

Victor / Phil

NOTICE:

The following temporary changes have been made inside the 'S-band XMTR Doppler' chassis (5-12 in the racks) to accommodate Tony Van Eyken's dual tone experiments:

1. The 3-dB pad in the "20-MHz" L.O. line to the mixer has been bypassed, to allow proper L.O. level since the L.O. is now being obtained through a lossy front panel jack from Synth 4.
2. The 10-dB pad in the "230 MHz" RF line to the same mixer has been replaced with a 6-dB pad to make up for increased cable and mixer loss since we are now using much higher frequencies at the RF & L.O. inputs to the mixer.

RF: $1000 \text{ MHz} + (\text{split} / 2)$ & $1000 \text{ MHz} - (\text{split} / 2)$ [instead of ~230 MHz]
LO: 750 MHz [instead of 20 MHz]

3. The 5.5-MHz-wide BPF in the mixer's IF output line has been replaced with a 40-MHz-wide filter.

The "removed" components are all taped down or otherwise secured inside the chassis at or near their proper locations.

The higher frequencies were chosen to accommodate Tony's desired phase adjustment range with a single stretchable line section.

All the changes must be undone before normal S-band radar operation is attempted.

- a) Put the 3-dB pad back into mixer L.O. path.
- b) Replace the temporary 6-dB pad with the original 10-dB pad.
- c) Replace the temporary wideband filter with the original narrowband filter.

Also, reconnect the normal cables to the 230-MHz and 20-MHz SMA connectors on the rear panel of the chassis.

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