

## BILL ANALYSIS

Senate Research Center

S.B. 505  
By: Perry; West  
Agriculture, Water & Rural Affairs  
6/1/2015  
Enrolled

### AUTHOR'S / SPONSOR'S STATEMENT OF INTENT

The increasing prevalence of meteorological evaluation towers (METs), which are used to measure wind speed and direction to identify locations for future wind turbines, has caused concern for the National Transportation Safety Board (NTSB) and the Federal Aviation Administration (FAA) due to an increase in fatal accidents involving these towers and low altitude pilots. Low altitude pilots include aerial applicators, emergency medical flight crews, aerial firefighting crews, fish and wildlife teams, military pilots, and others.

Under current federal and state law, towers that are less than 200 feet above ground level are not required to be marked or lighted so as to be visible to low altitude pilots. Texas law does require wireless communications facilities that are between 100 feet and 200 feet above ground level to be marked with two warning spheres, each on the highest guy wires. Texas law also requires a notice to be given to certain airport and aerial applicators of the construction of a wireless communication facility for those facilities taller than 100 feet above ground level. Unfortunately, these laws are largely ineffective due to a number of exemptions and lack of enforcement.

S.B. 505 provides that METs between 50 and 200 feet above ground level:

- Must be painted in equal alternating bands of aviation orange and white, beginning with orange at the top of the tower;
- Must have aviation orange marker balls installed and displayed;
- May not be supported by guy wires unless the guy wires have a seven-foot-long safety sleeve at each anchor point that extends from the anchor point along each guy wire attached to the anchor point; and
- An owner of an MET that does not comply with these safety standards commits a Class C misdemeanor (or a Class B misdemeanor if a collision with the tower occurs causing bodily injury or death to another person).

These marking requirements are from the FAA Advisory Circular AC 70/7460-1K, which the NTSB recommends for increasing the visibility of METs under 200 feet. Many low altitude pilots report difficulty seeing unmarked METs from the air. The near invisibility of unmarked METs contributes to extremely dangerous conditions for low altitude flight. In keeping with the NTSB and FAA recommendations, S.B. 505 also requires reporting and registration with the Texas Department of Transportation (TxDOT).

S.B. 505 does not apply to:

- An electric utility transmission line;
- A facility licensed by the Federal Communications Commission or any structure with the primary purpose of supporting telecommunications equipment;
- A wind-powered electrical generator with a rotor blade radius greater than six feet; or
- A traffic-control signal erected or maintained by TxDOT.

Despite recommendations by the FAA and NTSB, the fact remains that most METs are not marked. As a result, 13 states have passed legislation requiring the marking of METs, and several other states are actively pursuing legislation. Most of these statutes are similar in their

key provisions. S.B. 505 would bring Texas in line with these other states and make significant gains in preventing tower-related accidents and fatalities.

S.B. 505 amends current law relating to painting and marking requirements for certain meteorological evaluation towers and creates an offense.

### **RULEMAKING AUTHORITY**

Rulemaking authority is expressly granted to the Texas Department of Transportation in SECTION 1 (Section 21.071, Transportation Code) of this bill.

### **SECTION BY SECTION ANALYSIS**

SECTION 1. Amends Subchapter B, Chapter 21, Transportation Code, by adding Section 21.071, as follows:

Sec. 21.071. PAINTING AND MARKING REQUIREMENTS FOR CERTAIN METEOROLOGICAL EVALUATION TOWERS; OFFENSE. (a) Defines "meteorological evaluation tower."

(b) Provides that for purposes of this section, "meteorological evaluation tower" does not include a structure that is located adjacent to a building, including a barn, or an electric utility substation, or in the curtilage of a residence.

(c) Provides that a meteorological evaluation tower that is at least 50 feet but not more than 200 feet in height above ground level:

(1) must be painted in equal alternating bands of aviation orange and white, beginning with orange at the top of the meteorological evaluation tower;

(2) must have aviation orange marker balls installed and displayed in accordance with the standards contained in 76 Fed. Reg. 36983 (June 24, 2011) and Federal Aviation Administration Advisory Circular AC 70/7460-1K; and

(3) may not be supported by guy wires unless the guy wires have a seven-foot-long safety sleeve at each anchor point that extends from the anchor point along each guy wire attached to the anchor point.

(d) Provides that a person who owns, operates, or erects a meteorological evaluation tower in violation of this section commits an offense. Provides that an offense under this subsection is a Class C misdemeanor, except that the offense is a Class B misdemeanor if it is shown on the trial of the offense that as a result of the commission of the offense a collision with the meteorological evaluation tower occurred causing bodily injury or death to another person.

(e) Requires Texas Department of Transportation (TxDOT) to adopt rules to implement and administer this section, including rules requiring a person:

(1) who owns, operates, or erects a meteorological evaluation tower to provide notice to TxDOT of the existence of or intent to erect a meteorological evaluation tower; and

(2) to register the meteorological evaluation tower with TxDOT.

SECTION 2. Requires TxDOT to adopt rules required to implement and administer Section 21.071, Transportation Code, as added by this Act, not later than December 31, 2015.

SECTION 3. (a) Provides that, except as provided by this section, Section 21.071, Transportation Code, as added by this Act, applies to a meteorological evaluation tower erected before, on, or after the effective date of this Act.

(b) Provides that a meteorological evaluation tower erected before the effective date of this Act is not required to comply with the painting and marking requirements of Section 21.071, Transportation Code, as added by this Act, until September 1, 2016.

SECTION 4. Effective date: September 1, 2015.