X3T9.2/90-188R1   November 29, 1990

TO: X3T9.2 Committee

FR: Lawrence J. Lamers
        X3T9.2 Project Editor for SCSI-2

RE: Report on ANSI Editors Meeting of November 27-28, 1990

John Lohmeyer and I visited ANSI headquarters in New York, NY to meet with the ANSI Editors and discuss the final edit of the SCSI-2 document.

A list of corrections and clarifications requested by X3T9.2 committee (based the input received by the Project Editor and motions passed by the committee) was submitted to the ANSI editors prior to the meeting for their review. See attachment A and B for details.

The initial discussion revolved around the technicalities of transferring the SCSI-2 document (now in WordPerfect format) to Pagemaker 4 in the Macintosh environment. Bob Hager reported that importing the text was no problem; importing the figures had some problems if high resolution printout was desired, however it is quite possible this problem will be resolved by an upgrade to the conversion software; importing the tables is a problem and no known solution exists. Getting the tables into Pagemaker 4 involves stripping all the vertical and horizontal lines, importing the text and then drawing the lines in Pagemaker. Based on prior experience with converting SCSI-1 to Ventura Publisher this procedure will likely result in errors in the table. An extremely good proofreading will be necessary.

Following this discussion we were shown an example of the letter that ANSI is requiring to be signed. Upon reading the letter, it appears that paragraph 4 and 6 contradict each other in the case of SCSI-2. Mary Clare Lynch, Director of Publications at ANSI, maintained that the letter had to be signed contradictions not withstanding. John Lohmeyer stated that signing of such a letter is more appropriate for CBEMA or X3. See attachment C for a copy of the letter.

Mary Clare Lynch then proceeded to outline the rules under which the final editing was to be done. ANSI editors are not bound by restrictions on changes that were mandated by CBEMA. It is the ANSI editors task to change the document as they see fit. Furthermore, per the above mentioned letter, no input from any outside (i.e., non-ANSI) organization will be considered during the final edit.   This includes typographical errors as well as technical errors. The committee is supposed to have procedures to deal with these issues and those procedures are the only available recourse.

Consequently all the corrections, including the typographical errors, that are in attachment A were rejected. However, in reviewing the ANSI mark-up of the SCSI-2 document, the ANSI editors a planning in excess of 1000 changes to SCSI-2. Many of these are minor formatting changes, (e.g., several lists that are enumerated in 10c will not enumerated in the standard since they are not sequences of events). There are several places where rewording is planned, several of which could cause a change of meaning. These I pointed out in my review of their mark-up.

As a result of this meeting and feeling the full responsibility to members of X3T9.2 to protect their investment in SCSI-2 I am recommending that SCSI-2 rev 10c be withdrawn as a standard and control of the document be returned to X3T9.2. I believe this is a responsible course of action to make the corrections to known errors. This will delay the publishing of SCSI-2 as a standard, however since the ANSI editors are proving to be inflexible in dealing with situation it is the only course of action I can recommend. Please note that the final edit with SCSI-1 and even recently with ESDI was markedly different and many errors were corrected during final edit.

Therefore I request that the committee consider the following motion at the December 1990 plenary meeting:

"Larry Lamers moved and _____ seconded that X3T9.2 request X3T9 initiate the actions necessary to withdraw SCSI-2 from ANSI to correct errors discovered during the final editing."

Attachment A - SCSI-2 Corrections

3.1
The first definition of "logical unit" should be "logical block"

4.8 p1 s2
Add 'or equal to' in front of 200 ns

5.1.5.3 p7 s1
Delete 'for a command'

5.2 p2 s1
Should read 'Futhermore, SCSI devices .. powered-on..

Table 5-2
In the Key: No = the first ACK should be ATN

7.2.17.1 p1 s6 'available length' should be 'buffer capacity'

7.3.2 p19 s2
'ET' should be 'ETC'

7.3.4.5 Table 7-77
In Byte column '8' should be '4'

8.1.7 p7
Should read: "The FORMAT UNIT, PREVENT ALLOW MEDIUM REMOVAL (with a prevent bit of one),
REZERO UNIT, and START STOP UNIT commands retrun RESERVATION CONFLICT status if any..."

8.2.12.1 p3 Change wording to: '... REQUEST SENSE, PREVENT ALLOW MEDIUM REMOVAL (with a
prevent bit of one), or a RELEASE command the command shall be rejected..'

8.3.3.1 par 15
delete "ceiling" in sentence 2; add "maximum prefetch" ceiling field

8.3.3.4 par 3
Table ref 8-35 should be 8-45

8.3.3.6 par 5 sen 4
"posting" should be "reporting" to match par 3

13.2.10 p2 ISRC should reference ISO 3901

13.3.3 Table 13-31 change 'Cache' to 'DPOFUA'

13.3.3 p6
(changed) "When used with the MODE SENSE command, a DPOFUA bit of one indicates that the target
supports the DPO and FUA bits."

13.4 def of Yellow Book '(IEC 108)' should be '(IEC 908)'

15.3.3 p6
Change "When used with the MODE SENSE command, a DPOFUA bit of one indicates that the target supports the DPO and FUA bits."

