

VLBA ACQUISITION MEMO #232

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To: VLBA Recording Group
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Subject: Edge slitting signatures and edge quality of 16 μm tapes

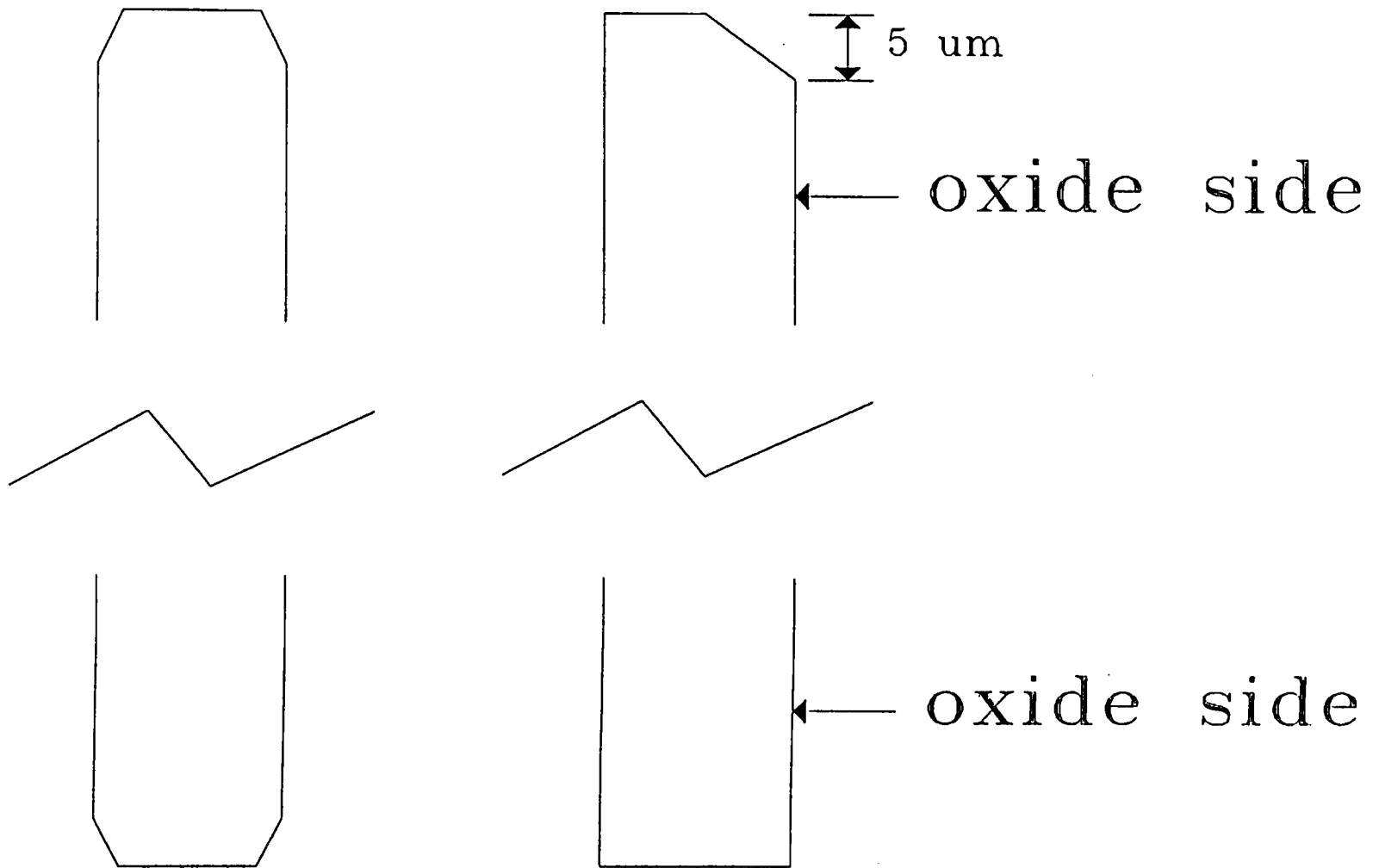
Using the method of Acquisition Memo #135, we measured the edge variations on several tapes.

Tape Type	Edge Variation p-p μm	Predominant Components Wavelength cm	Notes
Fuji H621	22	31	1
Ampex	13	30, 32	2
Maxell D1	13	37	
Sony D1K	7	29	3

Notes:

- 1] Taken for reference.
- 2] 2 frequencies, 11.25 and 10.5 Hz show on a typical spectrum of edge noise at 135 IPS. The 10.5 Hz which corresponds to a wavelength of 32 cm was usually the weaker.
- 3] The edge variation is substantially lower on the Sony D1K than the other tapes tested.

We have examined the appearance of the tape edges under a microscope (see Acquisition Memo #229) and while there are large variations along the tape, the figure shows the general shape. The Sony tape appears fairly symmetrical while the Ampex and Maxell tapes both appear quite asymmetrical - especially with respect to one of the edges.



SONY MAXELL & AMPEX
Figure Appearance of tape edges