



# TOWER CLIMBING SAFETY CLASS

WITH N5XO/HAMSTER

SAFETY IS NO ACCIDENT... IT'S A PLAN!

OUR GOAL:

EVERY CLIMB UP SAFE...  
EVERY CLIMB DOWN SAFE!



WELCOME TO THE HAMSTER GROUP TOWER CLIMBING SAFETY CLASS! TODAY WE'LL COVER THE ESSENTIALS TO KEEP YOU SAFE—BEFORE, DURING, AND AFTER YOUR CLIMB!

TODAY'S TOPICS:

-  1. PROPER CLIMBING GEAR AND INSPECTION
-  2. TOWER INSPECTIONS BEFORE YOU CLIMB
-  3. GROUND TEAM SAFETY
-  4. RF & ELECTRICAL HAZARDS
-  5. EMERGENCY PLANS AND RESCUE
-  6. COMMON MISTAKES TO AVOID
-  7. FINAL SAFETY CHECKLIST



CLIMBING TOWERS IS SERIOUS BUSINESS. YOUR ATTITUDE, YOUR GEAR, AND YOUR TRAINING ARE WHAT GET YOU HOME SAFE TO YOUR FAMILY AND BACK ON THE AIR!

**LET'S CLIMB SMART. CLIMB SAFE. 73!**

# TOPIC 1: PROPER CLIMBING GEAR



THE RIGHT GEAR SAVES LIVES!

BEFORE YOU CLIMB, YOU NEED THE RIGHT GEAR AND YOU NEED TO KNOW HOW TO USE IT CORRECTLY!



**GOLDEN RULE:**

IF YOU HAVE ANY DOUBT ABOUT YOUR GEAR—DON'T USE IT!  
INSPECT IT, REPLACE IT, AND CLIMB ANOTHER DAY.

**BASIC CLIMBING GEAR CHECKLIST**

**FULL BODY HARNESS**



Your most important piece of equipment. It keeps you connected and distributes fall forces.

**TOWER CLIMBING BELT**



Provides positioning support. Use with a harness—**NEVER** by itself!

**SHOCK ABSORBING LANYARD**



Reduces fall arrest forces. Always attach from harness to tower.

**CLIMBING LANYARD (ADJUSTABLE)**



For work positioning. Adjust to keep you close to the tower.

**FALL ARREST DEVICE (SLIDER)**



Moves with you up and down. Locks instantly if you fall.

**LOCKING CARABINERS**



Locking carabiners help ensure connections stay secure.

**TOOL LANYARD**



Tethers your tools so they don't become falling hazards.

**CLIMBING HELMET**



Protects your head from impacts and falling objects.

**GLOVES & BOOTS**



Protect your hands and feet. Wear slip-resistant boots with ankle support.

**FULL BODY HARNESS—WEAR IT RIGHT!**

**FRONT VIEW**

**BACK VIEW**



- ✓ All straps snug, not tight.
- ✓ Dorsal D-ring centered between shoulder blades.
- ✓ Leg straps connected and snug.
- ✓ No twists in straps.

A PROPERLY FIT HARNESS IS COMFORTABLE AND SAFE.

**YOUR LIFELINE: ALWAYS TIE-OFF**

YOU **MUST** ALWAYS BE TIED-OFF TO THE TOWER WITH AN APPROVED FALL ARREST SYSTEM!



**THE RULE:**  
**100% TIE-OFF**  
**100% OF THE TIME**

- ✓ Maintain at least one (1) approved attachment at all times while climbing or working.
- ✓ Use the correct attachment point (usually the dorsal D-ring on your harness) for fall arrest.
- ✗ Never tie off to your belt, gear loops, or non-approved points!

**REMEMBER:**

- ✓ Inspect all gear before every climb.
- ✓ Use only gear rated for climbing and fall protection.
- ✓ Know your gear—practice on the ground first.
- ✓ If gear is damaged, remove it from service.



**"NEVER SKIP A STEP.  
NEVER RISK A STEP."**

**CLIMB SMART.  
CLIMB SAFE.  
73!**

**TOPIC 2:  
TOWER INSPECTIONS  
CHECK IT ALL—EVERY TIME!**



A THOROUGH INSPECTION CAN PREVENT ACCIDENTS AND SAVE LIVES. INSPECT FROM TOP TO BOTTOM—AND BACK AGAIN!



**COMPLETE TOWER INSPECTION CHECKLIST**



**1. STRUCTURAL MEMBERS**

Check legs, braces, and cross members for bends, cracks, rust, or corrosion.



**2. BOLTS AND CONNECTIONS**

Ensure all bolts, nuts, and hardware are tight and secured. Look for missing or damaged parts.



**3. CLIMBING FACILITIES**

Inspect rungs, steps, and safety cable for damage, looseness, or wear. Climb with confidence!



