VLB ARRAY MEMO No. 441

NATIONAL RADIO ASTRONOMY OBSERVATORY Charlottesville, Virginia

March 26, 1985

TO: VLBA MEMBERS FROM: BUCK PEERY SUBJECT: CONF./SITE MEETING 850320

PRESENT: BROWN, BRUNDAGE, CRANE, HOGG, HVATUM, KELLERMANN, NAPIER, PORTER, VANDEN BOUT, WADE, WALKER AND PEERY.

THE CONTRACT FOR A/E SERVICES TO DESIGN THE PIE TOWN SITE HAS BEEN APPROVED BY NSF. A MAJOR EIS REPORT IS NOT REQUIRED. DESIGN WORK WILL START THE FIRST WEEK IN APRIL.

WE HAVE BEEN ADVISED AN ANTENNA COULD BE LOCATED IN THE TA33 AREA OF THE LANL SITE AT LOS ALAMOS. A VISIT IS SCHEDULED FOR APRIL 4TH TO ESTABLISH THE EXACT LOCATION, DRIVE A STAKE AND START THE PROCEDURE TO OBTAIN TITLE TO THE AREA NEEDED FOR THE ANTENNA INSTALLATION.

RFI TESTS ARE UNDERWAY AT THE PROPOSED FORT DAVIS SITES.

PRELIMINARY STUDIES OF THE WATER VAPOR TEST DATA FROM HAWAII DO NOT INDICATE A MAJOR DIFFERENCE BETWEEN THE LOCATIONS WHERE THE TESTS WERE MADE. A REPORT OF THE RESULTS WILL BE OUT SOON. A BROAD DISCUSSION OF THE MANY FACETS INFLUENCING THE CHOICE OF THE EXACT LOCATION FOR THE ANTENNA IN HAWAII RESULTED IN A DECISION TO REAPPROACH THE UNIVERSITY OF HAWAII RELATIVE TO THE USE OF THE LOCATION, PREVIOUSLY DISCUSSED WITH THEM, AT THE 11800 FOOT ELEVATION ON MAUNA KEA. OTHER RESEARCH AND RFI TESTS WILL CONTINUE AS FUNDS ARE AVAILABLE.

RFI REPORTS FOR KITT PEAK (MEMOS 423 & 433) HAVE BEEN ISSUED FOR REVIEW. A PRELIMINARY REVIEW OF THE LIMITED WIND DATA FOR THE MOUNTAIN SITE IS NOT ENCOURAGING. A REPORT INCLUDING THE WIND DATA FOR THE MOUNTAIN, WIND DATA FOR THE VALLEY AND STUDIES OF THE ATMOSPHERE WILL BE ISSUED FOR REVIEW. THE TELEPHONE COMPANY HAS INDICATED THEY COULD CHANGE THE FREQUENCY OF THE CARRIER (2.121 MHZ, 2.172 MHZ), THAT APPEARS MIGHT PRESENT PROBLEMS (MEMO 423), AT OUR EXPENSE. ESTIMATE OF THE COST IS OVER \$100K.

THE SEARCH FOR A SITE IN PUERTO RICO IS ACTIVE TO THE EXTENT THAT THE LOCATIONS OF POTENTIAL SOURCES OF RF! ARE MARKED ON A MAP ALONG WITH POSSIBLE TERRAIN SHEILDS IN PREPARATION FOR A VISIT THERE WHEN FUNDS ARE AVAILABLE.

HAWAII AND PUERTO RICO WILL BE GIVEN TOP PRIORITY IN THE SITE GROUP'S DELIBERATIONS.

CRANE WILL PREPARE A HAND OUT DESCRIBING THE VLBA, INCLUDING OUR CONCERNS WITH RFI PROBLEMS, FOR DISTRIBUTION TO FREQUENCY COORDINATORS IN EACH AREA WHERE WE PROPOSE TO LOCATE AN ANTENNA.