RST-8710 ADDENDUM ---

To help you enjoy your Vertical Dipole even more...

Installation

The base-station configuration of the RST-8710 antenna must be installed with any metallic clamping devices (hose clamps, metal wire clamps, conduit clamps, etc.) installed BELOW the matching coil area inside the PVC pipe. If you install the decal as shown in the construction section, then you have an easy reference to the location of the coil area inside the pipe.

Drawing 871-3951 (attached at the end of this manual) shows several ways to mount the antenna as a base station antenna.

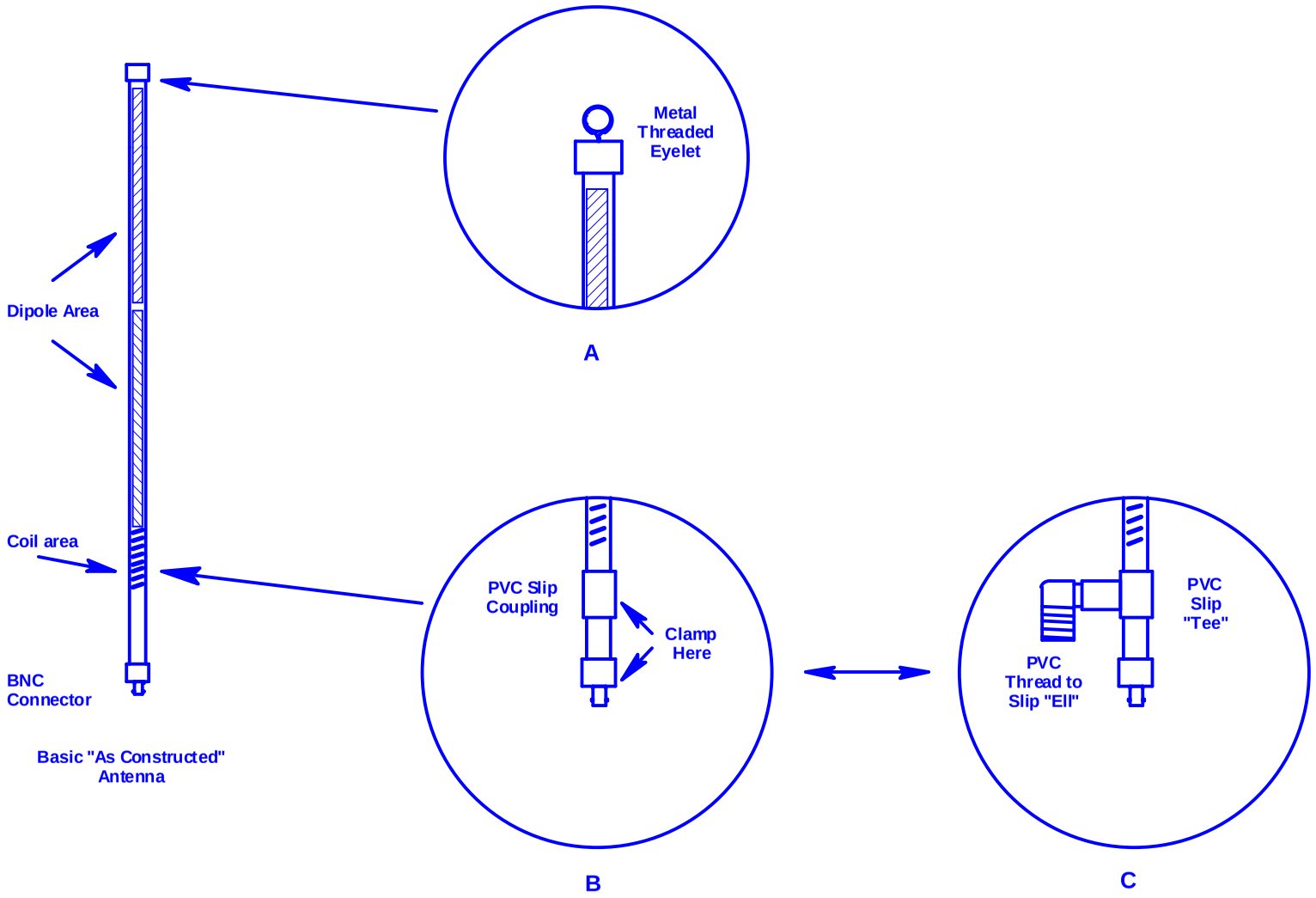
A. Drill a small pilot hole into the top PVC end cap and thread a metal eyelet into the end cap. Use some sort of sealant (RTV® or silicone sealant) on the threads to keep the inside of the pipe hermetically sealed. This method of mounting is used primarily in a portable/emergency environment where a string is looped around a tall tree branch and the antenna hauled up by the string. If you are in the field and need to make an emergency mount without the eyelet, simply use a tight knot on the pipe side of the top PVC end cap and haul the antenna up by the flange on the end cap.

B. This method of mounting supposes that you are going to use metal clamps (radiator or worm clamps) to fasten the antenna to another mast. In this method of mounting, cut the long PVC pipe 2" shorter than the directions say, glue a ½" PVC slip coupling to the bottom of the mast, and then glue a 1½" short PVC pipe section into the slip coupling. Install the bottom end cap in accordance with the standard directions.

C. This is similar to the "B" method of mounting, but instead of a slip coupling, a ½" PVC Tee fitting is glued onto the long pipe, then the short pipe glued into the Tee. A short (¾" or so) pipe section couples the Tee to a slip-threaded Ell. This method is used where you have a ½" pipe thread already on your antenna mast and you wish to make the mounting onto this pipe thread. (**NOTE**: the antenna is no longer hermetically sealed with this option of mounting.)

Installation of this antenna into a composite structure (i.e. a “plastic airplane”) may be done by any one of a number of methods. Certainly the rigid wooden dowel may be used if you wish, but it is also possible to install the tape onto a thin piece of flexible plastic or fiberglass, or onto the aircraft structure directly, if you choose. The only warning that RST can give is that the matching coil be wound on the proper diameter form AND that it be wound at a distance from the center of the dipole as measured and shown in the construction plans. The distance between the coax cable and the bottom of the antenna is NOT critical, so long as you understand that the braid of the coax is soldered to the BOTTOM element of the dipole at the dipole center.

In both the base station configuration AND the composite configuration, it is ABSOLUTELY necessary to use 50 A coaxial cable between the antenna and the transmitter. Using “cable TV” coax (70A) will NOT make the antenna perform as designed.



Vertical Antenna Mounting Methods	Scale:NTS	**Drawn by: OWJ**	**Approved by:**	***RST Engineering*** 13249 Grass Valley Ave Grass Valley CA 95945 916.272.2203 tech@rst-engr.com	Drawing # **8710-3951**
	Date: 18 Oct 97	Rev:A	*Jim Weir*		