**4. SAFETY CABLE / LADDER SYSTEM**

Check for frayed cables, broken clamps, or improperly secured connections.



**5. ANTENNAS AND MOUNTS**

Verify mounts are secure. Look for loose, damaged, or misaligned antennas.



**6. COAX AND CABLES**

Check for chafing, UV damage, loose connections, and proper strain relief.



**7. GROUNDING SYSTEM**

Inspect ground connections and bonds. Look for corrosion or loose hardware.



**8. OBSTRUCTIONS & HAZARDS**

Check for bird nests, wasp nests, ice, snakes, or other hazards on tower.



**IF YOU FIND ANY ISSUES—REPORT THEM AND GET THEM FIXED BEFORE CLIMBING!**

**BEFORE YOU CLIMB—BE CLIMB READY!**

**PLAN YOUR CLIMB**



Know your objective, route, hazards, and escape plan.

**CHECK THE WEATHER**



No climb in lightning, high winds, heavy rain, ice, or extreme heat.

**CHECK YOUR HEALTH**



Climb only when you are physically and mentally fit.

**HYDRATE & FUEL UP**



Stay hydrated and fueled—fatigue leads to mistakes.

**TELL SOMEONE**



I WILL CLIMB THIS TOWER AT 0900.

Let someone know where you're going, when you'll be back, and who your backup is.

**CHECK YOUR ENVIRONMENT**

**LIGHTNING**



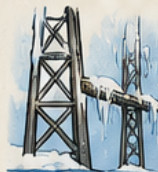
**30/30 RULE:**  
If you see lightning or hear thunder within 30 seconds—GET DOWN!

**HIGH WINDS**



Check wind speed. Over 25-30 mph? **POSTPONE THE CLIMB!**

**ICE / SNOW**



Ice makes rungs, steps, and platforms **EXTREMELY HAZARDOUS!**

**EXTREME HEAT**



Heat stress is real! Take extra precautions and hydrate often.

**WILDLIFE / PESTS**



Watch for snakes, wasps, birds, and other critters.

**RF EXPOSURE ZONES**



Know the RF zones on the tower. Stay safe!

**INSPECT & DOCUMENT**

**DOCUMENT ANY ISSUES YOU FIND:**

- ✓ Take photos
- ✓ Make notes
- ✓ Report to the site owner
- ✓ **Don't** climb if the tower is unsafe

**IF IT DOESN'T LOOK RIGHT—IT PROBABLY ISN'T!**



**A GOOD INSPECTION TODAY PREVENTS A BAD OUTCOME TOMORROW!**



**INSPECT CAREFULLY. CLIMB CONFIDENTLY. GET HOME SAFELY. 73!**

# GROUND TEAM SAFETY

**YOU'RE THE BACKBONE OF THE CLIMB!**



CLIMB SAFE...  
START SAFE...  
STAY SAFE!  
A GREAT CLIMB  
BEGINS WITH AN  
AWESOME GROUND  
TEAM!



## GROUND TEAM RULES



**1. KEEP PEOPLE OUT!**

Keep all non-essential personnel outside the barricaded area.



**2. STAY ALERT!**

Always be aware of the climber's position and activities.



**3. COMMUNICATE!**

Maintain clear, constant communication with the climber.



**4. CONTROL THE AREA!**

Use cones, rope, or barricades to define a safe work zone.



**5. WATCH THE CONDITIONS!**

Monitor weather, wind, and lightning. Stop the climb if needed.



**6. BE READY!**

Know the emergency plan and have first aid / rescue gear ready.

## COMMUNICATION IS KEY!

AGREE ON HAND SIGNALS OR RADIO PROCEDURES BEFORE THE CLIMB BEGINS!

**EXAMPLE  
HAND SIGNALS:**

- ALL CLEAR / CLIMB ON
- CLIMB DOWN
- STOP / PROBLEM



## BE PREPARED FOR ANYTHING

HAVE THESE ITEMS READY AT GROUND LEVEL:

- First Aid Kit
- Rescue / Descent Device
- Extra Carabiners
- Lanyard or Rope
- Tool Bag
- Water
- Weather Monitoring
- Radio / Phone



**HOPE FOR THE BEST...  
PREPARE FOR THE WORST!**

## GROUND TEAM DUTIES

**1. PRE-CLIMB CHECK**

Review the plan, inspect gear, and confirm communication.



**2. MONITOR THE CLIMB**

Track the climber's progress and watch for hazards.



**3. MANAGE TOOLS AND EQUIPMENT**

Raise and lower tools carefully. Never drop anything!



**4. WATCH ABOVE AND AROUND**

Look for power lines, traffic, wildlife, and changing conditions.



**5. SUPPORT THE CLIMBER**

Encourage your climber. A calm, focused climber climbs safer!



