

Remotely Controlled Station

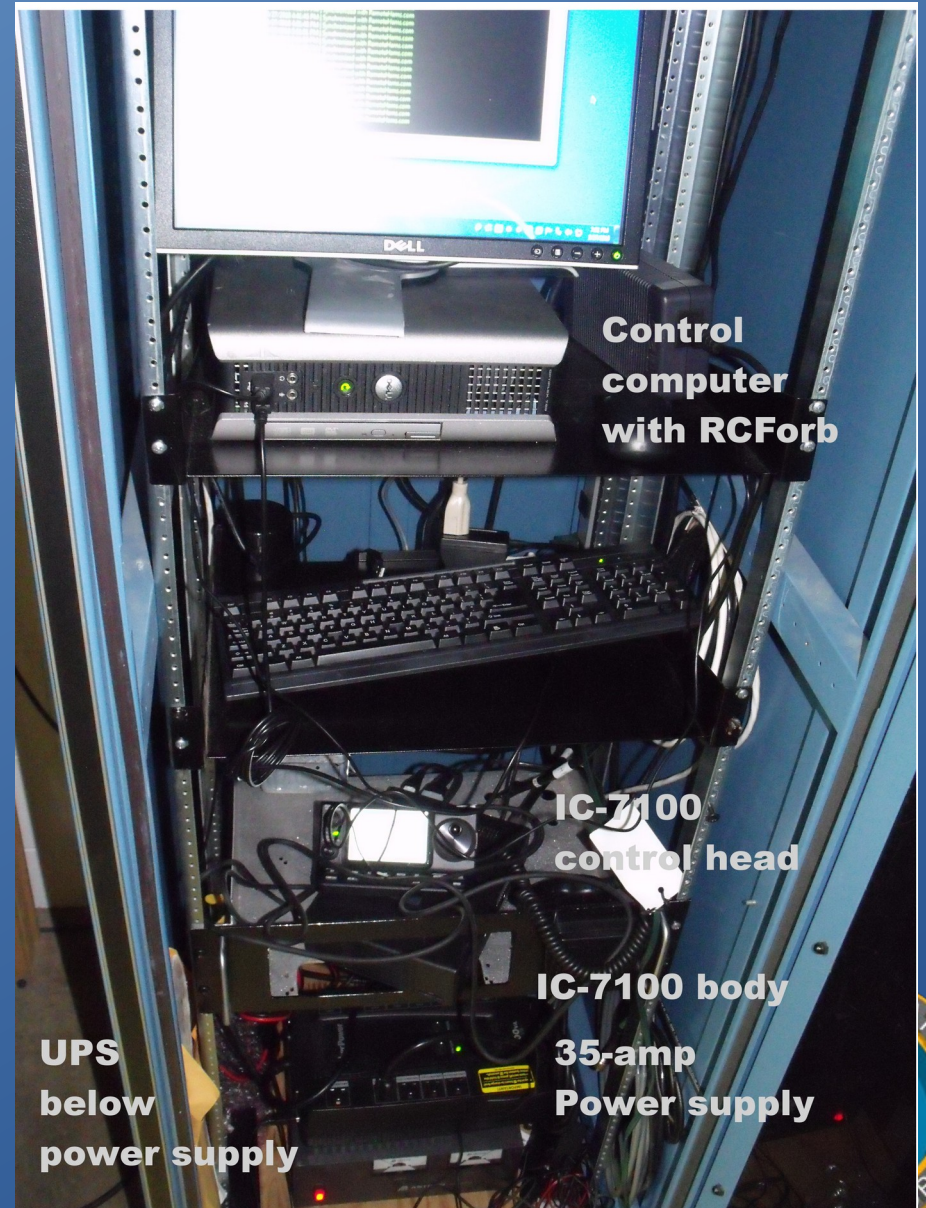
Topic: How to use the Richmond Amateur Radio Club's remotely controlled station for HF, VHF, & UHF operations

