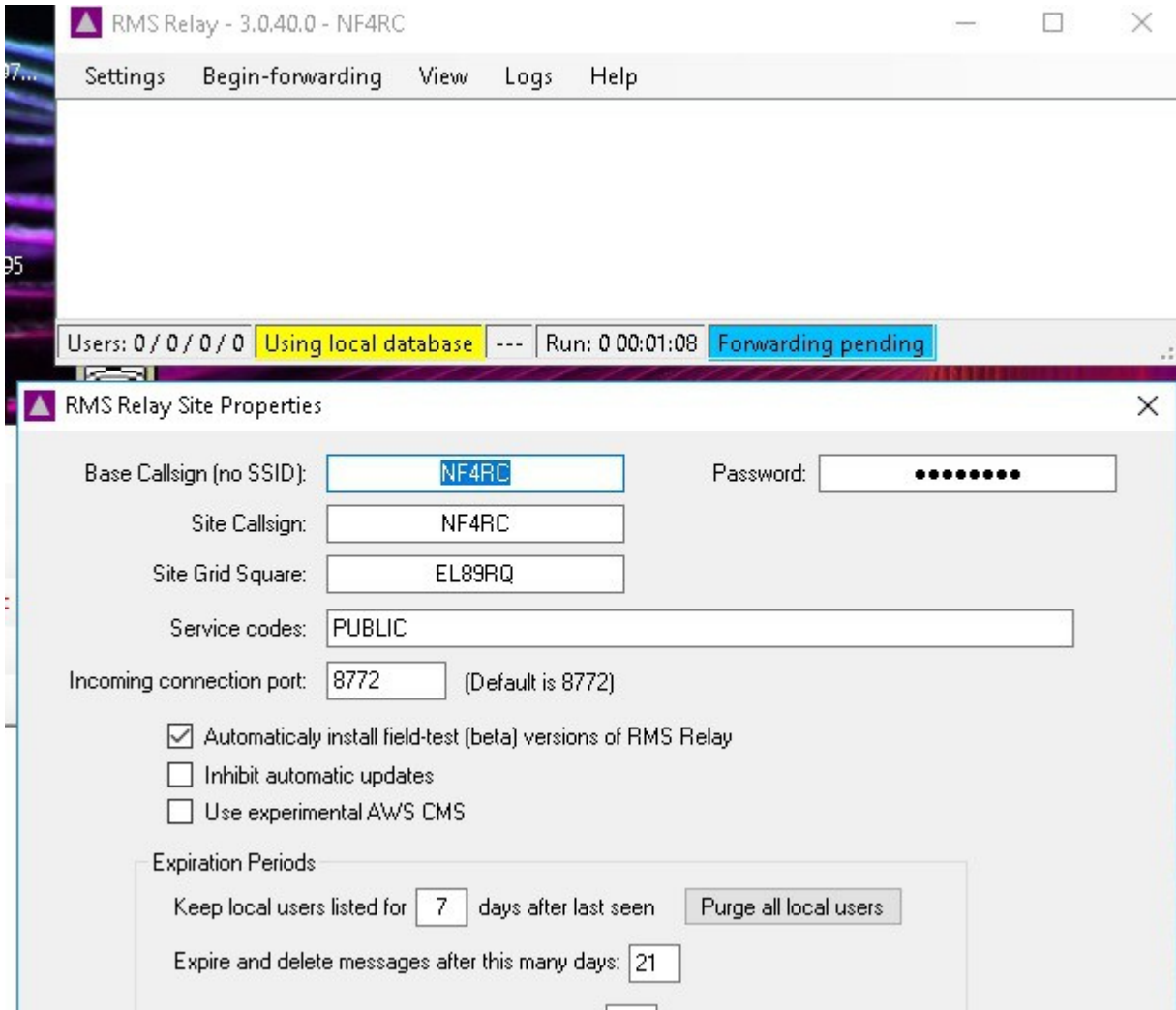


# Configuring a WINLINK RMS Gateway for HF Forwarding without Internet for Exercise or Emergency Situation

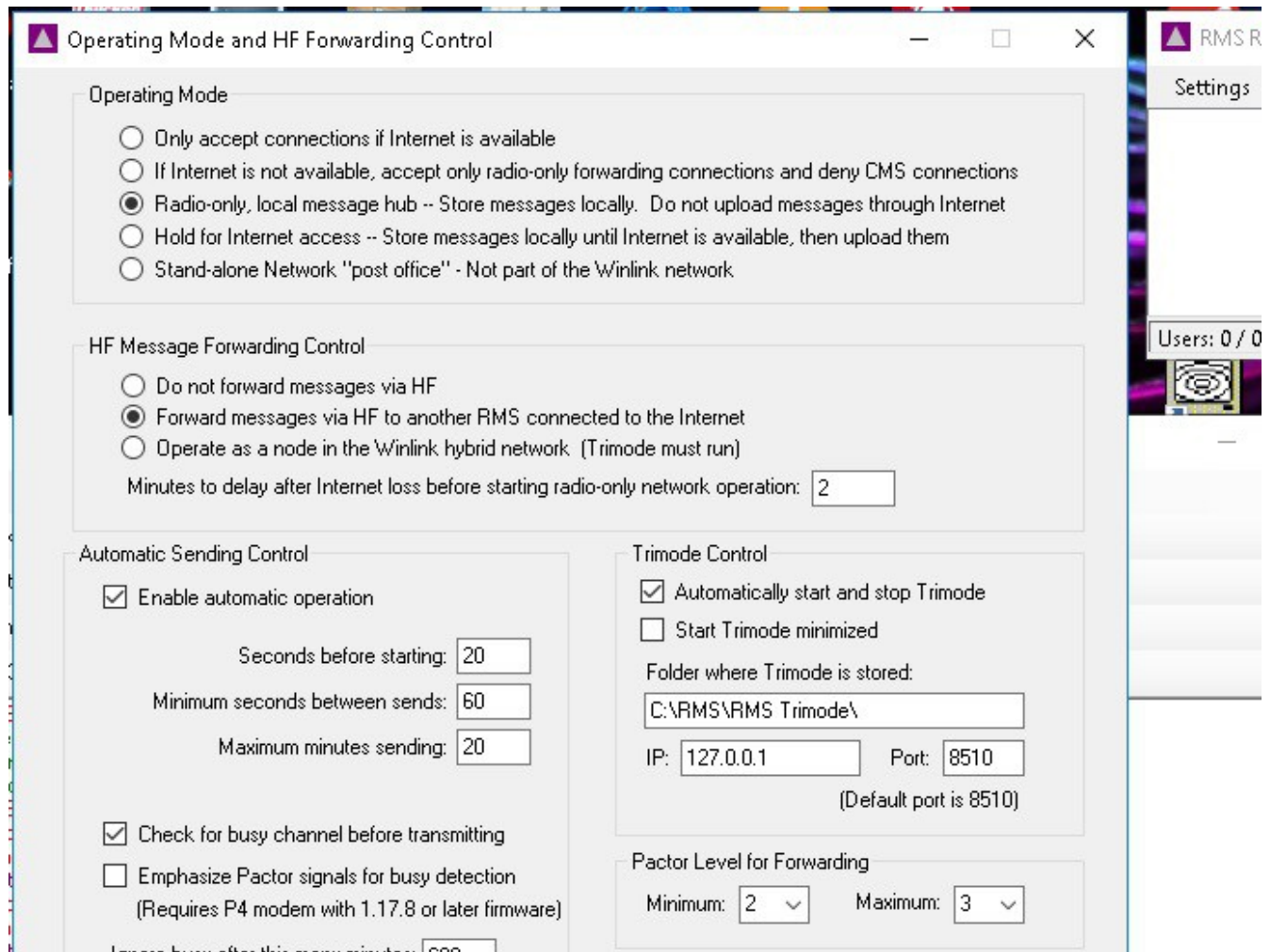
Strongly suggest to set this up while connected to the Internet, and well in advance of your exercise!  
This is tedious and complicated configuration at times.

