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Area Code 617  
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To: VLBA Recorder Group  
From: Hans F. Hinteregger  
Subject: Tape Packaging (Refer to VLBA Acquisition Memo #092, Item #4)

The quote from Corning for "self-packing" sixteen-inch glass reels is discouraging: \$400 each in prototype quantity (1 to 50) and no price commitment for production quantities (lots of 500 or 1000). This is regardless of the fact that the self-packing glass reel was developed by Haystack with Corning's cooperation nine years ago, that the fourteen-inch version received a production part number (690512) and that a lot of 500 reels was procured for VLBI at that time with a reasonable 15% "special handling" surcharge relative to the standard product.

I am now told that NRE will have to be repeated (original records have apparently been lost) and that the "special" production surcharge even for a lot of 500 or more will be much larger, at least 50%. Sixteen-inch glass self-packing reels are therefore likely to cost the VLBA \$200 to \$300 each, which seems excessive. Nevertheless, less expensive technical alternatives may be difficult and certainly time-consuming to develop. (A lot of dabbling has already been done over the years). We do not have any proven alternative for thin tape in hand.

The projected cost of the reel is about one third that of the 27,000 foot tape. The same ratio obtained nine years ago when the fourteen-inch glass reel was \$35 and 9,000 feet of instrumentation tape cost \$95. Conservatively VLBA should budget up to \$1,250 per packaged sixteen-inch reel of 27,000 foot tape. Haystack needs direction/funding to a) obtain glass reel prototypes and production commitment and/or b) develop alternative reel. Note that fourteen-inch reel (with a working length of  $3/4 \times 27,000$  feet) will satisfy the twelve-hour per tape VLBA requirement but that new fourteen-inch glass self-packing reels will not be much less expensive than the sixteen-inch variety.