Interagency Aviation
SAFETY ALERT

Subject: Technisonic Industries TDFM-136/A and 136/NV Radios

Area of Concern: Communications

Distribution: Fire and Aviation Operations

Discussion: A software problem in the Technisonic TDFM-136/A radios (including the "NV" version) has inadvertently introduced a relatively easy way to unintentionally disrupt communications without the operators knowledge. The problem lies within the "Talk Around" feature that was introduced in the new 3.0.2 software. With Talk Around enabled, the channel's receive frequency (Rx) and tone setting are transferred to the transmit frequency (Tx) settings. This is a problem in some geographic areas where a repeater's transmit and receive frequencies are different (duplex operation) or where there is a tone on the Tx but not the Rx frequency. With Talk Around enabled, you will be able to hear others on the frequency, but **they won't be able to hear you**.

Activating Talk Around is accomplished by pressing the ESC key.   No other keystrokes are required to activate it. If the ESC key is inadvertently pressed (easy enough as it's in the lower R/H corner), then the active channel will automatically revert from duplex to simplex operation. This changes the Tx frequency and tone to whatever is programmed for the Rx frequency and tone. The problem is that this feature may go unnoticed since the only indication the operator will see is an up arrow (↑) that replaces the decimal point in the displayed frequency. Talk Around can be deactivated by simply pressing the ESC key. *If pressing the ESC key does not deactivate it, then cycle the radio off, then on.*

TDFM-136A

TDFM-136/NV

"Talk Around" is the name given to the function that allows you to temporarily set a duplex memory (channel) to use the receive parameters for transmit. Simplex channels that don't use tones are unaffected as the receive and transmit parameters are already the same. The up arrow character will replace the decimal point in the frequency field to indicate that Talk Around is active for the channel (e.g. n168.775Rx changes to n168↑775Rx).

This feature is not included in older software versions and doesn't manifest in a similar manner in the new TDFM-136Bs. Although present in the TDFM-136B's software, the feature is normally disabled (off). Unfortunately, the software in the TDFM-136/A, the "Talk Around" feature is normally enabled (on).

Until this software related vulnerability is corrected, all pilots and operators of the TDFM-136/A and NV radios should be briefed on this vulnerability. There is a way to disable the Talk Around function installed in the version 3.0.2 software, but this change is complex and should only be attempted by qualified avionics personnel.

For more information, contact Frank Smith, USFS NIICD Avionics at 208-387-5648, Jeff McVey, OAS National Avionics Specialist at 208-334-9310, or Technisonic Industries at 905-890-2113.

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