



INFORMATION BULLETIN

NAT Part #: **NPX138N-060**

Information Bulletin #: **001**

Description: **Panel Mount VHF FM Transceiver
with Custom Guard Receiver**

Document #: **NPX138N\060\609-0**

Prepared By: 	Checked   	Approved By: 
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1 Applicability

This information is applicable to all NPX138N-060 units being used by Civil Air Patrol aircraft. In this application, the units are modified to suit the customer's specific requirements.

2 Subject

Under normal operation, the Guard signal is set to 10 mW when the front panel Guard volume knob is set to "MIN". The customer requires that the Guard signal be reduced to 0 mW when the front panel Guard volume knob is set to "MIN". This requirement is met by making the changes outlined in the following procedure:

Note: **The NPX138N-060 Panel Mount Transceiver contains electrostatic discharge sensitive components.** All assembly/disassembly and maintenance procedures should be performed at a static protected workstation.

2.1 Disassembly

Referenced drawings are located in Service Manual SM41, Section 6, Drawings.

Note: Some of the screws are secured with Loctite; an initial sharp twist is necessary to break the bond.

2.1.1 Covers (M30 and M31)

Refer to **Exploded View** NPX138\904-3.

- a) Remove 11 Phillips flathead screws M11 (nine in the top and one in each side) and carefully remove top cover M30 from the chassis assembly.
- b) Remove 14 Phillips flathead screws M11 (eight in the bottom and three in each side) and carefully remove bottom cover M31 from the chassis assembly.

2.1.2 Front Panel Assembly

Refer to **Exploded Views** NPX138\904-3 and NPX138\904-1 and **Component Locators** NPX138-1N\924-0, NPX138-4N\924-0 and NPX138-9\924-0.

- a) Unfasten four flathead screws M11 from the chassis flanges.
- b) Gently pull the front panel assembly forward to release J106 of System Control subassembly SA1 from J404 of I/O Control subassembly SA4.
- c) Unplug the red MTA100 backlight connector P107 that connects System Control subassembly SA1 to J901 of Backlight subassembly SA9.

2.2 Modification

Refer to **Component Locator** NPX138-4N\924-0.

2.2.1 Move jumper JP401 from pins 2 and 3 to pins 1 and 2.

2.2.2 Adjust potentiometer R416 fully counter-clockwise.

2.3 Assembly

2.3.1 Reassemble the NPX138N-060 by reversing the procedures outlined in section 2.1.

2.4 Testing

2.4.1 Referencing Section 2 of Service Manual SM41, perform the complete functional test on the NPX138N-060 to confirm proper operation.

2.4.2 If required, turn the NPX138N-060 upside-down and adjust the MIN GD VOL potentiometer to achieve desired minimum Guard volume.

2.5 Labelling

2.5.1 Label the top cover of the NPX138N-060 "Minimum GD Volume Disabled" or similar wording to indicate that this modification has been performed.

End of information bulletin