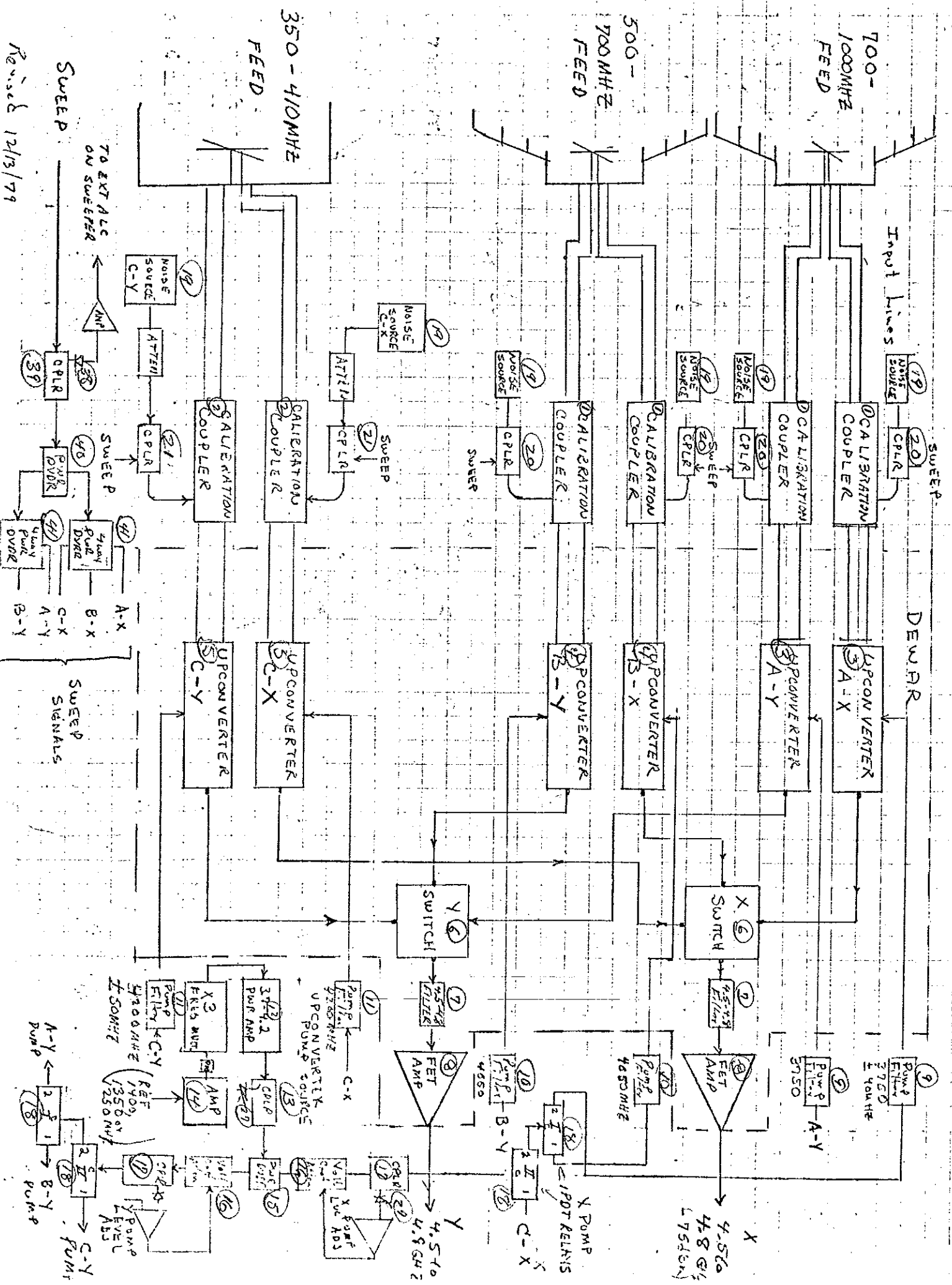
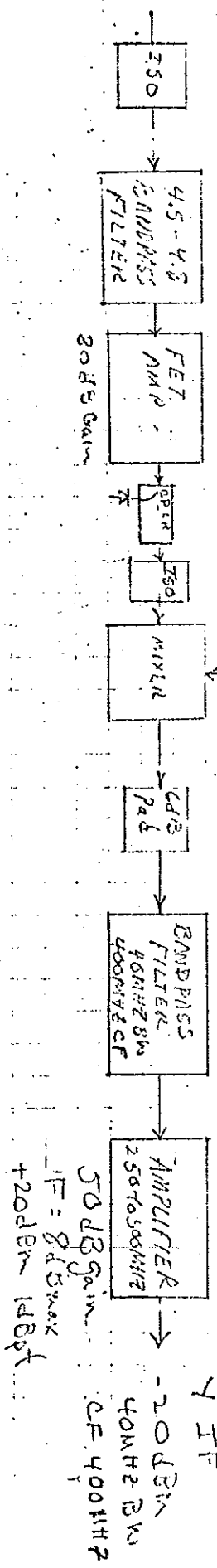
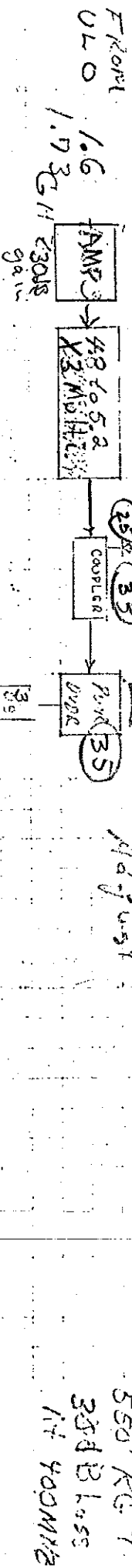
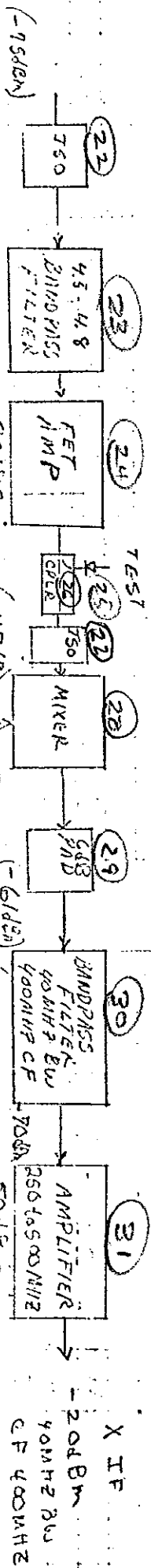


