

Those On-Site Radios Need Licenses, Too

**BY RON FRANKLIN,
CUSTOMER SERVICE
EWA**



One of the trends we see is an increasing number of chain stores and restaurants outfitting their employees with radios. And it really is a great idea. It increases the efficiency of the sales associates and provides security, which is very important in the retail space. Operating your own radio system has a lot of pluses, however, many enterprise users are unaware that these radios all operate on frequencies that are regulated by the Federal Communications Commission (FCC). That means that, to operate, they must be on the proper frequencies and there must be a license. Not following the rules has gotten some major retailers into trouble with the FCC. This "trouble" ended with a notice of apparent liability, also known as a fine. This is an easily avoided liability and EWA can help.

One of the common mistakes enterprise users make is buying radios that operate on the General Mobile Radio Service (GMRS), which is reserved for individual, non-commercial use. Another mistake is buying Family Radio Service (FRS) radios for business use. While not illegal, these GMRS

and FRS radios are designed to be used by individuals and families, not businesses. This means they are not made for 24/7 use. Not because they are technically incapable, but because increased use makes them vulnerable to interference. Many enterprise users don't enjoy having someone else operating on top of their frequency.

Radios that use frequencies allocated under Part 90 of the FCC's rules are good candidates for many on-site uses. Even though they may operate at low power, only 1 or 2 watts, a license is still necessary. With refarming in 1997 came the development of the low-power pools found in the FCC Rules and Regulations Part 267 Assignment and use of frequencies in the 450-470 MHz band for low power use. Radios on these frequencies may operate at an effective radiated power (ERP) of six watts or less.

Have you been to a restaurant that provided you with a pager to let you know when your table is ready? One looks like a coaster that lights up like a movie marquee when it is time to be seated. These

paggers, though low power, still use frequencies in the industrial business pool, which are governed under Part 90 of the FCC's rules, which means the restaurant must be licensed.

There are positive aspects to having a license for a communications system built on these on-site radios. Having a license is one way of ensuring that the investment in wireless communications is not compromised by interference from a nearby radio system. When a radio is licensed, you have the right to request that the interfering party lower their power or lower their antenna to reduce the amount of interference. Having a license basically means the FCC will stand behind your right to communicate over your frequencies.

At EWA, we can take the hassle out of licensing these radios. We understand that owners and managers of retail stores, restaurants and other businesses that tend to use these radios are busy people with many employees, so we have developed, in cooperation with radio dealers, a special worksheet to simplify the

continued on page 32

ADVERTISER INDEX

Kenwood	IFC	Simulcast Solutions	11	Dataradio	21
Vertex Standard.	3	IP Technology Workshop	13	Enterprise Wireless Alliance	30
Tessco.	5	EFJohnson.	15	Motorola	IBC
Hutton	7	Enterprise Wireless 2006	16	ICOM.	BC
		Multiplier	19		

Sachs *continued from page 4*

resolve a contested application, much less make substantive changes in its rules pursuant to the requisite notice and comment rule making proceeding.

The implications of this widening gap between accelerating technological advances and an inflexible regulatory process are highlighted in the current state of the 24 MHz of 700 MHz spectrum allocated for public safety use. The rules for this band began to be developed almost ten years ago, before wireless services, particularly the non-CMRS services, had embraced broadband operations. The result is a traditional, striated approach to spectrum allocations with individual, narrow bandwidths designated for specialized purposes. Actually, these rules arguably are more forward-looking than some. They provide for at least a small number of “wideband” channels and the ability to amalgamate them to create even bigger “wideband” channels under certain circumstances.

Franklin *continued from page 6*

process of applying for a license for low-power radio system. The FCC calls these kinds of licenses “Mobile Only,” because a base station isn’t used since the radios talk directly to each other.

The worksheet covers the basic administrative information, including street address of the establishment, coordinates, frequency band and bandwidth. The worksheet includes the power level because frequency bands each have rules on the maximum amount of operating power and it’s

Now, in the Eighth Notice of Proposed Rulemaking, both the public safety and manufacturing communities are attempting to undo some of the hyper-regulation they previously had requested for this spectrum. They have seen the light in the form of IP-based broadband technology that can handle virtually any type of transmission public safety might need. The narrowband voice allocations that appeared to be the height of spectrum efficiency already are being viewed as outdated and far from the optimal way of maximizing efficient use of this band. And attempting to maintain them while deploying broadband in the same allocation dictates a need for even more guardband spectrum, thereby diluting whatever efficiencies will be gained.

Given the requirements of the Administrative Procedures Act that governs the process by which the FCC is permitted to modify its rules, it is obvious that technological changes will continue to move at a faster pace than any rule making proceeding. If this industry wants to have the option of deploying state-of-the-art equipment, it will need to move away from “command-and-control” allocation schemes and embrace more flexible regulations that permit rather than prescribe what technologies may be implemented. □

important to find the right band for each radio system. You can download this worksheet on the www.enterprisewireless.org website. Send us the information and we can take it from there and get your system licensed by the FCC.

Today’s big box retailers are covering more square feet with fewer employees than ever before. Restaurants are required to serve more customers in less time. Wireless communications makes up for these changes and guarantees prompt customer service. Whether you are the end user or the company selling the radio system, it is critical to remember that these radio systems must be licensed to avoid fines and interference issues. □