AIRPORT CERTIFICATION INFORMATION BULLETIN

DATE: 06/30/2008, NUMBER: 08-10 WINDCONE ILLUMINATION REQUIREMENTS





All windcones must be fully illuminated to the pilot. Recent inspections have revealed several cases in which the illumination of the windcone(s) has changed intensities as runway lights were stepped through intensity. In some cases, the windcone was scarcely visible on the lower steps. Regardless of the runway light setting, the windcone must provide adequate illumination to those aircraft flying in the pattern, whether across the midfield or on final approach. Please re-evaluate the windcones on your airport during self-inspections and remember that these windcones provide the pilot one last physical indication of the environment he/she is about to enter prior to landing. Below is an excerpt from AC 150/5370-10C, Standards for Specifying Construction of Airports (page L-107-2, section 107-2.2) that provides technical information on the approved installation:

107-2.2 WIND CONES. The 8-foot (240 cm) and 12-foot (3.5 m) wind cones and assemblies shall conform to the requirements of AC 150/5345-27, Specification for Wind Cone Assemblies.

The illuminated windcone must present a constant brightness to the pilot. As a result, the source of power for the windcone circuit must be identified. Where a constant voltage is available, the windcone may be connected directly to the constant voltage circuit. Where the series lighting circuit is used as a power source to the windcone, a power adapter that converts constant current to constant voltage must be specified. An additional requirement for the power adapter is the output voltage must remain constant regardless of the input current. The manufacturer of the power adapter must be consulted to verify the additional load imposed on the series circuit by the power adapter.

The engineer should specify the windcone and power adapter combination recommended by the manufacturer when the power source for the windcone circuit will be the constant current series lighting circuit.