Presenter: Bruce MacAlister, W4BRU



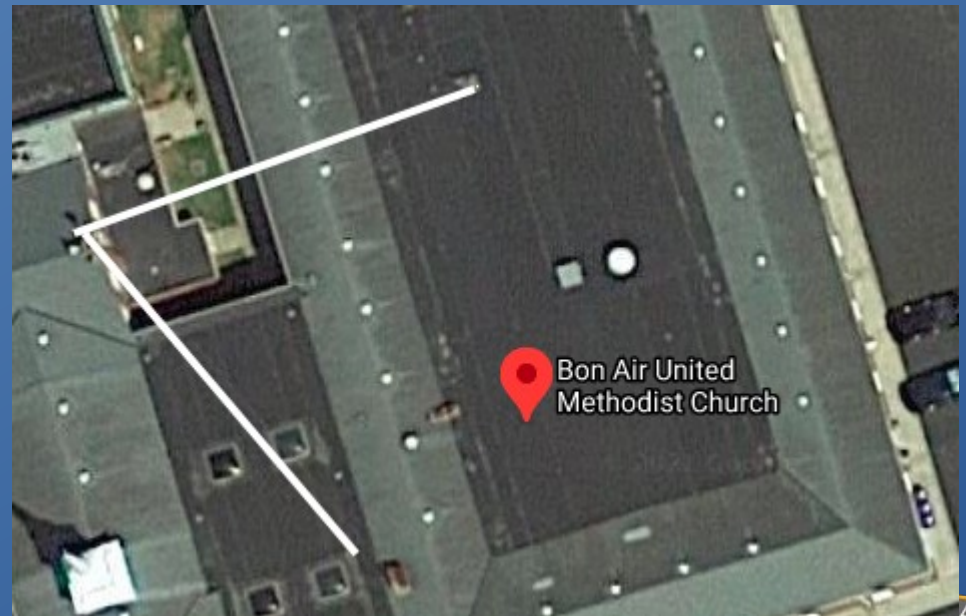
The station

The station is in a locked cabinet within a locked closet at Bon Air United Methodist Church



