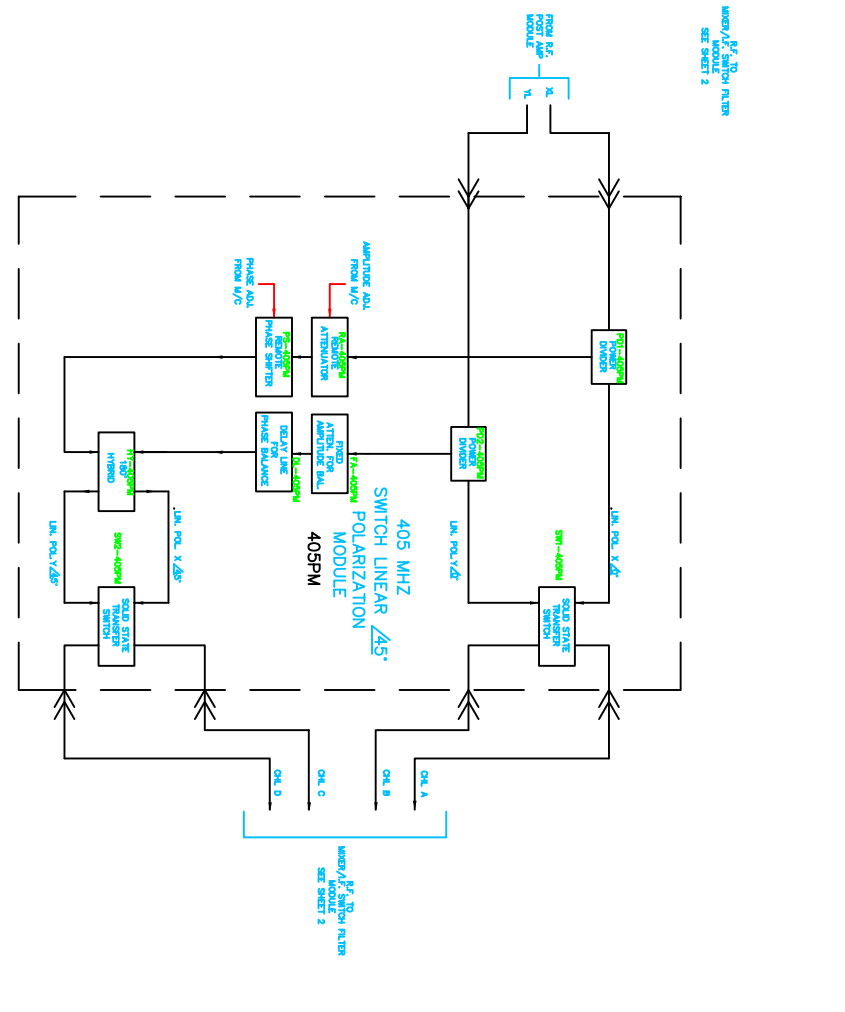
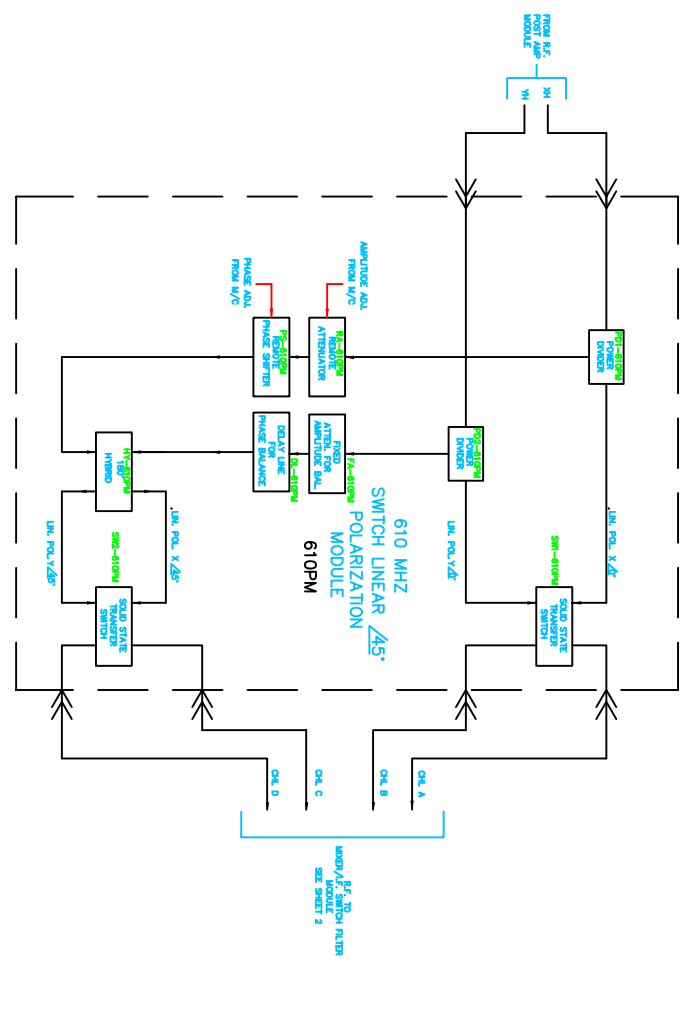
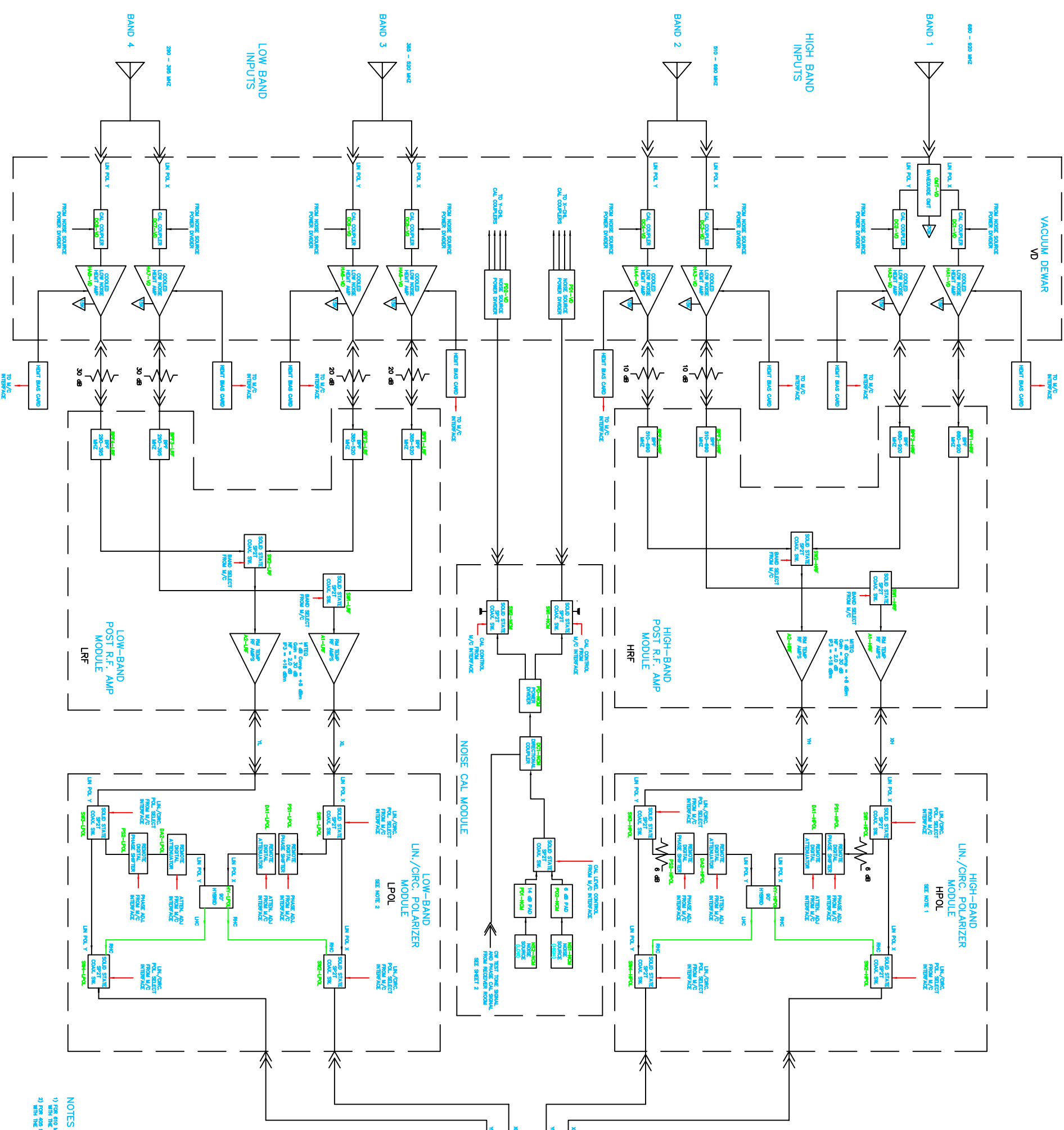