## SETTINGS: RELAY SITE PROPERTIES

Be certain NOT to select the Amazon Servers...  
Set for LOCAL users to be kept local for longer than your exercise.



## OPERATING MODES AND HF FORWARDING



Be CERTAIN that “enable automatic operation” is selected.

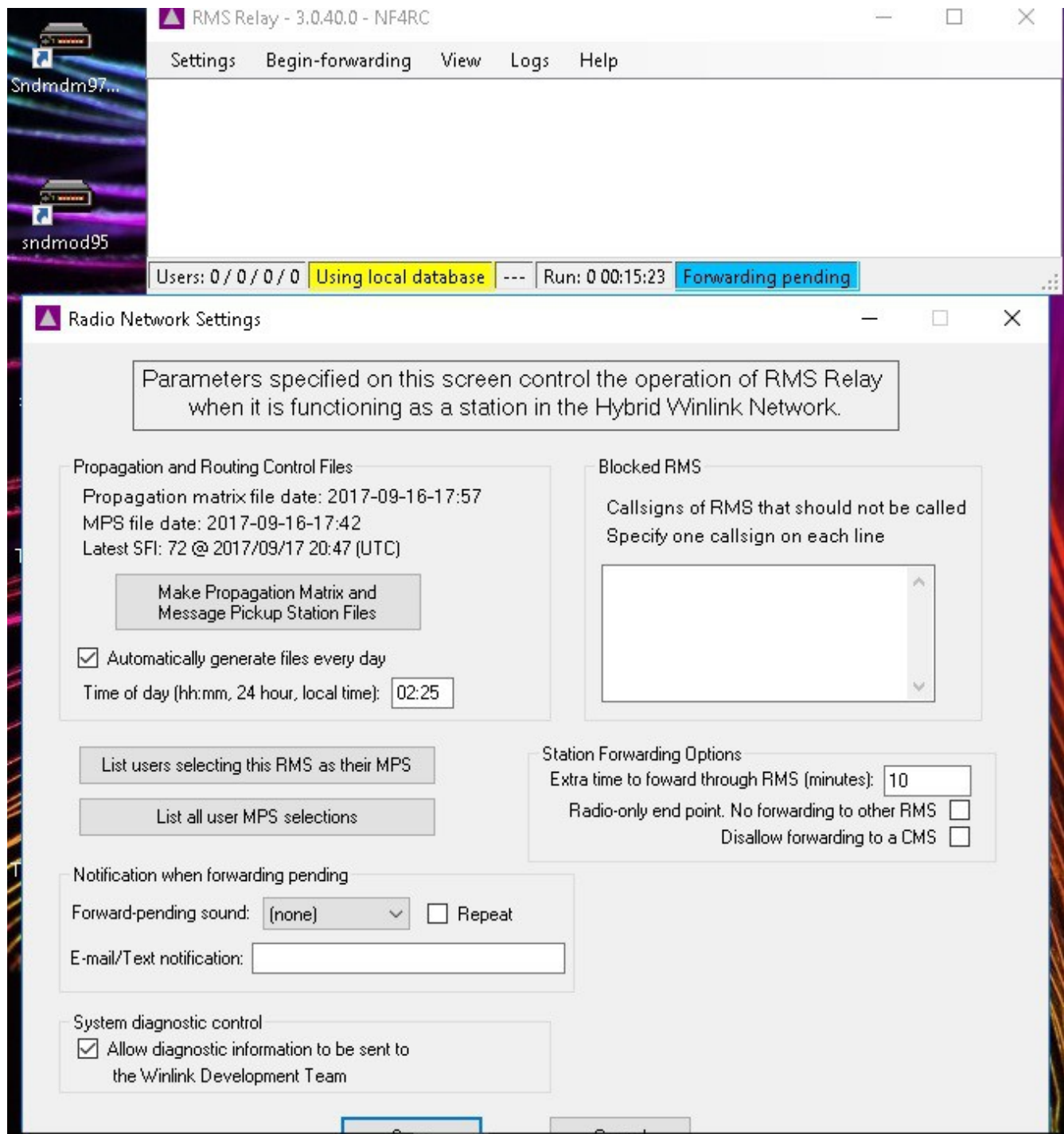
Probably want “automatically start and stop Trimmode”

Two different ways to handle the closely-linked first two questions at the top in order to create a station that will forward nicely with HF RADIO:

A. Make it RADIO ONLY – Check “Radio only, local message hub” and “Forward messages via HF to another RMS....” --- this will not use the internet at all

B. Make it a part of the HYBRID (both radio and Internet) and then just either “simulate internet outage” or turn off your WIFI, or disconnect your router: “Hold for Internet Access – store messages locally” and “Operate as a node in the WINLINK Hybrid network” Note that “Simulate Internet Outage” is at the bottom of the dialog box (got cut off in this photo)

## RADIO NETWORK SETTINGS



Be CERTAIN not to set the “Extra Time to forward through RMS (minutes) to Zero!! 10 minutes is the default.

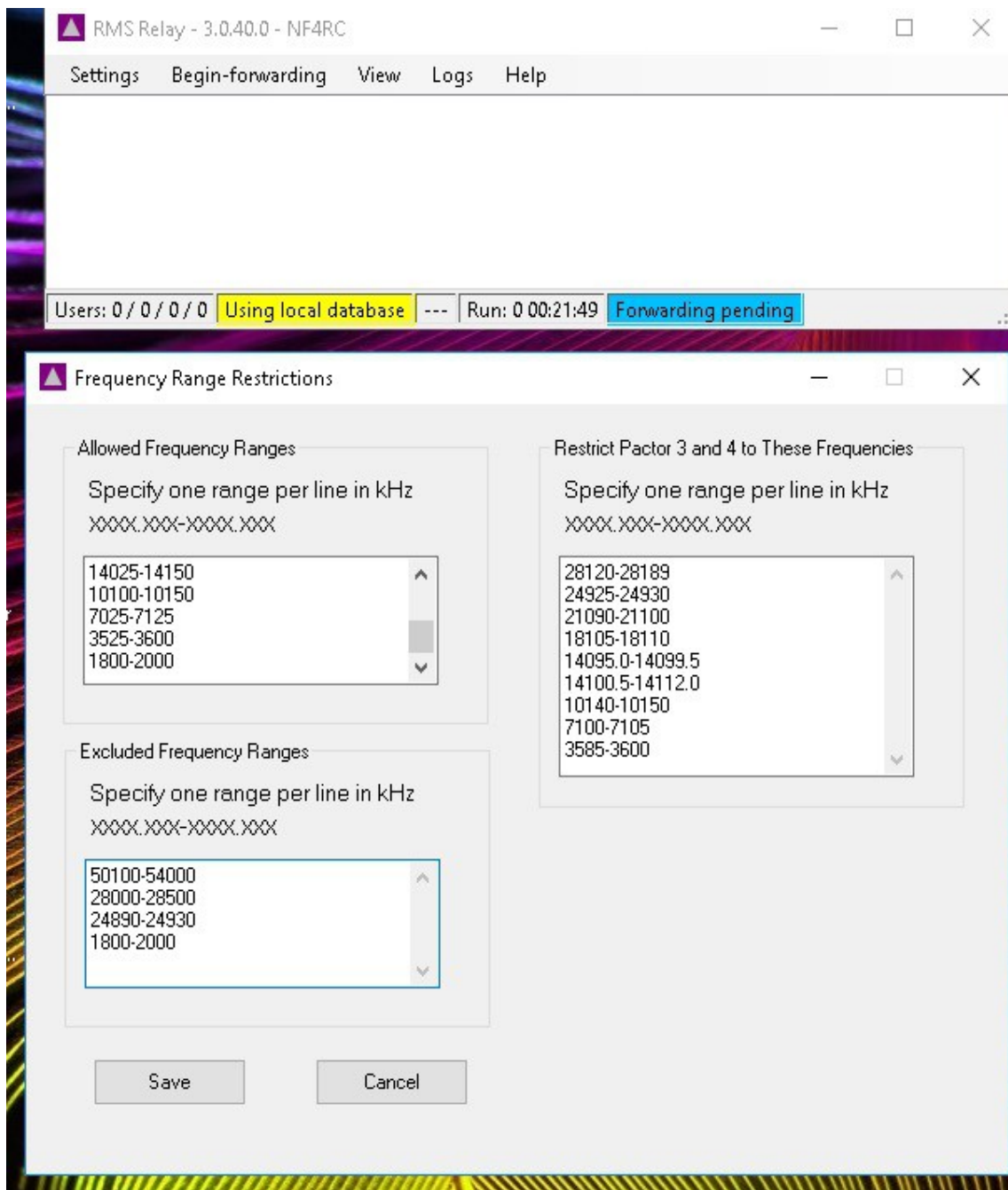
You might want to set the system NOT to create a new propagation matrix every day, in an attempt to stop it from doing it FIRST THING when you turn the system on after a hiatus in operation.



## FREQUENCY RANGE RESTRICTIONS

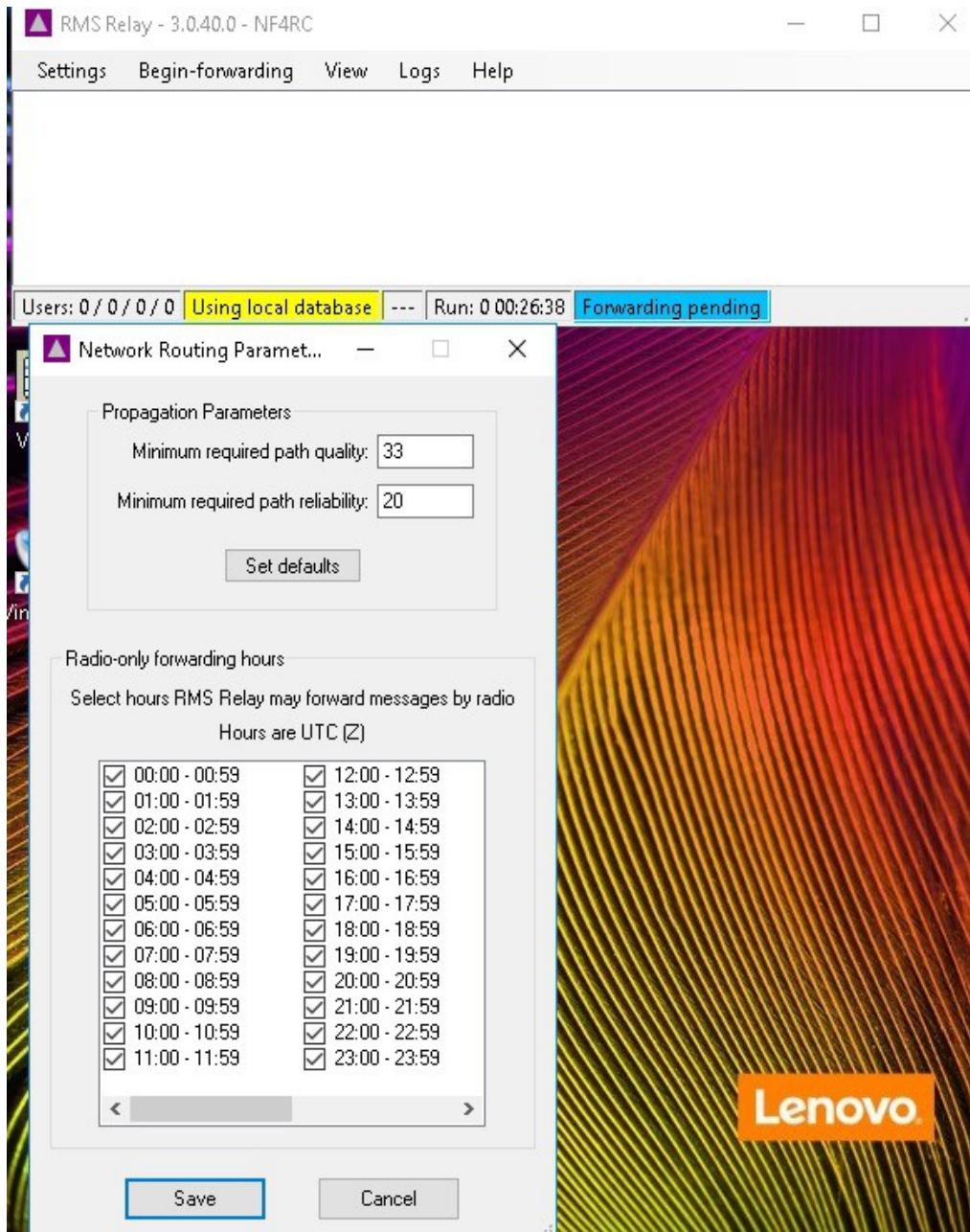
I believe several of these boxes get filled in with default frequency bands, in accordance with FCC regulations on the Pactor 3 & 4 operation – if you build the system while connected to the Internet.

If there are bands for which you don't have an antenna --- be sure to put those in the “EXCLUDED FREQUENCY BANDS” --- because THIS is the page where you are setting all the bands that the automatic system can try to find receptive gateways --- and there are WINLINK gateways all over the frequency bands....so be certain you think through which ones won't present an unacceptable SWR to your transmitter...



## NETWORK ROUTING PARAMETERS

Be sure that some hours are allowed!!! Don't set the minimum required path quality/reliability to unreasonable values.

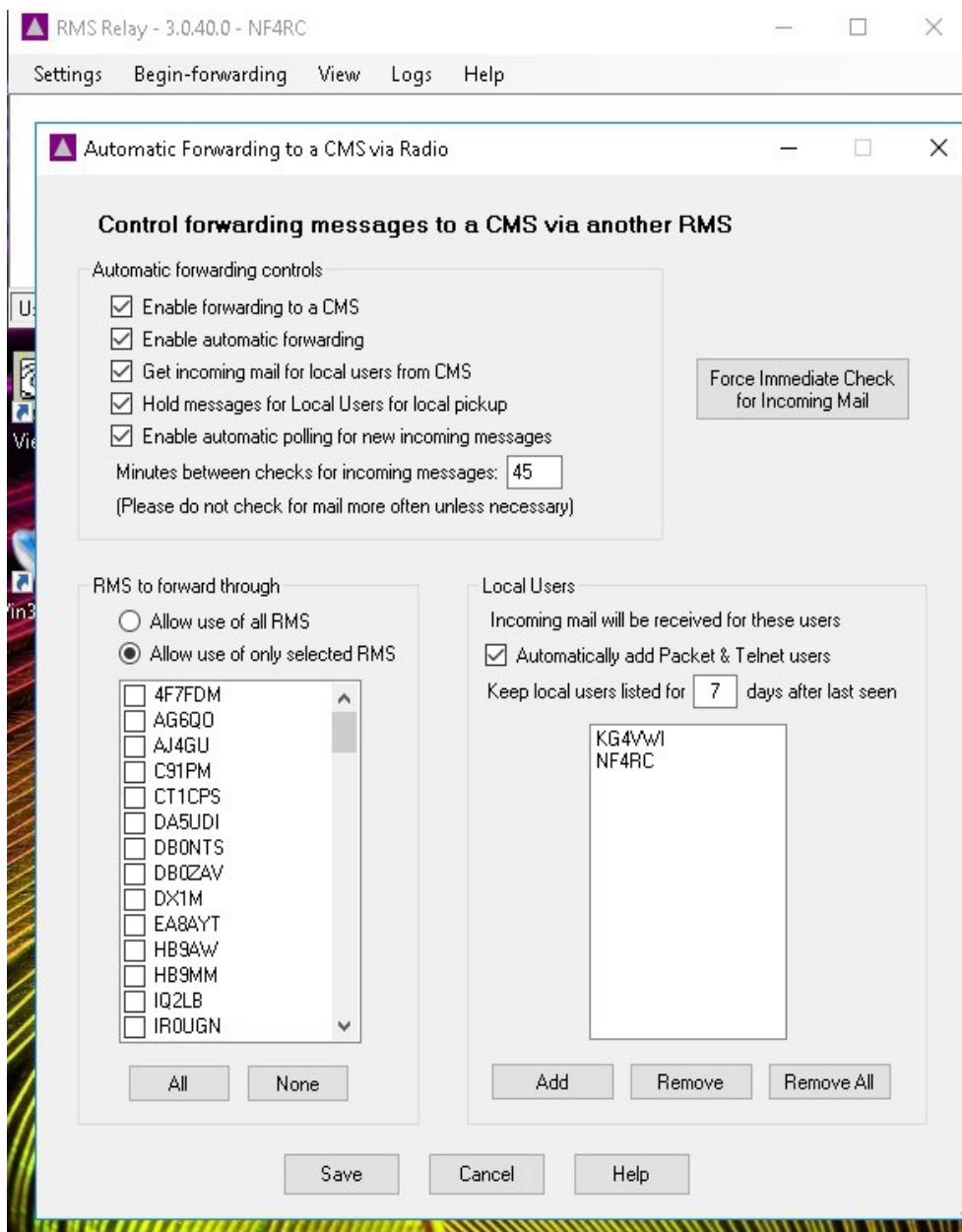




## AUTOMATIC FORWARDING TO A CMS VIA RADIO

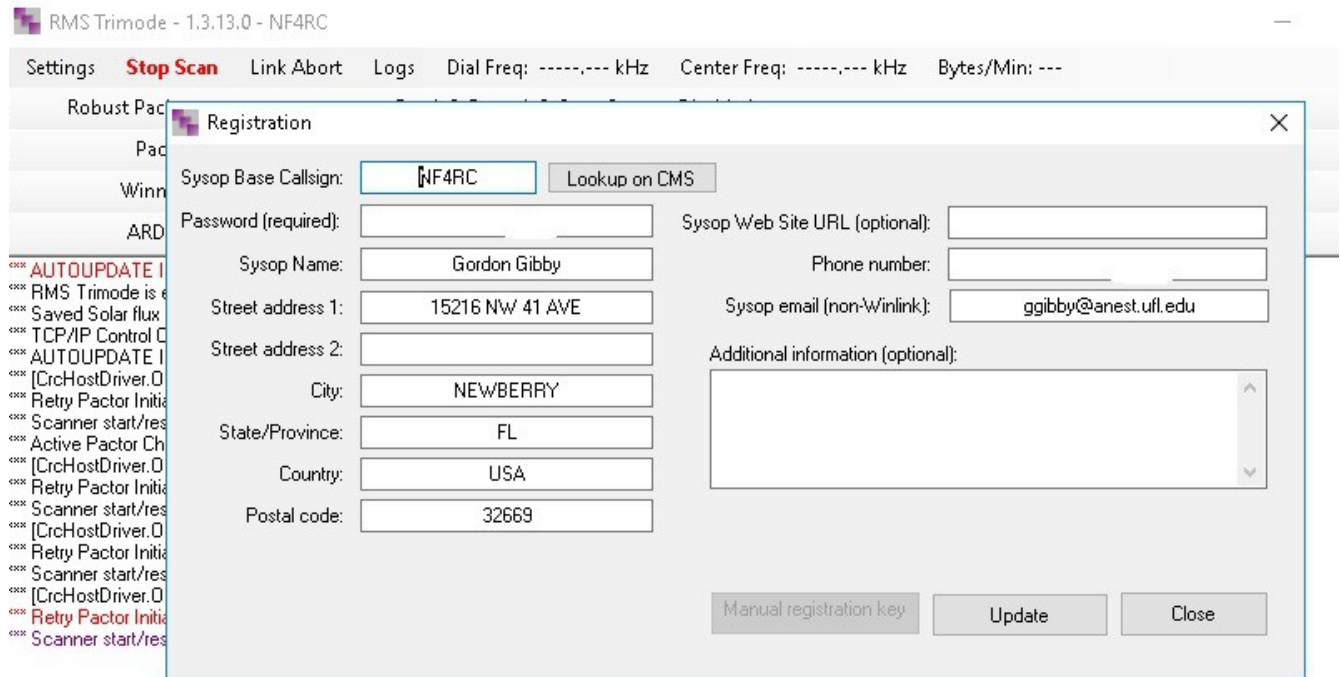
Very important page!