The antennas

Vertical VHF-UHF
and 94-foot HF
longwire

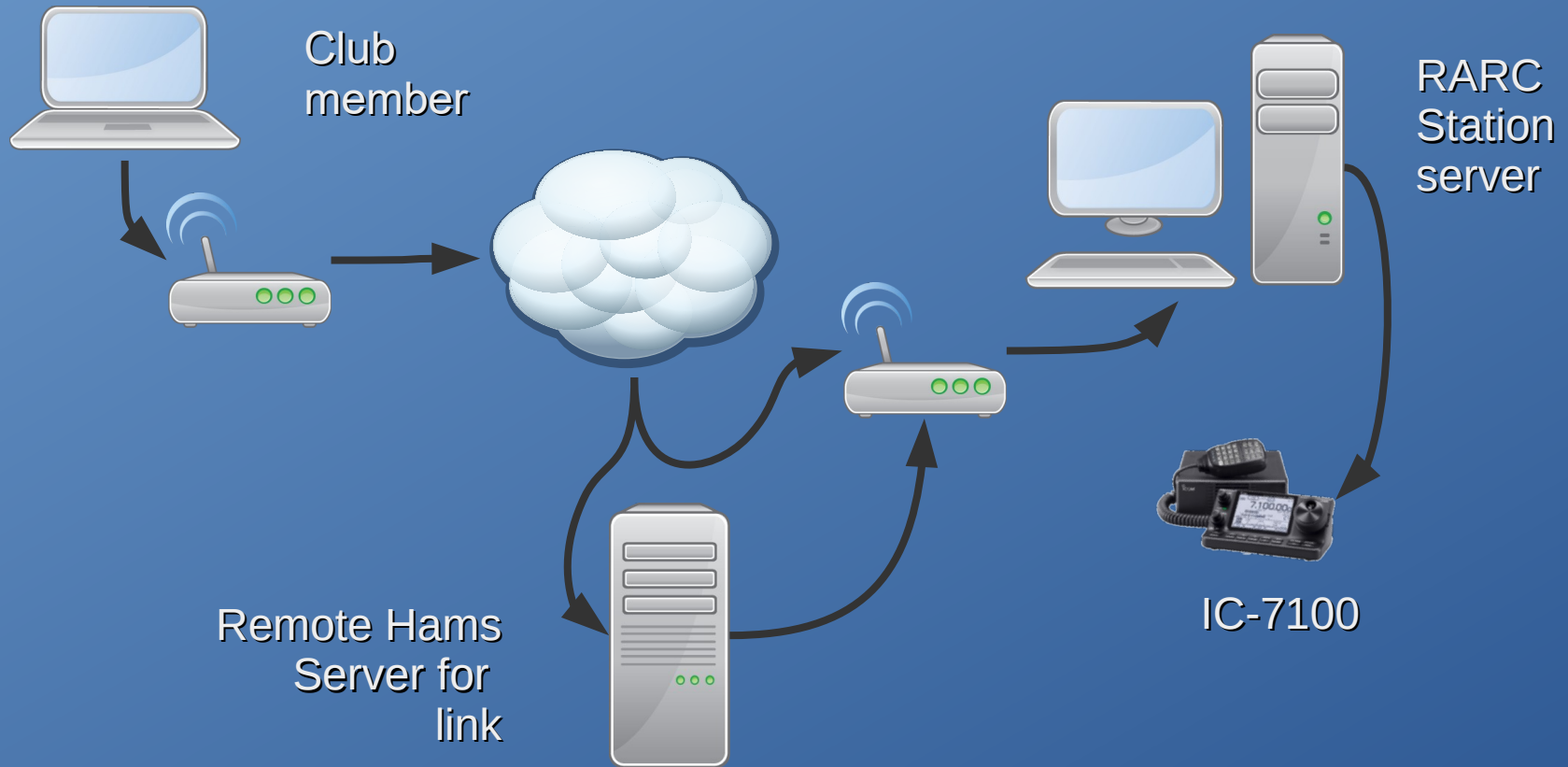


The specs

- Icom-7100 transceiver
- HF+6M, VHF, & UHF
- 100w SSB, 40w AM, 50w VHF, 35w UHF
- Icom AH-4 remote long-wire tuner
- Windows 7 PC with RemoteHams server



The connection



Limitations by license class

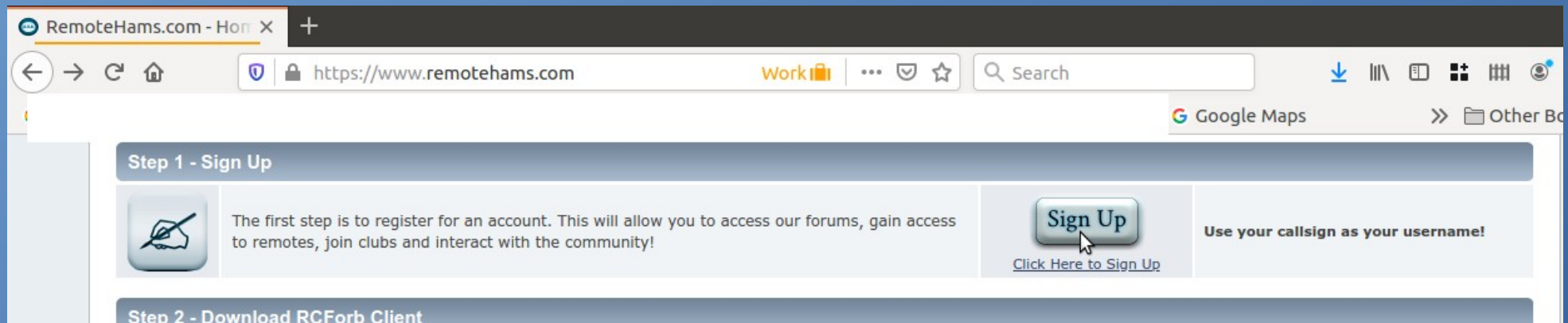
- Call sign – needs to be your Remote Hams ID
- Frequencies permitted based on license class
- Administrator or user