## KEEP THE AREA SAFE!

- ✓ Barricade the area
- ✓ Keep tools and ropes organized
- ✓ No distractions
- ✓ No horseplay
- ✓ Stay off the tower
- ✓ Ask questions if unsure



**THE BEST CLIMBS ARE A TEAM EFFORT.**

**A SAFE GROUND TEAM = A SAFE CLIMB!**



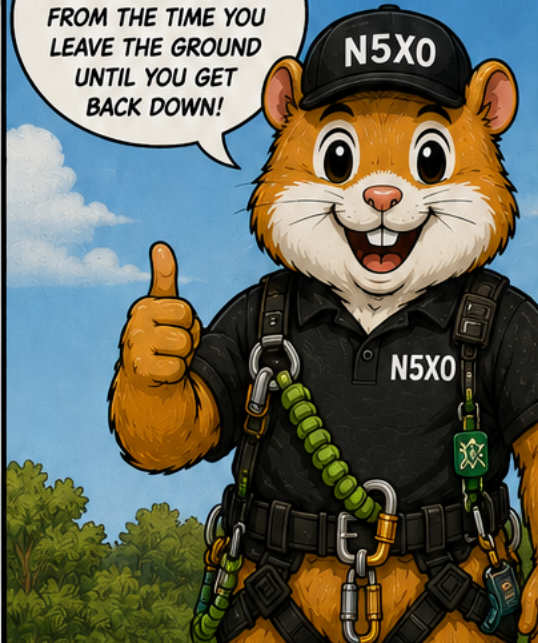
THANK YOU, GROUND CREW!

# TOPIC 4: CLIMBING THE RIGHT WAY

**TECHNIQUE + TIE-OFF = LIFE!**



USE PROPER TECHNIQUE AND MAINTAIN 100% TIE-OFF FROM THE TIME YOU LEAVE THE GROUND UNTIL YOU GET BACK DOWN!



## THE 100% TIE-OFF RULE

You must be attached at all times while climbing.

### CORRECT

Always maintain at least one point of attachment.



### INCORRECT

Never unclip both points at the same time.



### EXTREMELY DANGEROUS

Never work without being attached!



## THREE-POINT CONTACT

Maintain three points of contact with the tower at all times—two hands and one foot, or two feet and one hand.



## CLIMB SMOOTH, NOT FAST

Rushing leads to mistakes. Move deliberately and plan your next move.



## REST AND WORK POSITIONS

### REST POSITION

Use a locking carabiner or positioning lanyard to lean back and rest. Never rest in your harness alone.



### WORK POSITION

Use positioning gear to keep both hands free for the task.



## COMMON TIE-OFF METHODS

### DOUBLE LANYARD (100% TIE-OFF)

Move one lanyard at a time. Always keep one attached.



### Y-LANYARD

Provides 100% tie-off and better mobility.



### VERTICAL LIFELINE

Use with a fall arrester sliding on the lifeline. Inspect before use.



## WHAT NOT TO DO

- ❌ Don't skip tie-off points.
- ❌ Don't step over lanyards.
- ❌ Don't attach to guardrails, antennas, or non-rated objects.
- ❌ Don't use damaged gear.
- ❌ Don't carry tools in your hands while climbing.



### PRO TIP

Plan each move before you make it. Slow is smooth—smooth is safe!

GOOD CLIMBERS DON'T TAKE CHANCES... THEY TAKE RESPONSIBILITY. CLIMB SMART. CLIMB SAFE. **73!**



### REMEMBER:

- ✅ 100% tie-off
- ✅ Three points of contact
- ✅ Move deliberately
- ✅ Use proper positioning
- ✅ Inspect your gear

★ THE BEST ANTENNAS ARE AT THE TOP... BUT YOU HAVE TO GET THERE SAFELY! ★

# TOPIC 5: KNOW YOUR HAZARDS







SEE IT. RESPECT IT. MANAGE IT.




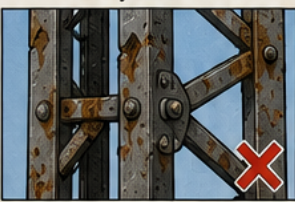






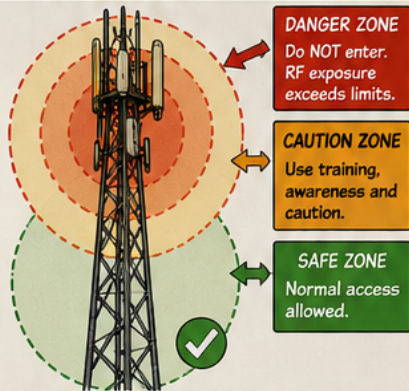

TOWERS CAN BE SAFE—IF YOU KNOW THE HAZARDS AND TAKE THE RIGHT PRECAUTIONS!



