



Aviation Towers

S1127T, S1127-3T

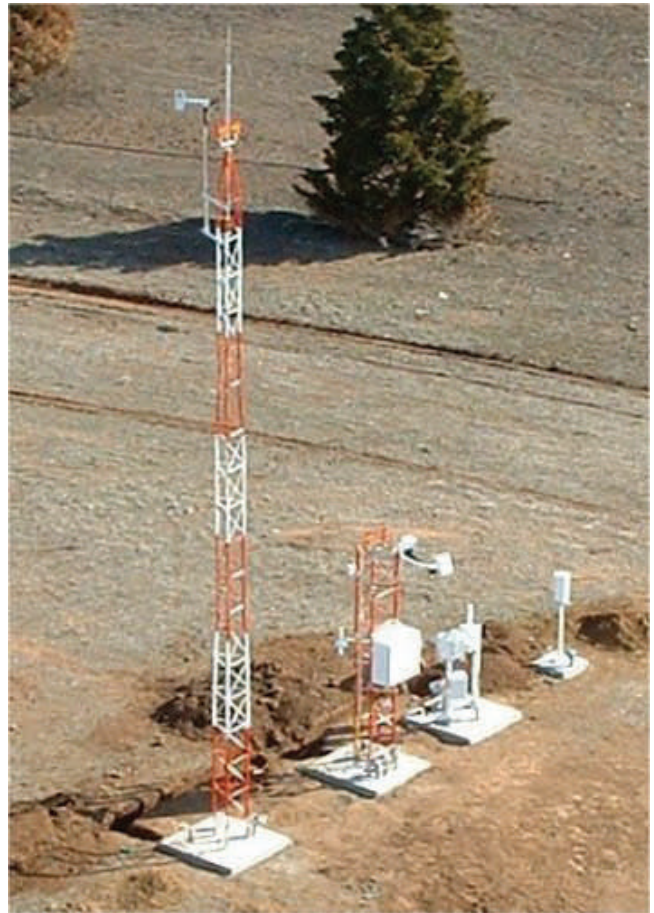
- Painted for Aviation Use
 - 10 Meter Height
- Free Standing—no guy wires required •
- Aviation lighting •

The 10 meter aluminum tower selected is Universal model 21-30 with B-22 Base. It is qualified to withstand a wind load of 110 mph; by extrapolation it is easily capable of supporting the approximately 1 ft² of wind load at 132 mph. The wind load for this tower consists only of the wind sensor, lightning protection and clearance lights. This tower requires a four-foot cubic base in which the B-22 base is embedded. The embedded base has connectors just above the concrete surface, for attachment of the tower.

It is possible to use hardware to support frangibility – the ability of the tower to give way to a force applied without destroying the object hitting it. Frangibility can be achieved by attaching the tower to the base with shear bolts designed to break away at forces higher than those required to support the tower in maximum winds (shear bolts and calculations optional).

The tower consists of three sections which bolt together at the site during installation. It can be raised or lowered as a unit by disconnecting one of the three base-attachment bolts and pivoting. The tower is of triangular design, three vertical aluminum legs tied together with cross- and angle-braces. The lower section legs are 22 in. apart, tapering to 18 in. over the top 1.5 ft. The middle section legs are 18” apart, with a taper to 14”. The top section legs are at 14” with a final taper to a single tube. Weight of the assembled tower is 77 lbs.

The base calls for concrete 3 ft. X 3 ft., 4 ft deep. It mounts similarly, using frangible bolts just above ground level.



This photo shows both the 10 meter tower (left) and next to it the 3 meter tower in a typical aviation application.