FEEDS 300 - 1000 MHz RECEIVER



Revised 12/13/79



X10 Phase Adjust

+20dB max F - 90dB max

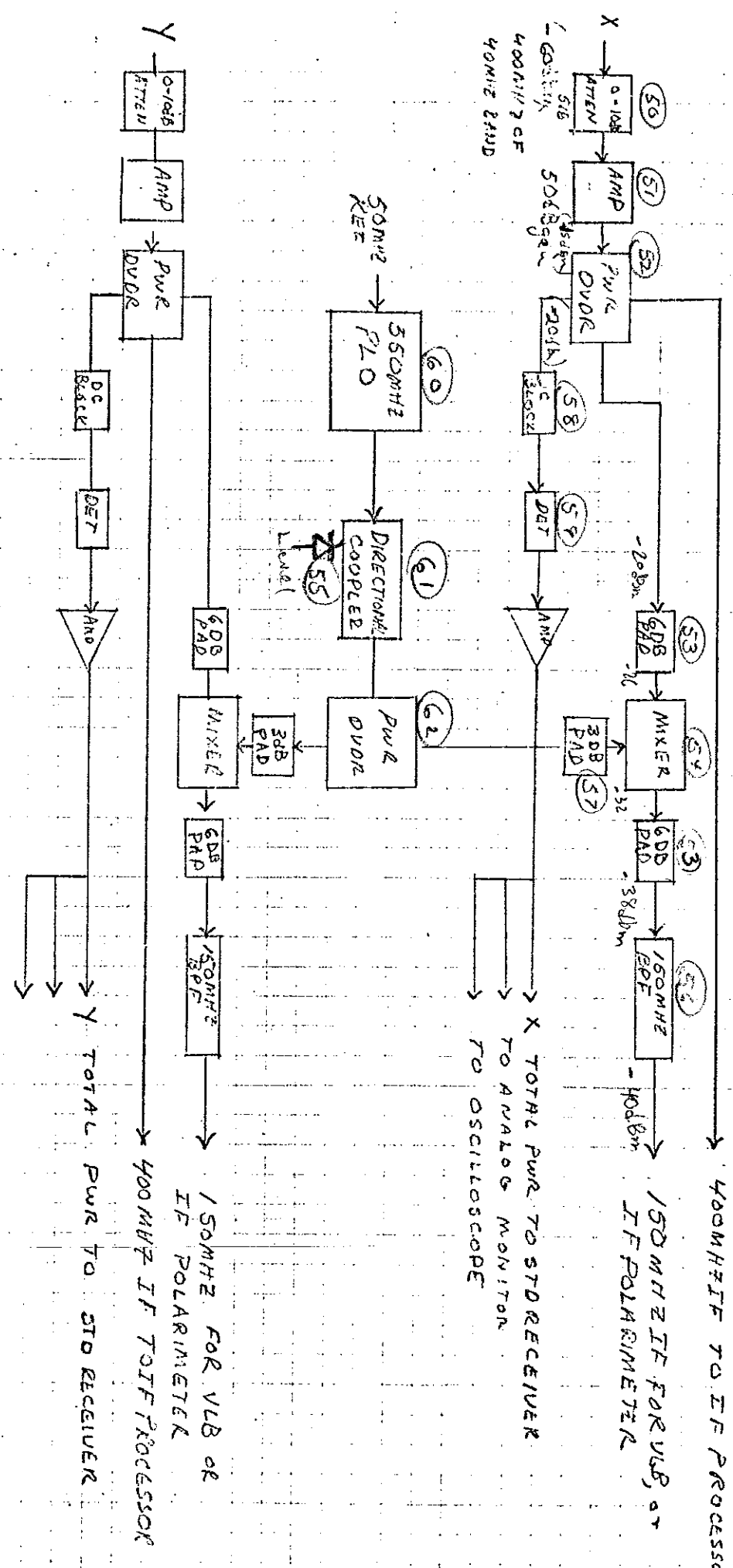
550' RG 7
35dB Loss
At 400MHz

50 dB gain
IF = 8 dB max
+20dB 1dBpt

6/6/78
2/9/78

J. COE

300 - 1000 MHz RECEIVER T.F. CONNECTION (CONTROL ROOM EQUIPMENT)