## HAZARD CATEGORIES

FALL HAZARDS	ELECTRICAL HAZARDS	RF EXPOSURE
 <ul style="list-style-type: none"> <li>Falls from height are the #1 cause of injury and death.</li> <li>Always use 100% tie-off.</li> </ul> 	 <ul style="list-style-type: none"> <li>Power lines, lighting, and equipment can electrocute.</li> <li>Maintain safe clearance.</li> </ul> 	 <ul style="list-style-type: none"> <li>Antennas transmit RF energy.</li> <li>Know the limits and stay outside hot zones.</li> </ul> 

WEATHER HAZARDS	STRUCTURAL HAZARDS	DROPPED OBJECTS	ENVIRONMENTAL HAZARDS
 <ul style="list-style-type: none"> <li>Lightning, high winds, ice, snow, and extreme heat are dangerous.</li> <li>Check the forecast and tower conditions.</li> </ul> 	 <ul style="list-style-type: none"> <li>Corrosion, missing bolts, and damaged members can lead to failure.</li> <li>Always inspect before every climb.</li> </ul> 	 <ul style="list-style-type: none"> <li>Tools or hardware can fall and cause serious injury.</li> <li>Use tool lanyards and keep your area clean.</li> </ul> 	 <ul style="list-style-type: none"> <li>Wildlife, uneven terrain, and vegetation can create risks.</li> <li>Be aware of your surroundings.</li> </ul> 

RF AWARENESS	ELECTRICAL CLEARANCE												
<p>RF energy is invisible, but it can be harmful. Know your site and follow posted limits.</p> <p><b>TIPS:</b></p> <ul style="list-style-type: none"> <li>Check site RF signage.</li> <li>Know the frequency and power levels.</li> <li>Stay outside posted limits.</li> <li>Use a buddy when in question.</li> </ul>  <p><b>DANGER ZONE</b> Do NOT enter. RF exposure exceeds limits.</p> <p><b>CAUTION ZONE</b> Use training, awareness and caution.</p> <p><b>SAFE ZONE</b> Normal access allowed.</p>	<p>Maintain <b>MINIMUM</b> clearance from power lines and electrical equipment.</p> <table border="1"> <thead> <tr> <th>VOLTAGE RANGE</th> <th>MINIMUM CLEARANCE</th> </tr> </thead> <tbody> <tr> <td>Up to 50 kV</td> <td>10 FEET</td> </tr> <tr> <td>Over 50 kV to 200 kV</td> <td>15 FEET</td> </tr> <tr> <td>Over 200 kV to 350 kV</td> <td>20 FEET</td> </tr> <tr> <td>Over 350 kV to 500 kV</td> <td>25 FEET</td> </tr> <tr> <td>Over 500 kV</td> <td>35 FEET</td> </tr> </tbody> </table> <p><b>MAINTAIN CLEARANCE AT ALL TIMES!</b></p> <p><b>SAFETY FIRST!</b></p> 	VOLTAGE RANGE	MINIMUM CLEARANCE	Up to 50 kV	10 FEET	Over 50 kV to 200 kV	15 FEET	Over 200 kV to 350 kV	20 FEET	Over 350 kV to 500 kV	25 FEET	Over 500 kV	35 FEET
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RESPECT THE TOWER!	HAZARD AWARENESS = RISK MANAGEMENT
<ul style="list-style-type: none"> <li>Plan ahead.</li> <li>Inspect everything.</li> <li>Manage the hazards.</li> <li>If it doesn't look right—don't climb!</li> </ul> 	<ul style="list-style-type: none"> <li>Identify the hazard</li> <li>Understand the risk</li> <li>Take proper action</li> <li>Verify the control</li> </ul>  <p><b>RISK CHECK</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> IDENTIFY</li> <li><input checked="" type="checkbox"/> ANALYZE</li> <li><input checked="" type="checkbox"/> CONTROL</li> <li><input checked="" type="checkbox"/> REVIEW</li> </ul>

# RF & ELECTRICAL SAFETY

**RESPECT THE POWER—STAY SAFE!**



RF AND ELECTRICAL HAZARDS CAN'T BE SEEN OR HEARD—BUT THEY CAN HURT OR KILL YOU. KNOW THE RISKS AND PROTECT YOURSELF!



### RF EXPOSURE—THE INVISIBLE HAZARD

Antennas transmit RF energy that you can't see. Too much exposure can heat your body tissue and cause serious injury.

**FOLLOW THESE RULES**

- ✓ Know the frequency and power levels of all antennas.
- ✓ Stay outside posted RF areas.
- ✓ Assume antennas are "HOT" unless confirmed safe.
- ✓ Never climb past active antennas unless necessary.
- ✓ When in doubt—ASK!

