### **RADIO SEI ECTION GUIDE**

### **COMMERCIAL RADIOS**

A basic, easy-to-use communication solution that is ideal for elementary and high schools, hotels, restaurants, food service, construction and delivery operations.

- Simple, basic solution for work team communication
- Compact models
- · Display and non-display models
- · Limited or non-keypad models
- · Repeater capability for increased coverage when needed
- Hands-free communication with voice activation
- · Variety of audio and carrying accessories

### **PROFESSIONAL RADIOS**

The ideal communication solution for larger organizations with more complex communication needs such as: manufacturing, warehousing, collegiate campuses, resorts, utilities and public service operations.

- · The most robust solution
- · Variety of scanning and signaling options
- High number of channels to organize large work groups
- · Intrinsically safe models for use in hazardous work environments
- · Data applications such as GPS location tracking and text messaging
- · Option board capability to enable customized applications
- IMPRES™ audio and energy accessory solutions

# Radio Selection Portable and Mobile Radios

## USER NEEDS

There are three basic factors you need to consider when selecting which radio is right for you.

- 1. Number of Users / Channels
- 2. Frequency Band
- 3. Features

### **NUMBER OF USERS / CHANNELS**

The number of individual users as well as the number of talk groups you need to maintain determines the number of channels you will require in a radio. For example, if you want a certain department to maintain its own talk group, it would require a dedicated channel for that department. If two or more individuals need to maintain private communications, a dedicated channel would be required. It is not uncommon to have multiple channels within a department for special projects where more than one operation or event is occurring simultaneously. In addition, the use of digital technology increases the capacity of your system by dividing your existing channels into two time slots. This enables you to double the number of users on your system without the need for additional infrastructure equipment. Lastly, when making decisions regarding the number of channels you require, it is very important to keep future expansion in mind.

#### **FREQUENCY BAND**

For most general applications, there are 3 categories of frequency bands to consider:

- VHF (Very High Frequency) at 136-174 MHz
- UHF (Ultra High Frequency) at 403-512 MHz
- 800 / 900 MHz