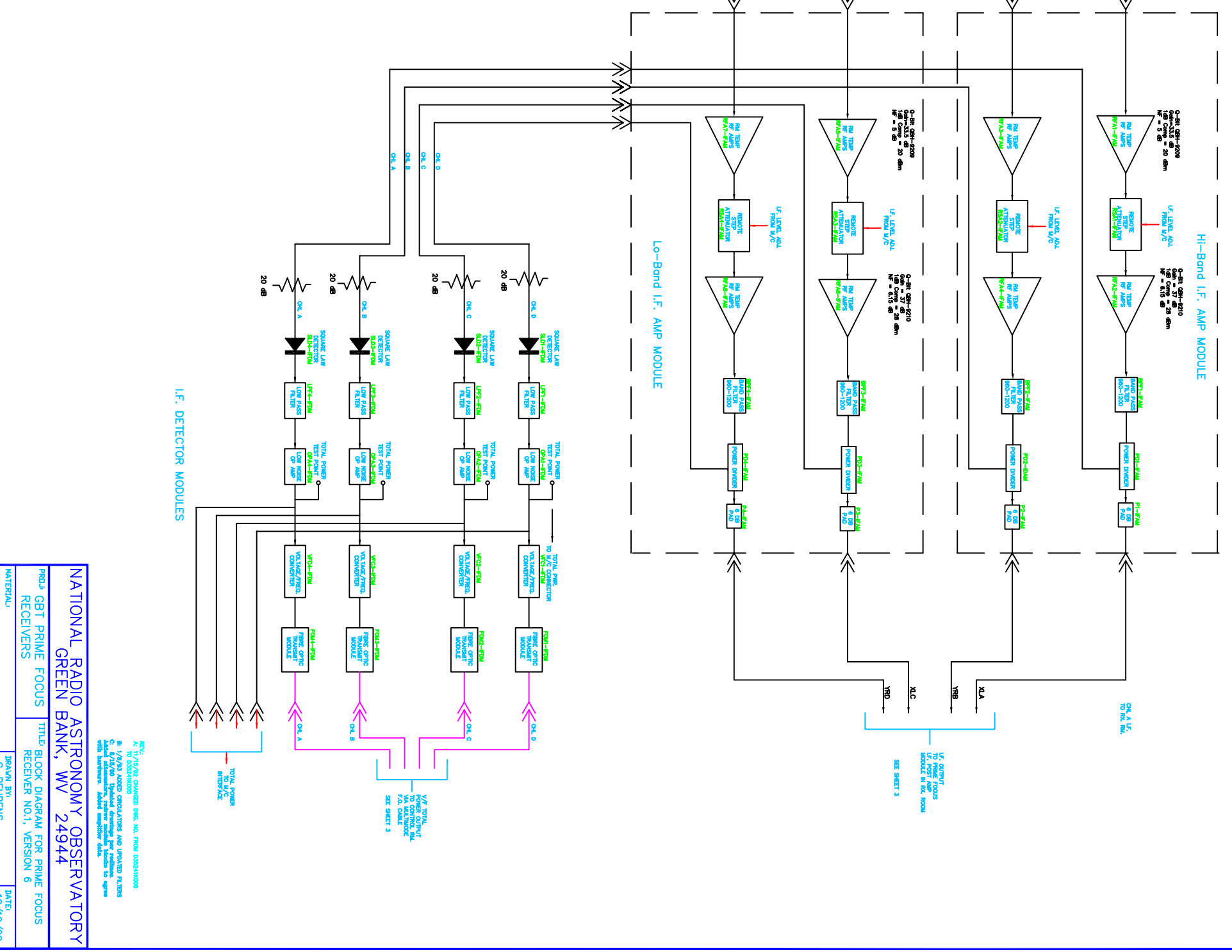
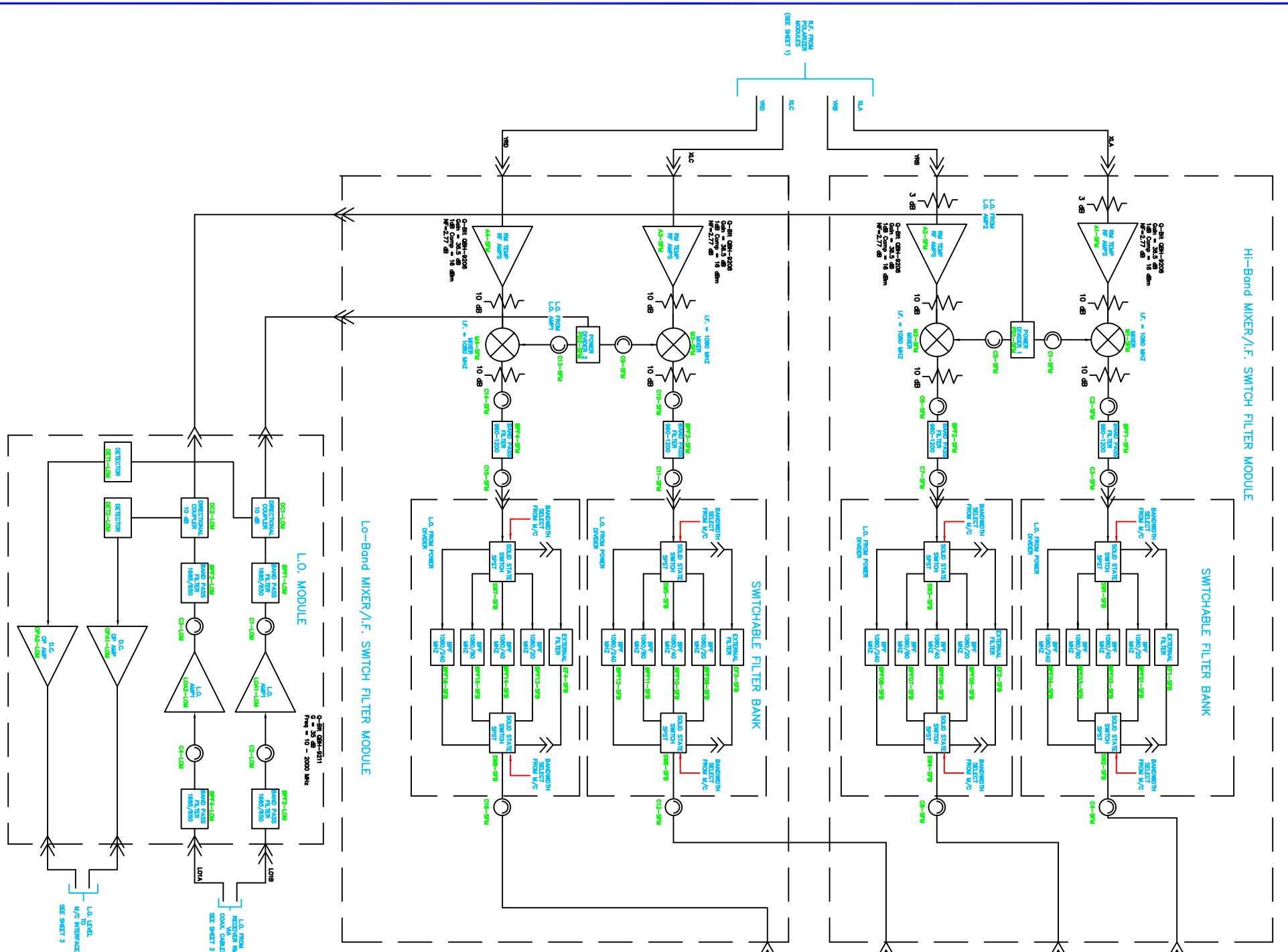


REV	DATE	BY	DESCRIPTION
A		GHB	ADDED NOISE CAL MODULE
B		GHB	MODIFIED NOISE CAL MODULE
C	3/22/93	GHB	REPLACED XTER SWITCHES @ HPOL & LPOL MODULES WITH SP2T SWITCHES
D	4/26/93	GHB	ADDED REVISION BLOCK
E	08/14/00	GNA	Modified Noise Cal: added amp data, corrected polarizer schematic



NOTES
 1) FOR 610 MHz SWITCHED LINEAR POLARIZATION OBSERVATIONS, MANUALLY REPLACE THIS MODULE WITH THE 610 MHz SWITCHED LINEAR POLARIZATION OBSERVATION MODULE.
 2) FOR 405 MHz SWITCHED LINEAR POLARIZATION OBSERVATIONS, MANUALLY REPLACE THIS MODULE WITH THE 405 MHz SWITCHED LINEAR POLARIZATION OBSERVATION MODULE.

NATIONAL RADIO ASTRONOMY OBSERVATORY		BLOCK DIAGRAM FOR PRIME	
FOCUS RECEIVER NO. 1		FOCUS RECEIVER NO. 1	
PROJECT	GBT PRIME FOCUS	DATE	03/22/93
MATERIAL		DESIGN BY	G.BEHRENS
FINISH		DATE	03/22/93
SHEET	1 OF 3	REV.	E
BRANDING NUMBER	D35241K005	SCALE	



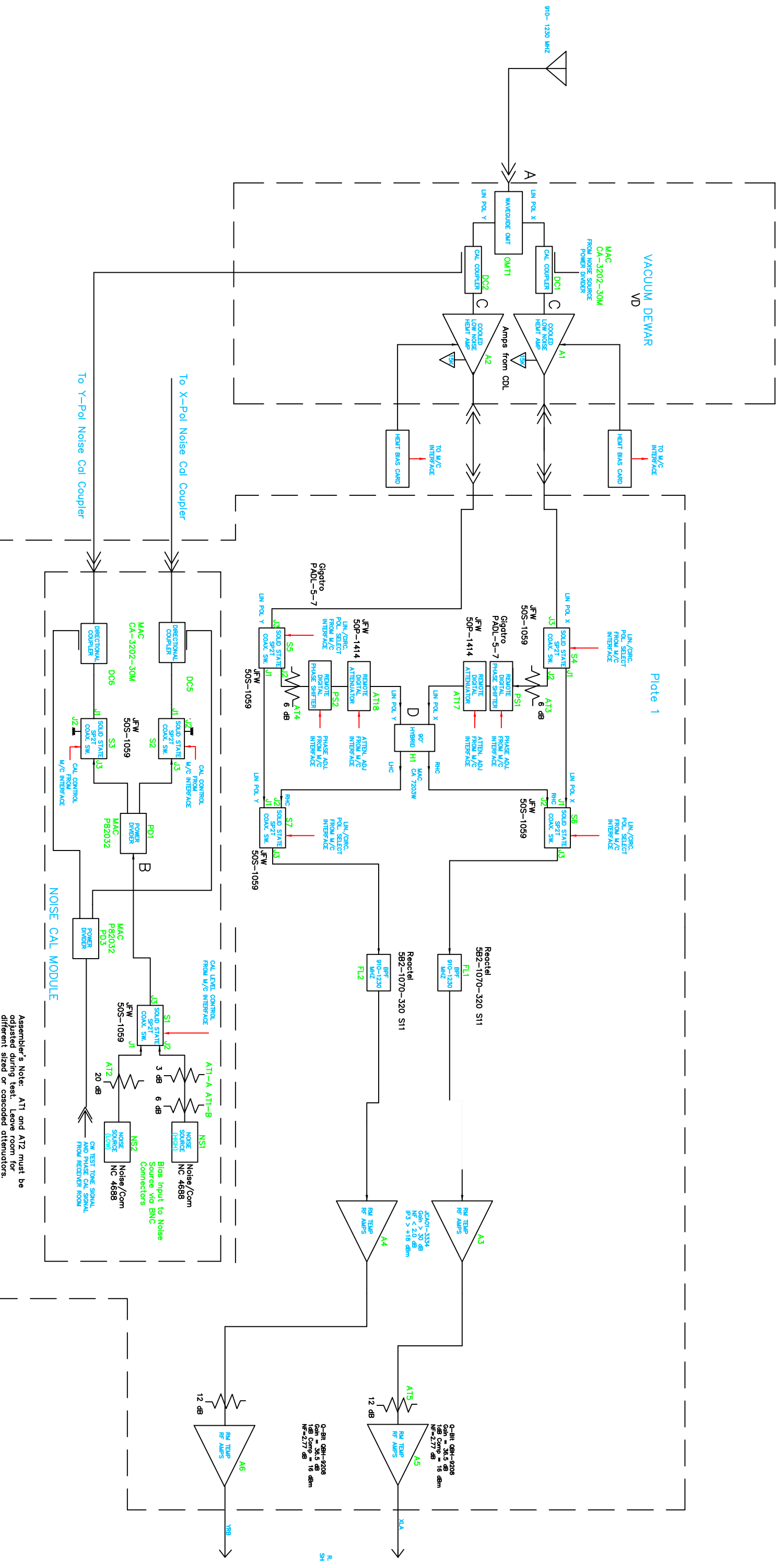
**NATIONAL RADIO ASTRONOMY OBSERVATORY
GREEN BANK, WV 24944**

PRQJ: GBT PRIME FOCUS RECEIVERS
TITLE: BLOCK DIAGRAM FOR PRIME FOCUS RECEIVER NO.1, VERSION 6

MATERIAL	BRNWN BY: G. BEHRENS	DATE: 10/19/92
FINISH	DESIGN BY: G. BEHRENS	DATE: 10/19/92
SHEET: 2 OF 3	DRAWING NUMBER: D35241K005	REV: E

REV: A: 11/15/92 CHANGED PNL NO. FROM D35241K005 TO D35241K006
 B: 12/15/92 CHANGED PNL NO. FROM D35241K006 TO D35241K007
 C: 10/17/92: Updated drawing per customer field instructions, replace existing labels to agree with drawings. Attach original labels.

REV	DATE	BY	DESCRIPTION



NOTE: RF paths must be phase matched over the following segments:

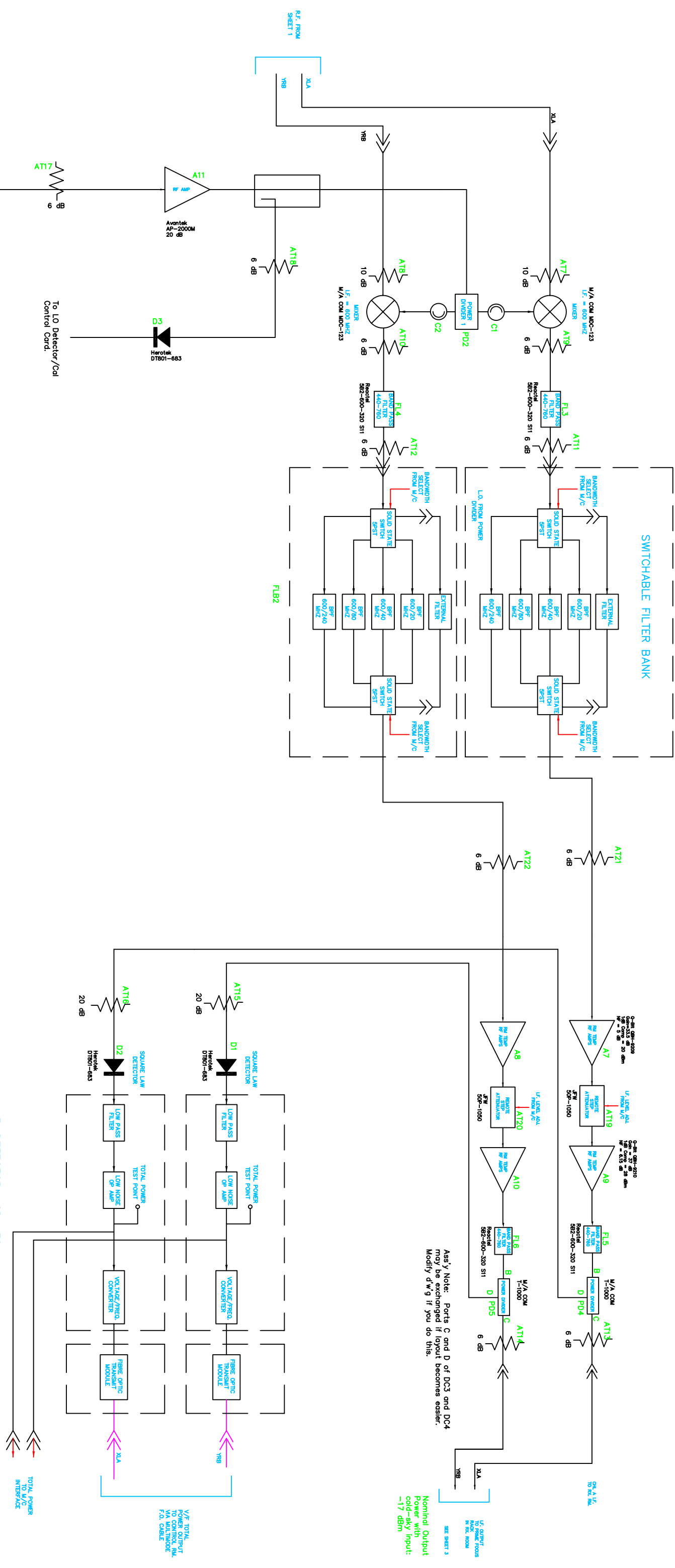
- A-B
- A-C
- A-D

Assembler's Note: ATT1 and ATT2 must be adjusted during test. Leave room for different sized or cascaded attenuators.

NATIONAL RADIO ASTRONOMY OBSERVATORY			
GBT PRIME FOCUS RECEIVERS			
BLOCK DIAGRAM: 1070 MHz PF RX			
24944			
REQD	GBR	DATE	
MATERIAL	NA	DRAWN BY	G. Anderson
FINISH	NA	DESIGN BY	G. Anderson
SHEET	1 OF 2	DATE	04/01/01
BRAVING	NUMBER	REV	SCALE
D1030K001		0	

R.F. TO SHEET 2

IF Plate 2



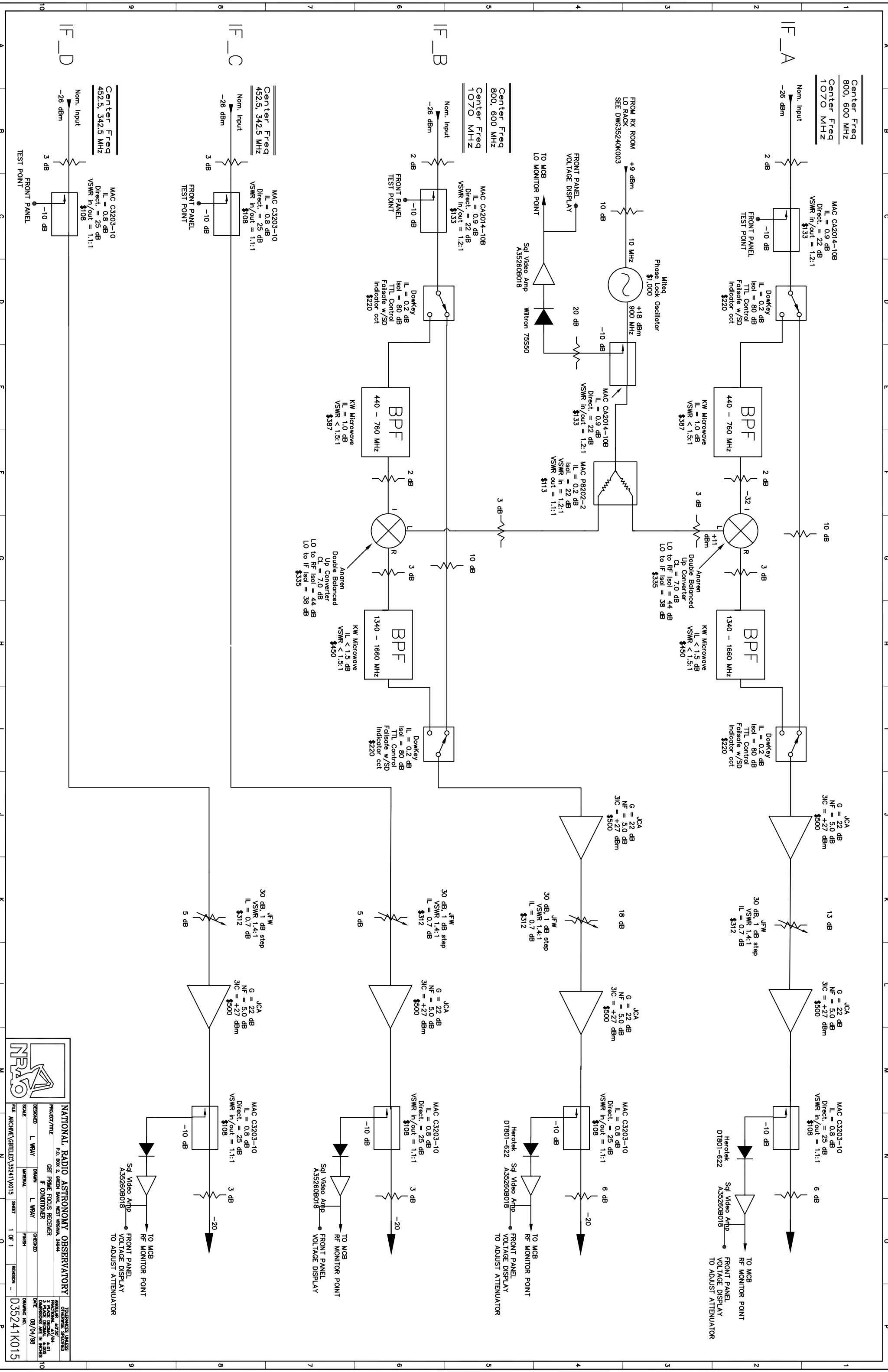
Asy. Note: Ports C and D of DC3 and DC4 may be exchanged if layout becomes easier. Modify d w g if you do this.

