

Jewell

NATIONAL RADIO ASTRONOMY OBSERVATORY
Charlottesville, Virginia

March 26, 1990

MEMORANDUM:

TO: Addressee

FROM: J. Payne JP

SUBJECT: Time Scales for Millimeter Receivers (For Internal Circulation Only)

The following are time tables for the construction of the various receivers for the 12-m telescope. This schedule represents the most optimistic times and may not be realized due to machine shop load, telescope work or other factors.

68-115 GHZ RECEIVER

Activity	Person	Location	Comp. Date
Fabrication of dewar	GB shop	GB	5/01/90
Fabrication of refrigerator	Cochran	GB	5/15/90
Dewar test	Payne/Cochran	GB	5/15/90
Completion of 68-90 GHz inserts	Bailey/Boyd/Cochran	CV	6/01/90
Completion of 90-115 GHz inserts	Bailey/Boyd/Cochran	CV	6/15/90
Installation of inserts in dewar and test	Payne/Bailey	CV	6/30/90
Ship to Tucson			7/01/90
Pattern measurement on optics	Lamb	Tucson	5/01/90
Design of rotating table for optics	Lamb/Kingsley	Tucson	5/15/90
Fabrication of rotating table	Tucson shop	Tucson	6/15/90
Construction of circuitry	Lamb/Kemp	Tucson	7/01/90
Fabrication of parabolas	Tucson shop	Tucson	6/01/90
Design of front-end box	Kingsley	Tucson	5/01/90
Fabrication of front-end box	Kingsley	Tucson	6/01/90
Receiver assembly and test	Lamb/Kemp/Cochran/etc.	Tucson	9/01/90
Receiver test on telescope	Tucson group	Tucson	9/15/90

This schedule is extremely tight and I have real doubts that it can be done. To stand any chance of success, we must attempt to minimize the involvement of the receiver builders in summer shutdown.

130-170 GHZ RECEIVER

Activity	Person	Location	Comp. Date
Order LO components	Lamb	Tucson	5/01/90
Design feeds and optics	Lamb	Tucson	7/01/90
Design insert	Bailey	CV	8/01/90
Mixer design	Kerr/Pan	CV	6/01/90
Mixer test	Pan/Kerr	CV	9/30/90
Insert fabrication	CV Shop	CV	10/30/90
Insert test	Pan/Bailey	CV	12/01/90
Ship to Tucson			12/15/90
Telescope tests		Tucson	3/01/91

240-360 GHZ MIXER

No action planned for next six months.

8-BEAM CONVERSION

Activity	Person	Location	Comp. Date
Design dewar	Payne	TUC/CV	7/01/90
Design LO modifications	Payne	TUC/CV	7/01/90
Fabricate dewar	GB Shop	GB	9/01/90
Fabricate 10 mixers	Horner/CV shop	CV	11/01/90
Test mixers	Pan/Bailey	CV	12/01/90
Fabricate 10 amplifiers	Harris	CV	11/01/90
Design inserts	Payne	TUC/CV	8/01/90
Fabricate inserts	CV Shop	CV	12/01/90
Fabricate LO mods	CV Shop	CV	11/01/90
Fabricate circuitry	Kemp/etc.	Tucson	12/01/90
Design new front-end box	Kingsley	Tucson	12/01/90
Assemble inserts and and test in dewar	Payne/Cochran	TUC/CV	2/01/91
Remove 8-beam Schottky from service			3/01/91
Assemble new receiver and test			7/01/91
Telescope tests and placed into service			9/01/91

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