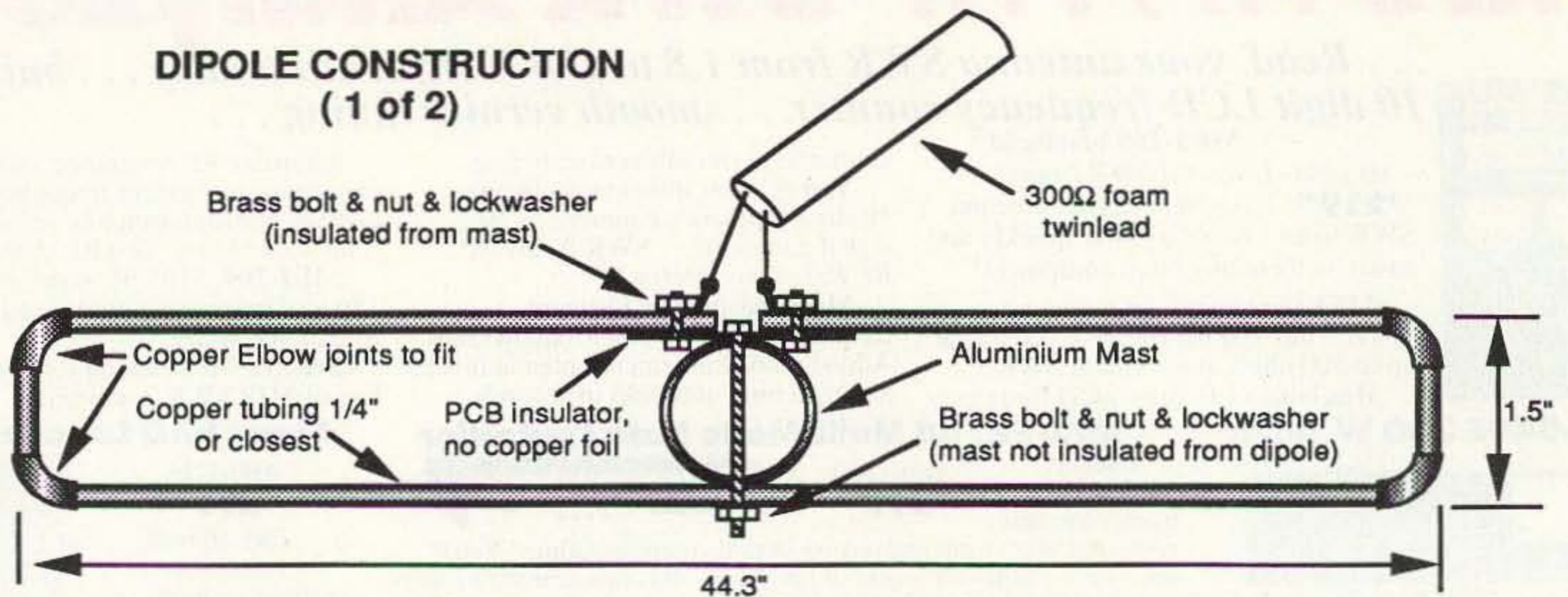
