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To: X3T9.2 SCSI Committee
From: Bob Pentecost

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Subject: READ POSITION Command

PROPOSAL: The READ POSITION command needs to be modified to include information on whether the sequential access device is currently at End of Tape, Beginning of Tape, or at a File or Set Mark.

JUSTIFICATION: Many host systems need to be able to retrieve tape positioning information at any point in time. Currently, tape positioning information is only valid after a check condition. The READ POSITION command already provides information on partition positioning through the BOP and EOP bits. The READ POSITION command needs to be expanded to also provide information on whether the media is currently at End of Tape, Beginning of Tape, Filemark, or a Setmark.

Change byte 0 of the Read Position Data Format (page 9-22) as follows:

Bit / Byte	7	6	5	4	3	2	1	0
0	BOP	EOP	BOT	EOT	FM	BPU	SM	Res.
	The rest of the Read Position data format is unchanged...							

Add the following text to the READ POSITION command:

A beginning of tape (BOT) bit of one indicates that the logical unit is currently at the beginning of the tape media. A BOT bit of zero indicates that the current position is not at the beginning-of-tape.

An end of tape (EOT) bit of one indicates that the logical unit is currently positioned between early warning and end of tape. An end of tape (EOT) bit of zero indicates that the logical unit is not positioned between early-warning and end of tape.

A filemark (FM) bit of one indicates that the logical unit is currently positioned at a filemark written on the media. The logical position of the tape may be before or after the filemark, depending on what direction the initiator's previous commands were (forward or reverse). A filemark (FM) bit of zero indicates that the logical unit is currently not positioned at a filemark.

A setmark (SM) bit of one indicates that the logical unit is currently

positioned at a setmark written on the media. The logical position of the tape may be before or after the setmark, depending on what direction the initiator's previous commands were (forward or reverse). A setmark (SM) bit of zero indicates that the logical unit is currently not positioned at a setmark.

IMPLEMENTOR'S NOTE: The READ POSITION command will NOT cause any media movement or flush the buffer of the device. To obtain accurate positioning information the initiator should flush the buffer by issuing a WRITE FILEMARKS command with both the Immed bit and the transfer length field set to zero before issuing the READ POSITION command.