



Training Bulletin 13-11: Possible Radio Interference

Subject: Notification from Motorola regarding possible interference generated by police radio transmissions that can adversely affect other electronic equipment including TASER devices.

A police department recently notified TASER International of a possible interference issue between their 400 MHz Motorola police radio and a TASER® X26 device that was located directly adjacent to the radio. The interference from the Motorola police radio caused the TASER X26 device to unexpectedly discharge when the TASER X26 device was within approximately 1 inch of the radio antenna and the TASER device safety switch was in the up (ARMED) position. TASER International immediately started an investigation into this issue to determine the probable cause of the interference. As part of our investigation, we contacted Motorola, Inc. to obtain additional information about all models of their police radios, including antennas, microphones, radio accessories, power output and any interference issues they were aware of.

Motorola informed us that the Motorola police radio antenna transmits enough energy that any electronic device (e.g., cell phone, walkie-talkie, or TASER device) that is within approximately 1 inch of the radio antenna is subject to possible interference up to and including permanent damage to components in the other electronic device.

Motorola advised TASER International that all electronic devices, including TASER devices, should be kept at least 1 inch away from the radio antenna, especially during radio transmission, in order to avoid harmful interference and possible permanent damage to these electronic devices.

Based on this caution received from Motorola, and a complete analysis of the TASER X26 device in question, TASER International has determined that the TASER X26 device was operating according to factory specifications and in compliance with FCC requirements. The probable cause of the interference was the transmission of the Motorola radio when the radio antenna was in close proximity to the TASER X26 device and the TASER device safety is in the up (ARMED) position.

The only known incidences of this type of interference involve 400 MHz radios. TASER International was able to duplicate the interference with a 400 MHz Motorola radio, but we were unable to duplicate it with an 800 MHz Motorola radio. Motorola discontinued production of 400 MHz radios in 2004.

TASER International recommends that all departments advise their officers of this notification from Motorola. As a precaution, all Motorola police radios should be kept several inches away from any electronic device, including a TASER device, and that the safety on a TASER device should be placed in the down (SAFE) position whenever it is immediately adjacent to a Motorola police radio. TASER International also recommends that if a department is using a radio manufactured by any other company, that department should contact the radio manufacturer for recommended distances for protection of other electronic devices.