## ELECTRICAL HAZARDS—ALWAYS RESPECT THE POWER

<p><b>POWER LINES</b> Always assume all power lines are energized.</p> <p>Keep at least 10 FEET AWAY from any power line!</p> <p><b>10 FT.</b></p>	<p><b>GROUNDING SYSTEMS</b> Tower grounds can carry fault current.</p> <p>Never disconnect or interfere with grounding.</p>	<p><b>LIGHTNING</b> Towers are lightning magnets.</p> <p>Do not climb or work on towers when lightning is possible. When thunder roars—go indoors!</p>	<p><b>EQUIPMENT</b> Electrical equipment can have multiple power sources.</p> <p>Verify all power is disconnected and locked out before working.</p>	<p><b>COAX &amp; CABLES</b> Damaged cables can cause arcing or RF burns.</p> <p>Inspect cables for wear, loose connections, or damage.</p>
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### USE THE RIGHT PROTECTION

<p><b>INSULATED GLOVES</b></p> <p>Use when working with electrical equipment.</p>	<p><b>SAFETY GLASSES</b></p> <p>Protect your eyes from arcs, debris, and UV.</p>	<p><b>FLAME-RESISTANT CLOTHING</b></p> <p>Wear FR clothing when there is a risk of arc flash.</p>	<p><b>INSULATED TOOLS</b></p> <p>Use tools rated for electrical work.</p>
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### LOCK OUT / TAG OUT (LOTO)

Before working on any electrical equipment:

- ✓ Identify all power sources.
- ✓ Disconnect and open.
- ✓ Lock it out.
- ✓ Tag it out.
- ✓ Verify ZERO energy.

### RF & ELECTRICAL SAFETY BEST PRACTICES

- ✓ Know your site and review the hazards before climbing.
- ✓ Obey all posted signs and warnings.
- ✓ Use proper PPE for the task.
- ✓ Keep your body and gear out of restricted zones.
- ✓ Avoid working alone—use a ground crew.
- ✓ Report any electrical or RF hazard to the site owner.

**AWARENESS + RESPECT = SAFETY**

POWER IS USEFUL—BUT IT DOESN'T FORGIVE MISTAKES. RESPECT IT, AND IT WON'T HURT YOU!

### REMEMBER

- ✓ RF is real—even if you can't feel it.
- ✓ Electricity can arc, shock, or burn.
- ✓ Stay informed.
- ✓ Stay alert.
- ✓ Stay alive.

**SAFETY FIRST, EVERY TIME!**



EVEN WITH PERFECT GEAR AND GREAT TEAMWORK, THINGS CAN GO WRONG. BE READY TO HANDLE EMERGENCIES!



**PLAN TODAY—BE READY TOMORROW!**

**HAVE A PLAN BEFORE YOU CLIMB!**

- ✔ Review the plan with your entire team.
- ✔ Know rescue procedures and who does what.
- ✔ Make sure everyone knows how to call for help.
- ✔ Have the right equipment and know how to use it.
- ✔ Practice makes a big difference!



**CLIMBER IN DISTRESS—WHAT COULD HAPPEN?**

<p><b>FALL / SLIP</b> A slip or fall can happen to anyone.</p>	<p><b>MEDICAL EMERGENCY</b> Heat exhaustion, heart issues, or other medical problems.</p>	<p><b>EQUIPMENT FAILURE</b> Gear can fail if it's old, damaged, or used improperly.</p>	<p><b>WEATHER CHANGE</b> Sudden weather changes can create dangerous conditions.</p>	<p><b>OTHER HAZARDS</b> Wildlife, interference, or unexpected events can occur.</p>
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**RESCUE OPTIONS—KNOW YOUR METHOD**

Discuss and train on your rescue plan.

<p><b>SELF-RESCUE</b> Climber is able to lower themselves safely.</p>	<p><b>ASSISTED RESCUE</b> Another qualified climber assists from the tower.</p>	<p><b>GROUND-BASED RESCUE</b> Lower the climber using a pre-rigged rescue system.</p>
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**EMERGENCY COMMUNICATION**

Clear communication can save a life!

- 📞 Use a dedicated channel for tower operations.
- ☎️ Have a backup method (radio, phone, or both).
- 🗣️ Confirm messages—speak clearly and listen.
- 📢 Use plain language—no codes in an emergency.
- 📞 **911** Know your location and have emergency numbers ready.



**EMERGENCY GEAR—BE READY TO USE IT**

<p><b>RESCUE KIT</b></p> <p>Include descent device, carabiners, straps, and instructions.</p>	<p><b>RESCUE ROPE</b></p> <p>Proper diameter, length, and in good condition.</p>	<p><b>DESCENT DEVICE</b></p> <p>Know how to set it up and use it BEFORE an emergency.</p>	<p><b>FIRST AID KIT</b></p> <p>Have it accessible and fully stocked.</p>	<p><b>WATER &amp; SHADE</b></p> <p>Heat stress is real—stay hydrated and cool when possible.</p>
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**REMEMBER:**

- ✔ Have a plan.
- ✔ Train your team.
- ✔ Use the right gear.
- ✔ Communicate clearly.
- ✔ Stay calm and act safely.
- ✔ Help each other.

