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Winlink 2000 RMS Express

A User Client for Emergency Communications

*When it absolutely,
positively has to
get through!*

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Emergency Coordinator
Prince George's County, MD
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August 24, 2013

Course Content

- Winlink 2000 System Overview
- Common Session
 - Install walk through
 - Set up parameters and personal choices
- VHF/UHF Session
 - Hands on with equipment
- HF Session
 - Demonstration (hopefully!)
- Tactical Discussion – Time Permitting

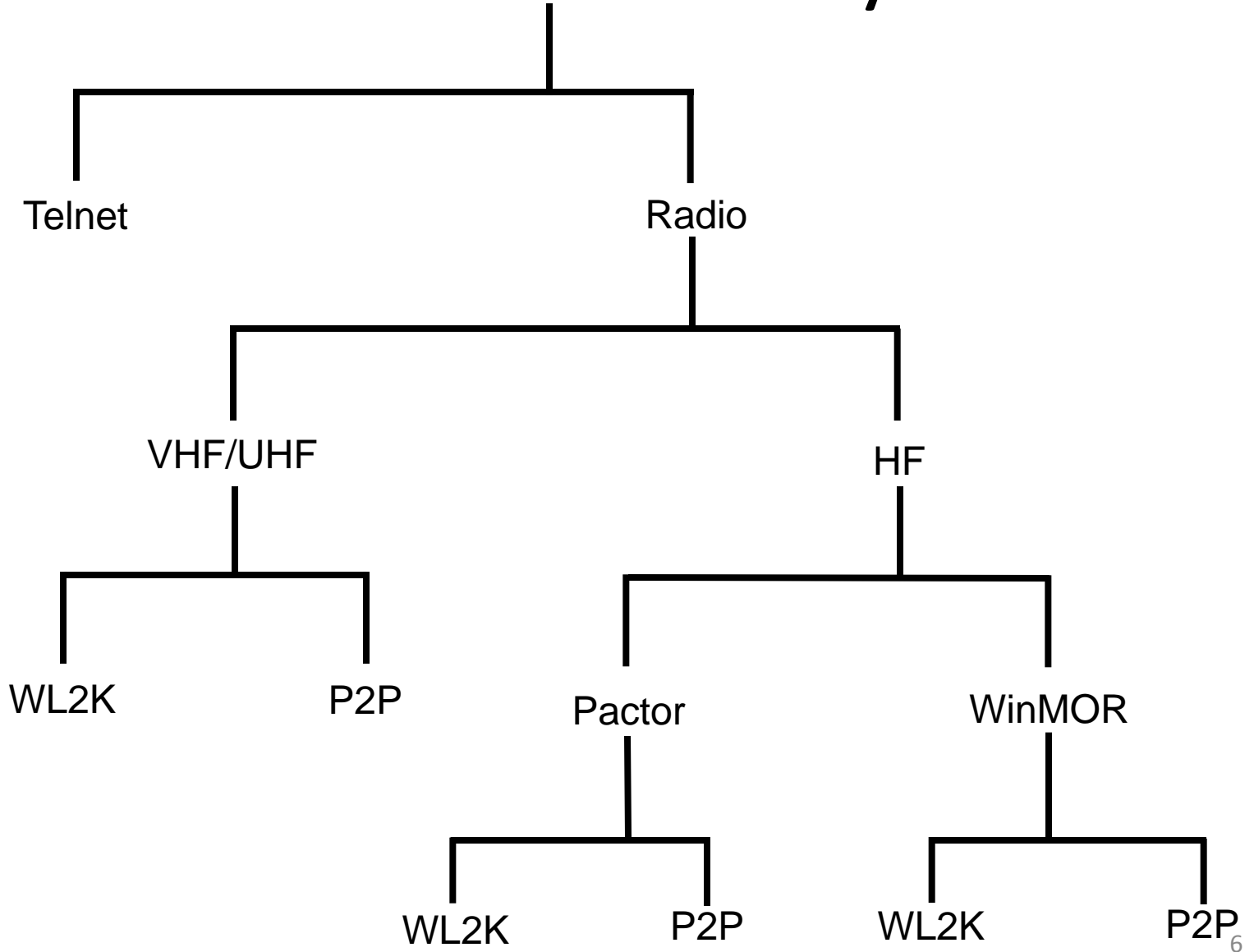
Winlink 2000 System

- Is a worldwide *system* of volunteer sysops, radio stations and network assets supporting e-mail over radio, with non-commercial links to Internet e-mail.
- Resources come from Amateur Radio, the Military Auxiliary Radio System (MARS), government agencies, and non-government volunteer organizations.

Winlink 2000 System

- Provides valuable service to emergency communicators and to licensed radio operators without access to the Internet.
- The all-volunteer Winlink Development Team (WDT) is committed to continuous improvement using modern computer technology with the most effective radio modes and digital protocols for local, regional and long-distance applications.

Winlink Hierarchy



Typical Users

- State & County Gov't
- US Coast Guard
- US Army MARS
- US Navy MARS
- Homeland Security
- ARES
- RACES
- Health Care Facilities
- Many others

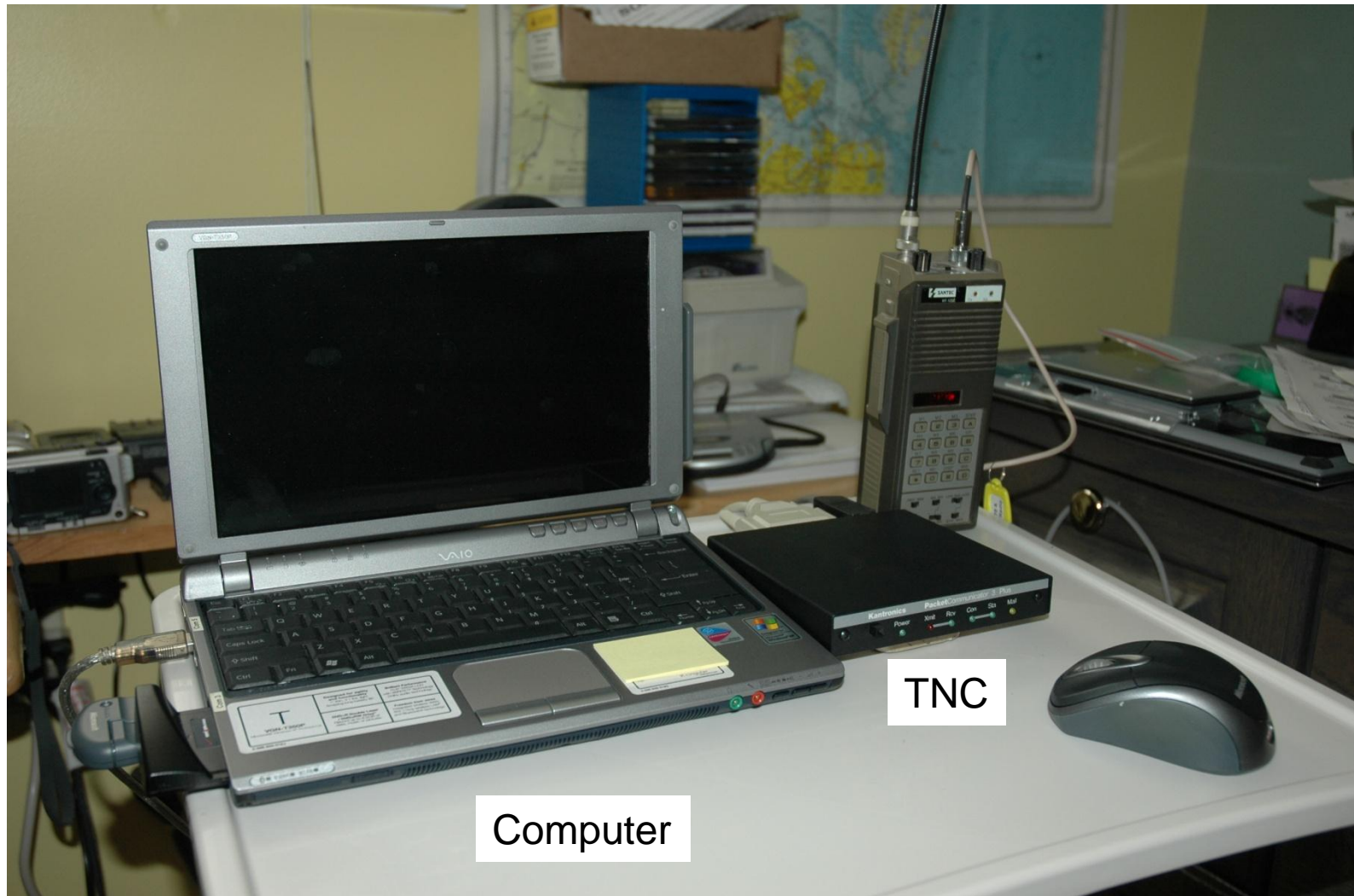
Typical RMS Express Station



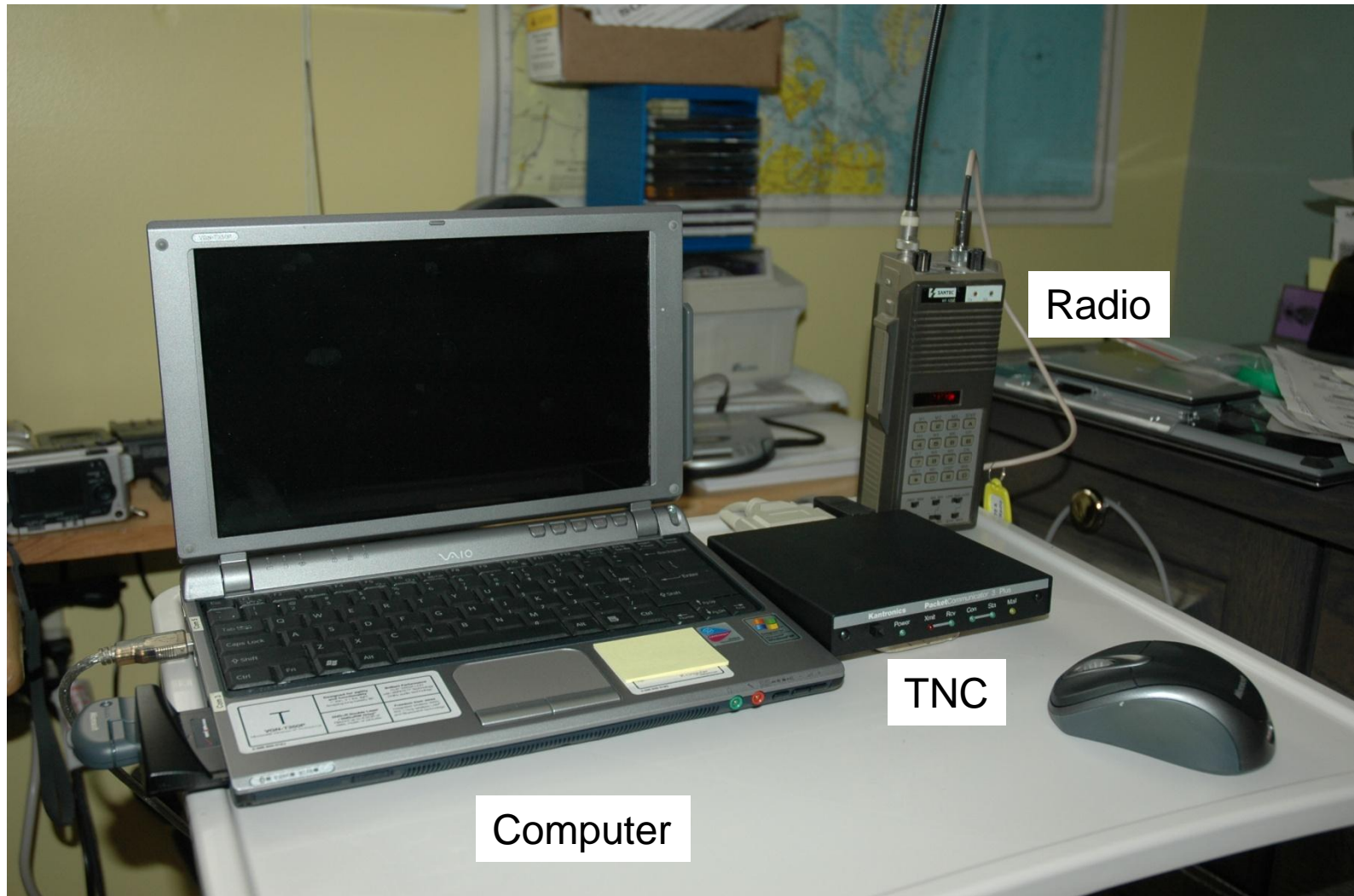
Typical RMS Express Station



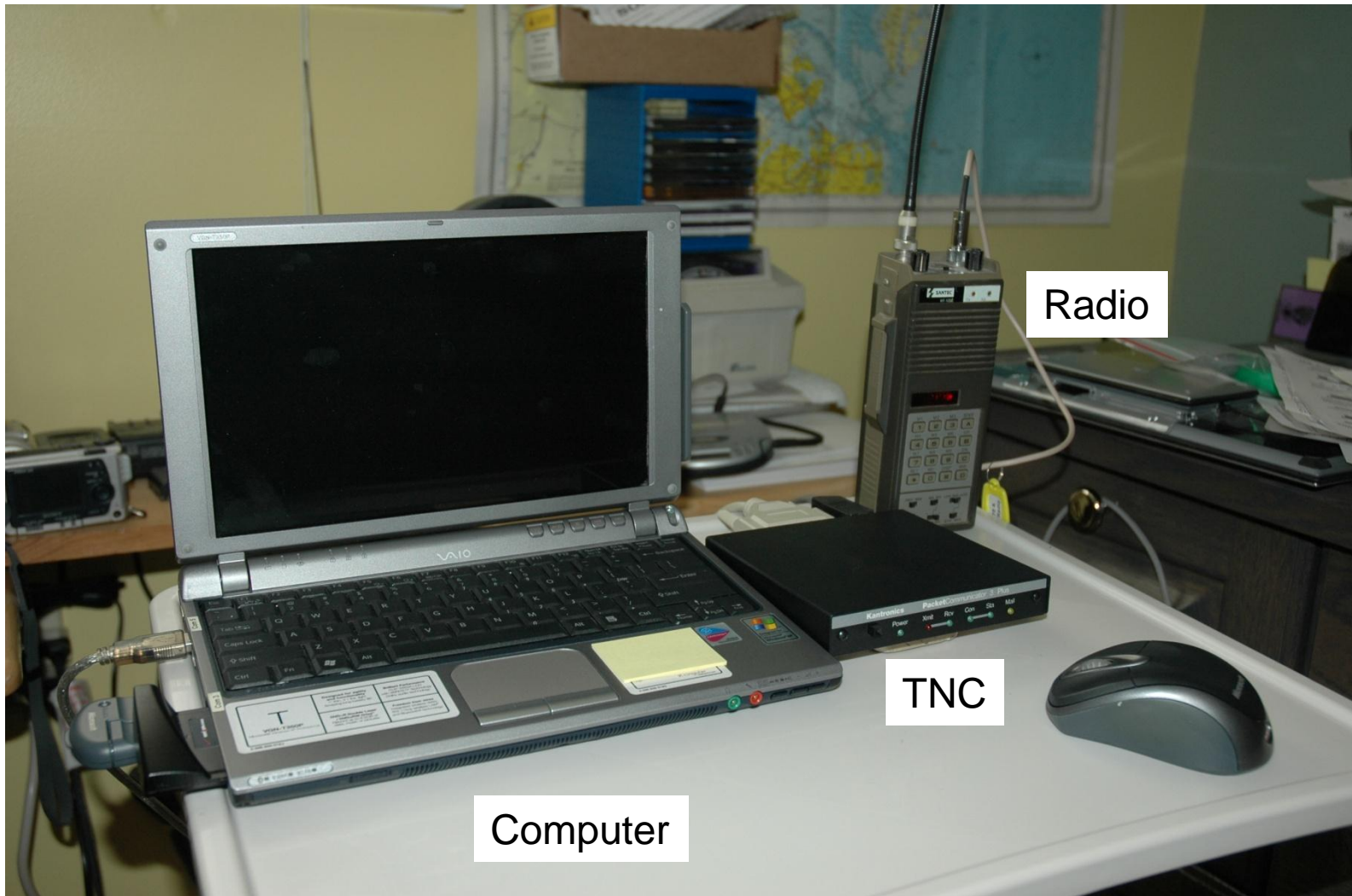
Typical RMS Express Station



Typical RMS Express Station

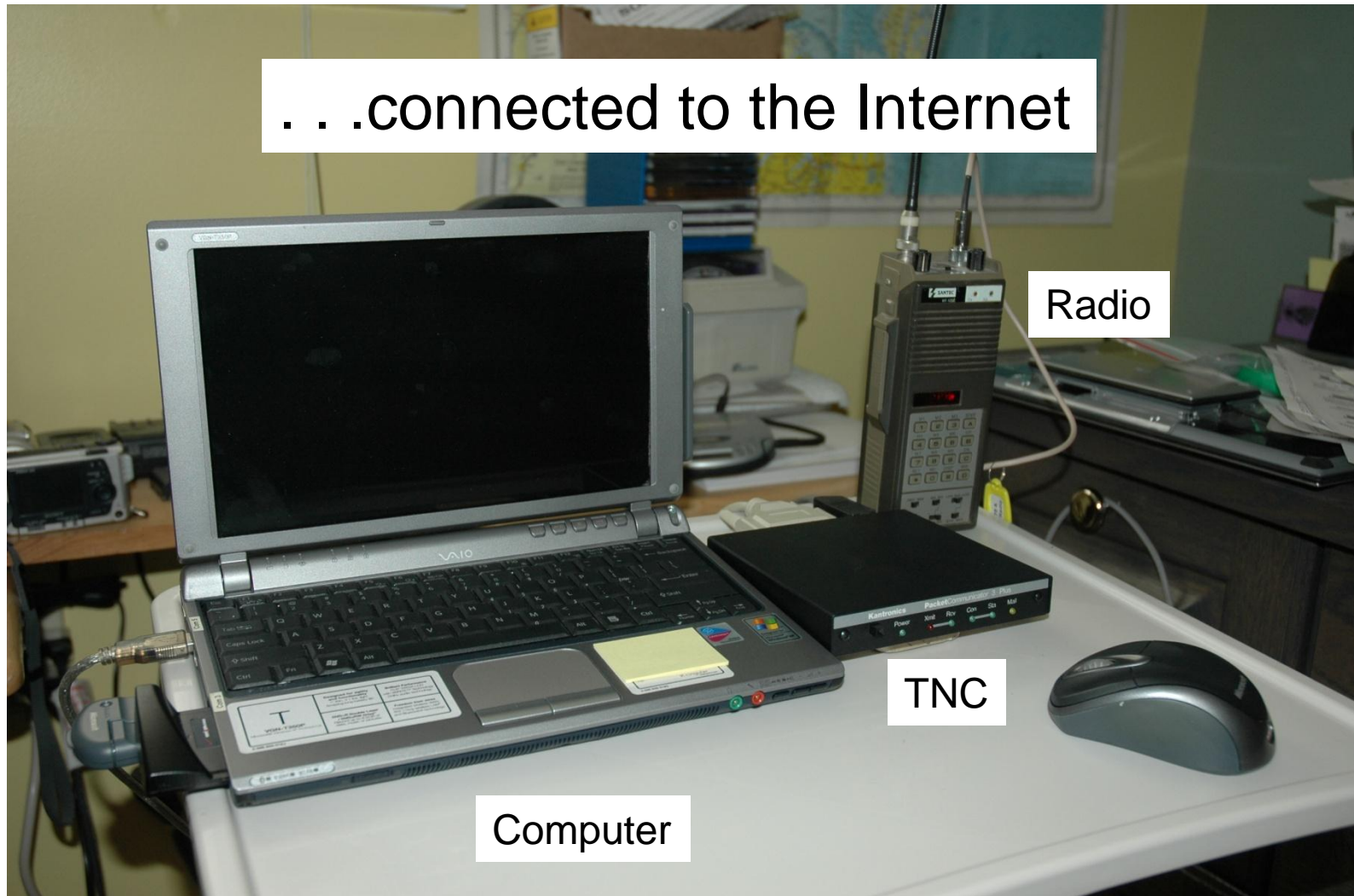


Typical RMS Node Station

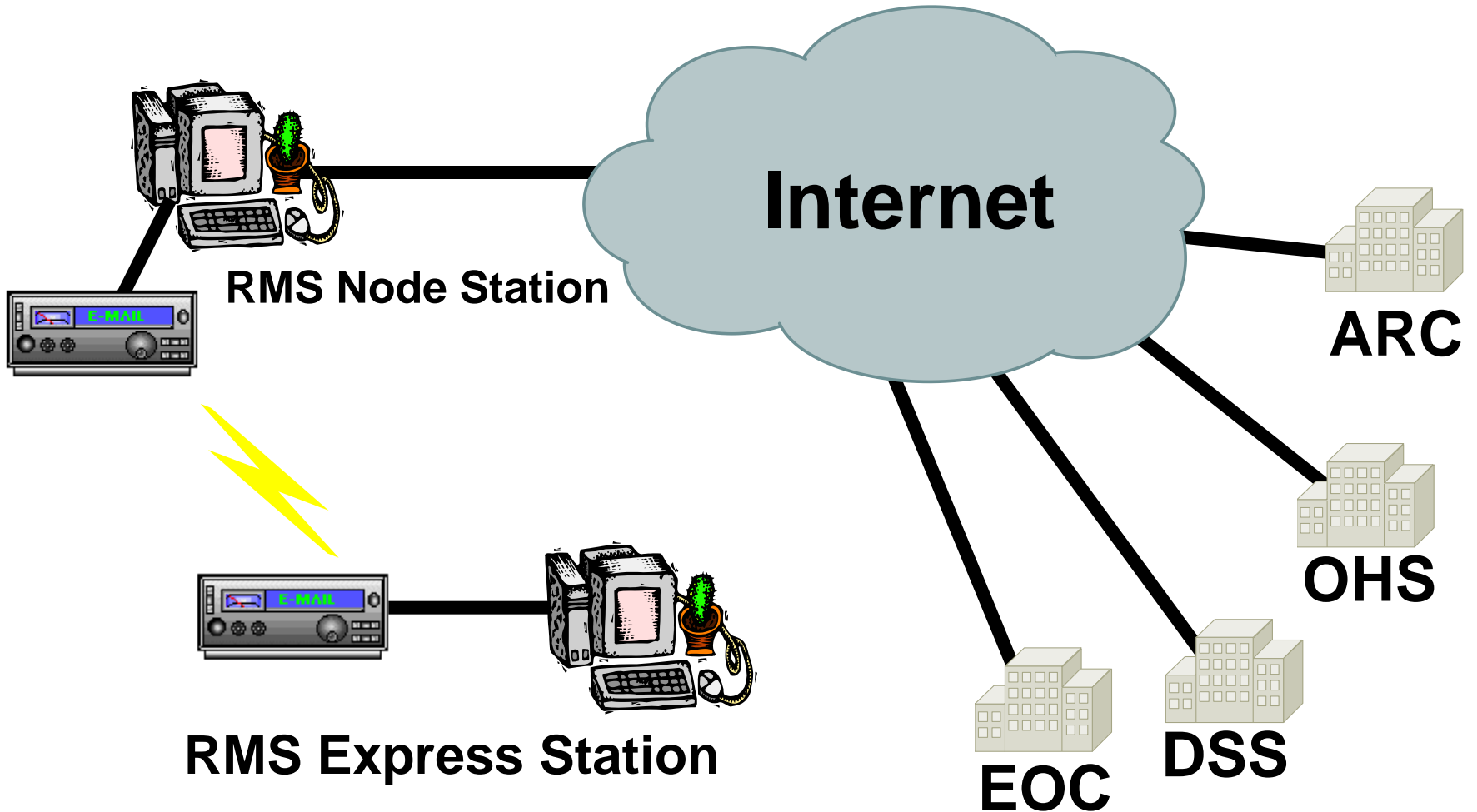


Typical RMS Node Station

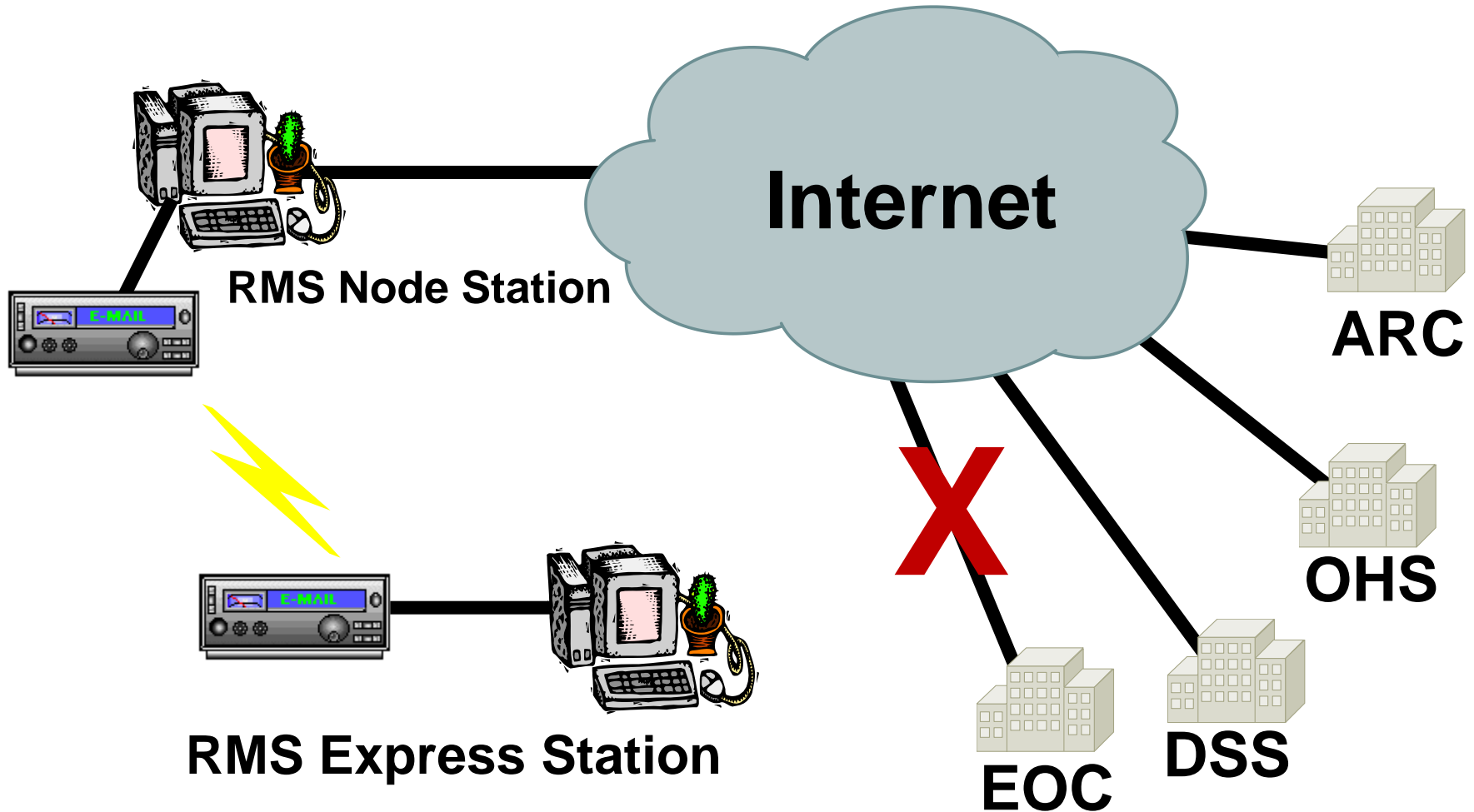
. . .connected to the Internet



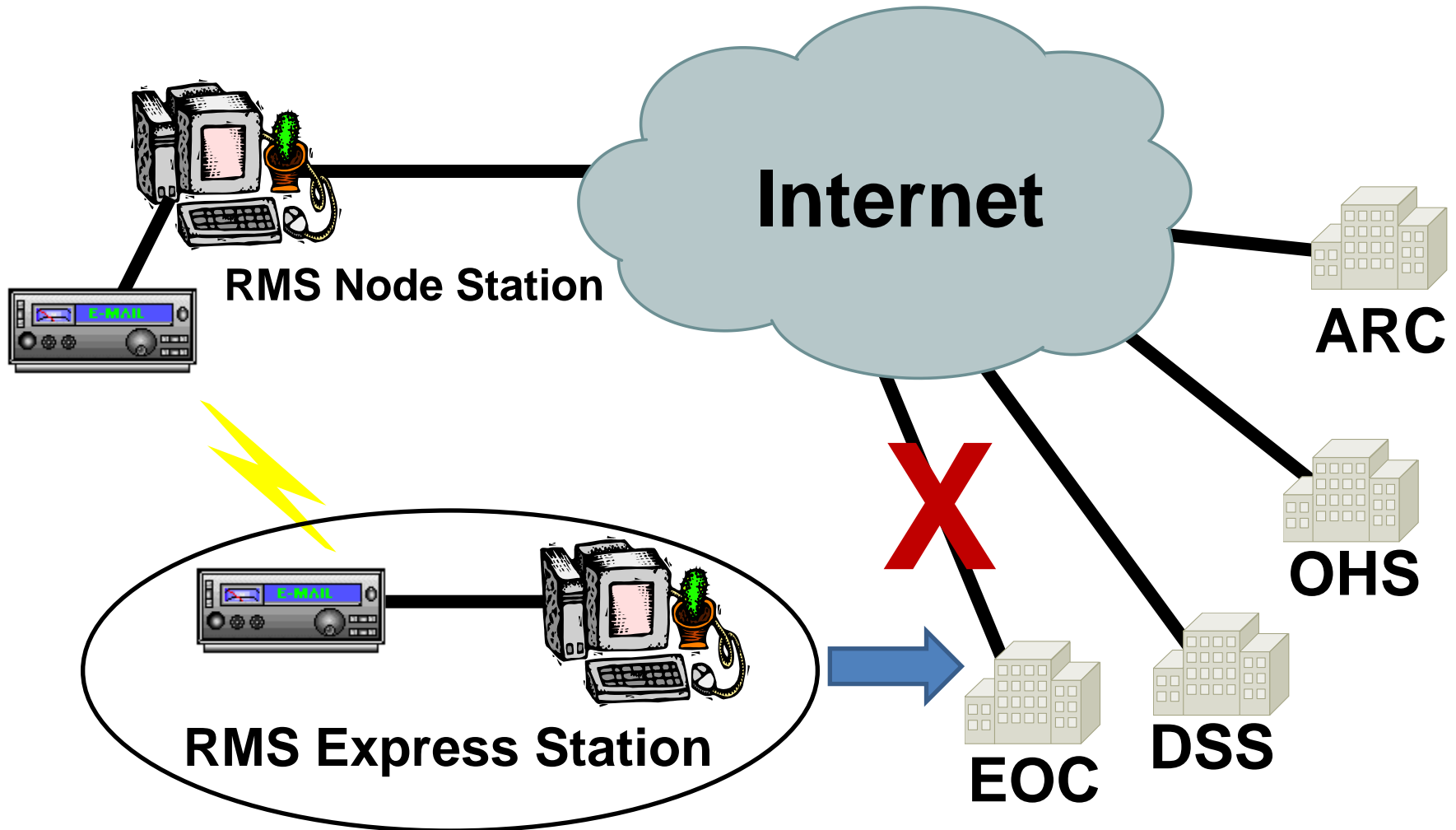
Winlink 2000 System Pictorial



Winlink 2000 System Pictorial



Winlink 2000 System Pictorial



RMS Express Features

- TELNET
- AX.25 PACKET
- PACTOR 1-3 & 4!
- Most any TNC (Packet)
- Sound card (HF)
- Peer-to-peer contacts
- "Keyboard" connections
- Up to 3 users
- Tactical address support
- Message precedence
- RMS Relay support
- Built-in message editing
- Attached documents
- Address book
- WL2K Catalog
- Update support (auto)
- Automatic polling (VHF)
- Cost: ***Free***

RMS Express Features

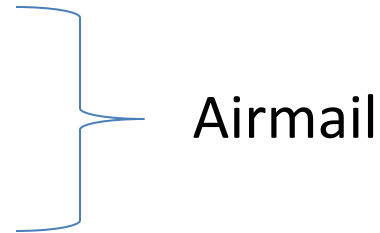
- TELNET
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- Update support (auto)
- Automatic polling (VHF)
- Cost: ***Free***

Overview


- RMS – Radio Mail Server
- Created by Winlink 2000 Development Team
- To augment the prohibitively expensive and proprietary Pactor modems
- RMS Express choices:
 - Telnet WL2K Internet
 - Packet WL2K TNC
 - Pactor WL2K Sound Card
 - WINMOR WL2K Sound Card
 - Pactor P2P Sound Card
 - WINMOR P2P Sound Card

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 - WINMOR P2P Sound Card
- 
- Additional features
in RMS Express

RMSE Installation Process

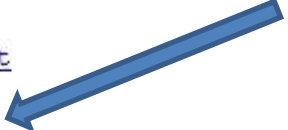
- Go to the file transfer protocol download page:
 - <ftp://autoupdate.winlink.org/User%20Programs>
- Download the latest version:

FTP directory /User%20Programs/ at autoupdate.winlink.org

To view this FTP site in Windows Explorer, click **Page**, and then click **Open FTP Site in Windows Explorer**.

