

RADIO ROOM 3  
MAINTENANCE/RESTORATION  
LOG  
1995 to 1996

Compiled by : Jerry Proc VE3FAB

## **JUL 1/95**

Commenced physical restoration of Radio 3.

## **JUL 22/95**

AN/URT504 S/N 431

- The glass face on the input meter was pushed in. Removed meter and glued the retaining ring.
- Replaced missing AC receptacle, J401. Could not fit the connector into place without a major disassembly, so the connector was mounted with its flange on the exterior rather than the interior of the rear filter box.

## **SEP 23/95**

Completed physical restoration of Radio 3.

## **SEPT 30/95**

Mounted two URR35 receivers, two CAU's and one TED3.

## **OCT 1/95**

TED3 S/N 398

This is a non-functional 'carcass'. Missing RF power assembly.

- Replaced two broken 'spare' fuseholders.
- Re-aligned bent hinge on left access door.
- Repaired tube guard rail on modulator unit.
- Installed missing TEST CARRIER switch. Did not bother to reconnect the wires.
- Cleaned up unit as best as possible.

## **OCT 21/95**

Built junction box for TED3. Installed wiring for TED3 and its associated CAU and URR35. Tests good. Also find that the UHF antennas for Radio 3 are mixed up. Someone must have swapped the intermediate connections on the yardarms. Coax tagged as RA14 is connecting to the only good antenna. Coax RA8 is dead. The next coax is terminated but not tagged. It too is dead. The fourth coax is untagged and unterminated.

## **DEC 9/95**

Built junction box for TED4.

### **MAR 2/96**

Built junction boxes for TED1 and TED2

### **APR 6/96**

Wired up TED4 (S/N398), CAU and associated URR35. No audio O/P from URR35. Needs repair. CAU cable from CAU to junction box is mislabelled at the CAU end.

Fuse types for power box are:

BAF-10 (least expensive)

FNM-10

ATM-10 (most expensive - \$7.91 each!)

13/32" x 1.5"

### **MAY 11/96**

- Completed wiring of TED1 and TED2 and associated CAU's and URR35's.
- Waiting for delivery of two more TED's from Halifax.
- Installed dummy 'C' connector on one of the antenna coax lines. It is NOT connected to the transmission line internally and can be removed from the cable easily. Will try and locate UG/167AU connector as a permanent fix.
- Water is leaking into Radio 3 again from the gun director.

### **MAY 18/96**

- Tuned up TED3 transmitter - tests OK.

### **MAY 20/96**

AN/URR35 S/N CN208

Symptom: No audio; noisy cooling fan.

Fix:

- 1) Replaced missing audio preamp tube V209 (2C51).
- 2) Re-aligned impellor on fan assembly.

AN/URR35 S/N CN353

Symptom: Input signal cuts out shortly after power up.

Fix:

- 1) Replaced defective second IF amp V204 (6AK5W). Tube tests good on tube tester but won't work in circuit.
- 2) Replaced V302 regulator (OB2WA). Seems that it was glowing orange instead of purple.
- 3) Tested all other tubes - test OK.
- 4) Tested with crystal - test OK.
- 5) Touched up IF gain control.

Voltage measurements for the record:

PARAMETER	SPEC	AS MEASURED
B+	180 VDC	200 to 207
Across V302 (OB2)	105 VDC	107 to 152
Across V303 (OA2)	150 VDC	149 to 152
R301	-3 VDC	-4.36 to -4.76
R309	-9 VDC	-8 to -8.25
V301 Fil To Gnd	?	246 to 252

### **MAY 26/96**

- All four URR35's and CAU's are working as of this date. TED#3 works but TED#4 (S/N 398) is missing the RF unit. The TED transmitters for positions 1 and 2 are missing as of this date.

### **JUL 14/96**

Refinished one AS-390 antenna. Awaiting installation on foremast upper yardarm.

### **JUL 27/96**

One of the antenna cables was missing an N connector end. Installed a barrel type transition connector.

### **SEP 14/96**

Tested and installed the following TED transmitters in positions 1, 2, and 4.

S/N's CN307, CN135 and CN387

There is a problem with TED1. The carrier light stays on constantly in 'local' mode, so the transmitter is being keyed from an unknown source. May be a wiring error in the remote control wiring. Otherwise, all four transmitters are functional, however, some of the outputs are 'soft' meaning that the RF output stage is not up to specification.