 9:44:45 AM
Type: Highlight
ACCEPT - DONE (the quote and suggested resolution is wrong. However, changed "it" to "application client", and the 2nd "application client" to "it")
6.3.2.1 Mode parameter block descriptors overview
This << If it returns a mode >> should be << If the device server returns a mode >>

Page: 110
Sequence number: 1
Date: 8/24/2004 4:00:14 PM
Type: Highlight
ACCEPT - DONE
6.3.2.3 Long LBA mode parameter block descriptor
This << the MODE SELECT (10) and MODE SENSE (10) commands when >> should be << the MODE SELECT (10) command and MODE SENSE (10) command when >>

Page: 112
Sequence number: 1
Date: 8/24/2004 3:54:47 PM
Type: Highlight
ACCEPT - DONE (made into a)b) list along with ENDL comment)
6.3.3 Caching mode page
This << use the NUMBER OF CACHE SEGMENTS field or the CACHE SEGMENT SIZE field, dependent upon the SIZE bit, to control the caching algorithm >> should be << use the NUMBER OF CACHE SEGMENTS field if SIZE is set to zero or the CACHE SEGMENT SIZE field if SIZE is set to one to control the caching algorithm >>

Page: 112
Sequence number: 2
Date: 10/3/2004 4:20:01 PM
Type: Highlight
ACCEPT - DONE (per 04-288, Sep CAP WG voted to use only "vendor-specific."

90-024r2, which defined this page, started with "is operation and/or vendor-specific." 90-024r4 added the reference to bytes 4 to 11 to clarify "the perceived interaction between the Abort Pre-Fetch (ABPF) bit and the advisory pre-fetch length bytes". This SBC-2 change removes the original meaning. When the bit is 0, the target uses its normal vendor-specific algorithm, which may or may not including not prefetching for certain opcodes but is supposed to take into account bytes 4-11.)
6.3.3 Caching mode page
This << upon Caching mode page bytes 4 through 11 and is operation and/or vendor-specific. >> makes no sense. Change to << upon Caching mode page bytes 4 through 11. >>

Page: 112
Sequence number: 3
Date: 8/25/2004 9:49:51 AM
Type: Highlight
REJECT (but converted everything after "disabled" to an e.g.)
6.3.3 Caching mode page
This << A CAP bit set to zero specifies that caching analysis be disabled to reduce overhead time or to prevent nonpertinent

operations from impacting tuning values. >> should be << A CAP bit set to zero specifies that caching analysis be disabled. >>

Page: 113
Sequence number: 1
Date: 8/24/2004 12:45:12 PM
Type: Highlight
ACCEPT - DONE
6.3.3 Caching mode page
Table 106 — Demand read retention priority and write retention priority
This table combines the description of the DEMAND RETENTION PRIORITY field and the WRTIE RETENTION PRIORITY field into one table. This is very confusing. Make two tables, one for each field.

Page: 113
Sequence number: 2
Date: 8/24/2004 12:45:34 PM
Type: Highlight
ACCEPT - DONE
6.3.3 Caching mode page
table 106
This << WRITE or WRITE AND VERIFY command >> should be << WRITE command or WRITE AND VERIFY command >>

Page: 113
Sequence number: 3
Date: 8/24/2004 12:45:41 PM
Type: Highlight
ACCEPT - DONE
6.3.3 Caching mode page
table 106
This << WRITE or WRITE AND VERIFY command >> should be << WRITE command or WRITE AND VERIFY command >>

Page: 114
Sequence number: 1
Date: 8/25/2004 10:23:36 AM
Type: Highlight
REVIEW
ACCEPT - DONE (as an a)b) list with restructuring)
6.3.3 Caching mode page
This << The MINIMUM PRE-FETCH field specifies either a number of blocks or a scalar multiplier of the TRANSFER LENGTH, depending upon the setting of the MF bit. >>
should be
<< The MINIMUM PRE-FETCH field specifies a number of blocks if the MF bit set set to zero or a scalar multiplier of the TRANSFER LENGTH if the MF bit is set to one.>>

Page: 114
Sequence number: 2
Date: 8/25/2004 10:53:23 AM
Type: Highlight
ACCEPT - DONE (per ENDL comment, added see SPC-3)
6.3.3 Caching mode page
This << according to the rules for reporting deferred errors. >> needs a reference as to were the rules are defined.

Page: 114
Sequence number: 3
Date: 8/25/2004 10:21:31 AM
Type: Highlight
REVIEW
ACCEPT - DONE (as an a)b) list with restructuring)
6.3.3 Caching mode page
This << The MAXIMUM PRE-FETCH field specifies either a number of blocks or a scalar multiplier of the TRANSFER LENGTH, depending upon the setting of the MF bit. >> should be << The MINIMUM PRE-FETCH field specifies a number of blocks if the MF bit set set to zero or a scalar multiplier of the TRANSFER LENGTH if the MF bit is set to one.>>

Page: 114
Sequence number: 4
Date: 8/25/2004 10:37:54 AM
Type: Highlight
ACCEPT - DONE (moved offending wording into an e.g. rather than delete it)
6.3.3 Caching mode page
This << reorder the sequence of writing addressed logical blocks in order to achieve a faster command completion. >> should be

<< reorder the sequence of writing addressed logical blocks. >>

Page: 114
Sequence number: 5
Date: 8/26/2004 3:04:11 PM
Type: Highlight
REJECT (obsoleting field instead)
6.3.3 Caching mode page
This << perform the SCSI buffer
function. >> needs a reference as to were the SCSI buffer function is defined.

Page: 115
Sequence number: 1
Date: 8/24/2004 12:48:23 PM
Type: Highlight
ACCEPT - DONE
6.3.4 Read-Write Error Recovery mode page
This << medium (e.g., READ, WRITE, WRITE AND VERIFY, etc.). >> should be << medium (e.g., READ commands, WRITE commands , WRITE AND VERIFY commands). >>

Page: 115
Sequence number: 2
Date: 8/24/2004 1:42:57 PM
Type: Highlight
ACCEPT - DONE (with "the...bit" too)
6.3.4 Read-Write Error Recovery mode page
This << bits (EER, PER, DTE, and DCR) >> should be << bits (i.e., EER, PER, DTE, and DCR) >>

Page: 115
Sequence number: 3
Date: 8/24/2004 1:43:31 PM
Type: Highlight
ACCEPT - DONE (With "the...bit" too. Also deleted TB from this list, since it is not in the list two paragraphs earlier, and is not in table 108)
6.3.4 Read-Write Error Recovery mode page
This << bits (TB, EER, PER, DTE, and DCR) >> should be << bits (i.e., TB, EER, PER, DTE, and DCR) >>

Page: 116
Sequence number: 1
Date: 8/24/2004 6:47:20 PM
Type: Highlight
REVIEW
ACCEPT - DONE (this note was in the same place with the same wording in SBC-1. In SCSI-2, this note followed the RC bit description (where the term "fabricated" is used) not the TB bit description. Resolution is to move the note down two paragraphs below the RC bit descriptions, change "This bit" to "The RC bit", and change "the buffer" to "a buffer")
6.3.4 Read-Write Error Recovery mode page
note 25
This << This bit may be used in image processing, audio, or video applications. >> should be << The TB (?) bit may be used in image processing, audio, or video applications. >>

Page: 116
Sequence number: 2
Date: 8/24/2004 6:57:15 PM
Type: Highlight
REVIEW
REJECT (but changed "conflicting error recovery bits" to just "bits" since TB is probably also intended)
6.3.4 Read-Write Error Recovery mode page
This << bits (EER, DCR, DTE, and PER) within >> should be << bits (i.e., EER, DCR, DTE, and PER) within >>

Page: 116
Sequence number: 3
Date: 8/24/2004 1:44:34 PM
Type: Highlight
REJECT (table deleted per postLB comment)
6.3.4 Read-Write Error Recovery mode page
This << definitions for EER, PER, DTE and DCR are contained >> should be << definitions for the EER bit, PER bit, DTE bit and DCR bit are contained >>

Page: 117

Sequence number: 1
Date: 8/26/2004 2:59:39 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations and shall perform error correction in an attempt to recover the data.
The device server shall not report recovered errors. The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.")
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 0 0 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data.
A CHECK CONDITION is not reported at the completion of the command for recovered errors.
The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. >>

Page: 117
Sequence number: 2
Date: 8/26/2004 2:59:51 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations but shall not perform error correction in an attempt to recover the data.
The device server shall not report recovered errors. The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 0 0 1 row
This description needs to be rewritten. I suggest it be changed to:
<<No error correction shall be attempted however the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data. A CHECK CONDITION is not reported at the completion of the command for recovered errors. The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. >>

Page: 117
Sequence number: 3
Date: 8/26/2004 3:00:11 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations and shall perform error correction in an attempt to recover the data.
The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
The device server shall return CHECK CONDITION status with the sense key set to RECOVERED ERROR at the completion of a command during which any recoverable error occurs. The information field in the sense data shall contain the LBA of the last recovered error that occurred during the command.)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 1 0 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one.
A CHECK CONDITION with a sense key of RECOVERED ERROR is reported at the completion of the command for any recoverable error that occurs. The INFORMATION field in the sense data shall contain the LBA of the last recovered error that occurred during the transfer.>>

Page: 117
Sequence number: 4
Date: 8/26/2004 3:00:31 PM

Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations but shall not perform error correction in an attempt to recover the data.
The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
The device server shall return CHECK CONDITION status with the sense key set to RECOVERED ERROR at the completion of a command during which any recoverable error occurs. The information field in the sense data shall contain the LBA of the last recovered error that occurred during the command.)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 1 0 1 row
This description needs to be rewritten. I suggest it be changed to:
<<No error correction shall be attempted however the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. A CHECK CONDITION with a sense key of RECOVERED ERROR is reported at the completion of the command for any recoverable error that occurs. The INFORMATION field in the sense data shall contain the LBA of the last recovered error that occurred during the transfer>>

Page: 118
Sequence number: 1
Date: 8/26/2004 3:00:51 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations and shall perform error correction in an attempt to recover the data.
The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted if any error, either recoverable or unrecoverable, is detected. The information field in the sense data shall contain the LBA of the block in error.
If an unrecoverable data error occurs during a read operation, the data in the block with the error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 1 1 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted if any recoverable or unrecoverable error is detected. The INFORMATION field in the sense data shall contain the LBA of the block in error. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one.>>

Page: 118
Sequence number: 2
Date: 8/26/2004 3:01:11 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the full number of retries as specified in the read retry count field for read operations, the write retry count field for write operations, and the verify retry count field (see 6.3.5) for verify operations but shall not perform error correction in an attempt to recover the data.
The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted if any error, either recoverable or unrecoverable, is detected. The information field in the sense data shall contain the LBA of the block in error.
If an unrecoverable data error occurs during a read operation, the data in the block with the error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 0 1 1 1 row
This description needs to be rewritten. I suggest it be changed to:
<<No error correction shall be attempted however the full number of retries as specified in the READ RETRY COUNT field, WRITE RETRY COUNT field or VERIFY RETRY COUNT field (see 6.3.5) shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted if any recoverable or unrecoverable error is detected. The INFORMATION field in the sense data shall contain the LBA of the block in error. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one.>>

Page: 118
Sequence number: 3
Date: 8/26/2004 3:01:33 PM
Type: Highlight

ACCEPT - DONE (The device server shall perform the fewest possible number of retries and perform error correction in an attempt to recover the data.
The device server shall not report recovered errors. The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 1 0 0 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the fewest possible number of retries shall be attempted to recover the data. A CHECK CONDITION is not reported at the completion of the command for recovered errors. The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. >>

Page: 118
Sequence number: 4
Date: 8/26/2004 3:02:20 PM
Type: Highlight
ACCEPT - DONE (The device server shall perform the fewest possible number of retries and perform error correction in an attempt to recover the data.
The device server shall terminate a command with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected.
If an unrecoverable data error occurs during a read operation, the data in the block with the unrecoverable error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.
The device server shall return CHECK CONDITION status with the sense key set to RECOVERED ERROR at the completion of a command during which any recoverable error occurs. The information field in the sense data shall contain the LBA of the last recovered error that occurred during the command.)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 1 1 0 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the fewest possible number of retries shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted only if an unrecoverable error is detected. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. A CHECK CONDITION with a sense key of RECOVERED ERROR is reported at the completion of the command for any recoverable error that occurs. The INFORMATION field in the sense data shall contain the LBA of the last recovered error that occurred during the transfer. >>

Page: 118
Sequence number: 5
Date: 8/26/2004 3:02:06 PM
Type: Highlight
ACCEPT - DONE (The device server shall perform the fewest possible number of retries and perform error correction in an attempt to recover the data.
The device server shall terminate the command with CHECK CONDITION status before the transfer count is exhausted if any error, either recoverable or unrecoverable, is detected. The information field in the sense data shall contain the LBA of the block in error.
If an unrecoverable data error occurs during a read operation, the data in the block with the error may or may not be transferred to the application client depending on the setting of the transfer block (tb) bit.)
6.3.4 Read-Write Error Recovery mode page
Table 109 the 1 1 1 0 row
This description needs to be rewritten. I suggest it be changed to:
<< Error correction and the fewest possible number of retries shall be attempted to recover the data. The command terminates with CHECK CONDITION status before the transfer count is exhausted if any recoverable or unrecoverable error is detected. The INFORMATION field in the sense data shall contain the LBA of the block in error. If an unrecoverable data error occurred on a read operation, the data in the block with the unrecoverable error shall only be transferred if the TB bit is set to one. >>

Page: 119
Sequence number: 1
Date: 8/24/2004 3:46:42 PM
Type: Highlight
ACCEPT - DONE (note that the sentences about wto fields both specified are deleted per an ENDL comment, in favor of the last paragraph in the section)
6.3.4 Read-Write Error Recovery mode page
This paragraph combines two fields into one description which makes it unclear as to what the field or fields are that are being defined. It needs to be make into two paragraphs such as:
<< The READ RETRY COUNT field specifies the number of times that the device server shall attempt its recovery algorithm during a read operation. If the READ RETRY COUNT field and the RECOVERY TIME LIMIT field are both specified in a MODE SELECT command, the field that requires the least time for data error recovery actions shall have priority.

The WRITE RETRY COUNT fields specifies the number of times that the device server shall attempt its recovery algorithm during a write operation. If the WRITE RETRY COUNT field and the RECOVERY TIME LIMIT field are both specified in a MODE SELECT command, the field that requires the least time for data error recovery actions shall have priority. >>

Page: 119
Sequence number: 2
Date: 8/24/2004 12:53:47 PM
Type: Highlight
ACCEPT - DONE
6.3.5 Verify Error Recovery mode page
This << The EER, PER, DTE, and DCR bits are defined in 6.3.4. >> should be << The EER bit, PER bit, DTE bit, and DCR bit are defined in 6.3.4. >>

Page: 119
Sequence number: 3
Date: 8/25/2004 11:34:12 AM
Type: Highlight
ACCEPT - DONE (also use small caps for the field names and use the correct names for this context)
6.3.5 Verify Error Recovery mode page
Note 27
This << set the EER bit to zero, the PER, DTE, and DCR bits to one and the number of retries and recovery time limit to zero. >> should be << set the EER bit to zero, the PER bit to one, the DTE bit to one, and DCR bit to one and the number of retries to zero and recovery time limit to zero. >>

Page: 120
Sequence number: 1
Date: 8/24/2004 12:55:24 PM
Type: Highlight
ACCEPT - DONE
6.3.6 XOR Control mode page
This << within a device. >> should be << within the logical unit. >>

Page: 120
Sequence number: 2
Date: 8/24/2004 12:55:16 PM
Type: Highlight
ACCEPT - DONE
6.3.6 XOR Control mode page
This << parameters of the target. >> should be << parameters of the logical unit. >>

Page: 120
Sequence number: 3
Date: 8/24/2004 12:55:30 PM
Type: Highlight
ACCEPT - DONE
6.3.6 XOR Control mode page
This << within a device. >> should be << within the logical unit. >>

Page: 120
Sequence number: 4
Date: 8/24/2004 12:55:51 PM
Type: Highlight
ACCEPT - DONE
6.3.6 XOR Control mode page
This << the target accepts >> should be << the device server accepts >>

Page: 121
Sequence number: 1
Date: 8/24/2004 3:37:46 PM
Type: Highlight
ACCEPT - DONE
6.4.2 Block Limits VPD page
This << a single PRE-FETCH, READ, VERIFY, WRITE, WRITE AND VERIFY, XDREAD, XDWRITE, XDWRITEREAD, or XPWRITE command. >> should be << a single PRE-FETCH command, READ command, VERIFY command, WRITE command, WRITE AND VERIFY command, XDREAD command, XDWRITE command, XDWRITEREAD command, or XPWRITE command. >>

Page: 121
Sequence number: 2

Date: 8/24/2004 3:37:53 PM
Type: Highlight
ACCEPT - DONE
6.4.2 Block Limits VPD page
This << a single PRE-FETCH, READ, VERIFY, WRITE, WRITE AND VERIFY, XDREAD, XDWRITE, XDWRITEREAD, or XPWRITE command. >> should be << a single PRE-FETCH command, READ command, VERIFY command, WRITE command, WRITE AND VERIFY command, XDREAD command, XDWRITE command, XDWRITEREAD command, or XPWRITE command. >>

Page: 121
Sequence number: 3
Date: 8/24/2004 3:38:02 PM
Type: Highlight
ACCEPT - DONE
6.4.2 Block Limits VPD page
This << a single PRE-FETCH, READ, VERIFY, WRITE, WRITE AND VERIFY, XDREAD, XDWRITE, XDWRITEREAD, or XPWRITE command. >> should be << a single PRE-FETCH command, READ command, VERIFY command, WRITE command, WRITE AND VERIFY command, XDREAD command, XDWRITE command, XDWRITEREAD command, or XPWRITE command. >>