Nominal Output Power with cold-sky input: -17 dbm

V/F TOTAL POWER OUTPUT TO CONTROL PM. V/F CABLE

NATIONAL RADIO ASTRONOMY OBSERVATORY GREEN BANK, WV 24944

PROJECT: GBT PRIME FOCUS RECEIVERS		TITLE: BLOCK DIAGRAM: 1070 MHz PF RX	
MATERIAL:	NA	DESIGN BY:	G. Anderson
FINISH:	NA	DATE:	04/01/01
SHEET:	2 OF 2	SCALE:	



NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26044

DESIGNED BY: L. WRAY
 DRAWN BY: L. WRAY
 CHECKED BY: []
 DATE: 09/04/98

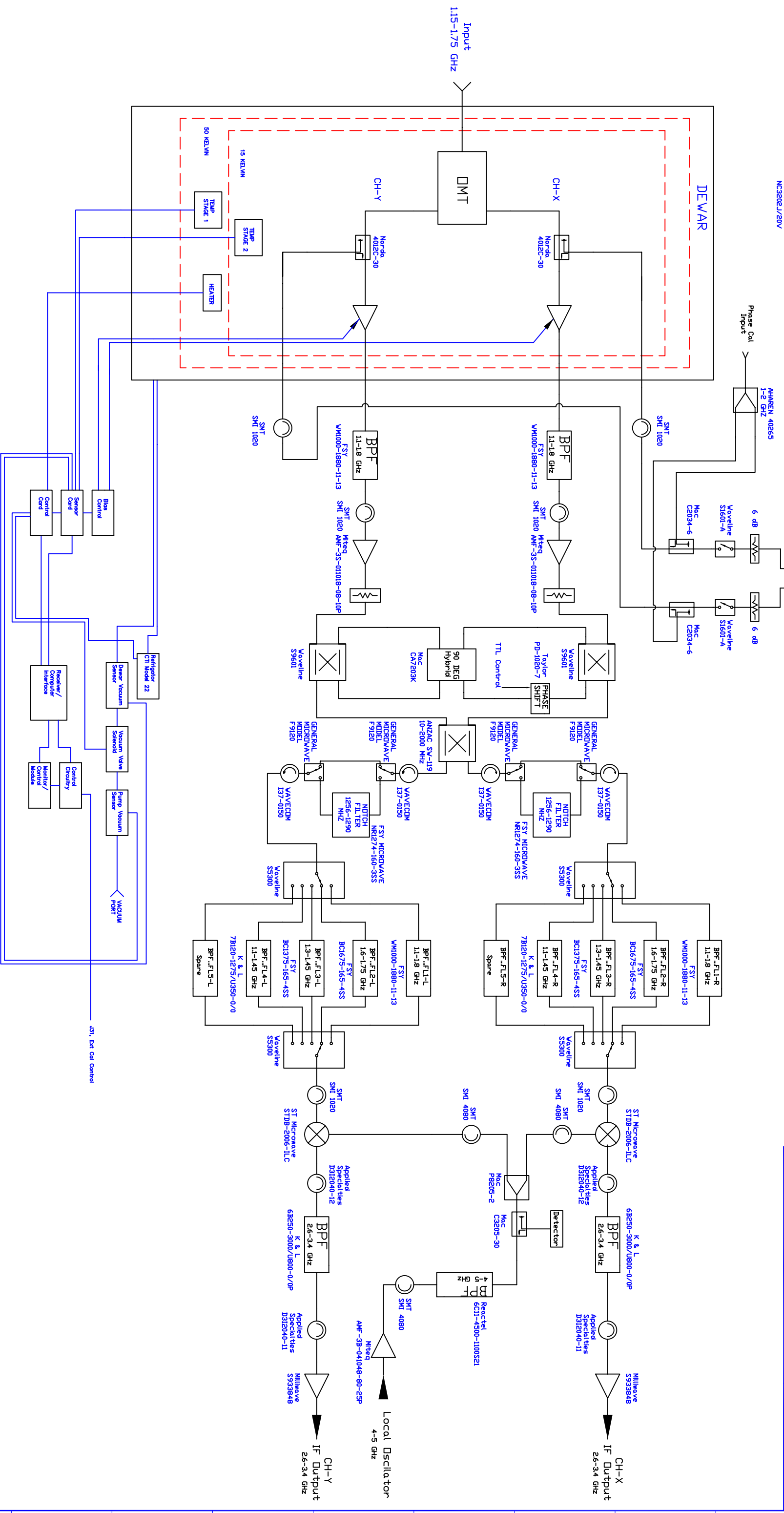
PROJECT/TITLE: GBT PRIME FOCUS RECEIVER
 SUB-TITLE: RF CONDITIONER

SCALE: []
 SHEET: 1 OF 1

DRAWING NO.: D35241K015



REVISIONS					
REVISION	MADE BY	DESCRIPTION	ZONE	DATE	APPROVED
A	B. Simons	Added ANZAC Polarization Switch	1-5	4/13/95	R. Norrod
B	T. DUNBRACK	Added Filter & Channel Labeling MODIFIED CAL. CIRCUIT FOR NEW REQUIREMENTS	4-G 1-3	6/7/01	
C	T. DUNBRACK	ADDED NOTCH FILTER CIRCUITS	H-J 4-7	2/13/02	
D	T. DUNBRACK	ADDED TEXT	H-5	5/1/02	



NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26044

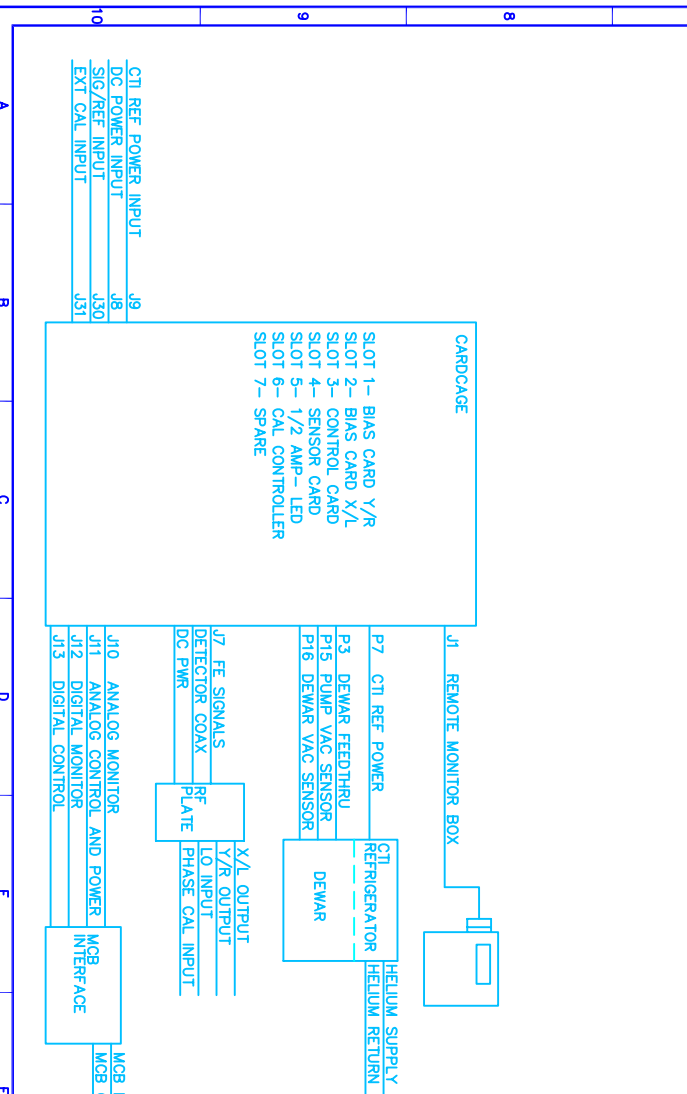
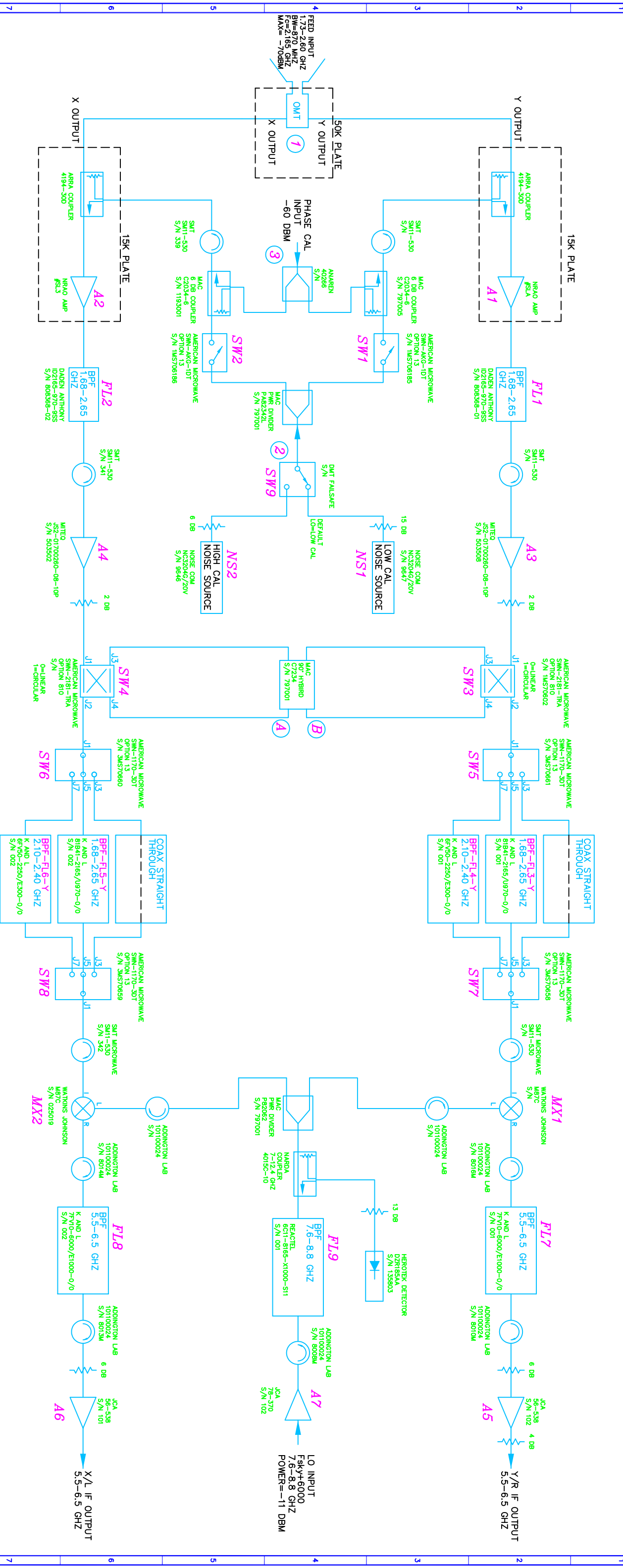
PROJECT/TITLE: GBT... 1.15-1.75 GHz Receiver Block Diagram
 DESIGNED: DPM/Masterman
 CHECKED: [blank]
 DATE: 10-22-93


SCALE: [blank]
 MATERIAL: [blank]
 FINISH: [blank]

TOOLER'S LIST: [blank]
 OTHERS SPECIFIED: [blank]
 ANNOTATE: [blank]
 3 PLACE DECIMAL & 4 SIG
 DIMENSIONS ARE IN INCHES
 DATE: 10-22-93
 DRAWING NO.: D35242K001

FILE: [blank] SHEET: 1 OF 1 REVISION: D

REVISIONS		ZONE	DATE	APPROVED
F	SIMON	REMOVE POL SWITCH, REDRAW	5/15/03	

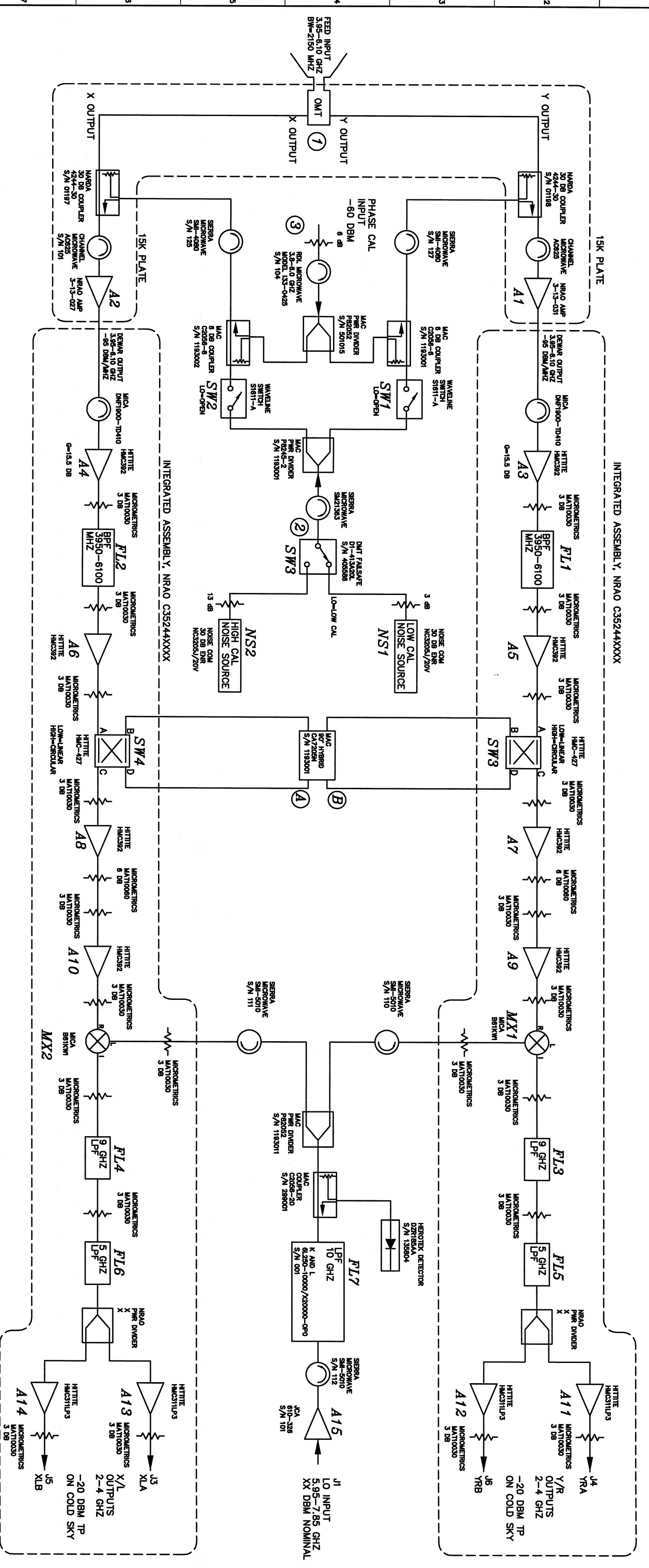




NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26064

PRODUCT/TITLE	1.73-2.6 GHz S-BAND RECEIVER	DESIGNED BY	S. FORE	DRAWN		CHECKED		DATE	7/15/98
SCALE		VERTICAL		HORIZONTAL		FINISH		DRAWING NO.	C35248K001
FILE		SHEET	1 OF 1	REVISION	F				

REVISIONS	ZONE	DATE	APPROVED



NOTE: INSTABILITIES RELATED TO ALL THE MICROSTRIP AMPLIFIERS REQUIRED US TO REMOVE THEM FROM DOWNCONVERTERS. BOTH THE AMP AND THE SUB FOUND TO BE BYPASSED WITH A TRANSMISSION LINE. WE THEN ADDED AN EXTERNAL MILLIWAIVE AMP TO THE IF PORT.

