



Suggested Standard Configuration for WinLink RMS Stations

What I hope to do

- Encourage the construction of local WinLink RMS stations that can be quickly put into portable use
- Provide RMS setup information
- Establish a suggested standard configuration for Portable WinLink RMS stations.
- Establish procedures for portable RMS operation

**But first, some
history!**

N7CFO-10



Uglybox construction

- MDO plywood
- Ugly but durable and easy to make
- <http://www.n7cfo.com/amradio/projects/Uglybox.htm>

N7SS



N7SS improvements

- LED kaleidoscope mood lighting
- Surround sound stereo
- Aromatherapy generator
- Bubble machine
- Foot massager
- Automatic TASER and Mace deployment against intruders
- Optional disco mirror ball

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- Built as a portable
- Set up for DC power
- When I talked to the WinLink team they told me that portable station had never been used successfully during an emergency
- I set it up, tested it and packed it in a Pelican case

- A few months later I unpacked it and **it did not work!**
- The problem was simple – I had missed several WinLink updates and it would not connect
- The Solution? Put it back on the air as a fixed station and check it daily!

Problems since then...

- WIN10 updates have wiped out the configuration files twice and have disconnected the RMS from the network several times for no apparent reason
- WinLink updates have hung and crashed the program

So.....

**It is apparent that you have to
keep an eye on things**

- Check the station daily
- Reboot at least weekly
- Keep track of Windows updates

**Which brings us to the
standard configuration
project**

So, how many of you have....

- **A VHF or UHF radio gathering dust?**
- **A TNC that is not in use**
- **An unused laptop or netbook**

-or-

All three!

**Have you considered
setting up a RMS?**

**If so, may I suggest
configuring it as a
portable installation?**

- We need local RMS stations to support local emergency services
- If your EmComm group has backup power and solid internet connectivity you can take the pressure off wide area RMS stations
- Examples are the Mercer Island Radio Operators and SNOVARC
- It is not hard to build a RMS – set up a WinLink station, test it and then load and configure RMS Packet

**If you are starting from scratch,
I recommend a radio with a
data port and the TNC-X.**

**WinLink software puts minimal
demands on a computer so
most anything will do.**

Suggested Standards

- This is a work in progress – I'll hit the high points
- The American Red Cross requires that all field computer and radio installations be identical to maintain continuity. We should meet this standard.

- All equipment should run on both 12VDC and 110VAC power
- Maintain the RMS in daily use to ensure that it is fully operational
- Install RMS Express software so the station can also be used as a WinLink client station

Computer

A desktop folder containing the following:

- Screen shots of RMS Packet and RMS Express configuration screens
- WinLink FAQ in PDF
- Radio and TNC manuals in PDF
- Copy of the Sysop's Amateur radio license

Software

- WinLink RMS Packet set up to auto load when the computer boots
- RMS Express
- RMS Simple Terminal
- Microsoft Office or Libre Office
- Web browser with Winlink webpage in bookmarks toolbar
- Windows Device Manager on Desktop

Radio

- Copy of Sysop's amateur radio license on the transceiver
- Engage the frequency lock if available.

Antennas

- Readily deployable gain antennas
- If possible, several antenna options should be available

Accessory Kit

- Station equipment checklist
- Optional equipment checklist
- 12VDC Power supply
- Feedline
- PL-259 connectors and adapters
- PVC tape
- Wireties

- SWR bridge
- GPS to get grid coordinates for RMS software setup
- DC power cords
- PowerPole block
- Microphone
- VOM
- USB Memory stick

Daily Maintenance

- Make the RMS available on 'public' status
- When new users connect invite them to use the RMS as they need to. Request that they notify you if they have any issues
- Check weekly for Operating System updates

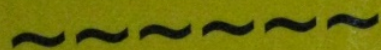
Pre-Deployment

Update if necessary:

- Computer Operating System
- RMS packet
- RMS Express
- RMS Express RMS station listing

- Check desktop references to ensure they are current
- Do a 'clean table layout' of all components and check them against the equipment list
- Check the optional equipment list for necessary items to support the issues at hand

N7CFO-10



145.690

Please Do Not Touch!

This is an emergency communications digital radio station. Do not touch without authorization by the control operator. For information, call N7CFO at (425) 765-6811

Packet TNC Configuration

Configure the TNC

TNC Type: KPC3512- Serial Port: COM5 Baud Rate: 9600 Location (Grid Square): CNE7000

TNC Configuration File: C:\VMS\RMS\Folder Data\Example\KPC3512-aps Browse

Configure a Port on the Selected TNC:

There are 2 ports available with the selected TNC. Select a port to configure: 1 2 Enable This Port ☒

Port call sign: N7CFO-10 Antenna Direction: Omni

Port Frequency (MHz): 145.690 Antenna Height AGL Feet: 55

On The Air Band Pass: 1200 Antenna Gain (dB): 6

Power (Watts): 25 Disable ASCII (Keyboard) Protocol ☐

Optional Login Message:

Update This Channel Open and Restart Help



Portable RMS Deployment Checklist.

OUT	RETURN	
		Radio power cable
		Feeding
		Power Supply
		DC splitter?
		Antenna?
		Dummy load?
		Co-Ax barrel?
		Co-Ax adapters?
		TNC Power Cord
		Netbook
		PP to female lighter socket adapter
		Netbook DC lighter plug
		DC jumper cables
		Updated Frequency List to Desktop
		Microphone

Amateur Radio Digital Emergency Communications Station

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**Danger!!  
1,000,000 Ohms!**

Packet TNC

Configure the

TNC Type:

KPC9612+

TNC Configu

Configure a Port

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Power

Optional Logi

# Deployment

- Locate a secure site with internet connectivity and electricity
- Obtain permission to connect the RMS
- If using Windows 10 set the internet connection as metered to prevent automatic updates

- Change the Maidenhead Grid location in RMS Express
- Lock the computer

# Maintenance

- Check the computer frequently to ensure it is connected to the internet
- Review the Sysop log frequently for inappropriate traffic
- Re-boot the computer daily

# Questions?

**Want to get involved?**

**Please contact me**

**Lynn**

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