

# THE NATIONAL ACADEMIES

*Advisers to the Nation on Science, Engineering, and Medicine*

National Academy of Sciences  
National Academy of Engineering  
Institute of Medicine  
National Research Council

August 19, 1999

Dr. Hugh Van Horn  
Director  
Division of Astronomical Sciences  
Room 1045S  
National Science Foundation  
4201 Wilson Boulevard  
Arlington, VA 22230

Dr. Karl Erb  
Director  
Office of Polar Programs  
Room 755S  
National Science Foundation  
4201 Wilson Boulevard  
Arlington, VA 22230

Dear Drs. Van Horn and Erb:

Since its initial meetings in 1992, the Committee on Astronomy and Astrophysics (CAA) has followed with great interest the development of astronomy conducted at the South Pole. The CAA has heard presentations at several meetings since that time. As part of its continuing interest in the subject, the CAA, at its meeting on November 10-11, 1998, invited Antony Stark, Doyal A. Harper, and John Lynch to give presentations on recent results of astronomical research conducted in the Antarctic. The CAA was impressed with the work put into the evaluation and analysis of the astronomical potential of the South Pole, especially in the 3-5 micron and submillimeter bands, and appreciates the advantages of low water vapor levels, reduced sky background emission, and 24-hour coverage. It is clear that the Center for Astrophysical Research in Antarctica (CARA) has demonstrated in the last decade that good astronomy can be done from the South Pole and that the infrastructure is adequate to support a reasonable astronomical enterprise.

The CAA strongly supports a peer-reviewed proposal process for the selection of astronomical research programs open to the U.S. community. This proposal process should stress the cost-

## Committee on Astronomy and Astrophysics

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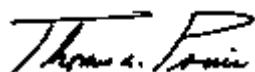
effectiveness of the science conducted at the South Pole, the uniqueness of the science, and, of course, the quality of the science.

CARA is the principal institution that supports and oversees work of this kind, and, over the coming year, the National Science Foundation plans to gradually phase down the program. The Astronomy and Astrophysics Survey Committee is, as part of its decadal priority-setting process, considering the role that Antarctic astronomy plays in astronomy overall. With this in mind, the CAA concluded that it would be desirable to continue the support of the Antarctic astronomy program until its priority ranking within astronomy has been determined and NSF can incorporate this information into its planning. The ranking should be available by mid 2000.

Sincerely,



John Huchra  
Co-Chair, CAA



Thomas Prince  
Co-Chair, CAA

Enc.: CAA roster

c: Morris Aizenman, NSF  
John Lynch, NSF  
Antony Stark, CARA  
Doyal A. Harper, CARA  
Christopher McKee, Co-Chair, AASC  
Joseph Taylor, Jr., Co-Chair, AASC  
Donald C. Shapero, Director, BPA  
Joseph K. Alexander, Director, SSB  
Robert L. Riemer, Senior Program Officer, CAA