1. Check all five checkboxes.
2. Set the minimum time between checks to a reasonable value, suggested 45 min or longer. Note that it DOES check every time it uploads a message.
3. If the boxes below of RMS stations don't fill in --- you probably built this without being connected to the Internet or some other problem.....get connected and run a "propagation matrix" again.
4. RMS: decide whether to allow ALL, or to pick trusted one that work well for the hours that are important to you....



## TRIMODE: REGISTRATION

1. Be certain you have the right password etc for your system.
2. You really want to SET THIS UP while connected to the Internet.
3. Password was erased from this screen





## TRIMODE: Channel Settings

Here's where I made my mistake: be certain that here, also, the CORRECT CALL SIGN is registered for the frequencies you want scanned. THE POSTINGS ON WINLINK MAPS AND LISTS AND DOWNLOADABLE LISTS OF GATEWAYS COME FROM HERE!!!

Channel Settings
✕

When scanning the program dwells on each frequency for a time and then is 'deaf' for 500 ms while changing frequency. A shorter dwell time of 3 seconds is used if ONLY Factor is enable on a frequency. Individual modes may be enabled on each frequency using its check box. A maximum of five frequencies will be scanned during any given hour.

The start time is the BEGINNING of the indicated hour and the stop stop is the END of the indicated hour for each frequency (all times in UTC) . Time intervals may span midnight. A start time of 18 and a stop time of 6 represents a period from 1800 UTC time to 0659 UTC time.

A frequency setting of 0.000 represents an unused channel. A start hour of 0 and stop hour of 23 represents a continuous 24 hour period.

Frequency changes will not take place as long as there is a connection if progress. Center frequency is 1500 Hz higher than the upper sideband dial frequency for all modes.

Bandwidth should be set for "N" for Robust Packet, WINMOR 500, and Factor 1 and 2 Channels and "W" for WINMOR 1600 and Factor 3 or 4 Channels. Narrow modes can be used on Wide channels but this may be poor utilization of spectrum.Do not use narrow channels in the automatic subbands in the US. Coordinate the use of automatic subband frequencies with the WL2K network manager.

If desired each frequency may use a different call sign/-ssid, Service code, Drive level adjustment, Tuner option and Antenna switch option.(Tuner and antenna switch options not yet enabled in Alpha version)

*Note: All Active frequencies and Service codes will be reported to the WL2K Data base. Users are required to know service codes other than PUBLIC to view status information on the RMS Channels Status page:*

<http://www.winlink.org/RMSChannels>

Center Frequency (KHz)	BW	Start Hour	Stop Hour	P3/4	P1/2	W	A	Rp	Dwell (sec)	Callsign	Service Code	Drive Adj	Tuner	Ant
1 3595.500	W	0	23	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	NF4RC	PUBLIC	0	None	None
2 7104.000	W	0	23	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	NF4RC	PUBLIC	0	None	None
3 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None
4 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None
5 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None
6 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None
7 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None
8 0.000	N	0	23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	KX4Z	PUBLIC	0	None	None

Enable Max Freq Tuning Signal on Scan Resume
Update
Cancel

## **REMAINDER OF TRIMODE**

The remainder of TRIMODE is pretty straight forward if you have ever set up a PACTOR modem --- and you HAVE to have a pactor modem configured before the system will let you be a FORWARDING station.....

Some people therefore suggest that you set up the PACTOR modem in TRIMODE before trying to get everything set up in RMS RELAY.