400MHz IF TO IF PROCESSOR

150MHz IF FOR VLB, or IF POLARIMETER

X TOTAL PWR TO STORAGE RECEIVER

X TOTAL PWR TO ANALOG MONITOR

TO OSCILLOSCOPE

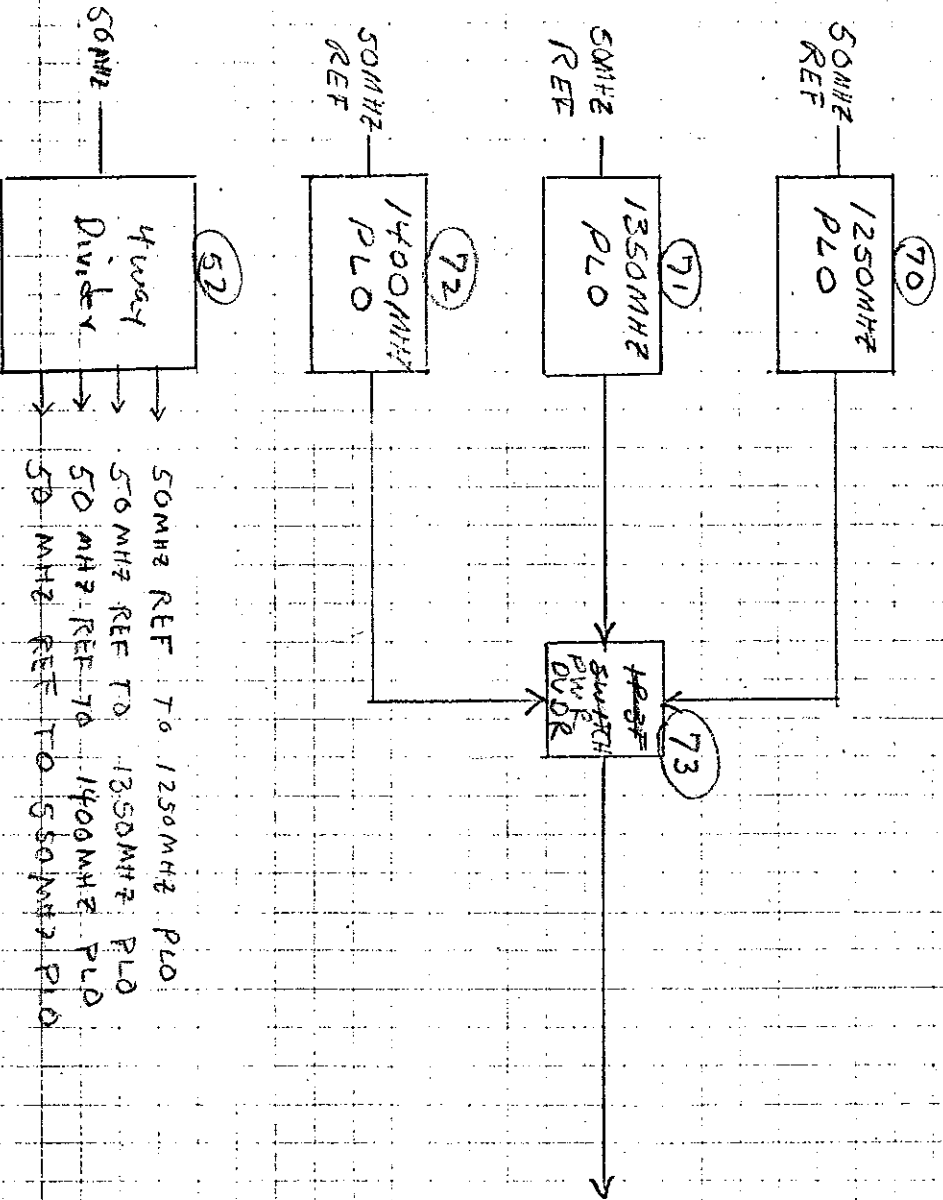
400MHz IF TO IF PROCESSOR

150MHz FOR VLB or IF POLARIMETER

Y TOTAL PWR TO STORAGE RECEIVER



300-1000 MHz RECEIVER UP CONVERTER PUMP REFERENCE
 (CONTROL ROOM EQUIPMENT)



REF TO FRONT END BOX
 1250, 1350, or 1400 MHz

| ITEM (QTY) NAME | MANUFACTURER | MODEL | SPECIFICATIONS |
|-----------------------------------|----------------|-------------------|--|
| 1 (4) A+B CAL. COUPLER | WARD A | | 500 - 1000 MHz RFQ GB 112 |
| 2 (2) C CAL COUPLER | WARD A | | 250 - 500 MHz RFQ GB 112 except ± 0.8 dB coupling. Variations due to max. length |
| 3 (2) UP CONVERTER A | N. R. A. O. | | |
| 4 (2) UP CONVERTER B | N. R. A. O. | | |
| 5 (2) UP CONVERTER C | N. R. A. O. | | |
| 6 (2) RF SWITCH | DB PRODUCTS | 45L2001 | 1P4T LATCHING 15V OPERATE |
| 7 (2) COOLED FILTER FREQ CONTROLS | | | 4.45 - 4.85 PASS BAND 40 dB \leq 4.2 GHz |
