

Safety Notice SN-35

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FLYING NEAR BROADCAST TOWERS

High-power radio broadcast towers (typically 50 kW or greater) may generate Electromagnetic Interference (EMI) with helicopter electrical systems and electronic equipment. Early indications of a high-power radio field can be considerable radio squelch break or static in the intercom system. More severe effects may include random illumination of warning lights or erratic engine governor and tachometer operation. In the worst cases, the governor may attempt to fully open or close the throttle. If the pilot is not ready to counteract a governor malfunction, a low-RPM condition or overspeed may occur.

Radio field strength decreases rapidly as distance from a transmitting antenna increases. To minimize the probability of encountering EMI, do not fly within ½ mile of high-power broadcast towers.

If EMI is inadvertently encountered:

- Do not become distracted trying to adjust the radio or audio system.
- Keep one hand on the throttle twist grip and feel for normal operation. If operation is abnormal, tighten grip to override governor and control throttle manually. If desired, governor may be switched off until helicopter is clear of the EMI area.
- Monitor tachometer, engine instruments, and warning lights carefully. Use caution not to overreact to a false instrument or warning light indication.
- Following a flight where EMI was encountered, have electrical system and installed electronic equipment assessed by qualified maintenance personnel.

The location and height of radio broadcast towers are marked on aeronautical charts. However, transmitter power and frequency are not. While all broadcast towers should be circumnavigated at a safe distance, those in the HF/Short Wave band have the highest likelihood of causing EMI. A list of such towers for the United States can be found on the Robinson Helicopter Company website at www.robinsonheli.com/sn35antennas. The list was compiled from a Federal Communications Commission (FCC) database of HF/Shortwave stations. Appropriate agencies in other countries may be able to provide similar databases.