



NTSB

SAFETY ALERT

National Transportation Safety Board

★ Meteorological Evaluation Towers

Pilots urged to be vigilant for Meteorological Evaluation Towers

The Problem

- Meteorological Evaluation Towers (METs) are used to measure wind speed and direction during the development of wind energy conversion facilities. METs are made from galvanized tubing (or other galvanized structure) with a diameter of 6 to 8 inches and are secured with guy wires that connect at multiple heights on the MET and anchor on the ground.
- Many METs fall just below the 200-foot Federal Aviation Administration (FAA) threshold for obstruction markings. They can also be erected quickly and without notice to the local aviation community, depending upon their location.
- Because of their size and color, pilots have reported difficulty seeing METs from the air. Therefore, METs could interfere with low-flying aircraft operations, including those involving helicopter emergency medical services, law enforcement, animal damage control, fish and wildlife, agriculture, and aerial fire suppression.
- The NTSB has investigated several fatal accidents involving aircraft collisions with METs:
 - On January 10, 2011, a Rockwell International S-2R, N4977X, collided with a MET during an aerial application in Oakley, California.
 - On May 19, 2005, an Air Tractor AT-602, N9017Z, collided with a MET that was erected 15 days before the accident in Ralls, Texas.
 - On December 15, 2003, an Erickson SHA Glasair, N434SW, collided with a MET near Vansycle, Oregon.
- While Wyoming and South Dakota have implemented requirements for METs to improve the safety of low-flying aircraft, not all states have such requirements for METs. (Wyoming maintains an online database of METs and requires all METs to be registered and marked so that they are visible from a distance of 2,000 feet. South Dakota requires that METs be marked.)

- The FAA has issued a notice of proposed rulemaking (docket number FAA-2010-1326) to update Advisory Circular (AC) 70/7460-1K to recommend the marking of METs. However, the NTSB is concerned that the application of the AC is voluntary, and, without mandatory application and marking requirements for METs, many METs will still be constructed without notice to the aviation community and will fail to be marked appropriately.

What can pilots do to avoid METs?

- Maintain vigilance for METs when conducting low-altitude flights.
- If you locate a MET in your area, let other pilots know about the location of the MET. FAA Safety Team members are also exploring methods of notifying pilots of the location and height of METs and are working to educate MET owners, builders, and communities on the flight-safety issues presented by METs.
- Encourage the marking of METs in your area.

Need more information?

NTSB accident database for information on MET accidents: <http://www.nts.gov/ntsb/query.asp>

FAA AC 70/7460-1K:

[http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/b993dcdcf37fcdc486257251005c4e21/\\$FILE/AC70_7460_1K.pdf](http://rgl.faa.gov/Regulatory_and_Guidance_Library/rgAdvisoryCircular.nsf/0/b993dcdcf37fcdc486257251005c4e21/$FILE/AC70_7460_1K.pdf)

Proposed revisions to FAA AC 70/7460-1: <http://www.gpo.gov/fdsys/pkg/FR-2011-01-05/pdf/2010-33310.pdf>

National Agricultural Aviation Association: www.agaviation.org/content/lets-be-fair-about-sharing-air

South Dakota House Bill 1155: <http://legis.state.sd.us/sessions/2010/Bill.aspx?Bill=1155>

Wyoming database of METs: <http://gf.state.wy.us/METTowers/default.aspx>

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