| 8 (2) COOLED FET AMP | NRAO (Weinreb) | | a f 7.2 GHz, Cryogenic T_{eq} 200 K FET AMP ATL Proposal JD 927A |
| 9 (2) C PUMP FILTER | LARK | 6C3750-75-YAA | 3750 MHz CF 2% BW FILTER |
| 10 (2) B PUMP FILTER | LARK | 6C4050-81-YAA | 4050 MHz CF 20% BW FILTER |
| 11 (2) A PUMP FILTER | LARK | 6C4200-84-YAA | 4200 MHz CF 20% BW FILTER |
| 12 (1) 3.7-4.2 PWR AMP | LOCUS | MODEL 1086A | 3.7-4.2 GHz, 24 dB GAIN +24 dBM IDB 4T |
| 13 (1) P/L COUPLER | MERRIMAC | C2M-20-3,9G | 3.7-4.2 2001 COUPLING |
| 14 (1) AMPLIFIER | WATKINS | JOHNSON 6202-349 | 10-1500 MHz 35 DB GAIN +11 DBM IDB 4T |
| 15 (1) PWR DIVIDER | TRIANGLE | MICROWAVE YL-1048 | 3.7-4.2 GHz |
| 16 (2) VOLT. CONT. ATTEN. ANAREN | MODEL 60540 | | 3.7-4.2 GHz, 24 dBm to 60 dBm |
| 17 (2) COUPLER | TRIANGLE | MICROWAVE CG-392 | 3.7-4.2 GHz |
| 18 (4) 1 P 2T COAX SWITCH | TRANSCO | 909C70100 | LATCHING TYPE, WITH COT OFF CIRCUIT |
| 19 (6) NOISE SOURCE | MSC | MODEL 63185 | 10 MHz to 16 GHz 20 dBm |