Demonstration



Signing up for remote software



Call sign needs to be your user name

A few days delay as they you check out

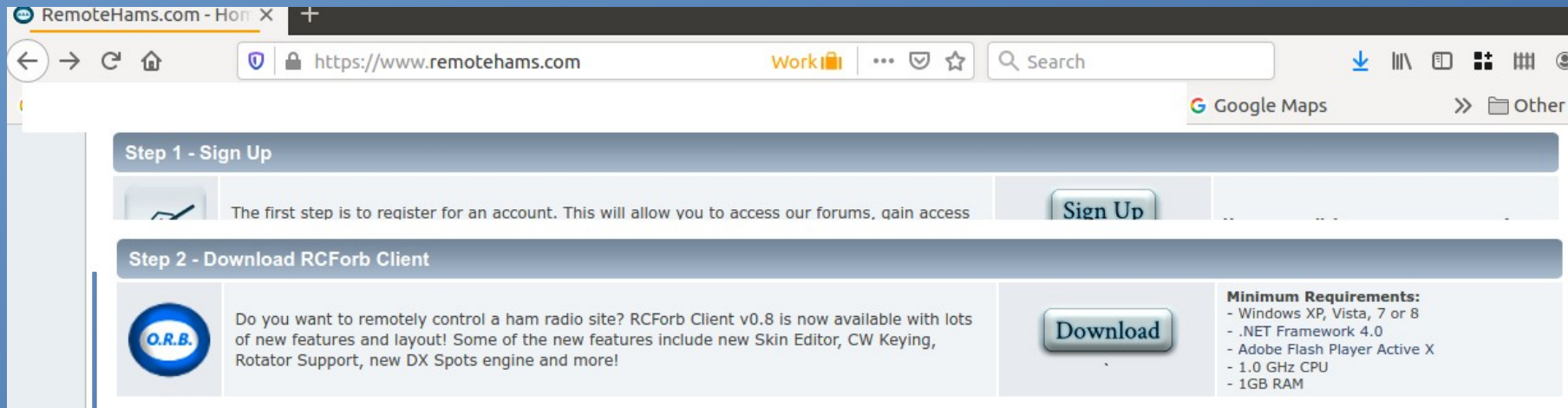
Call sign on your login is sent to RARC server

RARC server looks you up:

1. Makes sure you are a club member
2. Limits to allowed frequencies



Getting the software



This is the Windows choice; XP, 7, 10
Needs Windows Net, will download it

Documentation has instructions if needed

http://beta.remotehams.com/orb/RCForb_ClientManual.pdf



Android & other options

RCForb Client for Android Beta



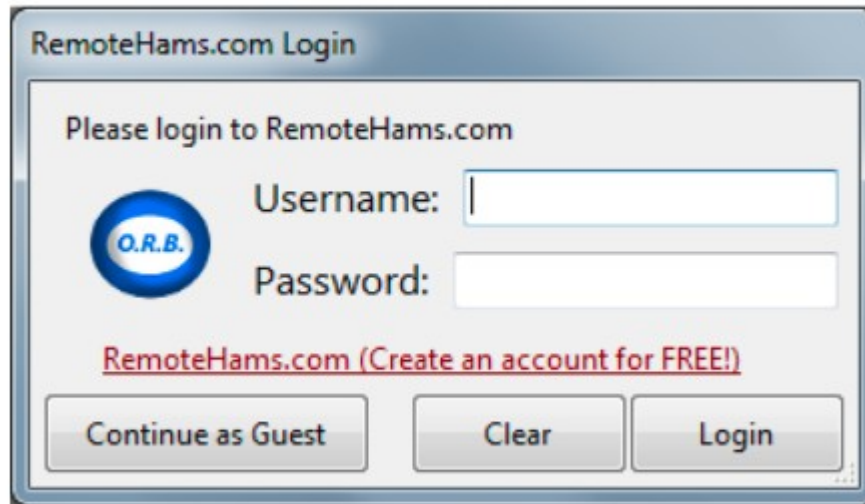
You may now enjoy tuning your favorite remote around using only your Android based device! Supports receive and transmit along with all your favorite radio controls. Features a built-in DX Spot client to make DX hunting a breeze.