Page: 122
Sequence number: 1
Date: 8/24/2004 1:03:00 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
This << Figure A.1 illustrates a read-modify-write >> should be << Figure A.1 shows a read-modify-write >>

Page: 122
Sequence number: 2
Date: 8/24/2004 1:05:06 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
This << a data disk device (holding protected user data), and a parity disk device (holding check data) >> should be << a data disk device that holds protected user data, and a parity disk device that holds check data >>

Page: 122
Sequence number: 3
Date: 8/24/2004 1:09:39 PM
Type: Highlight
ACCEPT - DONE (adding "An" in front of each too)
A.2 Update write operation
This << XDWRITE, XDREAD, and XPWRITE. XDWRITEREAD may be used in place of any sequence of XDWRITE followed by XDREAD. >> should be << XDWRITE command, XDREAD command, and XPWRITE command. XDWRITEREAD command may be used in place of any sequence of an XDWRITE command followed by an XDREAD command. >>

Page: 122
Sequence number: 4
Date: 8/24/2004 1:15:22 PM
Type: Highlight
REJECT (the technical content of this is suspect - see PostLB comment. The whole sequence will be changed so the SACL doesn't send the XPWRITE before it has write data ready.)
A.2 Update write operation
This << disk device (the supervising storage array controller does not yet have the intermediate XOR data for this command; the purpose of issuing the XPWRITE command at this time is to cause the parity disk device to begin reading XOR data from its medium to its buffer memory). >> should be << disk device (i.e., the supervising storage array controller does not yet have the intermediate XOR data for this command. The purpose of issuing the XPWRITE command at this time is to cause the parity disk device to begin reading XOR data from its medium to its buffer memory). >>

Page: 122
Sequence number: 5
Date: 8/24/2004 12:56:41 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
This << XOR data (read with the XDREAD command) available >> should be << XOR data (i.e., read with the XDREAD command)

available >>

Page: 123
Sequence number: 1
Date: 8/24/2004 1:02:40 PM
Type: Highlight
ACCEPT - DONE
A.3 Regenerate operation
This << Figure A.2 illustrates a regenerate >> should be << Figure A.2 shows a regenerate >>

Page: 123
Sequence number: 2
Date: 8/24/2004 1:09:48 PM
Type: Highlight
ACCEPT - DONE (adding "An" in front of each too)
A.3 Regenerate operation
This << used: READ, XDWRITE, and XDREAD. XDWRITEREAD may be used in place of any sequence of XDWRITE followed by XDREAD. >> should be << used: READ command, XDWRITE command, and XDREAD command. XDWRITEREAD command may be used in place of any sequence of an XDWRITE command followed by an XDREAD command. >>

Page: 123
Sequence number: 3
Date: 8/24/2004 12:57:49 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
Figure A.1
This << XDWRITE >> should be << XDWRITE command >>

Page: 123
Sequence number: 4
Date: 8/24/2004 12:57:36 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
Figure A.1
This << XDREAD >> should be << XDREAD command>>

Page: 123
Sequence number: 5
Date: 8/24/2004 12:57:42 PM
Type: Highlight
ACCEPT - DONE
A.2 Update write operation
Figure A.1
This << XPWRITE >> should be << XPWRITE command>>

Page: 124
Sequence number: 1
Date: 8/24/2004 12:59:50 PM
Type: Highlight
ACCEPT - DONE
A.3 Regenerate operation
Figure A.2
This << READ >> should be << READ command >>.

Page: 124
Sequence number: 2
Date: 8/24/2004 12:59:58 PM
Type: Highlight
ACCEPT - DONE
A.3 Regenerate operation
Figure A.2
This << XDWRITE or XDWRITEREAD >> should be << XDWRITE command or XDWRITEREAD command>>

Page: 124
Sequence number: 3
Date: 8/24/2004 1:00:04 PM
Type: Highlight

ACCEPT - DONE
A.3 Regenerate operation
Figure A.2
This << XDREAD or XDWRITEREAD >> should be << XDREAD command or XDWRITEREAD command>>

Page: 124
Sequence number: 4
Date: 8/24/2004 1:00:10 PM
Type: Highlight
ACCEPT - DONE
A.3 Regenerate operation
Figure A.2
This << XDWRITE or XDWRITEREAD >> should be << XDWRITE command or XDWRITEREAD command>>

Page: 124
Sequence number: 5
Date: 8/24/2004 1:00:17 PM
Type: Highlight
ACCEPT - DONE
A.3 Regenerate operation
Figure A.2
This << XDREAD or XDWRITEREAD >> should be << XDREAD command or XDWRITEREAD command>>

Page: 124
Sequence number: 6
Date: 8/24/2004 1:02:28 PM
Type: Highlight
ACCEPT - DONE
A.4 Rebuild operation
This << Figure A.3 illustrates a rebuild >> should be << Figure A.3 shows a rebuild >>

Page: 124
Sequence number: 7
Date: 8/24/2004 1:09:27 PM
Type: Highlight
ACCEPT - DONE (adding "An" in front of each too)
A.4 Rebuild operation
This << used: READ, XDWRITE, XDREAD, and WRITE. XDWRITEREAD may be used in place of any sequence of XDWRITE followed by XDREAD. >> should be << used: READ command, XDWRITE command, XDREAD command, and WRITE command. XDWRITEREAD command may be used in place of any sequence of an XDWRITE command followed by an XDREAD command. >>

Page: 125
Sequence number: 1
Date: 8/24/2004 1:02:15 PM
Type: Highlight
ACCEPT - DONE
A.4 Rebuild operation
This << is the "rebuilt" data and is sent >> should be << is the rebuilt data and is sent >>

Page: 125
Sequence number: 2
Date: 8/24/2004 1:01:36 PM
Type: Highlight
ACCEPT - DONE
A.4 Rebuild operation
Figure A.3
This << READ >> should be << READ command >>.

Page: 125
Sequence number: 3
Date: 8/24/2004 1:01:56 PM
Type: Circle
ACCEPT - DONE
A.4 Rebuild operation
Figure A.3
This << XDWRITE or XDWRITEREAD >> should be << XDWRITE command or XDWRITEREAD command>>

Page: 125

Sequence number: 4
Date: 8/24/2004 1:01:49 PM
Type: Circle
ACCEPT - DONE
A.4 Rebuild operation
Figure A.3
This << XDREAD or XDWRITEREAD >> should be << XDREAD command or XDWRITEREAD command>>

Page: 125
Sequence number: 5
Date: 8/24/2004 1:01:43 PM
Type: Highlight
ACCEPT - DONE
A.4 Rebuild operation
Figure A.3
This << WRITE >> should be << WRITE command >>.

Author: iomega

Page: i
Sequence number: 4
Date: 10/3/2004 3:43:16 PM
Type: Note
REJECT (per 04-288 CAP WG, It's not clear if the comment really meant SBC-3 should obsolete removable media, or if SBC-2 (the project being voted on) should do so. Regardless, the CAP WG discussed the topic and decided that no such change should be made in SBC-2. It can be reconsidered in SBC-3.)
(comment submitted with an abstain vote)
Iomega has not chosen to carefully review SBC-2. Instead, Iomega
believes SBC-3 should obsolete the Removable Media portion of SBC.
Actual massively distributed boot BIOS and operating systems have never
fully supported Removable SBC as specified by t10.org. Consequently,
designs for broad compatibility in read, boot, and write are moving to
removable MMC UDF for more than 32 GiB/disc, as in the example of the
Iomega REV drive, else to detachable but not removable SBC, as in the
example of USB adapters for small Compact Flash.

Author: lsi - John Lohmeyer

Page: vi
Sequence number: 2
Date: 8/24/2004 10:27:24 AM
Type: Note
ACCEPT - TODO
Pages vi -- x
Remove revision information from copy that goes to public review.

Page: 2
Sequence number: 1
Date: 8/24/2004 10:32:43 AM
Type: Highlight
ACCEPT - DONE (reworded without the :)
1 Scope
In item l) of the last list in this subclause, "this" s/b "the".

Page: 5
Sequence number: 2
Date: 8/24/2004 10:45:39 AM
Type: Highlight
ACCEPT - DONE
3.1.6 check data
"allows" s/b "may allow"

Page: 6
Sequence number: 3
Date: 8/26/2004 1:19:58 PM
Type: Highlight
ACCEPT - DONE (definition added from ANSI T1 dictionary)
3.1.26 media:
Either remove this definition or add a definition of medium.

Page: 6
Sequence number: 4
Date: 8/26/2004 2:03:16 PM
Type: Highlight
REJECT (non-volatile is hard to define without it being non-volatile <something>)
3.1.27 non-volatile cache memory:
It is probably better to define non-volatile separately from cache memory (and medium). We would then have separate definitions for non-volatile, volatile, cache memory, and medum.

Page: 7
Sequence number: 2
Date: 8/24/2004 10:52:53 AM
Type: Note
ACCEPT - DONE (also added glossary entry)
3.2 Symbols and abbreviations
Please add:
CRC cyclic redundancy check

Page: 12
Sequence number: 5
Date: 8/24/2004 10:59:22 AM
Type: Highlight
ACCEPT - DONE
4.5 Ready state
In the last paragraph, replace "set to" with "set to one to".

Page: 12
Sequence number: 6
Date: 8/27/2004 5:39:36 PM
Type: Highlight
ACCEPT - DONE (deleted the sentence, which meant the Format Device mode page which is now obsolete)
4.8 Medium defects
First paragraph: Some block devices provide the application client control (of what?) through use of the mode parameters.

Page: 13
Sequence number: 4
Date: 8/24/2004 11:07:21 AM
Type: Highlight
ACCEPT - DONE
4.8 Medium defects
In list item d), replace "theprevious" with "the previous".

Page: 13
Sequence number: 5
Date: 8/27/2004 5:27:15 PM
Type: Highlight
ACCEPT - DONE
4.9 Cache memory
In the fourth paragraph, last sentence, consider adding "without power" to the end of the sentence, "There may be a limit on the amount of time a non-volatile cache is able to retain data."

Page: 13
Sequence number: 6
Date: 8/24/2004 11:07:54 AM
Type: Highlight
ACCEPT - DONE
4.9 Cache memory
Fifth paragraph, first sentence. Change "is written" to "is to be written".

Page: 14
Sequence number: 3

Date: 8/26/2004 10:08:51 AM
Type: Strikeout
ACCEPT - DONE (specifies deleted)
4.9 Cache memory
Seventh paragraph, last sentence. Delete "specifies". Alternatively, re-word this sentence as follows: "An FUA_NV bit of one permits the device server to access a non-volatile cache memory rather than the medium."

Page: 14
Sequence number: 4
Date: 8/24/2004 11:08:31 AM
Type: Highlight
ACCEPT - DONE
4.9 Cache memory
Ninth paragraph, first sentence should read, "When a VERIFY command or a WRITE AND VERIFY command is processed,..."

Page: 33
Sequence number: 3
Date: 8/24/2004 11:18:02 AM
Type: Highlight
ACCEPT - DONE
5.1 Commands for direct-access block devices
Table 9, Note e
Change 'of'' to 'if'.

Page: 36
Sequence number: 1
Date: 8/24/2004 5:12:33 PM
Type: Strikeout
ACCEPT - DONE
5.4.1 FORMAT UNIT command overview
Note 7 ahould be deleted. The information is already covered in the paragraph above table 13.

Page: 65
Sequence number: 1
Date: 8/24/2004 11:25:45 AM
Type: Highlight
ACCEPT - DONE
5.21 START STOP UNIT command
third paragraph from the end of this subclause
Replace this paragraph with "It is not an error to specify that the logical unit transition to its current power condition."

Author: msft

Page: 11
Sequence number: 25
Date: 10/3/2004 6:08:52 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG as a "should")
MSFT #1
4.4 Logical blocks
Add notification of a change to block size / number of blocks
Modification of READ CAPACITY data (block size or number) shall result in a unit attention condition with a sense code indicating such change.

Author: mxo

Page: 1
Sequence number: 11
Date: 9/2/2004 7:48:06 PM
Type: Note
REJECT (write-once and optical memory device types are obsolete)
Maxtor #1

PDF Page 1
Change the text in item (a) to, "Permit an application client to
communicate over a SCSI service delivery subsystem with a logical unit
that declares itself to be a direct-access device, write-once device, or
optical memory device in the device type field of the INQUIRY command
response data;"

Page: 1
Sequence number: 12
Date: 9/2/2004 7:50:11 PM
Type: Note
REJECT (none of the remaining "devices" left after resolving other comments are wrong)
Maxtor #2
PDF Page 1
Change "devices" to "device".

Page: 5
Sequence number: 17
Date: 9/2/2004 7:52:11 PM
Type: Note
REJECT (why would that not be understood?)
Maxtor #3
PDF Page 5
Add, "The set of contiguous logical blocks may be all of logical blocks on the device."

Page: 10
Sequence number: 35
Date: 9/2/2004 8:20:47 PM
Type: Note
REJECT (data-out is only used with "data-out buffer". "write operation" or "write command" are used for those terms. Those will be made consistent - the latter will be changed to "commands performing write operations" everywhere.)
Maxtor #5
PDF Page 10
Should "write" be changed to "data-out"? One way or the other, we should
have a definition or at least be consistent.

Page: 10
Sequence number: 36
Date: 9/2/2004 8:40:07 PM
Type: Note
REJECT (data-in is only used with "data-in buffer". "read operation" or "read command" are used for those terms. Those will be made consistent - the latter will be changed to "commands performing read operations" everywhere.)
Maxtor #6
PDF Page 10
Should "read" be changed to "data-in"? One way or the other, we should have a definition or at least be consistent.

Page: 10
Sequence number: 37
Date: 9/2/2004 8:40:34 PM
Type: Highlight
ACCEPT - DONE (reworded)
Maxtor #7
PDF Page 10
Change to, "A block device containing a removable medium may require
receipt of a START STOP UNIT command to become accessible for data-out
or data-in operations."
regarding "A block device containing a removable medium may need to receive a START STOP UNIT
command to become accessible for write or read operations."

Page: 13
Sequence number: 38
Date: 9/2/2004 8:50:53 PM
Type: Note
ACCEPT - DONE (tweaked a few words in the sentence. Did not add "implemented in most block devices")
Maxtor #9
PDF Page 13
Change to, "Cache memory is an area of temporary storage with fast
access time that is implemented in most block devices to enhance
performance. Cache memory exists separately from the user data stored on the medium and is not uniquely accessible by the

application client. Use of cache memory for data-out or data-in operations may reduce the access time to a logical block and can increase the overall data throughput."

Page: 13
Sequence number: 39
Date: 9/2/2004 8:53:53 PM
Type: Highlight
REJECT (but changed block device to device server)
Maxtor #10
PDF Page 13
Change to, "During data-in operations, the block devices use..."

Page: 13
Sequence number: 40
Date: 9/2/2004 8:54:03 PM
Type: Highlight
REJECT (but changed block devices to device server)
Maxtor #11
PDF Page 13
Change to, "During data-out operations, block devices use..."

Page: 13
Sequence number: 41
Date: 9/2/2004 8:53:43 PM
Type: Note
ACCEPT - DONE
Maxtor #12
PDF Page 13
Change to, "...to be written..."

Page: 13
Sequence number: 42
Date: 9/2/2004 9:03:41 PM
Type: Note
REVIEW
ACCEPT - DONE (clarified bits and pieces, and added this note:
"NOTE - This does not mean that stale data is allowed in the cache. If a write operation accesses the same LBA as a logical block in the cache, the logical block in the cache is updated with the new write data.")
Maxtor #13
PDF Page 13
I think this is supposed to be something like, "When the cache memory is filled with blocks of data that are being stored for possible future access, new blocks of data that are to be stored replace those currently in cache memory. The disable page out (DPO) bit allows the application client to influence the replacement of logical blocks in the cache. For data-out operations, setting this bit to one advises the device server to not replace existing blocks in the cache memory with the new data-out data. For data-in operations, setting the DPO bit to one advises the device server to not replace existing blocks in the cache memory with the new data-in data."

Page: 13
Sequence number: 43
Date: 9/2/2004 9:05:16 PM
Type: Underline
ACCEPT - DONE (changed to "commands performing write or read operations". The same phrase is being applied elsewhere.)
Maxtor #14
PDF Page 13
Change to, "...READ and WRITE..."

Page: 14
Sequence number: 33
Date: 9/2/2004 9:06:21 PM
Type: Highlight
REJECT (they might still flow through the cache. It just appears as if they don't - i.e. the medium is always updated immediately.)
Maxtor #15
PDF Page 14
Delete, "effectively".

Page: 18
Sequence number: 45
Date: 9/2/2004 9:07:24 PM
Type: Underline
ACCEPT - DONE (rewritten per ENDL comment)
Maxtor #16
PDF Page 18
Delete, "traditionally".

Page: 18
Sequence number: 46
Date: 9/2/2004 9:09:32 PM
Type: Highlight
ACCEPT - DONE (as "logical blocks may be accessed with similar access times regardless of their location on the medium"
Maxtor #17
PDF Page 18
Delete, "virtually".