CARDPACGE
 SLOT 1 - BIAS CARD V/R
 SLOT 2 - BIAS CARD X/L
 SLOT 3 - CONTROL CARD
 SLOT 4 - SENSOR CARD
 SLOT 5 - 1/2 AMP - LED
 SLOT 6 - CAL CONTROLLER
 SLOT 7 - SPARE

JXXX REMOTE MONITOR BOX
 P7 CTI REF POWER
 P3 DEWAR FEEDTHRU
 P16 DEWAR VAC SENSOR
 P39 VAC ION POWER
 VAC ION PUMP

HELIUM SUPPLY
 REFRIGERATOR
 DEWAR
 VAC ION PUMP

J10 ANALOG MONITOR AND POWER
 J12 ANALOG MONITOR
 J13 DIGITAL CONTROL
 J7 FE SIGNALS
 K/A OUTPUT
 Y/R OUTPUT
 LO INPUT
 PHASE CAL INPUT

MCB INPUT
 MCB OUTPUT TERMINATION
 MCB FUNCTION BOX
 MCB DASY CHAIN INPUT
 MCB DASY CHAIN OUTPUT

PRELIMINARY BLOCK DIAGRAM
 10/06/07

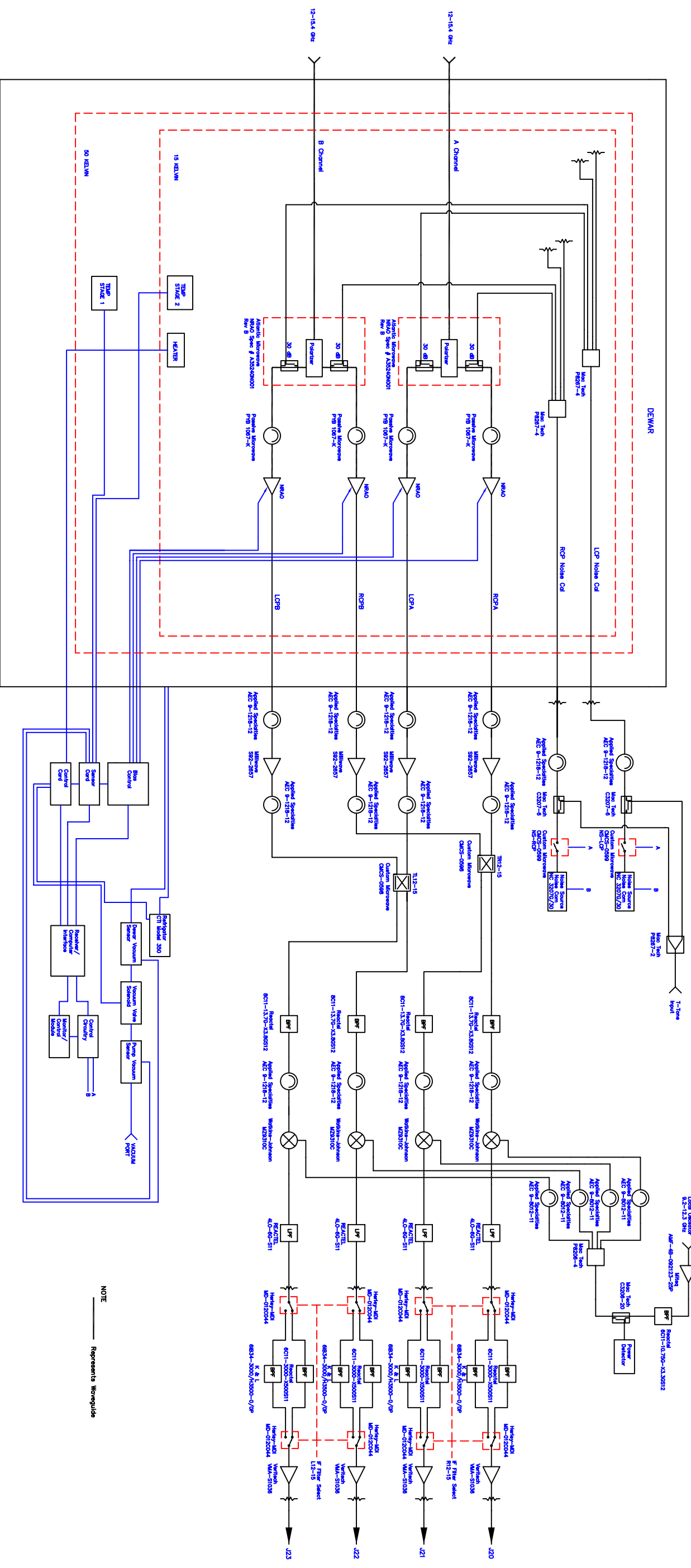
NRAO

NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26434

PROJECT/TITLE: 3.95-8.85 GHz C-BAND RECEIVER
 DESIGNED: [blank]
 DRAWN: [blank]
 CHECKED: [blank]
 DATE: 10/22/93

REFERENCE DRAWINGS:
 X35244K001, 300K RF ASSEMBLY
 C35244M079, TOP LEVEL MECHANICAL DRAWING

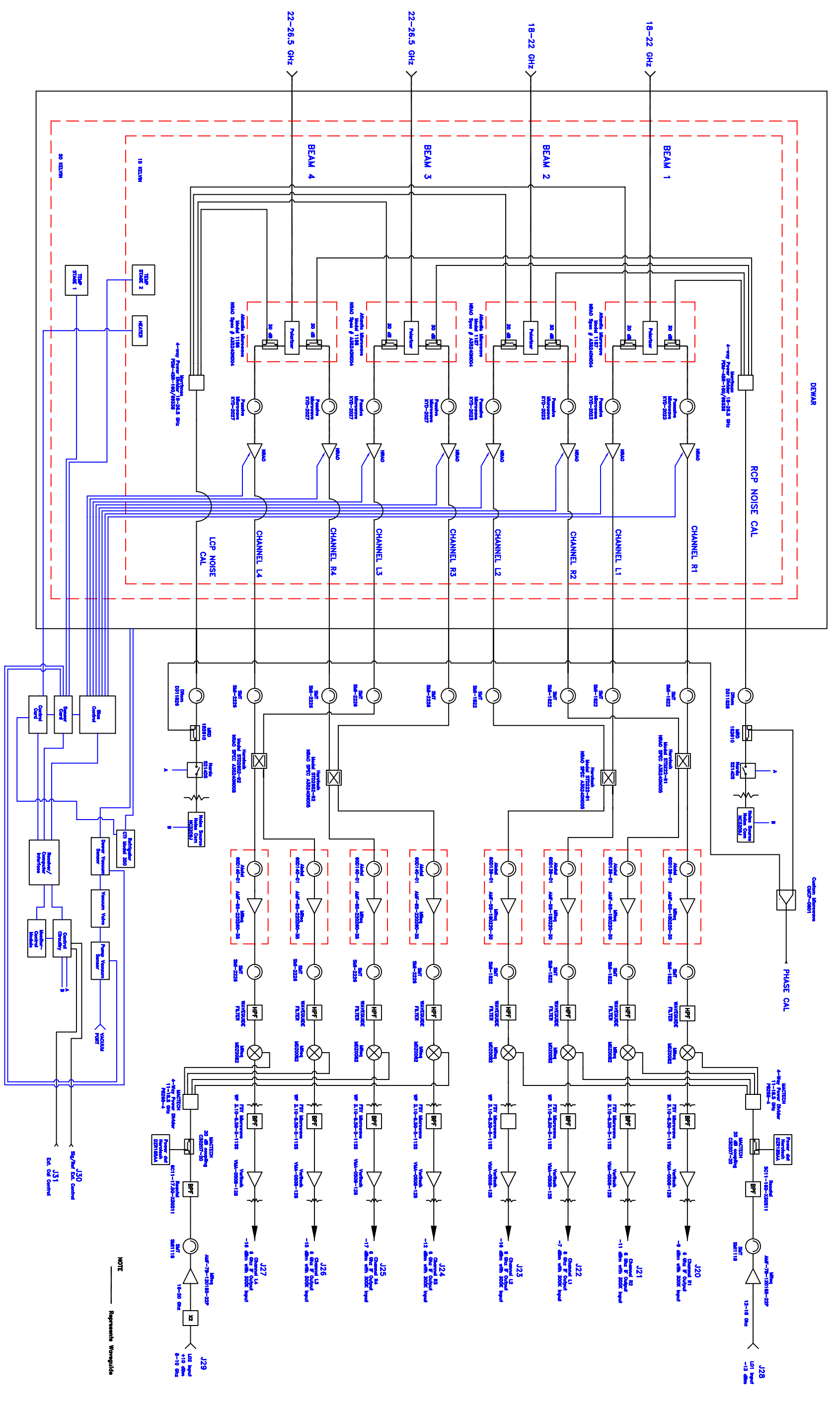
REVISIONS
 SHEET 1 OF 1
 DRAWING NO. C35244K001



