



**Jeff Welton**

Sales Manager - Central USA  
Nautel



**Matt Herdon**

Product Manager / Marketing  
Nautel



**Jim Gray**

Managing Partner  
Optimized Media Group

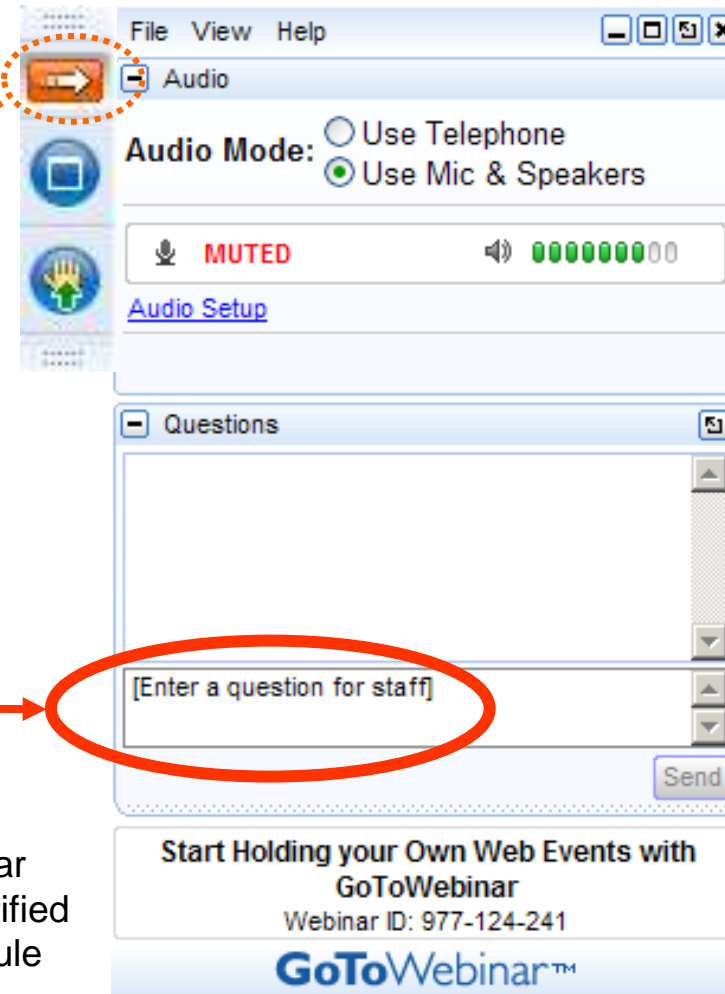


# How Technology Has Changed Our Lives

# 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 with two main sections: 'Audio' and 'Questions'. The 'Audio' section includes a menu icon (an orange arrow) circled in red, 'Audio Mode' options for 'Use Telephone' and 'Use Mic & Speakers', a 'MUTED' status indicator, and a volume level bar. Below the audio settings is a 'Questions' section with a large text input area and a 'Send' button. The text input area contains the placeholder text '[Enter a question for staff]' and is circled in red. At the bottom of the control panel, there is a promotional banner for GoToWebinar with the text 'Start Holding your Own Web Events with GoToWebinar' and 'Webinar ID: 977-124-241'.



Remember: The completion of a Nautel webinar qualifies for  $\frac{1}{2}$  SBE re-certification credit, identified under Category I of the Re-certification Schedule for SBE Certifications.



# Ideas for things to discuss

- **Remember when there were no computers?**
  - Now we've got more processing power than the first space launch had in our pocket
- **What can be done differently?**
  - Flying the tower instead of climbing it
- **Ways to Monitor**
  - SNMP, IP, WiFi, VPN, VNC
  - So many acronyms!
- **Other thoughts**
  - In spite of it all, the basics still apply
  - Maintenance is required
  - Keep them cool, clean and well grounded!





[https://americanhistory.si.edu/collections/search/object/nmah\\_334337](https://americanhistory.si.edu/collections/search/object/nmah_334337)



# Ideas for things to discuss





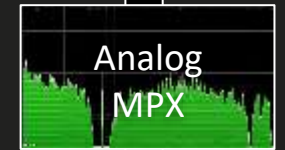
Any FM Processor  
with Stereo Generator



Omnia MPX  
Node (Encoder)



FM Transmitter



Omnia MPX  
Node (Decoder)



CKVE STL\*\*\*\*\*

<u>CKVE studio (1)</u>		<u>(2) CKVE Transmitter site</u>	
Latitude	44.591095 °	Latitude	44.525176 °
Longitude	-64.064660 °	Longitude	-64.086256 °
Ground elevation	20.0 m	Ground elevation	91.4 m
Antenna height	40.0 m	Antenna height	75.0 m
Azimuth	193.15 TN   210.48 MG °	Azimuth	13.13 TN   30.44 MG °
Tilt	0.78 °	Tilt	-0.84 °
<b>Radio system</b>		<b>Propagation</b>	
TX power	24.77 dBm	Free space loss	125.35 dB
TX line loss	0.66 dB	Obstuction loss	0.00 dB
TX antenna gain	22.00 dBi	Forest loss	0.00 dB
RX antenna gain	22.00 dBi	Urban loss	0.00 dB
RX line loss	0.66 dB	Statistical loss	16.41 dB
RX sensitivity	-87.00 dBm	Total path loss	141.76 dB
<b>Performance</b>			
<b>Distance</b>		<b>7.527 km</b>	
Precision		10.0 m	
Frequency		5900.000 MHz	
Equivalent Isotropically Radiated Power		40.843 W	