Page: 20
Sequence number: 32
Date: 9/2/2004 9:11:38 PM
Type: Note
ACCEPT - DONE (rewritten per other comments)
Maxtor #18
PDF Page 20
This is a huge paragraph that is not clear to me. I recommend making
this be more paragraphs something like:
A stripe is a set of corresponding strips of consecutively addressed storage from two or more block devices. A strip is an equal division of the storage capacity in a set of consecutively addressed LBAs on a single block device. When the storage array controller issues an update write to a device, the data in the device has been updated when successful status is returned for the command. Until the device containing check data has been updated, however, the associated stripe in the redundancy group is not consistent (e.g., performing an XOR operation on the protected data does not produce the check data). The storage array controller shall keep track
of this window of inconsistency and make sure that a regenerate or
rebuild operation for any data extent within the stripe is not attempted
until after the device containing check data has been updated (making
the stripe consistent again). For multi-initiator systems, tracking the
updates may be more complex because each storage array controller needs to ensure that a second storage array controller is not writing to a
stripe that the first storage array controller is regenerating or
rebuilding. The coordination between storage array controllers is system
specific and is beyond the scope of this standard. A storage array
controller needs to prevent data corruption due to a temporarily
inconsistent stripe in one case. When an XDWRITE or XDWRITEREAD command has been issued and completed, the device containing protected data has been updated but the device containing check data has not. The stripe is inconsistent until the XPWRITE command to the device containing check data returns completion status.

Page: 29
Sequence number: 28
Date: 9/2/2004 9:13:49 PM
Type: Highlight
ACCEPT - DONE
Maxtor #20
PDF Page 29
Delete, "primarily".

Page: 29
Sequence number: 29
Date: 9/2/2004 9:39:18 PM
Type: Highlight
ACCEPT - DONE
Maxtor #21
PDF Page 29
Delete, "primarily".

Page: 30
Sequence number: 11
Date: 10/3/2004 7:21:49 PM
Type: Highlight

ACCEPT - DONE (per 04-288 CAP WG)
Maxtor #22
PDF Page 30
Change READ (16) to "O".

Page: 31
Sequence number: 5
Date: 10/3/2004 3:19:42 PM
Type: Note
ACCEPT - DONE (per 04-288 CAP WG, unlike READ (16) and WRITE (16) which are only useful if the device supports long LBAs, READ CAPACITY (16) carries additional information like protection information presence (or not). It is mandatory so software can depend on it to confirm or deny protection information support with one command. CAP WG considered and decided to mandate if p.i. is supported, and be optional otherwise.)
Maxtor #23
PDF Page 31
Change <READ CAPACITY (16)> to "O".

Page: 33
Sequence number: 11
Date: 10/3/2004 7:22:06 PM
Type: Strikeout
ACCEPT - DONE (per 04-288 CAP WG)
Maxtor #24
PDF Page 33
Delete note - "If any of WRITE (6)/(10)/(12) is implemented, WRITE (16) shall also be implemented."

Page: 45
Sequence number: 21
Date: 9/2/2004 9:17:19 PM
Type: Underline
ACCEPT - DONE
Maxtor #25
PDF Page 45
Delete, "actually"

Page: 48
Sequence number: 9
Date: 9/2/2004 9:18:06 PM
Type: Highlight
ACCEPT - DONE
Maxtor #26
PDF Page 48
Delete, "directly".

Page: 66
Sequence number: 16
Date: 9/2/2004 9:20:26 PM
Type: Highlight
REJECT (per other comments, deleted this and put wording in the VERIFY and WRITE AND VERIFY commands that they effectively perform synchronize cache operations for the extents being accessed. Those are the commands with "implicit" synchronize caches. The fua bit descriptions are left as is.)
Maxtor #27
PDF Page 66
Change to, "The synchronize cache function is also performed by the
device server as the result of other commands defined in other clauses
of this standard (e.g., when the FUA bit is set to one for a write
command, contiguous cached data may be written to the media)."

Page: 115
Sequence number: 8
Date: 9/2/2004 9:21:40 PM
Type: Underline
ACCEPT - DONE
Maxtor #28
PDF Page 115
Change to, "(e.g., READ, WRITE, and WRITE AND VERIFY).

Page: 115
Sequence number: 9

Date: 9/2/2004 9:39:03 PM
Type: Highlight
ACCEPT - DONE
Maxtor #29
PDF Page 115
Change to, "The device server shall report any failures that occur during the reallocation operation. Error reporting as specifed by the
error recovery bits (EER, PER, DTE, and DCR) shall be performed only after completion of the reallocation."
regarding "Error reporting... The reallocation operation shall report any failures that occur."

Page: 115
Sequence number: 10
Date: 9/2/2004 9:38:53 PM
Type: Underline
ACCEPT - DONE
Maxtor #30
PDF Page 115
Change to, "The device server shall report any failures that occur during the reallocation operation. Error reporting as specifed by the error recovery bits shall be performed only after completion of the reallocation."
regarding sentences around "The
reallocation process shall present any failures that occur.

Page: 115
Sequence number: 11
Date: 9/2/2004 9:34:47 PM
Type: Highlight
REVIEW (double-check this. I think it is the only right answer, but make sure it was not mislead by the misplaced fabricated data note below)
ACCEPT - DONE
Maxtor #31
PDF Page 115
Add, "The data returned in this case is vendor specific." after TB=1 sentence

Page: 116
Sequence number: 13
Date: 9/2/2004 9:36:33 PM
Type: Highlight
REJECT (when referred to with its abbreviation, "an" is used. Not appropriate when referred to by name)
Maxtor #33
PDF Page 116
Change to, "an". before "read continuous (RC) bit"

Page: 120
Sequence number: 13
Date: 9/2/2004 9:38:39 PM
Type: Highlight
ACCEPT - DONE ("specifies that the device server shall enable")
Maxtor #34
PDF Page 120
Change to, "shall enable".

Author: relliott

Page: i
Sequence number: 1
Date: 8/24/2004 6:07:19 PM
Type: Note
ACCEPT - DONE
almost global
shall return CHECK CONDITION
s/b
shall terminate the command with CHECK CONDITION

Page: i
Sequence number: 2
Date: 8/24/2004 6:07:45 PM

Type: Note
ACCEPT - DONE
global
a CHECK CONDITION status
s/b
CHECK CONDITION status

Page: i
Sequence number: 3
Date: 8/24/2004 6:08:35 PM
Type: Note
ACCEPT - DONE
global
Make all the status sentences follow this format:
terminate the command with/return CHECK CONDITION status with the sense code set to ... and the additional sense code set to ...

Page: iii
Sequence number: 1
Date: 8/30/2004 10:40:04 AM
Type: Highlight
ACCEPT - DONE
ANSI cover page
Change "NCITS.306:1998"
to "INCITS 306-1998"

Page: v
Sequence number: 1
Date: 8/24/2004 10:44:53 AM
Type: Highlight
ACCEPT - DONE
Dedication
Change NCITS to INCITS since the former is not defined as an acronym

Page: xxi
Sequence number: 2
Date: 8/26/2004 1:11:21 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: xxi
Sequence number: 3
Date: 8/26/2004 1:11:25 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: xxi
Sequence number: 4
Date: 8/27/2004 2:23:00 PM
Type: Highlight
ACCEPT - DONE
data protection s/b protection information

Page: 1
Sequence number: 9
Date: 8/26/2004 12:47:46 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 1
Sequence number: 10
Date: 8/26/2004 1:11:39 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 3
Sequence number: 5
Date: 8/24/2004 8:00:26 PM
Type: Note
ACCEPT - DONE
change ITUT to ITU-T

Page: 5
Sequence number: 4
Date: 8/24/2004 10:53:22 AM
Type: Note
ACCEPT - DONE
3.1 Definitions
add "cyclic redundancy check (CRC)" definition from SAS

Page: 5
Sequence number: 9
Date: 8/26/2004 1:13:00 PM
Type: Highlight
ACCEPT - DONE
Change to direct-access block device (and move down to keep sections sorted)

Page: 5
Sequence number: 10
Date: 8/27/2004 1:27:09 PM
Type: Highlight
ACCEPT - DONE
3.1.16 XOR
storage device s/b direct-access block devices

Page: 5
Sequence number: 15
Date: 8/31/2004 10:35:22 AM
Type: Highlight
ACCEPT - DONE
3.1.14 device type
The type of device (or device model) implemented by the device server.
should mention the appropriate field in the standard INQUIRY data.
s/b
The type of device (or device model) implemented by the device server as indicated by the PERIPHERAL DEVICE TYPE field in the standard INQUIRY data. See SPC-3.

Page: 5
Sequence number: 16
Date: 8/31/2004 6:51:36 PM
Type: Highlight
ACCEPT - DONE
cache memory s/b cache

Page: 6
Sequence number: 13
Date: 8/26/2004 1:24:30 PM
Type: Strikeout
ACCEPT - DONE
remove off/on - power cycle itself is a defined term

Page: 6
Sequence number: 14
Date: 8/26/2004 1:25:34 PM
Type: Highlight
ACCEPT - DONE
change:
a subsequent read
operation
to
subsequent read operations
(there is no definition of a read-once medium in this standard)

Page: 6

Sequence number: 15
Date: 8/27/2004 1:26:47 PM
Type: Highlight
ACCEPT - DONE
3.1.39 storage array controller
storage devices s/b direct access block devices

Page: 6
Sequence number: 16
Date: 8/27/2004 1:29:27 PM
Type: Highlight
ACCEPT - DONE
3.1.34 redundancy group
Change exclusive-or to XOR (see 3.1.18)

Page: 6
Sequence number: 17
Date: 8/27/2004 2:24:10 PM
Type: Highlight
ACCEPT - DONE
3.1.34 redundancy group
protected space s/b XOR-protected data

Page: 6
Sequence number: 18
Date: 8/27/2004 4:13:06 PM
Type: Highlight
ACCEPT - DONE
3.1.39 SAC
SCSI command descriptor blocks s/b SCSI commands

Page: 6
Sequence number: 26
Date: 8/31/2004 6:51:54 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 6
Sequence number: 27
Date: 8/31/2004 6:52:04 PM
Type: Underline
ACCEPT - DONE
Cache memory s/b cache

Page: 6
Sequence number: 28
Date: 10/3/2004 4:06:01 PM
Type: Strikeout
ACCEPT - DONE
Delete "3.1.25 logical unit reset event: An event that triggers a logical unit reset from a logical unit as described in SAM-3."

Page: 6
Sequence number: 29
Date: 10/3/2004 3:14:20 PM
Type: Highlight
ACCEPT - DONE (per 04-288 CAP WG)
"A logical unit action in response to a logical unit reset event in which the logical unit performs the operations described in SAM-3."
s/b
per 04-290r1 "A condition resulting from the events defined by SAM-3 in which the SCSI device performs the power on operations described in SAM-3, this standard, and other applicable command standards (see table 9 in 5.1)."

Page: 7
Sequence number: 10
Date: 8/27/2004 1:30:26 PM
Type: Highlight
ACCEPT - DONE

XOR exclusive logical OR
Change to exclusive-or

Page: 7
Sequence number: 14
Date: 8/31/2004 6:52:15 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 7
Sequence number: 15
Date: 8/31/2004 6:52:24 PM
Type: Underline
ACCEPT - DONE
Cache memory s/b Cache

Page: 7
Sequence number: 16
Date: 9/2/2004 7:53:01 PM
Type: Note
ACCEPT - DONE (deleted "update" which was a optical media device term)
Maxtor #4
PDF Page 7
This definition [probably of "update"] is not clear. I don't understand it well enough to offer a recommendation.

Page: 7
Sequence number: 17
Date: 9/2/2004 11:46:43 PM
Type: Highlight
ACCEPT - DONE
Medium s/b Media

Page: 9
Sequence number: 2
Date: 10/3/2004 2:56:30 PM
Type: Note
ACCEPT - DONE
incorporate 04-296r1 which rewrites the numeric convention paragraphs

Page: 10
Sequence number: 19
Date: 8/25/2004 1:45:54 PM
Type: Highlight
ACCEPT - DONE
4.2 Direct-access device type model overview
Merge contents into 4.1 and use this name rather than "General"

Page: 10
Sequence number: 20
Date: 8/26/2004 12:48:24 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 10
Sequence number: 21
Date: 8/26/2004 12:48:44 PM
Type: Note
ACCEPT - DONE
direct-access device s/b direct-access block device in 4.2 header

Page: 10
Sequence number: 22
Date: 8/30/2004 4:01:53 PM
Type: Highlight
REJECT (deleted sentence instead)
Since there is only one kind of block device described in SBC-2, change:
"The common attribute of block devices is that they are block addressable"

to:
"Direct-access block devices are block addressible"

Page: 10
Sequence number: 23
Date: 8/30/2004 4:02:04 PM
Type: Highlight
REJECT (sentence deleted instead)
Change:
are addressed on the
block device
to:
is addressed

Page: 10
Sequence number: 24
Date: 8/26/2004 12:57:48 PM
Type: Note
ACCEPT - DONE
Change "block device" to "direct-access block device" in 4.3.1

Page: 10
Sequence number: 25
Date: 8/30/2004 10:19:11 AM
Type: Strikeout
ACCEPT - DONE
This sentence seems unnecessary, is not exactly true, and is the only use of "logical block length" and "physical block length" in the standard.
Delete "logical block length is not required to bear any relation to the physical
block length of the storage medium."

Page: 10
Sequence number: 27
Date: 8/30/2004 4:02:37 PM
Type: Strikeout
ACCEPT - DONE
Delete "The common attribute of block devices is that they are block addressable (i.e., the data are addressed on the block device in groups referred to as logical blocks)."
The sentences pulled in from 4.2 do a better job of saying the same thing.

Page: 10
Sequence number: 28
Date: 8/30/2004 4:06:13 PM
Type: Strikeout
ACCEPT - DONE
delete "the ... of the block device."

Page: 10
Sequence number: 34
Date: 8/31/2004 6:52:46 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 10
Sequence number: 38
Date: 9/2/2004 8:31:07 PM
Type: Strikeout
ACCEPT - DONE
delete user

Page: 10
Sequence number: 39
Date: 9/2/2004 8:31:32 PM
Type: Highlight
ACCEPT - DONE
"block of user data" s/b "logical block"

Page: 10

Sequence number: 40
Date: 9/2/2004 8:32:14 PM
Type: Highlight
ACCEPT - DONE
"write operations (e.g. WRITE commands)" s/b "commands performing write operations"

Page: 10
Sequence number: 41
Date: 9/2/2004 8:32:33 PM
Type: Highlight
ACCEPT - DONE
"read operations (e.g. READ commands)" s/b "commands performing read operations"

Page: 11
Sequence number: 18
Date: 8/25/2004 7:27:24 PM
Type: Highlight
ACCEPT - DONE
is issued s/b is received

Page: 11
Sequence number: 19
Date: 8/25/2004 7:27:38 PM
Type: Highlight
ACCEPT - DONE
command is terminated
s/b
device server terminates the command

Page: 11
Sequence number: 20
Date: 8/26/2004 12:58:31 PM
Type: Note
ACCEPT - DONE
Change block device to direct-access block device in 4.3.2

Page: 11
Sequence number: 21
Date: 8/26/2004 12:59:17 PM
Type: Highlight
ACCEPT - DONE
Change
of block devices
to
in direct-access block devices

Page: 11
Sequence number: 22
Date: 8/26/2004 1:03:45 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 11
Sequence number: 23
Date: 8/26/2004 1:03:35 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 11
Sequence number: 24
Date: 8/26/2004 1:03:52 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 11
Sequence number: 26

Date: 9/2/2004 8:46:44 PM
Type: Highlight
REJECT (but added "need not" to the list of keywords. It is used several other places.
"May" and "may not" are intended for actively granting permission to an entity to do (or not do) something.
"Can" and "Need not" are intended for requiring that an entity tolerate certain behaviors outside its control. In this case, the entity is the application client, being warned that access times might not be inconsistent.)
Maxtor #8
PDF Page 11
Change "need" to "may".

Page: 12
Sequence number: 19
Date: 8/26/2004 1:04:01 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 12
Sequence number: 20
Date: 8/26/2004 1:04:10 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 12
Sequence number: 21
Date: 8/26/2004 1:04:27 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device throughout 4.6

Page: 12
Sequence number: 22
Date: 8/26/2004 1:04:48 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device throughout 4.8

Page: 12
Sequence number: 28
Date: 10/3/2004 3:01:11 PM
Type: Note
ACCEPT - DONE
Move 4.7 Implicit HEAD OF QUEUE down just ahead of 4.10 Reservations,

Page: 12
Sequence number: 29
Date: 9/1/2004 10:24:02 AM
Type: Highlight
ACCEPT - DONE
user data s/b user data and protection information, if any,

Page: 13
Sequence number: 19
Date: 8/26/2004 1:05:05 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device throughout 4.9

Page: 13
Sequence number: 20
Date: 8/26/2004 2:34:23 PM
Type: Highlight
REVIEW
ACCEPT - DONE
Change "can be specified in the mode parameters" to "is vendor specific"
This used to be possible with the Format Control mode page alternate sectors per zone, alternate tracks per zone, and alternate tracks per logical unit fields. That page is obsolete so this sentence is not true any more. The limit is vendor-specific.

Page: 13
Sequence number: 22
Date: 8/31/2004 6:53:25 PM
Type: Underline
ACCEPT - DONE
cache memory s/b Cache

Page: 13
Sequence number: 23
Date: 8/31/2004 6:53:35 PM
Type: Underline
ACCEPT - DONE
4.9 Cache memory s/b Caches

Page: 13
Sequence number: 24
Date: 8/31/2004 6:53:44 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 25
Date: 8/31/2004 6:53:55 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 26
Date: 8/31/2004 6:54:07 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 27
Date: 8/31/2004 6:54:17 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 28
Date: 8/31/2004 6:56:05 PM
Type: Highlight
ACCEPT - DONE
Cache memory s/b Cache

Page: 13
Sequence number: 29
Date: 8/31/2004 6:56:08 PM
Type: Highlight
ACCEPT - DONE
Cache memory s/b Cache

Page: 13
Sequence number: 30
Date: 8/31/2004 6:56:23 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 31
Date: 8/31/2004 6:56:27 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 32
Date: 8/31/2004 6:56:34 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 33
Date: 8/31/2004 6:56:39 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 34
Date: 8/31/2004 6:57:04 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 35
Date: 8/31/2004 6:57:10 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 36
Date: 8/31/2004 6:57:15 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 13
Sequence number: 37
Date: 9/2/2004 8:16:51 PM
Type: Highlight
ACCEPT - DONE
"read and write commands" s/b "commands performing read and/or write operations"

Page: 13
Sequence number: 45
Date: 9/3/2004 12:17:35 PM
Type: Highlight
ACCEPT - DONE
"read, write, and verify commands" s/b "commands performing write, read, or verify operations"

Page: 14
Sequence number: 24
Date: 8/26/2004 9:44:10 AM
Type: Highlight
ACCEPT - DONE
Merge these two sentences into the first sentence of the paragraph: "Furthermore, a synchronize cache operation is also implied to write unwritten logical blocks still in the cache memory. These logical blocks are stored on the
medium before the verify operation begins."

