

HOUSE BILL REPORT

HB 2241

As Reported by House Committee On:
Transportation

Title: An act relating to aeronautic safety.

Brief Description: Regarding aeronautic safety.

Sponsors: Representatives Johnson, Warnick, Ross, DeBolt, Chandler, Clibborn and Lytton.

Brief History:

Committee Activity:

Transportation: 1/20/14, 1/23/14, 1/29/14, 1/30/14 [DPS].

Brief Summary of Substitute Bill

- Establishes state regulations for guyed towers outside cities and towns when the tower is not governed by other state or federal regulations or is exempt.
- Establishes a misdemeanor penalty for a person found to be in violation of the guyed tower regulations.

HOUSE COMMITTEE ON TRANSPORTATION

Majority Report: The substitute bill be substituted therefor and the substitute bill do pass. Signed by 27 members: Representatives Clibborn, Chair; Farrell, Vice Chair; Fey, Vice Chair; Moscoso, Vice Chair; Orcutt, Ranking Minority Member; Hargrove, Assistant Ranking Minority Member; Bergquist, Fitzgibbon, Freeman, Habib, Hawkins, Hayes, Johnson, Klippert, Kochmar, Moeller, Morris, Muri, Ortiz-Self, Pike, Riccelli, Ryu, Sells, Takko, Tarleton, Walkinshaw and Zeiger.

Minority Report: Do not pass. Signed by 3 members: Representatives Overstreet, Assistant Ranking Minority Member; Shea and Young.

Staff: Jerry Long (786-7306).

Background:

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

A guyed tower is secured with guy wires that are anchored in a set of concrete bases on the ground. As a result of the guy wires, this type of tower has a large footprint which allows the guyed tower to have a larger antenna load and higher height than a self-supporting tower. Since July 1, 1996, the Federal Communication Commission (FCC) has had the authority from Congress to require the painting and/or illumination of antenna towers that are registered with the FCC when it is determined that a tower may constitute a hazard to air navigation. The FCC requires an Federal Aviation Administration (FAA) determination that an antenna tower will not pose an aviation hazard before it will grant permission to build a antenna tower. Antenna structures must be painted and lighted when the tower exceeds 200 feet in height or the antenna requires a special aeronautical study. Any construction or alteration of a tower of more than 200 feet in height above ground level must provide notification to the FAA.

Another type of tower is a Meteorological Evaluations Tower (METS) which is used to measure wind speed and direction during development of wind energy conversion facilities. The METs are made from galvanized materials and are secured with guy wires that connect. Many METs are below the 200-foot FAA threshold for obstruction markings. The towers can be erected quickly and without notice to the aviation community. Because of their color, pilots have reported difficulty seeing the METs from the air. In March 2011 the National Transportation Safety Board published a safety alert on the METs. Some states, for example, Idaho, Wyoming, Montana, and South Dakota, have implemented requirements for the METs.

Summary of Substitute Bill:

Any temporary or permanent guyed tower 25 feet or more in height located outside an incorporated city or town, not governed by an existing state or federal law, rule, or regulation, and on land that is rural, undeveloped or used for agriculture, or is primarily desert must:

- be lighted, marked, and painted or otherwise be visible in clean air during daylight hours from 2,000 feet;
- be painted in seven equal alternating bands of aviation orange and white. The alternating bands must begin with orange at the top of the tower and end with orange at the base;
- have a flashing light at the top of the tower. The light must be visible from a distance of 2,000 feet when flashing and with night vision goggles;
- have the surface area under the footprint of the tower and the circular area surrounding each tower anchor, with a radius of six feet, to have a contrasting appearance with any surrounding vegetation;
- have two marker balls that must be attached to and evenly spaced on each of the outside guy wires; and
- have a seven-foot-long safety sleeve at each anchor point and must extend from the anchor point along each guy wire attached to the anchor point.

The substitute bill establishes the following definitions:

- "guyed tower" means a tower that is supported in whole or in part by guy wires and ground anchors or other means of support besides the superstructure of the tower itself, towers used for military purposes excepted;
- "height" means the distance measured from the original grade at the base of the tower to the highest point of the tower; and
- "temporary or permanent guyed tower" means a guyed tower erected and standing for any period of time.

