

NATIONAL RADIO ASTRONOMY OBSERVATORY  
Green Bank, West Virginia

September 29, 1983

TO: A. Shalloway  
FROM: B. Peery  
SUBJECT: Telephone System at Prospective VLBA Sites

In our visit to prospective VLBA telescope sites, we inquire about telephone service. In all cases where there are existing facilities, we get an answer that is not a very enthusiastic endorsement of the local system. At some of the existing installations there are alternate systems or alternate systems being considered. The main use has been for voice communication. They have not attempted to transmit data to any extent, it appears - definitely not high speed digital data.

The following is a brief review of our interpretation of what the situation is at those sites visited:

- Harvard Observatory - Fort Davis, Texas  
Served by Southwest Bell out of Fort Davis.  
Have asked for upgrade of system for 2400 baud.  
This is being worked on. Moving slow.
- McDonald Observatory - Fort Davis, Texas  
Served by Southwest Bell out of Fort Davis.  
Are considering private satellite system to the  
University of Texas in Austin.
- Kitt Peak - Arizona - Served by Mountain Bell out of Tucson.  
Our impression is that our experience there has  
been similar to that described by other sites.
- Owens Valley Observatory - Big Pine, California  
Served by small telephone company out of Bishop.  
They have dedicated line back to Caltech in  
Pasadena by-passing local system.
- Haystack Observatory - Westford, Mass.  
Served by New England Telephone (part of Bell  
System).  
Have private microwave link back to MIT - Boston.

Five College Observatory - Quabbin Reservoir near Pelham and Cooleyville,  
Mass.

Served by New England Telephone (part of Bell  
System).

Have private microwave link back to University of  
Mass. in Amherst.

North Liberty Radio Observatory - North Liberty, Iowa

Served by small local telephone company.

Have private microwave link back to University of  
Iowa in Iowa City.

In all cases, the people we talked with thought that we could probably get better service by by-passing the local organization, but this would take time and would probably increase the cost of the service. We did not pursue the issue beyond this, as we were making our first visit and the sites are considered prospective sites at this time.