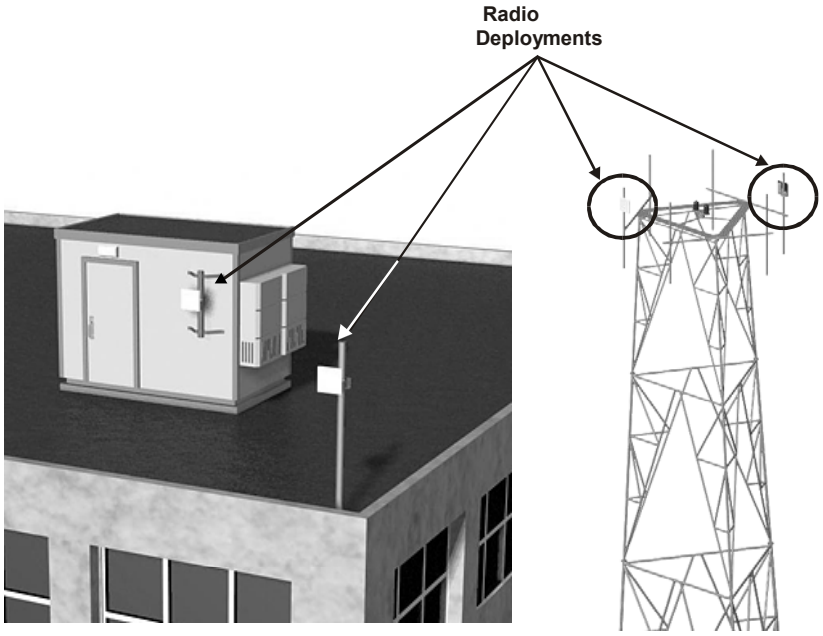

Figure 8: Radio Deployment Options

Identify potential sources of RF interference. Test for possible RF interference on the roof-top or tower by utilizing appropriate test equipment. RF interference arises from any other wireless system operating within the same frequency band as the AN-30. Note that the AN-30 system supports nine different overlapping channels within the 5.8 GHz band and has the ability to use up to five of these channels at any one cell site; there is, therefore, some flexibility in addressing or avoiding interference should other transmitters in relatively close proximity present problems.

6.2. Installing The Antenna

Once the site survey has been completed and the exact location for the antenna identified, the next step is to assemble and mount the radio onto either a building structure, pole or tower.

Note there is an arrow on the back of the antenna, which must point in the same direction for both the local and remote systems to ensure proper polarization when the antenna is deployed (see Figure 7 above). Ensure the proper polarization is used for the antenna before attaching the mounting bracket in the next step.

The vertical mount bracket is installed first. The antenna and mounting brackets have been designed to withstand strong winds; it is imperative that all hardware for the mounting brackets be securely fastened to avoid any movement which could introduce misalignment.

The T-58 Transceiver is then mounted to the mounting bracket. This assembly is in turn attached to the back of the antenna. Note the transceiver must be connected to the antenna via the short RF cable provided.

For building mounts, ensure the surface to which the mounting bracket will be attached is structurally sound, flat and vertical (use a level). Ensure that the installation can withstand wind loading.

6.3. Running The IF Cable

The system is shipped with a 100 foot (30.5 m) length of RG6 IF cable to connect the transceiver and indoor terminal. The IF cable carries the transmitted and received signal, DC power for the AN-30 radio, and control signals. One hundred feet is the mandatory minimum length; if a longer outdoor run is required, it is recommended that a single length of the appropriate cable be used; coupling the provided 100 foot cable to another length will result in increased attenuation. Refer to the cable requirements in the Specifications section at the end of this manual.

Note: If male "F" crimp connectors are used with custom cables, the cable's core conductor diameter must be no larger than 1mm (.042 inches) or longer than 1cm (0.38 inches) to avoid damage to the T-58 and AN-30 connectors. If the core diameter exceeds 1mm, use solder type 'F' connectors that do not exceed these dimensions.

The following steps define the cable installation process:

1. Run the cable alongside the antenna pole as shown. The IF cable is equipped with 75 ohm male F-type connectors at both ends. Ensure the cable is running downward as shown to prevent water from accumulating on the connector. The cable should be fastened to the pole to prevent movement or damage to the connector.

Figure 9: IF Cable