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Episode #73

Winterizing the Site Seasonal Maintenance



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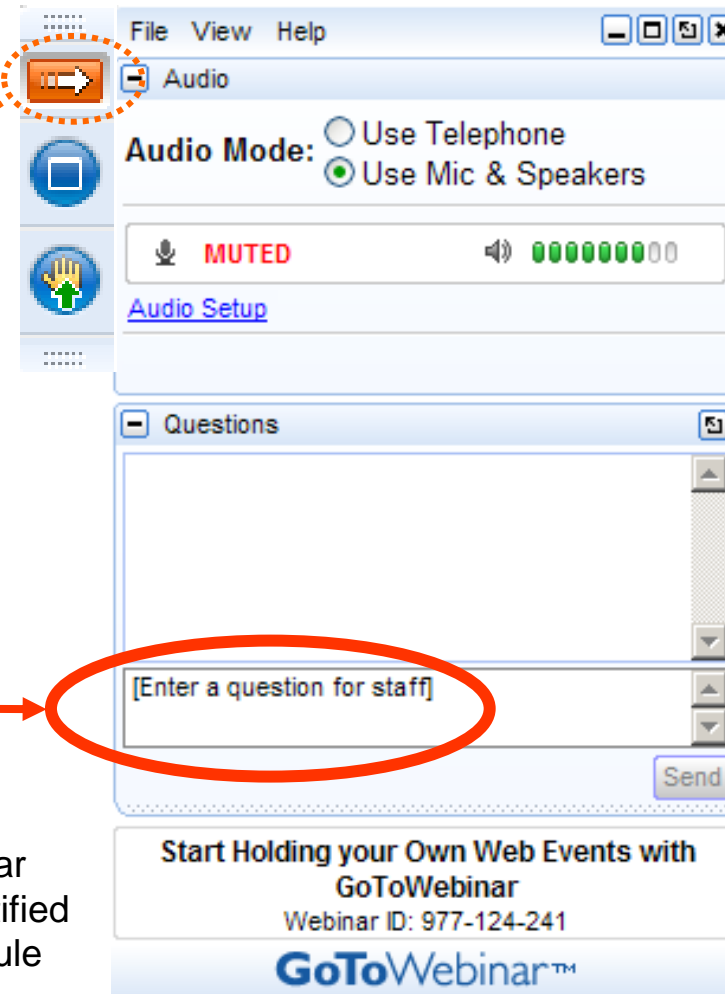
Episode #73

Winterizing the Site Seasonal Maintenance

Your questions please?

(if you don't see the control panel, click on the orange arrow icon to expand it)

Please enter your questions in the text box of the webinar control panel (remember to press send)



The screenshot shows a GoToWebinar control panel window. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below the menu bar, there is a section for 'Audio' settings. An orange arrow icon is circled in red and has a dotted orange line pointing to it. The audio settings include 'Audio Mode' with two radio buttons: 'Use Telephone' (unselected) and 'Use Mic & Speakers' (selected). Below this, there is a 'MUTED' indicator with a microphone icon and a volume level indicator showing 00. A link for 'Audio Setup' is visible. Below the audio settings, there is a 'Questions' section. A text box with the placeholder '[Enter a question for staff]' is circled in red, and a red arrow points to it. A 'Send' button is located to the right of the text box. At the bottom of the control panel, there is a promotional banner for 'Start Holding your Own Web Events with GoToWebinar' with the Webinar ID: 977-124-241 and the GoToWebinar logo.



Remember: The completion of a Nautel webinar qualifies for ½ SBE re-certification credit, identified under Category I of the Re-certification Schedule for SBE Certifications.

Advance Questions

What's your favorite calendar app for keeping track of scheduled maint? How many total popup reminders do you get per month?

List of goodies to keep at the transmitter site. MRIs?



Ideas for things to cover

- Redundancy
 - STL
 - Telemetry
- Site hardening
 - Fire zones
 - Ice protection
 - Wind protection
- Personal Safety
 - Medical
 - PPE or equipment
- Personal comfort
 - Food/water
 - Hygiene
 - Sleep

Redundancy



- Backup access
 - What happens if primary link fails?
 - STL dies/backhoe fade
 - Is there a redundant method of control/content delivery?
 - Wired line
 - LTE data link
 - Wi-Fi bridge

Site Hardening

- Sun shields on outdoor cabinets
- Ice bridges over cables
- Ensuring cables are tied down
- Flood control
- High wind rated roofing and tie downs



Checklists



The Checklist Manifesto: How to Get Things Right

by Atul Gawande

★★★★★ 4.04 ·  Rating details · 51,357 ratings · 4,480 reviews

The *New York Times* bestselling author of *Better* and *Complications* reveals the surprising power of the ordinary checklist

We live in a world of great and increasing complexity, where even the most expert professionals struggle to master the tasks they face. Longer training, ever more advanced technologies, neither seems to prevent grievous errors. But in a hopeful turn, accl



Want to Read 

Rate this book



<https://www.goodreads.com/book/show/6667514-the-checklist-manifesto>

- Make a checklist of things to do
- Like checking the generator
 - Changing air filters
 - On both the transmitter
 - And the air handling system
- Or testing the backup STL
- Tick off items as they're done to minimize surprises

Generator Maintenance

- Fluid levels and changes
- Belts and filters
- Check for leaks
- Fuel conditioning/treatment
- Battery check



Photo credit: www.cat.com

Winterizing

- **Batteries!**
 - Check UPSes
 - Flashlights/headlights
 - Transmitter controllers
 - Smoke detectors
 - CO detectors
 - Multimeters
 - Heating/Cooling remotes



Image credit: rei.com

Winterizing

- Lubricate
 - Contactors in AM arrays
 - (dry graphite)
 - Air handling system
 - Fan motors
 - Louvres
 - Locks
 - Padlocks on gates
 - Entry locks
 - ATUs or outdoor cabinets
 - Bearings in phase converters
 - Satellite dish drive mechanisms



Image credit: kadexaero.com

Checking Access...

- Door closed?
- Transmitter set to REMOTE?
- Cameras are handy.



And louvres!

- **No,
seriously...
Cameras are
handy!**



Safety



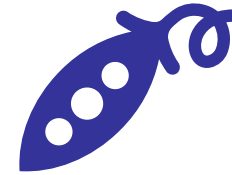
First aid kit

Inventory list?
Used items replaced?



Contact list

Site Management
Security



PPE

Arc Flash if appropriate
Safety shoes (EH rated)
Hardhat

Emergency kits

- Water
 - Food (if canned, remember opener!)
 - First Aid
 - Sanitation
 - Survival (blankets, lights)
-
- Allow for at least 72 hrs supply
 - Per person, plus extra



[Emergency Preparedness kit from edisastersystems.com](http://edisastersystems.com)

Online Information



Webinars

<https://www.nautel.com/resources/webinars/>



Nautel Waves Newsletter

<https://www.nautel.com/newsletters/>



YouTube

<http://www.youtube.com/user/NautelLtd> (also search out SoCal Broadcast Engineer)



The Broadcasters' Desktop Resource

<https://www.thebdr.net/>



<https://broadcastengineering.info/index.php>



THANK YOU!