**BE PREPARED.  
STAY SAFE. SAVE LIVES!**

DON'T HOPE FOR A GOOD RESCUE—PLAN FOR ONE!



★ SAFETY ISN'T JUST FOR YOU—IT'S FOR YOUR TEAM, YOUR FAMILY, AND EVERYONE WHO COUNTS ON YOU! ★

# TOPIC 8: COMMON MISTAKES



**DON'T LET THIS BE YOU!**

WE ALL MAKE MISTAKES. SMART CLIMBERS LEARN FROM THEM! DON'T LET THESE COMMON MISTAKES PUT YOU—or YOUR TEAM—AT RISK!



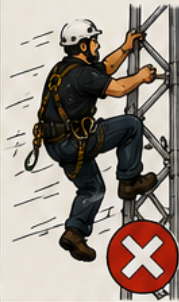
**DON'T SKIP INSPECTIONS**

Always inspect your gear, the tower, and the site before you climb.



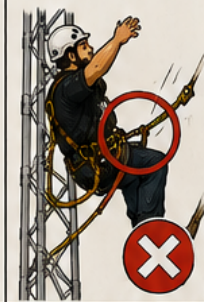
**DON'T RUSH**

Rushing leads to mistakes. Take the time to do it right.



**DON'T SKIP TIE-OFF**

Be attached at all times. Never move without 100% tie-off.



**DON'T OVERREACH OR CLIMB OFF THE MAIN STRUCTURE**

Stay within your limits and your work area.



**DON'T IGNORE THE WEATHER**

Wind, lightning, ice—they can turn a good day into a bad one fast.



**DON'T CARRY TOO MUCH**

Extra tools and gear can throw you off balance.



**DON'T CLIP TO THE WRONG THING**

Only attach to rated structure or approved anchors.



**DON'T WORK ALONE**

Always have your ground team and a plan.



**DON'T GET COMPLACENT**

Overconfidence leads to accidents. Stay focused every climb, every time.



**REAL-WORLD LESSONS**

**THE RUSH JOB**

Skipping a pre-climb inspection, a climber didn't see a loose bolt. The result: a fall that could have been fatal.



**LESSON:** Inspect every time—no exceptions!

**THE WEATHER CHANGE**

Conditions looked good—until they weren't. Winds picked up fast.



**LESSON:** Check forecasts and watch the sky!

**THE WRONG ANCHOR**

Clipped to an antenna mount not rated for fall arrest. It failed.



**LESSON:** Know your anchors and use rated points only!

**THE RIGHT MINDSET**

**GOOD CLIMBERS HAVE GOOD HABITS!**

- ✓ Plan your climb.
- ✓ Inspect everything.
- ✓ Use proper gear.
- ✓ Stay tied off.
- ✓ Communicate.
- ✓ Watch conditions.
- ✓ Never stop learning.
- ✓ Look out for your team.

MAKE GOOD HABITS PART OF EVERY CLIMB! THAT'S HOW PROS STAY ALIVE!



**PREVENTABLE ≠ ACCEPTABLE**

Most tower accidents are preventable. They happen when we ignore the small things that matter.

**DON'T BE A STATISTIC. BE A PRO.**



**STOP AND THINK!**

- ★ Is this the safest way?
- ★ Have I done everything right?
- ★ What could go wrong?
- ★ Will this decision affect my team?



**A MISTAKE CAN CHANGE YOUR LIFE. MAKE SAFETY YOUR CHOICE.**



# TOPIC 9: TEAMWORK & COMMUNICATION



NO ONE CLIMBS  
A TOWER ALONE.  
GOOD COMMUNICATION  
AND TEAMWORK  
KEEP EVERYONE  
SAFE!



TOGETHER WE CLIMB. TOGETHER WE COME HOME.

## COMMUNICATION SAVES LIVES

Clear, concise communication ensures everyone knows what's happening, what to do, and when to do it.

- ✔ Use standard words and phrases.
- ✔ Speak clearly and calmly.
- ✔ Listen completely.
- ✔ Confirm important instructions.
- ✔ Never assume—always verify.