- Use Google Play to download it onto your Android tablet or phone
- Cannot use Apple iPhone
- Should work in Windows mode in OSX
- Does not work in WINE under Linux but still trying



Logging on to the station

On First Run



The screenshot shows a dialog box titled "RemoteHams.com Login". Inside the dialog, there is a text prompt "Please login to RemoteHams.com". To the left of the input fields is a circular logo with "O.R.B." inside. There are two input fields: "Username:" and "Password:". Below the input fields is a red link that says "RemoteHams.com (Create an account for FREE!)". At the bottom of the dialog are three buttons: "Continue as Guest", "Clear", and "Login".

You will be asked for your RemoteHams Username & Password, on first run.

If you choose so, you may continue as a guest by clicking on the button labeled "Continue as Guest".

- Use call sign as Username
- Option to store it on your computer for regular use



Enter RARC station W4FJ

The screenshot shows the RCForb (Online Remote Base) software interface. The main window is titled "RCForb (Online Remote Base) by RemoteHams.com". The interface includes a menu bar (File, Options, * Upload Amateur Radio License *), a toolbar with controls for SPKR, MIC, Vol, Mic, Play, VOX, RX, STBY, TX, and Delay (0.00s). A "Num Pad" is visible on the left side.

The "Lobby" window is open, displaying a search for "w4fj". The search results are shown in a table:

Remote Name	Radio	TX	City	State	Country
W4FJ RARC's club membership required	lc-7100	<input checked="" type="checkbox"/>	Richmond	VA	United States
SAUDSN (IC-7700)	lc-7700	<input checked="" type="checkbox"/>	Bow	WA	United States
KL0NP					
N7QT					
N5LYJ XIEGU G90 QRP Vertical					
WA7MAZ TS-480 Remote Base, available for M					
KC7C Spokane WA Voice, CW, Digital					
W0RFK					
KC3CBK WV REMOTE					
K9DBV FTdx-3000					
KE8ANE					
E - REMOTE					
LU8MIL - Mendoza Argentina					
VK6PCB Private					

A callout box highlights the search results, showing the "Lobby" window with the search term "w4fj" and the "Find Next" button. The search results are filtered to show "All Online" stations. The "W4FJ RARC's club membership required" entry is highlighted, and a mouse cursor is pointing to it.

The "Chat Room" window is also visible, showing the title "RCForb (Online Remote Base) Client v0.8" and the subtitle "Remote Control of Your Ham Radio Station!". It includes a message input field, a "Type a message..." button, and a "Users" list on the right side.



Picking a band & a frequency

From Memories

The screenshot shows a radio software interface. At the top, there are controls for AIR Bands, CW, 100% RF Gain, and a 0.1 kHz filter. Below this is the 'Memories' window, which has a dropdown menu set to 'Remote Frequency/Mode' and a 'Copy to Local Database' button. A table lists various memory entries. An 'Editing Memory (50215000)' dialog box is open, showing fields for Name, Info, Frequency, Mode, Filter, CTCSS, DCS, Repeater Shift, and Repeater Offset. The 'Name' field contains '50125 net', 'Info' contains '6m net', and 'Frequency' is set to '50.215 MHz'. The 'Mode' is 'USB' and 'Filter' is 'Medium'. At the bottom of the dialog are 'Cancel' and 'Save' buttons.