Page: 14
Sequence number: 25
Date: 8/26/2004 9:53:26 AM
Type: Highlight
ACCEPT - DONE
Change "The DPO bit is provided..." to "The DPO bit is defined in the VERIFY command..."

Page: 14
Sequence number: 26
Date: 8/26/2004 7:07:27 PM

Type: Square
ACCEPT - DONE
Change "The FUA_NV bit" to "The force unit access nonvolatile cache (FUA_NV) bit"

Page: 14
Sequence number: 29
Date: 8/31/2004 6:57:22 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 14
Sequence number: 30
Date: 8/31/2004 6:57:37 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 14
Sequence number: 31
Date: 9/1/2004 7:12:58 PM
Type: Strikeout
ACCEPT - DONE
4.10 Reservations
Replace the first two paragraphs with "See SPC-3 for a description of reservations."
These paragraphs are not in SSC-3's reservations section, and SPC-3 does a better job describing all the details.
"The access enabled or access disabled condition determines when an application client may store or retrieve user data on all or part of the medium. Access may be restricted for read operations, write operations, or both. This attribute may be controlled by an external mechanism or by persistent reservations (see SPC-3).
An application client uses reservations to gain a level of exclusivity in access to all or part of the medium for itself or another application client. It is expected that the reservation is retained until released. The device
server ensures that the application client with the reservation is able to access the reserved medium within the operating parameters established by that application client."

Page: 14
Sequence number: 32
Date: 9/1/2004 7:15:43 PM
Type: Strikeout
ACCEPT - DONE
Delete the following sentences, which are better covered by SPC-3.
"A command that does not explicitly write the medium shall be checked for reservation conflicts before the command enters the current task state for the first time. Once the command has entered the current 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."

Page: 16
Sequence number: 11
Date: 8/27/2004 2:20:54 PM
Type: Highlight
ACCEPT - DONE
write protected s/b write-protected

Page: 16
Sequence number: 14
Date: 9/1/2004 7:31:40 PM
Type: Highlight
ACCEPT - DONE
Reformat the table so "Excl = Exclusive" is not needed

Page: 16
Sequence number: 15
Date: 9/1/2004 7:31:58 PM
Type: Highlight
ACCEPT - DONE
issued by s/b received from
to match SPC-3

Page: 16
Sequence number: 16
Date: 9/1/2004 7:32:03 PM
Type: Highlight
ACCEPT - DONE
issued by s/b received from
to match SPC-3

Page: 16
Sequence number: 17
Date: 9/1/2004 7:32:16 PM
Type: Highlight
ACCEPT - DONE
by s/b from to match SPC-3

Page: 16
Sequence number: 18
Date: 9/1/2004 7:32:19 PM
Type: Highlight
ACCEPT - DONE
by s/b from to match SPC-3

Page: 17
Sequence number: 14
Date: 8/26/2004 12:48:54 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 17
Sequence number: 15
Date: 8/26/2004 12:49:01 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 17
Sequence number: 16
Date: 10/3/2004 4:16:23 PM
Type: Highlight
ACCEPT - DONE (use 4.12 header plus 'overview")
4.12.1 Examples overview s/b Examples of direct-access block devices overview

Page: 17
Sequence number: 17
Date: 8/26/2004 12:49:09 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 17
Sequence number: 18
Date: 8/26/2004 12:49:15 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 17
Sequence number: 19
Date: 8/26/2004 1:18:22 PM
Type: Highlight
ACCEPT - DONE
after "induced" add "(i.e., a magnetic disk)" to link up with the example in the new medium definition.

Page: 17
Sequence number: 25
Date: 8/31/2004 1:59:40 PM
Type: Note
ACCEPT - DONE

Move 4.12 Examples (of medium types) up near the beginning of the model section, after the discussion of tracks, cylinders, etc. currently in 4.2 and before the discussion of removable medium.

Page: 17
Sequence number: 26
Date: 8/31/2004 10:15:07 PM
Type: Highlight
ACCEPT - DONE
checksum or error
correction information
s/b additional information
to use a glossary term

Page: 17
Sequence number: 27
Date: 8/31/2004 10:16:04 PM
Type: Highlight
ACCEPT - DONE
"The checksum or the error correction information"
s/b "that" (combine with previous sentence rather than restate the end of it)

Page: 17
Sequence number: 28
Date: 9/1/2004 2:06:34 PM
Type: Underline
ACCEPT - DONE
"A sector may be made up of a header, data, and a trailer. The header, if any, may contain a preamble used to synchronize read circuits to the data, an address field to identify the sector, flags to use for defect management, and a checksum that validates or corrects the header. The data field begins with a synchronizing field and a data area that contains user data. The trailer may contain checksum or error correction information (e.g., ECC bytes). The checksum or the error correction information allows the correction of data for medium defects."
s/b "Sectors may also contain information for accessing, synchronizing, and protecting the integrity of the logical blocks."

Page: 18
Sequence number: 34
Date: 8/26/2004 1:05:16 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 18
Sequence number: 35
Date: 8/27/2004 1:36:51 PM
Type: Highlight
ACCEPT - DONE
4.13.1
After redundancy group add (see 3.1.xx)

Page: 18
Sequence number: 36
Date: 8/30/2004 10:39:11 AM
Type: Note
ACCEPT - DONE
4.13 Model for XOR
add definitions:
XOR-protected data: logical blocks ...
check data: logical blocks ...

Page: 18
Sequence number: 37
Date: 8/27/2004 2:25:41 PM
Type: Underline
ACCEPT - DONE
4.13.1
protected data s/b XOR-protected data

Page: 18
Sequence number: 38
Date: 8/27/2004 3:28:53 PM

Type: Strikeout
ACCEPT - DONE
4.13.1.1.1
Delete "The XOR functionality may be used when all of the devices are in the same domain, when
all devices are in separate domains, or any combination thereof, as long as the domains are accessible by the
storage array controller."
This was used to explain that SACL supervised XOR worked in all those environments, while third-party XOR did not work if the drives were in different domains. Since third-party XOR commands are obsolete, there is no need to mention this anymore.

Page: 18
Sequence number: 39
Date: 8/27/2004 3:59:41 PM
Type: Note
ACCEPT - DONE
Global esp 4.13
The XOR terminology is too close to the protection information terminology.
Change "protected data" to "XOR-protected data". Define in the glossary as containing logical blocks and including "user data and protection information, if any".
Keep "check data" as is.
Make sure all protection information references use "protection information" and not "protected information", "protected data", "data protection", etc.
Change "user data" to XOR-protected data where that is what is meant.

Page: 18
Sequence number: 40
Date: 8/27/2004 4:02:25 PM
Type: Highlight
ACCEPT - DONE
4.13.1
In this section define "data disk" as a direct-access block device containing XOR-protected data". This shorthand is necessary in many of the sequences that follow - a separate name is needed for devices containing check data and devices containing XOR-protected data, and those terms are already used in a few places.

Page: 18
Sequence number: 41
Date: 8/27/2004 4:11:27 PM
Type: Underline
ACCEPT - DONE
Change "Some areas within the address space of the storage array are used for check data. The check data is generated by performing a cumulative exclusive-or (XOR)
operation with the data from other areas within the address space of the storage array known as protected
data."
to "The type of object supported by this model is the redundancy group (see 3.1.38), where some of the logical blocks on the direct-access block devices are used for for XOR-protected data (see 3.1.47) and some of the logical blocks are used for check data (see 3.1.5). The check data is generated by performing a cumulative XOR (see 3.1.18) operation of the XOR-protected data. "

Page: 19
Sequence number: 22
Date: 8/27/2004 2:26:45 PM
Type: Underline
ACCEPT - DONE
4.13.1.1.2
protected user data s/b XOR-protected data

Page: 19
Sequence number: 23
Date: 8/27/2004 2:26:58 PM
Type: Underline
ACCEPT - DONE
4.13.1.1.2
protected user data s/b XOR-protected data.

Page: 19
Sequence number: 24
Date: 8/27/2004 2:27:02 PM
Type: Underline
ACCEPT - DONE
4.13.1.1.2
protected user data s/b XOR-protected data

Page: 19
Sequence number: 25
Date: 8/27/2004 2:28:08 PM
Type: Underline
ACCEPT - DONE
4.13.1.1.2
protected data s/b XOR-protected data

Page: 19
Sequence number: 26
Date: 8/27/2004 3:48:23 PM
Type: Strikeout
REVIEW
ACCEPT - DONE
4.13.1.1.3
Delete "including user data and protection information, if
any,"
Although true, it's a bit confusing to mention here.

Page: 19
Sequence number: 27
Date: 9/1/2004 10:22:28 AM
Type: Highlight
ACCEPT - DONE
user data s/b data

Page: 19
Sequence number: 28
Date: 9/1/2004 10:22:33 AM
Type: Highlight
ACCEPT - DONE
user data s/b data

Page: 20
Sequence number: 26
Date: 8/26/2004 1:05:36 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device throughout 4.13.1.2.3

Page: 20
Sequence number: 27
Date: 8/27/2004 2:29:16 PM
Type: Underline
ACCEPT - DONE
4.13.1.2.3
protected data s/b XOR-protected data

Page: 20
Sequence number: 28
Date: 8/27/2004 2:29:33 PM
Type: Underline
ACCEPT - DONE
4.13.1.2.3
protected data s/b XOR-protected data

Page: 20
Sequence number: 29
Date: 8/27/2004 4:20:16 PM
Type: Strikeout
ACCEPT - DONE
Delete "is a multi-initiator system and the storage array controller"
Multi-initiator handling should be the norm, not a special case, in modern SCSI discussion.

Page: 20
Sequence number: 30
Date: 8/27/2004 5:01:13 PM
Type: Note

ACCEPT - DONE
Move 4.13.1.3.1 contents into 4.13.1.2.3 since it's just one more paragraph about inconsistent stripes and since 4.13.1.3.2 is going away

Page: 20
Sequence number: 31
Date: 8/27/2004 5:04:25 PM
Type: Strikeout
REVIEW
ACCEPT - DONE
Delete "4.13.1.2.1 Additional array subsystem considerations overview
This subclause lists considerations that apply to any array subsystem, but describes how use of the XOR commands may affect handling of those situations."
which seems to say nothing useful.

Page: 21
Sequence number: 9
Date: 8/24/2004 7:07:35 PM
Type: Highlight
ACCEPT - DONE
target s/b device server

Page: 21
Sequence number: 11
Date: 9/2/2004 9:12:22 PM
Type: Underline
ACCEPT - DONE (whole section deleted)
Maxtor #19
PDF Page 21
Delete "directly" unless there are other errors to be defined that result "indirectly" from the primary command.

Page: 24
Sequence number: 4
Date: 8/24/2004 5:33:20 PM
Type: Note
ACCEPT - DONE
global:
change
"a sense key of ... and an additional sense code of..."
to
"the sense key set to...and the additional sense code set to..."

Page: 25
Sequence number: 6
Date: 8/24/2004 7:15:38 PM
Type: Note
ACCEPT - DONE
4.15.1 Protection information overview
Add an or to the e.g. list before recalculate[d]

Page: 25
Sequence number: 7
Date: 8/27/2004 2:30:47 PM
Type: Highlight
ACCEPT - DONE
4.15.1
This data protection model provides for protection of the data...
s/b
The protection information model provides for protection of user data...

Page: 26
Sequence number: 7
Date: 8/27/2004 2:31:52 PM
Type: Highlight
ACCEPT - DONE
4.15.3.1
data protection s/b protection information

Page: 26

Sequence number: 8
Date: 9/3/2004 9:21:37 AM
Type: Note
REVIEW
ACCEPT - DONE (converted to an a)b) list for commands that do not/do include the field, and included this in b): " These commands are only processed if the medium was formatted with application client ownership of the logical block reference tag (i.e., with the rto_req bit set to one in the FORMAT UNIT command (see 5.2))")
The logical block reference tag introduction needs to mention the RTO concept of the application client or the device server owning the reference tag.

Page: 26
Sequence number: 9
Date: 9/2/2004 6:57:33 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 26
Sequence number: 10
Date: 9/2/2004 6:57:39 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 27
Sequence number: 3
Date: 9/2/2004 5:25:24 PM
Type: Strikeout
REVIEW
ACCEPT - DONE
Delete "+ (xk × L(x))" from the Q(x) equation.
The CRC is not transmitted as inverted and the data is not prepending with leading 1s, so there is no L(x) involved in the math - this part of the equation is incorrect.

Page: 27
Sequence number: 4
Date: 9/2/2004 5:24:24 PM
Type: Highlight
ACCEPT - DONE
Change "of degree k-1 that is used to represent the k bits of"
to "representing"
The degree of the polynomial is not crucial to the standard. k is not needed without that.

Page: 27
Sequence number: 5
Date: 9/2/2004 5:24:51 PM
Type: Highlight
ACCEPT - DONE
Before "The sequence" add "A polynomial representing"

Page: 27
Sequence number: 6
Date: 9/2/2004 5:24:55 PM
Type: Highlight
ACCEPT - DONE
Before "The sequence" add "A polynomial representing"

Page: 27
Sequence number: 7
Date: 9/2/2004 6:36:33 PM
Type: Note
ACCEPT - DONE
Reword as:
"The equations that are used to generate the CRC from F(x) are as follows. All arithmetic is modulo 2.
The CRC is calculated by appending 16 zeros to F(x) and dividing by G(x) to obtain the remainder R(x) according to the following

equation:
...
R(x) is the CRC value, and is transmitted in the logical block guard field.
M(x) is the polynomial representing the user data field followed by the logical block guard field (i.e., F(x) followed by R(x)).
M(x) = x16 x F(x) + R(x)"

Page: 28
Sequence number: 4
Date: 9/14/2004 11:10:51 PM
Type: Square
ACCEPT - DONE (yes it is mathematically irrelevant with an expected zero remainder. Checking text all rewritten to clarify two popular means of checking - run F'(x) through the generator equation and compare to R'(x), or run M'(x) through a checker equation and compare to 0.)
Should "x16 ×" be deleted from the CRC checking equation?

Page: 28
Sequence number: 5
Date: 9/2/2004 6:37:11 PM
Type: Note
ACCEPT - DONE
Reword as:
M’(x) (i.e., the received user data field followed by the received logical block guard field) may differ from M(x) (i.e., the transmitted user data field followed by the transmitted logical block guard field) if there are transmission errors.
The receiver checks M’(x) validity by dividing M’(x) by G(x) and obtaining the remainder P(x) according to the following equation:
...
In the absence of errors, the remainder P(x) is zero.

Page: 29
Sequence number: 10
Date: 8/27/2004 2:15:22 PM
Type: Highlight
ACCEPT - DONE
protected data s/b protection information

Page: 29
Sequence number: 11
Date: 8/27/2004 2:15:46 PM
Type: Highlight
ACCEPT - DONE
protected data s/b logical blocks with protection information

Page: 29
Sequence number: 12
Date: 8/27/2004 2:16:09 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected data s/b protection information

Page: 29
Sequence number: 13
Date: 8/27/2004 2:16:25 PM
Type: Highlight
ACCEPT - DONE
protected data s/b protection information

Page: 29
Sequence number: 14
Date: 8/30/2004 10:38:56 AM
Type: Highlight
ACCEPT - DONE
protected information s/b protection information

Page: 29
Sequence number: 15
Date: 8/27/2004 2:17:24 PM
Type: Highlight
ACCEPT - DONE
4.15.4

protected information s/b protection information

Page: 29
Sequence number: 16
Date: 8/27/2004 2:17:30 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information s/b protection information

Page: 29
Sequence number: 17
Date: 8/27/2004 2:17:43 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information usage s/b protection information

Page: 29
Sequence number: 18
Date: 8/27/2004 2:17:47 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information s/b protection information

Page: 29
Sequence number: 19
Date: 8/27/2004 2:17:52 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information s/b protection information

Page: 29
Sequence number: 20
Date: 8/27/2004 2:17:56 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information s/b protection information

Page: 29
Sequence number: 21
Date: 8/27/2004 2:18:00 PM
Type: Highlight
ACCEPT - DONE
4.15.4
protected information s/b protection information

Page: 29
Sequence number: 22
Date: 8/27/2004 2:19:52 PM
Type: Highlight
ACCEPT - DONE
4.15.5
Protected data commands s/b Protection information and commands

Page: 29
Sequence number: 25
Date: 9/2/2004 8:08:05 PM
Type: Highlight
ACCEPT - DONE
Line 4) does not grammatically match the intro to the list "it shall: ... should be used."
Change line 4 to a standalone paragraph after the list, with "the application client may...the application client should" active tense.