## TEAM ROLES—EVERY ROLE MATTERS

<p><b>CLIMBER</b> Focuses on the climb. Follows the plan and communicates status.</p>	<p><b>GROUND CREW</b> Manages ropes, gear, and the work area. Your eyes on the ground are critical.</p>	<p><b>SPOTTER</b> Watches for hazards and keeps the area clear.</p>	<p><b>EQUIPMENT MANAGER</b> Inspects, preps, and tracks all gear. Nothing gets missed.</p>	<p><b>COMMUNICATION LEAD</b> Coordinates, communicates, and ensures everyone stays informed.</p>
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## STANDARD HAND SIGNALS

<p><b>CLIMB</b> Make a fist, thumb up.</p>	<p><b>STOP</b> Arm out straight, palm down.</p>	<p><b>LOWER</b> Arm out, palm up, move hand down.</p>	<p><b>ROPE TIGHT</b> Hands apart, move hands together.</p>	<p><b>ROPE SLACK</b> Hands together, move hands apart.</p>	<p><b>HAZARD</b> Point to eyes, then to hazard.</p>	<p><b>NEED HELP</b> Wave arms over head.</p>
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## PRE-CLIMB TEAM CHECK

Before every climb, do a full team check.

- ✔ Review the plan.
- ✔ Identify hazards.
- ✔ Check the weather.
- ✔ Inspect all gear.
- ✔ Confirm roles.
- ✔ Perform radio check.
- ✔ Ask: "Anything we're missing?"



### PRO TIP

A two-minute team talk can prevent a two-hour problem—or worse.

## COMMUNICATION CHECKLIST

Use this checklist to keep everyone in the loop.

- ✔ Climber: "Going up."
- ✔ Ground: "Go ahead."
- ✔ Climber: "X feet." (periodically)
- ✔ Ground: "Copy."
- ✔ Climber: "At work."
- ✔ Ground: "Copy. Work safe."
- ✔ Climber: "Coming down."
- ✔ Ground: "Lowering."
- ✔ Climber: "Down."
- ✔ Ground: "You're clear."



CLIMBER	GROUND
GOING UP.	GO AHEAD.
10 FEET.	COPY.
AT WORK.	COPY. WORK SAFE.
COMING DOWN.	LOWERING.
DOWN.	YOU'RE CLEAR.

### REMEMBER:

- ✔ Communicate clearly.
- ✔ Listen actively.
- ✔ Support your team.
- ✔ Trust the plan.
- ✔ Never rush.



A STRONG TEAM  
COMMUNICATES,  
SUPPORTS, AND  
LOOKS OUT FOR  
EACH OTHER.

**TEAMWORK  
MAKES THE DREAM  
WORK-SAFELY!**



GOOD COMMUNICATION. STRONG TEAM. SAFE CLIMB. EVERY TIME.



# PUSH UP POLE SAFETY

RAISE IT RIGHT. CONTROL IT ALWAYS.



PUSH UP POLES ARE ACTUAL ANTENNA SUPPORT STRUCTURES. THEY REQUIRE CONTROL, AWARENESS, AND TEAMWORK!



## WHAT IS A PUSH UP POLE?

A push up pole is a mono-pole antenna mast raised by hand, extension by extension.

It provides an antenna mounting point above the roofline.

Because it is lifted manually, loss of control can happen in a split second.



## MAJOR HAZARDS—DON'T LET THIS HAPPEN TO YOU!

### LOSING CONTROL

The pole can twist or kick, making it hard to control.



### SLIDING DOWN FAST

If not held securely, the pole can slide down rapidly.



### PINCHING OR CRUSHING FINGERS

Hands, fingers, and thumbs can be pinched between sections.



### FALLING FROM HEIGHT

Falls from ladders or roofs can cause serious injury or worse.



### DAMAGING EQUIPMENT OR PROPERTY

A falling pole can damage antennas, roofs, vehicles, or people.



## SAFE PRACTICES—RAISE IT RIGHT!

### 1. PLAN AHEAD

- ✓ Inspect the pole, sections, and hardware.
- ✓ Check the area for obstructions.
- ✓ Know your limits and the pole's height.



### 2. TEAMWORK

- ✓ Use at least two people.
- ✓ One raises, the other guides and watches for hazards.



### 3. SECURE YOUR GRIP

- ✓ Keep hands below the top section.
- ✓ Use both hands.
- ✓ Wear gloves for better grip.



### 4. EXTEND SLOWLY AND SMOOTHLY

- ✓ Lift one section at a time.
- ✓ Keep the pole vertical.
- ✓ Don't overextend.



### 5. CONTROL THE POLE

- ✓ Keep tension on the pole.
- ✓ Don't let it slip.
- ✓ If it starts to drop, lower it under control.



### 6. WATCH YOUR HANDS

- ✓ Be aware of pinch points.
- ✓ Keep thumbs out of the gap between sections.



### 7. SECURE WHEN DONE

- ✓ Install guy wires or additional support.
- ✓ Verify everything is tight and secure.