Local	Info	Freq (MHz)	MD	Filter	CTCSS	DCS	Shift	Offset
<input checked="" type="checkbox"/>	W1AW 80m CW Morse Code Practice	3.5815	CW	Medium				
<input type="checkbox"/>	VA Phone Net	3.947	LSB	Wide			Simplex	
<input type="checkbox"/>	W1AW 40m	7.0475	CW	Medium				
<input type="checkbox"/>	40m CW Slow	40m CW Slow Speed area 7.110 - 7.120 Mhz		Medium				
<input type="checkbox"/>	6m Net	50215 Net		Wide			Simplex	
<input type="checkbox"/>	KG4MRA	KG4MRA Repeater		Wide	74.4 Hz		-	
<input type="checkbox"/>	RATS 2m	RATS 2m Repeater		Wide	74.4 Hz			



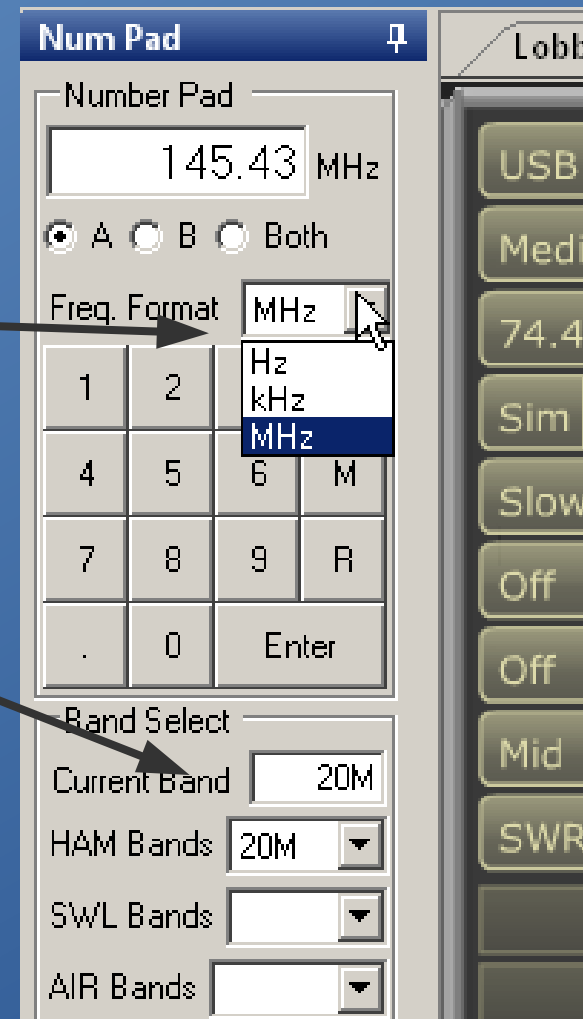
Picking a band & a frequency

With buttons

1. Pick kHz or MHz, key in frequency

OR

2. Pick the band and use the knob to tune to frequency



Check sliders

- The prior user may have set power low for digital, etc.
- Scroll down to see all
- Set them to what you need for your mode and frequency