Page: 29
Sequence number: 26
Date: 9/2/2004 8:10:04 PM

Type: Highlight
ACCEPT - DONE
"read commands" s/b "commands performing read operations"

Page: 29
Sequence number: 27
Date: 9/2/2004 8:10:13 PM
Type: Highlight
ACCEPT - DONE
"write commands" s/b "commands performing write operations"

Page: 30
Sequence number: 5
Date: 8/26/2004 12:49:24 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 30
Sequence number: 6
Date: 8/26/2004 12:49:30 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 30
Sequence number: 7
Date: 8/26/2004 12:49:36 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 30
Sequence number: 12
Date: 10/3/2004 7:27:16 PM
Type: Note
ACCEPT - DONE (Sep Cap WG voting log:
a) require all (even if not needed)
b) require none (read(16) and write(16) become optional)
c) leave weird half-requirement as is (read & write mandatory, all others optional)
d) if implement any, implement all (if read (16) is implemented, must implement all other (16)s that is implemented (e.g write(16) if any write is implemented)
Vote for one or more (one per company):
a=3
b=9
c=2
d=8
Runoff b) or d), one vote only:
b=4
d=6
After further consideration, the group voted for b) instead.)

Page: 30
Sequence number: 13
Date: 10/3/2004 7:27:16 PM
Type: Note
ACCEPT - DONE (final Sep CAP WG resolution of the mandatory/optional comments)
motion:
if read(16) is implemented, the device shall implement the long LBA versions of each other command that it implements (e.g. write (16) if any write is supported, lock unlock (16) if any lock unlock is supported, verify (16) if any verify is supported, etc.)
if read(16) is not implemented, the device shall not implement any long LBA versions.
George moved: amend the entire motion to just be option b): read(16) is O, write (16) is O, verify (16) is O, lock unlock (16) is O, etc.
vote to amend: 15-2-1
vote: 14-4-0

Page: 30
Sequence number: 14
Date: 10/3/2004 5:08:50 PM

Type: Note
ACCEPT - DONE
left-justify the command name column

Page: 31
Sequence number: 6
Date: 10/3/2004 7:27:16 PM
Type: Note
ACCEPT - DONE (per 04-288)
Motion: READ CAPACITY is mandatory if protection information is supported (as indicated by the PROTECT bit in standard INQUIRY data)
Vote: yes

Page: 31
Sequence number: 7
Date: 10/3/2004 7:27:16 PM
Type: Note
ACCEPT - DONE (per 04-288)
motion: mark REPORT LUNS as M
vote: 7-2-6

Page: 33
Sequence number: 7
Date: 8/26/2004 12:49:51 PM
Type: Note
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 33
Sequence number: 10
Date: 8/31/2004 9:41:48 PM
Type: Strikeout
ACCEPT - DONE
Delete "Notes:"

Page: 34
Sequence number: 3
Date: 8/30/2004 10:53:47 AM
Type: Highlight
ACCEPT - DONE
Table 10
Change "Obsolete (REBUILD (32))" to Reserved

Page: 34
Sequence number: 4
Date: 8/30/2004 10:53:51 AM
Type: Highlight
ACCEPT - DONE
Table 10
Change "Obsolete (REGENERATE (32))" to Reserved

Page: 34
Sequence number: 5
Date: 8/30/2004 10:53:57 AM
Type: Highlight
ACCEPT - DONE
Table 10
Change "Obsolete (XDWRITE EXTENDED (32))" to Reserved

Page: 34
Sequence number: 6
Date: 8/30/2004 10:54:03 AM
Type: Highlight
ACCEPT - DONE
Table 10
Change "Obsolete (XDWRITE EXTENDED (64))" to Reserved

Page: 34
Sequence number: 8

Date: 8/30/2004 9:37:56 PM
Type: Strikeout
ACCEPT - DONE
remove "for direct-access devices" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 34
Sequence number: 9
Date: 8/30/2004 9:38:04 PM
Type: Strikeout
ACCEPT - DONE
remove "for this standard" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 34
Sequence number: 10
Date: 8/30/2004 9:38:11 PM
Type: Strikeout
ACCEPT - DONE
remove "for this standard" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 34
Sequence number: 12
Date: 9/1/2004 9:23:25 AM
Type: Highlight
ACCEPT - DONE
defined in SPC-3
s/b (see SPC-3)

Page: 35
Sequence number: 7
Date: 8/30/2004 9:38:17 PM
Type: Strikeout
ACCEPT - DONE
remove "for this standard" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 35
Sequence number: 8
Date: 8/30/2004 9:38:20 PM
Type: Strikeout
ACCEPT - DONE
remove "for this standard" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 35
Sequence number: 9
Date: 9/1/2004 9:23:31 AM
Type: Highlight
ACCEPT - DONE
defined in SPC-3
s/b (see SPC-3)

Page: 36
Sequence number: 11
Date: 8/27/2004 1:01:09 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 36
Sequence number: 12
Date: 8/27/2004 1:01:30 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 37
Sequence number: 5
Date: 8/31/2004 9:42:05 PM
Type: Strikeout
ACCEPT - DONE
Delete "Notes:"

Page: 37
Sequence number: 6
Date: 8/31/2004 9:44:34 PM
Type: Square
ACCEPT - DONE
Delete these words
"notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes
notes" since they're really footnotes, not notes.

Page: 38
Sequence number: 6
Date: 9/2/2004 8:34:11 PM
Type: Highlight
ACCEPT - DONE
"formatting operation." s/b "format operation"

Page: 40
Sequence number: 5
Date: 8/25/2004 2:45:04 PM
Type: Highlight
ACCEPT - DONE
follow s/b follows

Page: 41
Sequence number: 2
Date: 8/25/2004 4:28:20 PM
Type: Highlight
ACCEPT - DONE
move "(see table 19)" after "field"

Page: 42
Sequence number: 5
Date: 10/3/2004 4:46:47 PM
Type: Highlight
ACCEPT - DONE
Move "The pattern is modified by the IP MODIFIER field." from the INITIALIZATION PATTERN LENGTH paragraph into the INITIALIZATION PATTERN paragraph

Page: 44
Sequence number: 5
Date: 8/31/2004 6:57:47 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 44
Sequence number: 6
Date: 8/31/2004 6:57:50 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 44
Sequence number: 7

Date: 8/31/2004 6:57:55 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 13
Date: 10/3/2004 3:41:37 PM
Type: Note
REJECT (moot as the command is voted obsolete.)
Ralph wants to change "initiator port" to "I_T nexus" in the LOCK UNLOCK CACHE command:
"Multiple locks may be in effect from more than one initiator port. Locks from different initiator ports may overlap. An unlock of an overlapped area does not release the lock of another initiator port.
We discussed that paragraph in the January editing meeting and changed "application client" to the current "initiator port". (SCSI-2 used "initiator").
Are the cache locks really I_T scoped? Would a dual-ported drive mark the lock differently based on which port it came in on? Or, is the intent that the locks do not keep track of which initiator port or I_T nexus established them, and the wording is just a sloppy way of saying that if one or more application clients set up overlapping lock regions, clearing out one lock region has no effect on the others? e.g. if LOCK UNLOCK CACHE is sent locking LBA 0 to 1024, then LOCK UNLOCK CACHE is sent locking 512 to 768, then LOCK UNLOCK CACHE is sent unlocking 0 to 1024, then 512 to 768 remains locked.
That seems like the most likely implementation to me. I have trouble imagining a cache manager remembering I_T nexus or initiator port identities in the cache.

Page: 45
Sequence number: 15
Date: 8/31/2004 6:58:02 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 16
Date: 8/31/2004 6:58:09 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 17
Date: 8/31/2004 6:58:17 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 18
Date: 8/31/2004 6:58:23 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 19
Date: 8/31/2004 6:58:31 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 20
Date: 8/31/2004 6:58:34 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 45
Sequence number: 22
Date: 10/3/2004 3:40:21 PM
Type: Note

ACCEPT - DONE (04-288 CAP WG agreed)
Seagate letter ballot comment to obsolete Lock Unlock Cache commands

Page: 46
Sequence number: 5
Date: 10/6/2004 7:42:41 PM
Type: Highlight
REJECT
after medium add "(i.e., the size of the extent (see 3.1.19))"

Page: 46
Sequence number: 8
Date: 8/31/2004 6:58:47 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 9
Date: 8/31/2004 6:58:52 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 10
Date: 8/31/2004 6:58:58 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 11
Date: 8/31/2004 6:59:04 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 12
Date: 8/31/2004 6:59:12 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 13
Date: 8/31/2004 6:59:17 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 14
Date: 8/31/2004 6:59:24 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 15
Date: 8/31/2004 6:59:29 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 46
Sequence number: 16
Date: 8/31/2004 6:59:35 PM

Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 3
Date: 8/26/2004 9:09:20 AM
Type: Highlight
ACCEPT - DONE
To match other sections like WRITE (6), change ",including user data but not including protection information,"
to a standalone sentence:
Data includes user data but does not include protection information.

Page: 47
Sequence number: 4
Date: 8/31/2004 6:59:43 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 5
Date: 8/31/2004 6:59:48 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 6
Date: 8/31/2004 6:59:53 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 7
Date: 8/31/2004 6:59:57 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 8
Date: 8/31/2004 7:00:02 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 9
Date: 8/31/2004 7:00:07 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 47
Sequence number: 10
Date: 8/31/2004 7:00:12 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 48
Sequence number: 4
Date: 8/26/2004 1:06:39 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 48
Sequence number: 5
Date: 10/6/2004 7:42:50 PM
Type: Highlight
REJECT
after
transferred
add " (i.e., the size of the extent (see 3.1.19))")

Page: 48
Sequence number: 6
Date: 8/30/2004 9:43:15 AM
Type: Highlight
ACCEPT - DONE
change "to be" to "that shall be"

Page: 48
Sequence number: 8
Date: 8/31/2004 7:00:18 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 50
Sequence number: 4
Date: 8/26/2004 3:09:42 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the rdprotect field and the medium format."

Page: 50
Sequence number: 6
Date: 10/3/2004 4:34:01 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 51
Sequence number: 2
Date: 8/25/2004 6:05:19 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 51
Sequence number: 3
Date: 8/25/2004 6:05:22 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 51
Sequence number: 4
Date: 8/25/2004 6:05:29 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 51
Sequence number: 5
Date: 9/3/2004 9:40:41 AM
Type: Highlight

REVIEW
ACCEPT - DONE
rdprotect 001b/ref tag/REF_CHK = 1
should refer to note j about the rto_en bit

Page: 51
Sequence number: 6
Date: 9/3/2004 9:40:48 AM
Type: Highlight
REVIEW
ACCEPT - DONE
rdprotect 010b/ref tag/REF_CHK = 1
should refer to note j about the rto_en bit

Page: 52
Sequence number: 12
Date: 8/25/2004 6:05:34 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 52
Sequence number: 13
Date: 8/25/2004 6:05:37 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 33 mean that the page shall not be supported?

Page: 53
Sequence number: 14
Date: 10/6/2004 7:42:57 PM
Type: Highlight
REJECT
after "transferred"
add "(i.e., the size of the extent)"

Page: 53
Sequence number: 15
Date: 8/31/2004 8:48:52 AM
Type: Highlight
ACCEPT - DONE
nonvolatile s/b non-volatile

Page: 53
Sequence number: 16
Date: 8/31/2004 7:00:25 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 53
Sequence number: 17
Date: 8/31/2004 7:00:30 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 53
Sequence number: 18
Date: 8/31/2004 7:00:35 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 53

Sequence number: 19
Date: 8/31/2004 7:00:40 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 53
Sequence number: 20
Date: 9/2/2004 8:18:21 PM
Type: Highlight
ACCEPT - DONE
reads s/b read operations

Page: 54
Sequence number: 5
Date: 8/26/2004 3:20:50 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the rdprotect field and the medium format."

Page: 54
Sequence number: 6
Date: 8/26/2004 3:20:57 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the rdprotect field and the medium format."

Page: 55
Sequence number: 11
Date: 8/26/2004 5:53:03 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 55
Sequence number: 12
Date: 8/26/2004 5:53:06 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 55
Sequence number: 13
Date: 8/26/2004 6:02:44 PM
Type: Highlight
ACCEPT - DONE
Change "TAG in" to "TAG field in"

Page: 55
Sequence number: 14
Date: 8/27/2004 12:29:08 PM
Type: Note
ACCEPT - DONE
add Byte 11 Reserved

Page: 55
Sequence number: 15
Date: 10/6/2004 7:44:00 PM
Type: Highlight
REJECT
range of logical blocks for this command
s/b extent

Page: 55
Sequence number: 16
Date: 8/31/2004 9:32:34 PM
Type: Note

ACCEPT - DONE
move RTO_EN paragraph above table, since it doesn't apply to each size command the same

Page: 55
Sequence number: 17
Date: 8/30/2004 9:16:54 AM
Type: Strikeout
ACCEPT - DONE
Delete "See the READ (10) command (see 5.10) for a definition
description of the RDPROTECT field checking enables and requirements."
The rdprotect reference is already given in the paragraph below the table.

Page: 55
Sequence number: 20
Date: 9/2/2004 6:57:59 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 55
Sequence number: 21
Date: 9/2/2004 6:58:05 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 55
Sequence number: 22
Date: 10/3/2004 7:27:16 PM
Type: Note
REJECT (these were just notes of possibilities discussed in the CAP WG)
If allowed...
for read:
a) ignore the initial reftag field (just compare to LBA if RDPROTECT says so)
b) require the initial reftag field = LBA (extra check by the device server not documented now)
for write (same):
a) ignore the initial reftag field
b) require the initial reftag field = LBA

Page: 56
Sequence number: 3
Date: 8/26/2004 1:07:26 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 56
Sequence number: 4
Date: 8/26/2004 1:07:57 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 56
Sequence number: 5
Date: 8/30/2004 6:05:51 PM
Type: Highlight
ACCEPT - DONE
shall be zero
s/b
shall be set to zero

Page: 57
Sequence number: 4
Date: 8/26/2004 1:08:32 PM

Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 57
Sequence number: 5
Date: 8/26/2004 1:08:37 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 57
Sequence number: 6
Date: 9/1/2004 9:24:14 AM
Type: Highlight
ACCEPT - DONE
after "SERVICE ACTION IN operation code"
add "(see A.2)" (the new location of the section summarizing the service action code assignments)

Page: 57
Sequence number: 7
Date: 9/1/2004 3:31:29 PM
Type: Underline
ACCEPT - DONE
may be specified
s/b exceeds the maximum value that is able to be specified in the ...
to match page 60

Page: 60
Sequence number: 11
Date: 9/1/2004 3:30:01 PM
Type: Underline
ACCEPT - DONE
exceeds the capability...
s/b exceed the maximum value that is able to be specified in the allocation length field

Page: 61
Sequence number: 4
Date: 10/6/2004 7:44:25 PM
Type: Highlight
REJECT
After "client."
add "(i.e., the size of the extent (see 3.1.19) is one logical block)"

Page: 61
Sequence number: 5
Date: 8/30/2004 3:08:34 PM
Type: Highlight
ACCEPT - DONE
5.18
"ECC code" s/b "ECC" since the last C means code

Page: 61
Sequence number: 6
Date: 8/30/2004 3:11:20 PM
Type: Highlight
ACCEPT - DONE
5.18
additional bytes s/b additional information

Page: 62
Sequence number: 9
Date: 8/24/2004 5:52:52 PM
Type: Highlight
ACCEPT - DONE
set s/b returned

Page: 62
Sequence number: 10

Date: 9/15/2004 8:16:20 AM
Type: Note
REJECT (the app client thinks they're defective, and after running the command they cannot be retrieved without a FORMAT UNIT. Leave terminology as is)
they aren't necessarily defective, just allegedly so. Compare to other "defective" terminology to see if this should be improved.

Page: 62
Sequence number: 11
Date: 8/27/2004 1:02:10 PM
Type: Highlight
ACCEPT - DONE
change "application client data-in buffer" to "data-in buffer"

Page: 62
Sequence number: 12
Date: 10/6/2004 7:44:35 PM
Type: Highlight
REJECT
client.
add "(i.e., the size of the extent (see 3.1.19) is one logical block)"

Page: 62
Sequence number: 13
Date: 9/1/2004 9:24:24 AM
Type: Highlight
ACCEPT - DONE
after "SERVICE ACTION IN operation code"
add "(see A.2)" (the new location of the section summarizing the service action code assignments)

Page: 64
Sequence number: 11
Date: 8/24/2004 5:53:47 PM
Type: Highlight
ACCEPT - DONE
sense information s/b sense data

Page: 64
Sequence number: 12
Date: 8/24/2004 5:54:41 PM
Type: Highlight
ACCEPT - DONE
status shall be returned s/b device server shall return status

Page: 64
Sequence number: 13
Date: 8/24/2004 5:54:45 PM
Type: Highlight
ACCEPT - DONE
status shall be returned s/b device server shall return status

Page: 64
Sequence number: 14
Date: 8/25/2004 7:08:34 PM
Type: Strikeout
ACCEPT - DONE
remove "in the address descriptors,"

Page: 64
Sequence number: 15
Date: 8/26/2004 1:08:43 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 64
Sequence number: 16
Date: 8/26/2004 1:08:48 PM
Type: Highlight
ACCEPT - DONE

Change block device to direct-access block device

Page: 64
Sequence number: 17
Date: 8/26/2004 1:09:23 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 64
Sequence number: 18
Date: 8/31/2004 7:00:47 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 65
Sequence number: 18
Date: 8/25/2004 7:22:45 PM
Type: Highlight
ACCEPT - DONE
POWER CONDITIONS s/b POWER CONDITION

Page: 65
Sequence number: 19
Date: 8/25/2004 7:23:14 PM
Type: Highlight
ACCEPT - DONE
POWER CONDITIONS s/b POWER CONDITION

Page: 65
Sequence number: 20
Date: 8/25/2004 7:23:33 PM
Type: Highlight
ACCEPT - DONE
POWER CONDITIONS s/b POWER CONDITION

Page: 65
Sequence number: 21
Date: 8/25/2004 7:23:38 PM
Type: Highlight
ACCEPT - DONE
POWER CONDITIONS s/b POWER CONDITION

Page: 65
Sequence number: 22
Date: 8/25/2004 7:40:38 PM
Type: Highlight
ACCEPT - DONE
the s/b a

Page: 66
Sequence number: 13
Date: 8/26/2004 9:15:12 AM
Type: Strikeout
ACCEPT - DONE
Delete "The synchronize cache function is also required implicitly by other SCSI functions as defined in other clauses of this standard." (same comment in SYNCHRONIZE CACHE (16))
A reader of the SYNCHRONIZE CACHE command probably doesn't care about the behavior of other commands, especially if they are not specifically referenced.
Instead, add statements in VERIFY and WRITE AND VERIFY that as part of their behavior that they act as if they are performing SYNCHRONIZE CACHE commands (with matching LBA/length arguments).

