

VLB-ARRAY MEMO No. 483

NATIONAL RADIO ASTRONOMY OBSERVATORY
Charlottesville, Virginia

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To: VLBA Memo List

From: Martin Ewing

Subject: VLBA Telecommunications (response to VLBA Memo No. 475)

I agree that the common-carrier packet switched networks may be the practical connection to Hawaii, Europe - and possibly to continental US VLBA sites. (As a matter of fact, I wonder if anyone at NRAO has looked into Telenet as a replacement for the NRAO leased lines. Those lines seem to be lightly loaded; Telenet might be cheaper and more reliable. DECNET will run over Telenet, so a packet-switched network would look the same to users. Peak throughput might be an issue, however.)

It may be possible to increase the throughput beyond 300 baud by buffering techniques, allowing confirmations to lag some number of packets behind transmissions. I think DECnet does this automatically.

Is the UK - Hawaii link DECnet?

Lars Baath has used Telenet successfully to log in to our VAXes here from Sweden, and I expect to use it from Australia. The \$10/hr cost is dominant for this work.

Although giving remote users Telenet login access to NRAO would allow them to send mail and communicate with VLBA personnel, I feel that the large academic research networks (BITNET and USENET) are more appropriate for mail. They are free and accessible from all major universities and many minor ones. They have good coverage in the US, Europe, and Australia. I am still amazed that astronomical facilities have been so slow to tap in to such a useful and cheap communications system!