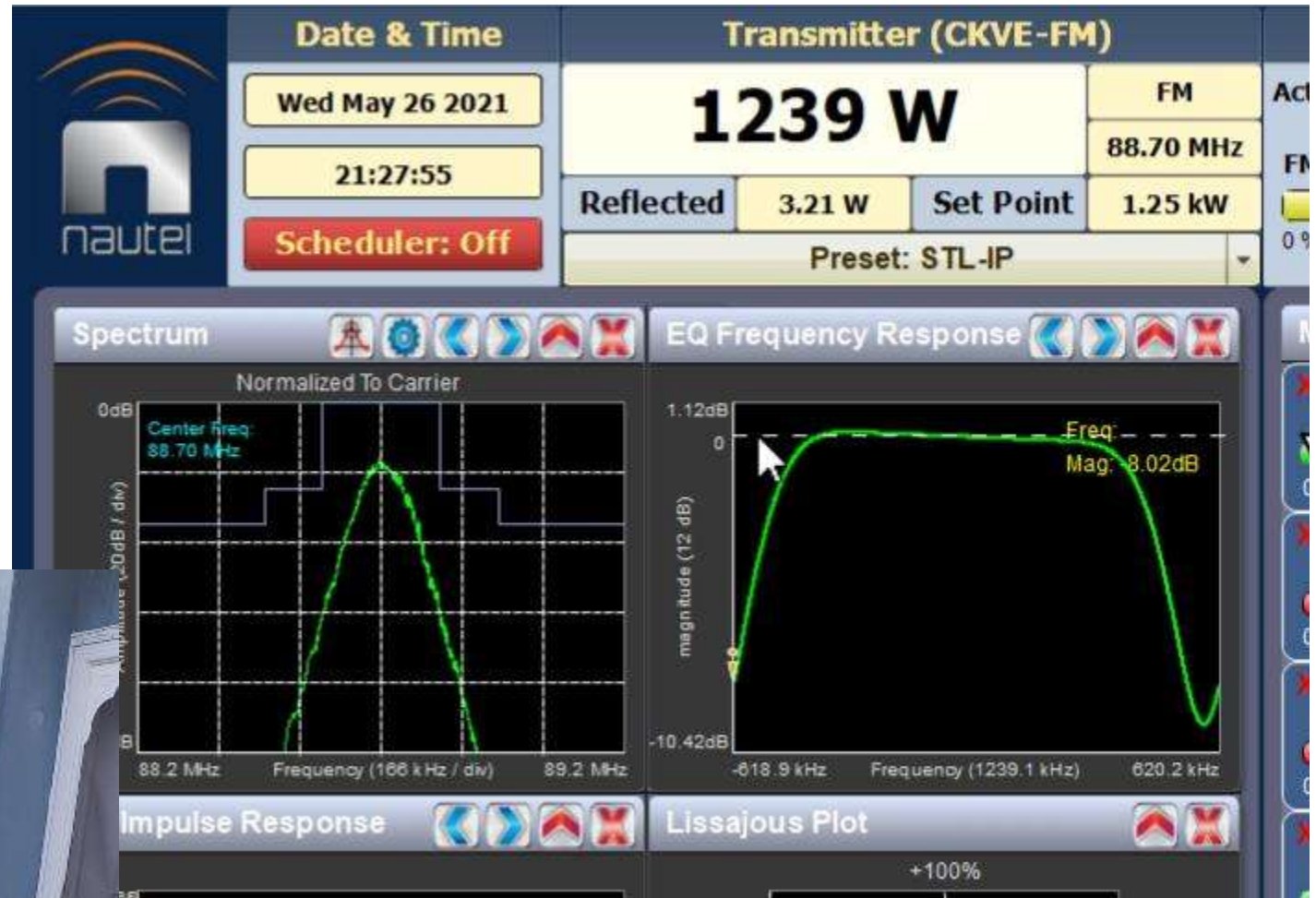
<http://support.nautel.com/rf-toolkit/radio-coverage-tool/>





1. Use the transmitter's AUI (local or remote) or controller UI alarm status/logs to isolate the defective low voltage power supply (LVPS), noting there may be redundant (dual) supplies installed, or Power Supply module.
2. Open the transmitter front door and locate the suspect LVPS / Power Supply module. See [Figure 4.1.15](#) on page 4.1.50.
3. Using [Figure 4.1.16](#) on page 4.1.51 as a guide, remove the LVPS / Power Supply module from the front of the transmitter.
4. Locate or obtain a replacement LVPS / Power Supply module (Nautel Part # UG92\*).
5. Using [Figure 4.1.16](#) on page 4.1.51 as a guide, reinstall the new LVPS / Power Supply module.

Figure 4.1.16: Removing/Installing LVPS / Power Supply Modules







<https://www.rcrwireless.com/20160818/network-infrastructure/could-drones-replace-tower-climbers-tag4-tag99>





























# Online Information



## **Webinars**

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



## **Nautel Waves Newsletter**

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



## **YouTube**

<http://www.youtube.com/user/NautelLtd>



## **Online Info, such as the Broadcasters' Desktop Resource**

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



# THANK YOU!

