

13 May 2004

Applicability

This Technical Note applies to the firmware utilised in Tait Orca 5030, 5035 and 5040 MPT1327 Trunked radios. It also applies to the Trunked Programming Application v3.9.0 used to read/program radio personality files.

1. Introduction

**What is in this
Technical Note?**

The Orca Trunked Firmware v4.26 has been released to manufacturing to replace the current Firmware (v4.22) being installed in Tait Orca 5030, 5035 and 5040 Trunked products.

Version 4.26 Firmware was first implemented in an Orca TOP-XXXXX-XX, radio serial number **XXXXXXXX**, job XXXXXXXXXXX, and date XX May 2004.

This Firmware is compatible only with Tait Orca Trunked Programming Application TOP-TPA v3.9.0 or later.

**What does it
work with?**

The TOP-TPA v3.9.0 is available on the Tait Programming Utilities TPU v3.9.0 CD-ROM available from the Tait Software Issuing Authority as IPN 406-00003-06, or available for download from support.taitworld.com under Portables -> Programming Software.

2. Changes

**What has been
resolved in this
release?**

The Firmware version v4.26 resolves the following issues in the Orca 5030, 5035 and 5040:

- FOCUS 14403: Corrected issue caused by repeatedly pressing the PTT on a conventional channel. This seemed to cause intermittent TX, seen when sometimes the radio would transmit, and other times it would just beep.

- Backlighting is now operational upon receiving a Status Message when Night Use is selected. (TIMS 15207).
- Functionality added to deactivate the menu structure if a SOS Call is made. This was to address an issue where if a SOS Call was made while in the menu structure, the radio enters the SOS mode, however failed to make the SOS call. (TIMS 21051).
- FOCUS 12571: Corrected operation when using firmware v4.17 (or newer) in CCTM (Computer Controlled Test Mode). Upon sending a terminal command '13' the radio exited the test mode, and returned an error message.
- Correction of a problem seen when the channel selector is moved from a Conventional channel to a MPT Preset Call. This caused the radio to attempt a random call setup automatically after completing the transition from a Conventional Channel to a MPT preset. This caused "Unobtainable" to appear briefly on the screen. (TIMS 22422).
- Correction of an error seen in Orca 5030 radios containing v4.21 (or newer firmware) after the radio missed an incoming call. The radio indicates the missed incoming call, however it was found every second missed call, where there was a Callback attempt each time by the radio user, failed upon a Callback PTT press. (TIMS 22563 and TIMS 21857).
- Issue addressed where the radio did not retain the tuning data for the TCXO, while operating in other frequency related tests in the TOP Calibration Application. (TIMS 24134).
- Correction of an issue where if a Function Key is assigned to a preset call, and pressed while in the radios menu structure, the preset call is not set up, and an error tone is heard. Now the menu structure will be deactivated upon the function key activation, and the call request will be processed. (TIMS 26264).
- FOCUS 10582: Added ability for the TOP radios to process an additional ACKI being sent, after an initial ACKQ has already been sent. Newer models of Zetron Controllers with "full off air call set-up" send this combination of code words.

Implemented Enhancements

The feature enhancements to the PC Application TOP-TPA v3.9.0 below were implemented in conjunction with the Firmware v4.26 changes.

- Selective scan enhancement - A new tickbox is featured on the Selective Scan form for enabling priority scan. If this is enabled, then the group ID that is in the first column of the Selective Scan list, will become a priority group. With Selective Scan enabled - If a GTC for this priority group ID is received (via the current *traffic* channel) by the user's radio while on a ***X Selective Scan preset group call. The radio will leave the current group call, and will move to join the Priority Group call on the new traffic channel. **Note: The Trunking system used in conjunction with this radio software enhancement must also support this functionality. (i.e GTC on Traffic Channels)** (TIMS 26212).
- The Advanced Settings functions featured in the User Defined Menu structure can now be disabled within the TOP-TPA. (TIMS 26450).

Changes to the TOP-TPA v3.9.0

- Correction to the TOP-TPA where the user was prompted to "Enable Select Preset option in the User Defined Menu", when exiting the Preset Calls form when programming an Orca 5030. This was occurring even though this radio model doesn't support the User Defined Menu. The TOP-TPA will now only prompt the user to enable the Select Preset item in the User Defined Menu if the radio model supports this feature. (TIMS 25343).
- FOCUS 14720: Correction to the TOP-TPA in how it operates with new Trunked Channel Block entries. Now channels remain contiguous across all channel blocks. Changing a channel number to a value that causes it to overlap the channel numbers in another block, causes other channel blocks to be "redistributed" to accommodate the new block size. Selecting "Add" creates a new channel block containing one channel, using defaults from the previous channel block, however also incrementing the Channel Start / Start Rx frequency / Start Tx Frequency as required.
- FOCUS 12532: The 'N' key can be used to select a value of NONE for SOS Call String. This action will also disable all other fields in the SOS Call box until a valid call string is specified.