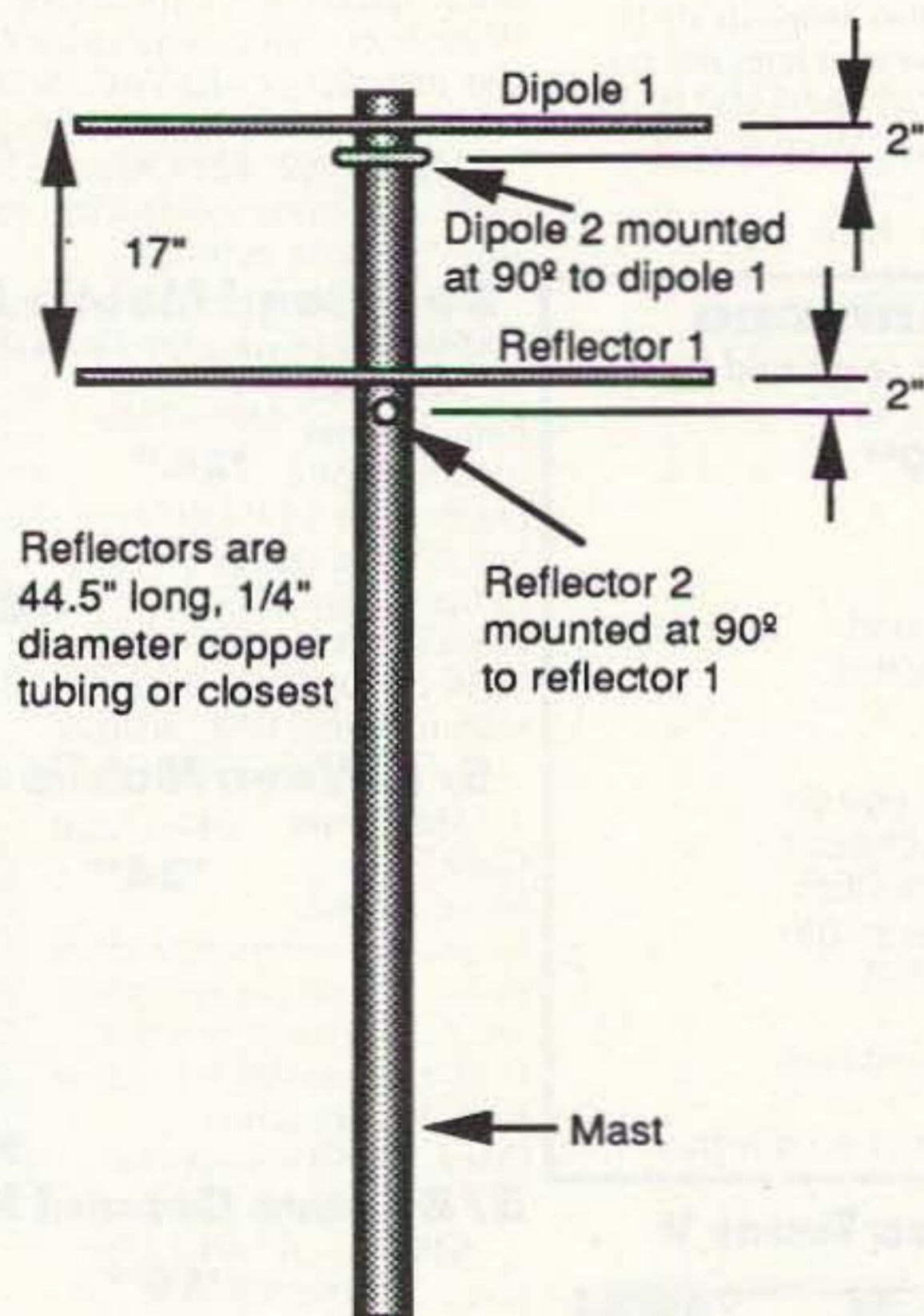


