



Tower Regulations in Calgary (Amateur Radio Services)

An update for 2016

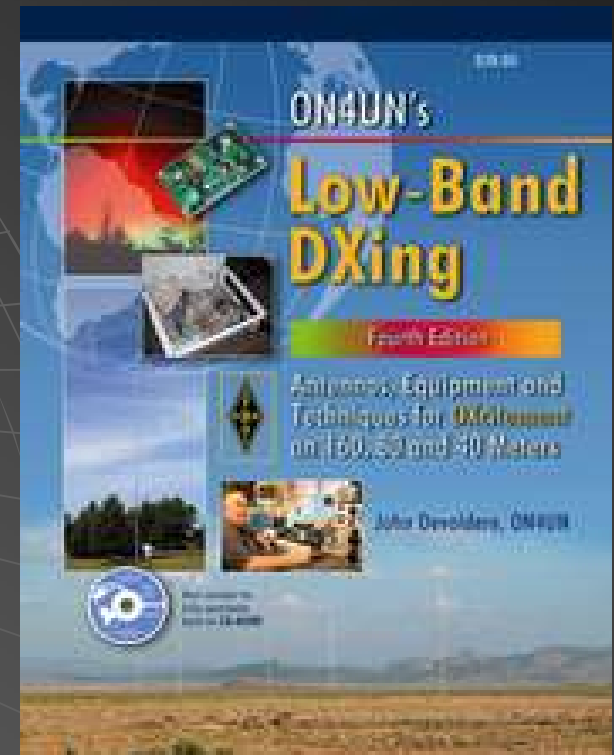
by

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Do you really need one?

- ◆ What are your interests?
 - ◆ Present station location
 - ◆ Present circumstances
-
- ◆ What does ON4UN say?
 - Two local amateurs

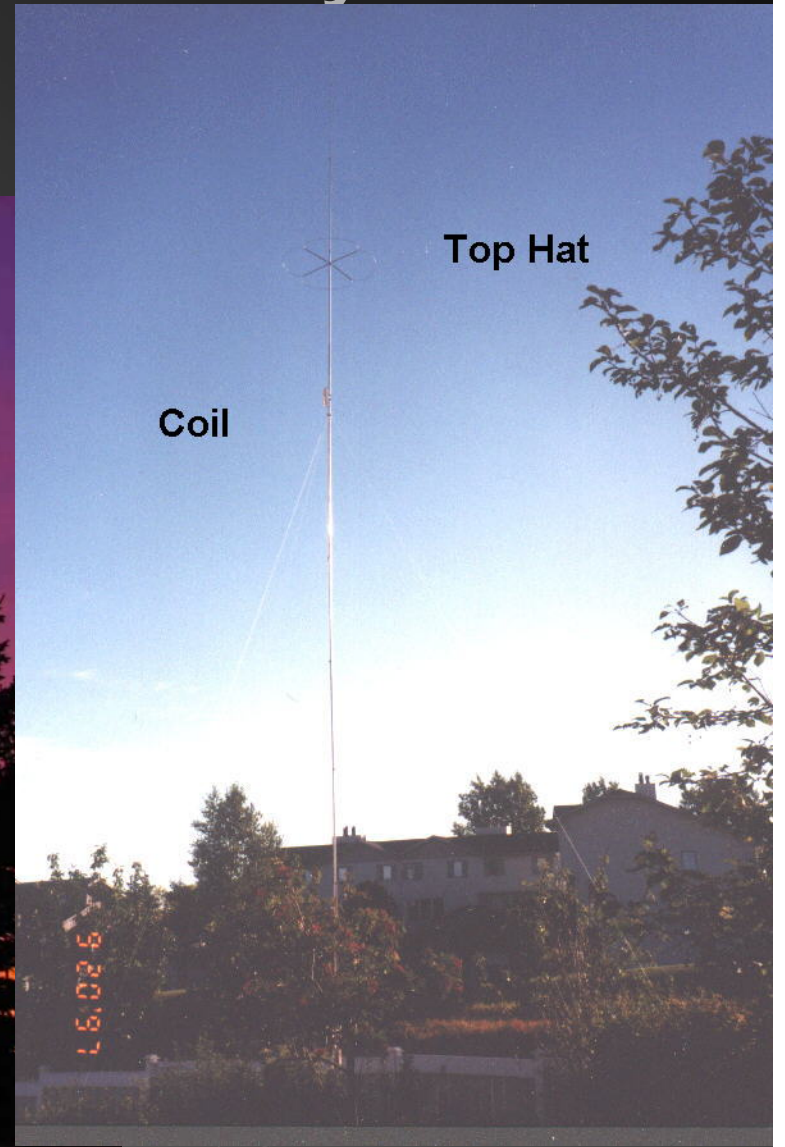


ON4UN

"...a successful Low Band DXer from an urban QTH, from the middle of nowhere, right in the auroral doughnut, using simple antennas..."

