Subject: Thoughts on RG's White Paper Date: Fri, 29 Dec 2000 09:38:15 -0500

From: Paul Vanden Bout pvandenb@NRAO.EDU>

To: Bob Brown <rbrown@NRAO.EDU>

DRAFT

POSITION PAPER ON THE ORGANIZATION OF ALMA IN CHILE

January 5, 2001

R. Giacconi

Introduction The Atacama Large Millimeter Array (ALMA) is an international project organized between two partners, Europe and North America, with the strong possibility of a third partner, Japan. The parties to this partnership have different legal structures, ranging from a private corporation to government agencies, to an international treaty organization. Any organizational structure for ALMA in Chile must account for these differences in providing what is required to successfully conduct construction and operation of ALMA.

The history of construction and operation of astronomical facilities by foreign entities in Chile offers two models which have been the focus of discussion for ALMA thus far. In Europe, ALMA is focused in the European Southern Observatory (ESO), which has built and operates major optical facilities in Chile for many years. ESO is an international treaty organization and, as such, enjoys privileges and immunities which are attractive for ALMA. In the United States, ALMA is focused in the National Radio Astronomy Observatory (NRAO), a facility of the National Science Foundation (NSF) operated by Associated Universities, Inc. (AUI) under cooperative agreement with the NSF. The United States also has a long history of building and operating optical facilities in Chile. The legal basis for doing so is in a law granting the same immunities and privileges that ESO enjoys, albeit not with the level of assurance afforded by an international treaty.

In the discussion to date, it has been assumed that either of these models could be applied to ALMA and that it was only necessary to choose the most attractive. That appeared to be the model whereby ESO provided the legal representation in Chile, because of the higher assurance of privileges and immunities, and the ALMA Coordinating Committee decided to make that its first choice for organizing ALMA in Chile, while keeping open all other options as it studied the legal and practical ramifications and opened discussions with the government of Chile.

It is argued in this position paper that neither of these models satisfies the requirements for ALMA, and that a new model is necessary.

Requirements What are the requirements for organizing the construction and operation of ALMA in Chile? The principal requirements are access

to a telescope site, the right to construct and operate an observatory in Chile, and the legal basis to do this with as much freedom, flexibility, and protection from interference as possible. It will be necessary to satisfy the requirements imposed by Chile. And there may be requirements unique to each of the partners that must be accommodated.

... words on each of these points ...

Problems with the ESO Model

Problems with the AUI Model

A Third Model

Conclusion

 \ldots references to ESO's history should be minimal throughout the document \ldots