| ITEM (qty) | NAME | MANUFACTURER | MODEL | SPECIFICATIONS |
|------------|---------------------|--------------------|---------------|---|
| 20 (4) | SWEEP CPLR | TRIANGLE MICROWAVE | CO-281 | 500-1000 MHz |
| 21 (2) | SWEEP CPLR | TRIANGLE MICROWAVE | CO-281 | 250-500 MHz |
| 22 (4) | ISOLATOR | AERTECH | ASI-4080 | 4-8 GHz |
| 23 (2) | BANDPASS FILTER | UTE MICROWAVE | FCF-420-0 | 4.5 to 5.0 GHz Bandpass |
| 24 (2) | FET AMP | AVANTEK | SDB-0574M | 4.5 to 4.9 GHz 30dB Gain RF 5B-108 CA |
| 25 (3) | DETECTOR | AERTECH | DOM 408BR | 4-8 GHz Tunnel Diode Detector |
| 26 (2) | COUPLER | TRIANGLE MICROWAVE | CO-431 | 4.5-4.8 GHz COUPLER |
| 27 (3) | DETECTOR | AERTECH | DOM 208B | 2.0-8 GHz Tunnel Diode Detector |
| 28 (1) | MIXER | AERTECH | MX 7500 | Double Balanced Mixer |
| 29 (2) | GDB ATTENUATOR | | | |
| 30 (2) | 400MHz CF BP FILTER | LARK | SF 400-40-4A5 | 400MHz CF 40dB |
| 31 (2) | AMPLIFIER | WATKINS JOHNSON | WJ 6200-385 | 5 to 500MHz AMP; 50dB gain 44B VLF 420dBm max output |
| 32 (1) | X3 FREQ. MULTIPLIER | FREQUENCY SOURCES | FS 1145-XX | RF 4 GB-117 |
| 33 (1) | COUPLER | TRIANGLE MICROWAVE | CO-432 | 4.8-5.2 GHz |
| 34 | 3DB PADS | | | |
| 35 (1) | PWR DVDR | TRIANGLE MICROWAVE | YL-1047 | 4.8-5.2 GHz |
| 36 (1) | PHASE SHIFTER | TRIANGLE MICROWAVE | | 4.8-5.2 GHz |
| 37 (1) | L.O. AMP | LOCUS | RF 624A | 1650-1750 30dB GAIN |
| 38 (1) | DETECTOR | AERTECH | DOM 110D | 0.1 to 1 GHz Tunnel Diode |

| ITEM | (87) | NAME | MANUFACTURER | MODEL | SPECIFICATIONS |
|------|------|-----------------|-----------------|----------|--------------------------|
| 39 | (1) | COUPLER | MINICIRCUITS | ZDC-10-2 | 250-1000 MHz 10DB |
| 40 | (1) | PWR DIVIDER | MINI-CIRCUITS | ZFSC 2-2 | 10-1000 MHz 5N PHASE |
| 41 | (2) | 4WAY PWR DIVDR | MINI-CIRCUITS | ZFSC-4-1 | 1-1000 MHz 5N PHASE |
| 50 | (2) | STEP ATTENUATOR | TEXSCAN | MA-50 | 0-10DB 1DB STEPS |
| 51 | (3) | AMPLIFIER | WATKINS JOHNSON | G200-385 | 10-500MHz |
| 52 | (3) | PWR DIVIDER | MINI CIRCUITS | ZFSC 4-1 | 4WAY PWR DIVDR 1-1000MHz |
| 53 | (4) | 6 DB PADS | | | |
| 54 | (3) | MIXER | MINI CIRCUITS | ZLW-2 | 1-1000MHz |
| 55 | (1) | DETECTOR | AERTECH | DOM 510D | .5-1.0GHz 100mV 1 Div |
| 56 | (2) | 150MHz BPFILTER | | | |

300-1000MHz RECEIVER
 MANUFACTURER MODEL SPECIFICATIONS

59 (2) DETECTOR AERTECH DOM 105D Tunnel Diode .1-.5GHz
 60 (1) 550MHz PHASE LOCKED OSC. TECHTROL FXA-151-55 550MHz

61 (1) DIRECTONAL MINICIRCUITS ZDC-10-2 250-1000MHz 100B
 COUPLER

62 (1) POWER DIVIDER MINICIRCUITS ZFSC 2-1 2WAY INPHASE
 5-600MHz

70 (1) PHASE LOCKED OSC SOLID STATE TECH 1250MHz RFO GB-126

71 (1) " " " " 1350MHz " "

72 (1) " " " " 1400MHz " "

73 1 PWR DVDR 4WAY TRM DMS-405 1-2GHz