[Up to higher level directory](#)

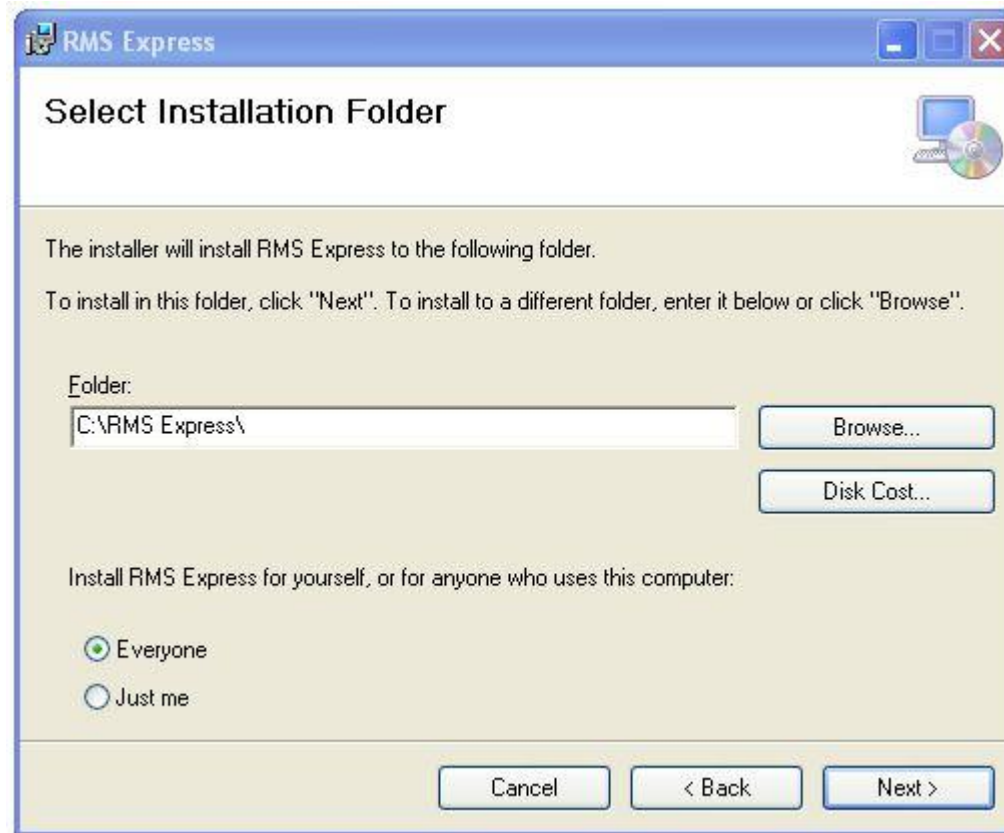
07/25/2012 12:00AM	3,233,022	itshfbc_120722.zip
10/10/2012 12:00AM	1,723,540	Faclink_setup_4-3-4-0.zip
06/29/2011 12:00AM	1,111	README_Install_Instructions.txt
05/06/2013 12:00AM	7,524,427	RMSMessageLog_setup_1-9-0.zip
07/09/2013 11:04PM	10,263,995	RMS_Express_setup_1-2-13-0.zip
05/13/2012 12:00AM	12,176	SCS_PTC-IIIusb_and_end_of_PTC-IIusb_IIpro_IIex.pdf
06/23/2012 12:00AM	3,483,544	V4Chat_1.0.4.0_Full_Install.zip
09/07/2011 12:00AM	200,155	WINMOR_TNC_1.4.0.0.zip



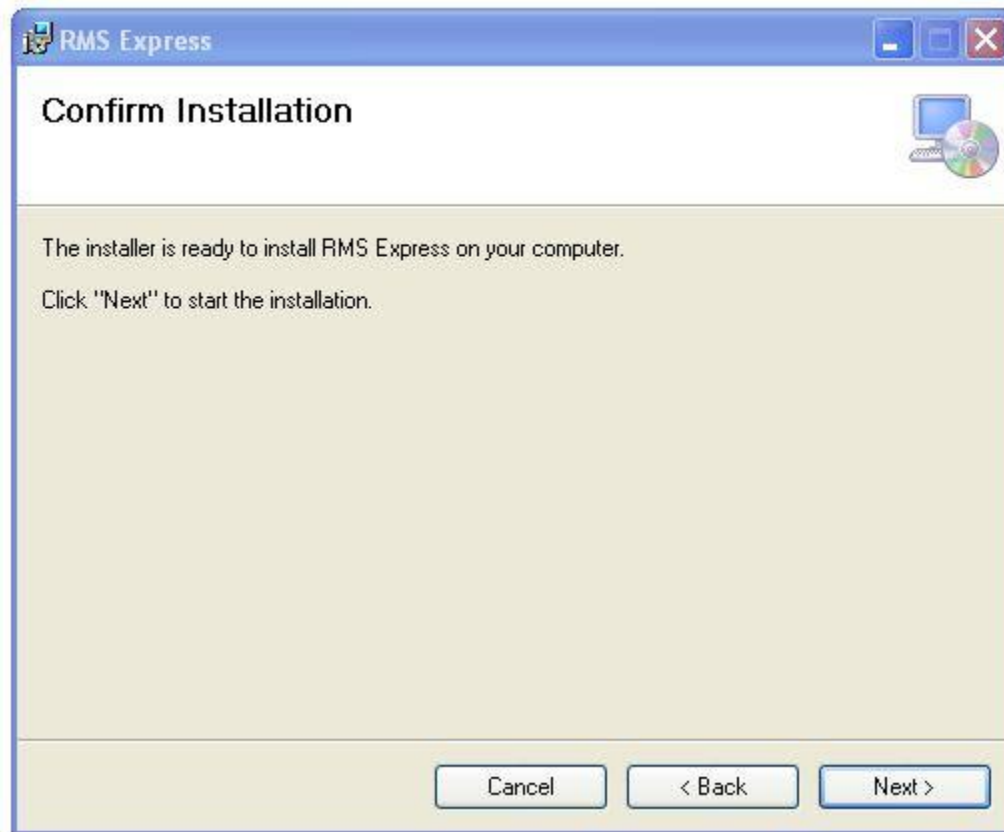
RMS Express Installation Screens



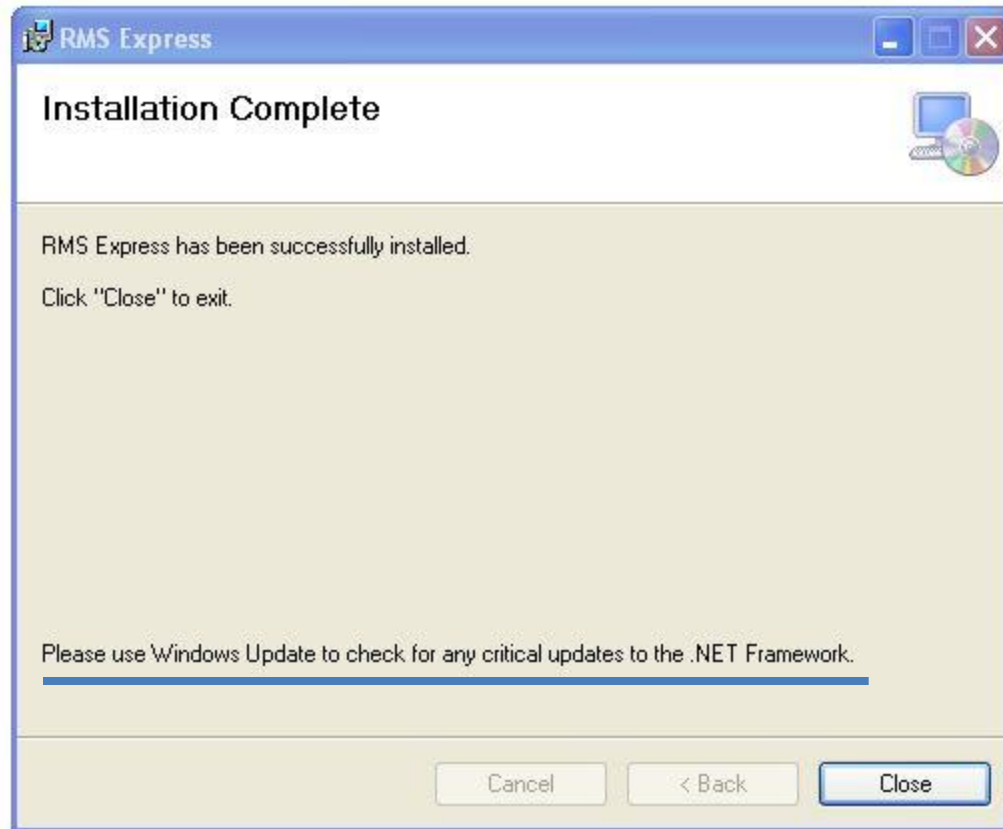
RMS Express Installation Screens



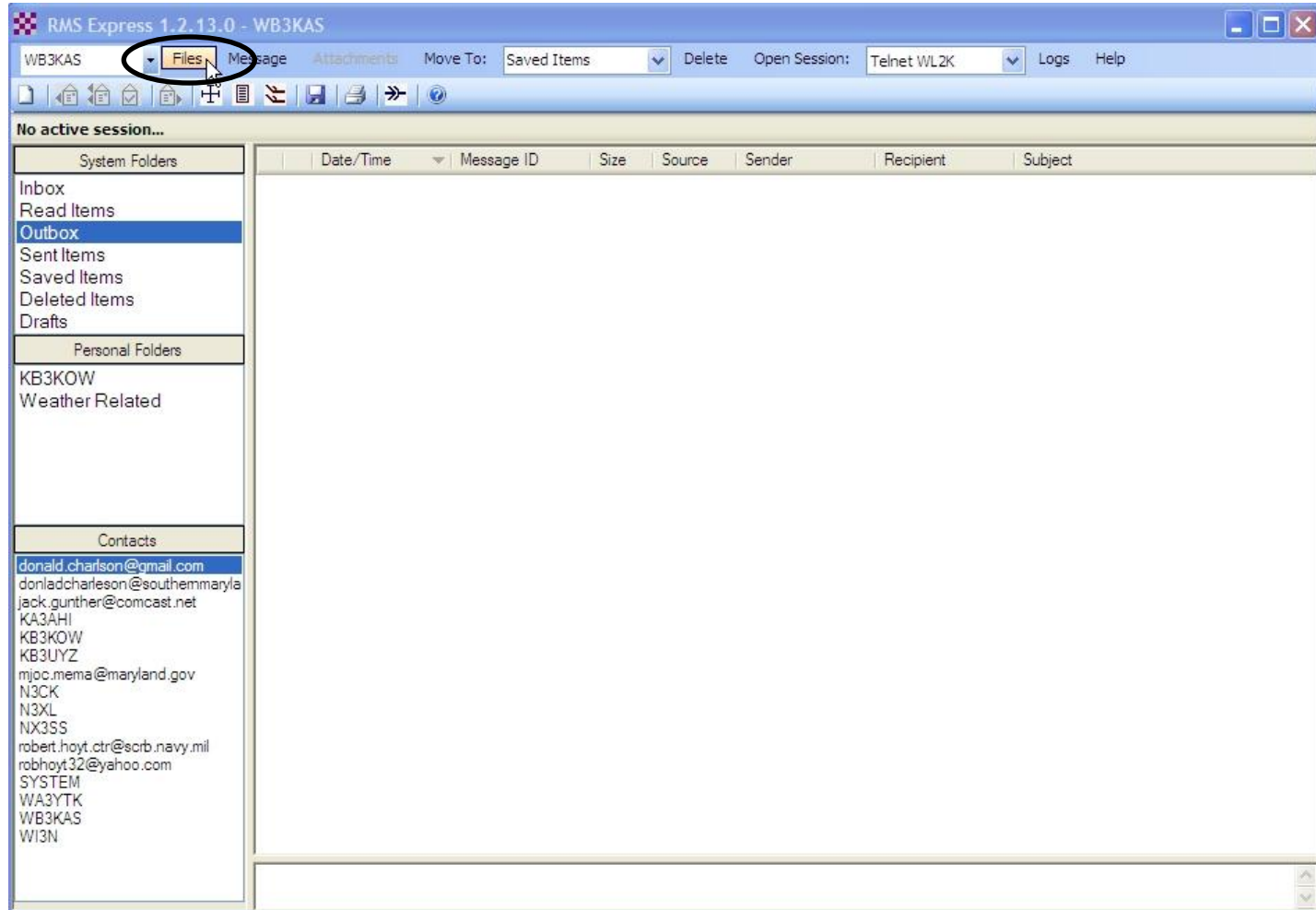
RMS Express Installation Screens



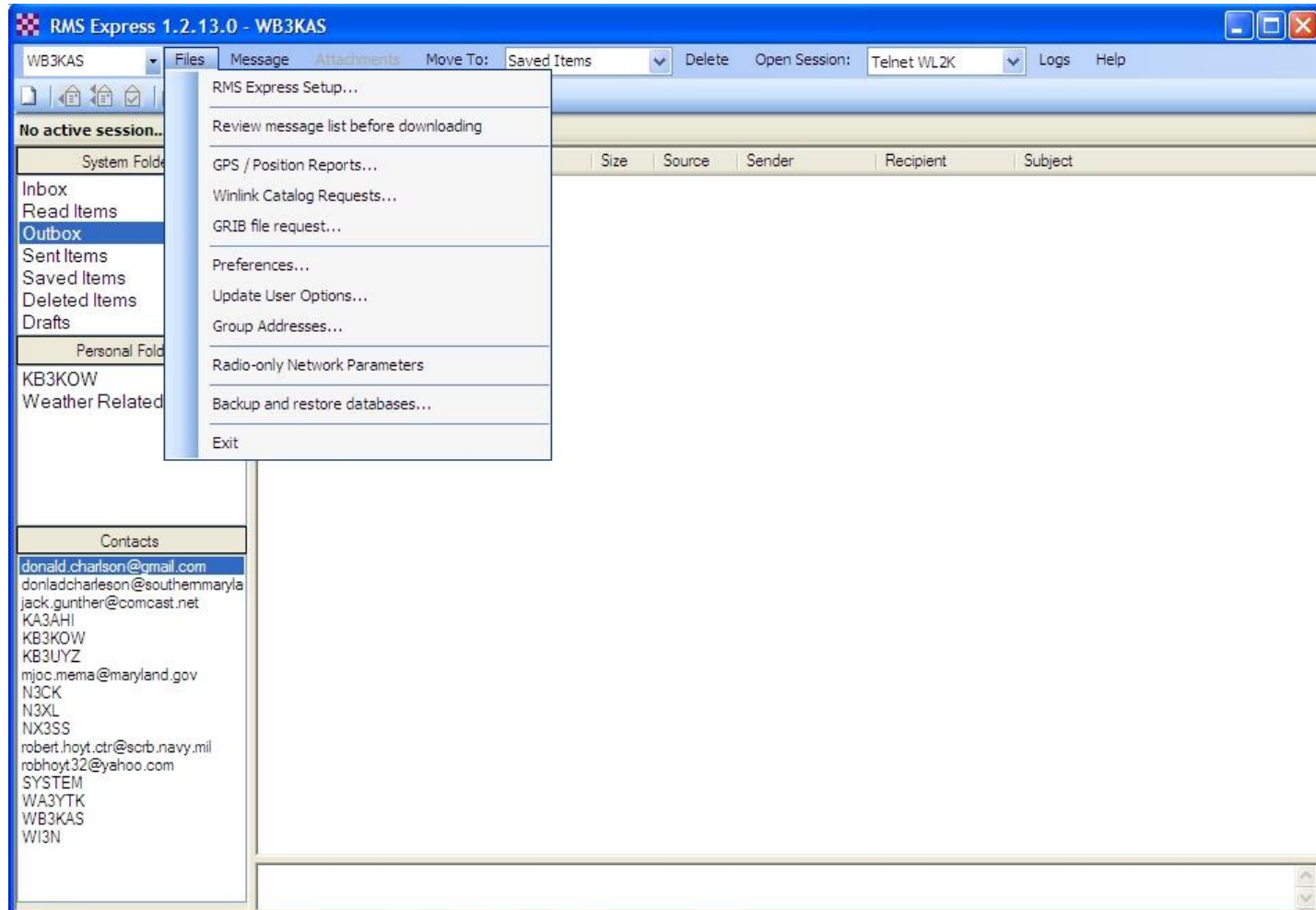
Installing RMS Express



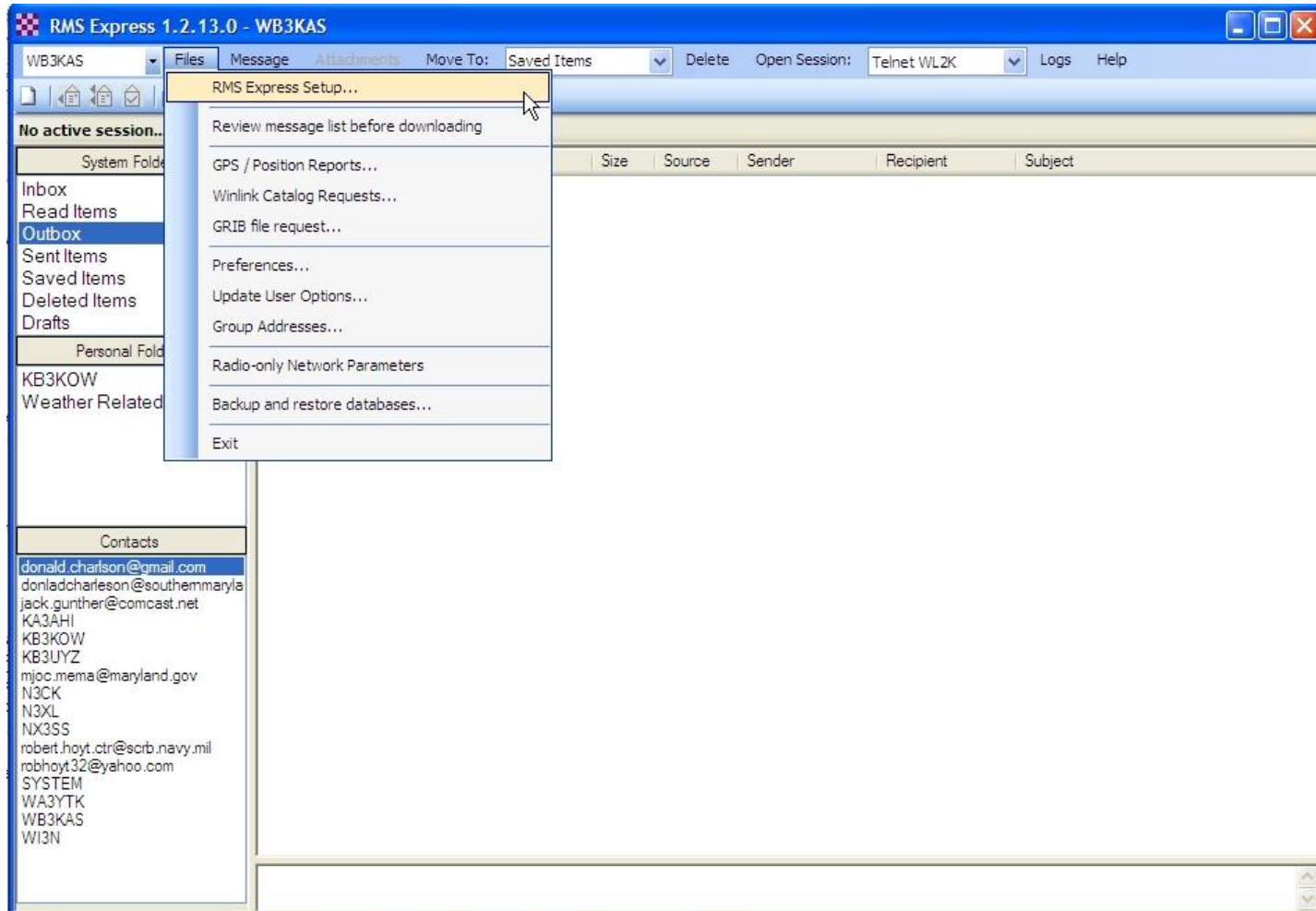
RMS Express Installation Screens



RMS Express Installation Screens



RMS Express Installation Screens



RMS Express Installation Screens

RMS Express Properties

Call Signs

My Callsign: Optional auxiliary callsigns

My shortened callsign:

Aux Call 1:

Add callsign suffix if required (optional):

Aux Call 2:

My Grid Square:

My Password (optional): Use Secure Login

NOTE: A password is required only if you use secure login.

Winmor registration key (optional):

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Disable Peer-To-Peer Message Transfer

Path to propagation forecast program:

Service Codes

(Use PUBLIC for ham call signs. Separate multiple service codes by spaces.)

If you change service codes, you must update the list of channels.

Recalculate HF path quality if SFI changes more than:

Keep logs for weeks

RMS Express Installation Screens

1

RMS Express Properties

Call Signs

My Callsign: **WB3KAS** Optional auxiliary callsigns

My shortened callsign: Aux Call 1:

Add callsign suffix if required (optional): Aux Call 2:

My Grid Square:

My Password (optional): Use Secure Login

NOTE: A password is required only if you use secure login.

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RMS Express Installation Screens

1

2

RMS Express Properties

Call Signs

My Callsign: Optional auxiliary callsigns

My shortened callsign: Aux Call 1:

Add callsign suffix if required (optional): Aux Call 2:

My Grid Square: Lat/Lon to Grid Square

My Password (optional): Use Secure Login

NOTE: A password is required only if you use secure login.

Winmor registration key (optional):

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Disable Peer-To-Peer Message Transfer

Path to propagation forecast program:

Service Codes

(Use PUBLIC for ham call signs. Separate multiple service codes by spaces.)

If you change service codes, you must update the list of channels.

Recalculate HF path quality if SFI changes more than:

Keep logs for weeks

RMS Express Installation Screens

1

2

3

The screenshot shows the 'RMS Express Properties' dialog box. It is divided into several sections. The 'Call Signs' section includes a 'My Callsign' field with 'WB3KAS' entered, and 'Optional auxiliary callsigns' fields for 'Aux Call 1' (MDCSEC) and 'Aux Call 2' (MDCPRGEEC). The 'My Grid Square' field contains 'FM18NR'. The 'Service Codes' section has a text box with 'PUBLIC' entered. Three numbered arrows point to these specific fields: arrow 1 points to 'WB3KAS', arrow 2 points to 'FM18NR', and arrow 3 points to 'PUBLIC'. Other fields include 'My shortened callsign', 'Add callsign suffix if required (optional)', 'My Password (optional)', 'Use Secure Login' (checked), 'Winmor registration key (optional)', 'Display list of pending incoming messages prior to download' (unchecked), 'Warn about connections to stations holding messages' (checked), 'Disable Peer-To-Peer Message Transfer' (unchecked), 'Path to propagation forecast program' (C:\ntshfbc\), 'Recalculate HF path quality if SFI changes more than' (25), and 'Keep logs for' (2 weeks). Buttons for 'Update', 'Cancel', and 'Remove call sign' are at the bottom.

RMS Express Properties

Call Signs

My Callsign: WB3KAS

Optional auxiliary callsigns

My shortened callsign:

Aux Call 1: MDCSEC

Add callsign suffix if required (optional):

Aux Call 2: MDCPRGEEC

My Grid Square: FM18NR

Lat/Lon to Grid Square

My Password (optional):

Use Secure Login

NOTE: A password is required only if you use secure login.

Winmor registration key (optional):

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Disable Peer-To-Peer Message Transfer

Path to propagation forecast program: C:\ntshfbc\

Service Codes

PUBLIC

(Use PUBLIC for ham call signs. Separate multiple service codes by spaces.)

If you change service codes, you must update the list of channels.

Recalculate HF path quality if SFI changes more than: 25

Keep logs for 2 weeks

Update Cancel Remove call sign

RMS Express Installation Screens

1

2

3

4

The screenshot shows the 'RMS Express Properties' dialog box. It is divided into two main sections: 'Call Signs' and 'Service Codes'.
1. A callout points to the 'My Callsign' field, which contains 'WB3KAS'.
2. A callout points to the 'My Grid Square' field, which contains 'FM18NR'.
3. A callout points to the 'Service Codes' field, which contains 'PUBLIC'.
4. A callout points to the 'Keep logs for' field, which is a spinner box set to '2' weeks.
Other fields include 'My shortened callsign', 'Add callsign suffix if required (optional)', 'Optional auxiliary callsigns' (Aux Call 1: MDCSEC, Aux Call 2: MDCPRGEEC), 'My Password (optional)', 'Use Secure Login' (checked), 'Winmor registration key (optional)', 'Display list of pending incoming messages prior to download' (unchecked), 'Warn about connections to stations holding messages' (checked), 'Disable Peer-To-Peer Message Transfer' (unchecked), 'Path to propagation forecast program' (C:\ntshfbc\), and 'Recalculate HF path quality if SFI changes more than' (25).

RMS Express Properties

Call Signs

My Callsign: WB3KAS

Optional auxiliary callsigns

My shortened callsign:

Aux Call 1: MDCSEC

Add callsign suffix if required (optional):

Aux Call 2: MDCPRGEEC

My Grid Square: FM18NR

Lat/Lon to Grid Square

My Password (optional):

Use Secure Login

NOTE: A password is required only if you use secure login.

Winmor registration key (optional):

Display list of pending incoming messages prior to download

Warn about connections to stations holding messages

Disable Peer-To-Peer Message Transfer

Path to propagation forecast program: C:\ntshfbc\

Service Codes

PUBLIC

(Use PUBLIC for ham call signs. Separate multiple service codes by spaces.)

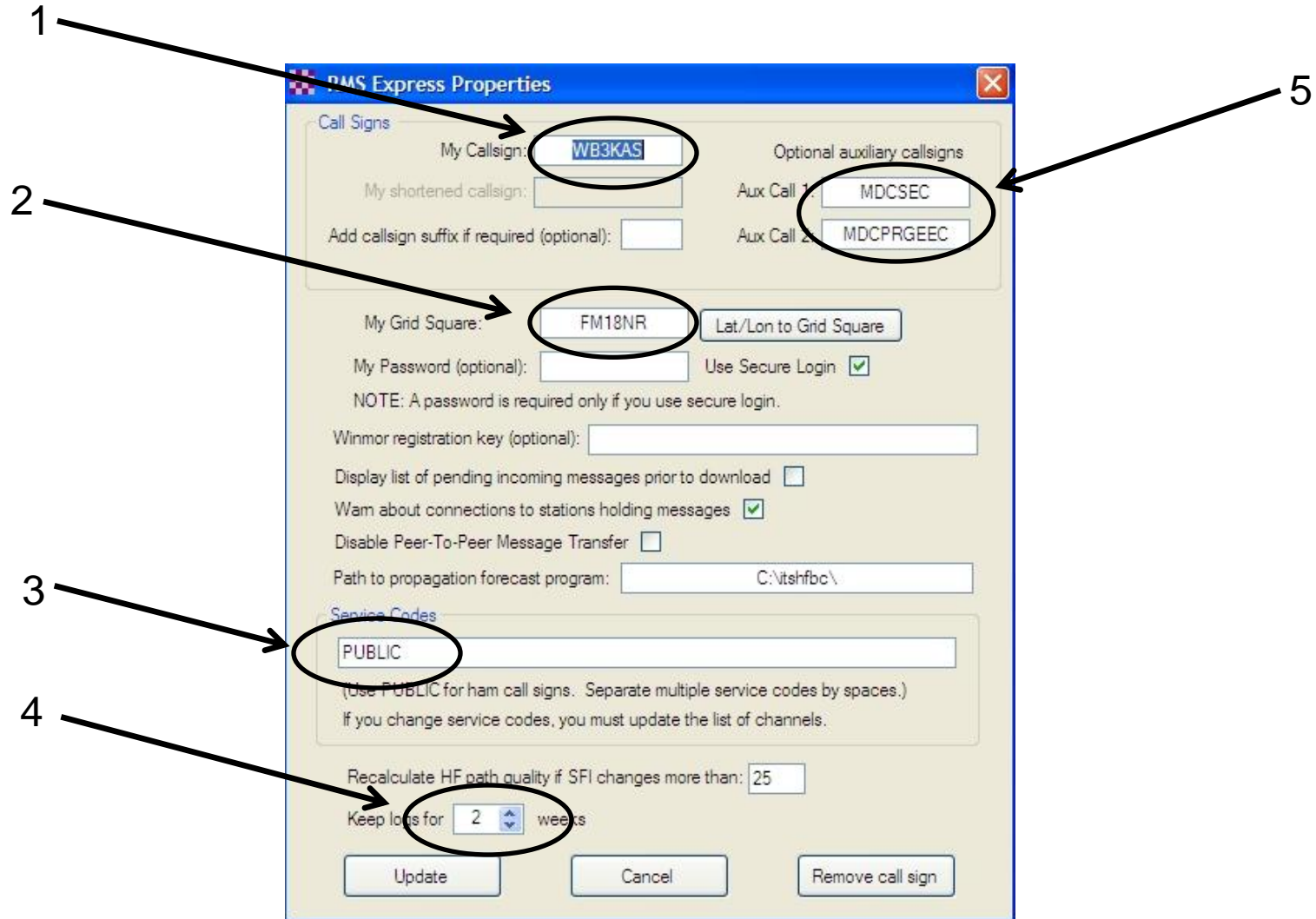
If you change service codes, you must update the list of channels.