NOTE _____ Represents Wavelength

NATIONAL RADIO ASTRONOMY OBSERVATORY
GREEN BANK, WV 24944

PROJECT	GBT Receiver		TITLE	12-18 GHz Receiver System Block Diagram	
MATERIAL	IRAVN BY		DESIGN BY	M. Mosterman	
FINISH			DATE		
SHEET	DRAWING NUMBER	D35246R001	REV	A	
	SCALE				



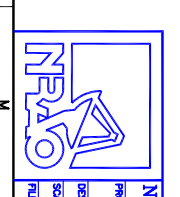
NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26064

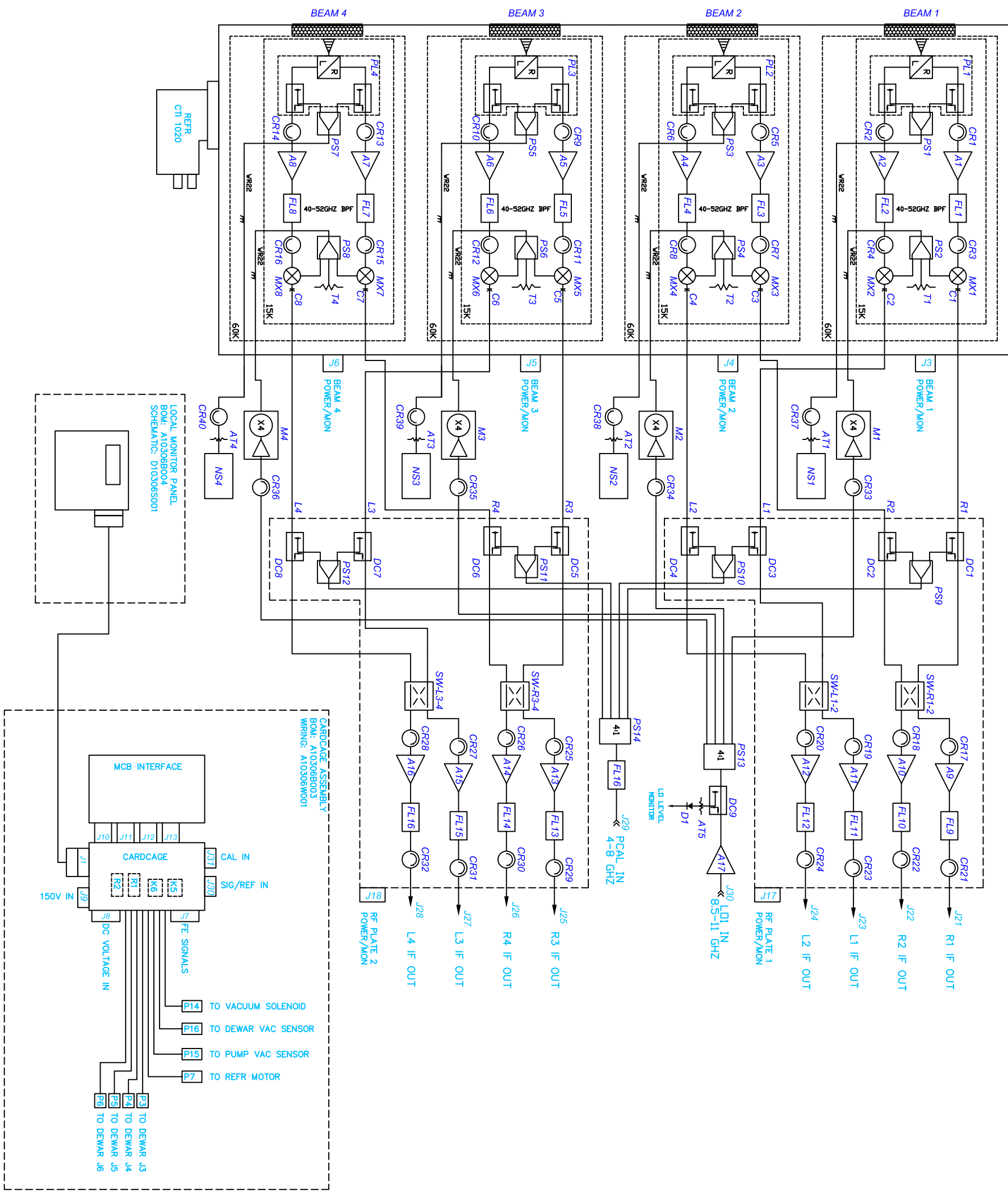
PROJECT/TITLE: 35243
DESIGNER: M. MASTERMAN
CREATED: 6-27-02
DRAWN: M. MASTERMAN/D. BURBANK
DATE: 6-27-02
SCALE: NO SCALE
REVISION: 2

TOLERANCES UNLESS OTHERWISE SPECIFIED:
 3 PLACE DECIMAL & 0.1 INCHES
 2 PLACE DECIMAL & 0.01 INCHES
 DIMENSIONS ARE IN INCHES

FILE: 35243\001
SHEET: 1 OF 1
DRAWING NO.: D35243K001

NOTE: _____ Represents Worsgilde





REVISIONS			
REVISION	MADE BY	DESCRIPTION	ZONE
A	RANORROD	CHG INTERCONNECTIONS	63-7

DATE	APPROVED
3/29/2000	

NATIONAL RADIO ASTRONOMY OBSERVATORY
 P.O. BOX 2, GREEN BANK, WEST VIRGINIA, 26064

PROJECT/TITLE: 08T 40-52 GHz RECEIVER
 RECEIVER BLOCK DIAGRAM

DESIGNED: RANORROD
 DRAWN: RANORROD
 CHECKED: RANORROD
 DATE: 12/12/1999

SCALE: 1 OF 1
 SHEET: 1 OF 1
 REVISION: A

FILE FILE PATH: D:\0306K001

TOLENCES: UNLESS OTHERWISE SPECIFIED
 DIMENSIONS: IN UNLESS OTHERWISE SPECIFIED
 FINISH: UNLESS OTHERWISE SPECIFIED

