



Federal Aviation Administration
 Air Traffic Airspace Branch, ASW-520
 2601 Meacham Blvd.
 Fort Worth, TX 76137-0520

Aeronautical Study No.
 2008-ANE-1387-OE
 Prior Study No.
 2008-ANE-497-OE

Issued Date: 06/17/2009

Anita M. Scheipers
 Town of Lincoln
 16 LINCOLN RD
 LINCOLN, MA 01773

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower Lincoln Tower
Location:	LINCOLN, MA
Latitude:	42-25-52.30N NAD 83
Longitude:	71-17-59.20W
Heights:	66 feet above ground level (AGL) 451 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does exceed obstruction standards but would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

- At least 10 days prior to start of construction (7460-2, Part I)
- Within 5 days after the construction reaches its greatest height (7460-2, Part II)

See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

Any height exceeding 66 feet above ground level (451 feet above mean sea level), will result in a substantial adverse effect and would warrant a Determination of Hazard to Air Navigation.

This determination is based, in part, on the foregoing description which includes specific coordinates , heights, frequency(ies) and power . Any changes in coordinates , heights, and frequencies or use of greater power will void this determination. Any future construction or alteration , including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as

indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (816) 329-2525. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2008-ANE-1387-OE.

Signature Control No: 605480-109751318

(EBO)

Donna O'Neill
Specialist

Attachment(s)
Additional Information
Map(s)

Additional information for ASN 2008-ANE-1387-OE

The structure is an existing antenna tower located approximately 2.27 nautical miles (NM) south of the Laurence G. Hanscom Field (BED), Bedford, MA. It exceeds Federal Aviation Regulations Part 77 obstruction standards as follows as applied to Hanscom Field:

Section 77.23(a)(5): The surface of a takeoff and landing area of an airport or any imaginary surface established under 77.25, 77.28, or 77.29, exceeds the conical surface by 88 ft.

The proponent has requested the removal of the obstruction marking and lighting from this existing structure. As this structure exceeds obstruction standards, even at its proposed reduced height, that would not normally be acceptable for aviation safety. Considerable discussions were held with proponent/representative regarding the specific circumstances and environment associated with this structure.

The structure is located on the top of a heavily wooded hill and is closely surrounded by trees to a height of 66 ft. AGL. Natural vegetation (e.g. trees) is not normally considered to provide shielding as vegetation can and often is removed by the acts of man or nature. Also, in this case the existing structure is taller than the surrounding trees.

The proponent (Town of Lincoln, MA) has agreed to the following conditions, including partially dismantling the existing structure to a height not to exceed 66 ft. AGL, in order to obtain the conditional approval of the discontinuance of the obstruction marking/lighting of this antenna tower. The discontinuance of the obstruction marking and lighting (M&L) of this structure is approved providing all conditions set forth within this determination (See Page 1 and below) are strictly met.

Additional Conditions

- 1) The existing structure shall be lowered to a height not to exceed 66 ft. AGL/451 ft. AMSL prior to discontinuing the use of the current obstruction marking/lighting. The lighting system shall remain on the structure and be maintained in a working condition, so that it could become operational immediately if the shielding vegetation is reduced in height or removed in any manner.
- 2) FAA Form 7460-2 shall be submitted within 5 days after the structure's partial dismantlement to the height of 66 ft. AGL/451 ft. AMSL so records and charts may be updated to reflect the new, lower height of this existing structure.
- 3) No trees located within a 300 ft. radius of this structure shall be removed or reduced in height. If, at any point in the future, an unforeseeable natural event (e.g. wind, hail storm, etc.) removes more than 10% of the trees (especially the taller, mature trees) from this area, the obstruction marking/lighting shall be immediately turned back on. The proponent for this study is responsible to promptly initiate a marking and lighting study (submission of FAA Form 7460-1, Notice of Proposed Construction or Alteration) should this occur so the records can be updated to reflect the operational status of the obstruction marking/lighting system.
- 4) The intent of the conditions to allow for the discontinuance of the obstruction marking and lighting on this structure is to ensure that there is a very significant quantity of natural vegetation (trees) continually surrounding this structure and that the structure is no taller than those surrounding trees so that aviation safety will be maintained at the natural level existing in this area (i.e. an aircraft would encounter a tree before encountering this antenna structure regardless of the direction of approach).

