NATIONAL RADIO ASTRONOMY OBSERVATORY

Tucson, Arizona

June 20, 1983

MEMORANDUM

TO:

12 Meter Working Group

FROM:

D. Ross

SUBJECT:

Sun-Screen Fabric

I'm enclosing a copy of correspondence and data sheet for Gore-tex fabric. The address given is incorrect. Inquiries should be made to Mr. Hansen at 301/392-3300.

Pricing and delivery (for budgetary purposes only) are \$14.13 per square foot and approximately one day fabrication for each 100 feet. The price will vary depending attachment techniques.

DR/ew

Science and Engineering Research Council

Rutherford Appleton Laboratory

Dewey Ross NRAO 2010 Forbes Boulevard Tucson Arizona Chilton, Didcot, Oxfordshire OX11 0QX Telegrams: Ruthlab Abingdon Telex: 83159 Tel: Abingdon (0235) 21900 Extension: 6462

12 November 1982

Dear Dowey

When I was speaking to you on my visit you expressed an interest in the membrane material we were planning on using. I have made some enquiries the results of which I'm sure will amuse you.

The material is PTFE and comes in the form of a woven fabric.

It is called Gore-tex supplied by: W L Gore Ass Inc

Reoff Dong las.

1505 North Forth Street

Flagstaff Arizona

Phone: 602-774-0611-524-1290

A paper entitled: 'A New Near Millimetre Wavelength Radome Membrane Material' by Dr Rick Street is at present being prepared for publication in Applied Optics. When it is finished/accepted I will send you a copy. In the meantime attached is a copy of a curve of the transmission properties.

Thanks for the stuff you let me have it was well received here, have you had the rest yet? It is extremely wet here compared to Arizona, 4" of rain fell in October to make it the wettest on record.

Regards

G Douglas

B = Gore-Tex laminate

A = Core-Tex fabric without membrane

B has the following solar properties over the wavelength range 340 - 2100nm:-

Integrated reflectance 69.24% Integrated transmittance 24.75%