Page: 66
Sequence number: 14
Date: 8/31/2004 7:00:52 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 66
Sequence number: 15
Date: 8/31/2004 7:00:58 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 67
Sequence number: 12
Date: 8/26/2004 8:49:12 AM
Type: Note
REVIEW
ACCEPT - DONE
add this below the figure (so VERIFY (12)/(16)/(32) don't have to copy it):
Logical units that contain cache memory shall write referenced cached data to the medium for the logical unit (e.g., as they would do in response to a SYNCHRONIZE CACHE command (see 5.22) with the sync_nv bit set to zero, the logical block address field set to the value of the VERIFY command's logical block address field, and the number of blocks field set to the value of the VERIFY command's verification length field).

Page: 67
Sequence number: 13
Date: 8/26/2004 9:14:58 AM
Type: Strikeout
ACCEPT - DONE
Delete "The synchronize cache function is also required implicitly by other SCSI functions as defined in other clauses of this standard." (same comment in SYNCHRONIZE CACHE (10))
A reader of the SYNCHRONIZE CACHE command probably doesn't care about the behavior of other commands, especially if they are not specifically referenced.
Instead, add statements in VERIFY and WRITE AND VERIFY that as part of their behavior that they act as if they are performing SYNCHRONIZE CACHE commands (with matching LBA/length arguments).

Page: 67
Sequence number: 14
Date: 8/26/2004 3:21:30 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the vrprotect field and the medium format."

Page: 67
Sequence number: 15
Date: 8/30/2004 9:29:37 AM
Type: Highlight
ACCEPT - DONE
remaining logical blocks
s/b
from the one specified in the logical block address field to the last logical block on the medium.

Page: 67
Sequence number: 17
Date: 8/31/2004 7:01:05 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 67
Sequence number: 18
Date: 8/31/2004 7:01:11 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 67
Sequence number: 19
Date: 8/31/2004 7:01:45 PM
Type: Strikeout
ACCEPT - DONE
Delete meory

(changing all cache memory to cache)

Page: 68
Sequence number: 9
Date: 8/27/2004 1:02:34 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 68
Sequence number: 10
Date: 8/27/2004 1:02:40 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 68
Sequence number: 11
Date: 8/27/2004 1:04:30 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 68
Sequence number: 12
Date: 8/27/2004 1:04:39 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 68
Sequence number: 13
Date: 10/6/2004 7:45:25 PM
Type: Highlight
REJECT
after
verified
add
" (i.e., the size of the extent (see 3.1.19))"

Page: 69
Sequence number: 4
Date: 10/3/2004 4:34:44 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 70
Sequence number: 1
Date: 8/25/2004 6:06:12 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 70
Sequence number: 2
Date: 8/25/2004 6:06:15 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 70
Sequence number: 3

Date: 8/25/2004 6:06:18 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 71
Sequence number: 7
Date: 8/25/2004 6:06:23 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 71
Sequence number: 8
Date: 8/25/2004 6:06:26 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 72
Sequence number: 7
Date: 8/25/2004 6:06:34 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 72
Sequence number: 8
Date: 8/25/2004 6:06:37 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 72
Sequence number: 9
Date: 8/25/2004 6:06:39 PM
Type: Highlight
ACCEPT - DONE (this mixes terminology from other protection information tables that have a "Device server check" column in a similar position. For tables with the VPD bit values, I will merge the "Shall not" and "No check performed" cells into one cell that says only "No check performed.")
<<Shall not>> Does 'Shall not' in the Extended INQUIRY VPD page column of table 58 and table 59 mean that the page shall not be supported?

Page: 72
Sequence number: 10
Date: 10/3/2004 4:34:52 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 73
Sequence number: 1
Date: 8/27/2004 1:04:45 PM
Type: Highlight

ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 73
Sequence number: 2
Date: 8/30/2004 11:17:20 AM
Type: Highlight
ACCEPT - DONE (with same wording from the modified note h in the previous tables: "If the rto_en bit is set to zero in the long read capacity data (see 5.13)(i.e., the command is a VERIFY (10) command, a VERIFY (12) command, or a VERIFY (16) command), the device server shall check the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a VERIFY (32) command), the device server shall check the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2).")
(from Jim Coomes)
In review of your issues with George it was realized that Table 60 checking protection information from the application client is related to a Write type operation. To clarify the checking of the Ref Tag field, the same note as my comment on Table 68 WRPROTECT :
"If the RTO_EN bit is set to zero in the long read capacity data (see 5.15), the device server checks the logical block reference tag with the lower 4 bytes of the LBA associated with the logical block. If the RTO_EN bit is set to one, the device server checks the logical block reference tag only if it has knowledge of the contents of the LOGICAL BLOCK REFERENCE TAG field. This knowledge may be obtained by use of the Write (32) command (see 5.32)."
should be added to VRPROTECT 001b and 010b Ref Tag Check (by the Shall and May).

Page: 73
Sequence number: 3
Date: 8/30/2004 11:17:12 AM
Type: Highlight
ACCEPT - DONE
Table 60 - checking pi from app client
May needs a footnote (see shall comment on 001b case)

Page: 73
Sequence number: 4
Date: 10/3/2004 4:34:57 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 75
Sequence number: 1
Date: 8/27/2004 1:04:51 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 75
Sequence number: 2
Date: 10/3/2004 4:35:03 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 76
Sequence number: 6
Date: 8/26/2004 3:21:46 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the vrprotect field and the medium format."

Page: 77
Sequence number: 10
Date: 8/26/2004 3:21:40 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the vrprotect field and the medium format."

Page: 78
Sequence number: 11

Date: 8/26/2004 3:21:53 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any." to
"may include protection information, as specified by the vrprotect field and the medium format."

Page: 78
Sequence number: 12
Date: 8/26/2004 5:53:13 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 78
Sequence number: 13
Date: 8/26/2004 5:53:17 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 78
Sequence number: 14
Date: 8/26/2004 6:02:03 PM
Type: Highlight
ACCEPT - DONE
Change "TAG in" to "TAG field in"

Page: 78
Sequence number: 15
Date: 8/27/2004 12:29:16 PM
Type: Note
ACCEPT - DONE
add Byte 11 Reserved

Page: 78
Sequence number: 16
Date: 8/30/2004 9:18:20 AM
Type: Strikeout
ACCEPT - DONE
Delete "See the VERIFY (10) command (see 5.24) for a definition
description of the VRPROTECT field checking enables and requirements."
The vrprotect reference is already given in the paragraph below the table.

Page: 78
Sequence number: 17
Date: 10/6/2004 7:46:16 PM
Type: Highlight
REJECT
range of logical blocks for this command.
s/b extent

Page: 78
Sequence number: 18
Date: 9/2/2004 6:58:14 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 78
Sequence number: 19
Date: 9/2/2004 6:58:38 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 78
Sequence number: 20
Date: 10/3/2004 7:16:17 PM
Type: Note
ACCEPT - DONE
change to "If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is enabled (see table 64 in 5.27), the logical block application tag mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask bit set to one enables the checking of the corresponding bit of the expected logical block application tag field with the corresponding bit of the logical block application tag field in the protection information.
If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is disabled (see table xx in 5.yy), or if the ato bit is set to zero, the logical block application tag mask field and the expected logical block application tag field shall be ignored." to match Sun READ (32) comment

Page: 78
Sequence number: 21
Date: 10/6/2004 7:51:43 PM
Type: Highlight
ACCEPT - DONE
VERIFY (32)
"transfer data to the application
client from the medium." s/b "verify data"

Page: 79
Sequence number: 8
Date: 8/26/2004 8:59:52 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 79
Sequence number: 9
Date: 8/26/2004 1:09:30 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 79
Sequence number: 10
Date: 10/6/2004 7:46:43 PM
Type: Highlight
REJECT
After "transferred."
add
" (i.e., the size of the extent (see 3.1.19))"

Page: 79
Sequence number: 11
Date: 8/31/2004 7:01:58 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 80
Sequence number: 11
Date: 8/26/2004 9:01:10 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 80
Sequence number: 12
Date: 8/26/2004 3:23:03 PM
Type: Highlight
ACCEPT - DONE
Change:
"and includes
protection information as required by the WRPROTECT field and the medium format."
to

"and may include protection information, as specified by the wrprotect field and the medium format."

Page: 80
Sequence number: 13
Date: 10/6/2004 7:46:50 PM
Type: Highlight
REJECT
After
"transferred."
add
" (i.e., the size of the extent (see 3.1.19))"

Page: 80
Sequence number: 14
Date: 8/31/2004 7:02:04 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 80
Sequence number: 15
Date: 9/2/2004 8:18:09 PM
Type: Highlight
ACCEPT - DONE
writes s/b write operations

Page: 81
Sequence number: 5
Date: 8/27/2004 1:04:59 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 81
Sequence number: 8
Date: 10/3/2004 7:27:16 PM
Type: Note
ACCEPT - DONE (from Sep CAP WG)
motion: in wrprotect 001b, change "shall not " to "may (note c)" for the application tag, and do the same for vrprotect 001b
"checking data from the application tag"
This allows checking if the device server has knowledge of the contents (via means outside the scope of the standard or via WRITE (32))

Page: 81
Sequence number: 9
Date: 10/3/2004 4:35:11 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 83
Sequence number: 7
Date: 8/26/2004 9:01:40 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 83
Sequence number: 8
Date: 8/26/2004 9:01:48 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 83
Sequence number: 9
Date: 8/26/2004 3:23:18 PM
Type: Highlight
ACCEPT - DONE

Change:
"and includes
protection information as required by the WRPROTECT field and the medium format."
to
"and may include protection information, as specified by the wrprotect field and the medium format."

Page: 83
Sequence number: 10
Date: 8/26/2004 3:23:36 PM
Type: Highlight
ACCEPT - DONE
Change:
"and includes
protection information as required by the WRPROTECT field and the medium format."
to
"and may include protection information, as specified by the wrprotect field and the medium format."

Page: 84
Sequence number: 11
Date: 8/26/2004 3:23:57 PM
Type: Highlight
ACCEPT - DONE
Change:
"protection information, if any."
to
"and may include protection information, as specified by the wrprotect field and the medium format."

Page: 84
Sequence number: 12
Date: 8/26/2004 4:47:00 PM
Type: Square
ACCEPT - DONE
Move the RTO_EN paragraph above the table to parallel VERIFY and others

Page: 84
Sequence number: 13
Date: 8/26/2004 5:53:27 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 84
Sequence number: 14
Date: 8/26/2004 5:53:31 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 84
Sequence number: 15
Date: 8/26/2004 6:02:12 PM
Type: Highlight
ACCEPT - DONE
Change "TAG in" to "TAG field in"

Page: 84
Sequence number: 16
Date: 8/27/2004 12:29:20 PM
Type: Note
ACCEPT - DONE
add Byte 11 Reserved

Page: 84
Sequence number: 17
Date: 8/30/2004 9:18:48 AM
Type: Strikeout
ACCEPT - DONE
Delete "See the WRITE (10) command (see 5.29) for a definition description of the WRPROTECT field checking enables and requirements."

The wrprotect reference is already given in the paragraph below the table.

Page: 84
Sequence number: 20
Date: 9/2/2004 6:56:35 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 84
Sequence number: 21
Date: 9/2/2004 6:56:51 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 85
Sequence number: 11
Date: 8/26/2004 9:02:09 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 85
Sequence number: 12
Date: 8/26/2004 9:02:32 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 86
Sequence number: 9
Date: 8/24/2004 4:53:48 PM
Type: Highlight
ACCEPT - DONE
bits s/b fields

Page: 86
Sequence number: 10
Date: 8/26/2004 9:02:53 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 87
Sequence number: 13
Date: 8/26/2004 3:25:34 PM
Type: Highlight
ACCEPT - DONE
Change "protection information, if any"
to
"and may include protection information, as specified by the wrprotect field and the medium format."

Page: 87
Sequence number: 14
Date: 8/26/2004 5:53:37 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 87
Sequence number: 15
Date: 8/26/2004 5:53:40 PM
Type: Highlight
ACCEPT - DONE

Change "TAG is enabled" to "TAG field is enabled"

Page: 87
Sequence number: 16
Date: 8/26/2004 6:02:18 PM
Type: Highlight
ACCEPT - DONE
Change "TAG in" to "TAG field in"

Page: 87
Sequence number: 17
Date: 8/27/2004 12:29:23 PM
Type: Note
ACCEPT - DONE
add Byte 11 Reserved

Page: 87
Sequence number: 18
Date: 8/30/2004 9:20:56 AM
Type: Strikeout
ACCEPT - DONE
Delete "See the WRITE AND VERIFY (10) command (see 5.33) for a definition description of the WRPROTECT field checking enables and requirements."
The wrprotect reference is already given in the paragraph below the table.

Page: 87
Sequence number: 20
Date: 9/2/2004 6:57:04 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 87
Sequence number: 21
Date: 9/2/2004 6:57:11 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 87
Sequence number: 22
Date: 10/6/2004 7:48:09 PM
Type: Note
ACCEPT - DONE
change to "If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is enabled (see table xx in 5.yy), the logical block application tag mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block. A logical block application tag mask bit set to one enables the checking of the corresponding bit of the expected logical block application tag field with the corresponding bit of the logical block application tag field in the protection information.
If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is disabled (see table xx in 5.yy), or if the ato bit is set to zero, the logical block application tag mask field and the expected logical block application tag field shall be ignored." to match Sun READ (32) and WRITE (32) comments

Page: 87
Sequence number: 23
Date: 10/6/2004 7:51:17 PM
Type: Highlight
ACCEPT - DONE
WRITE AND VERIFY (32)
"to the application client from the medium." s/b from the app client to the medium

Page: 88
Sequence number: 6
Date: 10/6/2004 7:48:34 PM
Type: Highlight

REJECT
After "medium."
add "(i.e., the size of the extent (see 3.1.19) is one logical block)"

Page: 88
Sequence number: 7
Date: 10/3/2004 6:36:41 PM
Type: Note
ACCEPT - DONE
Add wording from force unit access for write operations:
"The device server shall write the logical block to the medium, and shall not return GOOD status until the logical block has actually been written on the medium."

Page: 89
Sequence number: 7
Date: 8/26/2004 9:03:23 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 89
Sequence number: 8
Date: 10/6/2004 7:48:44 PM
Type: Highlight
REJECT
after medium.
add " (i.e., the size of the extent is one logical block)"

Page: 89
Sequence number: 10
Date: 9/1/2004 9:24:37 AM
Type: Highlight
ACCEPT - DONE
after "SERVICE ACTION IN operation code"
add "(see A.2)" (the new location of the section summarizing the service action code assignments)

Page: 90
Sequence number: 8
Date: 8/26/2004 3:41:49 PM
Type: Highlight
ACCEPT - DONE
Change
"from the application client"
to
"in the single block of data from the application client"

Page: 90
Sequence number: 9
Date: 8/26/2004 3:42:08 PM
Type: Highlight
ACCEPT - DONE
Change
"in the single block of data"
to
"in the single block of data from the application client"

Page: 90
Sequence number: 10
Date: 8/26/2004 4:02:51 PM
Type: Highlight
REVIEW
ACCEPT - DONE
Regarding "If the ATO bit is set to zero, the logical block application tag received in the single block of data may be placed in the LOGICAL BLOCK APPLICATION TAG field of each logical block."
This is just one of many options it has. If ATO is zero (device server owned), then it is allowed to write any value. Mentioning this one specific possible value is misleading and incomplete.
Change to:
If the ATO bit is set to zero, the device server may write
any value into the LOGICAL BLOCK APPLICATION TAG field of each logical block.

Page: 90
Sequence number: 11
Date: 8/27/2004 1:05:06 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 90
Sequence number: 12
Date: 8/27/2004 1:05:14 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 90
Sequence number: 13
Date: 8/27/2004 1:05:27 PM
Type: Underline
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 90
Sequence number: 14
Date: 10/6/2004 7:48:53 PM
Type: Highlight
REJECT
After "written."
add " (i.e., the size of the extent (see 3.1.19))"

Page: 92
Sequence number: 13
Date: 8/30/2004 9:21:37 AM
Type: Strikeout
ACCEPT - DONE (but sentence deleted)
delete description

Page: 92
Sequence number: 14
Date: 8/26/2004 5:53:46 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 92
Sequence number: 15
Date: 8/26/2004 5:53:49 PM
Type: Highlight
ACCEPT - DONE
Change "TAG is enabled" to "TAG field is enabled"

Page: 92
Sequence number: 16
Date: 8/26/2004 6:02:24 PM
Type: Highlight
ACCEPT - DONE
Change "TAG in" to "TAG field in"

Page: 92
Sequence number: 17
Date: 8/27/2004 12:29:27 PM
Type: Note
ACCEPT - DONE
add Byte 11 Reserved

Page: 92
Sequence number: 18
Date: 8/30/2004 9:22:08 AM
Type: Strikeout

ACCEPT - DONE
Delete "See the WRITE SAME (10) command (see 5.39) for a
definition description of the WRPROTECT field checking enables and requirements."
The wrprotect reference is already given in the paragraph below the table.

