MARK 5 MEMO #083

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To: Mark 5 Development Group

From: Dan L. Smythe

Subject: Pressurized Disk Drives

I have tested a ToughDisk TD3500 <<u>http://www.formation.com/solutions/product.aspx?id=140</u>> pressurized 1-TB SATA disk drive with a Mark 5B+. This disk drive is specified to work at altitudes up to 80,000 feet and carries as 1-year warranty.

While conditioning, the recording and playback speed was always greater than 580 Mb/s.

To confirm this recording rate, I recorded 6 scans of test vectors, totaling 4 hours and 16 minutes, at 512 Mb/s; all of the scans were good.

Based on these tests, I conclude that a 4-pack of these disk drives (4 TB) could record at 2048 Mb/s from end to end.

At a cost of US\$1850 per drive, plus US\$595 for an empty Conduant module, a 4-TB 4-pack of these drives would cost US\$7,995, or US\$2.00 per GB. An 8-TB 8-pack would be US\$15,395, or US\$1.92 per GB.