

**Christine Joyce**2/28  
5

**From:** Don Johnson  
**Sent:** Thursday, February 24, 2005 4:07 PM  
**To:** Board of Selectmen  
**Subject:** FW: Amateur Radios - new/revised draft article

Roland's revised Draft Amateur Radio Tower Article, forwarded for your information.

Regards,  
Don

-----Original Message-----

**From:** Don Johnson  
**Sent:** Thursday, February 24, 2005 4:06 PM  
**To:** Roland Bartl; Planning Board  
**Cc:** Stephen Anderson; Garry Rhodes  
**Subject:** FW: Amateur Radios - new/revised draft article

Roland:

As you have already gleaned, from my years of experience as Building Commissioner I think the approach suggested by this amended version of the Warrant Article is incorrect. That having been said, I see some apparent technical issues that I wanted to bring to your attention.

If I read your comment with respect to setbacks correctly, you seem to have gone the other way here and potentially, in certain cases, have required a greater setback with respect to the front setback than currently exists. If I read the bylaw correctly, the current wording would require a front setback at least equal to the minimum front setback as established in the bylaw and, at most, equal to the height of the tower. With the new wording, it seems that nothing can be placed in the "Front Yard", which seems to be the entire area of the lot in front of the primary structure (between the structure and the front lot line and extending across the entire width of the property. If I am correct, a 45' tower under today's bylaw would need a 45 foot setback from the front lot line - no matter where the primary structure is located. Under the new requirement, it would appear that the same tower would need a 150' setback if the principal building on the lot is set back 150'. Conversely, the same tower, located in a Side or Rear Yard, would require a 45' setback today (the height of the tower) from side or rear property lines and, under the new wording, might be as close as 10' (or even 0') to the side or rear property lines. Moreover, it would appear that a tower of any size could be located immediately adjacent to the public way if there is no principal building on the site. Are these the intended results?

Don

-----Original Message-----

**From:** Roland Bartl  
**Sent:** Thursday, February 24, 2005 2:58 PM  
**To:** Planning Board  
**Cc:** Stephen Anderson; Don Johnson  
**Subject:** Amateur Radios - new/revised draft article

Hi:

Following the Board's vote after the close of the public hearing on 2/22 to propose no requirements or restrictions on ham operators, I have redrafted the article as attached. A thorough review revealed the need for several changes in the bylaw in order to accomplish the stated objective. Please note the following:

1. The article establishes amateur radio installations as a stand-alone principal use since we learned that they can be operated from a remote location.

2/24/2005

2. The new defining words are "antennas and antenna structures". Antenna structures is the term used in the exemption of in Ch. 40A , S. 3.
3. I have retained the prohibition from the front yard of buildings, as it seemed that everybody during the hearing thought this to be reasonable. I assumed that to be part of the Planning Board's intentions. If that is in error, let me know.
4. As drafted, the article will also retain the standard setback requirements for structures. According to the Building commissioner, guy anchors would not be considered a structure and therefore not subject to setbacks. If this is not the outcome you thought the Board had intended please let me know.

I am copying this to Town Counsel for review and comment, and to the Town Manager as FYI.

*Roland Bart, AICP  
Town Planner, Town of Acton  
472 Main Street  
Acton, MA 01720  
978-264-9636*

To see if the Town will vote to amend the zoning bylaw as follows:

A. Insert under section 3.2 – General Uses, a new use definition as sub-section 3.2.4 as follows:

3.2.4 Amateur Radio Installation – One or more antennas or antenna STRUCTURES for the exclusive use by an amateur radio operator with a valid and current amateur radio operator’s license issued by the Federal Communications Commission, provided that no antennas and antenna STRUCTURES shall be located in the front yard of a principal BUILDING as defined in Section 5.2.4.

B. Insert under section 3 – Table of Principal Uses, a new line 3.2.4 as follows:

		RESIDENTIAL DISTRICTS					VILLAGE DISTRICTS					OFFICE DISTRICTS	
PRINCIPAL USES		R-2	R-4	R-A	R-AA	VR	EAV	EAV-2	NAV	SAV	WAV	OP-1	OP-2
		R-8	R-8/4										
		R-10	R-10/8										
<b>3.2 GENERAL USES</b>													
3.2.4	Amateur Radio Installation	Y		Y		Y	Y	Y	Y	Y	Y	Y	Y

		BUSINESS DISTRICTS			INDUSTRIAL DISTRICTS					SP. DIST.	
PRINCIPAL USES		KC	LB	PM	GI	LI	LI-1	SM	TD	ARC	SITE PLAN
<b>3.2 GENERAL USES</b>											
3.2.4	Amateur Radio Installation	Y	Y	Y	Y	Y	Y	Y	Y	Y	NR

C. Delete section 3.10.3 – Applicability of Special Requirements for Wireless Communication Facilities, and replace it with a new section 3.10.3 as follows:

3.10.3 Applicability – This section 3.10 shall apply only to reception and transmission facilities for the purpose of personal wireless communication services identified in the Federal Telecommunications Act of 1996. Nothing in this Bylaw shall be construed to regulate or prohibit customary installations for the reception of wireless communication signals at home or business locations, and nothing in this Bylaw shall be construed to regulate or prohibit antennas or antenna STRUCTURES installed solely for use by a federally licensed amateur radio operator.

