

OSHA Related Safety Requirements

The United States Department of Labor, through the provisions of the Occupational Safety and Health Act (OSHA) of 1970, has established an electromagnetic energy safety standard that applies to the use of this equipment. Proper use of this equipment will result in exposure below the OSHA limit.

Human Exposure Compliance for RF Energy

STR 3000 Simulcast Base Radios are designed to generate and radiate RF energy by means of an external antenna. When terminated into a non-radiating RF load, the base radio equipment is certified to comply with Federal Communications Commission (FCC) regulations pertaining to human exposure of RF radiation in accordance with the FCC Rules Part 1 section 1.1310 as published in title 47 code of federal regulations and procedures established in *TIA/EIA TSB92, Report on EME Evaluation for RF Cabinet Emissions Under FCC MPE Guidelines*.

Compliance to FCC regulations of the final installation should be assessed and take into account site specific characteristics, such as type and location of antennas, as well as site accessibility of occupational personnel (controlled environment) and general public (uncontrolled environment). This equipment should only be installed and maintained by trained technicians. Licensees of the FCC using this equipment are responsible for ensuring that its installation and operation comply with FCC regulations Part 1 section 1.1310 as published in title 47 code of federal regulations.

Whether a given installation meets FCC limits for human exposure to radio frequency radiation may depend not only on this equipment, but also on whether the “environments” being assessed are being affected by radio frequency fields from other equipment, the effects of which may add to the level of exposure. Accordingly, the overall exposure may be affected by radio frequency generating facilities that exist at the time the licensee’s equipment is being installed or even by equipment installed later. Therefore, the effect of any such facilities must be considered in site selection and in determining whether a particular installation meets the FCC requirements.

FCC OET Bulletin 65 provides materials to assist in making determinations if a given facility is compliant with the human exposure to RF radiation limits. Determining the compliance of transmitter sites of various complexities may be accomplished by means of computational methods.

In general, observe the following guidelines when working in or around radio transmitter sites:

- Ensure that all personnel have electromagnetic energy awareness training.
- Ensure that all personnel entering the site are authorized.
- Obey all posted signs.
- Assume all antennas are active.
- Before working on antennas, notify owners and disable appropriate transmitters.
- Maintain minimum of 1 m (3 ft.) clearance from all antennas.
- Do not stop in front of antennas.
- Use personal RF monitors while working near antennas.
- Never operate transmitters without shields during normal operation.
- Do not operate base station antennas in equipment rooms.