Page: 92
Sequence number: 20
Date: 9/2/2004 6:57:18 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 92
Sequence number: 21
Date: 9/2/2004 6:57:22 PM
Type: Highlight
ACCEPT - DONE
INITIAL LOGICAL BLOCK REFERENCE TAG
s/b <<EXPECTED>> INITIAL LOGICAL BLOCK REFERENCE TAG
to avoid confusion that it might be given the device server a value to write, rather than giving it a value to compare against

Page: 92
Sequence number: 22
Date: 10/6/2004 7:49:18 PM
Type: Note
ACCEPT - DONE
change to "If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is enabled (see table xx in 5.yy), the logical block application tag mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block. A logical block application tag mask bit set to one enables the checking of the corresponding bit of the expected logical block application tag field with the corresponding bit of the logical block application tag field in the protection information.
If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is disabled (see table xx in 5.yy), or if the ato bit is set to zero, the logical block application tag mask field and the expected logical block application tag field shall be ignored." to match Sun READ (32) and WRITE (32) comments

Page: 92
Sequence number: 23
Date: 10/6/2004 7:50:53 PM
Type: Highlight
ACCEPT - DONE
WRITE SAME (32)
"to the application client from the medium."
s/b from the app client to the medium

Page: 93
Sequence number: 13
Date: 8/26/2004 9:04:14 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the device server"

Page: 94
Sequence number: 9
Date: 8/24/2004 7:01:44 PM
Type: Highlight
ACCEPT - DONE
is s/b shall be

Page: 94
Sequence number: 10
Date: 8/26/2004 9:04:22 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the device server"

Page: 94
Sequence number: 11

Date: 8/26/2004 9:04:55 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 94
Sequence number: 13
Date: 10/5/2004 6:42:26 PM
Type: Underline
ACCEPT - DONE
In XDWRITE(10)
Replace "The resulting
XOR data is stored by the target until it is retrieved by an XDREAD (10) command."
with a pointer to 4.14.4, since there are other reasons it is not retained.

Page: 95
Sequence number: 10
Date: 8/24/2004 7:02:26 PM
Type: Highlight
ACCEPT - DONE
is s/b shall be

Page: 95
Sequence number: 11
Date: 8/26/2004 9:05:23 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the application client"

Page: 95
Sequence number: 12
Date: 10/6/2004 7:49:26 PM
Type: Highlight
REJECT
After "medium."
add " (i.e., the size of the extent (see 3.1.19))"

Page: 95
Sequence number: 14
Date: 8/30/2004 6:03:33 PM
Type: Note
ACCEPT - DONE
Table 84
fix line between rows 5 and 6

Page: 95
Sequence number: 15
Date: 10/5/2004 6:42:42 PM
Type: Underline
ACCEPT - DONE
In XDWRITE(32)
Replace "The resulting
XOR data is stored by the target until it is retrieved by an XDREAD (32) command."
with a pointer to 4.14.4, since there are other reasons it is not retained.

Page: 96
Sequence number: 6
Date: 8/26/2004 9:06:03 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred to and from the application client"

Page: 97
Sequence number: 6
Date: 8/26/2004 9:06:32 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred to and from the application client"

Page: 98
Sequence number: 6
Date: 8/26/2004 9:07:03 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred
from the device server"

Page: 99
Sequence number: 13
Date: 8/26/2004 9:07:25 AM
Type: Strikeout
ACCEPT - DONE
Delete "transferred from the device server"

Page: 99
Sequence number: 14
Date: 10/6/2004 7:49:51 PM
Type: Highlight
REJECT
After "medium."
add " (i.e., the size of the extent (see 3.1.19))"
and join these two sentences

Page: 99
Sequence number: 16
Date: 10/5/2004 6:41:32 PM
Type: Note
ACCEPT - DONE
In XPWRITE, just point to the common location for the definition of the LOGICAL BLOCK ADDRESS field.

Page: 101
Sequence number: 4
Date: 8/24/2004 4:25:52 PM
Type: Highlight
ACCEPT - DONE
after SEND DIAGNOSTIC add command

Page: 101
Sequence number: 5
Date: 8/26/2004 12:50:30 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 101
Sequence number: 6
Date: 8/26/2004 12:50:37 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 101
Sequence number: 7
Date: 8/30/2004 9:37:02 PM
Type: Strikeout
ACCEPT - DONE
remove "for this standard" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 102
Sequence number: 3
Date: 8/24/2004 4:25:13 PM
Type: Highlight
ACCEPT - DONE
after SEND DIAGNOSTIC add command

Page: 102
Sequence number: 4
Date: 8/24/2004 4:25:25 PM

Type: Highlight
ACCEPT - DONE
after RECEIVE DIAGNOSTIC
RESULTS add command

Page: 104
Sequence number: 2
Date: 8/26/2004 12:50:43 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 104
Sequence number: 3
Date: 8/26/2004 12:50:46 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device.

Page: 104
Sequence number: 4
Date: 8/26/2004 1:10:32 PM
Type: Highlight
ACCEPT - DONE
Change block device to direct-access block device

Page: 105
Sequence number: 15
Date: 8/24/2004 4:15:14 PM
Type: Highlight
ACCEPT - DONE
Change fields to parameters

Page: 105
Sequence number: 17
Date: 9/2/2004 9:28:34 PM
Type: Highlight
ACCEPT - DONE
blocks s/b logical blocks

Page: 107
Sequence number: 1
Date: 8/26/2004 12:50:55 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 107
Sequence number: 2
Date: 8/26/2004 12:50:59 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 107
Sequence number: 3
Date: 8/26/2004 12:51:07 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 107
Sequence number: 4
Date: 8/26/2004 12:51:14 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 107

Sequence number: 5
Date: 8/27/2004 2:21:11 PM
Type: Highlight
ACCEPT - DONE
write protected s/b write-protected

Page: 108
Sequence number: 2
Date: 8/26/2004 12:51:21 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 108
Sequence number: 3
Date: 8/26/2004 12:51:25 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 109
Sequence number: 6
Date: 8/26/2004 12:51:32 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 109
Sequence number: 10
Date: 9/1/2004 3:30:57 PM
Type: Underline
ACCEPT - DONE
may be specified
s/b is able to be specificed
to match wording on page 60

Page: 110
Sequence number: 2
Date: 10/3/2004 4:57:45 PM
Type: Highlight
ACCEPT - DONE
after ILLEGAL REQUEST add
and the additional sense code set to INVALID FIELD IN PARAMETER LIST.

Page: 110
Sequence number: 3
Date: 8/24/2004 6:12:14 PM
Type: Highlight
ACCEPT - DONE
is terminated with
s/b
device server shall terminate the MODE SELECT command with

Page: 110
Sequence number: 4
Date: 8/26/2004 12:51:38 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 111
Sequence number: 3
Date: 8/24/2004 6:13:10 PM
Type: Highlight
REVIEW
ACCEPT - DONE
after ILLEGAL REQUEST add
and the additional sense code set to INVALID FIELD IN PARAMETER LIST.

Page: 111
Sequence number: 4
Date: 8/24/2004 6:13:27 PM
Type: Highlight
ACCEPT - DONE
is terminated with
s/b
device server shall terminate the MODE SELECT command with

Page: 112
Sequence number: 5
Date: 8/26/2004 3:05:05 PM
Type: Highlight
ACCEPT - DONE
Change NON CACHE SEGMENT SIZE to Obsolete (see comment on last paragraph)

Page: 113
Sequence number: 4
Date: 8/25/2004 10:05:58 AM
Type: Highlight
ACCEPT - DONE
advises doesn't seem like the best word
change to "specifies the retention policy the device server should assign..."

Page: 113
Sequence number: 13
Date: 8/25/2004 10:06:27 AM
Type: Note
ACCEPT - DONE
table 106
reword 1h and Fh entries in terms of "The device server should"

Page: 113
Sequence number: 14
Date: 8/25/2004 10:56:35 AM
Type: Highlight
ACCEPT - DONE
Expand out the field names in MINIMUM and MAXIMUM

Page: 113
Sequence number: 15
Date: 8/25/2004 10:56:45 AM
Type: Highlight
ACCEPT - DONE
Expand out the field names in MINIMUM and MAXIMUM

Page: 113
Sequence number: 16
Date: 8/31/2004 6:50:33 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 17
Date: 8/31/2004 6:50:16 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 18
Date: 8/31/2004 6:50:30 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 19

Date: 8/31/2004 6:50:23 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 20
Date: 8/31/2004 6:50:11 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 21
Date: 8/31/2004 6:50:08 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 22
Date: 8/31/2004 6:50:13 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 23
Date: 8/31/2004 6:50:18 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 24
Date: 8/31/2004 6:50:20 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 25
Date: 8/31/2004 6:50:27 PM
Type: Highlight
REJECT (deleting memory everywhere instead)
cache s/b cache memory

Page: 113
Sequence number: 26
Date: 8/31/2004 6:51:04 PM
Type: Note
ACCEPT - DONE (going with "cache" alone)
global
pick either "cache" or "cache memory". It might be simpler to drop "memory" everywhere.

Page: 113
Sequence number: 27
Date: 8/31/2004 7:02:13 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 113
Sequence number: 28
Date: 8/31/2004 7:02:21 PM
Type: Underline
ACCEPT - DONE
cache memory s/b cache

Page: 113
Sequence number: 29
Date: 10/3/2004 4:35:18 PM
Type: Highlight
ACCEPT - DONE
Value s/b Code per Sep CAP WG

Page: 114
Sequence number: 17
Date: 8/30/2004 3:19:54 PM
Type: Note
REVIEW
ACCEPT - DONE
This bit in the Caching mode page is problematic:
"A force sequential write (FSW) bit set to one specifies that multiple block writes are to be transferred from the application client data-out buffer and written to the medium in an ascending, sequential, logical block order. An FSW bit set to zero specifies that the device server is allowed to reorder the sequence of writing addressed logical blocks in order to achieve a faster command completion."
How does this interact with relative offset/modify data pointer usage on the transport protocol? If relative offset/modify data pointer is enabled, does FSW mean the block device must transfer data over the transport protocol in order and not use the relative offset/modify data pointer feature?
If the transport protocol supports transport layer retries of some sort, does this mean the block device cannot use that feature?
Although the history of the bit indicates it was indeed intended to impose transport protocol related restrictions, I think the bit should only refer to the order that blocks are written to the media, and not concern itself with how the blocks are pulled from the application client:
Change to "A force sequential write (fsw) bit set to one specifies that, for commands writing to multiple blocks (i.e., with an extent greater than one logical block), the device server shall write the logical blocks to the medium in ascending sequential order. An fsw bit set to zero specifies that the device server may reorder the sequence of writing logical blocks (e.g., in order to achieve faster command completion)."

Page: 114
Sequence number: 18
Date: 8/25/2004 10:50:45 AM
Type: Highlight
ACCEPT - DONE
Move ",as a result of the error," to the end of the sentence

Page: 114
Sequence number: 19
Date: 8/25/2004 10:59:40 AM
Type: Highlight
ACCEPT - DONE
Change "not read" to "shall not read"

Page: 114
Sequence number: 20
Date: 8/26/2004 3:03:32 PM
Type: Note
REVIEW
ACCEPT - DONE
Obsolete the NON CACHE SEGMENT SIZE field, which has a very unclear definition

Page: 114
Sequence number: 21
Date: 8/27/2004 1:07:10 PM
Type: Highlight
ACCEPT - DONE
change "application client data-out buffer" to "data-out buffer"

Page: 114
Sequence number: 22
Date: 8/27/2004 1:07:39 PM
Type: Highlight
ACCEPT - DONE
change buffer to pre-fetch buffer to avoid confusing with the data-in buffer

Page: 114
Sequence number: 23
Date: 8/27/2004 1:07:53 PM

Type: Highlight
ACCEPT - DONE
change buffer to pre-fetch buffer

Page: 115
Sequence number: 6
Date: 8/25/2004 12:52:15 PM
Type: Highlight
ACCEPT - DONE
Reword TB paragraph in terms of "device server shall ... shall not"

Page: 115
Sequence number: 7
Date: 8/27/2004 1:09:01 PM
Type: Highlight
ACCEPT - DONE
change the buffer to a buffer

Page: 116
Sequence number: 4
Date: 8/24/2004 1:35:07 PM
Type: Highlight
ACCEPT - DONE
Table 108
eer=0 row
Change as to an

Page: 116
Sequence number: 5
Date: 8/24/2004 1:45:10 PM
Type: Note
REVIEW
ACCEPT - DONE
6.3.4 Read-Write Error Recovery mode page
Table 108 - Error recovery bit definitions
This does not make sense as a table; it's just 8 sentences that would normally be split into 4 paragraphs, one per bit. Redo in normal T10 style.
Update cross references to table 108 to point to the section 6.3.4 only.

Page: 116
Sequence number: 6
Date: 8/24/2004 6:49:06 PM
Type: Highlight
REVIEW
ACCEPT - DONE
6.3.4 Read-Write Error Recovery mode page
Table 108
Delete "message system error recovery procedures" which probably referred to parallel SCSI bus errors like parity errors. There may have been confusion in the past that this block specific bit also covered bus errors?
Although modern SCSI transport protocols also have errors and error recovery procedures, it doesn't seem important that this bit description mention that those are not covered.

Page: 116
Sequence number: 9
Date: 8/24/2004 6:54:44 PM
Type: Highlight
ACCEPT - DONE
control s/b recovery

Page: 116
Sequence number: 10
Date: 8/25/2004 12:59:35 PM
Type: Highlight
REVIEW
ACCEPT - DONE (ECC)
Change "error condition codes" to "error correcting codes" or "ECC". This was the term used in SCSI-2. SBC-1 changed it for some reason into the undefined "error condition code" term.

Page: 116

Sequence number: 11
Date: 8/27/2004 1:09:34 PM
Type: Highlight
ACCEPT - DONE
NOTE 25
Change the buffer to a buffer

Page: 116
Sequence number: 12
Date: 9/2/2004 9:34:06 PM
Type: Note
ACCEPT - DONE (actually the note belonged with the RC bit, not the TB bit. That's where fabricated data is discussed.)
Maxtor #32
PDF Page 116
There needs to be a tie-in to "fabricated data". This note could be deleted with the recommended insertion in the previous paragraph.

Page: 117
Sequence number: 5
Date: 8/24/2004 1:48:58 PM
Type: Highlight
ACCEPT - DONE
table 109 - combined bits
Change "if DTE is" to "if the DTE bit is"
(change throughout this table)

Page: 117
Sequence number: 6
Date: 8/24/2004 2:12:16 PM
Type: Highlight
ACCEPT - DONE
6.3.4 Read-Write Error Recovery mode page
Table 109
Change parameter to bit in table header

Page: 120
Sequence number: 9
Date: 8/26/2004 12:51:47 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 120
Sequence number: 10
Date: 8/26/2004 12:51:54 PM
Type: Highlight
ACCEPT - DONE
direct-access device s/b direct-access block device

Page: 120
Sequence number: 11
Date: 8/26/2004 6:42:07 PM
Type: Highlight
ACCEPT - DONE
After XOR operations add "(see 4.12)"

Page: 120
Sequence number: 12
Date: 8/30/2004 9:37:15 PM
Type: Strikeout
ACCEPT - DONE
remove "for this device type" per Brocade comment. All other standards aren't reserving them for that purpose.

Page: 121
Sequence number: 6
Date: 8/24/2004 7:06:16 PM
Type: Highlight
ACCEPT - DONE
target s/b device server

Page: 122
Sequence number: 6
Date: 8/31/2004 6:41:27 PM
Type: Note
REVIEW
ACCEPT - DONE
A.2 Update write operation
The recommended procedure here has the initiator send XPWRITE before it has the write data available. That is counter to most SAM-3 advice that the application client data buffer is supposed to be ready when the command is sent.
Delete all this and just say the initiator sends XPWRITE as step 3, following normal SCSI rules.

Page: 122
Sequence number: 7
Date: 8/27/2004 2:21:57 PM
Type: Underline
ACCEPT - DONE
A.2
protected user data s/b XOR-protected data

Page: 122
Sequence number: 8
Date: 8/27/2004 2:55:30 PM
Type: Underline
ACCEPT - DONE
A.2
data disk device s/b direct-access block device (i.e., data disk)

Page: 122
Sequence number: 9
Date: 8/27/2004 2:55:38 PM
Type: Underline
ACCEPT - DONE
A.2
parity disk device s/b direct-access block device (i.e., parity disk)

Page: 122
Sequence number: 10
Date: 8/27/2004 2:54:03 PM
Type: Underline
ACCEPT - DONE
A.2
data and parity devices s/b direct-access block devices

Page: 122
Sequence number: 11
Date: 8/27/2004 2:56:01 PM
Type: Underline
ACCEPT - DONE
A.2
user data s/b XOR-protected data

Page: 122
Sequence number: 12
Date: 8/27/2004 2:56:06 PM
Type: Underline
ACCEPT - DONE
A.2
user data s/b XOR-protected data

Page: 122
Sequence number: 13
Date: 8/27/2004 2:56:09 PM
Type: Underline
ACCEPT - DONE
A.2
user data s/b XOR-protected data

Page: 122

Sequence number: 14
Date: 8/27/2004 2:56:15 PM
Type: Underline
ACCEPT - DONE
A.2
user data s/b XOR-protected data

Page: 122
Sequence number: 15
Date: 8/27/2004 2:56:41 PM
Type: Underline
ACCEPT - DONE
data disk device s/b data disk

Page: 122
Sequence number: 16
Date: 8/27/2004 2:56:54 PM
Type: Underline
ACCEPT - DONE
data disk device s/b data disk

Page: 122
Sequence number: 17
Date: 8/27/2004 2:57:04 PM
Type: Underline
ACCEPT - DONE
parity disk device s/b parity disk

Page: 122
Sequence number: 18
Date: 8/27/2004 3:00:47 PM
Type: Strikeout
ACCEPT - DONE
A.2
Delete "In this example, ... and thus are not capable of peer-to-peer interaction." Since the XOR commands that used to perform peer-to-peer traffic are obsolete, it doesn't matter if the disks are in the same or different domain for these examples.

