12 METER MILLIMETER WAVE TELESCOPE

MEMO No. / 76



DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

MASSACHUSETTS INSTITUTE OF TECHNOLOGY CAMBRIDGE, MASSACHUSETTS 02139

> Room 38-377 (617) 253-4687

June 21, 1982

Dr. Sander Weinreb Associate Head Electronics Division National Radio Astronomy Observatory 2015 Ivy Road Charlottesville, VA 22903

Dear Sandy:

There are at least three companies which have built deformable mirrors for adaptive optics. They are Itek Corporation, the Perkin-Elmer Corporation and United Technologies, Inc. The corresponding mailing addresses are:

- (1) John W. Hardy Optical Systems Division Itek Corporation Lexington, MA 02173
- (2) Ronald P. Grosso or Martin Yellin The Perkin-Elmer Corporation Norwalk, CT 06856
- R. H. Freeman United Technologies Research Center Optics and Applied Technology Laboratory P.O. Drawer 4181 West Palm Beach, FL 33402

I do not know the individuals personally but have taken their names from various publications. These publications are:

- (1) John W. Hardy, "Adaptive Optics: A New Technology for the Control of Light", Proceedings of the IEEE, 66, 651-697, June 1978.
- (2) Ronald P. Grosso and Martin Yellin, "The Membrane Mirror as an Adaptive Optical Element", J. Opt. Soc. Am., 67, 399-406, March 1977.
- (3) R. H. Freeman and H. R. Garcia, "High-Speed Deformable Mirror System", Applied Optics, 21, 589-595, February 1982.
- (4) R. H. Freeman and J. E. Pearson, "Deformable Mirrors for all Seasons and Reasons", <u>Applied Optics</u>, <u>21</u>, 580-588, February 1982.

If I can be of any further help, please do not hesitate to call.

Dr. S. Weinreb

The aluminized mylar which you sent has arrived safely. We are looking forward to trying it on our experiment this summer. Thank you.

Sincerely,

Jeffrey H. Lang Assistant Professor of Electrical Engineering

JHL/en