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OFFICE OF THE PRESIDENT

COLUMBUS 5-2090

CABLES: UNIVASSOC

September 15, 1958

MEMO TO: F. J. Callender

FROM: Richard M. Emberson

SUBJECT: Report on Meeting at the National Science Foundation,
Thursday, September 11, 1958

1. This memorandum will confirm a report I made to you by telephone, concerning the meeting at the National Science Foundation Thursday, September 11, attended by Jack Luton and, most of the time, by Randall Robertson, Geoffrey Keller, Frank Sheppard, Charles Ruttenberg, and Al Leigh. Copies of this report are being sent to Jack Luton as a record of my understanding of the results of the discussions at the meeting.
2. Forest Festival- I advised that in response to the call to the Science Foundation from Representative Staggers, NRAO was providing an exhibit for the Forest Festival to be held in Elkins, West Virginia, the end of September. The exhibit will consist of the site model and the models of the 85-foot and 140-foot telescopes. In addition, there will be a display board with descriptions and pictures pertaining to the Observatory's programs. Attendance of 100,000 to 150,000 persons is expected, and we plan to provide 50,000 copies of a "give-away" sheet concerning the Observatory. Jack Luton will determine whether or not the NSF would like to place copies of the pamphlet at our exhibit to provide additional information on the NSF. As soon as you have learned the correct shipping address for printed material to be distributed at Elkins, please forward it to Jack Luton.
3. Irving Bowman & Associates Supplement - Mr. Ruttenberg said he had this on his desk, and planned to give it his early attention.
4. Replacement of Station Wagon - Jack Luton could not give me a specific date, but he believed that we would have a replacement station wagon before the time of the meetings in mid-October.

ACTION
FJC

5. Invitations to NSF Personnel - Jack Luton had discussed the October 16 ceremonies with Dr. Waterman, who thought it preferable that invitations be issued over Lloyd Berkner's signature to go to the members of the National Science Board, the NSF Astronomy Advisory Panel, and appropriate NSF staff members. Jack Luton will provide me a complete list of names and addresses. Meanwhile, I presume this will be mentioned at the forthcoming NS Board meeting in order that the October 16 date may be saved by the Board members.
- ACTION
JEL
6. Purchase of Land East of Route 28 - In my absence from the New York office on a trip that included the above stop in Washington, a letter had been received from Jack Luton concerning our proposal to purchase land east of Route 28 to protect the site. Copies of this letter have already been sent to recipients (LVB, LRB, FJC, CFD) of this memorandum. In brief, the letter suggested that we return to the earlier concept of easements rather than direct purchases. I pointed out that we had carefully reviewed all the features and had considered from our point of view, that direct purchase seemed preferable. Direct purchase solved the problem of radio interference, of undesirable commercial development and, of course, offered an opportunity for the use of the additional land for some purpose directly of interest to the Observatory. The matter was left that we would review Jack Luton's letter and reply to it. Meanwhile, Chuck Ruttenberg said that he would proceed with discussions with the Corps of Engineers concerning easements against commercial development.
7. Contract Amendment - I pointed out that escalation on the E. W. Bliss contract would be dated from August 14, provided we could give a full and unconditional go-ahead before September 30. Also, we expect bids on the Laboratory and Residence Hall on September 23. If the best bid is acceptable, we would like to proceed at once, in order that the contractor might take advantage of favorable construction weather in the Fall. Thus, there was considerable reason to expedite our contract amendment. Jack Luton said he felt safe in guaranteeing that our contract would be amended before September 30 and he asked Randall Robertson and Frank Sheppard to initiate the necessary action on paper for the forthcoming NS Board meeting.
8. Special Grant for Maser Receiver - During our discussion it was pointed out that the severe reductions in our appropriation would prevent our making an early commital for the development and construction of a maser receiver. One solution would be for the NSF to provide this receiver through a special grant. No formal action was appropriated at this meeting, but I gathered the impression that the NSF would prefer to make such a grant to a radio astronomer not directly affiliated with NRAO.

9. Operating Budget FY 1960 - The appropriate groups within the NSF, the Bureau of the Budget, etc., have take no action on this budget request, for reasons that will become clear in my later account of the discussions of the Capital Budget. Our Operating Budget was increased by \$70,000, from \$575,000 to \$645,000, adding the following items:

- \$10,000 - fuel oil for diesel generator
- \$20,000 - personnel (3) to operate diesel generator at all peak load times of day
- \$40,000 - to quiet the radio noise situations discovered in the Green Bank valley when the 85-foot telescope was put into operation.