Tuning options

- Click the tiny up or down arrows

- Click the big knob with the mouse and use the mouse wheel to tune up and down



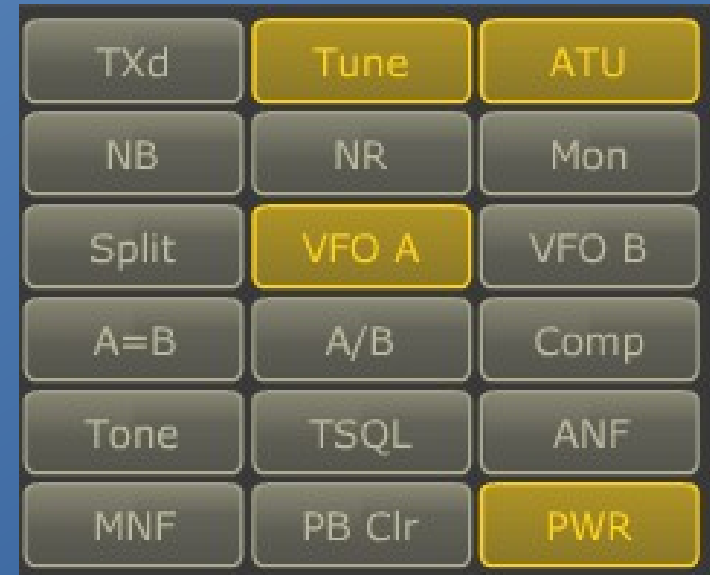
The buttons 1

1. Make sure the sideband is correct
2. Set Filter to Medium for SSB
3. Pre Amp Off except....
4. Set Tx BW to Mid for SSB



The buttons 2

1. Tune every time you change frequency
2. Press TXd to transmit
3. Press TXd again to receive
4. Use filters NR, ANF, MNF, and NB as needed
5. Don't press PWR or you will be off the air!



The memories

You can pick from Remote or create and edit your own Local

The screenshot displays a radio software interface. At the top, there are controls for 'AIR Bands', 'CW', '100 %', and 'RF Gain'. Below this is the 'Memories' window, which has a dropdown menu set to 'Remote Frequency/Mode' and a 'Copy to Local Database' button. A table lists various memory entries with columns for Name, Info, Freq (MHz), MD, Filter, CTCSS, DCS, Shift, and Offset. A dialog box titled 'Editing Memory (50215000)' is open, showing fields for Name (50125 net), Info (6m net), Frequency (50.215 MHz), Mode (USB), Filter (Medium), CTCSS, DCS, Repeater Shift, and Repeater Offset. Buttons for 'Cancel' and 'Save' are at the bottom of the dialog.

Local	Info	Freq (MHz)	MD	Filter	CTCSS	DCS	Shift	Offset
<input checked="" type="checkbox"/>	W1AW 80m CW Morse Code Practice	3.5815	CW	Medium				
<input type="checkbox"/>	VA Phone Net	3.947	LSB	Wide			Simplex	
<input type="checkbox"/>	W1AW 40m	7.0475	CW	Medium				
<input type="checkbox"/>	40m CW Slow			Medium				
<input type="checkbox"/>	6m Net			Wide			Simplex	
<input type="checkbox"/>	KG4MRA			Wide	74.4 Hz		.	
<input type="checkbox"/>	BATS 2m			Wide	74.4 Hz			