◆ *Low Band Dxing (2005) 2-2*

VE6LB-Verticals Only



ON4UN

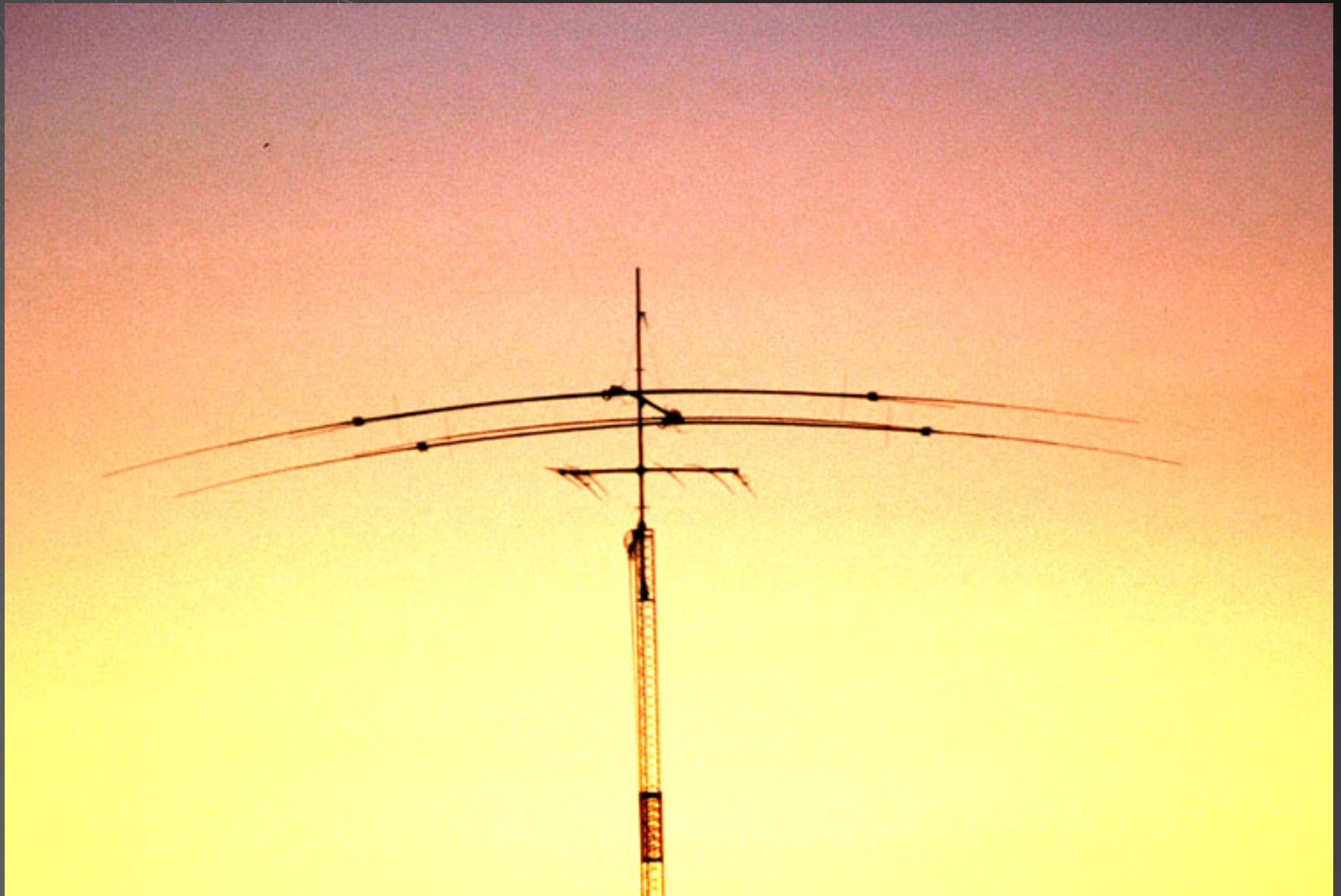


"...Steve is usually the first, if not the only one, I hear in Europe when the band decides to open up from his Northerly location. It is amazing what Steve does from a residential area."

