

June 19, 1984

To: Addressee

From: C. Bignell

Subject: AOC Building Requirements and Related Tasks

There are several tasks the Operations working Group should take on during the next month. Although some of these items are not as urgent as others, I would like everyone to give their input on ALL of the following topics by the July 20 (in random order):

(a) Special requirements for the AOC need to be described in more detail (see VLBA OPERATIONS MEMO #6 for a very brief list). To help focus on the specifics I have enclosed a blank table (II-2) that could be used as a fill in form.

(b) Some thought has to be given to "layout". That is, what rooms should be clustered together, what rooms should go in the basement (should there be one), etc. It may be difficult to be too specific since some basic decisions have not yet been made (e.g. number of stories, etc) but we need more input than we currently have to give to an architect. I believe it is reasonable to assume that there is a significant possibility that the AOC may have to be built in two stages because of the uncertain funding status for the VLA part. Therefore layout considerations should include this possibility.

(c) There is a possibility that insufficient funds will be available for building the complete stand alone version of the AOC (about 38,500 sq. ft.) at the beginning. If this is the case a priority list of what parts of the AOC could be delayed or omitted from the initial building will probably have to be established. Could I have your comments and suggestions so I can put this together for discussion at our next meeting.

(d) The current plan for bringing up the VLBA operations during the construction is limited to an initial attempt at describing a wish list of manpower levels over the 4 to 5 years of construction (see VLBA OPERATIONS MEMO #6). Unfortunately, the funding proposal which starts with about \$0.5M in 1986 and increases yearly to a final budget in 1989 does not match this wish list. Since 1986 is the earliest date for starting operations I will need a list of priorities in order to modify the plan. Two other items related to this topic also need more

discussion and revision. Some of the operational manpower will come from the construction crew. A plan for this must also be established. Also the current best guess for the VLBA operating budget in 1985 funds is still believed to be significantly higher than what NRAO will receive from NSF.

As a reminder can I have you input on these subjects by July 20.

Table II-2

VLBA OPERATIONS BUILDING SPACE REQUIREMENTS

Division	Purpose	Type of A/C- Heating	Type of Floors	Special room req. - shielding, etc	Other- specify
Scientific Services	Library /study area Secretary Office & Receptionist Area Directors Office Deputy Directors Office Scientific Offices Visitors Offices Auditorium Journal/Coffee area Visitor's kitchen Conference room Canteen				
Array Operations	Array Control Room Correlator Control Room Offices				
Tape Storage	Storage for 60 days at AOC				
Computer	Offices Computer room (not Post Proc) Correlator Room Electronic racks Tape staging Area Expansion rack space Computer room (Post Process) AIPs terminal rooms General tape archiving Maintenance lab Parts/comm equip/supplies Special AC room				
Business	Offices Files Warehouse, Equipment rooms Machines (copies, etc)				
Electronics, Field	Front End Lab Cryogenics Lab Local Osc. and IF Lab Digital Lab Recorder Lab Maser Lab Test System Lab Diagnost. and Monitoring Area Record Keeping and File Area				

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VLBA OPERATIONS BUILDING SPACE REQUIREMENTS

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Division	Purpose	Type of A/C- Heating	Type of Floors	Special room req. - shielding, etc	Other- specify
	Offices				
	Shipping and Receiving Area				
	Stock Area				
	Modules to be Repaired Area				
	Modules Ready for Use Area				
	Drafting area				
	Screened room				
Antennas	Drafting Area				
	Office				
	Antenna Servo/Electrical				
	Antenna Mechanical				
	Machine Shop				
Overhead (hallways, washrooms, etc)					

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