Recalculate HF path quality if SFI changes more than: 25

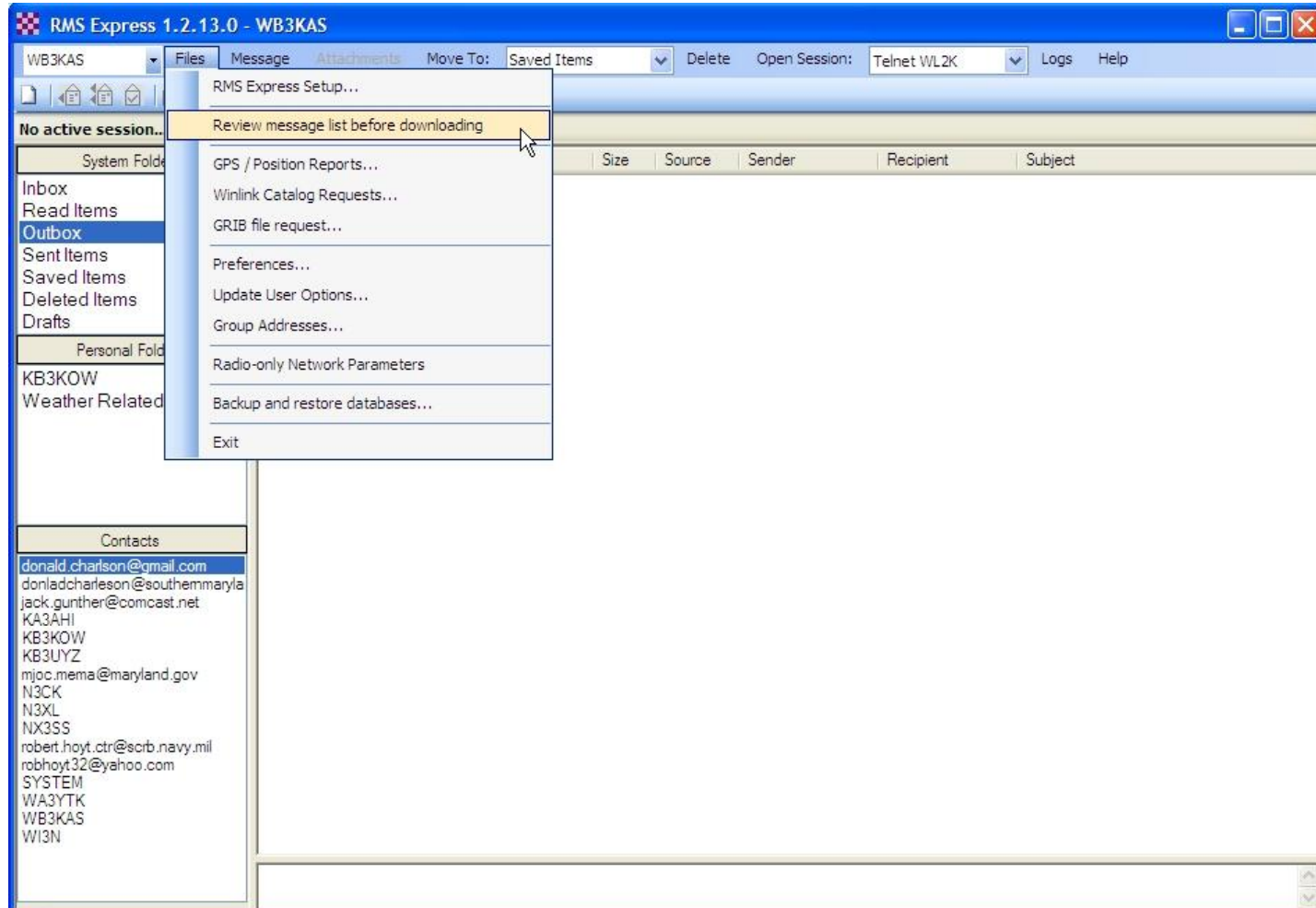
Keep logs for 2 weeks

Update Cancel Remove call sign

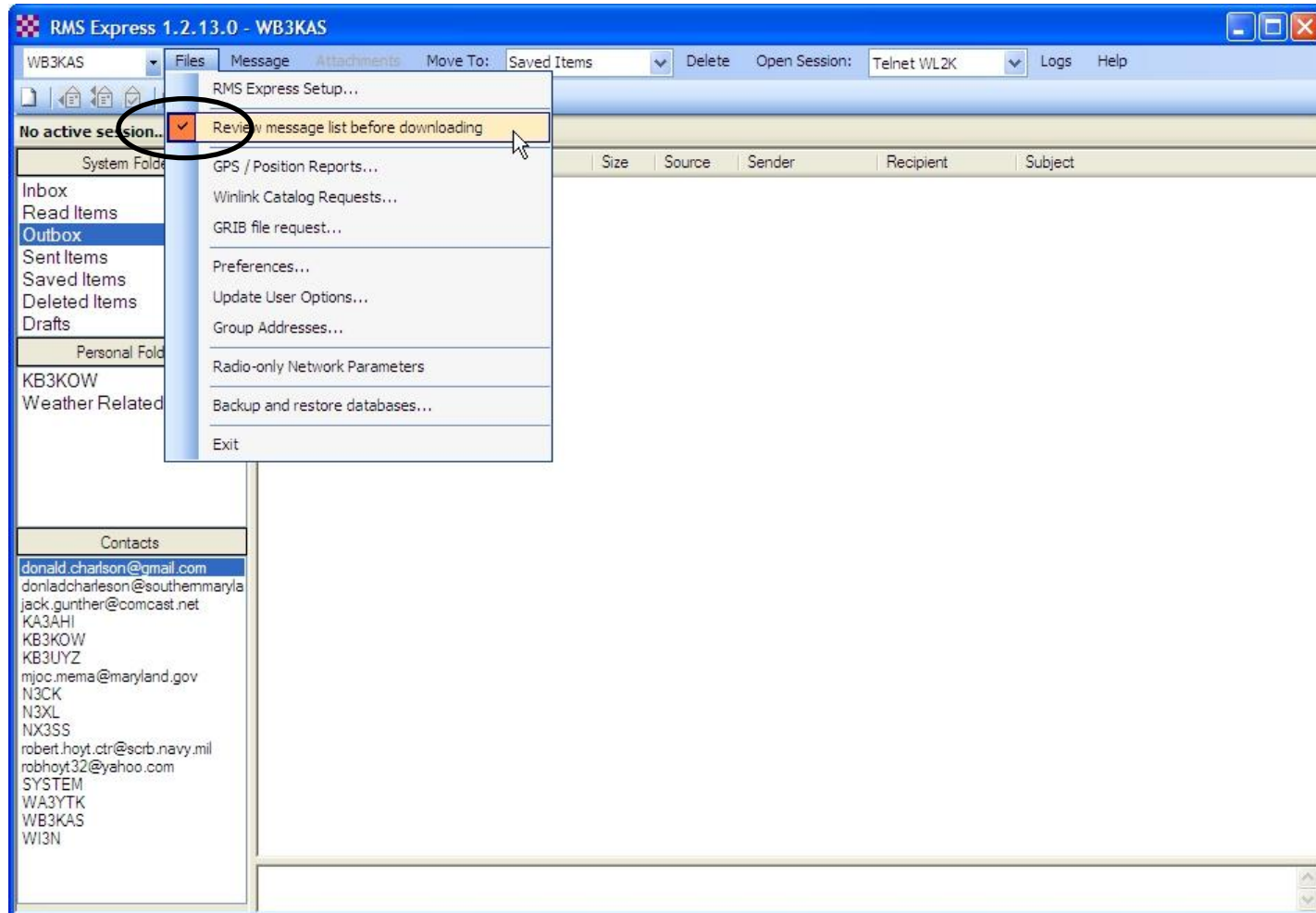
RMS Express Installation Screens



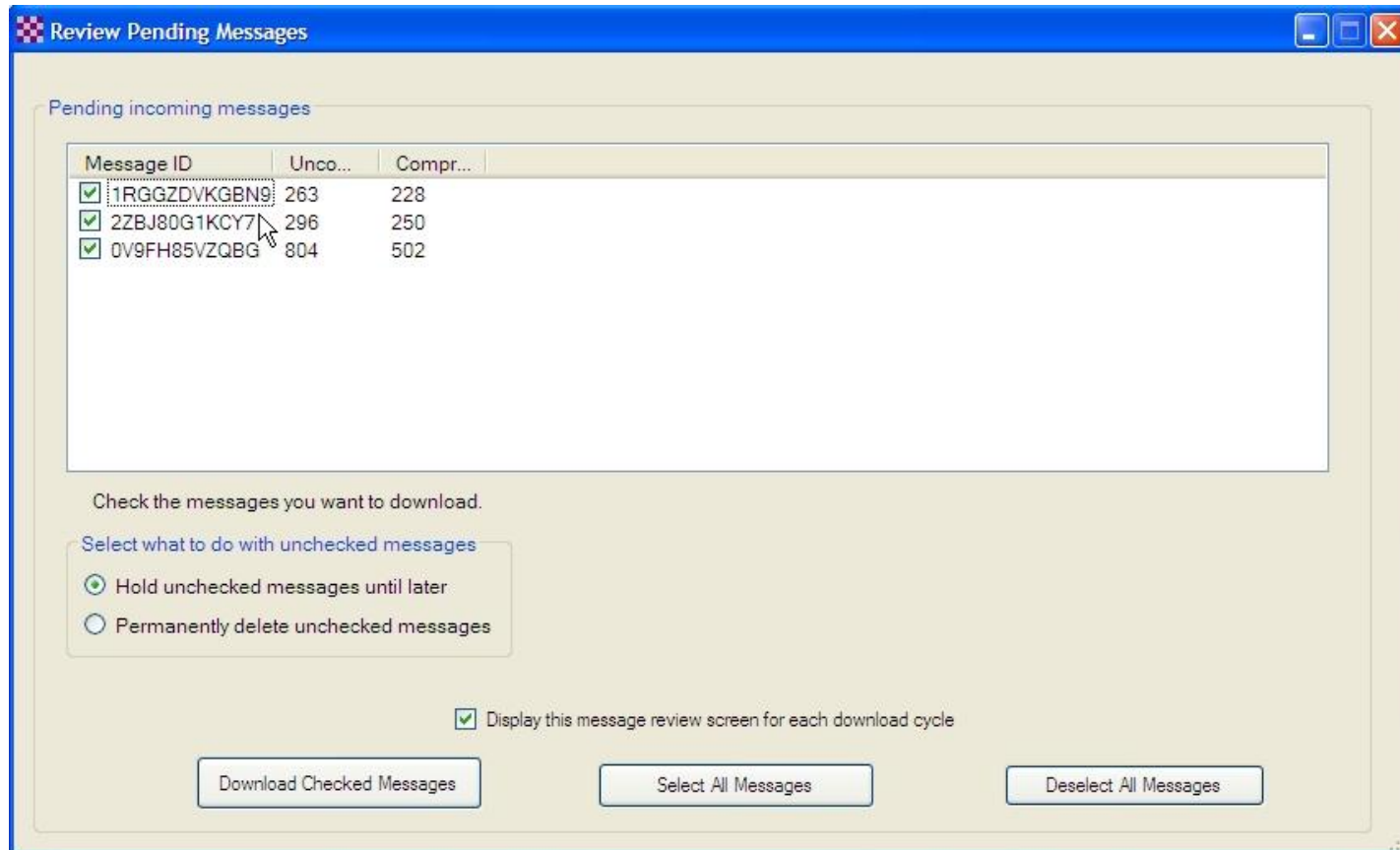
RMS Express Installation Screens



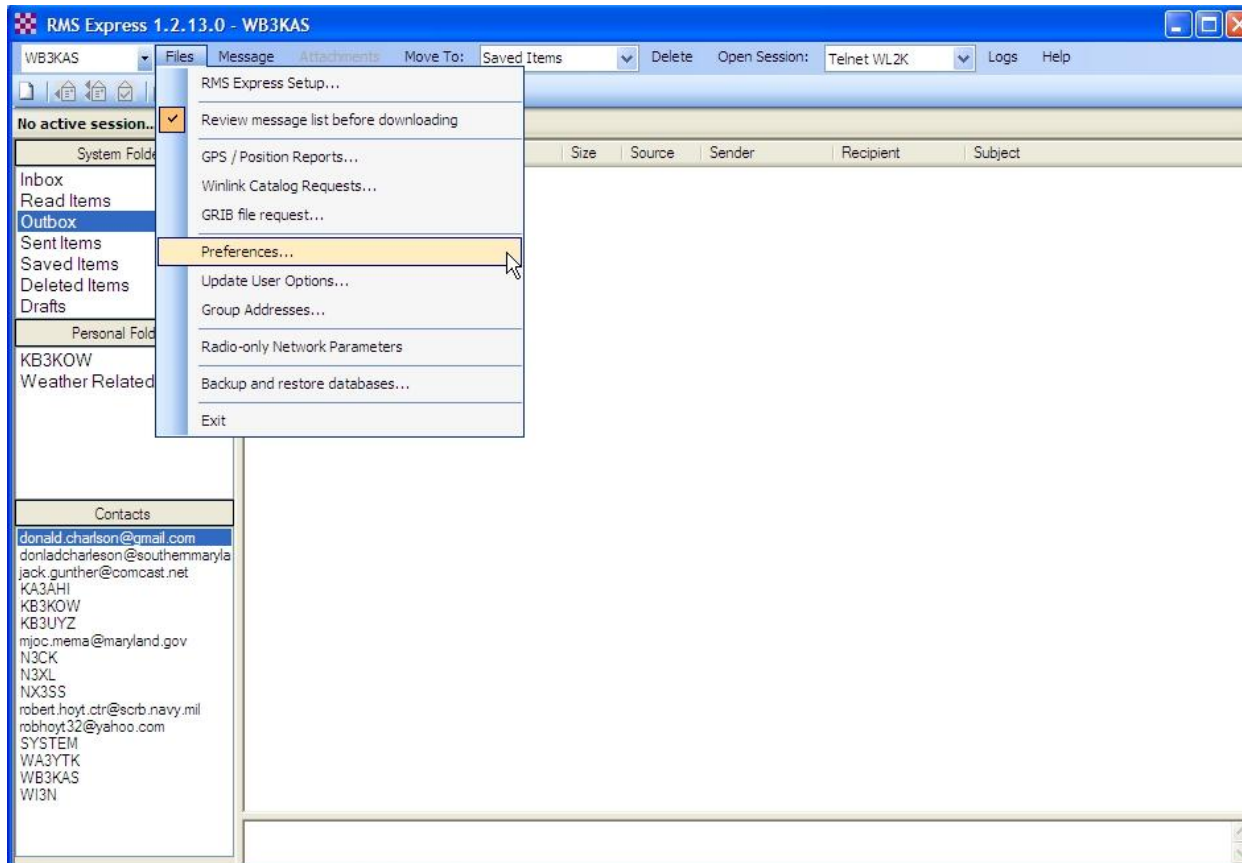
RMS Express Installation Screens



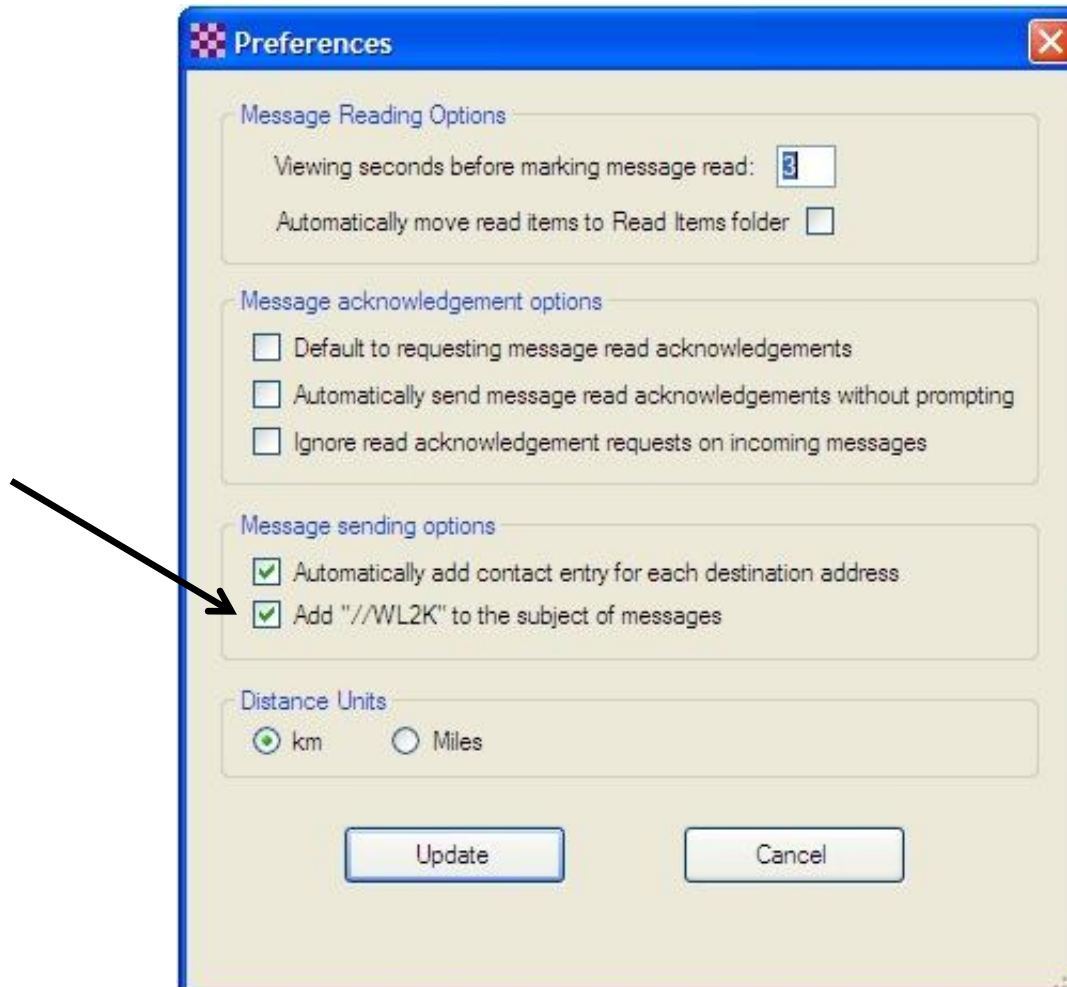
RMS Express Installation Screens



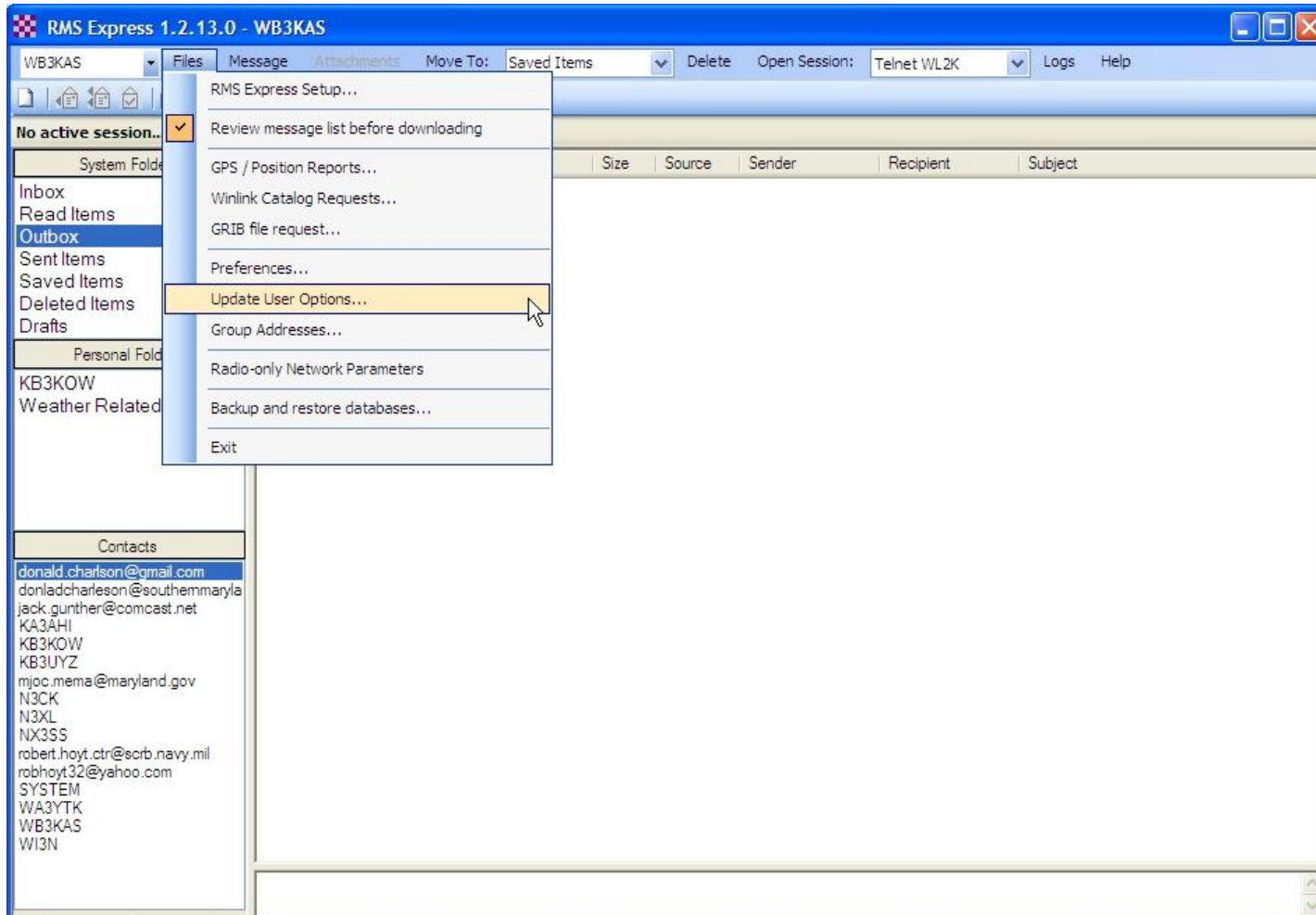
RMS Express Installation Screens



RMS Express Installation Screens



RMS Express Installation Screens



RMS Express Installation Screens

User Options

This dialog will create a message to request or change your user options. Once created the message must be forwarded by radio or telnet to the Winlink system.

Forward my message to this alternate address. Make or leave blank to prevent forwarding:

Limit the size of messages (in compressed form) addressed to me to:

 Bytes

Use the follow out-of-country prefix with my callsign:

Use the follow out-of-country suffix with my callsign:

Query Only Post Cancel

Installation
Complete

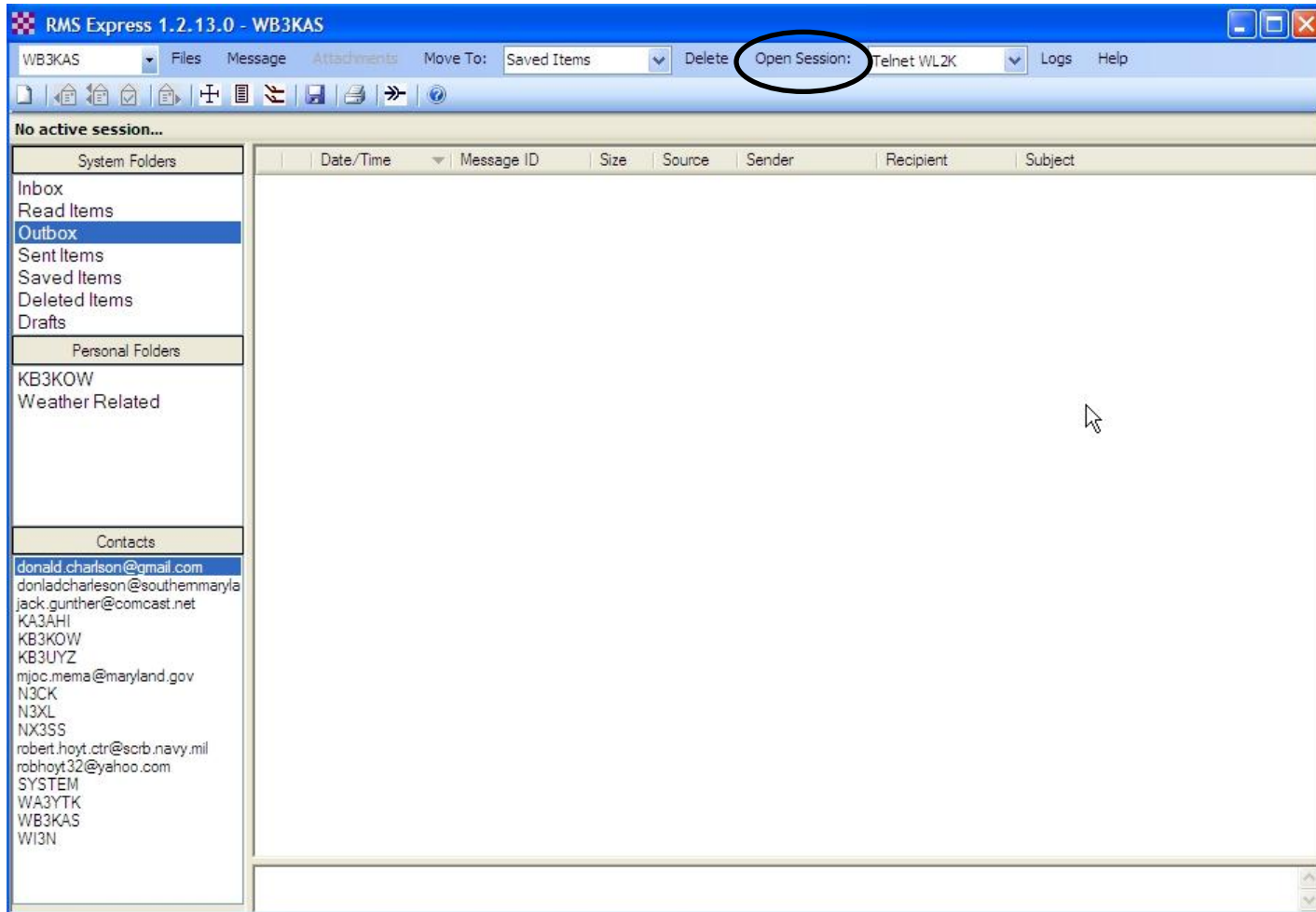
RMS Express Screen Icon



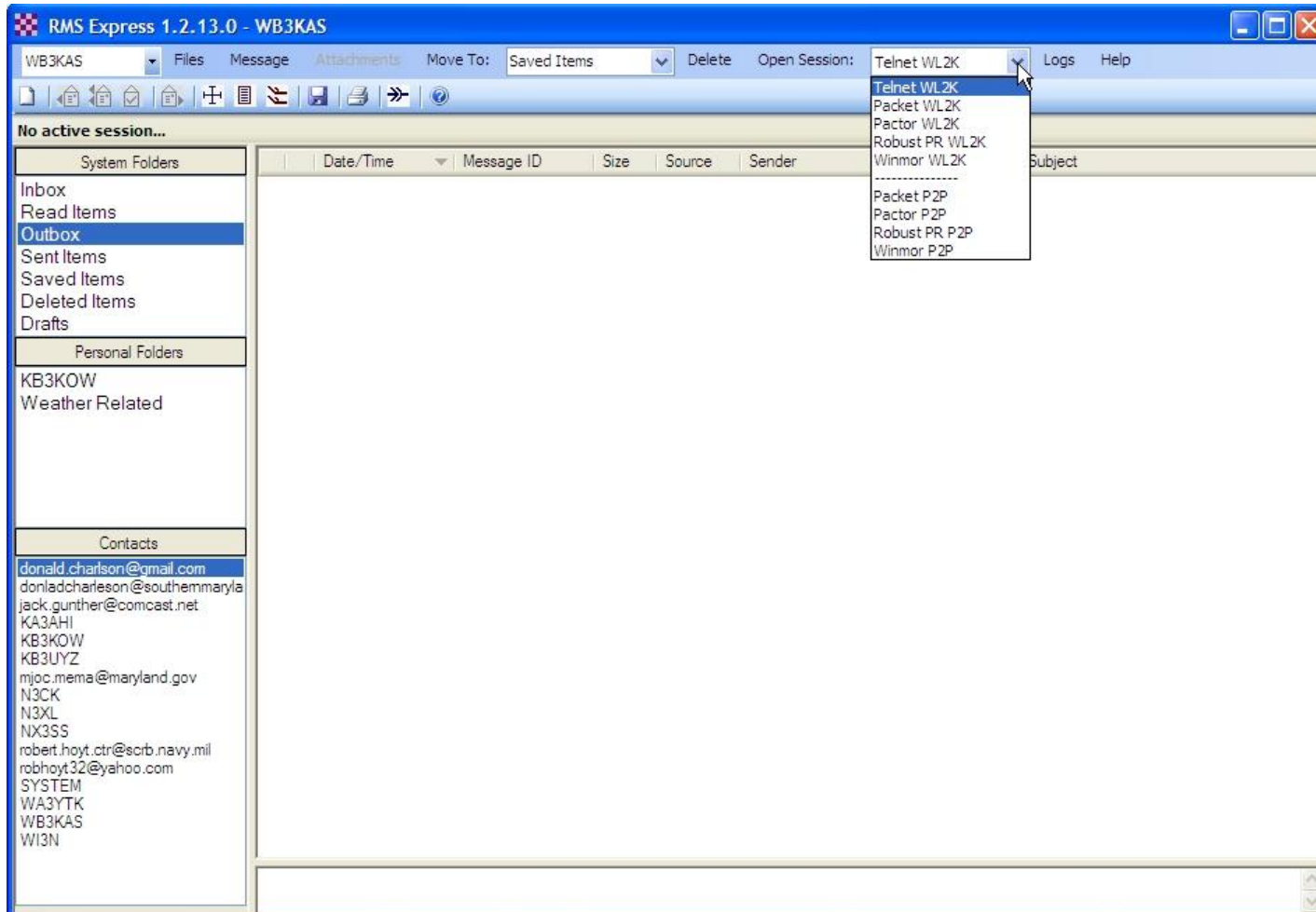
Configuring RMS Express Sessions

Configuring Telnet

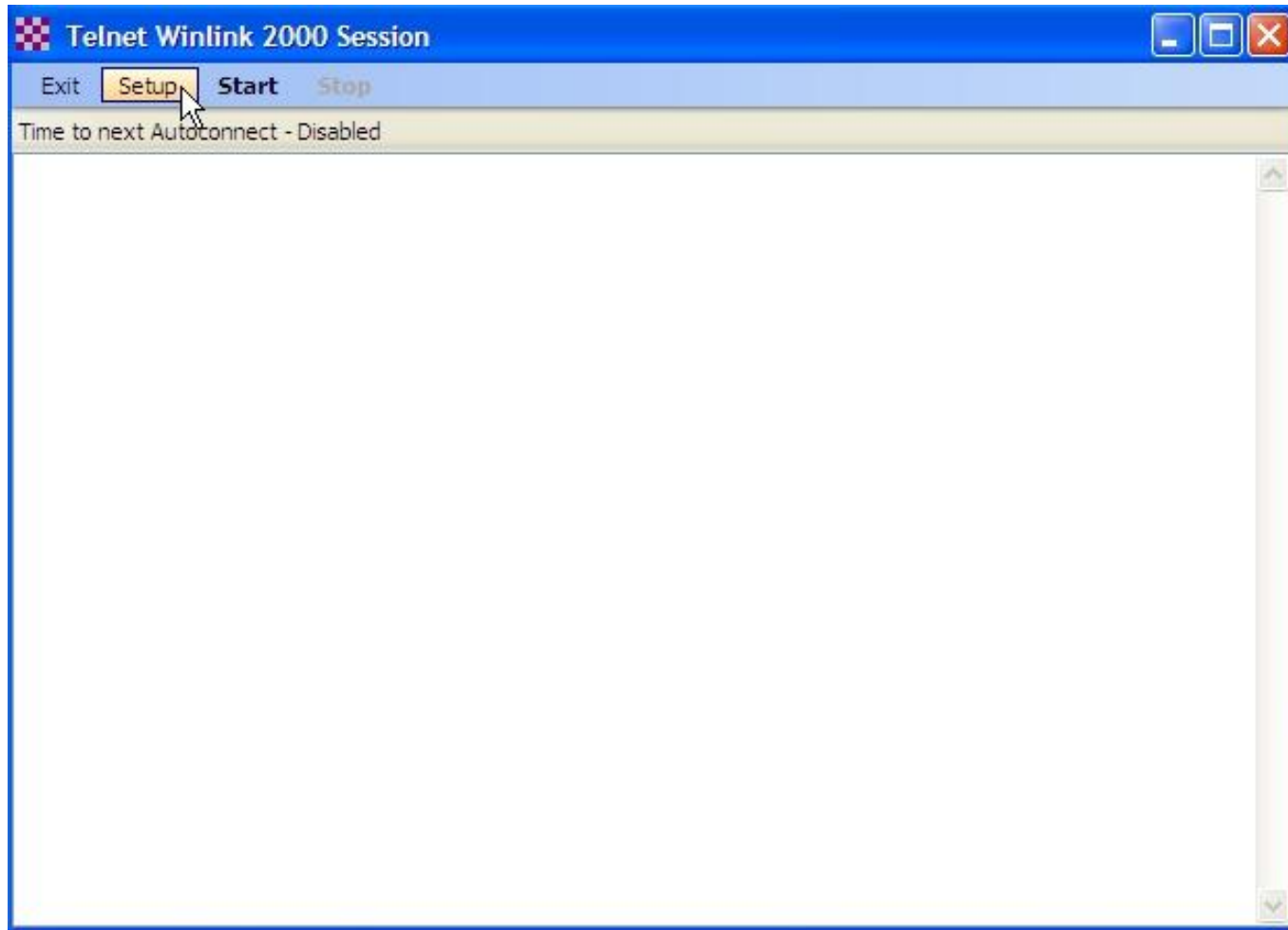
Telnet WL2K Session



Telnet WL2K Session



Telnet WL2K Session



Telnet WL2K Session

Telnet Properties

Telnet Connection
Telnet by default always connects to the first available CMS site. This is normally all that is required and no telnet properties need to be set.

If you have a need to connect to an RMS Relay site then check the box below and enter a path name to the site. If RMS Relay is running on the same machine as this program use the path name 127.0.0.1.

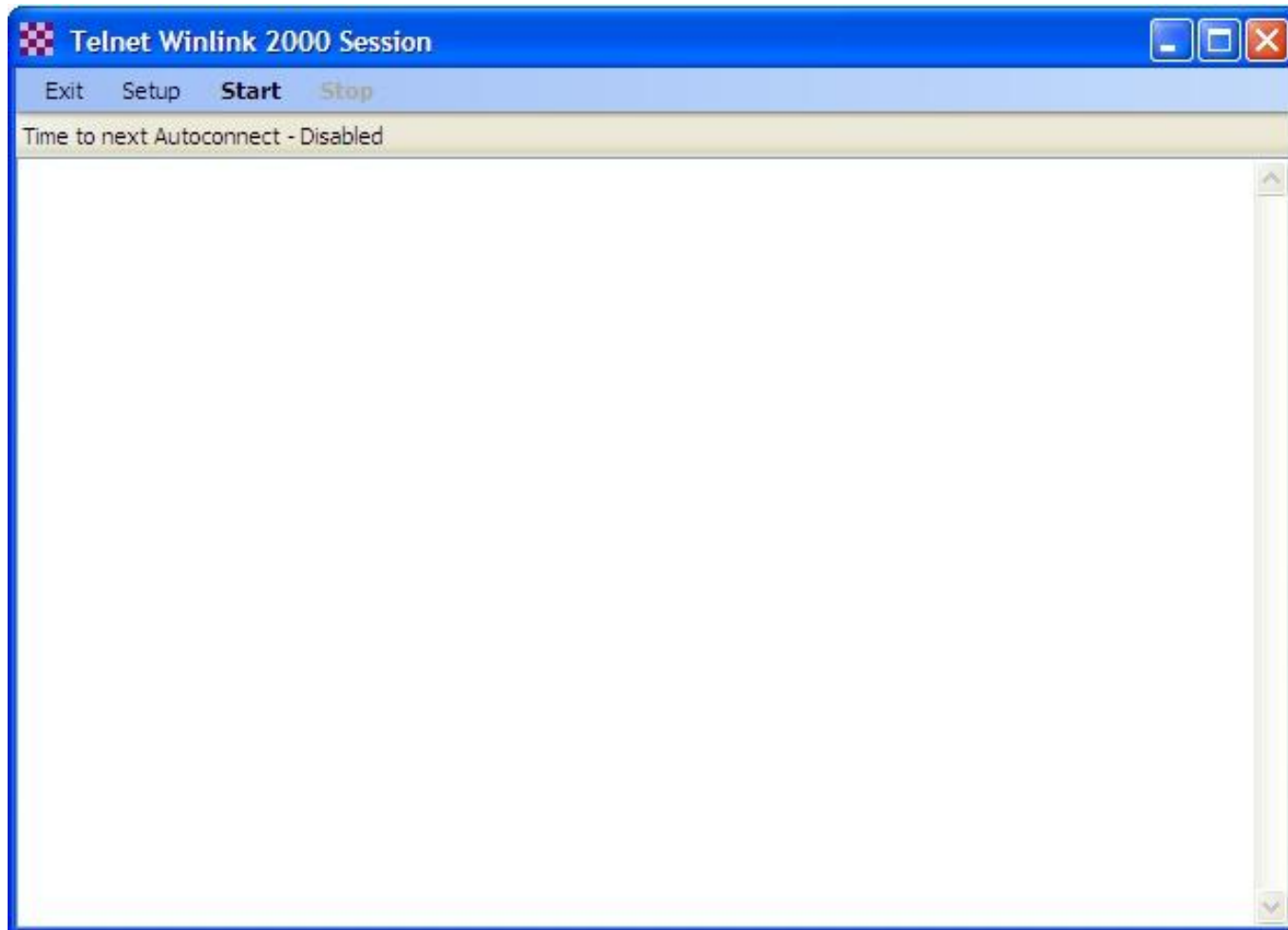
Use RMS Relay

TCP/IP path to the RMS Relay site:

Local IP address:

AutoConnect Time
 Times shorter than 15 minutes should be used only for emergency or priority situations.

