# MICROWAVE ANTENNAS KS-19273 PARABOLIC ANTENNA RADOME INSTALLATION

# 1. GENERAL

1.01 This section provides instructions for installing the KS-19273 L1, 10-foot, radome on parabolic antennas used in radio relay systems. The radome is primarily intended for use on standard 10-foot antennas, in periscopic installations, to provide protection against the elements. It may also be used on antennas in a direct radiator installation when conditions warrant, or on nonstandard 10-foot parabolic antennas when the physical dimensions of the radome and the antenna coincide. (Refer to Fig. 1.)

1.02 The radome is conical and constructed of glass fiber-reinforced polyester resin, approximately 0.11 inch thick. A gasketed flange around the perimeter of the radome is equipped with thirty clamps for securing the radome to the rim of the antenna. The radome has an insertion loss of approximately 1.4 db at 11 gc and is designed to withstand wind loads of 30 psf. The entire unit, including clamps and hardware, weighs about 112 lbs.

## 2. TOOLS AND EQUIPMENT

2.01 The following tools and equipment are required for installing the KS-19273 L1, 10foot radome.

#### QUANTITY

2 7/16-inch Open-End Wrenches

- Tools for opening wooden crates and removing metal straps.

ITEM

- Several 4 by 4 timbers, approximately 12-foot long, for unpacking the radome on rough terrain. (Optional)

# 3. UNPACKING AND HANDLING

**3.01** The radome is shipped to the installation site with the gasket, clamps, and associated hardware assembled on the rim. The wooden shipping crate is of lattice type construction approximately 127 inches by 96 inches by 96 inches and has a gross weight of approximately 654 pounds.

3.02 Unpack the radome by carefully removing

the cover from the crate. Retain the material for reshipping the radome if damage has occurred during transit. Remove all tape and packing material from the clamps and the surface of the radome.

**3.03** Check the packing list and thoroughly inspect the radome. Notify local supervision if any parts are missing or damaged.

## 4. INSTALLATION

4.01 Check the rim of the antenna reflector and the gasket on the radome; they should be clean and free of foreign matter.

4.02 Lift the radome from the packing crate and place it over the rim of the antenna reflector.

Caution: The radome presents a large sail area and should be handled with extreme care when gusts of wind are prevalent.

4.03 Rotate the thirty clamps to either side, allowing the gasket on the radome to set flush on the rim of the reflector.

4.04 Position the clamps over the rolled edge on the rim of the reflector as shown in Fig. 2. Center the radome on the reflector and secure one clamp in each quadrant.

4.05 Recheck the radome to be sure that it is centered on the rim of the reflector. Tighten all clamps until they are snug, being careful not to deform them.



Fig. 1 – KS-19273 L1, 10-foot Radome

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Fig. 2 - Clamp Detail for Mounting the KS-19273 L1, Radome