



TO Bill Horne

MEMORANDUM

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FROM: Tom Legg

SUBJECT: TIW Antenna Panels

**VLBA CC Memo No. 8**

*VLBA Antenna Memo No. 2*

Here are a few details on the bonded antenna panels that TIW have been working on at their Trenton, Ontario plant. (A try at mentioning this during your phone meeting was done in by a one-way connection to Ottawa.)

The work was done under an NRC 'PILP' contract which is now complete. TIW found, after one or two initial problems, that they could get RMS deviations of 0.006 to 0.007 inches with the new technique. This included systematic errors caused by 'spring-back' which could be compensated for by adjusting the jig. The last two panels, made with a readjusted jig, had RMS deviations of 0.0034 and 0.0037 inches.

I believe that TIW hope to get, or possibly by now have already gotten, a contract from JPL to prove the consistency of the technique. This will involve the construction of about 10 panels. They expect RMS errors better than 0.005 inches, which would certainly meet your 0.008 specifications. They have not yet estimated the price.

Conversion Table

0.0034 in = 85 $\mu$ m  
0.0037 in = 95 $\mu$ m  
0.005 in = 125 $\mu$ m  
0.006 in = 150 $\mu$ m  
0.007 in = 180 $\mu$ m  
0.008 in = 200 $\mu$ m