Interagency Aviation Safety Alert

No. IASA 11-01  Date: May 19, 2011

Subject: Meteorological Evaluation Towers
Area of Concern: Aviation Safety of Flight
Distribution: All Aviation Activities

Discussion: Meteorological Evaluation Towers (METs) are installed in remote or rural areas, just under 200 feet above ground level (AGL). These structures are portable, erected in a matter of hours, and constructed from a galvanized material that is difficult to see in most atmospheric conditions. Even more hazardous, the guy wires are nearly invisible.

The emphasis to discover sources of renewable energy in the United States has prompted industry to explore all means of power production. METs are erected to determine if a particular geographic area is a viable location for the installation of wind turbines. The data is usually gathered over the period of one year.

Requirements to file notice under FAR part 77 (so that they can be charted) do not apply to structures less than 200 feet AGL unless they’re erected in close proximity to an airport environment. As a result, the FAA does not maintain a database of MET locations, nor does it conduct aeronautical studies to determine whether the particular structure would be hazardous to aviation. The MET’s color, portability, remote location, and ability to be erected quickly presents an unknown hazard to all aircrews who operate in the low level environment. In March 2011, the NTSB issued a Safety Alert (SA-016) addressing the hazards associated with Meteorological Evaluation Towers. The Safety Alert can be found at www.ntsb.gov/alerts/alerts.htm

The FAA has issued a notice of proposed rulemaking (docket number FAA-2010-1326) to update Advisory Circular (AC) 70/7460-1K which recommended marking METs. However, compliance with an AC is voluntary and absent any regulatory requirement, many METs will more than likely be constructed without notice to the aviation community and fail to be marked appropriately.

Key Points:
- Towers generally range in height from 90 to 240 feet tall.
- Any tower less than 200 feet in height is not required by regulation to be lighted.
- Presently, there is no standardized notification system in place to indicate when and where these towers are erected.

Figure 1. Meteorological Evaluation Tower
On January 10, 2011 a Rockwell SR-2 impacted a 197’ 8” MET while delivering seed. The pilot was killed and the aircraft destroyed. The accident occurred in daylight, under visual meteorological conditions. Witnesses stated they did not see the pilot perform any evasive maneuvers prior to impact which strongly suggests the pilot never saw the tower or guy wires.

If you’re operating below 500 ft AGL, a vigilant scan and reconnaissance of the operating area is required in order to see and avoid all towers and other obstructions. If you notice any obstacles that are not annotated on your local hazards map, take note of their location, add it to the map, and be sure to communicate the information to others. If the obstacle is unlighted and you feel it should be, contact your state or regional aviation manager.

Dale Guenther (R6-FS, Fire & Aviation Management System Analyst and primary POC for the National Geospatial-Intelligence Agency), John Selkirk (BLM, NM State Aviation Manager) and Al Sandoval (BLM, NM Fire GIS Specialist) have been gathering data on FAA and DoD hazard and flight restrictions, including wind turbine generators and MET tower locations, in their region and nationwide. Give them a call if you have any questions on how to find towers in your area. Their phone numbers are: