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Episode #72

Repair or Replace? How to Decide

Advance Questions

What can we do with 1000 watts Nautel transmitter purchased by [REDACTED], it's reading different codes now,, what do we do

Will there be information about the actual decrease in spare parts for tube transmitters?

Why are so many things becoming non field repairable now that you have to either send them back or get a new one?

Hi, excited and ready to join this session.

My question is on power supply. In my part of the world public power supply is an issue, How can we leverage on solar power.

What's the oldest main transmitter amongst the attendees? The oldest console? The oldest STL transmitter?

Do 32 bit or 64 bit computers become part of the decision making process for anyone?

General rule I was trained to was not to repair power supplies as they can thereafter drift. How much actual risk?

I'm in the replacement stage of my broadcast life.....where do old engineers go?.....

When does the, "I can fix this" mentality get in the way of doing the right thing? How do I dispose of a 1-ton transmitter?



Sometimes it's easier to rip it all out...



This was found during a studio rebuild – it was powering every piece of equipment in the studio, and all goes back to one single plug.

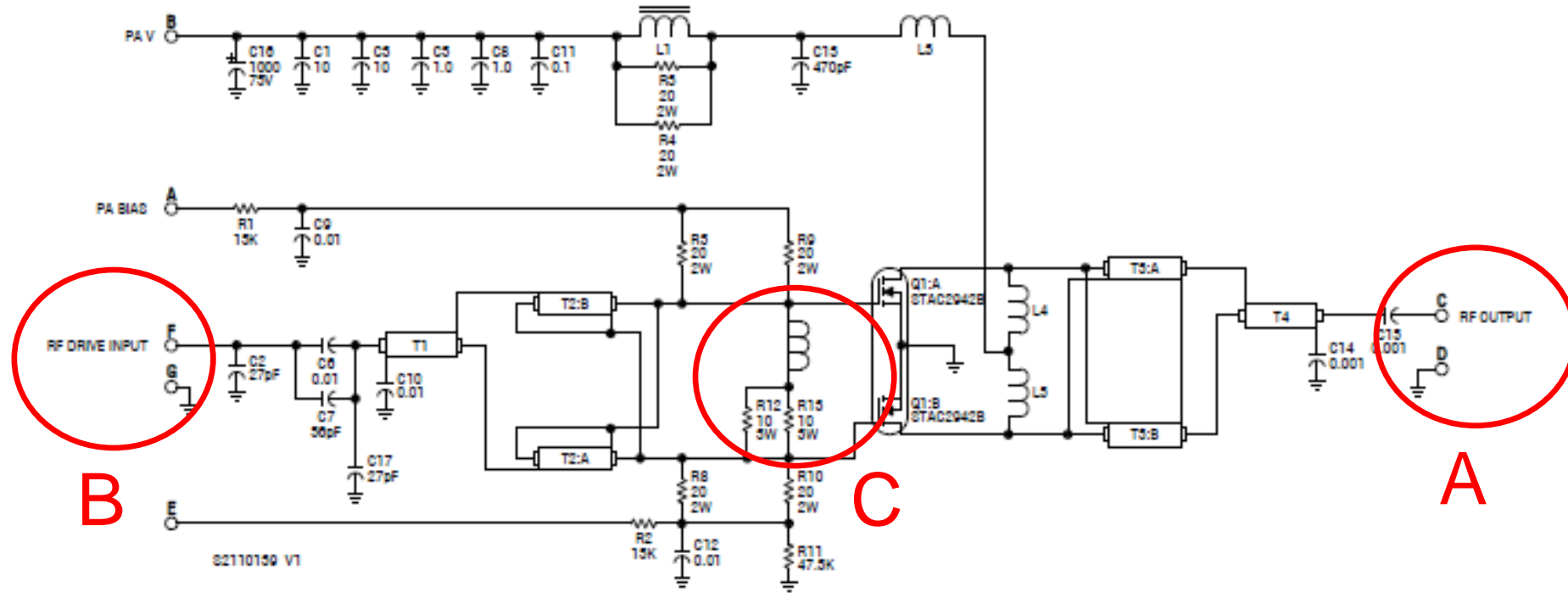
Photo credit to Andy Low

Cost of Services vs Repair

Usually maintenance is less expensive



Where to Look?