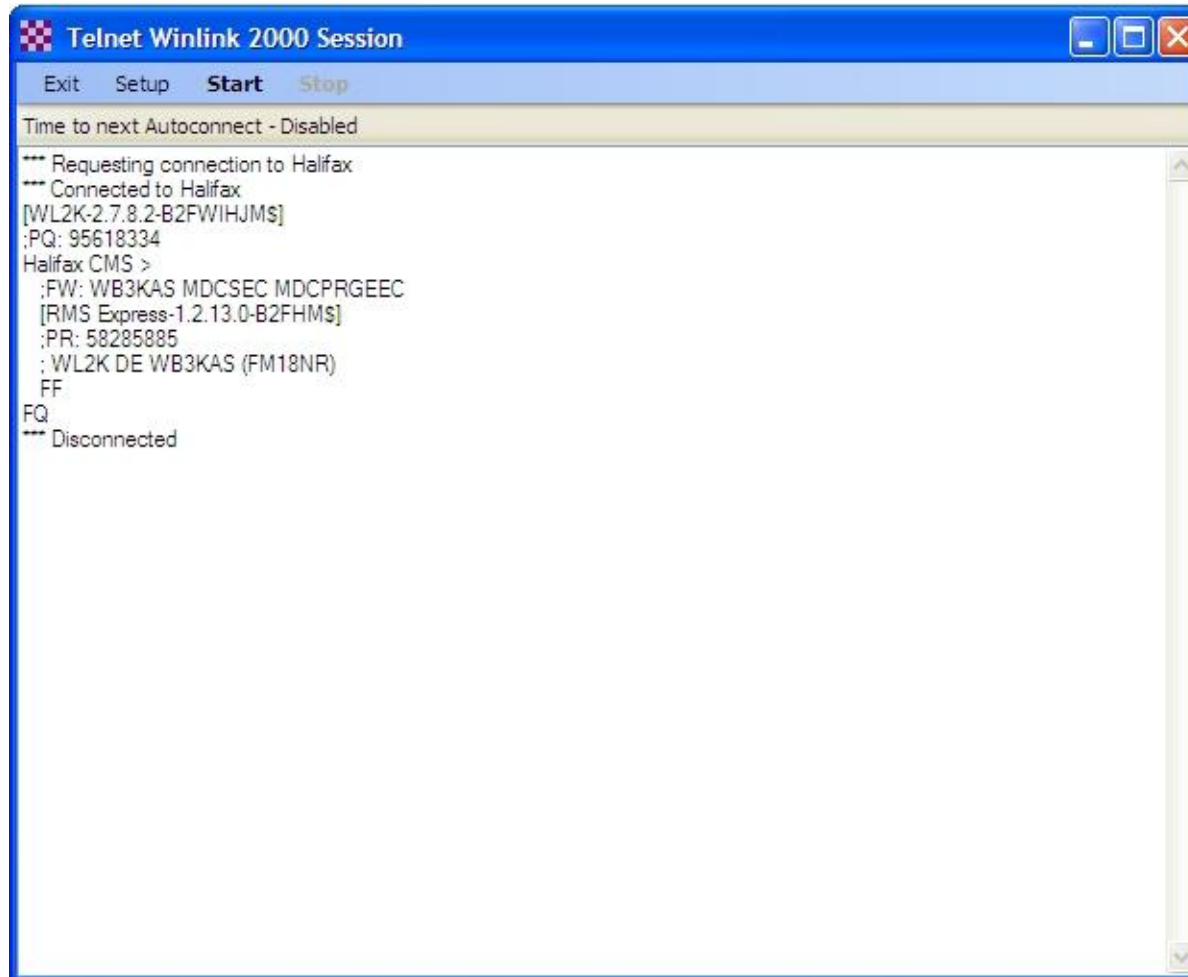
Telnet WL2K Session



Telnet WL2K Session

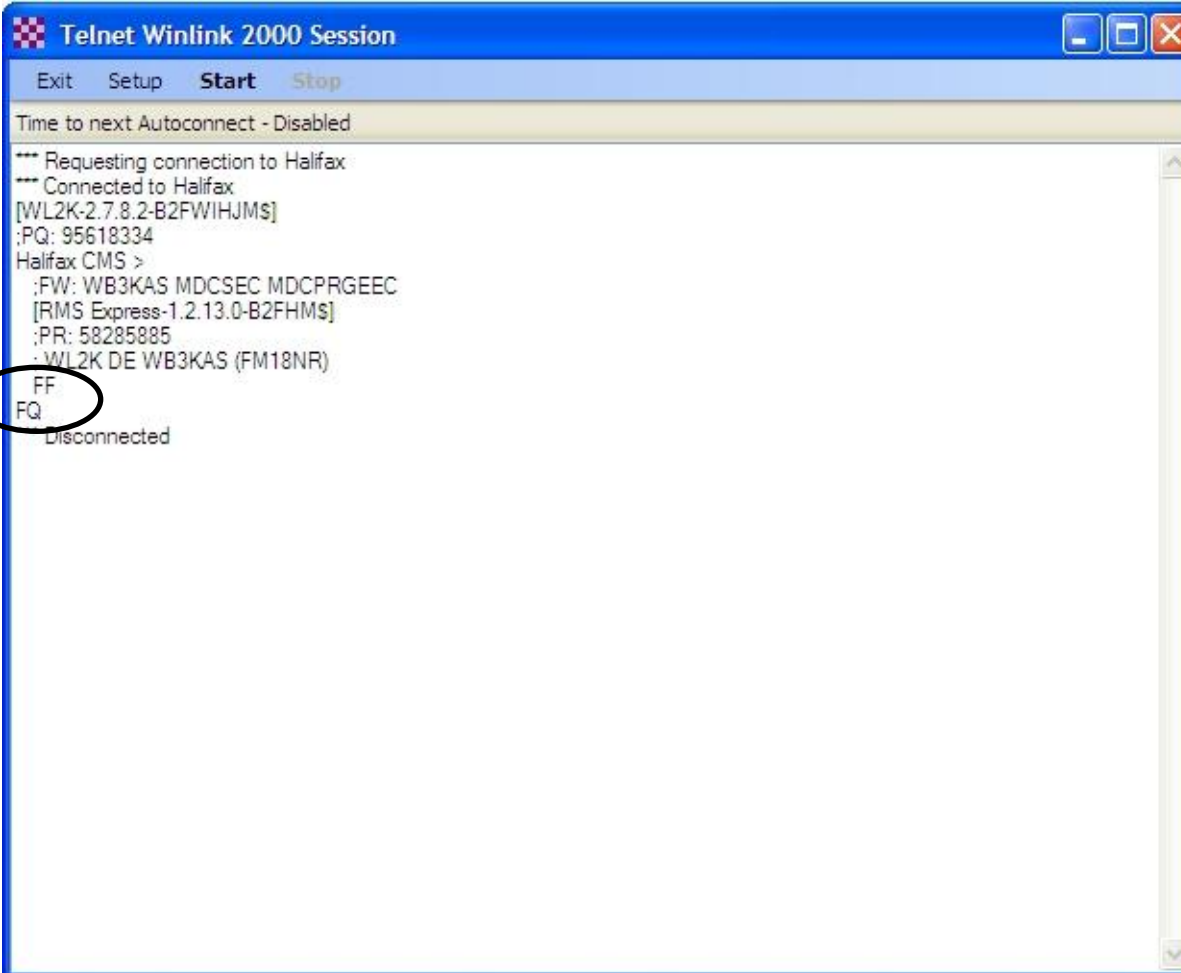


Telnet WL2K Session



```
Telnet Winlink 2000 Session
Exit  Setup  Start  Stop
Time to next Autoconnect - Disabled
*** Requesting connection to Halifax
*** Connected to Halifax
[WL2K-2.7.8.2-B2FWIHJM$]
;PQ: 95618334
Halifax CMS >
;FW: WB3KAS MDCSEC MDCPRGEEC
[RMS Express-1.2.13.0-B2FHMs]
;PR: 58285885
; WL2K DE WB3KAS (FM18NR)
FF
FQ
*** Disconnected
```

Telnet WL2K Session



```
Telnet Winlink 2000 Session
Exit Setup Start Stop
Time to next Autoconnect - Disabled
*** Requesting connection to Halifax
*** Connected to Halifax
[WL2K-2.7.8.2-B2FWIHJM$]
;PQ: 95618334
Halifax CMS >
;FW: WB3KAS MDCSEC MDCPRGEEC
[RMS Express-1.2.13.0-B2FHMs]
;PR: 58285885
;WL2K DE WB3KAS (FM18NR)
FF
FQ
Disconnected
```

Telnet WL2K Session



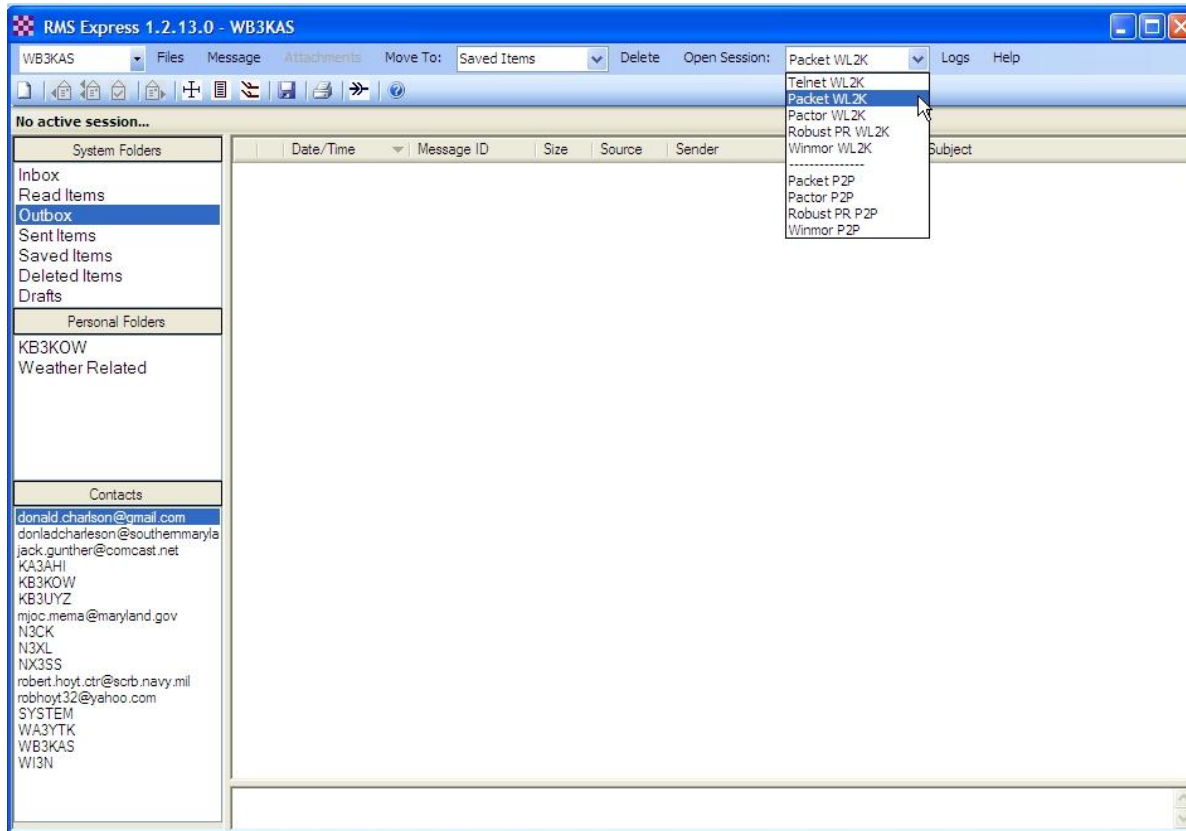
```
Telnet Winlink 2000 Session
Exit Setup Start Stop
Time to next Autoconnect - Disabled
*** Requesting connection to Halifax:
*** Connected to Halifax
[WL2K-2.7.8.2-B2FWIHJMs]
;PQ: 95618334
Halifax CMS >
;FW: WB3KAS MDCSEC MDCPRGEEC
[RMS Express-1.2.13.0-B2FHMs]
;PR: 58285885
; WL2K DE WB3KAS (FM18NR)
FF
FQ
*** Disconnected
```

“FF” indicates you have no messages for the CMS servers

“FQ” indicates the server has no messages for you

Configuring Packet

Packet WL2K Session



Packet WL2K Session

Packet WL2K/P2P Setup

TNC Connection

Packet TNC Type: Kantronics

Packet TNC Model: KPC-3+

Serial Port:

Serial Port Baud: 9600

AutoConnect Time: 15 Minutes

TNC Parameters

1200 Baud 9600 Baud

TX Delay (Milliseconds):	300	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	4	2
Persistence:	64	224
Slot time:	30	20
Maximum Retries:	10	5
Disable Xmt Level Adjust <input type="checkbox"/>	Transmit Level: 100	100

Update Cancel

Packet WL2K Session

Packet WL2K/P2P Setup

TNC Connection

Packet TNC Type: Kantronics

Packet TNC Model: KPC-3+

Serial Port: [Empty]

Serial Port Baud: 9600

AutoConnect Time: 15 Minutes

TNC Parameters

1200 Baud 9600 Baud

Parameter	1200 Baud	9600 Baud
TX Delay (Milliseconds):	300	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	4	2
Persistence:	64	224
Slot time:	30	20
Maximum Retries:	10	5
Transmit Level:	100	100

Disable Xmt Level Adjust

Update Cancel

Packet WL2K Session

Packet WL2K/P2P Setup

TNC Connection

Packet TNC Type: Kantronics

Packet TNC Model: KPC-3+

Serial Port: []

Serial Port Baud: 9600

AutoConnect Time: 15 Minutes

TNC Parameters

1200 Baud 9600 Baud

TX Delay (Milliseconds):	300	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	4	2
Persistence:	64	224
Slot time:	30	20
Maximum Retries:	10	5
Disable Xmt Level Adjust <input type="checkbox"/>	Transmit Level: 100	100

Update Cancel

Packet WL2K Session

Packet WL2K/P2P Setup

TNC Connection

Packet TNC Type: Kantronics

Packet TNC Model: KPC-3+

Serial Port: [Empty]

Serial Port Baud: 9600

AutoConnect Time: 15 Minutes

TNC Parameters

1200 Baud 9600 Baud

TX Delay (Milliseconds): 300

Maximum Packet Length: 128

Maximum Frames: 2

Frack: 4

Persistence: 64

Slot time: 30

Maximum Retries: 10

Disable Xmt Level Adjust

Transmit Level: 100

Update Cancel

Packet WL2K Session

The screenshot shows the 'Packet WL2K/P2P Setup' dialog box. It is divided into two main sections: 'TNC Connection' and 'TNC Parameters'. In the 'TNC Connection' section, the 'Packet TNC Type' is set to 'Kantronics', the 'Packet TNC Model' is 'KPC-3+', the 'Serial Port' is empty, and the 'Serial Port Baud' is '9600'. The 'AutoConnect Time' is set to '15 Minutes'. In the 'TNC Parameters' section, there are two columns of settings for '1200 Baud' and '9600 Baud'. The '1200 Baud' column is selected. The settings for '1200 Baud' are: TX Delay (300), Maximum Packet Length (128), Maximum Frames (2), Frack (4), Persistence (64), Slot time (30), Maximum Retries (10), and Transmit Level (100). The settings for '9600 Baud' are: TX Delay (300), Maximum Packet Length (255), Maximum Frames (7), Frack (2), Persistence (224), Slot time (20), Maximum Retries (5), and Transmit Level (100). There is also a 'Disable Xmt Level Adjust' checkbox which is unchecked. At the bottom of the dialog are 'Update' and 'Cancel' buttons. Several fields are circled in black: 'Packet TNC Type', 'AutoConnect Time', 'Serial Port', and 'Serial Port Baud'.

TNC Connection

Packet TNC Type: Kantronics

Packet TNC Model: KPC-3+

Serial Port: [Empty]

Serial Port Baud: 9600

AutoConnect Time: 15 Minutes

TNC Parameters

1200 Baud 9600 Baud

Parameter	1200 Baud	9600 Baud
TX Delay (Milliseconds):	300	300
Maximum Packet Length:	128	255
Maximum Frames:	2	7
Frack:	4	2
Persistence:	64	224
Slot time:	30	20
Maximum Retries:	10	5
Transmit Level:	100	100

Disable Xmt Level Adjust

Update Cancel

Packet WL2K Session

The screenshot shows the 'Packet WL2K/P2P Setup' dialog box. It is divided into two main sections: 'TNC Connection' and 'TNC Parameters'. Several fields are circled in black to highlight them.

TNC Connection

- Packet TNC Type: Kantronics
- Packet TNC Model: KPC-3+
- Serial Port: [Empty]
- Serial Port Baud: 9600
- AutoConnect Time: 15 Minutes

TNC Parameters

Radio buttons for 1200 Baud (selected) and 9600 Baud.

Parameter	1200 Baud	9600 Baud
TX Delay (Milliseconds)	300	300
Maximum Packet Length	128	255
Maximum Frames	2	7
Frack	4	2
Persistence	64	224
Slot time	30	20
Maximum Retries	10	5
Transmit Level	100	100

Disable Xmt Level Adjust

Buttons: Update, Cancel

Packet WL2K Session

The screenshot shows the 'Packet WL2K/P2P Setup' dialog box. It is divided into two main sections: 'TNC Connection' and 'TNC Parameters'. Several fields are circled in black to highlight specific settings.

TNC Connection Section:

- Packet TNC Type:** Kantronics (circled)
- Packet TNC Model:** KPC-3+
- Serial Port:** (empty, circled)
- Serial Port Baud:** 9600 (circled)
- AutoConnect Time:** 15 Minutes

TNC Parameters Section:

- 1200 Baud:** Selected radio button (circled)
- 9600 Baud:** Unselected radio button
- TX Delay (Milliseconds):** 300
- Maximum Packet Length:** 128
- Maximum Frames:** 2
- Frack:** 4
- Persistence:** 64
- Slot time:** 30
- Maximum Retries:** 10
- Disable Xmt Level Adjust:**
- Transmit Level:** 100

Buttons at the bottom: Update, Cancel

Packet WL2K Session

The screenshot shows the 'Packet WL2K/P2P Setup' dialog box. It is divided into two main sections: 'TNC Connection' and 'TNC Parameters'. Several fields are circled in black to highlight specific settings.

TNC Connection Section:

- Packet TNC Type:** Kantronics (circled)
- Packet TNC Model:** KPC-3+
- Serial Port:** (empty)
- Serial Port Baud:** 9600 (circled)
- AutoConnect Time:** 15 Minutes

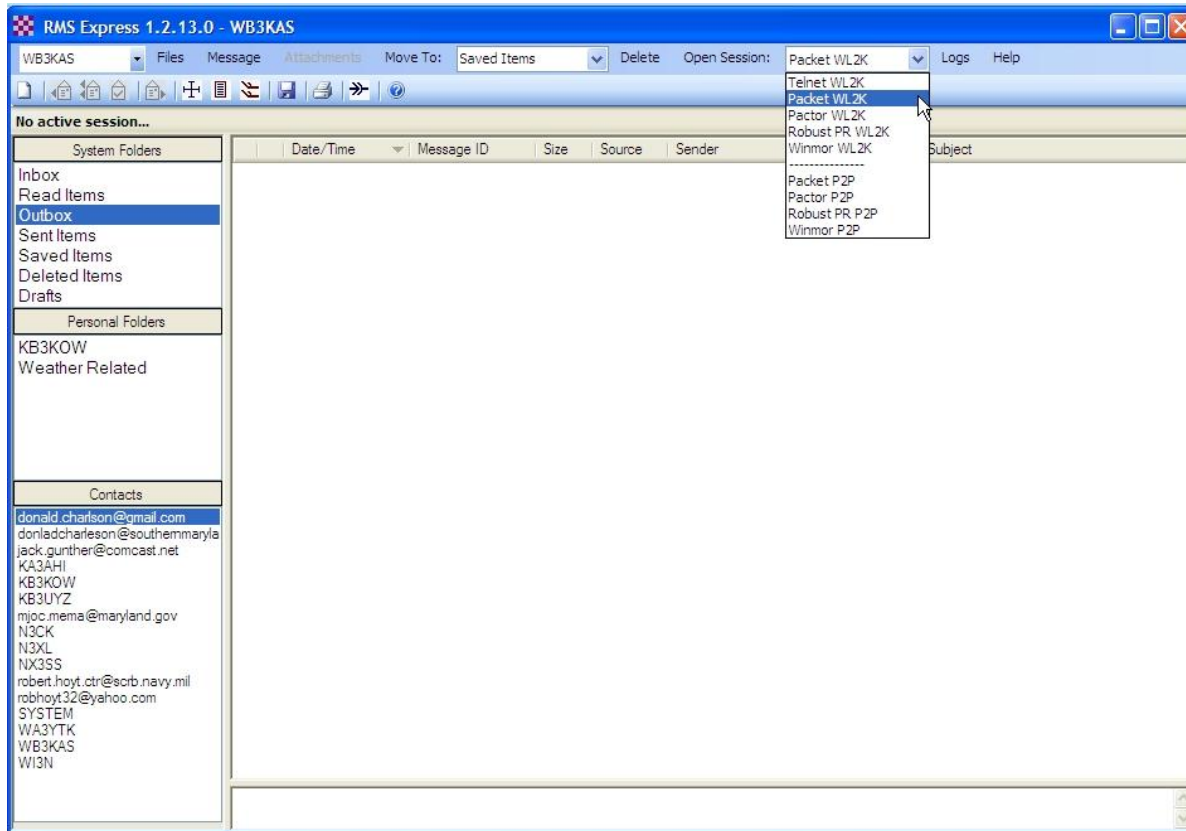
TNC Parameters Section:

- 1200 Baud** (radio button selected, circled) vs 9600 Baud
- TX Delay (Milliseconds):** 300
- Maximum Packet Length:** 128
- Maximum Frames:** 2
- Frack:** 4
- Persistence:** 64
- Slot time:** 30
- Maximum Retries:** 10
- Disable Xmt Level Adjust:**
- Transmit Level:** 100

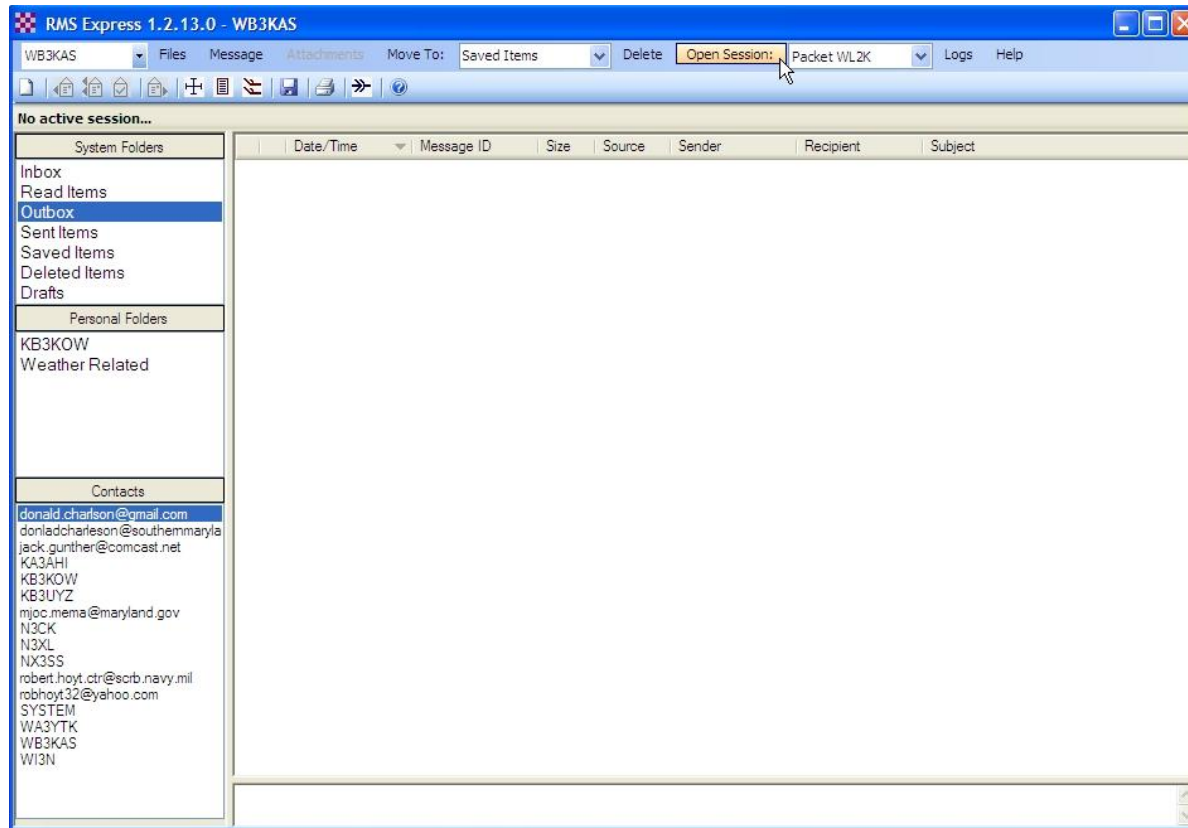
Buttons:

- Update** (circled)
- Cancel**

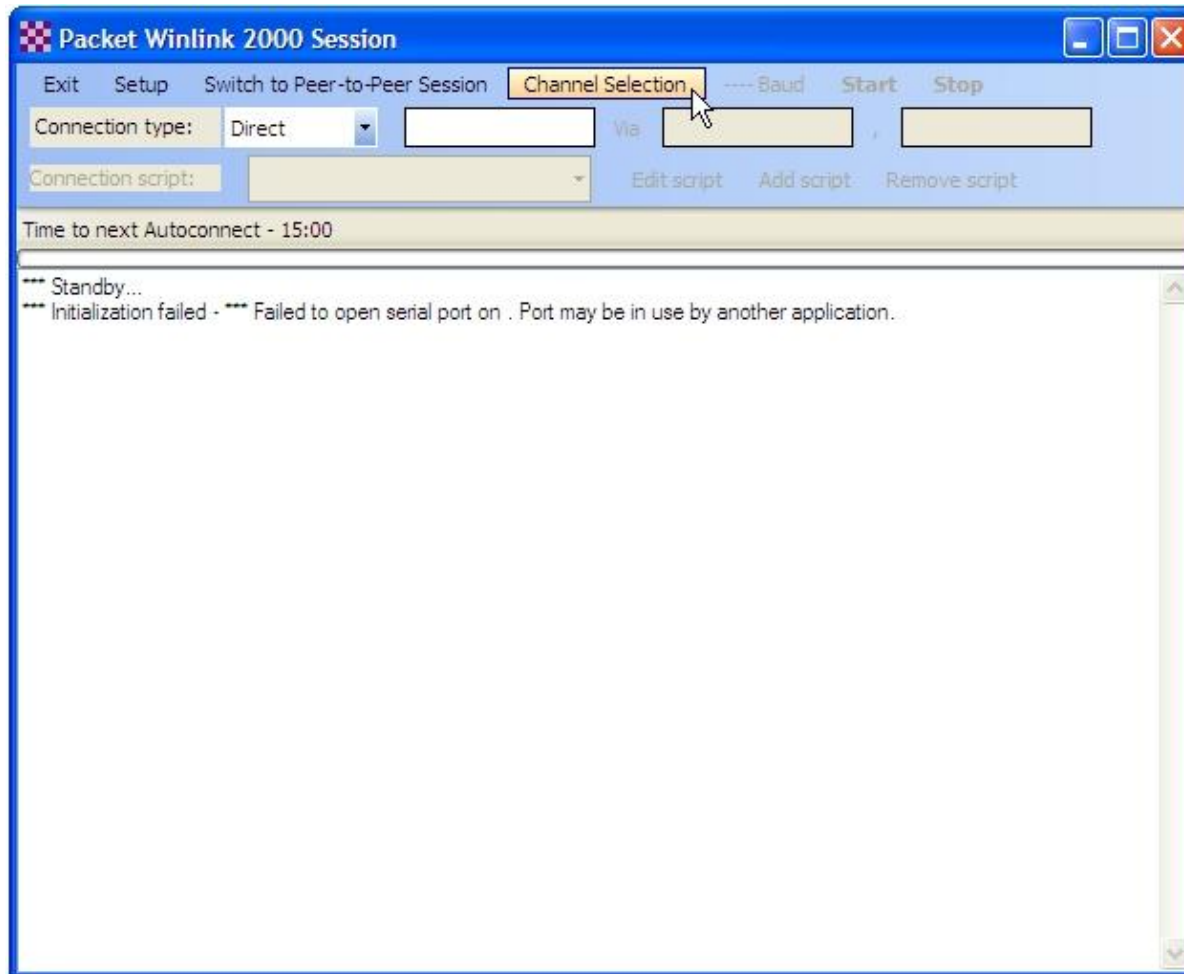
Packet WL2K Session



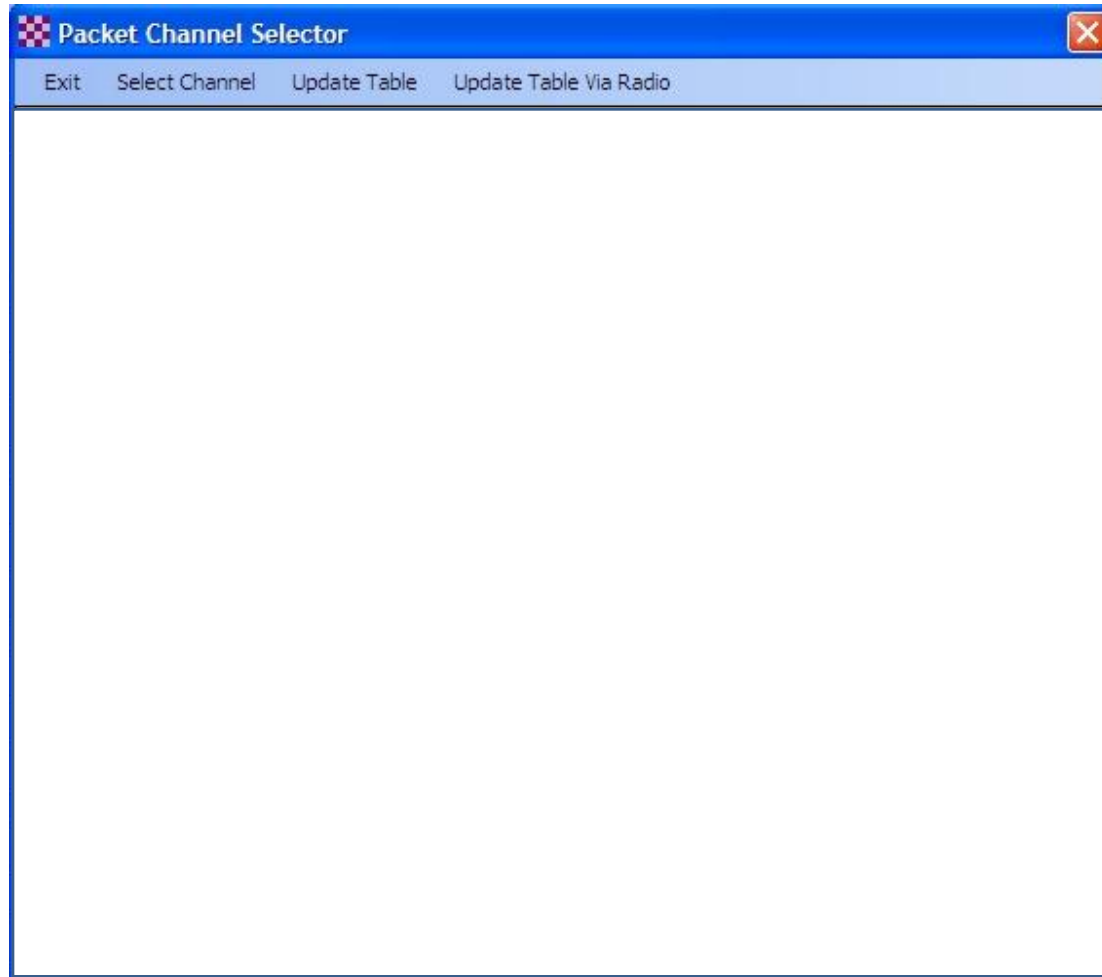
Packet WL2K Session



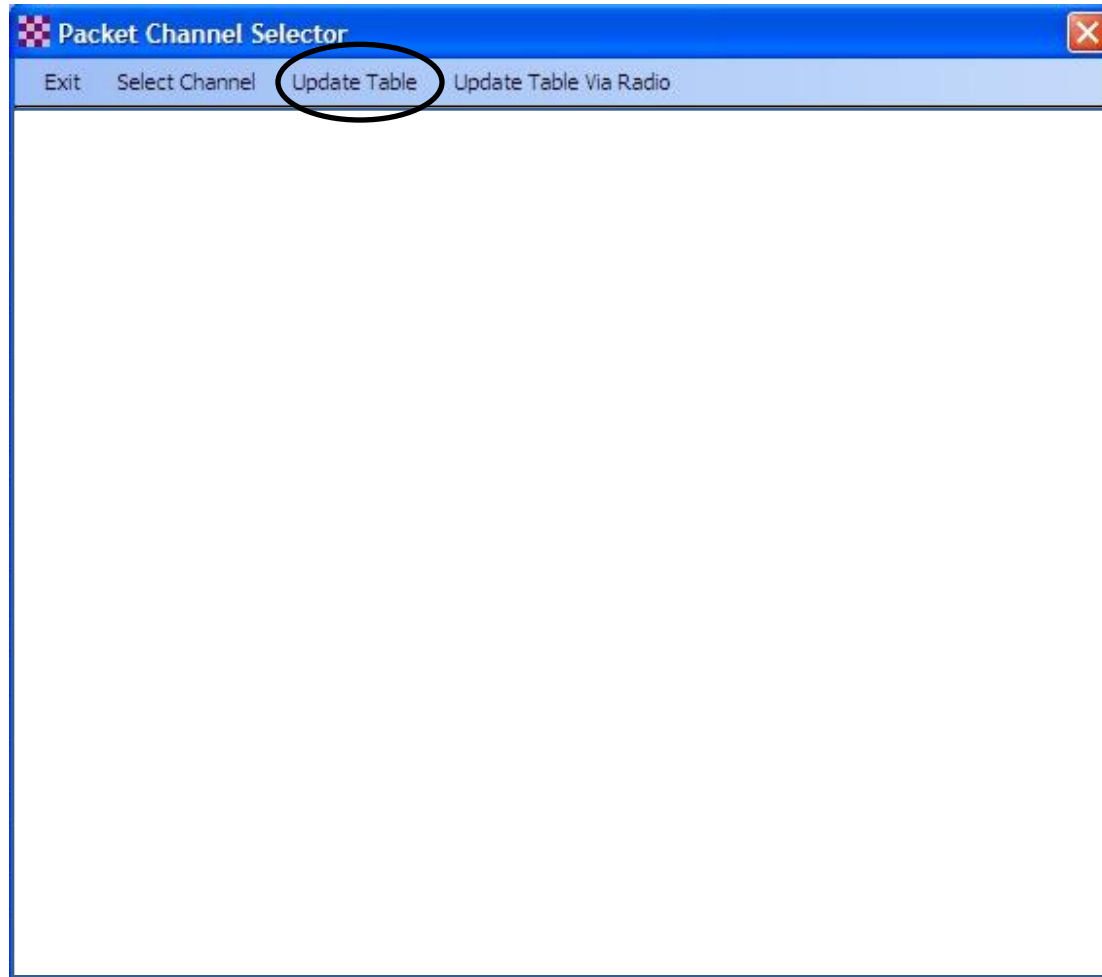
Packet WL2K Session



Packet WL2K Session



Packet WL2K Session



Packet WL2K Session



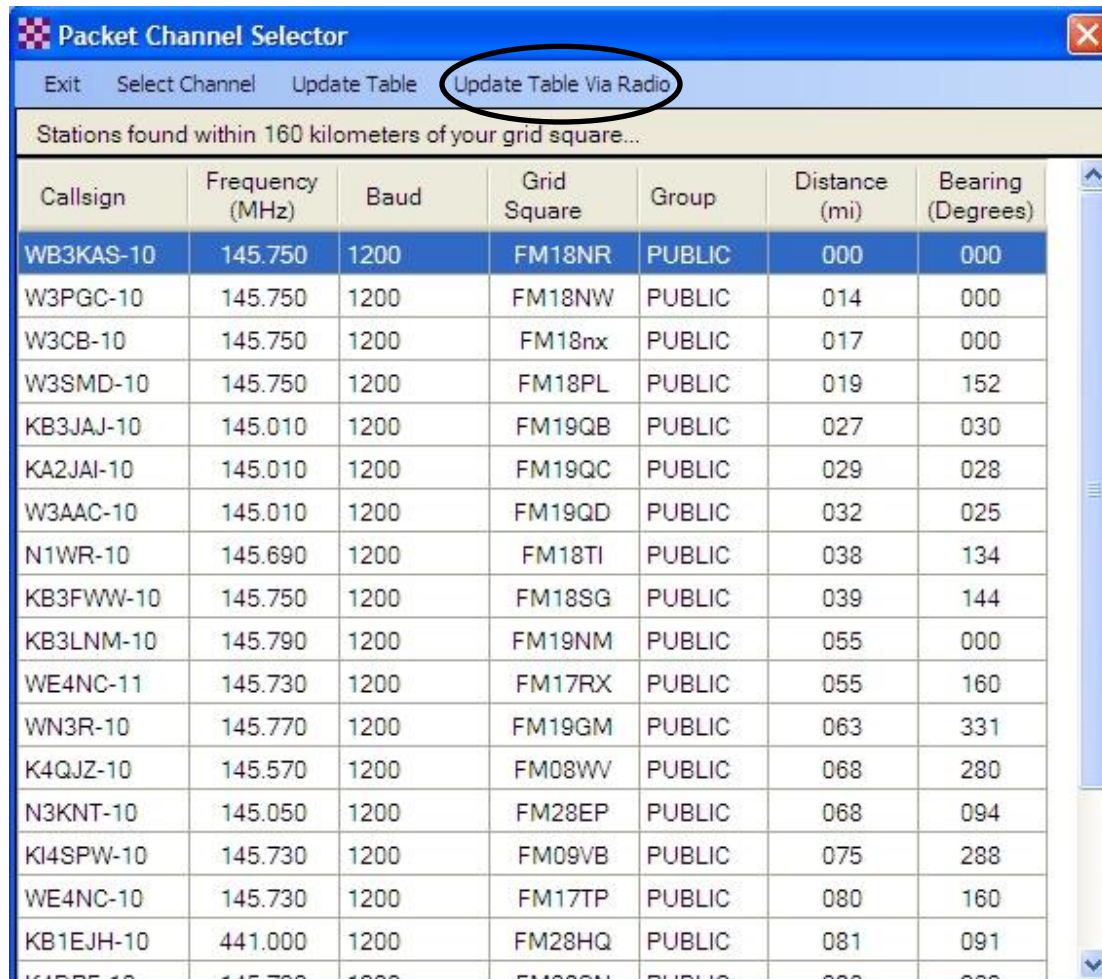
Packet Channel Selector

Exit Select Channel Update Table Update Table Via Radio

Stations found within 160 kilometers of your grid square...

Callsign	Frequency (MHz)	Baud	Grid Square	Group	Distance (mi)	Bearing (Degrees)
WB3KAS-10	145.750	1200	FM18NR	PUBLIC	000	000
W3PGC-10	145.750	1200	FM18NW	PUBLIC	014	000
W3CB-10	145.750	1200	FM18nx	PUBLIC	017	000
W3SMD-10	145.750	1200	FM18PL	PUBLIC	019	152
KB3JAJ-10	145.010	1200	FM19QB	PUBLIC	027	030
KA2JAI-10	145.010	1200	FM19QC	PUBLIC	029	028
W3AAC-10	145.010	1200	FM19QD	PUBLIC	032	025
N1WR-10	145.690	1200	FM18TI	PUBLIC	038	134
KB3FWW-10	145.750	1200	FM18SG	PUBLIC	039	144
KB3LNM-10	145.790	1200	FM19NM	PUBLIC	055	000
WE4NC-11	145.730	1200	FM17RX	PUBLIC	055	160
WN3R-10	145.770	1200	FM19GM	PUBLIC	063	331
K4QJZ-10	145.570	1200	FM08WV	PUBLIC	068	280
N3KNT-10	145.050	1200	FM28EP	PUBLIC	068	094
KI4SPW-10	145.730	1200	FM09VB	PUBLIC	075	288
WE4NC-10	145.730	1200	FM17TP	PUBLIC	080	160
KB1EJH-10	441.000	1200	FM28HQ	PUBLIC	081	091
K4DRE-10	145.730	1200	FM09BN	PUBLIC	086	080

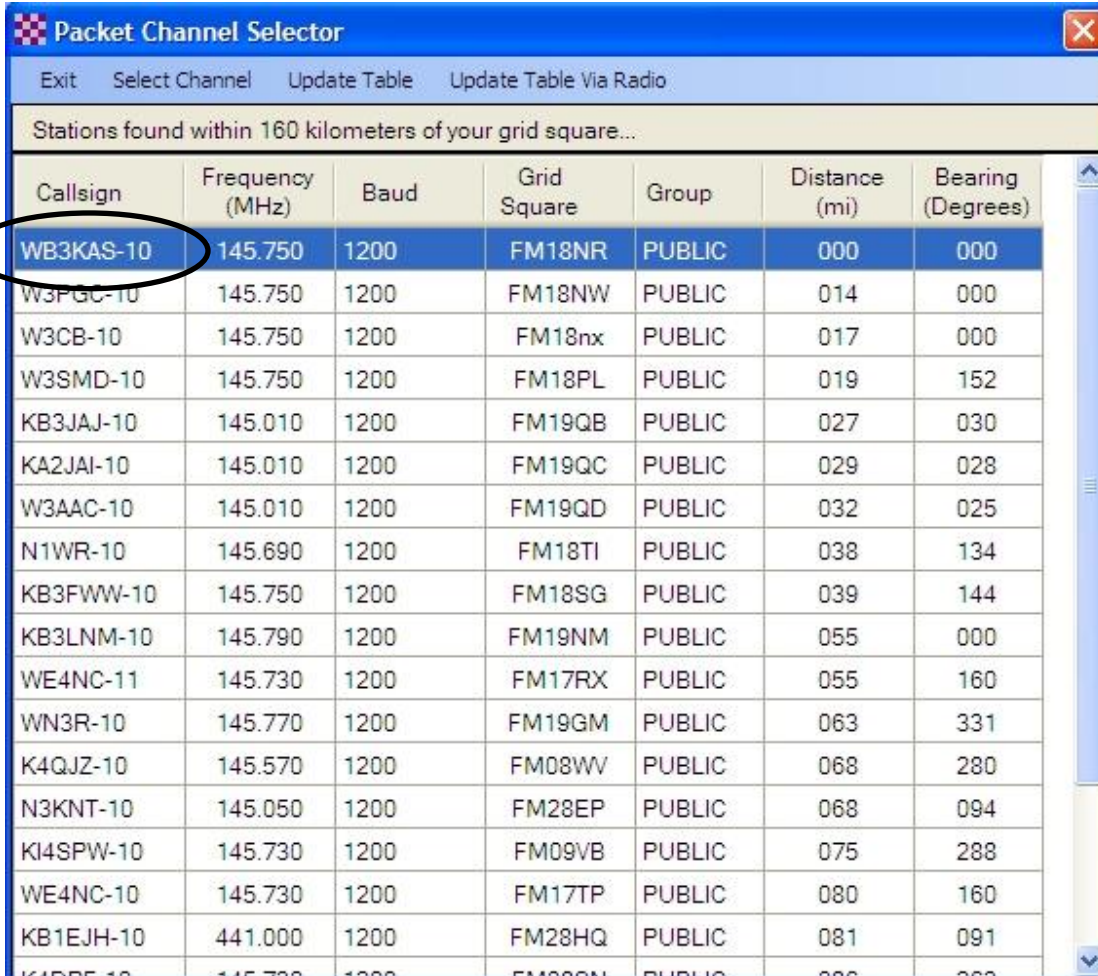
Packet WL2K Session



The screenshot shows the 'Packet Channel Selector' window. The title bar includes a close button (X) and the text 'Packet Channel Selector'. Below the title bar is a menu bar with the following items: 'Exit', 'Select Channel', 'Update Table', and 'Update Table Via Radio'. The 'Update Table Via Radio' item is circled in black. Below the menu bar is a status bar that reads 'Stations found within 160 kilometers of your grid square...'. The main area of the window contains a table with the following columns: 'Callsign', 'Frequency (MHz)', 'Baud', 'Grid Square', 'Group', 'Distance (mi)', and 'Bearing (Degrees)'. The table lists 20 stations, with the first row highlighted in blue.

Callsign	Frequency (MHz)	Baud	Grid Square	Group	Distance (mi)	Bearing (Degrees)
WB3KAS-10	145.750	1200	FM18NR	PUBLIC	000	000
W3PGC-10	145.750	1200	FM18NW	PUBLIC	014	000
W3CB-10	145.750	1200	FM18nx	PUBLIC	017	000
W3SMD-10	145.750	1200	FM18PL	PUBLIC	019	152
KB3JAJ-10	145.010	1200	FM19QB	PUBLIC	027	030
KA2JAI-10	145.010	1200	FM19QC	PUBLIC	029	028
W3AAC-10	145.010	1200	FM19QD	PUBLIC	032	025
N1WR-10	145.690	1200	FM18TI	PUBLIC	038	134
KB3FWW-10	145.750	1200	FM18SG	PUBLIC	039	144
KB3LNM-10	145.790	1200	FM19NM	PUBLIC	055	000
WE4NC-11	145.730	1200	FM17RX	PUBLIC	055	160
WN3R-10	145.770	1200	FM19GM	PUBLIC	063	331
K4QJZ-10	145.570	1200	FM08WV	PUBLIC	068	280
N3KNT-10	145.050	1200	FM28EP	PUBLIC	068	094
KI4SPW-10	145.730	1200	FM09VB	PUBLIC	075	288
WE4NC-10	145.730	1200	FM17TP	PUBLIC	080	160
KB1EJH-10	441.000	1200	FM28HQ	PUBLIC	081	091
K4DRE-10	145.730	1200	FM09BN	PUBLIC	086	080

Packet WL2K Session



Packet Channel Selector

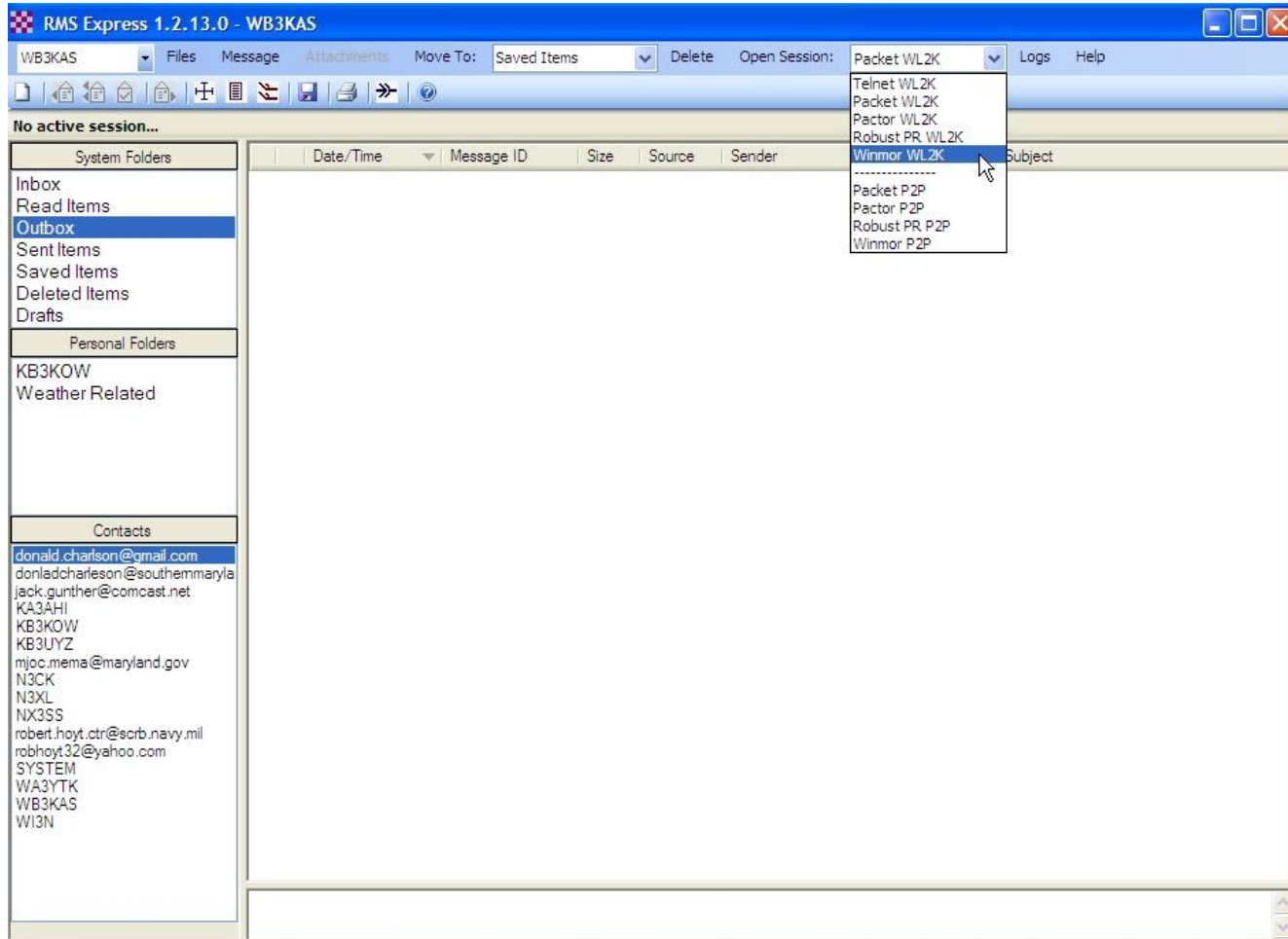
Exit Select Channel Update Table Update Table Via Radio

Stations found within 160 kilometers of your grid square...

Callsign	Frequency (MHz)	Baud	Grid Square	Group	Distance (mi)	Bearing (Degrees)
WB3KAS-10	145.750	1200	FM18NR	PUBLIC	000	000
W3PGC-10	145.750	1200	FM18NW	PUBLIC	014	000
W3CB-10	145.750	1200	FM18nx	PUBLIC	017	000
W3SMD-10	145.750	1200	FM18PL	PUBLIC	019	152
KB3JAJ-10	145.010	1200	FM19QB	PUBLIC	027	030
KA2JAI-10	145.010	1200	FM19QC	PUBLIC	029	028
W3AAC-10	145.010	1200	FM19QD	PUBLIC	032	025
N1WR-10	145.690	1200	FM18TI	PUBLIC	038	134
KB3FWW-10	145.750	1200	FM18SG	PUBLIC	039	144
KB3LNM-10	145.790	1200	FM19NM	PUBLIC	055	000
WE4NC-11	145.730	1200	FM17RX	PUBLIC	055	160
WN3R-10	145.770	1200	FM19GM	PUBLIC	063	331
K4QJZ-10	145.570	1200	FM08WV	PUBLIC	068	280
N3KNT-10	145.050	1200	FM28EP	PUBLIC	068	094
KI4SPW-10	145.730	1200	FM09VB	PUBLIC	075	288
WE4NC-10	145.730	1200	FM17TP	PUBLIC	080	160
KB1EJH-10	441.000	1200	FM28HQ	PUBLIC	081	091

Configuring WinMOR

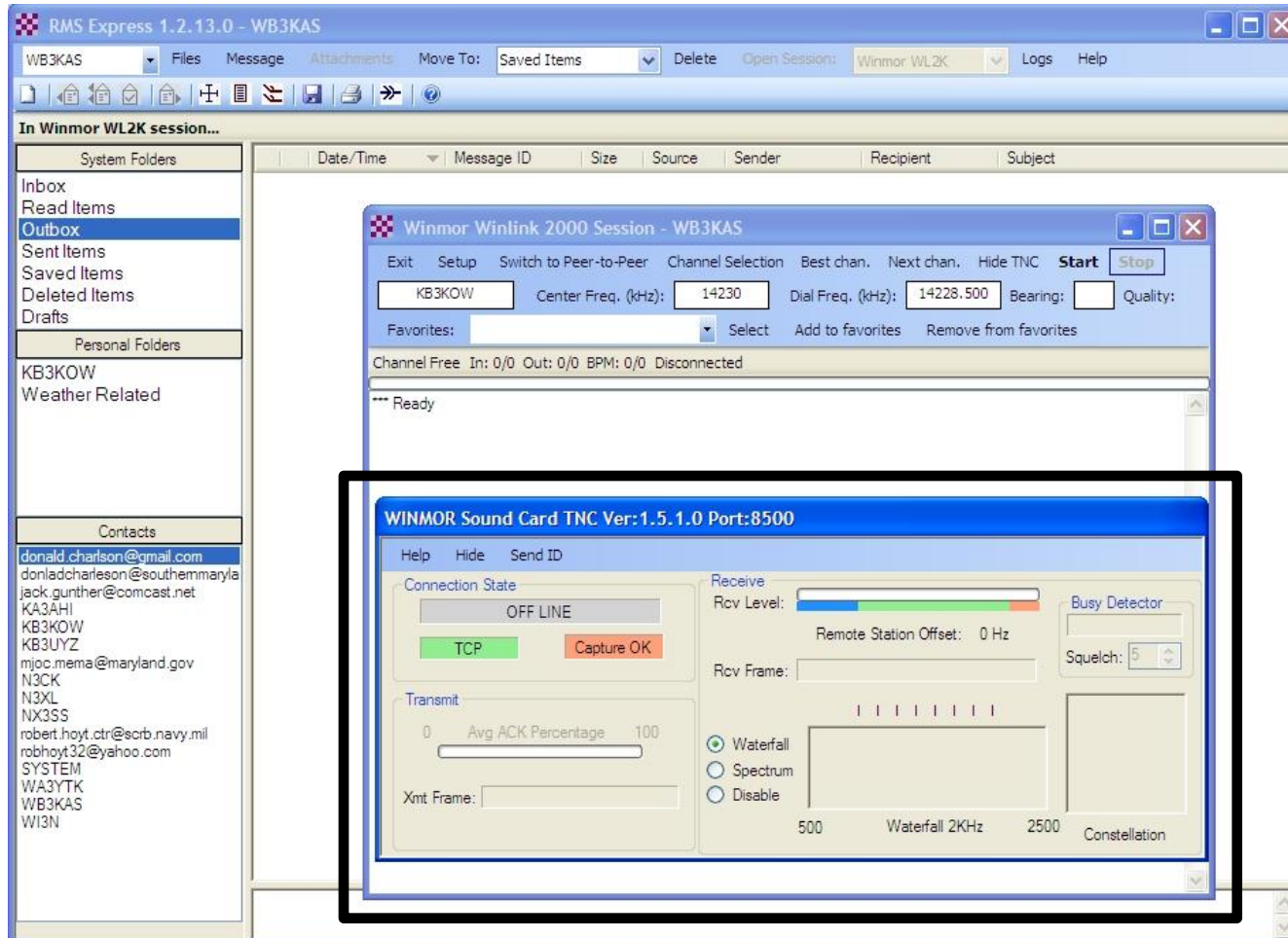
WinMOR WL2K Session



WinMOR WL2K Session

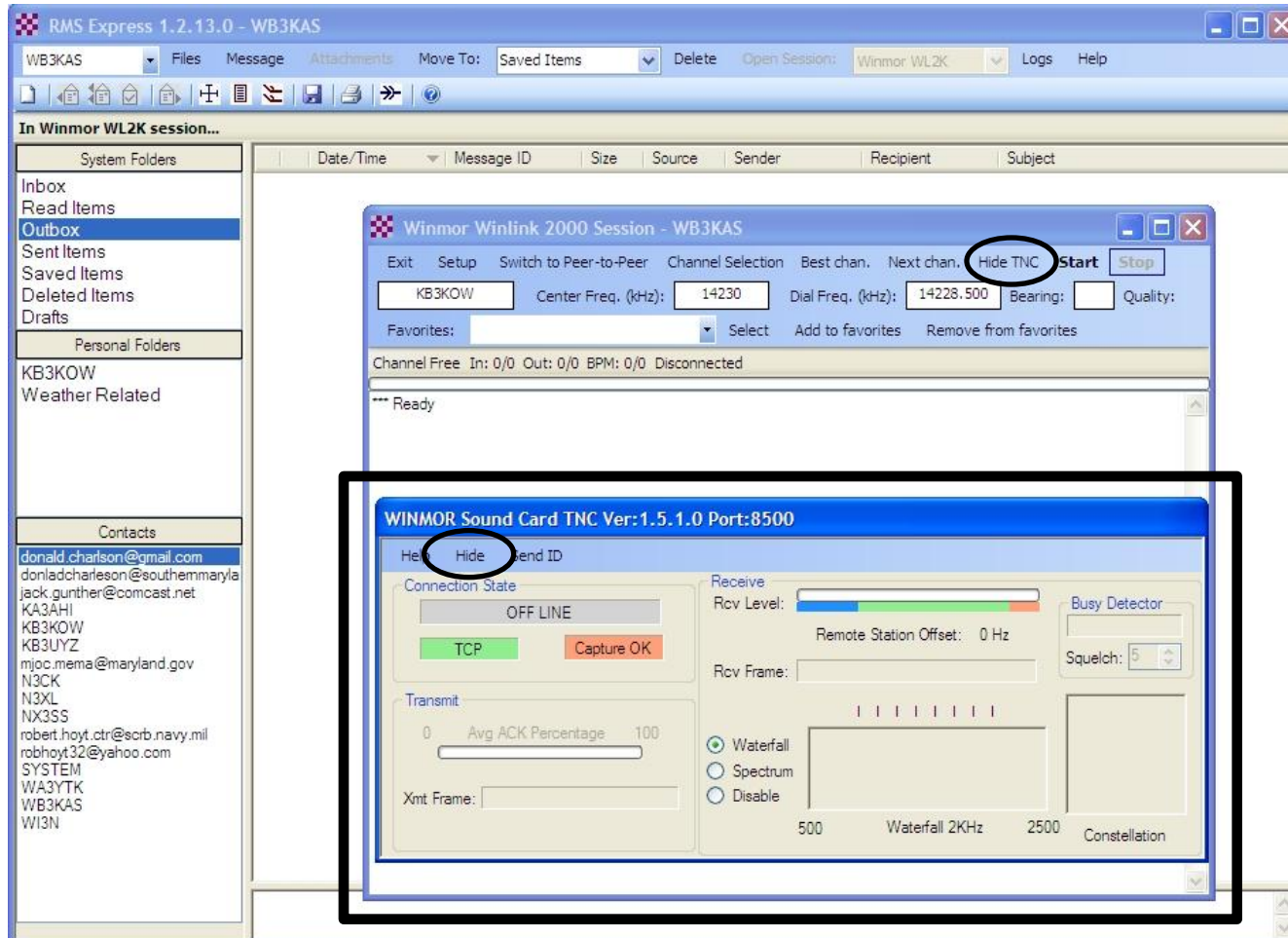
The screenshot displays the RMS Express 1.2.13.0 - WB3KAS software interface. The main window shows a list of folders (Inbox, Read Items, Outbox, Sent Items, Saved Items, Deleted Items, Drafts) and a list of contacts. A secondary window titled "Winmor Winlink 2000 Session - WB3KAS" is open, showing session parameters: Call Sign: KB3KOW, Center Freq. (kHz): 14230, Dial Freq. (kHz): 14228.500, Bearing: [empty], Quality: [empty]. The session status is "Channel Free In: 0/0 Out: 0/0 BPM: 0/0 Disconnected" and the text "Ready" is displayed. A third window titled "WINMOR Sound Card TNC Ver:1.5.1.0 Port:8500" is also open, showing connection state "OFF LINE", TCP status, and various receive/transmit controls. The receive level is shown as a bar graph, and the transmit section includes an "Avg ACK Percentage" slider and a "Waterfall" display.

WinMOR WL2K Session



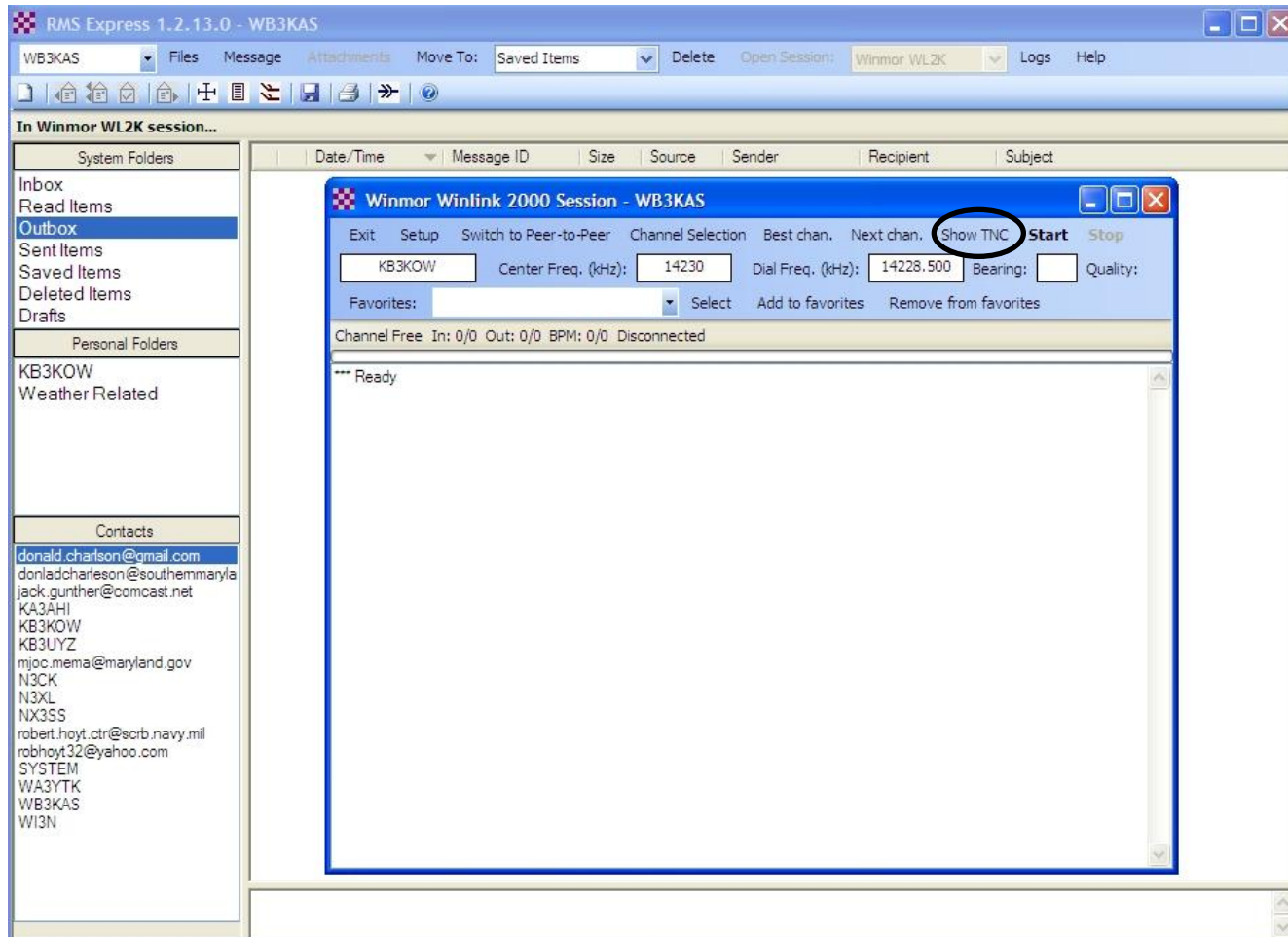
This is the Virtual Sound Card TNC

WinMOR WL2K Session

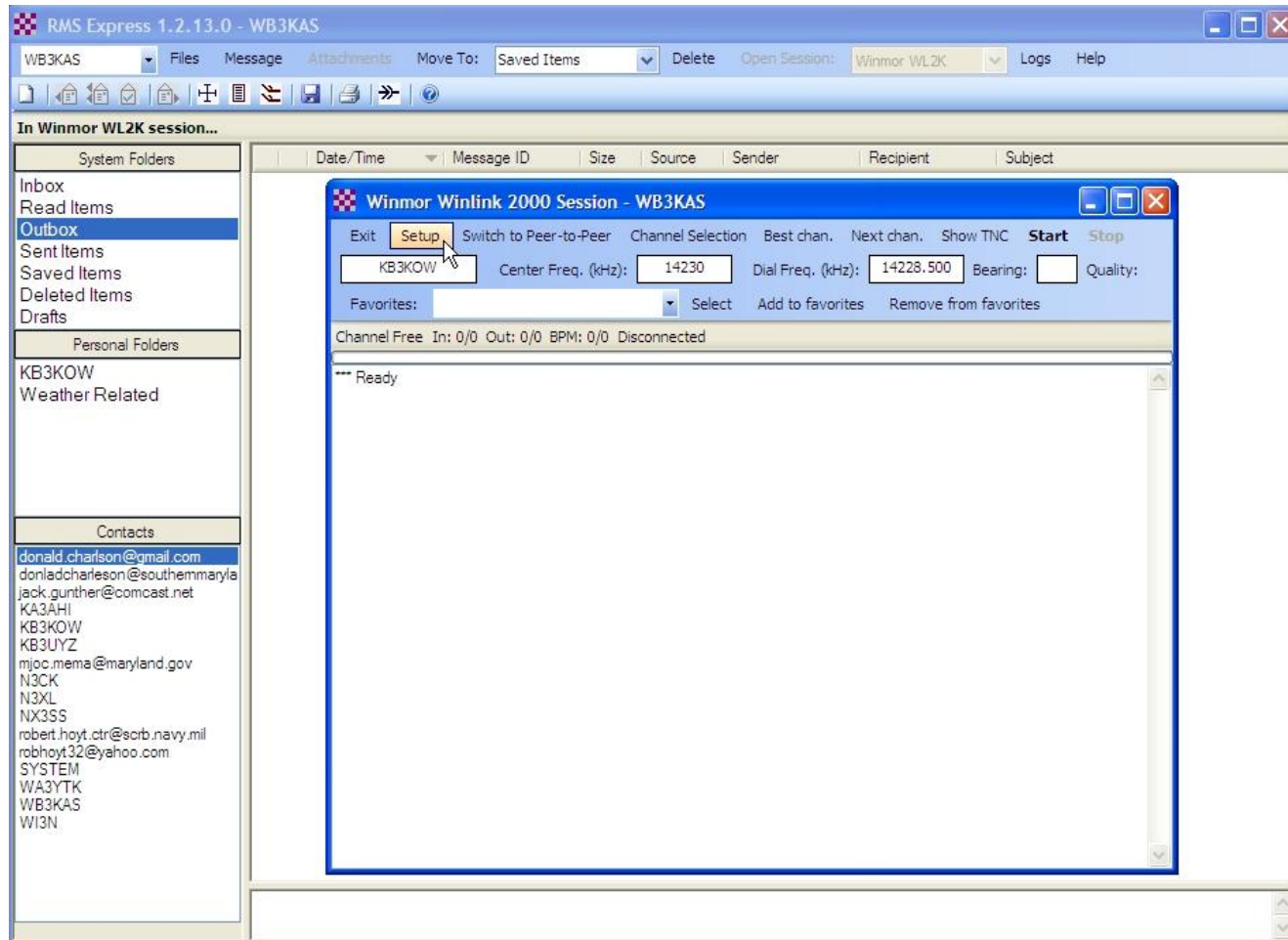


This is the Virtual Sound Card TNC

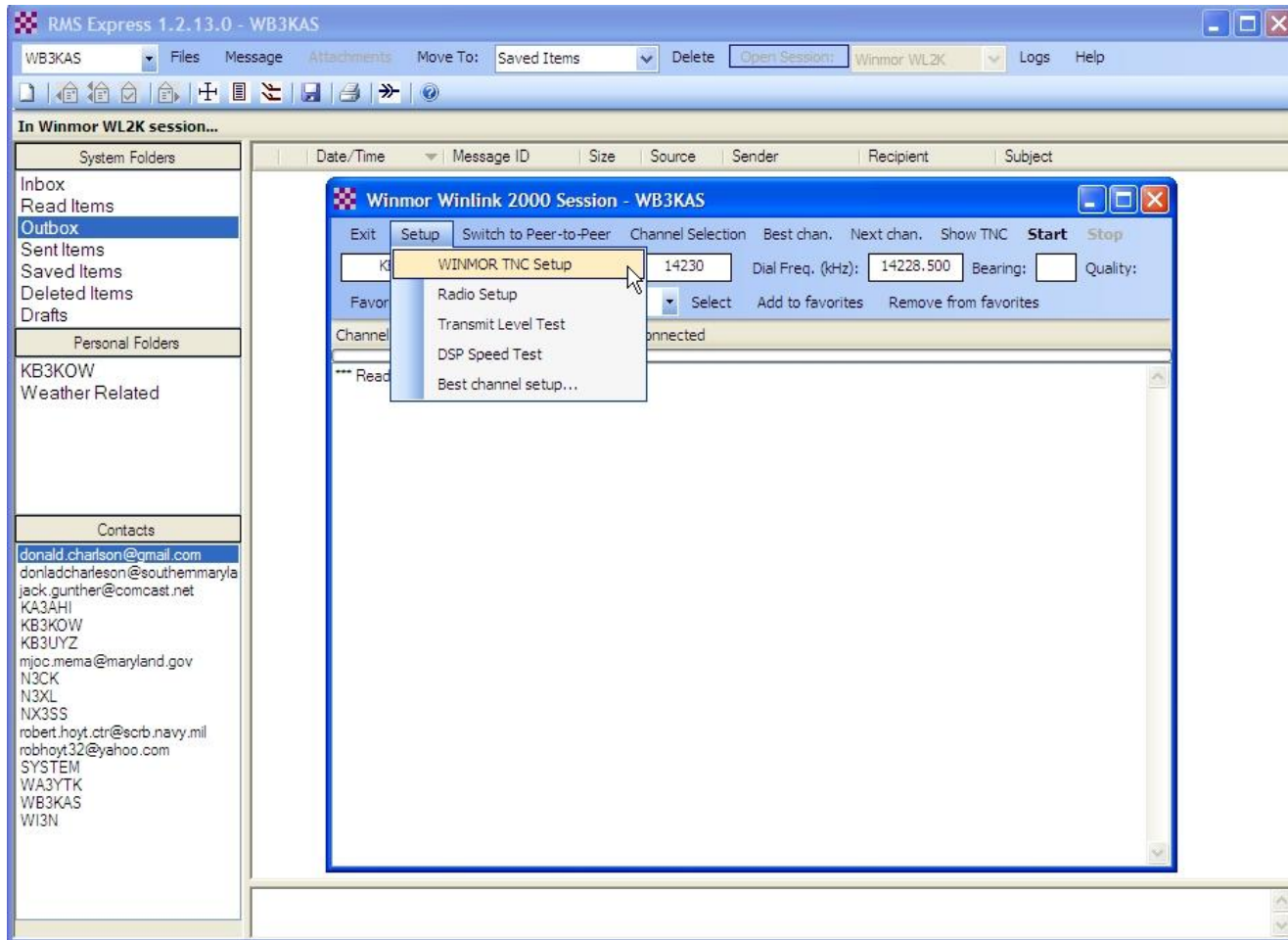
WinMOR WL2K Session



WinMOR WL2K Session



WinMOR WL2K Session



WinMOR WL2K Session

WINMOR Setup

Identify with Morse Code

WINMOR Capture Device:

WINMOR Playback Device:

Virtual TNC host address/name:

Virtual TNC Command Port: Data Port:

Inbound Session Bandwidth (Hz): Drive Level:

WinMOR WL2K Session

WINMOR Setup

Identify with Morse Code

WINMOR Capture Device:

WINMOR Playback Device:

Virtual TNC host address/name:

Virtual TNC Command Port: Data Port:

Inbound Session Bandwidth (Hz): Drive Level:

WinMOR WL2K Session

WINMOR Setup

Identify with Morse Code

WINMOR Capture Device: USB Audio CODEC-02

WINMOR Playback Device: Primary Sound Capture Driver-00
USB Audio CODEC-02
Realtek HD Audio Input-00

