IC 735 No RF Output Fault

By G8MNY (Update Jan 15)

G4APL GB7CIP 1.2.2015

I have 2 of these old rigs, a heavily used one for /P use, club events & training courses etc. & a clean one in the shack. I've been looking into a problem with my older well used IC735. It developed this fault while in use on a /P demo HF station, so I had to go & get the shack one to continue!

SYMPTOMS
Indicating clues to this fault's whereabouts, were the rig's O/P SWR meter showing power & infinite SWR (internal protection SWR/over Current ALC cuts power back to a safe level) but external kit showed no power.

Initially it looked like it was something to do with the rig's rear Rx phono patch lead as it came & went with any movement in that area. But it turned out to be the nearby SO239, where the centre pin is allowed to float slightly to make good connections. The thin hard wire used in the PA box to the filter PCB had eventually fractured due to this small movement.

FIXING IT
Access is fairly straight forward, but a lot of screws!
1/ Remove power lead, remove top & bottom covers including the anti rattle 4 around the LS.
2/ Unscrew the 4 screws for PA unit, remove external Phono Rx patch lead, release LS lead, RF drive lead from underside PCB & 2 other connectors to the upper PCB. then rotate the PA unit.
3/ Remove all the screening plate screws & lift it.
4/ Inspect the aerial socket. If broken as mine was or loose in PCB continue, or go to 8/.
5/ Remove the filter PCB (loads more screws) unsolder Rx phono wire & earth.
6/ Replace the hard wire link with fine flexible multi-strand wire. (I kept the original insulation tube)
7/ Put back the PCB & solder up, check the slight SO239 pin movement will not break the new wire.
8/ Reassemble & test.

Also see tech bul "PA instability in ICOM IC735" & "Autocaller with old Maplin kit"

Why don't U send an interesting bul?

73 de John G8MNY @ GB7CIP