## VLB ARRAY MEMO No. 424

## NATIONAL RADIO ASTRONOMY OBSERVATORY

FEBRUARY 4, 1985

TO: VLBA MEMBERS

FROM: BUCK PEERY

SUBJECT: CONF./SITE MEETING - 850130

PRESENT: BROWN, BRUNDAGE, CAMPBELL, CRANE, HOGG, KELLERMANN, NAPIER, WADE AND PEERY

DEVELOPMENT OF PLANS FOR THE PIE TOWN SITE IS MOVING FORWARD SLOWLY. THE A/E CONTRACT HAS NOT BEEN COMPLETED. THE PROJECTED DATE OF FINAL APPROVAL IS THE END OF FEBRUARY.

INFORMAL CONTACT TO OBTAIN PROPERTY TITLE FOR A SITE AT LOS ALAMOS HAS BEEN MADE. FINAL RECOMMENDATIONS FOR USE OF THE SITE BY THE SITE GROUP IS HELD OPEN PENDING FURTHER REVIEW OF THE RFI PROBLEM IN THE 1700 MHZ AREA. CHANGING OF THIS FREQUENCY BY THE OWNER (BLM) DOES NOT APPEAR PRACTICAL AT THIS TIME.

IT IS RECOMMENDED THAT CONTACT AT ALL LEVELS OF MANAGEMENT BE ESTABLISHED AND MAINTAINED BETWEEN NRAO AND LOS ALAMOS FOR PRESENT AND FUTURE PROTECTION OF OUR INTEREST AT THIS SITE.

RFI TESTS AT KITT PEAK AND IN THE VALLEY HAVE BEEN COM-PLETED. PRELIMINARY INDICATIONS ARE THAT THE MOUNTAIN HAS LESS INTERFERENCE. A 2.2 GHZ SIGNAL, ONE OF THE STRONGER INTER-FERENCE SIGNALS, COULD BE CHANGED BY THE TELEPHONE COMPANY. WIND DATA IS NOT AVAILABLE FOR A GOOD COMPARISON BETWEEN OUR LOCATION ON THE MOUNTAIN AND THE VALLEY LOCATION. THE WIND QUESTION WILL BE GIVEN FURTHER STUDY. A COMPARISON OF THE ATMOSPHERIC CONDI-TIONS BETWEEN THE MOUNTAIN AND THE VALLEY HAS NOT BEEN COMPLETED.

WATER VAPOR TESTS HAVE BEEN COMPLETED IN HAWAII. THE DATA HAS BEEN RECEIVED AND IS BEING PROCESSED. SOME RESULTS OF THE STUDY SHOULD BE AVAILABLE FOR THE NEXT MEETING.

THE PUERTO RICO SITE IS STILL UNSETTLED BECAUSE OF THE VOA INSTALLATION. WE WILL RECONSIDER SITES AT RAMEY, ARECIBO OBSERVATORY AND THE ISLAND OF ST. CROIX.

THE RFI TRAILER WILL MOVE TO FT. DAVIS IN A MONTH OR SO. THE QUESTION OF CHECKING FOR RFI ON TOP OF THE MOUNTAIN (McDONALD OBSERVATORY) AS WELL AS IN THE VALLEY (HARVARD INSTALLATION), WAS NOT RESOLVED. THIS WILL BE REVIEWED AT OUR FEBRUARY MEETING INCLUDING WIND CONDITIONS AT THE TWO SITES. THE DISCUSSIONS INDICATED RFI IS AND WILL CONTINUE TO BE A MAJOR PROBLEM AND WILL REQUIRE CONTINUOUS MONTIORING AT ALL SITES. THE GROUP RECOMMENDS THAT A VLBA FREQUENCY COORDINATOR BE NAMED. THAT A LIST BE PREPARED OF ALL FREQUENCY COORDINATORS FOR OTHER SERVICES (DOD, BLM, STATE, FOREST SERVICE, COMMERCIAL, ETC.) IN THE VICINITY (STATE OR REGION) OF EACH PROPOSED SITE AND THAT THEY BE CONTACTED ON A CONTINUING BASIS TO ESTABLISH A GOOD WORKING RELATIONSHIP WITH THEM.

MORE INFORMATION AS TO THE PROPOSED LOCATION FOR THE ANTENNAS ON THE ISLANDS OF PUERTO RICO AND HAWAII IS NEEDED BEFORE SENDING RFI TEST EQUIPMENT THERE. WHEN THIS IS DONE THE TRAILER WITH ALL ITS EQUIPMENT SHOULD BE SHIPPED THERE FOR THE TESTS.

CONSIDERATION WILL BE GIVEN TO SENDING THE RFI TRAILER TO GREENVILLE N.C., THIS SPRING, TO MAKE TESTS AROUND THE LARGE VOA STATION THERE. THE DATA WOULD BE USED IN CONSIDERING THE IMPACT OF THE VOA STATION IN PUERTO RICO.