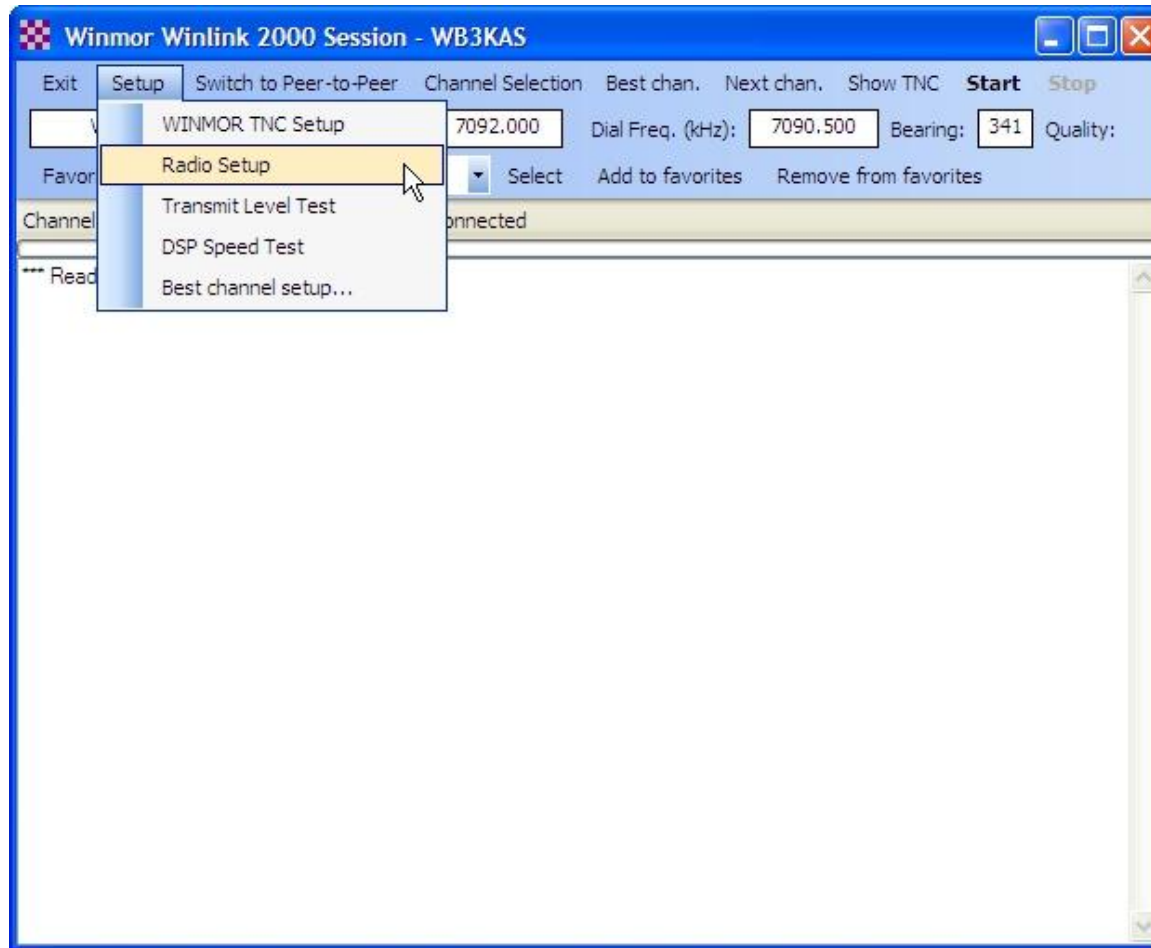
Virtual TNC host address/name: 127.0.0.1

Virtual TNC Command Port: 8500 Data Port: 8501

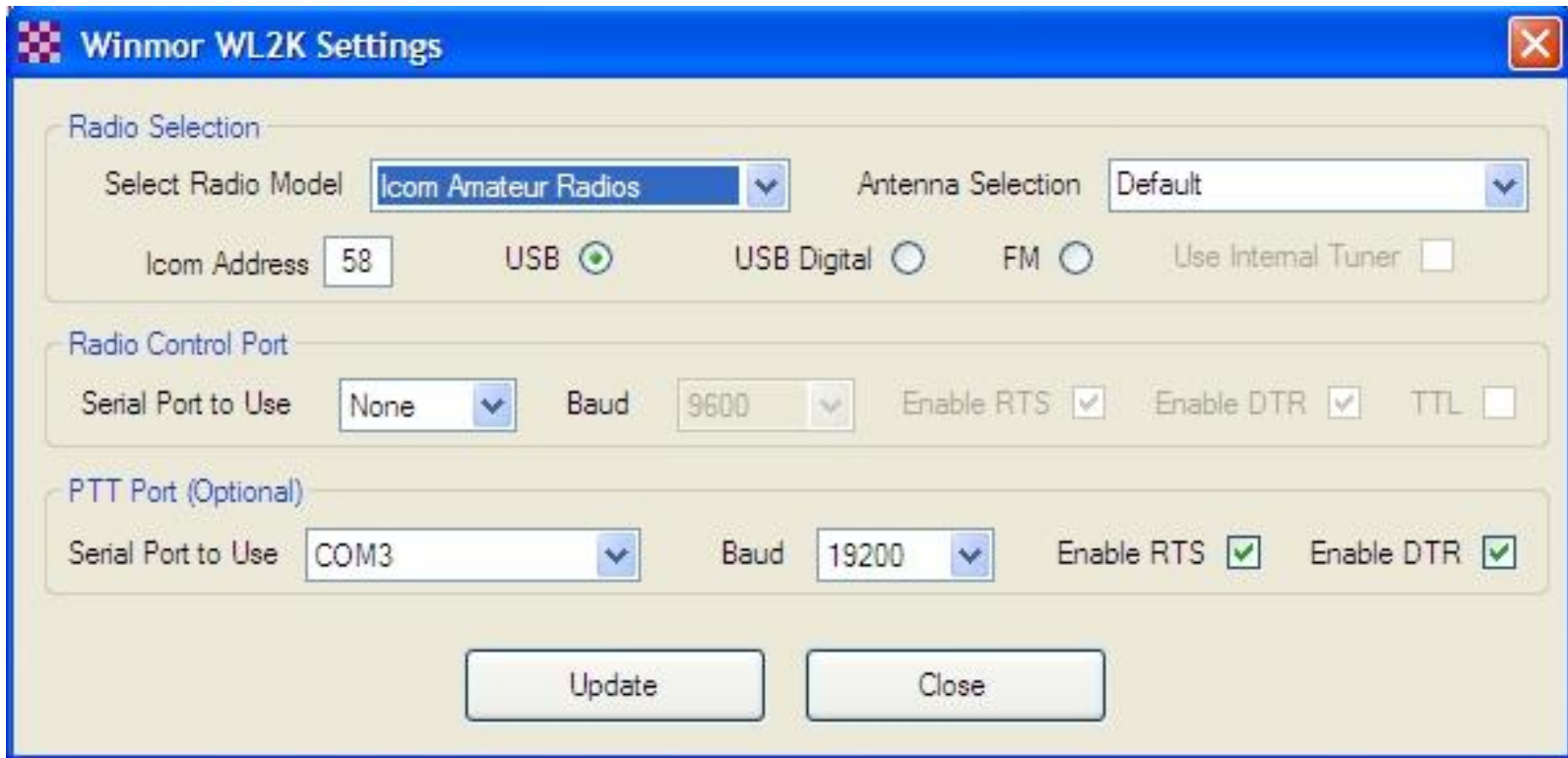
Inbound Session Bandwidth (Hz): 500 Drive Level: 90

Update Cancel

WinMOR WL2K Session



WinMOR WL2K Session



The image shows a Windows-style dialog box titled "Winmor WL2K Settings". The dialog is organized into three main sections: "Radio Selection", "Radio Control Port", and "PTT Port (Optional)".

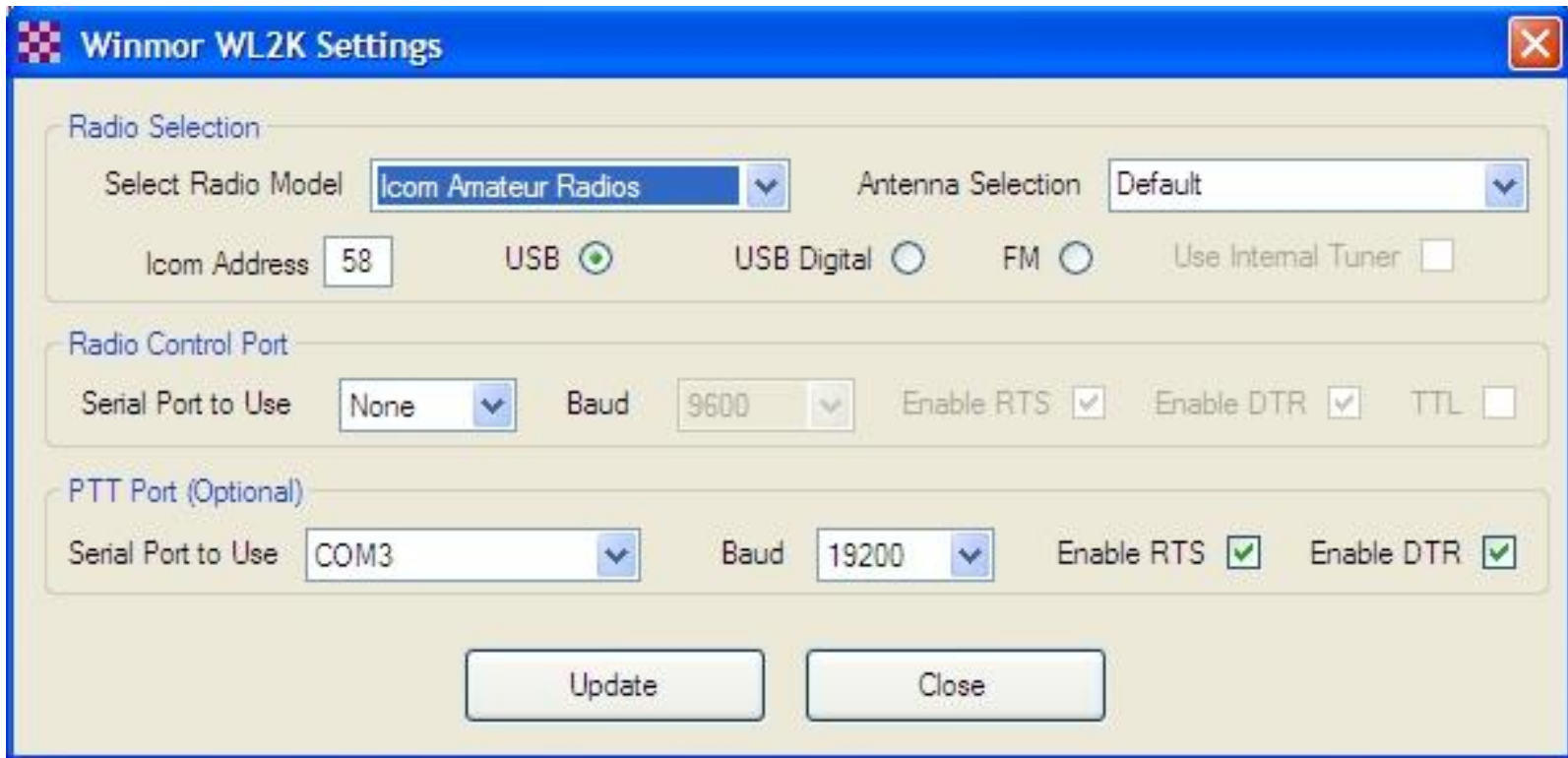
Radio Selection: This section contains a "Select Radio Model" dropdown menu set to "Icom Amateur Radios", an "Antenna Selection" dropdown menu set to "Default", an "Icom Address" text box containing "58", and three radio buttons: "USB" (selected), "USB Digital", and "FM". There is also a "Use Internal Tuner" checkbox which is unchecked.

Radio Control Port: This section contains a "Serial Port to Use" dropdown menu set to "None", a "Baud" dropdown menu set to "9600", and three checkboxes: "Enable RTS" (checked), "Enable DTR" (checked), and "TTL" (unchecked).

PTT Port (Optional): This section contains a "Serial Port to Use" dropdown menu set to "COM3", a "Baud" dropdown menu set to "19200", and two checkboxes: "Enable RTS" (checked) and "Enable DTR" (checked).

At the bottom of the dialog, there are two buttons: "Update" and "Close".

WinMOR WL2K Session



The image shows a screenshot of the Winmor WL2K Settings dialog box. The dialog has a blue title bar with the text "Winmor WL2K Settings" and a close button (X) in the top right corner. The settings are organized into three sections:

- Radio Selection:** Includes a "Select Radio Model" dropdown menu set to "Icom Amateur Radios", an "Antenna Selection" dropdown menu set to "Default", an "Icom Address" text box containing "58", and radio buttons for "USB" (selected), "USB Digital", and "FM". There is also a "Use Internal Tuner" checkbox which is unchecked.
- Radio Control Port:** Includes a "Serial Port to Use" dropdown menu set to "None", a "Baud" dropdown menu set to "9600", and checkboxes for "Enable RTS" (checked), "Enable DTR" (checked), and "TTL" (unchecked).
- PTT Port (Optional):** Includes a "Serial Port to Use" dropdown menu set to "COM3", a "Baud" dropdown menu set to "19200", and checkboxes for "Enable RTS" (checked) and "Enable DTR" (checked).

At the bottom of the dialog are two buttons: "Update" and "Close".

This is what works with an Icom 706 and a Signalink USB Sound Card Interface

WinMOR WL2K Session

HF Channel Selector

Exit Select Update Table Update Table Via Radio SFI All RMS

STANDBY - updating RMS channels propagation indices for KB3JAJ-5

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate

WinMOR WL2K Session

HF Channel Selector

Exit Select Update Table Update Table Via Radio SFI All RMS

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W3QA	3586.500	1600	FM15QC	00-23	PUBLIC	251	177	87	55
W3QA	7086.000	500	FM15QC	00-23	PUBLIC	251	177	81	55
KQ4ET	3589.000	1600	FM16XU	00-23	PUBLIC	137	160	84	53
W1EO	7104.500	1600	FN42IM	00-23	PUBLIC	393	046	83	53
WB2LMV	7103.500	1600	FN21TS	00-23	PUBLIC	248	031	74	52
VA3LKI	7092.000	1600	FN04CR	00-23	PUBLIC	441	341	80	52
W2GSA-5	7090.500	500	FN20WG	00-23	PUBLIC	181	053	71	51
KB9TYQ-10	7102.500	500	EM79ht	00-23	PUBLIC	434	282	78	50
W1EO	3597.900	1600	FN42IM	00-23	PUBLIC	393	046	75	49
KD8LZT	7101.500	1600	EN73EA	02-12	PUBLIC	544	306	71	46
KB4SC	7065.000	500	EM92WX	00-23	PUBLIC	436	206	75	46
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	516	271	70	45
VA3LKI	3613.000	1600	FN04CR	00-23	PUBLIC	441	341	63	44
VA3LKI	3595.500	500	FN04CR	00-23	PUBLIC	441	341	63	44
AJ4GU	7089.500	500	EM83AK	00-23	PUBLIC	537	229	69	44
KD4NUE-5	7081.000	500	EM91ED	00-23	PUBLIC	588	209	62	43
N9ZZK	7088.000	500	EN51VG	10-03	PUBLIC	624	290	58	42

WinMOR WL2K Session

HF Channel Selector

Exit Select Update Table Update Table Via Radio SFI All RMS

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W3QA	3586.500	1600	FM15QC	00-23	PUBLIC	251	177	87	55
W3QA	7086.000	500	FM15QC	00-23	PUBLIC	251	177	81	55
KQ4ET	3589.000	1600	FM16XU	00-23	PUBLIC	137	160	84	53
W1EO	7104.500	1600	FN42IM	00-23	PUBLIC	393	046	83	53
WB2LMV	7103.500	1600	FN21TS	00-23	PUBLIC	248	031	74	52
VA3LKI	7092.000	1600	FN04CR	00-23	PUBLIC	441	341	80	52
W2GSA-5	7090.500	500	FN20WG	00-23	PUBLIC	181	053	71	51
KB9TYQ-10	7102.500	500	EM79ht	00-23	PUBLIC	434	282	78	50
W1EO	3597.900	1600	FN42IM	00-23	PUBLIC	393	046	75	49
KD8LZT	7101.500	1600	EN73EA	02-12	PUBLIC	544	306	71	46
KB4SC	7065.000	500	EM92WX	00-23	PUBLIC	436	206	75	46
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	516	271	70	45
VA3LKI	3613.000	1600	FN04CR	00-23	PUBLIC	441	341	63	44
VA3LKI	3595.500	500	FN04CR	00-23	PUBLIC	441	341	63	44
AJ4GU	7089.500	500	EM83AK	00-23	PUBLIC	537	229	69	44
KD4NUE-5	7081.000	500	EM91ED	00-23	PUBLIC	588	209	62	43
N9ZZK	7088.000	500	EN51VG	10-03	PUBLIC	624	290	58	42

WinMOR WL2K Session

Solar Flux Index (SFI)

The current estimated solar flux index (SFI) is 125. You may enter a corrected value between 1 and 300 below if you have a more accurate value available.

OK
Cancel

Defaults to 00

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W3QA	3586.500							87	55
W3QA	7086.000							81	55
KQ4ET	3589.000							84	53
W1EO	7104.500							83	53
WB2LMV	7103.500							74	52
VA3LKI	7092.000							80	52
W2GSA-5	7090.500							71	51
KB9TYQ-10	7102.500	500	EM79nt	00-23	PUBLIC	434	282	78	50
W1EO	3597.900	1600	FN42IM	00-23	PUBLIC	393	046	75	49
KD8LZT	7101.500	1600	EN73EA	02-12	PUBLIC	544	306	71	46
KB4SC	7065.000	500	EM92WX	00-23	PUBLIC	436	206	75	46
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	516	271	70	45
VA3LKI	3613.000	1600	FN04CR	00-23	PUBLIC	441	341	63	44
VA3LKI	3595.500	500	FN04CR	00-23	PUBLIC	441	341	63	44
AJ4GU	7089.500	500	EM83AK	00-23	PUBLIC	537	229	69	44
KD4NUE-5	7081.000	500	EM91ED	00-23	PUBLIC	588	209	62	43
N9ZZK	7088.000	500	EN51VG	10-03	PUBLIC	624	290	58	42

Go to QRZ.COM and obtain the current SFI

WinMOR WL2K Session

HF Channel Selector

Exit Select Update Table Update Table Via Radio SFI All RMS

Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
W3QA	7086.000	500	FM15QC	00-23	PUBLIC	251	177	83	55
W3QA	3586.500	1600	FM15QC	00-23	PUBLIC	251	177	87	54
KQ4ET	3589.000	1600	FM16XU	00-23	PUBLIC	137	160	83	53
WB2LMV	7103.500	1600	FN21TS	00-23	PUBLIC	248	031	76	53
W1EO	7104.500	1600	FN42IM	00-23	PUBLIC	393	046	83	53
VA3LKI	7092.000	1600	FN04CR	00-23	PUBLIC	441	341	79	51
W2GSA-5	7090.500	500	FN20WG	00-23	PUBLIC	181	053	68	49
KB9TYQ-10	7102.500	500	EM79rt	00-23	PUBLIC	434	282	76	49
W1EO	3597.900	1600	FN42IM	00-23	PUBLIC	393	046	74	48
KB4SC	7065.000	500	EM92WX	00-23	PUBLIC	436	206	75	46
KD8LZT	7101.500	1600	EN73EA	02-12	PUBLIC	544	306	70	45
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	516	271	68	45
AJ4GU	7089.500	500	EM83AK	00-23	PUBLIC	537	229	68	44
KD4NUE-5	7081.000	500	EM91ED	00-23	PUBLIC	588	209	61	43
VA3LKI	3595.500	500	FN04CR	00-23	PUBLIC	441	341	60	43
VA3LKI	3613.000	1600	FN04CR	00-23	PUBLIC	441	341	60	43
WA6UVV	14117.500	1600	EL95WW	00-23	PUBLIC	903	193	55	42

SFI = 125 taken at 1845L

WinMOR WL2K Session

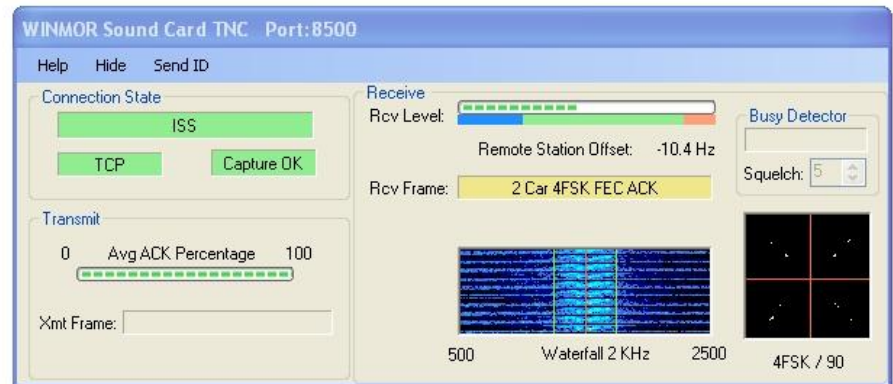
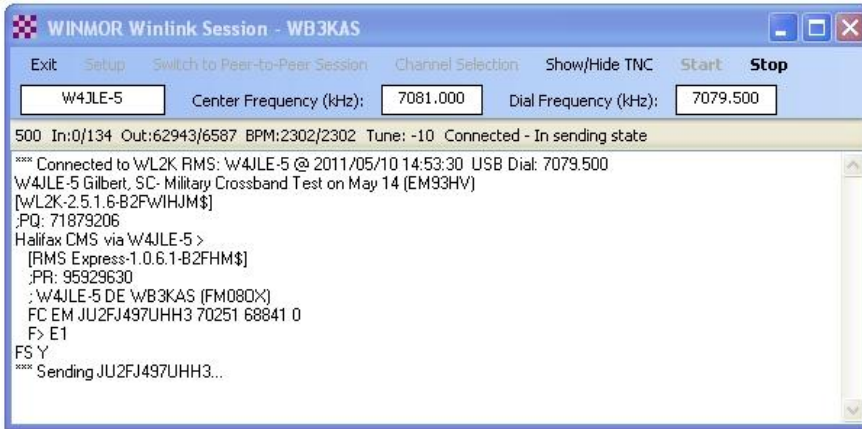
HF Channel Selector									
Exit	Select	Update Table	Update Table Via Radio	SFI	All RMS				
Callsign	Frequency (kHz)	Mode	Grid Square	Hours	Group	Distance (mi)	Bearing (Degrees)	Path Reliability Estimate	Path Quality Estimate
KQ4ET	3589.000	1600	FM16XU	00-23	PUBLIC	137	160	88	56
WB2LMV	7103.500	1600	FN21TS	00-23	PUBLIC	248	031	81	54
W3QA	7086.000	500	FM15QC	00-23	PUBLIC	251	177	86	54
W2GSA-5	7090.500	500	FN20WG	00-23	PUBLIC	181	053	77	54
W3QA	3586.500	1600	FM15QC	00-23	PUBLIC	251	177	87	53
W1EO	7104.500	1600	FN42IM	00-23	PUBLIC	393	046	85	53
W1EO	3597.900	1600	FN42IM	00-23	PUBLIC	393	046	84	52
VA3LKI	7092.000	1600	FN04CR	00-23	PUBLIC	441	341	80	50
KB9TYQ-10	7102.500	500	EM79nt	00-23	PUBLIC	434	282	77	48
VA3LKI	3595.500	500	FN04CR	00-23	PUBLIC	441	341	72	47
VA3LKI	3613.000	1600	FN04CR	00-23	PUBLIC	441	341	72	47
KB4SC	7065.000	500	EM92WX	00-23	PUBLIC	436	206	77	46
KD8LZT	7101.500	1600	EN73EA	02-12	PUBLIC	544	306	65	44
AJ4GU	7089.500	500	EM83AK	00-23	PUBLIC	537	229	65	44
WB9FHP-5	7075.500	500	EM68SM	13-02	PUBLIC	516	271	65	44
WA6UVV	14117.500	1600	EL95WW	00-23	PUBLIC	903	193	58	43
VE1YZ	10148.200	1600	FN84FS	00-23	PUBLIC	802	054	61	43

SFI = 125 but taken at 1901L

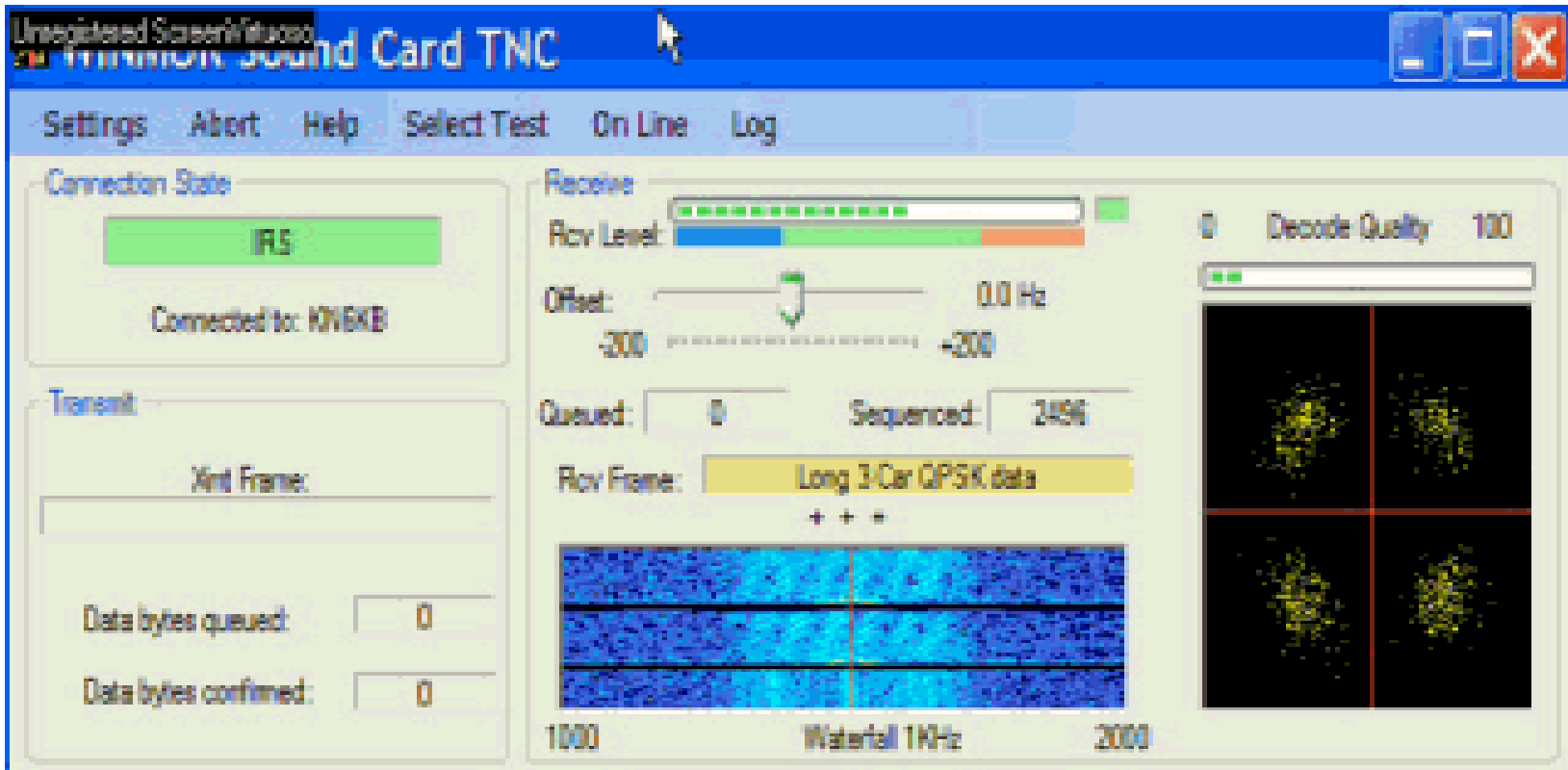
WinMOR WL2K Session

The image shows two overlapping windows from the WinMOR software. The background window is titled "Winmor Winlink 2000 Session - WB3KAS". It features a menu bar with "Exit", "Setup", "Switch to Peer-to-Peer", "Channel Selection", "Best chan.", "Next chan.", "Hide TNC", "Start", and "Stop". Below the menu, there are input fields for "VA3LKI", "Center Freq. (kHz): 7092.000", "Dial Freq. (kHz): 7090.500", "Bearing: 341", and "Quality:". A "Favorites:" dropdown menu is also present. The status bar shows "Channel Free In: 0/0 Out: 0/0 BPM: 421/121 Disconnected". The main text area displays session logs, including connection details for VA3LKI at 2013/08/16 14:19:09, MTD stats (Total connects = 271, Total messages = 70), and a list of received messages from GVDQHP58EIXP. The session summary at the bottom indicates a duration of 4.5 minutes, 0 Bytes/min average throughput, and 421 Bytes/min peak throughput. The foreground window is titled "WINMOR Sound Card TNC Ver: 1.5.1.0 Port: 8500". It has a menu bar with "Help", "Hide", and "Send ID". The "Connection State" section shows "DISCONNECTED" and buttons for "TCP" and "Capture OK". The "Transmit" section includes an "Avg ACK Percentage" slider (0 to 100) and an "Xmt Frame:" input field. The "Receive" section features a "Rcv Level:" progress bar, "Remote Station Offset: -174.0 Hz", and a "Rcv Frame:" input field. The "Busy Detector" section has a "Channel Clear" button and a "Squelch:" dropdown set to 5. A "Waterfall 2KHz" display shows a blue signal spectrum between 500 and 2500 Hz. The "Waterfall" radio button is selected, with "Spectrum" and "Disable" options also visible. The status bar at the bottom of this window reads "4FSK / 49".

Running RMS Express



Running RMS Express



Running RMS Express

WINMOR Sound Card TNC Port:8500

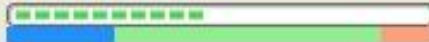
Help Hide Send ID

Connection State

IRS

TCP Capture OK

Receive

Rcv Level: 

Remote Station Offset: -2.1 Hz

Rcv Frame: 2 Car V16PSK FEC Data

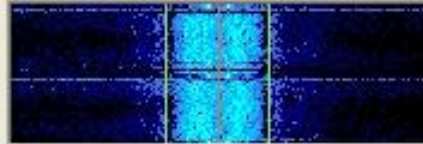
Transmit

0 Avg ACK Percentage 100

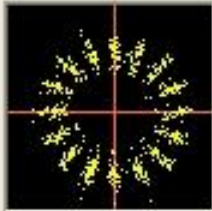
Xmt Frame:

Busy Detector

Squelch: 5



Waterfall 2 KHz



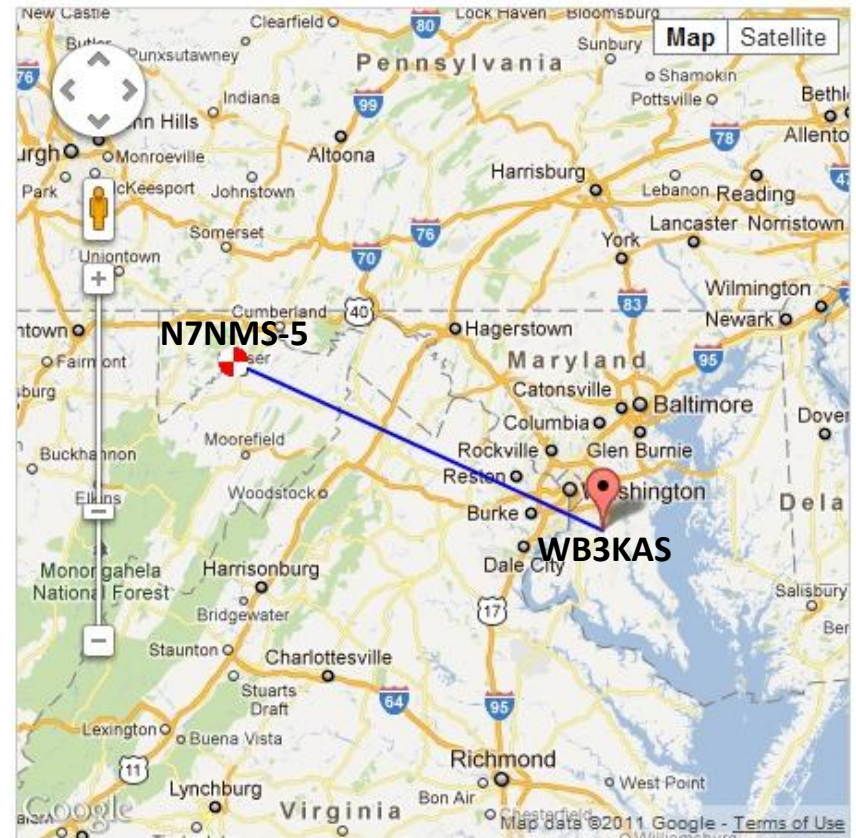
16PSK / 62

Testimonies

N7NMS-5

Westernport, MD

- Latitude 39.487678 (39° 29' 15" N)
- Longitude -79.030426 (79° 1' 49" W)
- Grid Square FM09II
- US State Maryland US County Allegany
- Bearing 295.1° WNW (from WB3KAS)
- Distance **129.1 mi** (207.8 km)
- 3587.5KHz at 0455L



W2GSA

Holmdel, NJ

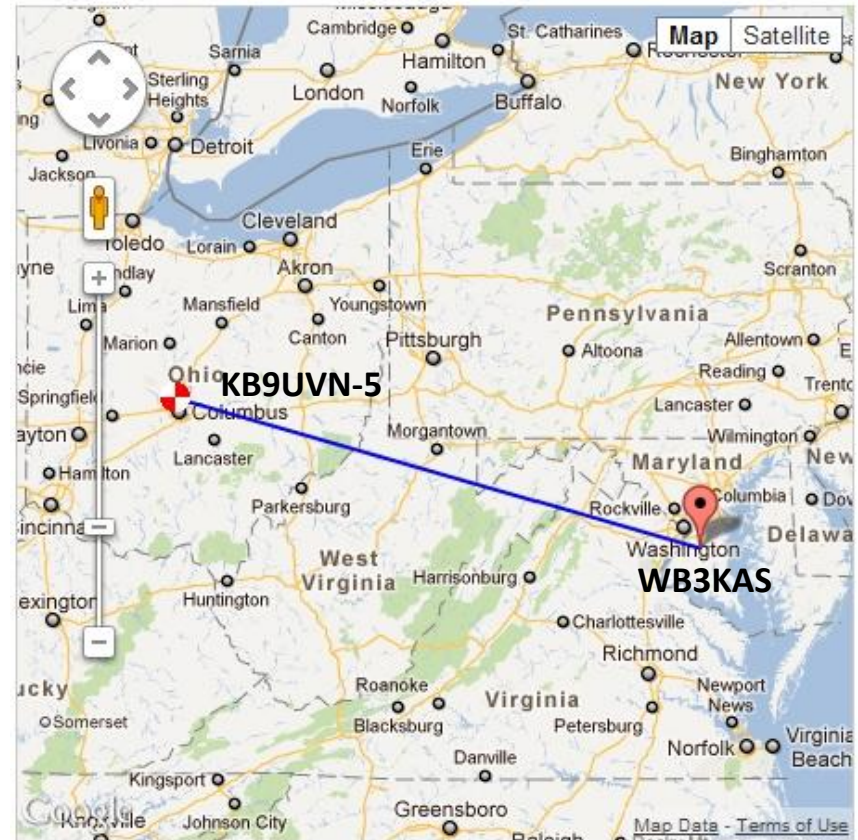
- Latitude 40.383890 (40° 23' 2" N)
- Longitude -74.170569 (74° 10' 14" W)
- Grid Square FN20vj
- US State New Jersey US County Monmouth
- Bearing 50.1° NE (from WB3KAS)
- Distance **183.0 mi** (294.5 km)
- 7095KHz at 0820L
- Garden State Amateur Radio Association Inc.



