Tower Safety

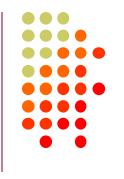
Tim Jellison W3YQ/KL7WV







Some disclaimers:



- I am not a certified instructor.
- You will not be a certified climber after this talk.
- I am, however, a certified climber/rescuer/rigger.
- My only goal is to help you stay safe.



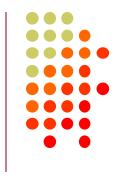




- Electrocution
- Structural Failure
- Incapacitation (Don't climb crank-ups)
- Falls







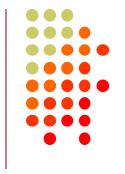
Electrocution

Check for powerlines before beginning work. Dipoles, verticals, towers, Yagis, ropes.

They're all conductive.







Structural failure

Check all guy wires.

Check foundation.

Check for rust/degraded components.

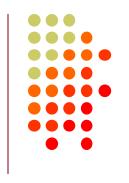
Cheap hardware used?

Guyed towers need to be straight and plumb.

Install temporary guys when stacking or dismantling towers.







Incapacitation

Know your body.

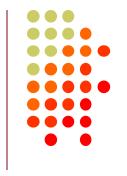
Heat/cold. Both can tap your strength.

Work slowly and methodically.

Insects and birds.







Falls

Any fall could be fatal.

Even falling 10 feet could kill you.

100% tie-off. No free climbing. No exceptions.



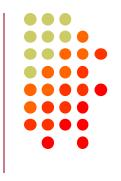


Safety procedures

- First check for power lines
- Use a proper harness and lanyards
- 100% Tie-off. NO FREE CLIMBING
- EVERYONE wears a hardhat
- Never "EVER" ride a rope, capstan







- 100% Tie off. No free climbing!
- Always use a full body harness.
- It will keep you safe(r) and it will greatly assist the rescuer during a rescue.
- I use a DBI Sala Exofit harness. But there are all kinds of approved options on the market.
- None of it is cheap, however. But what's your life worth?









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Plus, you can get a harness with a seat strap. These are the best!!!







Positioning Device









Double Fall Arrest Lanyards

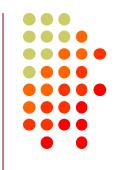








Double Fall Arrest Lanyards









Full Body Harness

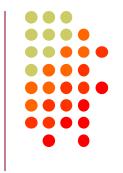








Fall Arrest Equipment

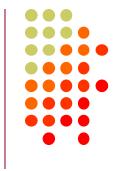


- The true, proper and safe methods of using fall arrest equipment is complicated and beyond the capabilities of this class. But we'll do our best.
- Using it improperly can be dangerous. And it might give you a false sense of security.
- Taking a professional tower climbing class is highly recommended.





Fall Arrest Equipment



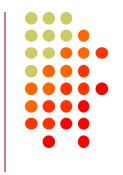
- The forces exerted on your body during a fall will surprise you.
- The tie-off point for your fall arrest equipment is critical.
- And while (if used properly) the fall arrest equipment will save your life, you WILL be hurt.







Fall Arrest



Only attach to the back, dorsal D-ring. Your attachment point must hold 4000 lbs. Will it hold a pickup truck?





When using a fall arrest lanyard, the tie-off point is critical. Don't trust Rohn cross braces. They're not strong enough.







Snap around the tower leg instead









Good way to climb Rohn towers







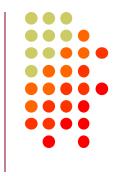


Be careful at the top of the tower. Don't let the lanyard slip over the top.







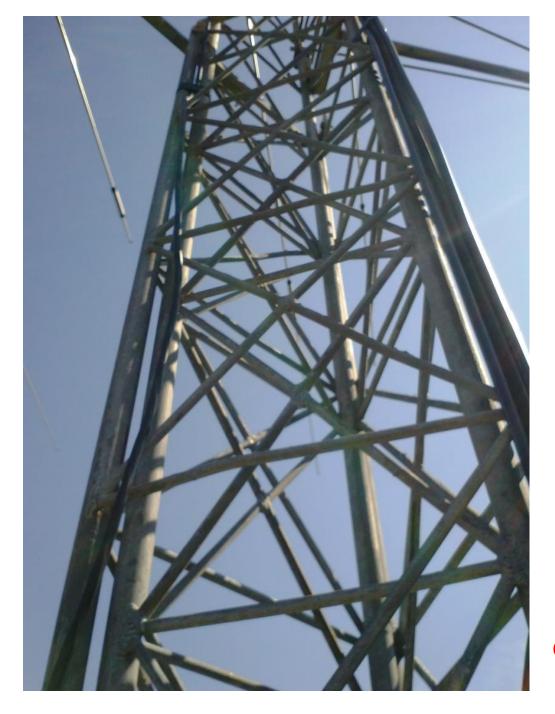


 Using man lifts and cranes cost you some \$, but they're a good way to do tower work.
 And do it safely.

 When using a man lift or a man basket hung from a crane, a full body harness with fall arrest lanyard MUST be used.









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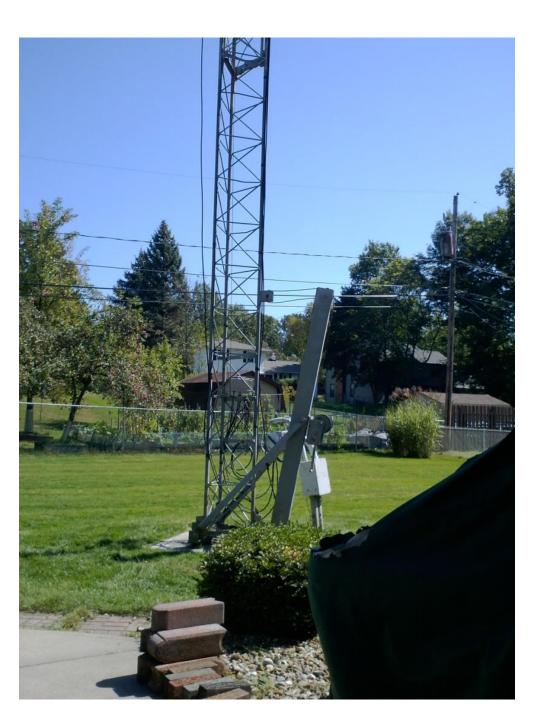
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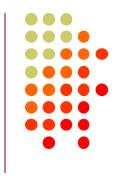






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- If hiring a tower crew, use only certified climbers
- Consider becoming a certified climber yourself
- www.comtrainusa.com
 www.citca4training.com





And above all, when climbing follow all safety rules!



NO SK's