DIPOLE CONSTRUCTION (1 of 2)

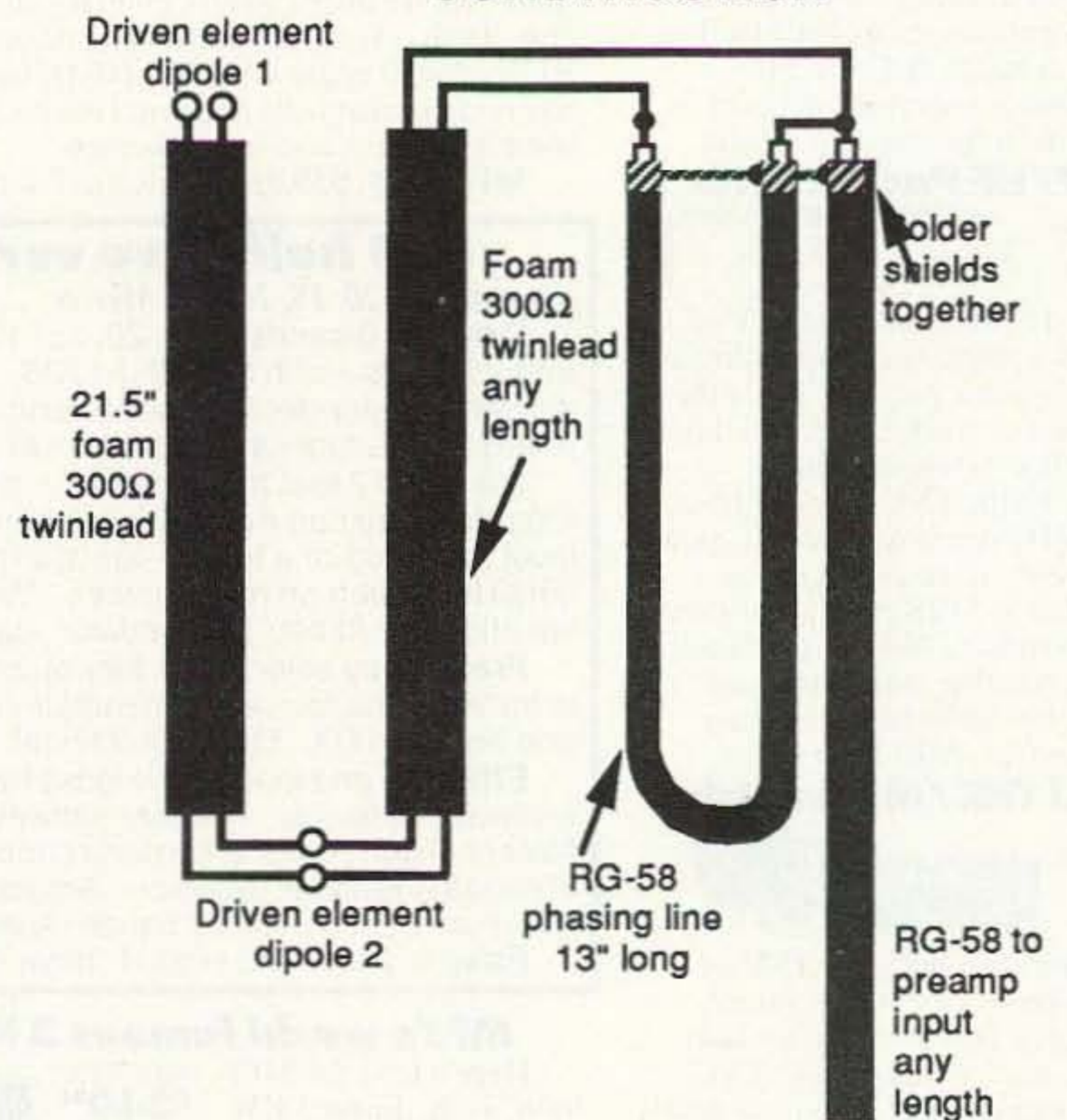


Note: Make insulator out of 3"x2" piece of PCB material with no copper cladding. Depending on the diameter of your mast, you might have to add a washer between the mast and the PCB insulator to keep dipole elements parallel. Weatherproof all connections.

ANTENNA ASSEMBLY



FEED & PHASING LINE CONSTRUCTION



This antenna design thanks to Ralph Taggart, WB8DQT

Figure 2. Turnstile antenna for receiving polar orbiting satellites.

COSMOS) satellites, which can provide spectacular pictures due to their strong signals and excellent visible picture resolution.

Polar orbiting weather satellites can give better resolution of geographical features than the geostationary satellites, due to their lower altitude. This can be a bonus on home-built equipment. Because their orbit is at about 950 km altitude (as opposed to the 35,000 km altitude of the geostationary

birds), you can usually resolve surface features better. The NOAA scanning radiometer optics correct for horizon distortion, yielding natural-looking pictures with a geometry that mostly looks like what you would expect to see on a map. This makes it easy to identify ground features from an atlas.

The second option is to implement an S-band receiving downconverter with a small dish or long yagi antenna to receive

the geostationary GOES or METEOSAT transmissions. The S-band downconverter receives signals at 1691 MHz and converts this signal to 137.5 MHz—this can feed the input of your existing 137 MHz receiver. Transmission formats for both systems are similar, so the results of both can be displayed on your PC screen. Pictures from GOES or METEOSAT are not as detailed as the pictures from a polar orbiter (they can