KB8UVN-5

Worthington, OH

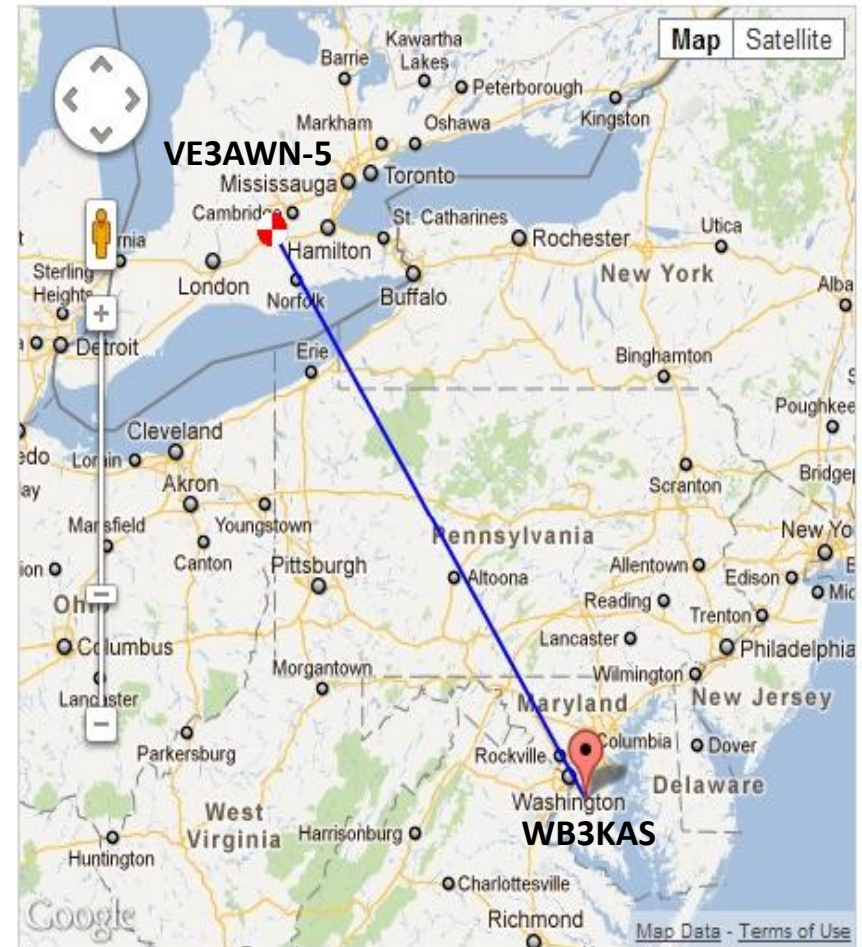
- Latitude 40.102230 (40° 6' 8" N)
- Longitude -83.057805 (83° 3' 28" W)
- Grid Square EN80lc
- US State Ohio US County Franklin
- Bearing 288.1° WNW (from WB3KAS)
- Distance **345.6 mi** (556.1 km)
- 10133KHz at 0922L



VE3AWN-5

Metcalf, Ontario

- Latitude 43.233700 (43° 14' 1" N)
- Longitude -80.550600 (80° 33' 2" W)
- Grid Square EN93rf
- Bearing 329.3° NNW (from WB3KAS)
- Distance **367.3 mi** (591.2 km)
- 7098.5 KHz at 1942L



W1EO-5

Carlisle, MA

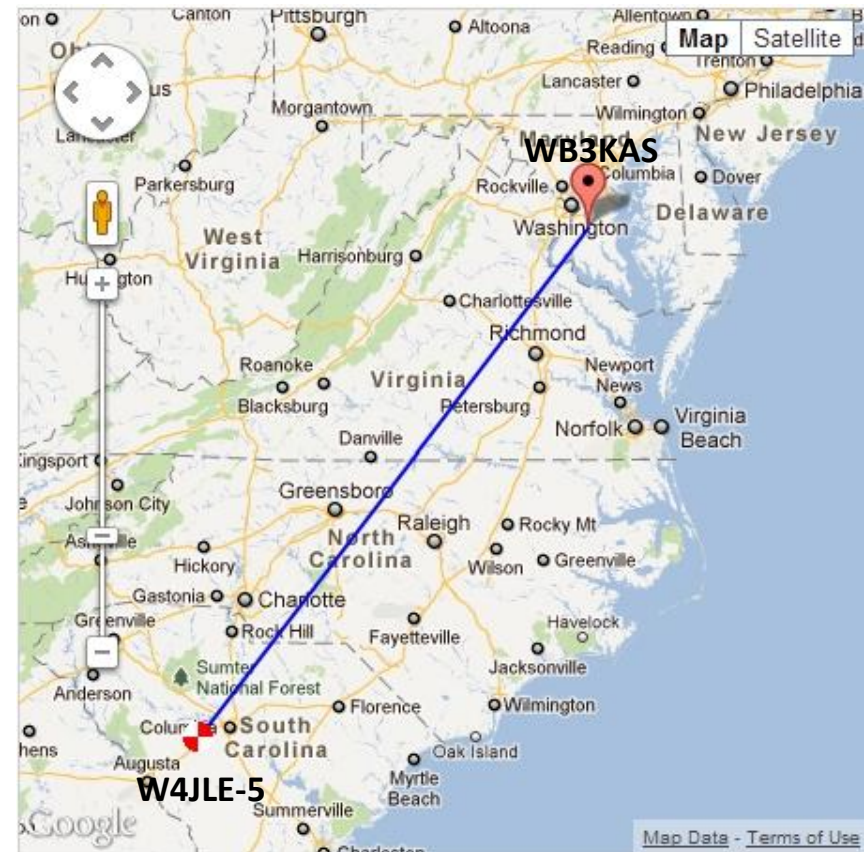
- Latitude 42.520000 (42° 31' 12" N)
- Longitude -71.293333 (71° 17' 35" W)
- Grid Square FN42im
- US State Massachusetts US County Middlesex
- Bearing 46.1° NE (from WB3KAS)
- Distance **391.9 mi** (630.7 km)
- 14102.7KHz at 1300



W4JLE-5

Gilbert, SC

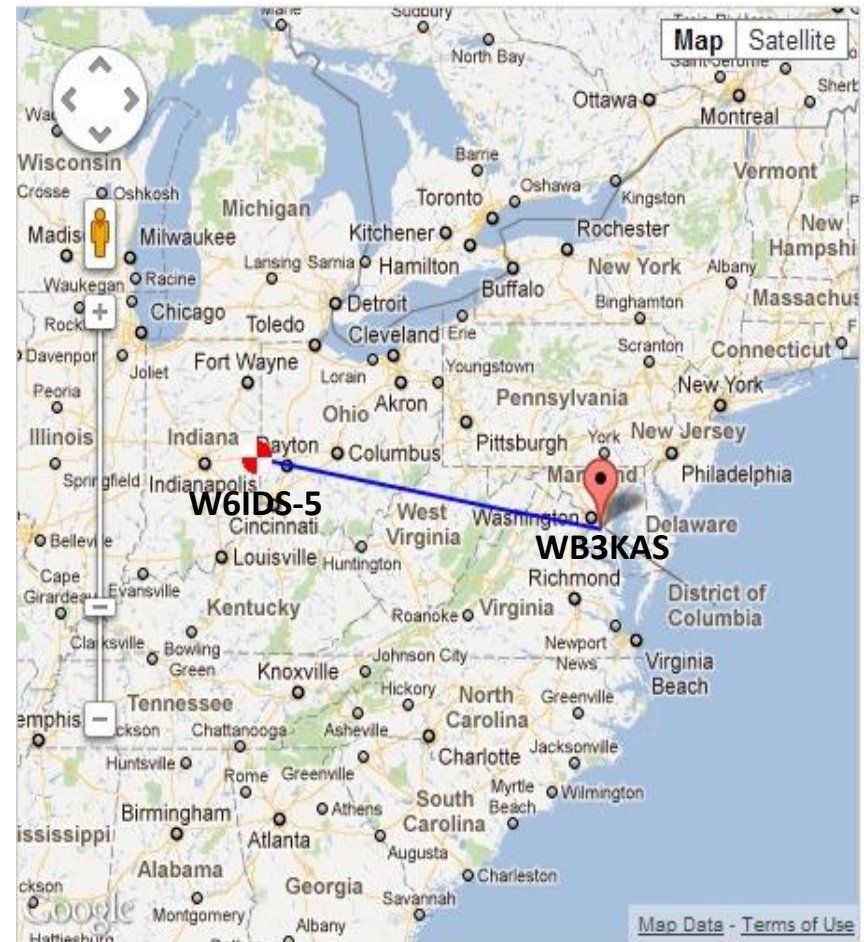
- Latitude 33.904460 (33° 54' 16" N)
- Longitude -81.401673 (81° 24' 6" W)
- Grid Square EM93hv
- US State South Carolina US County Lexington
- Bearing 218.8° SW (from WB3KAS)
- Distance **418.3 mi** (673.2 km)
- 7079.5KHz at 1108L, 2059L



W6IDS-5

Richmond, IN

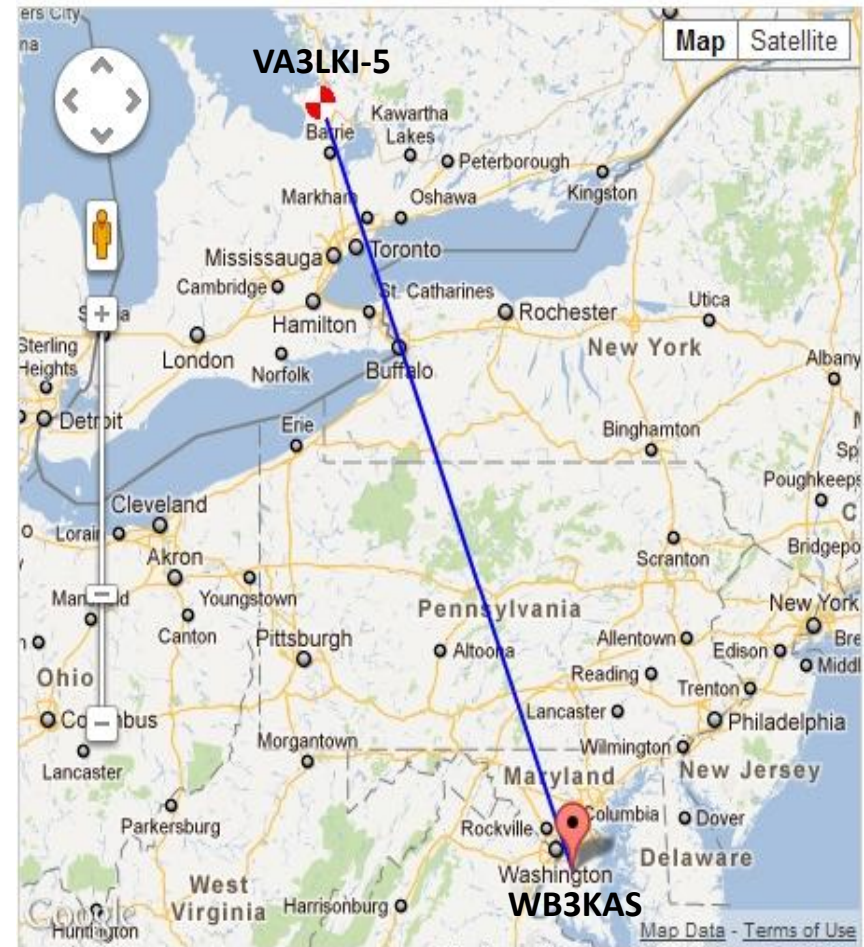
- Latitude 39.888453 (39° 53' 18" N)
- Longitude -84.900195 (84° 54' 0" W)
- Grid Square EM79nv
- US State Indiana US County Wayne
- Bearing 283.2° WNW (from WB3KAS)
- Distance **438.5 mi** (705.7 km)
- 7061KHz at 0627L & 1936L



VA3LKI-5

Port McNicoll, ON

- Latitude 44.750000 (44° 45' 0" N)
- Longitude -79.815000 (79° 48' 53" W)
- Grid Square FN04cs
- Bearing 340.7° NNW (from WB3KAS)
- Distance **444.3 mi** (715.0 km)
- 7082KHz at 0756L, 0936L, 1915L



WB9FHP-5

Paoli, IN

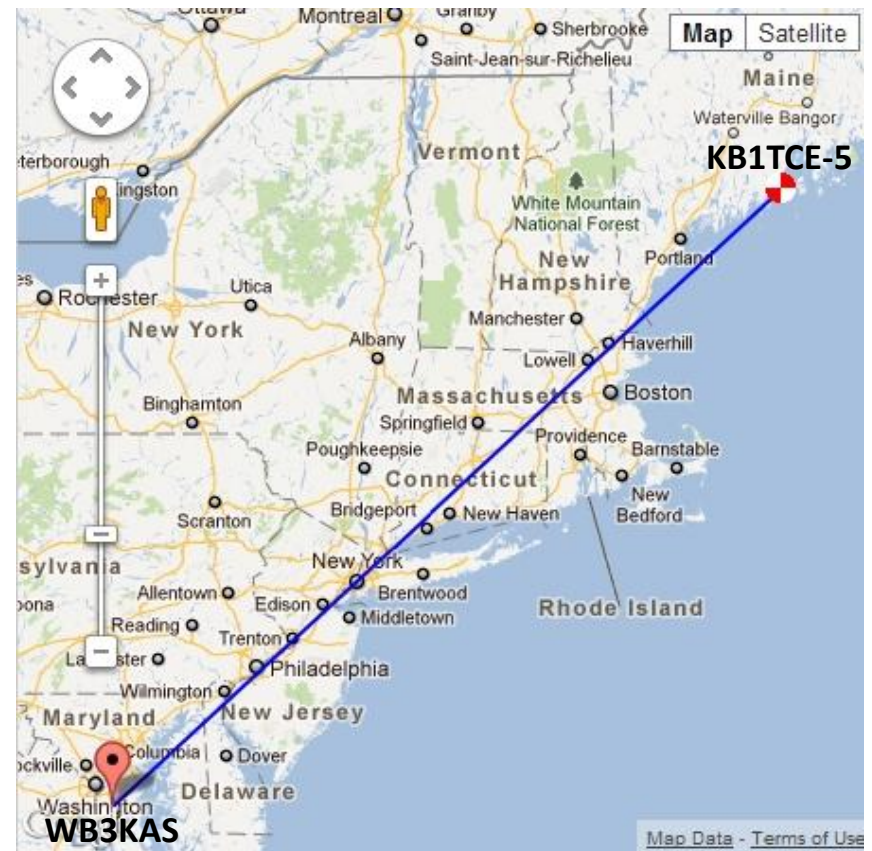
- Latitude 38.535564 (38° 32' 8" N)
- Longitude -86.461987 (86° 27' 43" W)
- Grid Square EM68sm
- US State Indiana US County Orange
- Bearing 271.6° W (from WB3KAS)
- Distance **519.5 mi** (836.0 km)
- 3575KHz at 0635L
- 7076.5KHz at 0602L, 1350L, 1936L



KB1TCE-5

Owls Head, ME

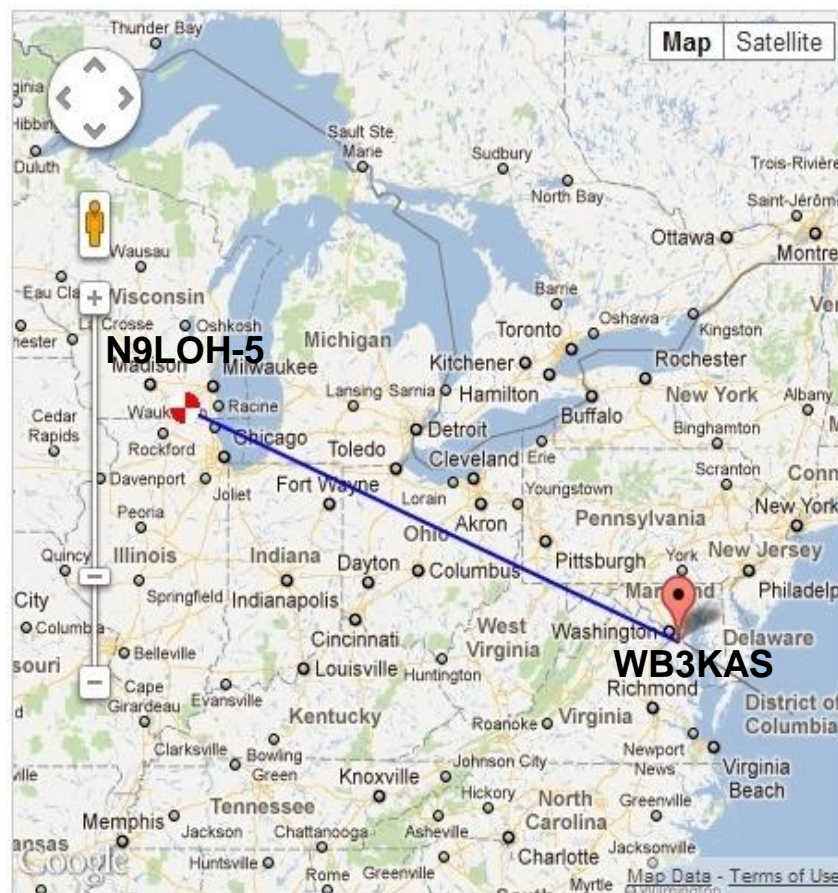
- Latitude 44.081327 (44° 4' 52" N)
- Longitude -69.086543 (69° 5' 11" W)
- Grid Square FN54kb
- US State Maine US County Knox
- Bearing 44.8° NE (from WB3KAS)
- Distance **546.3 mi** (879.2 km)
- 7088KHz at 1318L
- 3590KHz at 0625L



N9LOH-5

Elkhorn, WI

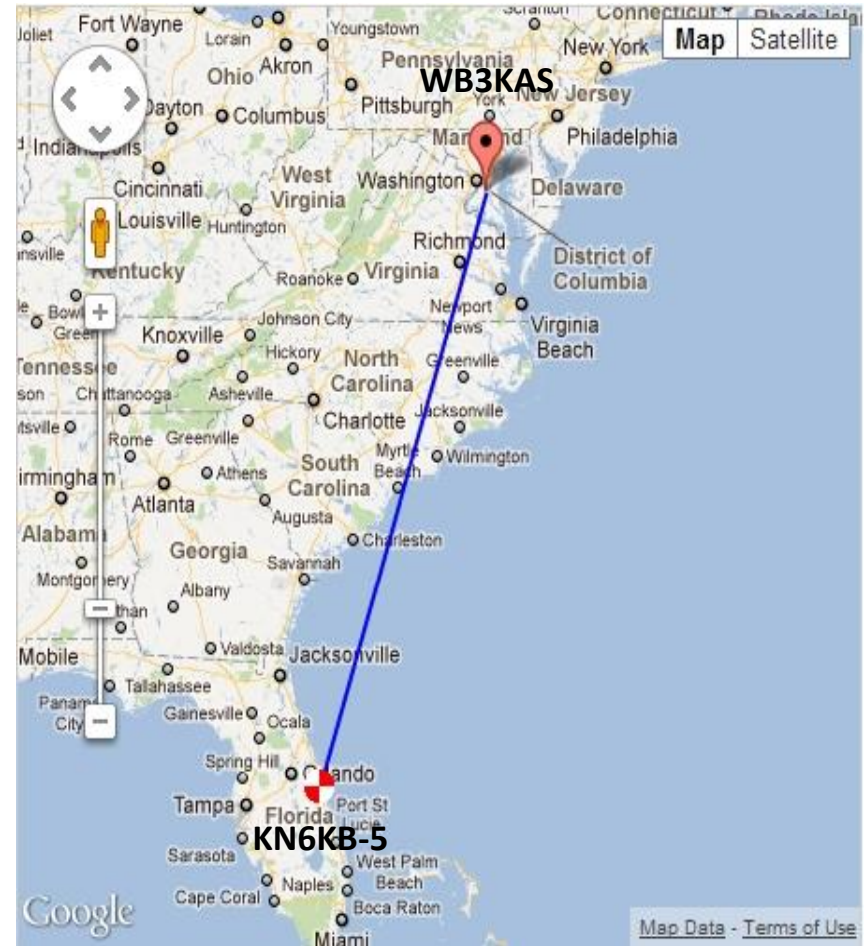
- Latitude 42.682649 (42° 40' 57" N)
- Longitude -88.539027 (88° 32' 20" W)
- Grid Square EN52rq
- US State Wisconsin US County Walworth
- Bearing 297.8° WNW (from WB3KAS)
- Distance **670.7 mi** (1079.5 km)
- 7095KHz at 0717L
- *** Connected to WL2K RMS: N9LOH-5 @ 2011/12/18 12:17:39 USB Dial: 7095.000 RMS WINMOR (EN52RS) 60 Minutes remaining [WL2K-2.7.0.7-B2FWIHJM\$] ;PQ: 10979315 Perth CMS via N9LOH-5 > [RMS Express-1.1.1.3-B2FHM\$] ;PR: 14875416 ; N9LOH-5 DE WB3KAS (FM18NR) FF FQ
- *** Disconnected from WL2K RMS: N9LOH-5 @ 2011/12/18 12:18:35 *** Session: 0.8 min; Avg Thruput: 222 Bytes/min; 1 Min Peak Thruput: 317 Bytes/min



KN6KB-5

Rockledge, FL

- Latitude 28.313660 (28° 18' 49" N)
- Longitude -80.723914 (80° 43' 26" W)
- Grid Square EL98ph
- US State Florida US County Brevard
- Bearing 198.6° SSW (from WB3KAS)
- Distance **752.6 mi** (1211.2 km)
- 7083KHz at 0722L
- 10131.5KHz at 1218L, 1538L

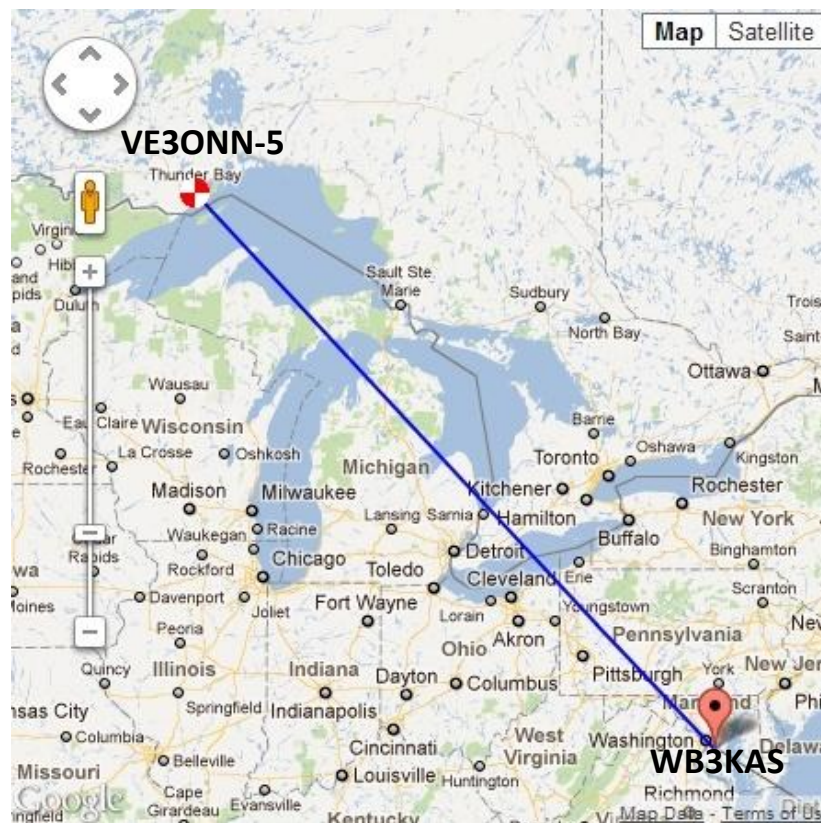


VE3ONN-5

Thunder Bay, Ontario

- Latitude 48.328700 (48° 19' 43" N)
- Longitude -89.269999 (89° 16' 11" W)
- Grid Square EN58ih
- Bearing 321.0° NW (from WB3KAS)
- Distance **908.4 mi** (1462.0 km)
- 7088KHz at 2044L

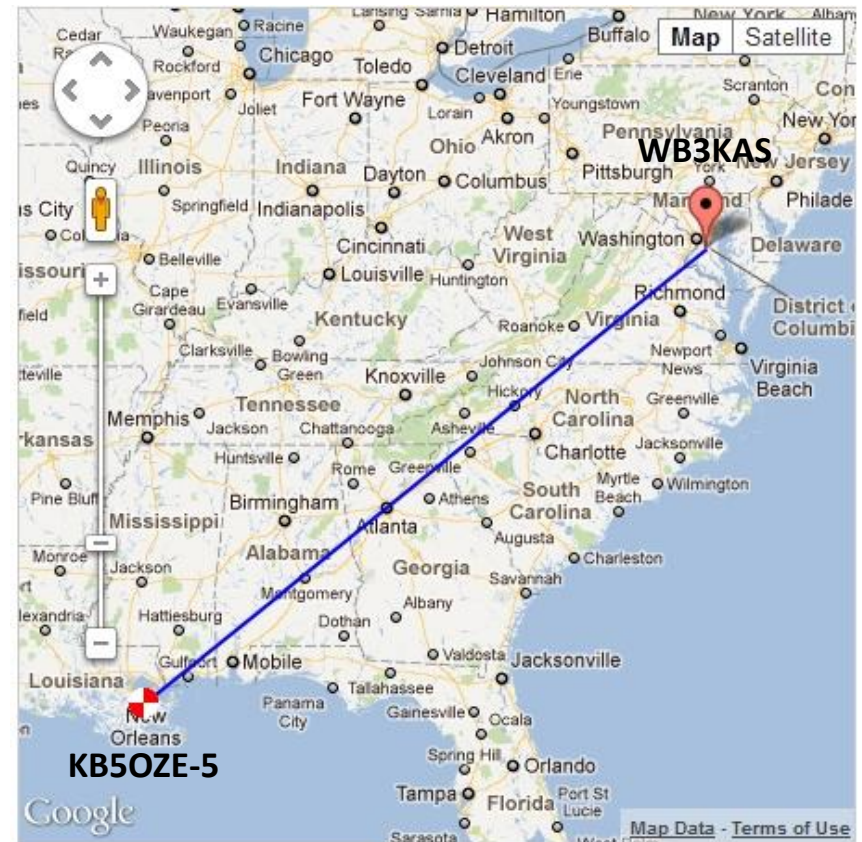
- *** Connected to WL2K RMS: VE3ONN-5 @ 2011/12/18 01:44:00
- USB Dial: 7088.000 VE3ONN RMS WINMOR THUNDER BAY, ONTARIO (EN58JK)
- 120 Minutes remaining [WL2K-2.7.0.7-B2FWIHJM\$] ;
- PQ: 44536975 SanDiego CMS via VE3ONN-5 > [RMS Express-1.1.1.3-B2FHM\$] ;
- PR: 00058475 ;
- VE3ONN-5 DE WB3KAS (FM18NR) FC
- EM T1VO4N36RUBH 855 562 0 F> 83 FS Y
- *** Sending T1VO4N36RUBH...
- FF
- FQ
- *** Disconnected from WL2K RMS: VE3ONN-5 @ 2011/12/18 01:47:09
- *** Session: 3.0 min; Avg Thruput: 289 Bytes/min; 1 Min Peak Thruput: 643 Bytes/min



KB5OZE-5

Marrero, LA

- Latitude 29.848453 (29° 50' 54" N)
- Longitude -90.122125 (90° 7' 19" W)
- Grid Square EL49wu
- US State Louisiana US County Jefferson
- Bearing 235.0° SW (from WB3KAS)
- Distance **973.2 mi** (1566.2 km)
- 3585KHz at 0546L
- *** Connected to WL2K RMS: KB5OZE-5 @ 2011/12/20 10:38:05
- USB Dial: 3585.000 RMS WINMOR (EL49WU)
- 60 Minutes remaining [WL2K-2.7.0.7-B2FWIHJM\$]
;PQ: 17054328 Wien CMS via KB5OZE-5 > [RMS Express-1.1.1.3-B2FHM\$] ;PR: 69331640 ;
- KB5OZE-5 DE WB3KAS (FM18NR)
- FC EM JLL82SWF85UP 662 463 0 F> 7F FS Y
- *** Sending JLL82SWF85UP...
- *** Disconnected from WL2K RMS: KB5OZE-5 @ 2011/12/20 10:47:04
- *** Session: 8.9 min; **Avg Thruput: 24 Bytes/min**; 1 Min Peak Thruput: 45 Bytes/min



ISOGRB-5

Cagliari, Sardinia, IT

- Latitude 39.246628 (39° 14' 47" N)
- Longitude 09.182888 (9° 10' 58" E)
- Grid Square JM49of
- Bearing 59.2° ENE (from WB3KAS)
- Distance **4425.7 mi** (7122.4 km)
- 3585KHz at 0546L
- *** Connected to WL2K RMS: ISOGRG-5 @ 2013/18/17 01:37:30
- USB Dial: 14111.000 RMS WINMOR (JM49OF)
- 300 Minutes remaining with ISOGRB-5
- San diego CMS via ISOGRB
- ISOGRB-5 DE KA3AHI (FM18NR)
- FFY
- FQ
- *** Disconnected from WL2K RMS: ISOGRB-5 @ 2013/18/17 01:41:07
- *** Session: 3.3 min; **Avg Thruput: 0 Bytes/min**; 1 Min Peak Thruput: 210 Bytes/min

- 14111.0KHz at 2141L



Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77

Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77
US Constitution	29.7K	1200	P2P	1:27

Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77
US Constitution	29.7K	1200	P2P	1:27
US Constitution	29.7K	9600	P2P	0:38

Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77
US Constitution	29.7K	1200	P2P	1:27
US Constitution	29.7K	9600	P2P	0:38
Catalog Listing	112.5K	1200	Node	3:48

Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77
US Constitution	29.7K	1200	P2P	1:27
US Constitution	29.7K	9600	P2P	0:38
Catalog Listing	112.5K	1200	Node	3:48
Catalog Listing	112.5K	1200	P2P	2:06

Throughput Speeds

TXT File	Size	RF Speed	Method	Clocked
US Dec of Indep	8.38K	1200	Node	1:25
US Dec of Indep	8.38K	1200	P2P	1:11
US Dec of Indep	8.38K	9600	P2P	0:15
US Constitution	29.7K	1200	Node	2:77
US Constitution	29.7K	1200	P2P	1:27
US Constitution	29.7K	9600	P2P	0:38
Catalog Listing	112.5K	1200	Node	3:48
Catalog Listing	112.5K	1200	P2P	2:06
Catalog Listing	112.5K	9600	P2P	0:46

Strategic National Stockpile Form

DESCRIPTION	Stock Number	Unit of Issue	Quantity Requested	Quantity Shipped
Acyclovir, 1000mg/20ml	55390-613-20	PKG of 10		
Aero Chamber Plus, w/large mask	58-80710	CS of 10		
Aero Chamber Plus, w/o mask	58-79710	CS of 10		
Aero Chamber Plus, w/small mask	58-88710	CS		
Albuterol Nebulizer Solution, 0.83mg/ml, 3ml	00172-6405-49	PKG of 1		
Alcohol pads, isopropyl, 70 1 1/4" x 2 1/2"	MDS090730	CS of 3000		
Amoxicillin 400mg/5ml oral suspension, powder, 100ml bottle	63304-970-04	CS of 96		
Amoxicillin 500mg oral Capsule unit of use #30 cap bottle	66336-511-30	CS of 40/80/480		
Amoxicillin 500mg oral capsules #500 cap bottle	0172-7414-70	CS of 36		
Amphotericin B IV 50mg vial	0013-1405-44	PKG of 5		
Aspirator, Laerdal, Battery, rechargeable	PN 884301	EA of 1		
Aspirator, Medline 601	MIN601	EA of 1		