*[Note: Section 3.10.3 currently states as follows:*

*3.10.3 Applicability – This section 3.10 shall apply only to reception and transmission facilities for the purpose of personal wireless communication services identified in the Federal Telecommunications Act of 1996. Nothing in this Bylaw shall be construed to regulate or prohibit customary installations for the reception of wireless communication signals at home or business locations, and nothing in this Bylaw shall be construed to regulate or prohibit an antenna installed solely for use by a federally licensed amateur radio operator, provided that the height of such antenna does not exceed applicable height limitations and, if freestanding,*

*that it is set back from all LOT lines at least the distance equal to its height, but not less than the otherwise applicable minimum yard requirement.]*

- D. In section 4.3.6.3 – Treatment and Renovation of Runoff, add the following sentence at the end of the section:

“This section shall not apply to Amateur Radio Installations.”

*[Note: Section 4.3.6.3 currently reads:*

*4.3.6.3 Treatment and Renovation of Runoff – All water runoff from IMPERVIOUS COVERS shall be funneled into gas trap catch basins. In addition, the first (1st) inch of every storm event shall be directed into a retention pond(s), where it shall be retained for an average of at least 3 days prior to recharge into the ground or discharge from the site. The retention pond(s) shall be exposed to sunlight, vegetated, and lined with soil featuring a permeability of 0.0001 cm/sec (0.1417 in/hr) or less. A DIVERSION BOX shall direct all water, which falls onto the site in excess of one (1) inch during a single storm event, toward additional storage, direct infiltration, or discharge from the site. Alternate methods of runoff treatment and renovation may be approved by the Special Permit Granting Authority if the Special Permit Granting Authority determines the intent of this Section is met.]*

- E. Insert in section 8 – Nonconforming Lots, Uses, Structures, and Parking; Exemptions; a new sub-section 8.10 as follows:

8.10 Exemption for Amateur Radio Installations – The limitations of this Zoning Bylaw pertaining to the height of BUILDINGS and STRUCTURES and the requirements for a minimum number of parking spaces in Section 6.3 shall not apply to Amateur Radio Installations as defined in Section 3.2.4.

- F. Insert in section 9B.4 – Allowed Uses in a Senior Residence Development, a new subsection 9B.4.9 as follows:

9B.4.9 Amateur Radio Installations.

, or take any other action relative thereto.

## SUMMARY

Amateur radio operators, or “hams”, communicate with other stations nearby and all over the world. The ability to communicate both over long and short distances increases with the height of an antenna above the ground. Federal and State governments recognize hams for providing vital communications in the event of emergency or disaster.

This article establishes “amateur radio installation” as a new principal use category allowed in every zoning district and provides certain exemptions for their antennas and antenna structures including an exemption from the otherwise applicable height limitations of the Acton Zoning Bylaw. The article would prohibit the placement of antennas and antenna structures in the front yards of buildings. Standard setback requirements from the lot lines would apply.

Federal Communications Commission (FCC) regulations state: “... local regulations which involve placement, screening or height of antennas and antenna structures based on health, safety, or aesthetic considerations must be crafted to accommodate reasonably amateur communications, and to represent the minimum practical regulation to accomplish the local authority’s legitimate purpose” (47 C.F.R. §97.15(e)); and “a station antenna structure may be erected at heights and dimensions sufficient to accommodate amateur service communications. State and local regulations

of a station antenna structure must not preclude amateur service communications. Rather, it must reasonably accommodate such communications and must constitute the minimum practicable regulation to accomplish the State or local authority's legitimate purpose" (47 C.F.R. §97.15(b)). In further clarifications of its Rules, the FCC did not consider it a legitimate local government action to seek a balance between local interest and the needs of an amateur radio operation to achieve effective communications. Rather, the FCC has placed the interest of the amateur radio operator above that of the community and expects the least local regulation necessary for the welfare of the community to accommodate the needs of the amateur radio operators to engage in amateur radio communications. This article reflects the reality of FCC rules, which elevate effective amateur radio operations to a vital national interest and largely preempt local control.

Direct inquiries to: Roland Bartl, AICP, Town Planner  
planning@acton-ma.gov / (978) 264-9636

Selectman assigned: -: bos@acton-ma.gov

**Board of Selectmen:**

**Finance Committee:**

**Planning Board:**