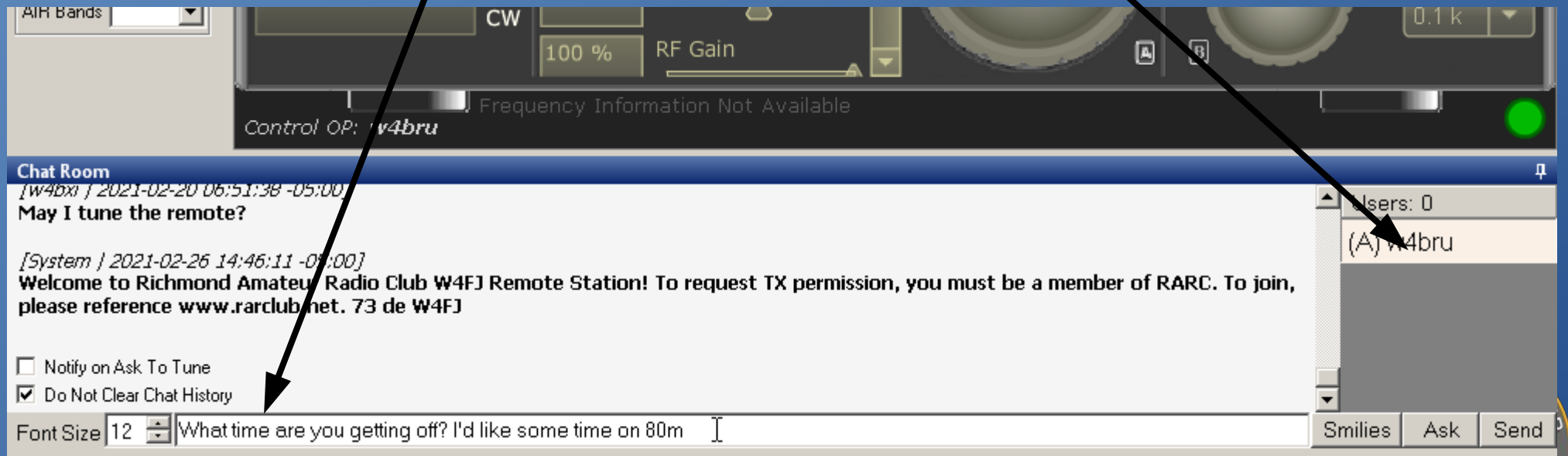


Android option

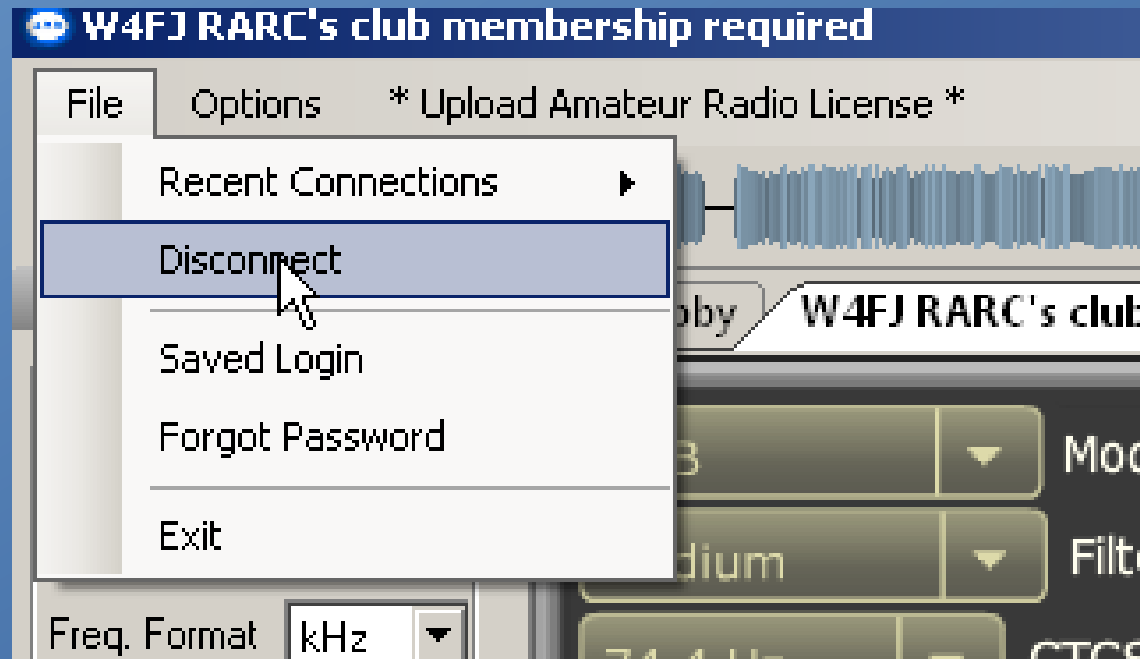


Too much demand

- See another logged on
- Listen to traffic
- Type message asking for time, etc



Disconnecting



RARC administrators

- Send emails for malfunctions, etc
- Call if unable to connect
- Power failure in Bon Air is the most common cause of failure

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