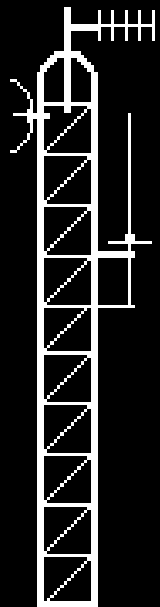


So, you want to put up a tower . . .
. . . and then you want to climb it too?

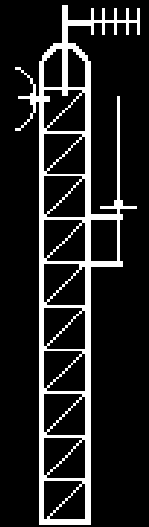


Robert Isby, Jr.
Owner

Algonquin Communications

April 6, 2009

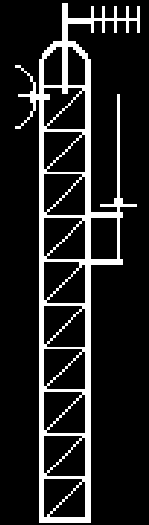
Tower Erection and Safety



The process of tower erection begins long before the actual placing of the structure.

- Technical Considerations
- Environmental Considerations
(Don't forget Public Perception)
- Practicality and Reasonableness

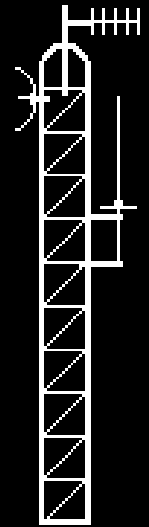
Tower Erection and Safety



Technical Considerations

- Tower Loading
 - What is the purpose of the tower?
HF, VHF, UHF, SHF, Other
 - Structural Analysis Including Wind and Ice Loading
- Site / Space Availability
 - Building Attachment Points
 - Base mount consideration
 - Guy Wire Path Assessment

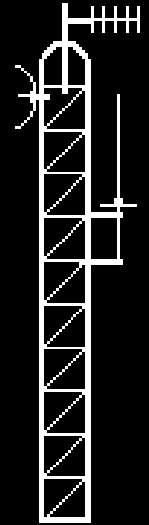
Tower Erection and Safety



Technical Considerations

- Suitable / Adequate Antenna Location(s)
 - Licensed Parameters
 - Meets Goals / Needs
- No such thing as a “Standard Tower”

Tower Erection and Safety

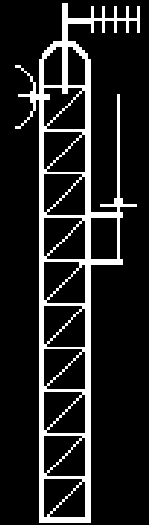


Environmental Considerations

- Zoning Approval
 - PRB1
 - NIMBY (Perception)
 - SHPO, NHPA, SEQRA, NEPA . . .
- FAA / FCC Obstruction Clearance
 - TOWAIR Study

<http://wireless2.fcc.gov/UlsApp/AsrSearch/towairSearch.jsp>

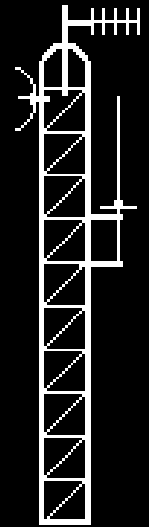
Tower Erection and Safety



Practicality & Reasonableness

- Does it Pass the Common Sense Test
- Tower Steel is usually only 10% of the total project cost. Is it worth it?
- What are the risks of constructing?
- What are the risks of not constructing?

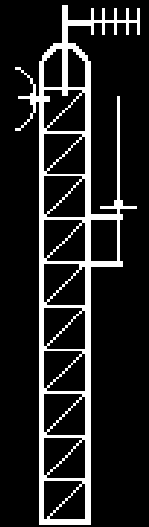
Tower Erection and Safety



KB2KFV Example

- Establish the Goal
- Discuss Goal with the Village Zoning Board
- Review Proposed Installation
- Present Findings to Zoning Board

Tower Erection and Safety

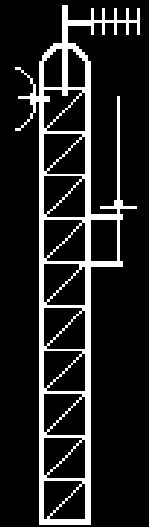


The actual tower erection needs to be well planned.

- Proper Installation Equipment
- Proper Personal Protective Equipment
- Safety is key element number one

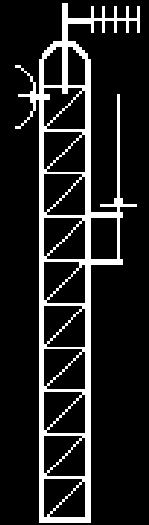
Tower Erection and Safety

Installation Equipment



- Crane
- Gin Pole
- Cable / Rope
- Specific Tools to meet OEM Specs

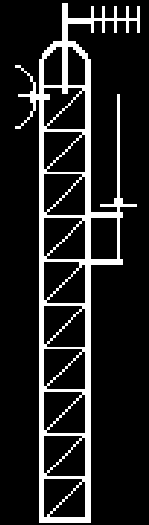
Tower Erection and Safety



Safety Equipment

- Hard Hat, Eye and Ear Protection, Gloves, Boots, Clothing selection
- Climbing Belt(s), Harnesses & Lanyards
- Positioning and Rescue Equipment
- Contact information / Emergency Numbers

Tower Erection and Safety



Safety Plan

- Safety Meetings
- Emergency Response
- Trained Personnel
- Proper Lockout / Tag-Out Procedure