



Radio Frequency Safety

Safety is a primary consideration when planning deployment of RF transmitters. Millions of devices are in existence today around the globe. Under most circumstances these transmitters are harmless, but depending on power, access, type of antennas, etc., there are scenarios where a hazard will exist and exposure to unsafe levels of RF radiation will occur. It is the licensee's responsibility to ensure that all FCC as well as any local RF Safety guidelines are met.

Comsearch has a long history of performing Radio Frequency Safety studies and developing RF Safety plans including site specific recommendations.

RF Safety Analysis

Theoretical RF power density calculations to define radiation hazard areas, controlled/uncontrolled boundaries and locations for appropriate signage. The theoretical analysis is a key first step when designing a new system or when adding additional transmitters to an existing facility.

RF Safety Measurements

On-site measurements using broadband (isotropic probes) or narrowband (spectrum analyzers or test receivers) instrumentation to determine the radiated levels throughout a facility. Field measurements allow for identification of all collocated transmitters at a facility. There is no substitute for on-site measurements to ensure that all accessible areas around transmitters remain safe for both general population and occupational exposures.

RF Safety Signage

Placement of correct signage and barricades at customer transmitter locations. The signage and barricade plan will be developed based on both the RF Safety Analysis and RF Safety Measurements.

RF Safety Training

General: Covers EME theory, practical applications and all safety regulations. Site Specific: Includes all of the general Radiation Safety training plus site-specific conditions of a customer's facility.

RF Safety Plan

Development of safety procedures and practices. It is critical that all individuals working around RF transmitters be made aware of the potential hazards. A Comsearch RF Safety Plan includes a comprehensive set of documents and site specific procedures that should be followed at transmit facilities. It often will include a regular training plan as part of the overall procedures plan.

FCC Licensing Support

Preparation of RF Safety Exhibit and other supporting documentation for FCC license applications.