16.3.3 Table 16-25
'01h-1Dh' should be '01h-1Ch'

Appendix C
Check for 'channel' should be 'nexus'

Appendix G p2
Replace '...between 100 ns and..' with '...less than...'

Appendix H - replace "is developing..' with '..has a standard (IT8.4a-1990)..'

Attachment B - SCSI-2 Clarifications

5.1.2 Implementors Note
Re our recent messages re Arbitration Abort, the scenario for hanging the bus lies in the third IMPLEMENTORS NOTE in 5.1.2, right at the bottom of p 5-2. As a corrective, we propose that we add the following sentence to that NOTE: "Accordingly, when arbitration is won, a SCSI device should always proceed to assert SEL so as to force other devices from the bus and thus preclude the possibility of the bus being hung."

5.6.21 p3 note 2 s4
The correct method is to respond to an SDTR message with a MESSAGE REJECT message if the device does not support synchronous transfers.

7.2.8 p6 s4
Add new sentence after 4: "If PS is set in the MODE SENSE data then the page shall be savable by issueing a MODE SELECT command with the SP bit set."

7.3.2 p13
Delete last two sentences per June plenary vote.

7.3.2 p 16 s2
Should read '..the target shall set the sense key to UNIT ATTENTION;..' delete the phrase ..'LOG EXCEPTION; and the additional sense code qualifier set.'

7.3.2 p24 s2
delete phrase '..as described in 7.3.3.1.'

8.2.1 Table 8-4
'VS' should be referenced as vendor-specific see glossary.

8.2.1 p26
Add sentence: Pages that not reported as saveable are not affect by the DSP bit (i.e. if pages 3&4 are not returned with the PS bit set they may be saved even if DSP is cleared).

8.2.1.2
Move IP bit definition to correct place

8.2.11 p1
Add after sentence 2: A reservation may only be released by the initiator that made it. Add to sentence 3 '.., or is held by another initiator.

8.3.3 par 4a, 6
par 4a (new) "When used with the MODE SELECT command the WP bit is not defined. par 6 (changed) "When used with the MODE SENSE command, a DPOFUA bit of one indicates that the target supports the DPO and FUA bits."

8.3.3.1 par 2
Add "If PS is set in MODE SENSE data then the page shall be savable by issuing a MODE SELECT command with SP set."

8.3.3.1 par 12 (pg 66) 90-086
If pre-fetch has read more than the amount of data indicated by the minimum pre-fetch then pre-fetching should be terminated whenever another command is ready to execute. This consideration is ignored when the minimum pre-fetch is equal to the maximum pre-fetch.

9.1.5 p1 s2
see BBSMSG #183 Bill Spence remove lack of parallelism

9.1.5 p 6
see BBSMSG #183

9.2.9 p1
Add sentence after 2: "A reservation may only be released by the initiator that made it." Add to sentence 3 '.., or is held by another initiator.'

13
In all sections: Replace Red Book and Yellow Book references
red = IEC 908 COmpact Disc Digital Audio System -1987
yellow = ISO/IEC 10149 Information Technology-Data Interchane on
Read-Only 120mm Optical Data Disks (CD-ROM) 1989

13.3.3 p6
(changed) "When used with the MODE SENSE command, a DPOFUA bit of one indicates that the target supports the DPO and FUA bits."

15.3.3 p4a
Add new paragraph: "When used with the MODE SELECT command the WP bit is not defined.

15.3.3 p6
Change to: "When used with the MODE SENSE command, a DPOFUA bit of one indicates that the target supports the DPO and FUA bits."

Appendix C - check for 'channel' should be 'nexus'

Appendix G -
p1 replace '...SCSI...' with '...synchronous transfer...'
   replace '...SCSI...' with '...synchronous transfer...'
notes - check against figure.

Attachment C - Text of Approval Letter required by ANSI

Dear Sir:

American National Standard _____ ANSI _____ (BSR _____) was approved on mm/dd/yy and is now being prepared for printing by the Publication Department.

The text which was filed with the BSR-9 submittal is the text which Ansi will publish; the BSR-9 text reflects all changes, technical or editorial, which were made in the document during the approval process -- including ANSI's public review and comment -- and which were voted on and accepted for inclusion.

ANSI Publication Department editors will bring the standard into the proper style and correct all grammatical errors and inconsistencies before publication. The staff editors will <u>review</u> their corrections with the submitter, but this review does not imply that the submitter may initiate text changes. The role of the submitter of the standard during the review is to acknowledge that the editorial "cleaning up" has not changed the technical content of the standard.

Changes to the content originating from the submitter subsequent to the BSR-9 filing must be held until the next submittal.

<u>Final editing will begin when the statement below is signed and returned to ANSI's Publication Department.</u>

The submitter responsible for American Nation Standard ANSI _____ confirms that no technical or editorial changes were made in the standard by the committee or submitter that are not incorporated in the submitted manuscript.

N   a   m   e

_____

Submitter _____
Signature _____