

# Center for Astrophysics

60 Garden Street  
Cambridge, Massachusetts 02138

Harvard College Observatory  
Smithsonian Astrophysical Observatory

January 8, 1974

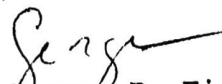
Dr. R. E. Vanelli  
Science Center  
Harvard University

Dear Ron:

Attached please find the piece of paper requested. The budget estimates come from a letter from Lozeau to Gingerich dated April 19, 1972, which was approved by Gingerich. I suspect they are only ball-park estimates, but this is the best that can be done right now. I have taken the liberty of rearranging them a bit, and adding a bit for inflation. Also, I have added an item for transporting the telescope to Cambridge and installing it here.

A group of concerned astronomers met at the Observatory before Christmas and reviewed the concept. They are enthusiastically supportive for the reasons stated. I feel, however, that for the project to be successful, provision must be made for manning the telescope; that is, guiding students in its proper use. Naturally, the Astronomy Department will do this for these students in its courses. However, the casual use by students in the building is more in line with the overall aim of the Center in increasing awareness of and interest in science. It is therefore proposed that the Science Center provide a part-time graduate assistant to serve this function. If the telescope were to open three hours on most clear week nights during the two semesters, there might be a total of 80 nights or 240 hours. This is about 1/5 time for a graduate student.

Sincerely,

  
George B. Field  
Director

GBF:kdb  
Enclosure

# A TEACHING TELESCOPE FOR THE HARVARD SCIENCE CENTER

## Introduction

Although city lights inhibit serious astronomical research, a moderate-size telescope mounted on the Science Center building would be very useful as a teaching tool. The Science Center is host to three undergraduate astronomy courses; in each of these students would use the telescope on clear nights to observe and report on the moon, planets, and stars, thus providing a unique type of scientific experience. In addition, because of the large flow of students through the Science Center, if such a telescope were open to the University community a few nights each week, there would be constant "free-wheeling" use by students outside of astronomy courses, almost certainly increasing the interest of students in the sky and in space phenomena. A recent example is Comet Kohoutek, which would be a very impressive and exciting object as seen through such a telescope.

## Telescope

In view of this, the Astronomy Department and the Observatory have located a fine visual instrument which will be made available to the Science Center at no cost to the latter. The telescope is a 10-inch f/15 refractor made by Fecker, and includes a 3-inch finder telescope and a 3-inch Ross-Fecker astrographic camera. This telescope is ideal for visual observations of stars and planets. The astrographic camera has a wide field, and is therefore ideal for photographing comets.

## Dome and Building Preparation

The Science Center building was designed with provision for a telescope. There is an opening at a suitable point on the roof of the building, and there is a suitable room to house the telescope. However, certain further work is needed to make the area ready for the telescope. A hemispherical dome to protect the telescope must be purchased and installed. This dome must be rotatable (with a motor) and must have a slit and cover of standard design. Certain structural and electrical work must be accomplished (power, concrete base for the instrument, etc.). Finally, the telescope must be dismantled at its present location, shipped to, and installed at the Science Center.

-2-

Budget Request

To accomplish these objectives, \$75,000 is requested as follows:

Dome purchase and installation	\$30,000
Structural and electrical work	35,000
Dismantling, shipping, and installing telescope	<u>10,000</u>
	\$75,000