◆ *Low Band Dxing (2005) 13-7*

VE6WZ-The other extreme





“You do not need a Tower”

◆ But

- We have lousy propagation
- The difference between using a yagi and a dipole is like night and day
- It will give you the “edge” in DX and Contests
 - ◆ “If you build it they will come”
- Not a substitute for good operating practice and skills

Important points

- ◆ Understand you can operate within the limits of your authorization
- ◆ Understand the process
- ◆ Support of your family
- ◆ Make friends with your neighbours
- ◆ Be safe

A little law

- ◆ Who has jurisdiction?
 - The Minister of Innovation, Science and Economic Development
- ◆ What law governs?
 - *Radiocommunication Act*
 - ◆ s. 5(f) ...and approve the erection of all masts, towers and other antenna support structures.
- ◆ Land Use Authority (LUA) has no “legal” power
- ◆ ISED Client Procedure Circulars or CPCs govern

Where we are today

- ◆ Pre 1987
 - Anything goes
- ◆ 1987-2007
 - Townsend Report 1987
 - ◆ Cannot ignore concerns of LUAs
 - CPC2-0-03 Issues 1-3 "Type 2 Installations"
- ◆ 2008-2014
 - Second Townsend Report 2004
 - Streamline process
 - CPC2-0-03 Issue 4
- ◆ 2014-
 - CPC2-0-03 Issue 5

Townsend II

- ◆ RAC made extensive submissions in 2003
- ◆ Townsend made a number of recommendations:

Recommendation 19: That Industry Canada should ensure that a **flexible and expeditious** land-use consultation model is available for the establishment and operation of radio stations (such as amateur stations) likely to have only a modest and localized impact upon their surroundings. **This model should set out both the rights and obligations of antenna proponents seeking antenna approvals from land-use authorities.**

The “Old” CPC

- ◆ CPC2-0-03 Issue 4
 - Effective January 1, 2008
 - Must consider using existing infrastructure
 - LUA Process must be followed
 - Public consultation
 - Address “reasonable and relevant” concerns

Reasonable and Relevant

- ◆ What is?
 - Alternate site possible?
 - Integrate into surroundings
 - Safety Code 6
- ◆ What is not?
 - Potential effects on property values/taxes
 - Questions on the whether the Act, CPC, by-laws should be reformed

CPC Exclusions

- ◆ s. 6 of the CPC
 - Maintenance
 - Addition/modification not to exceed 25% of height of existing structure
 - Limited duration (3 months)
 - 15 metres or less
 - ◆ lower limit where there should be no regulation

The New CPC

- ◆ CPC2-0-03 Issue 5
 - Effective July 15, 2014
 - Maintains section 6 exemptions
 - No longer a requirement to address “reasonable and relevant”
 - Required to comply with section 7
 - ◆ RF Exposure-SC6
 - ◆ RFI
 - ◆ Broadcasting undertakings
 - ◆ CEAA and Airports

What does ISED expect +15m?

- ◆ Written notification
 - ISED/LUA/Public
- ◆ Engage the LUA/Public
- ◆ LUA/Public must respond
- ◆ Follow the LUA Process:
 - *Protocols for Amateur Radio Antenna Support Structures in Residential Areas*

The 15 Metre Question

- ◆ LUA process can only “augment” the CPC
 - “The City of Calgary acknowledges that amateur radio operators **are not required**, under federal regulation, to provide notification to either The City or the public for those amateur radio antenna support structures that meet the *less than 15 metres in height* federal provision. Therefore, a submission is not required in these cases.”
- ◆ No mandated consultation or process for section 6 exempt installations
- ◆ Right to put up a 15 metre structure is unquestionable
- ◆ Over 15 metres.....?

But.....

- ◆ “Individual circumstances vary” even under section 6
- ◆ “Prudent to consult”
- ◆ “consider local circumstances” (“Four Points”)
 - Antenna systems dimensions compared to local surroundings
 - Location/proximity to neighbours
 - “community sensitive location”
 - Transport Canada

What about your Neighbours?