In addition, with reference to Table 2 on our May 1 submittal, the Astronomy Department was increased by 3 observing assistants, and the Electronics Departments was reduced by 3 electronic specialists.

ACTION With reference to Table 3, it was suggested that we provide the
FJC breakdown between equipment, services and supplies, because it was obvious that the Director would spend most of his allocation for services, whereas the Business office might spend most if its allocation for supplies and equipment.

10. Capital Budget FY 1960 - Our discussion of the FY 1960 Capital Budget started from opposite extremes. My inflexible position was that the May 1 submittal should be augmented by the \$420,000 cut from the supplemental appropriation, bringing the total to \$3.359 million. (FJC letter of September 2). This included a few minor adjustments based on improved estimates. The Foundation's position was that the hearings on the special appropriation had made clear that there would be no Capital appropriation for FY 1960. The items listed in the September 2 Tabulation were reviewed and discussed as follows:

A 1: We had earmarked \$650,000 for site acquisition. Congress had understood that this sum was sufficient for all acquisition necessary for the Observatory, including any land purchased for protection purposes. If we feel that the present remainder of approximately \$90,000 is more than enough for the easements recommended by the NSF, or for additional land purchases recommended by NRAO, then the total may be reduced, for example, to the \$600,000 level listed in the September 2 Tabulation. This reduction is not, however, an invitation for NRAO to come back with a Capital request for additional land purchases.

A 2: After considerable discussion, it was the NSF's determination that the \$60,000 for the special monitoring and standards trucks should be deferred until 1961. The validity of our arguments concerning radio noise sources in the valley, dis-

covered with the 85-foot telescope, were recognized, and a sum of \$40,000 was provided in the FY 1960 Operating Budget to handle this matter. All other items we had proposed in A 2 were deleted.

- A 3: Any additional money for on-site roads will have to be deferred until 1961.
- A 4: Because of assurances given to the Congressional committees during the recent hearings, no additional monies may be requested before 1961 for the water supply and sewer system.
- A 5: I described our electric power budget and the associated time schedule, and all present recognized the situation that will exist starting in the Spring, 1959. On the other hand, the Congressional committees had been assured that we had enough power to put the 85-foot and 140-foot telescopes into operation and, therefore, the NSF was opposed to an immediate request for a large sum to provide a new electric power system. On the other hand, in recognition of our power shortage, it was agreed that \$70,000 would be provided in the Capital Budget request for 1961 for the purpose of acquiring and installing a large stand-by diesel generator. While this diesel generator would serve for emergency purposes, it would also have to serve on a day-to-day basis to take care of the peak loads. Accordingly, the operating budget was augmented to provide \$10,000 for fuel oil and \$20,000 for operating personnel.
- B No additional construction (B 1 to B 5, inclusive) will be requested. If by next spring we can demonstrate a sufficient number of visitor applications to present a convincing argument that additional housing is necessary, the NSF will be willing to consider a request for a supplemental appropriation.
- C 1: Concerning the 140-foot telescope, the Congressional committees were again assured that this instrument could be completed from the existing and recent supplemental appropriations. It would be quite contrary to these understandings for us to request additional funds for the telescope, and NRAO is now certain it can put the 140-foot telescope into operation from the existing appropriation.
- C 2: The same argument applies to the 85-foot telescope.
- C 3: \$300,000 for a large antenna (either a fixed 200-300 foot paraboloid, or the first experimental section of a much larger antenna) must be deferred until 1961 or later.

- C 4: It was recognized that the \$420,000 reduction in the supplemental appropriation forced a serious cut in the funds available for the receivers, feeds and similar operating equipment. Accordingly, it was agreed that \$160,000 would be entered in the FY 1960 budget for these items. This is the reduction in item C4 between the May 1 submittal and the September 2 Tabulation.
- D 1: It was recognized that the NRAO should be prepared to service a maser receiver if one were brought in by a visiting astronomer. I suggested that we call Ed McClain at NRL and obtain an itemization of the various equipments and services required during Charlie Towne's temporary stay at NRL with his ruby maser. Whatever sum is included under D1 for this purpose, the NSF stipulates that no equipment should be provided for the solid state physics project and other programs envisioned for the laboratory wings that were deleted in B 3 above.

Concerning items D 2 through D 4 inclusive, the NSF suggests that all of this should be deleted. I argued that some small amounts would be necessary to outfit the buildings already under construction, because in preparing the budgets for these buildings we had requested that some equipment and furniture projects were of very short lead time, and could be budgeted one year later than the monies required for the construction of the buildings. NRAO is to submit a revised request in these categories, with a justification based on the existing construction program.

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