Page: 123
Sequence number: 6
Date: 8/27/2004 2:49:10 PM
Type: Underline
ACCEPT - DONE
Figure A.1
User data s/b XOR-protected data

Page: 123
Sequence number: 7
Date: 8/27/2004 2:49:14 PM
Type: Underline
ACCEPT - DONE
Figure A.1
User data s/b XOR-protected data

Page: 123
Sequence number: 8
Date: 8/27/2004 2:49:27 PM
Type: Underline
ACCEPT - DONE
Figure A.1
User data s/b XOR-protected data

Page: 123
Sequence number: 9
Date: 8/27/2004 2:49:31 PM
Type: Underline
ACCEPT - DONE
Figure A.1
User data s/b XOR-protected data

Page: 123
Sequence number: 10
Date: 8/27/2004 2:50:17 PM
Type: Highlight
ACCEPT - DONE
Figure A.1
Change "user data" to "check data" in the bottom right disk drive.

Page: 123
Sequence number: 11
Date: 8/27/2004 2:50:25 PM
Type: Highlight
ACCEPT - DONE
Figure A.1
Change "user data" to "check data" in the bottom right disk drive.

Page: 123
Sequence number: 12
Date: 8/27/2004 2:57:23 PM
Type: Underline
ACCEPT - DONE
parity disk device s/b parity disk

Page: 123
Sequence number: 13
Date: 8/27/2004 3:00:58 PM
Type: Strikeout
ACCEPT - DONE
A.2
Delete "In this example, ... and thus are not capable of peer-to-peer interaction." Since the XOR commands that used to perform peer-to-peer traffic are obsolete, it doesn't matter if the disks are in the same or different domain for these examples.

Page: 124
Sequence number: 8
Date: 8/27/2004 3:01:08 PM
Type: Strikeout
ACCEPT - DONE
A.2
Delete "In this example, ... and thus are not capable of peer-to-peer interaction." Since the XOR commands that used to perform peer-to-peer traffic are obsolete, it doesn't matter if the disks are in the same or different domain for these examples.

Page: 124
Sequence number: 9
Date: 8/27/2004 3:22:00 PM
Type: Underline
ACCEPT - DONE
Figure A.2
user data s/b data
(it could be XOR-protected data or check data that is being regenerated.)

Page: 125
Sequence number: 6
Date: 8/27/2004 3:22:30 PM
Type: Underline
ACCEPT - DONE
Figure A.3
user data s/b data (it could be XOR-protected data or check data)

Author: seg - Coomesj

Page: 44
Sequence number: 4
Date: 10/3/2004 3:40:07 PM
Type: Note
ACCEPT - DONE (04-288 CAP WG agreed)
Seagate letter ballot comment to obsolete Lock Unlock Cache commands

Page: 46
Sequence number: 7
Date: 10/3/2004 3:41:21 PM
Type: Note
REJECT (04-288 CAP WG vote to keep)
Seagate letter ballot comments to obsolete Prefetch commands

Page: 52
Sequence number: 3
Date: 8/31/2004 6:31:32 PM
Type: Highlight
REVIEW
ACCEPT - DONE (changed to "If the rto_en bit is set to zero in the long read capacity data (see 5.13), the device server checks the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a READ (32) command), the device server checks the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2)."
Note: a duplicate of this comment was deleted.)
Change to:
This knowledge may be obtained by use of the READ (32) command (see 5.13) or by a method not defined by this standard.

Page: 71
Sequence number: 1
Date: 8/31/2004 6:31:45 PM
Type: Highlight
REVIEW
ACCEPT - DONE (Changed entire note h to: "If the rto_en bit is set to zero in the long read capacity data (see 5.13)(i.e., the command is a VERIFY (10) command, a VERIFY (12) command, or a VERIFY (16) command), the device server shall check the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a VERIFY (32) command), the device server shall check the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2)."
Note: a duplicate of this comment was deleted.)
Change to:
This knowledge may be obtained by use of the VERIFY (32) command (see 5.27) or by a method not defined by this standard.

Page: 81
Sequence number: 1
Date: 8/31/2004 6:30:13 PM
Type: Highlight
REVIEW
ACCEPT - DONE (sharing with the 001b/ref tag/shall cell: "If the rto_en bit is set to zero in the long read capacity data (see 5.13), the device server checks the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a WRITE (32) command), the device server checks the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2)."
Note: a duplicate of this comment was deleted.)
A note is needed on wrprotect 010b/ref tag/may:
If the RTO_EN bit is set to zero in the long read capacity data (see 5.15) and the device server checks the logical block reference tag, the device server checks it with the lower 4 bytes of the LBA associated with the logical block. If the RTO_EN bit is set to one and the device server checks the logical block reference tag, the device server checks the logical block reference tag only if it has knowledge of the contents of the LOGICAL BLOCK REFERENCE TAG field. This knowledge may be obtained by use of the Write (32) command (see 5.32) or by a method not defined by this standard.

Page: 81
Sequence number: 2
Date: 8/31/2004 6:29:53 PM
Type: Highlight
REVIEW
ACCEPT - DONE (sharing with the 010b/ref tag/may cell: "If the rto_en bit is set to zero in the long read capacity data (see 5.13), the device server checks the logical block reference tag by comparing it to the lower 4 bytes of the LBA associated with the logical block. If the rto_en bit is set to one (i.e., the command is a WRITE (32) command), the device server checks the logical block reference tag based on the initial logical block reference tag field in the CDB (see 4.14.2)."
Note: a duplicate of this comment was deleted.)
A note is needed on wrprotect 001b/ref tag/shall:
If the RTO_EN bit is set to zero in the long read capacity data (see 5.15),
the device server checks the logical block reference tag with the lower 4
bytes of the LBA associated with the logical block. If the RTO_EN bit is
set to one, the device server checks the logical block reference tag only
if it has knowledge of the contents of the LOGICAL BLOCK REFERENCE TAG field. This knowledge may be obtained by use of the Write (32) command (see 5.32) or by a method not defined by this standard.

(also --- Per your comment on VRPROTECT, the "or by a
method not defined by this standard." should be deleted.)

Page: 112
Sequence number: 6
Date: 10/3/2004 3:49:43 PM
Type: Note
REJECT (Sep CAP WG chose to keep. IBM says they are using these fields.)
Seagate letter ballot comments to obsolete these items:
((3) These fields in Caching Mode page:
(a) Non-cache segment size
(b) Cache segment size
(c) Number of cache segments
(d) Maximum prefetch ceiling
(e) Maximum prefetch
(f) Minimum prefetch
(g) Disable prefetch transfer length
(h) Demand read retention priority
(i) Write retention priority
(j) LBCSS and DRA bits
(k) the IC, ABPF, CAP, DISC, SIZE, MF, and RCD bits

Author: seg - houlderg

Page: 10
Sequence number: 4
Date: 8/31/2004 6:33:23 PM
Type: Note
REVIEW
ACCEPT - DONE (added a new 4.xx Write protection section, borrowed from SSC-3: "Write protection prevents the alteration of the medium by commands issued to the device server. Write protection is usually controlled by the user of the medium through manual intervention (e.g., mechanical lock) or may result from hardware controls (e.g., tabs on the media housing) or software write protection. All sources of write protection are independent. When present, any write protection shall cause otherwise valid commands that request alteration of the medium to be rejected with CHECK CONDITION status with the sense key set to DATA PROTECT. Only when all write protections are disabled shall the device server process commands that request alteration of the medium.
Hardware write protection results when a physical attribute of the drive or medium is changed to specify that writing shall be prohibited. Changing the state of the hardware write protection requires physical intervention, either with the drive or the medium. If allowed by the drive, changing the hardware write protection while the medium is mounted results in vendor-specific behavior that may include the writing of previously buffered data (e.g., data in cache memory).
Software write protection results when the device server is marked as write protected by the application client using the swp bit in the Control mode page (see SPC-3). Software write protection is optional. Changing the state of software write protection shall not prevent previously accepted data (e.g., data in cache memory) from being written to the media.
The device server reports the status of write protection in the device server and on the medium with the device-specific parameter field in the mode parameter header (see 6.3.1)."
and mentioned the SWP bit in 6.3.1. No plans to list each command specifically affected - SSC-3 does not do that.)
SPC-3, under table 237, has this statement:
"For a list of commands affected by the SWP bit and details of
the WP bit see the command standard (see 3.1.18) for the specific device type."
I would expect SBC-2 to have such a list in the model section, but it doesn't even mention a write protected mode. We have SPC-3 making a promise that SBC-2 is not keeping. A write protect section listing affected commands should be added to the model.

Author: sun

Page: 10
Sequence number: 26
Date: 8/30/2004 4:20:47 PM
Type: Note
ACCEPT - DONE (Originally, a medium could have different block lengths for different regions. Only the recent proposal to clean up mode parameter block descriptors prohibited more than one block descriptor for a logical unit. This paragraph is merged with a paragraph from 4.2, and this sentence added: "The block length is the same for all logical blocks on the medium.")
Sun 1

page 10, 4.1, 3rd paragraph
The first 3 sentences of this paragraph are misleading. There is no provision in SBC or SPC for each block to have a unique block length. This should simply say something like, "The block length is constant for the entire LU."

Page: 12
Sequence number: 23
Date: 8/30/2004 4:18:13 PM
Type: Note
ACCEPT - DONE (only the block length setting remains. Sentence reworded to just discuss that)
Sun 2
page 12, 4.6, 1st paragraph, 3rd sentence.
Do any of the mode page parameters still allow setting of "geometry" since we obsoleted the format and geometry pages?

Page: 12
Sequence number: 30
Date: 9/2/2004 8:13:57 PM
Type: Note
REVIEW
ACCEPT - DONE (Adding a new section warning about what happens when power is lost.
"If one or more commands performing write operations are in the task set and are being processed when power is lost (e.g., resulting in a vendor-specific command timeout by the application client) or a medium error or hardware error occurs (e.g., because a removeable medium was incorrectly unmounted), the data in the logical blocks being written by those commands is indeterminate. When accessed by a command performing a read operation (e.g., after power on or after the removeable medium is mounted), the device server may return old data, new data, or vendor-specific data in those logical blocks.
Before reading logical blocks which encountered such a failure, an application client should reissue any commands performing write operations that were outstanding.")
Question: If a host sends a Write command, but the IO is interrupted before it can complete (anything from nexus-loss to target power cycle) what can the host assume about the state of the media at the addressed location?
As I read through SBC-2 for the letter ballot comments I didn't find a direct answer to the question. I think we need one, probably in section 4 - Model.

Page: 30
Sequence number: 8
Date: 8/30/2004 4:20:34 PM
Type: Highlight
ACCEPT - DONE
Sun 3
page 30, table 9, Inquiry row.
Protection information column should say 'yes'.

Page: 30
Sequence number: 9
Date: 8/31/2004 5:57:20 PM
Type: Highlight
ACCEPT - DONE (added "or for which protection information may be a factor in the processing of the command " in the intro to table 9)
Sun 4
page 30, table 9, Read (6) row.
Protection information column needs a note. The Read (6) command has no protection information in the CDB nor the data, yet protection information may be a factor in the processing of the command by the device.

Page: 31
Sequence number: 1
Date: 8/30/2004 5:12:36 PM
Type: Highlight
ACCEPT - DONE
Sun 5
page 31, table 9, Read Capacity (16) row.
Protection information column should say 'yes'.

Page: 31
Sequence number: 2

Date: 8/30/2004 5:13:36 PM
Type: Square
ACCEPT - DONE
Sun 6
page 31, table 9, Synchronize Cache (10 & 16) rows.
Protection information columns should say 'no'.

Page: 32
Sequence number: 1
Date: 8/31/2004 5:57:47 PM
Type: Highlight
ACCEPT - DONE (added "or for which protection information may be a factor in the processing of the command " in the intro to table 9)
Sun 7
page 32, table 9, Write (6) row.
Protection information column needs a note. The Write (6) command has no protection information in the CDB nor the data, yet protection information may be a factor in the processing of the command by the device.

Page: 45
Sequence number: 14
Date: 10/3/2004 3:40:57 PM
Type: Note
REJECT (whole command voted obsolete by CAP WG, so moot)
Sun 8
p 45, 5.5, last paragraph.
Suggested rewording to deal with the "initiator port" vs. I_T nexus
issue (see 04-088)
"Multiple locks may be in effect from initiator ports associated with
more than one I_T nexus. Locks associated with different I_T nexus may
overlap. An unlock of an overlapped area does not release the lock
associated with another I_T nexus."

Page: 55
Sequence number: 18
Date: 10/6/2004 7:44:04 PM
Type: Note
ACCEPT - DONE (as "If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is enabled (see table 64 in 5.27), the logical block application tag mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block in the extent. A logical block application tag mask bit set to one enables the checking of the corresponding bit of the expected logical block application tag field with the corresponding bit of the logical block application tag field in the protection information.
If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is disabled (see table xx in 5.yy), or if the ATO bit is set to zero, the logical block application tag mask field and the expected logical block application tag field shall be ignored.")
Sun 9
page 55, 5.13, 5th and 6th paragraphs.
"When checking of the LOGICAL BLOCK APPLICATION TAG is enabled" should also include "and the ATO bit is 1". If the App tag is owned by the
device server these two fields in Read(32) should be ignored.

Page: 67
Sequence number: 16
Date: 8/30/2004 4:25:21 PM
Type: Underline
ACCEPT - DONE
Sun 10
page 67, 5.24, first paragraph
"log read" s/b "long read"

Page: 81
Sequence number: 6
Date: 9/2/2004 6:55:10 PM
Type: Note
REVIEW
REJECT (The questioned command is allowed, but does not have any p.i. in the data-out buffer so the CDB values cannot be compared to anything. It would be a change of meaning to have the CDB carry values that the device server must use rather than values it must check, and wouldn't provide any protection value for the write operation. Since it's using a 32 byte command, the application client should know how to put the p.i. in the data-out buffer.
To clarify the intent of the fields in the CDB, will add EXPECTED in front of the INITIAL LOGICAL BLOCK REFERENCE TAG field

name. EXPECTED is already in the application tag field name.)
Same comment applies to WRITE SAME (32), WRITE AND VERIFY (32), and the VERIFY (32) tables that depend on data-out buffer contents. Same comment does not apply to READ (32) and VERIFY (32) tables based on data from the medium.)
Sun 11
page 81, table 68, row 1 (000b/Yes) notes g and h.
Is a Write(32) with wrprotect=000b allowed? If so, then notes g and h
should be modified to allow the values from the Write(32) CDB to be
used. If not, then we need to address this in the Write(32) text.

Page: 81
Sequence number: 7
Date: 10/3/2004 7:22:22 PM
Type: Highlight
ACCEPT - DONE (per 04-288 CAP WG)
Sun 12
page 81, table 81, 001b/yes/app-tag
Why "Shall not" check? Seems to me is should be "May" with note c. But,
it should also be qualified with whether or not ATO is set. If ATO, and
Write(32) then the device should be checking....
If not ATO, then the device is generating or ignoring, but not checking.

Page: 84
Sequence number: 18
Date: 10/6/2004 7:47:29 PM
Type: Note
ACCEPT - DONE (change to "If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is enabled (see table xx in 5.yy), the logical block application tag mask field contains a value that is a bit mask for enabling the checking of the logical block application tag field in the protection information for each logical block. A logical block application tag mask bit set to one enables the checking of the corresponding bit of the expected logical block application tag field with the corresponding bit of the logical block application tag field in the protection information.
If the ato bit is set to one in the Control mode page (see SPC-3) and checking of the logical block application tag field is disabled (see table xx in 5.yy), or if the ato bit is set to zero, the logical block application tag mask field and the expected logical block application tag field shall be ignored.")
Sun 13
Page 84, 5.32, paragraphs 5 & 6.
"When checking of the LOGICAL BLOCK APPLICATION TAG is enabled" needs to be qualified with the setting of ATO. If ATO is zero, these fields are ignored.

Page: 89
Sequence number: 9
Date: 8/30/2004 4:30:02 PM
Type: Note
ACCEPT - DONE (refer to WRITE (10) command section)
Sun 14
page 89, 5.39, 1st paragraph.
"WRPROTECT" should be followed with a reference back to table 68

Page: 109
Sequence number: 7
Date: 10/3/2004 4:56:56 PM
Type: Note
ACCEPT - DONE (rewrite per Sep CAP WG meeting: "A device server shall respond to a MODE SENSE command (see SPC-3) by reporting the number of blocks specified in the number of blocks field sent in the last MODE SELECT command that contained a mode parameter block descriptor. If no MODE SELECT command with a mode parameter block descriptor has been received then the current number of blocks shall be returned. To determine the number of blocks at which the logical unit is currently formatted, the application client shall use the READ CAPACITY command (see 5.13) rather than the MODE SELECT command.
On a MODE SENSE command, the device server may return a value of zero indicating that it does not report the number of blocks in the short LBA mode parameter block descriptor.
On a MODE SENSE command, if the number of logical blocks on the medium exceeds the maximum value that is able to be specified in the number of blocks field, the device server shall return a value of FFFFFFFFh.")
Sun 15
page 109, 6,3.2.2, paragraphs 3 & 4.
The two paragraphs starting with "On a MODE SENSE command,...." confuse me.
The previous paragraph states that the Number of Blocks field on a
Mode Sense returns a certain value, yet these two paragraphs seem to
contradict that. It would make more sense if these rules were on a Mode
Select, but I'm still not sure I see the subtle difference - the last
phrase of each paragraph is exactly the same. Same comment applies below to the Long LBA format also.