## LADDER & ROOF SAFETY

- ✓ Use the right ladder—tall enough and in good condition.
- ✓ Maintain 3 points of contact.
- ✓ Don't overreach.
- ✓ Keep tools and pole sections organized.
- ✓ Keep the work area clean and dry.
- ✓ Use roof anchors and wear fall protection when required.



## IF THE POLE SLIDES DOWN...

1. Don't try to grab the top!
2. Let it come down while controlling the lower sections.
3. Keep hands and body clear of pinch points.
4. Reset, recheck, and try again.

**THINK!**

A moment of carelessness can cause a lifetime of regret.



## PRE-RAISE CHECKLIST

- ✓ Pole sections in good condition
- ✓ All hardware accounted for and tight
- ✓ Base mount secure
- ✓ Clear area—no power lines or obstructions
- ✓ Weather conditions acceptable
- ✓ Ladder or roof access safe
- ✓ Team roles assigned
- ✓ Communication plan in place
- ✓ PPE worn—gloves, helmet, fall protection (as required)

## REMEMBER:

- ★ Control the pole.
- ★ Protect your hands.
- ★ Protect your team.
- ★ Raise it safe, secure, and right!

RESPECT THE POLE. RESPECT THE RISK.



PUSH UP POLE SAFETY IS EVERYONE'S RESPONSIBILITY.



# TOPIC 14: PUSH UP POLE SAFETY

## THE FINAL WRAP UP!



YOU NOW KNOW PUSH UP POLE SAFETY STARTS WITH A PLAN, CONTINUES WITH AWARENESS, AND SUCCEEDS WITH TEAMWORK!



### KEY TAKEAWAYS

- ✔ A push up pole is a powerful tool—but it can be dangerous if not controlled properly.
- ✔ Always plan your work and inspect all equipment.
- ✔ Use the right technique: extend slowly, control every section, and never let go.
- ✔ Stay aware of your surroundings, the weather, and your limits.
- ✔ Teamwork, communication, and focus keep everyone safe.

### THE SAFE PUSH UP POLE PROCESS—STEP BY STEP

1	2	3	4	5	6	7
<b>PLAN</b>	<b>INSPECT</b>	<b>POSITION</b>	<b>RAISE</b>	<b>SECURE</b>	<b>VERIFY</b>	<b>COMPLETE</b>
Review the plan, roles, hazards, weather, and communications.	Check the pole, hardware, guy wires, and tools.	Set the base and confirm the area is clear. Establish control and communication.	Extend one section at a time. Keep the pole vertical and under control.	Install guy wires or supports and tighten everything.	Check the pole, guys, hardware, and antenna. Confirm it's secure.	Clean up, document the work, and debrief the team.

### NEVER FORGET—MAJOR HAZARDS CAN HAPPEN IN A SPLIT SECOND!

<b>LOSING CONTROL</b> The pole can twist or kick. 	<b>SLIDING DOWN FAST</b> If not held securely, the pole can slide down rapidly. 	<b>PINCHING OR CRUSHING FINGERS</b> Hands, fingers, and thumbs can be pinched between sections. 	<b>FALLING FROM HEIGHT</b> Falls from ladders or roofs can cause serious injury or worse. 	<b>DAMAGING EQUIPMENT OR PROPERTY</b> A falling pole can damage antennas, roofs, vehicles, or people. 
<b>HOLD ON. STAY IN CONTROL.</b>	<b>CONTROL EVERY SECTION.</b>	<b>KEEP HANDS CLEAR.</b>	<b>USE FALL PROTECTION.</b>	<b>BE AWARE. PROTECT OTHERS.</b>

#### WHAT GOOD CLIMBERS DO

- ✔ Think before you act.
- ✔ Communicate clearly.
- ✔ Respect the pole, the power, and the potential.
- ✔ Control the pole—never let it control you.
- ✔ Look out for your team. Everyone goes home.



#### PUSH UP POLE SAFETY MANTRA

**“PLAN IT.  
RAISE IT RIGHT.  
CONTROL IT ALWAYS.  
GO HOME SAFE.”**

#### FINAL CHECK

- ✔ Did you plan the job?
- ✔ Did you inspect everything?
- ✔ Did you control the pole at all times?
- ✔ Did you communicate clearly?
- ✔ Did you watch for hazards?
- ✔ Did you secure the pole properly?
- ✔ Is everyone safe?



**SAFETY ISN'T LUCK—IT'S TRAINING, AWARENESS, AND DOING THE RIGHT THING EVERY TIME!**



YOU HAVE THE SKILLS. YOU HAVE THE KNOWLEDGE. NOW PUT SAFETY FIRST—EVERY TIME!

#### REMEMBER:

- ★ Respect the pole.
- ★ Respect the risk.
- ★ Protect your team.
- ★ Raise it safe.
- ★ Go home safe.



**SAFE CLIMB. SAFE POLE. SAFE DAY. EVERY DAY.**