Thermal scans



FM Transmitter Cost Comparison

Prepared By:

Date:



Required Information (complete the yellow shaded areas)

	Existing tx:	ECO10	Proposed tx:	NV10LT
Day Power	10.2 kW		10.2 kW	
for	24 hrs/day		24	
Overall Efficiency	50 percent		72 percent	
Base Electricity cost	11.5 cents/kWh		11.5 cents/kWh	
for first	100000 kWh		100000	
Cost for overage	0 cents/kWh		0	
Parts Cost	\$1,800.00 per year		\$250.00 per year	

Calculated Power Consumption and Costs

Power Consumption (in kWh)	ECO10	Cost	NV10LT	Cost	Cost Savings:
per month:	14,688	\$1,689.12	10,200	\$1,173.00	\$516.12
per year:	176,256	\$20,269.44	122,400	\$14,076.00	\$6,193.44
over 5 years:	881,280	\$101,347.20	612,000	\$70,380.00	\$30,967.20
over 10 years:	1,762,560	\$202,694.40	1,224,000	\$140,760.00	\$61,934.40
over 15 years:	2,643,840	\$304,041.60	1,836,000	\$211,140.00	\$92,901.60

Parts cost per year:	\$1,800.00	\$250.00	\$1,550.00
5 yr cost:	\$9,000.00	\$1,250.00	\$7,750.00
10 yr cost:	\$18,000.00	\$2,500.00	\$15,500.00
15 yr cost:	\$27,000.00	\$3,750.00	\$23,250.00

Total Projected Cost of Operation:

	ECO10	NV10LT	Savings Realized:
Year 1	\$22,069.44	\$14,326.00	\$7,743.44
Year 2	\$44,138.88	\$28,652.00	\$15,486.88
Year 3	\$66,208.32	\$42,978.00	\$23,230.32
Year 4	\$88,277.76	\$57,304.00	\$30,973.76
Year 5	\$110,347.20	\$71,630.00	\$38,717.20
Year 6	\$132,416.64	\$85,956.00	\$46,460.64
Year 7	\$154,486.08	\$100,282.00	\$54,204.08



Do an Audit

You can't begin to sort out where to save money if you don't know where you're spending it!



Sense Energy Monitor, from [amazon.com](https://www.amazon.com)



The goal is fewer panics, more time for naps!

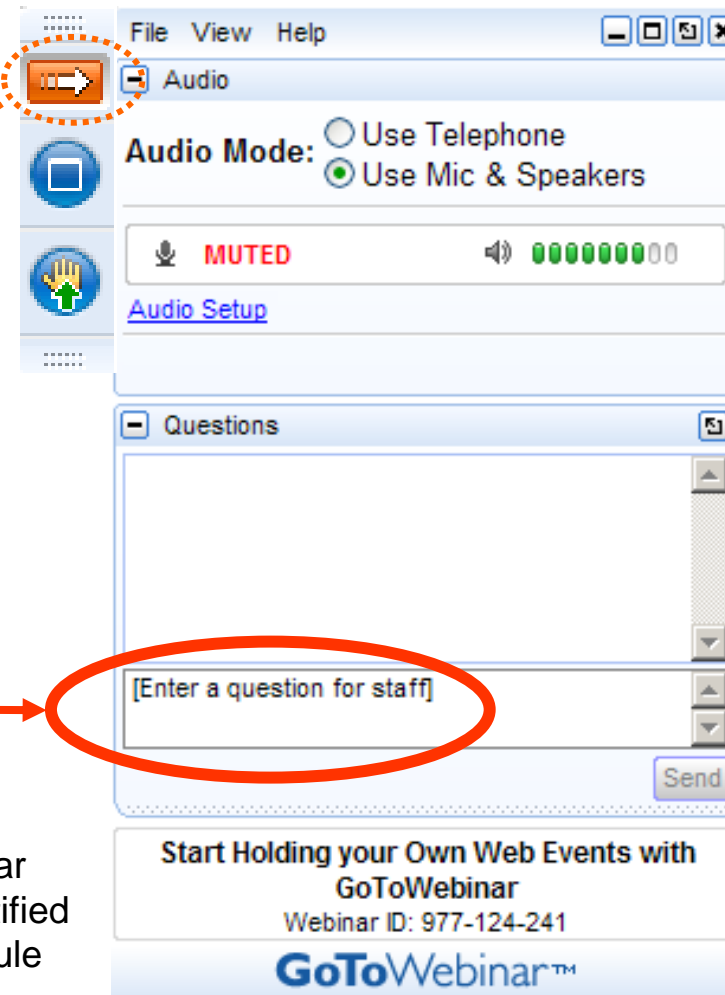


Photo credit, Randy Kerbawy, West Virginia Radio Corp.

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.



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The Broadcasters' Desktop Resource

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



THANK YOU!