Any guyed tower that was erected prior to the effective date of this act must be in compliance within one year of the effective date of this section. Any guyed tower that is erected on or after the effective date of this act must be in compliance prior to the time it is erected.

This section does not apply to power poles or non-guyed tower structures owned and operated by an electric utility or any structure where the primary purpose is to support telecommunications equipment, such as amateur radio, radio and television towers regulated by the FCC, and any guyed tower attached to a machine mounted on wheels, tracks, or skids and equipped with motorized winches used to lift or pull heavy loads.

This section does not apply to guyed towers within 50 feet of a higher or equal height structure or vegetation.

A person who is in violation of these regulations is guilty of a misdemeanor.

Substitute Bill Compared to Original Bill:

The substitute bill:

- places guyed tower marking requirements and exemptions for guyed towers in separate concise subsections;
- clarifies that the surface area under the footprint of the tower and the circular area surrounding each tower anchor, with a radius of six feet, must have a contrasting appearance with any surrounding vegetation;
- clarifies that "structures" owned and operated by an electric utility are non-guyed tower structures;
- requires erected guyed towers must have the required markings if the tower is erected; and
- removes the requirement that the towers have to be marked twenty-four hours prior to the tower being erected.

Appropriation: None.

Fiscal Note: Available.

Effective Date of Substitute Bill: The bill takes effect 90 days after adjournment of the session in which the bill is passed.

Staff Summary of Public Testimony:

(In support) The bill is important to agriculture pilots since MET towers can be erected quickly and are under the 200-foot requirement so the towers will not be reported to the FAA. There are 10 states that have enacted marking regulations on guyed towers due to accidents and deaths involving airplane pilots. Several of these have been crop dusters that fly low for crop dusting purposes and the towers are hard to be seen when a plane is traveling 150 to 160 miles per hour. Agriculture is a major economic driver of the state. A crop duster usually does a visual sweep of the fields to dust with a 3- to 5-mile radius so the pilot knows the obstacles. The process works well except for the guyed towers, because the towers blend into the background. Twenty-five percent of crop applications are applied by plane and there are 71 million crop acres in the State of Washington. On a cloudy day or because of contrasting vegetation a tower cannot be seen. The MET towers are not large in diameter like a base-supported tower, so they are very hard to see from a plane.

It is important to protect the state's pilots through lighting and painting of the towers so the pilots can see the guyed towers.

The National Transportation Board has issued a safety notice to the aviation community to warn the community about the increasing number of guyed towers for MET purposes. Pilot education is important and without lights and painting the towers are hard to see. This also affects aircraft used in search and rescue activities since during the searches the planes are also flying very low. The military also fly exercises at low altitudes. There is no database for MET towers and the towers can go up in less than three hours, so a pilot may not have a tower as an obstacle in the morning, but by afternoon the tower has been erected and the pilot is not expecting a tower there since it was not there earlier in the day. Currently there is no marking standard for guyed towers when the towers are up to 199-feet high.

The bill has criteria for marking the guyed towers and the orange and white stripes will help make the tower stand out.

The AM and FM radio towers need to be exempt since these towers are regulated by the FCC.

Helicopters can also be at risk with the MET and guyed towers.

When flying a plane, the rule is to see and avoid obstacles and touch nothing but air.

(Opposed) Logging towers are attached to large pieces of equipment which are usually bright colors and are usually in a cleared area due to the logging operation. The towers are usually only 45 feet to 100 feet in height. An exemption is desired for these towers since the towers are usually in a forested area and not in the areas mentioned in the bill.

Persons Testifying: (In support) Representative Johnson, prime sponsor; Heather Hanson, Gavin Morse, and Daniel Foster, Association of Washington Aerial Applicators; Mark Allen, Washington State Association of Broadcasters; and Robert Kay, Recreational Aviation Foundation and Airplane Owners and Pilot's Association.

(Opposed) Jerry Bonagofsky, Washington Contract Loggers Association, Inc.

Persons Signed In To Testify But Not Testifying: None.