



National Transportation Safety Board

Memorandum

Examination Summary

On August 20, 2008, I oversaw the examination of a Technosonic TFM-500 radio (s/n: JA 1563) that had been installed on Classic ship N407MJ. The examination was conducted at Dallas Avionics, Dallas, Texas, who is a certified repair facility for this vendor.

External examination of the unit revealed that the front faceplate was crushed inward from impact forces, which resulted in damage to the forward circuit boards. The main chase, where non-volatile memory is stored, was undamaged. The faceplate was removed to avoid the possibility of incurring more damage when power was applied and a new plate was installed. Power was then applied to the unit, and the following information was obtained:

- 1) The unit was serviceable.
- 2) The unit had been programmed to display the most recently tuned frequencies at each power-up
- 3) Functional test (receive and transmit) of the VHF and UHF bands was normal. The VHF had a Continuous Tone Coded Squelch System (CTCSS) Tone of 123.0 Hz and the UHF band tested at 110.9 Hz.
- 4) The programmed VHF and UHF frequencies were downloaded and printed
- 5) No mechanical anomalies were noted with the unit

The unit displayed the following information:

Line 1 (VHF)

023 GARFCORPT 156.015 0RT

Line 2 (UHF)

001 CLASSIC1 463.6250RT

Line 3

GD1 NPS Guardn 171.6250RX

Line 4

BS VHF TONE OFF PWR-HI

According to the Dallas Avionics technician, there was no way to determine if the radio was set to the VHF or UHF frequency. On this particular radio set-up, the pilot would have to manually select which mode the radio was set via a toggle switch on the audio panel.

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