- ◆ For a s. 6 exempt installation there is no requirement to “consult”
- ◆ You MUST “consult” if you are not within s. 6 (higher than 15 metres)
- ◆ BUT-ISED wants you to keep your neighbours “happy” in any event
 - No political activity!

In practice

- ◆ ISED will take a "hands off" approach to s 6 structures
- ◆ Expect you to deal with any "problems"
- ◆ ISED does not want to hear from your neighbours
- ◆ Will "support" installation under s 6
- ◆ Will expect you to make "compromises"
- ◆ It's at "your risk"

So what to do?

- ◆ You are effectively limited to 15 metres
 - In Calgary urban areas
- ◆ You should notify ISED and the LUA even if exempt
 - "Paper Trail"
- ◆ Consider the "four points" in s 6 and the CPC
- ◆ No absolute requirement to "consult" your neighbours
 - But a happy neighbour is good!
- ◆ Use precedents!
- ◆ Be open and up front with your intended installation

VE6SH Install November 2008

- ◆ 15 metre Rohn Tower/mast
- ◆ Force 12 C3S (12' boom)
- ◆ 160M Sloper
- ◆ Three (6) VHF/UHF phased loops
- ◆ SteppIR Big IR for low bands
- ◆ Irregular Lot
- ◆ Mount Royal
- ◆ Antenna changed to a C3 (18' boom) in September 2009

Notification-30 days

- ◆ Notify the City:
 - Development Officer
Development and Building
Licenses
The City of Calgary
City Hall
700 Macleod Trail South
Calgary, AB T2P 2M5

Notification-30 days

- ◆ and ISED:
 - Manager, Spectrum Operations
Industry Canada
639 - 5th Avenue SW
Calgary, AB T2P 0M9

Notification

- ◆ Tell them what you intend to do
 - Confirm less than 15 metres
 - Description of installation
 - "Compromise"
 - Confirm authorized under the Act
- ◆ Be complete and accurate
- ◆ Plot plan
- ◆ Pictures
- ◆ Respond to the four points in the CPC

Four Points to confirm

- ◆ Considered local circumstances
 - "Compromise"
 - compare to "local surroundings"
- ◆ Not a "community sensitive location"
 - no definition
- ◆ Meets RF exposure limits/Safety Code 6
 - limited operation/power level/duty cycle
- ◆ Installation not required to meet Transport Canada regulations.
- ◆ Address RFI if it arises

Plan to deal with Neighbours

- ◆ Tell City/ISED what you have done or intend to do
- ◆ Draft a handout to provide if faced with questions
 - copy with letter to City/ISED
 - "paper trail"
- ◆ Invite dialogue

Response from City/ISED??

- ◆ Likely no
- ◆ Wait 2-3 weeks
- ◆ Second letter
 - confirm no response from City/ISED
 - Outline neighbour interaction
 - confirm plan to proceed

Installation Day!

- ◆ Photos
 - Base and installation
- ◆ More neighbour dialogue/take notes
- ◆ Third letter-confirm installation with City/ISED
 - confirm final height
 - note any changes (further compromise)
- ◆ Letter to your insurer

Response after Installation

- ◆ Respond quickly
- ◆ Stress s 6 exempt installation
- ◆ Notified your neighbours
- ◆ Stress dealt with "four points" in s 6 and CPC
- ◆ Stress "compromise"
 - Many 18-21 metre towers in Calgary
- ◆ Continue dialogue with neighbours as required
- ◆ "Lawyer letters"-careful response!

Other Tips

- ◆ Safety first
- ◆ Professional Installation
- ◆ Keep it neat
- ◆ Same process if modification of structure
- ◆ 25% "growing tower"?
- ◆ Condo Owners-read the By-laws!
- ◆ Architectural caveats
- ◆ **15 metres means 15 metres**
 - measure it to be sure

Key Points

- ◆ Understand the CPC
 - Read it!
- ◆ Keep your neighbours happy
 - VE6WZ approach
- ◆ Have a Plan
- ◆ Document/Paper Trail
- ◆ Ignore anecdotal advice
- ◆ Photos!
- ◆ Don't give up!
- ◆ Remote operation is now very viable