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STATEMENT THAT TSUNAMI (Model 27705) RADIOS MUST BE PROFESSIONALLY INSTALLED AND SO IS EXEMPT FROM THE ANTENNA RESTRICTIONS OF FCC PART 15.203, INCLUDING INFORMATION ON ANTENNAS USED FOR TESTING

This letter is submitted with regards to professional installation of the Tsunami (Model 27705) radio and the antennas used for testing. The Tsunami (Model 27705) radios must be professionally installed and so is exempt from the antenna restrictions of FCC Part 15.203. The Tsunami (Model 27705) radio is a product manufactured by Western Multiplex in Sunnyvale, California.

The Tsunami (Model 27705) radio is to be certified for operation under Part 15.247 of the FCC Rules in the 5725-5850 MHz band. This equipment is designed for point-to-point communications and will only carry data signals using a 100BaseT interface. Due to the unique requirements of installation and integration of these systems, typical consumers or businesses will not have the proper training required for successful implementation of these systems.

The Tsunami (Model 27705) is not designed for use by the general public, and will be sold as follows:

- either through the Glenayre Western Multiplex sales force to professional communications users in the following categories: electric power utilities, cellular telephone operating companies, personal communication service operating companies, regional Bell operating companies, oil and gas exploration and transmission companies, railroad companies, federal, state and local government agencies, or
- through designated and professionally trained Glenayre Western Multiplex Value Added Resellers (VARs) to business users under individual reseller agreements.

These companies will either use their professional telecommunications engineering staff to carry out the installation or will subcontract to professional installation firms. On occasion, a professional installation firm will purchase the Tsunami (Model 27705) radios directly.

The Tsunami (Model 27705) radio will be used for fixed, permanent or temporary, outdoor links requiring the use of directional antennas at 5.8 GHz which tend to be mounted on towers. These antennas will be 2', 4', 6' or 8' dishes with narrow beam-widths (ranging from 7 degrees to less than 2 degrees) and require professional installers to align them.

In addition, **the** Tsunami (Model 27705) radio **must** be set up for the specific line interface required **during** installation. This procedure **must** be carried out by a **qualified professional** installer for **the** equipment to operate properly.

The output power of the Tsunami (Model 27705) radio will be adjusted to **meet any applicable** EIRP limits **by the** professional installer during installation. The method of **adjusting the output** power is **described** in the manual written for use **by professional** trained installers.

The Tsunami (Model 27705) radio is a full duplex **device with** a **common** transmit and receive port. The addition of an **external amplifier** to boost the transmit power would **disable the** receive signal, thus **rendering** the Tsunami (Model 27705) radio **inoperable**. In **addition**, high power amplifiers (not **generally available** at 5.8 GHz) cannot be used **without** ensuring that signal saturation does not occur (because this would produce **unrecoverable** deterioration of the receive signal). **Thus**, the addition of an **amplifier could not** be accomplished by a **non-professional** installer.

The Tsunami (Model 27705) radio is **typically sold** without an antenna, and the **customer and/or** installation engineer **chooses from** commercially available antennas. From **time to time**, Glenayre Western Multiplex may sell a **commercially available** antenna along **with the** Tsunami (Model 27705) radio upon customer request.



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