

NATIONAL RADIO ASTRONOMY OBSERVATORY
Charlottesville, Virginia

July 24, 1990

MEMORANDUM

TO: M. Balister
R. Brown
D. Emerson

FROM: A. R. Kerr *A.R.K.*

SUBJECT: 2-mm Receiver Schedule

There is insufficient money to order the varactor-tuned Gunn oscillators and broadband multipliers necessary to measure the sideband ratios of the new 2-mm mixers. The 2-mm mixer has two tuners which will allow broadband or (probably) SSB operation. Without the oscillators and multipliers, there is no simple way to tell whether a receiver is tuned DSB, USB, LSB, or somewhere in between. To measure the mixers without any idea of the sideband ratios would be to spend a great deal of time on measurements which would have to be repeated later...i.e., would be almost pointless.

The mixers are now in the CV shop. We had hoped to begin testing them in October. To have the new Gunns and multipliers in time, they need to be ordered now.

The CDL will have *underspent* its 1990 operating budget by \$50-100k by December 1990. This results from the sale of mixers and amplifiers. *If we had the authority to use this surplus for research equipment within the CDL, we would probably be able to fulfil our promise of fully tested 2-mm SIS mixers by the end of the year.*

cc: N. Bailey
P. Jewel
J. Lamb
H. Liszt
S.-K. Pan
J. Payne
B. Turner
A. Wootten

7/31/90 — John Payne reports that this problem has been solved — Bob Brown has provided the money.