

VLB ARRAY MEMO No. 419

NATIONAL RADIO ASTRONOMY OBSERVATORY  
Charlottesville, Virginia

December 27, 1984

TO: VLBA MEMBERS  
FROM: BUCK PEERY  
SUBJECT: CONF./SITE MEETING 841219  
PRESENT: BENSON, BRUNDAGE, HOGG, KELLERMANN, NAPIER, OTY,  
THOMPSON, WADE, WALKER, PEERY

A CONTRACT WITH AN A/E TO DESIGN THE PIE TOWN SITE AND A WORK ORDER TO SURVEY THE PIE TOWN SITE SHOULD BE COMPLETED EARLY NEXT YEAR.

VOA HAS ADVISED THEY WILL BE INSTALLING THEIR FIELD OF POWERFUL TRANSMITTERS WITHIN A FEW MILES OF THE WILDLIFE REFUGE IN PUERTO RICO, THE AREA WE PROPOSED FOR OUR ANTENNA. THIS MEANS FINDING ANOTHER SITE, VERY LIKELY ON SOME OTHER ISLAND. THE SEARCH FOR A SITE WILL CONTINUE.

RFI TESTS ON KITT PEAK ARE BEING MADE AT THIS TIME.

WATER VAPOR MEASUREMENTS ON THE ISLAND OF HAWAII ARE IN PROGRESS. THE FIRST DATA IS JUST BEGINNING TO ARRIVE.

BRUNDAGE REPORTED HIS CONTACTS WITH NSF AND THE MILITARY INDICATE RFI ON MAUNA KEA AND MAUNA LOA COULD BE A MAJOR PROBLEM. BOTH LOCATIONS HAVE A LINE OF SITE TO THE LARGE MILITARY TRAINING AREA (POHAKULOA TRAINING AREA). ALL TYPES OF UNITS, COMING FROM MANY DIFFERENT LOCATIONS, USE THE TRAINING AREA FOR SHORT PERIODS AND AT RANDOM TIMES. IT IS CONCEIVABLE THAT EVERY TYPE OF ELECTRONIC GEAR USED BY THE MILITARY COULD BE IN USE THERE AT ONE TIME OR ANOTHER AND AT DIFFERENT TIMES. THE EQUIPMENT IS MOVED IN AND OUT WITH THE UNIT USING THE AREA FOR TRAINING AT THAT PARTICULAR TIME.

A PRELIMINARY CHECK OF RFI AROUND QUABBIN INDICATES TV CHANNELS 38 & 40 SIGNALS ARE PRESENT. THE STRENGTH IS QUESTIONABLE AT THIS TIME. FURTHER TESTS WILL BE NEEDED. A REPORT ON THE PRELIMINARY TESTS IS IN THE PROCESS OF BEING DISTRIBUTED.

A CAREFUL GUIDE THROUGH, AND REVIEW OF, THE PIE TOWN RFI REPORT (MEMO 407) WAS MADE. IT WAS THE CONCENSUS OF THOSE PRESENT THAT THIS SITE IS ACCEPTABLE UNDER PRESENT CONDITIONS AND THAT THIS RECOMMENDATION BE MADE TO THE PROGRAM PROJECT MANAGER.

IT WAS POINTED OUT THAT IN THE 6000 MHZ AREA THERE ARE SOME FAIRLY STRONG SIGNALS WITHIN THE ACCEPTABLE LIMITS AS ESTABLISHED IN THE RED BOOK.

A DISCUSSION OF LONG TERM OR FUTURE INTERFERENCE PROBLEMS AT ANY ONE OR ALL SITES INDICATED THERE WAS NOT MUCH WE COULD DO. WE WOULD ACCEPT, OR REJECT SITES BASED ON EXISTING KNOWN CONDITIONS WITH THE UNDERSTANDING NEW DEVELOPMENTS, IN THE AREA OF EACH SITE, MUST BE MONITORED CONTINUALLY. AS POTENTIAL PROBLEMS DEVELOP THEY SHOULD BE REVIEWED WITH THE SOURCE FOR ANY CONSIDERATION THEY MIGHT GIVE US BEFORE THEY MAKE THEIR INSTALLATIONS.

A SIMILAR WORK THRU THE LOS ALAMOS SITE RFI REPORT (MEMO 401) WAS MADE. IT WAS NOTED SOME VERY STRONG SIGNALS AROUND THE 1700 MHZ AREA WOULD GIVE PROBLEMS WITH AN OH LINE. IT WAS AGREED TO STUDY THIS PROBLEM AND WITHHOLD ANY RECOMMENDATIONS UNTIL LATER. THOMPSON WILL REVIEW THE EFFECTS OF THIS SIGNAL ON THE RECEIVERS AND ANY POSSIBLE FILTERING THAT MIGHT BE APPLICABLE. CRANE WILL CHECK WITH THE SOURCE OF THESE SIGNALS TO SEE IF THERE IS A POSSIBILITY OF ANY RELIEF THERE.