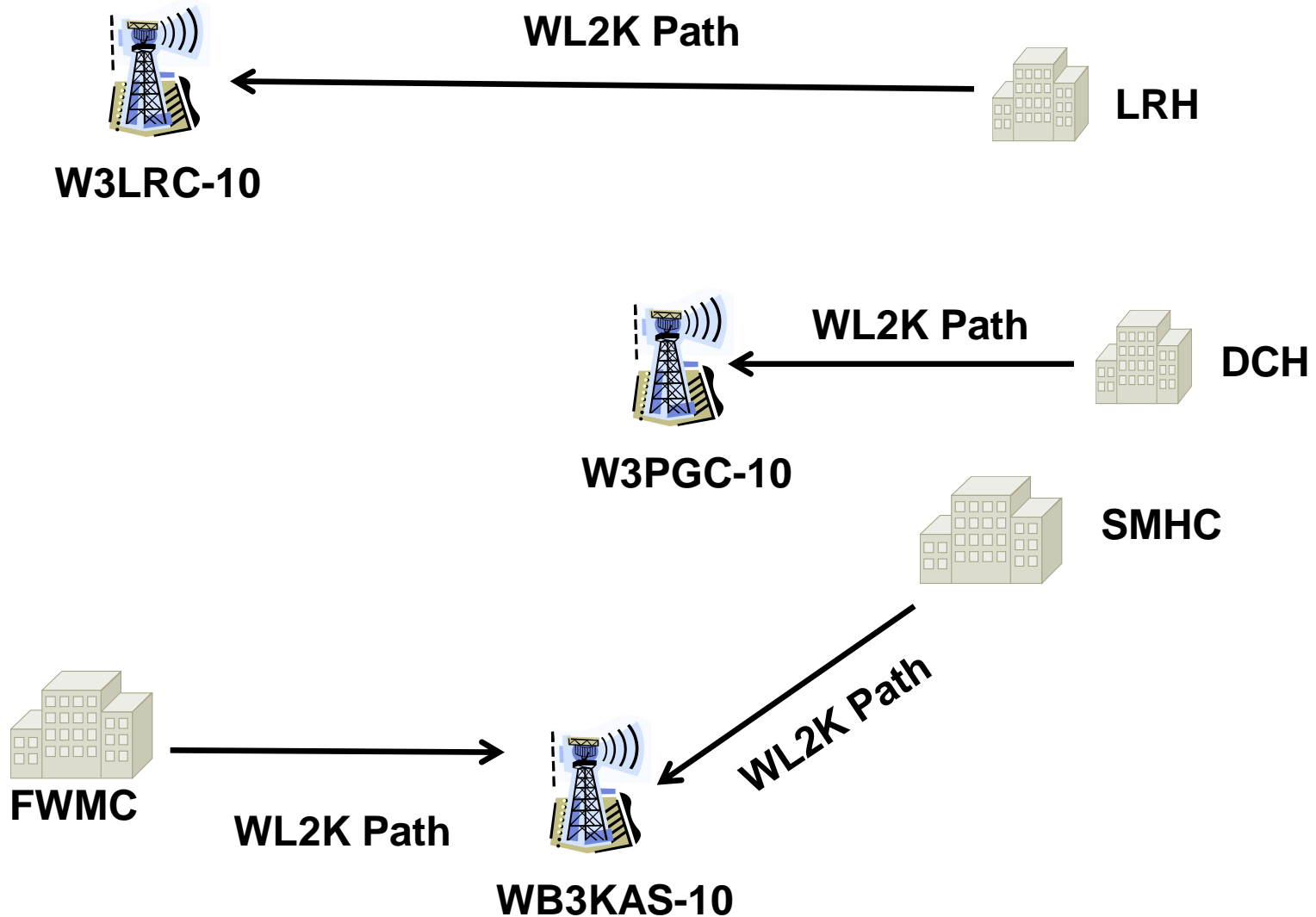
Tricks of the Trade

EmComm Status

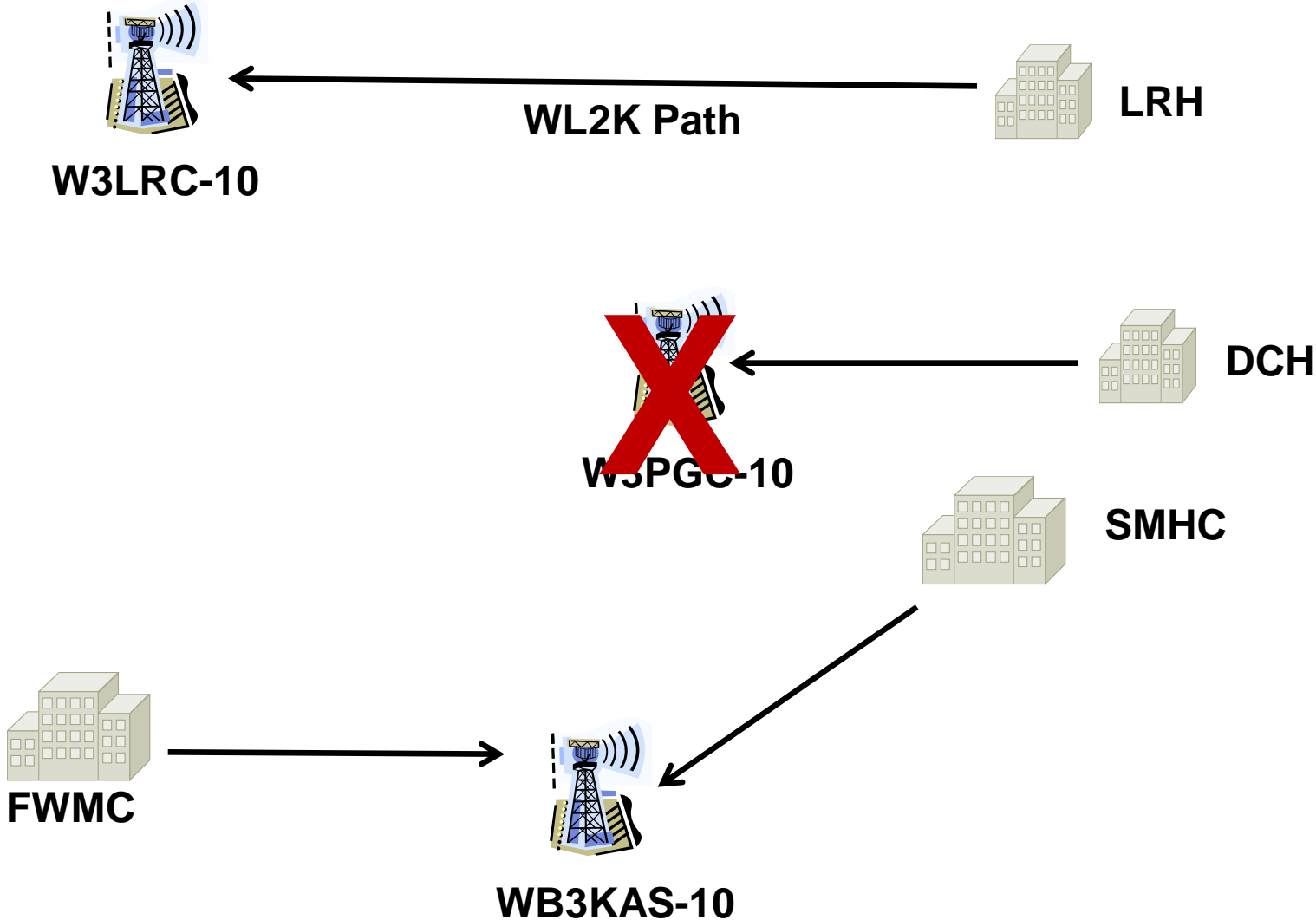
- Obtain VHF & HF Channel Updates:
 - BEFORE YOU DEPLOY
- If you decide to use the Auto Connect feature:
 - UNCHECK PREVIEW DOWNLOADS
 - KEEP IN MIND WHAT TRAFFIC YOU ARE EXPECTING
- Windoze likes to control your Audio
 - CHECK AUDIO SLIDERS OFTEN – KEEP THEM MAX
- Inbox traffic folder: ALWAYS KEEP IT EMPTY
 - Move traffic to appropriate folder
- Keep Outbox window active when sending traffic

Tactical Considerations

Tactical Considerations

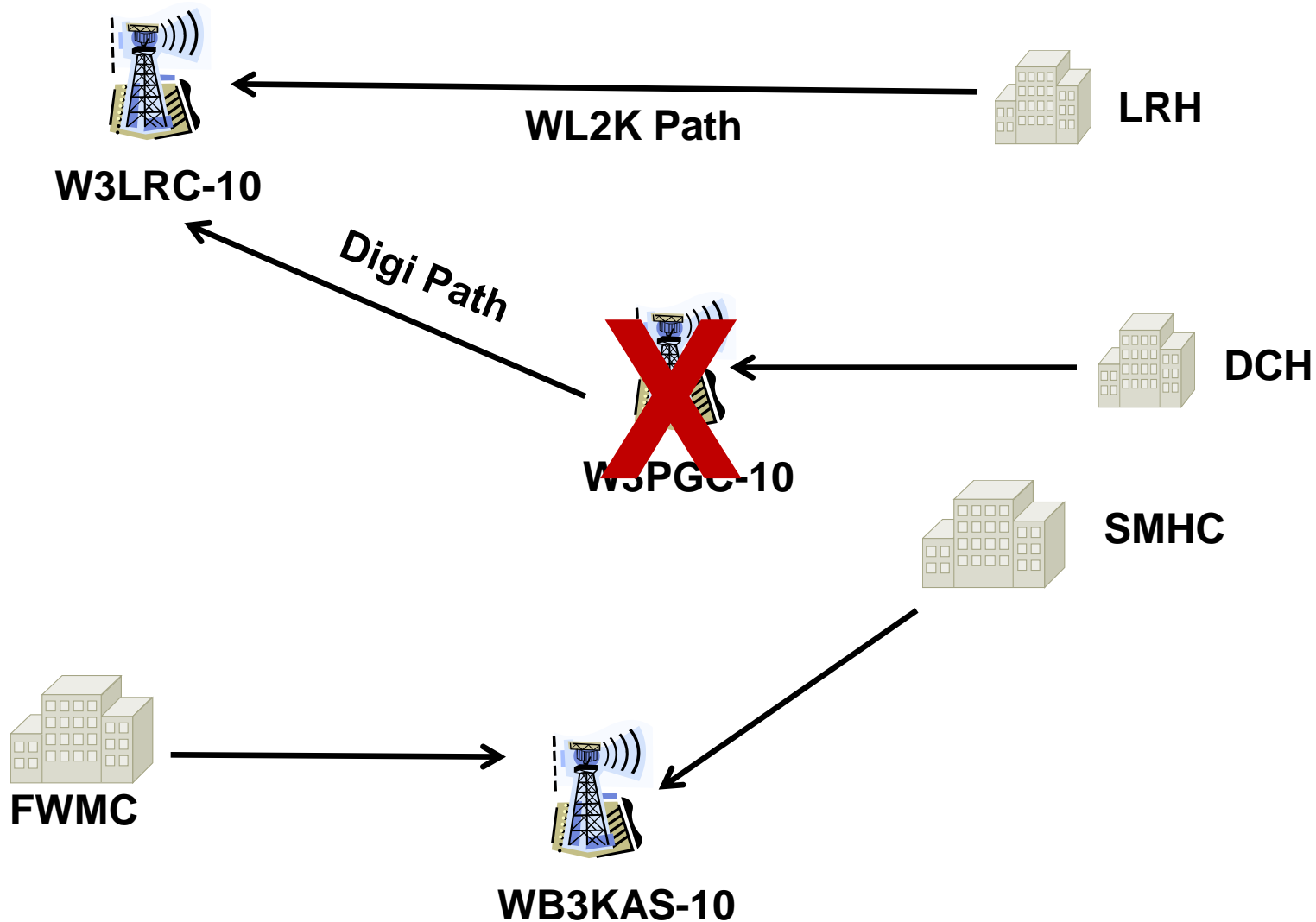


Tactical Considerations



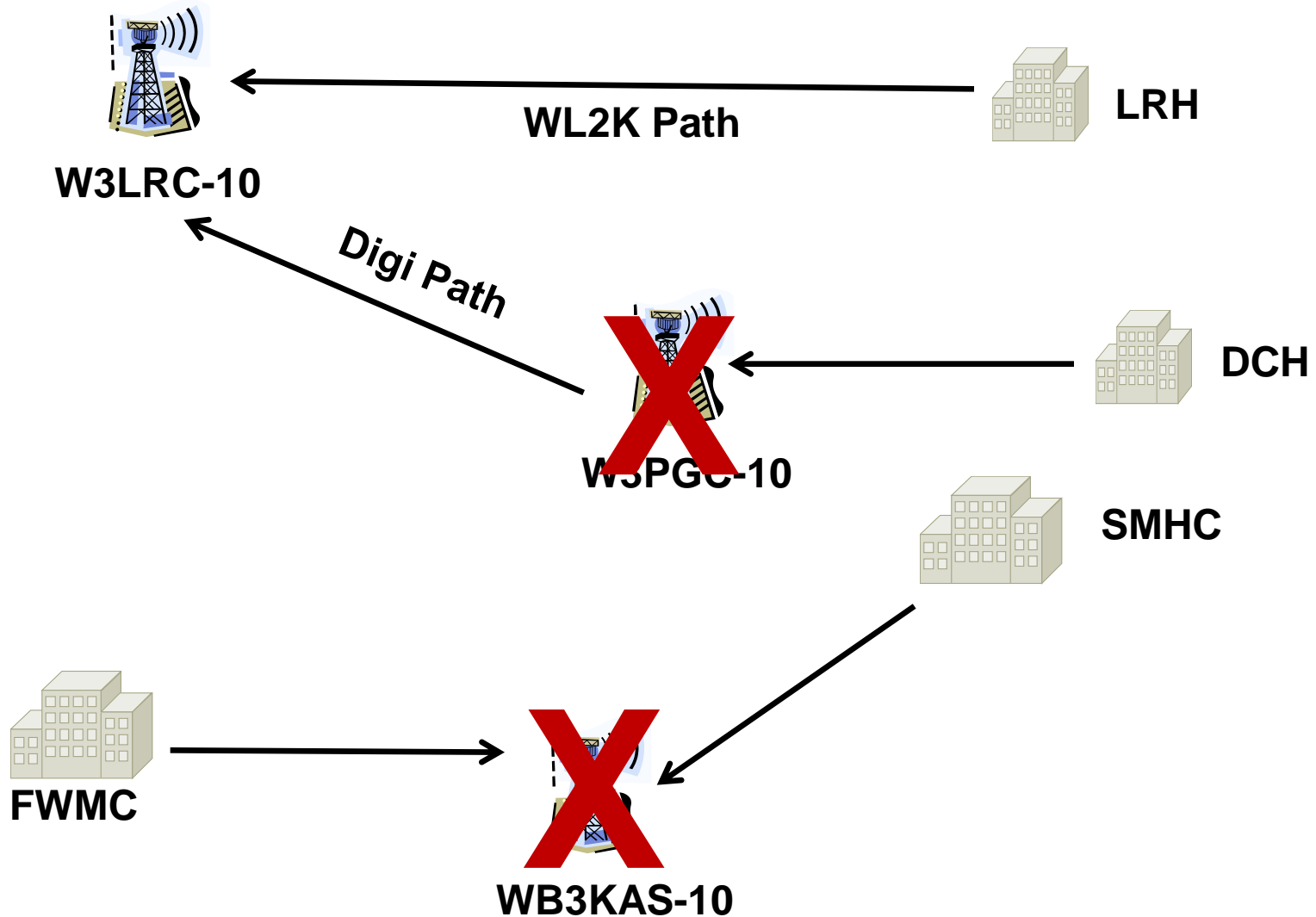
Tactical Considerations

Solution 1



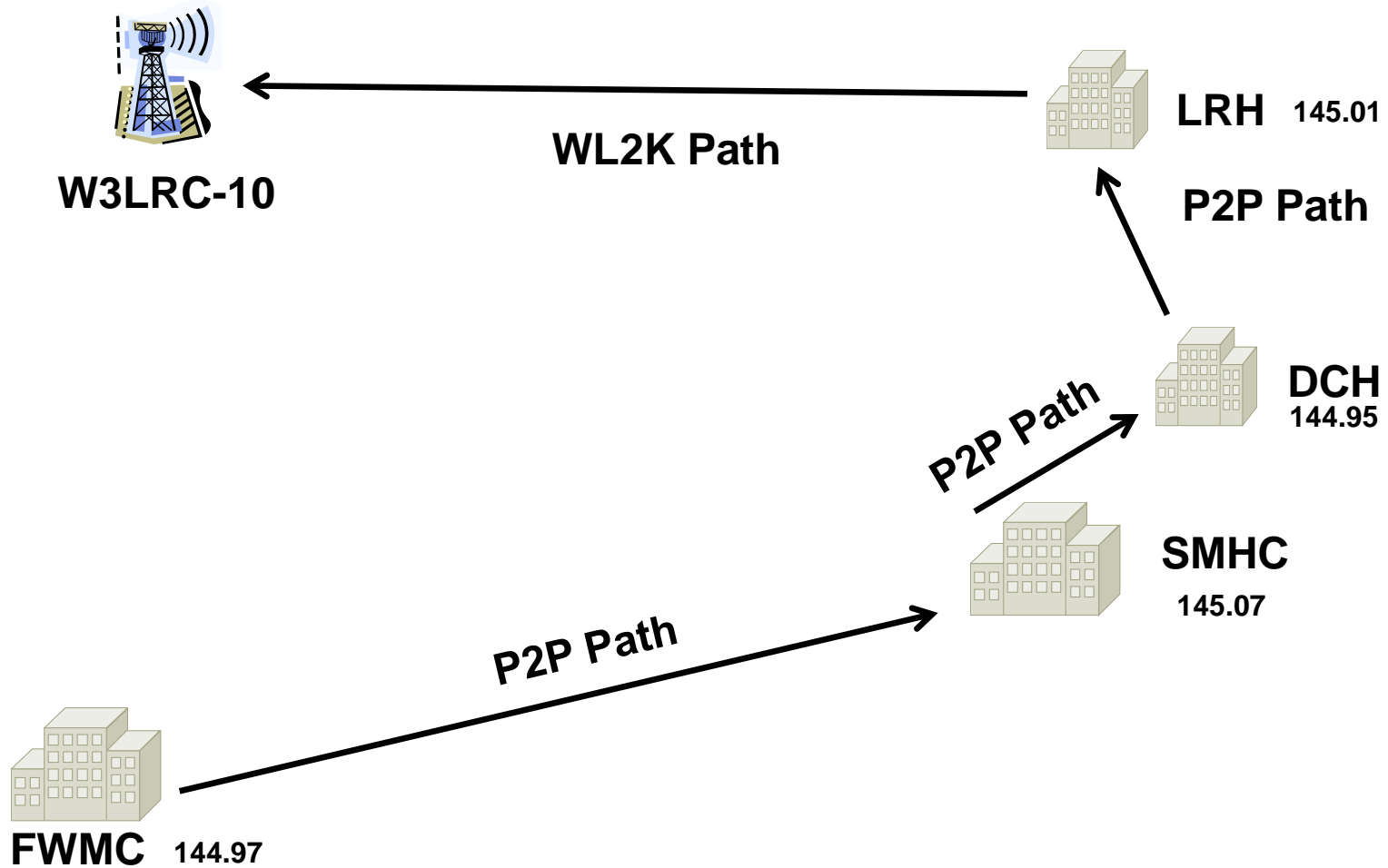
Tactical Considerations

Solution 1



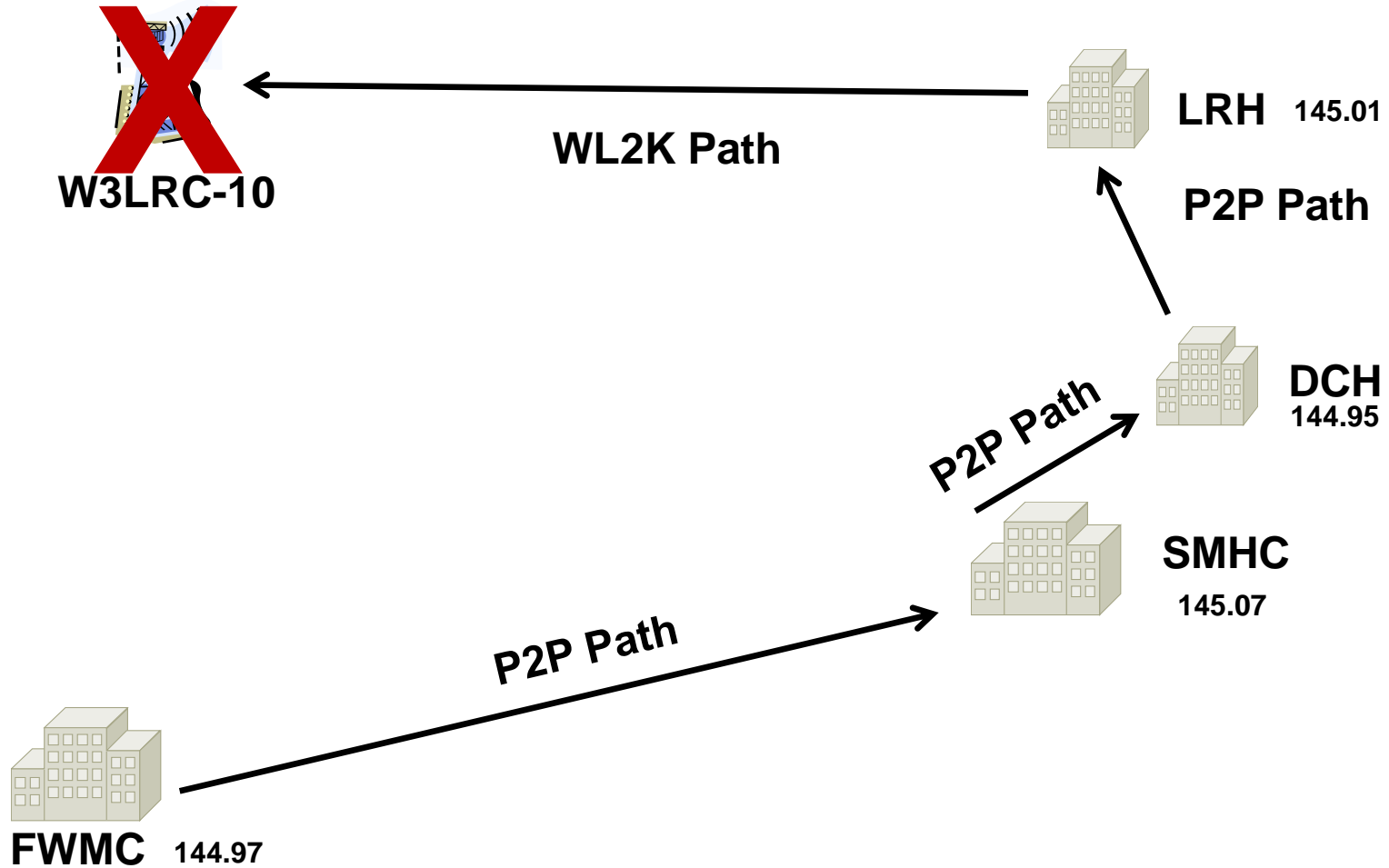
Tactical Considerations

Solution 2



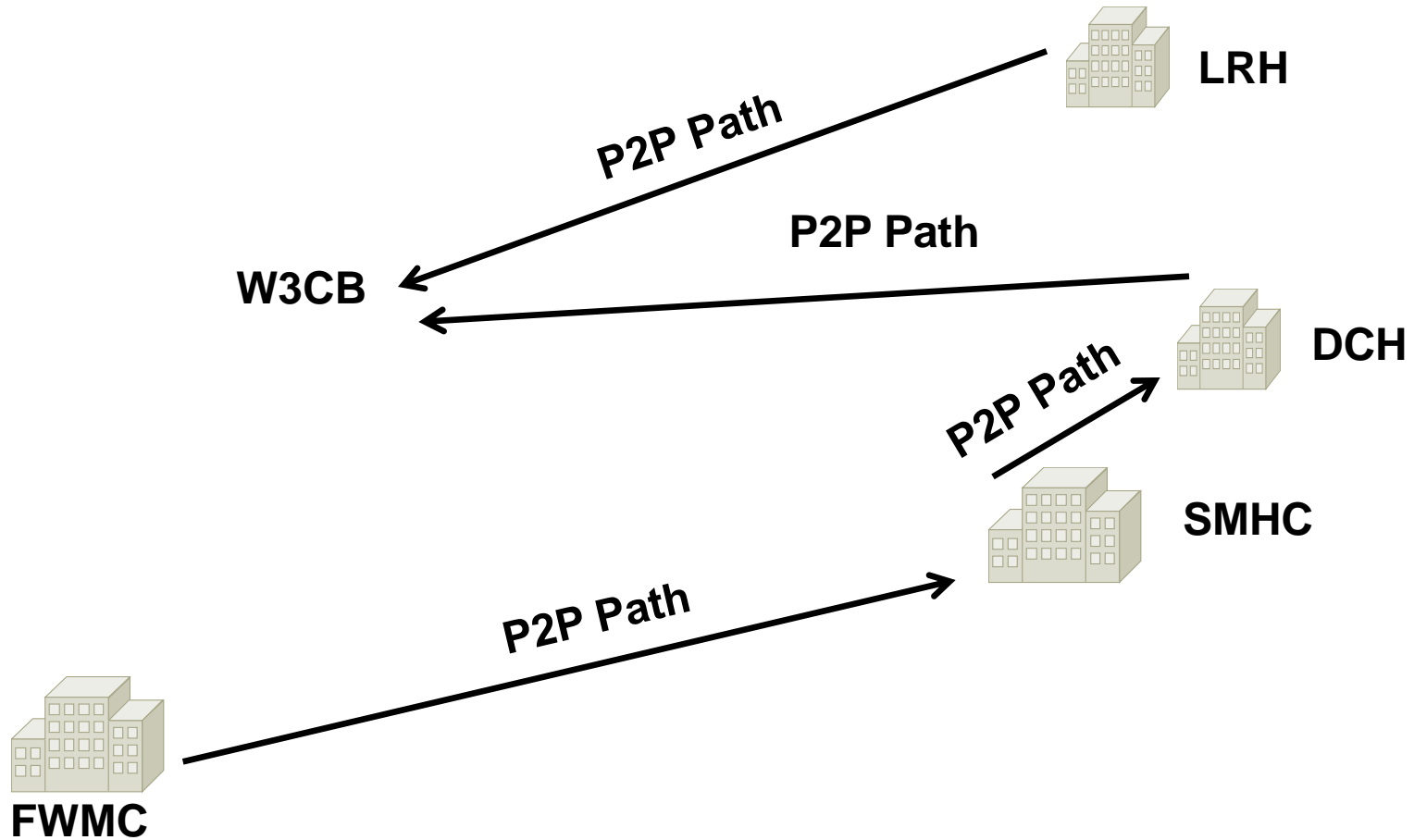
Tactical Considerations

Solution 2



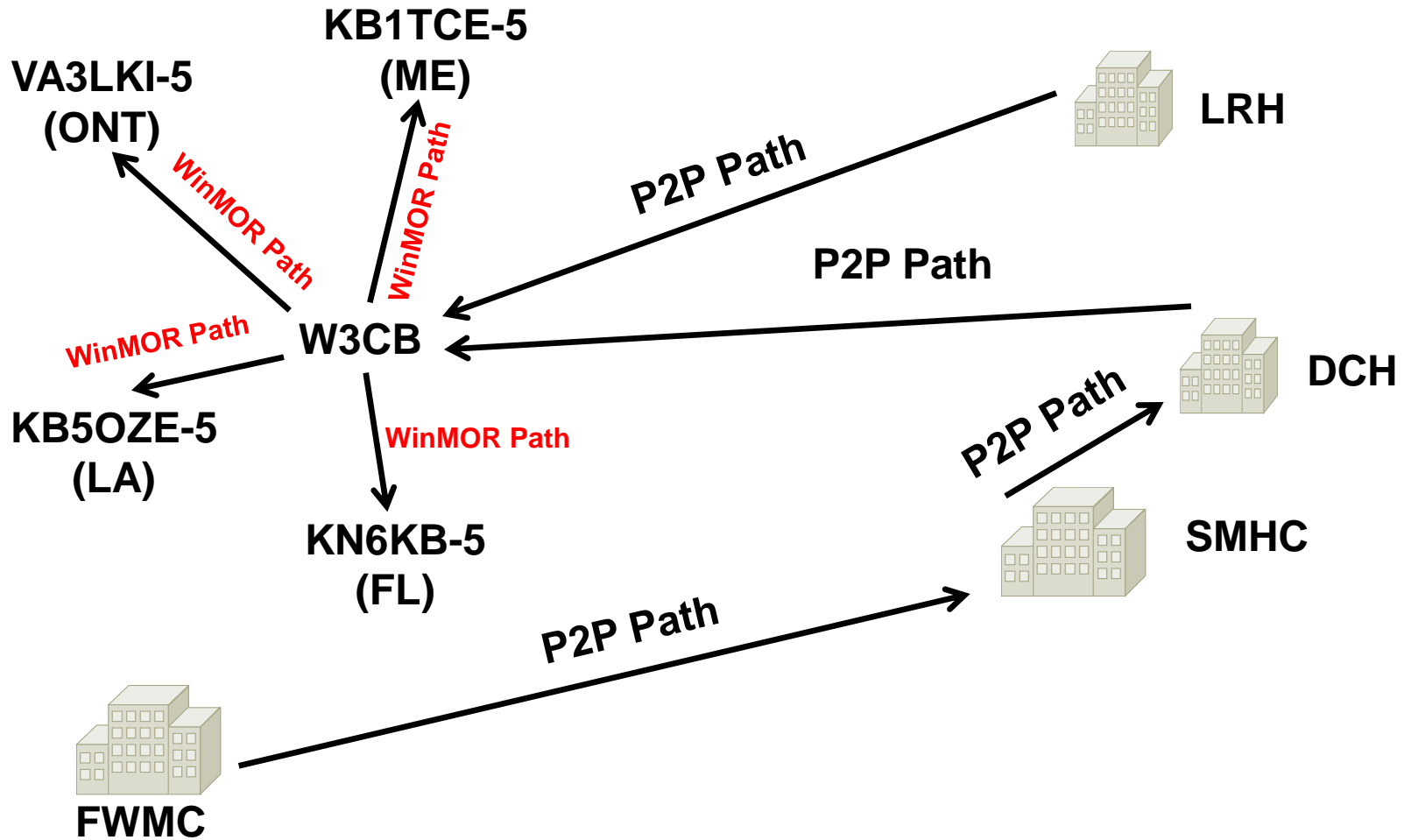
Tactical Considerations

Solution 3

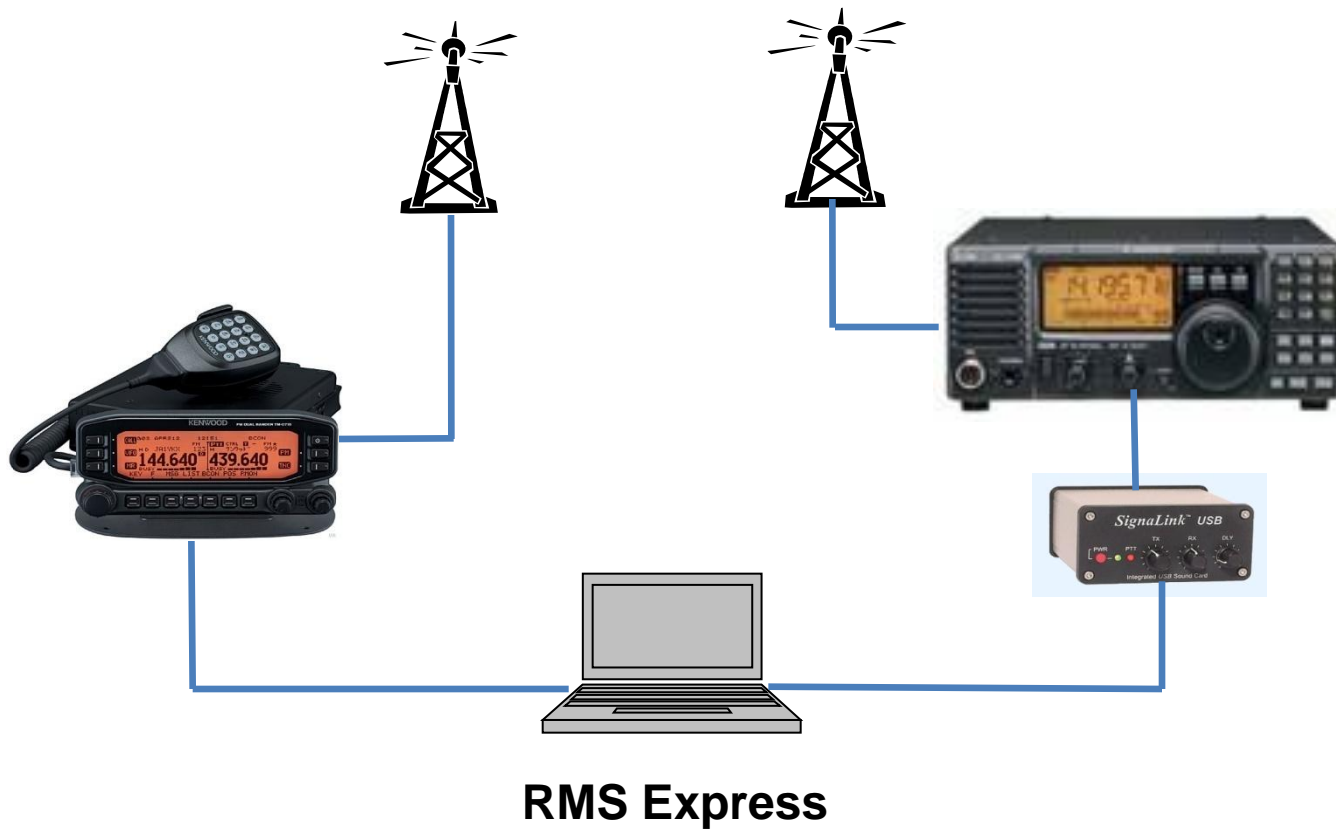


Tactical Considerations

Solution 3

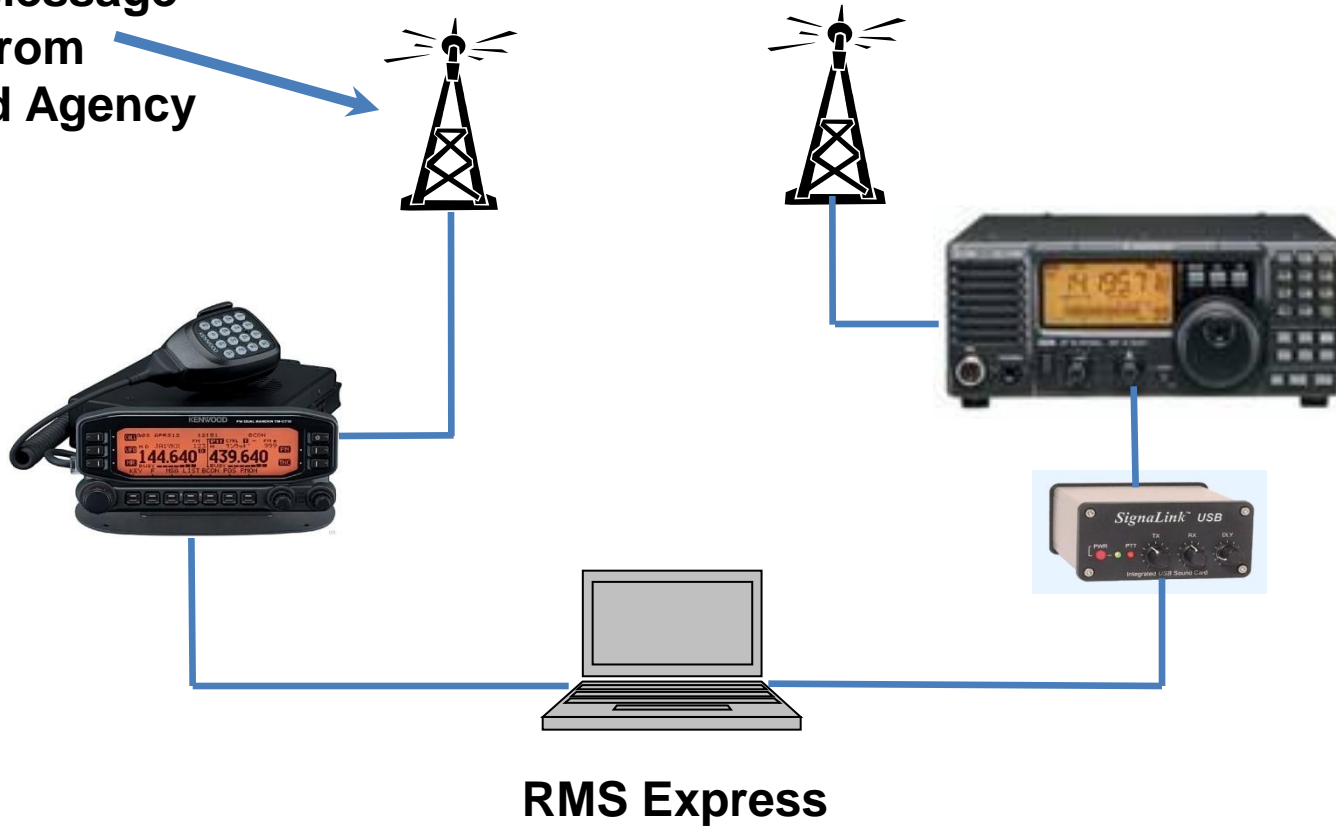


The Ideal EmComm Station

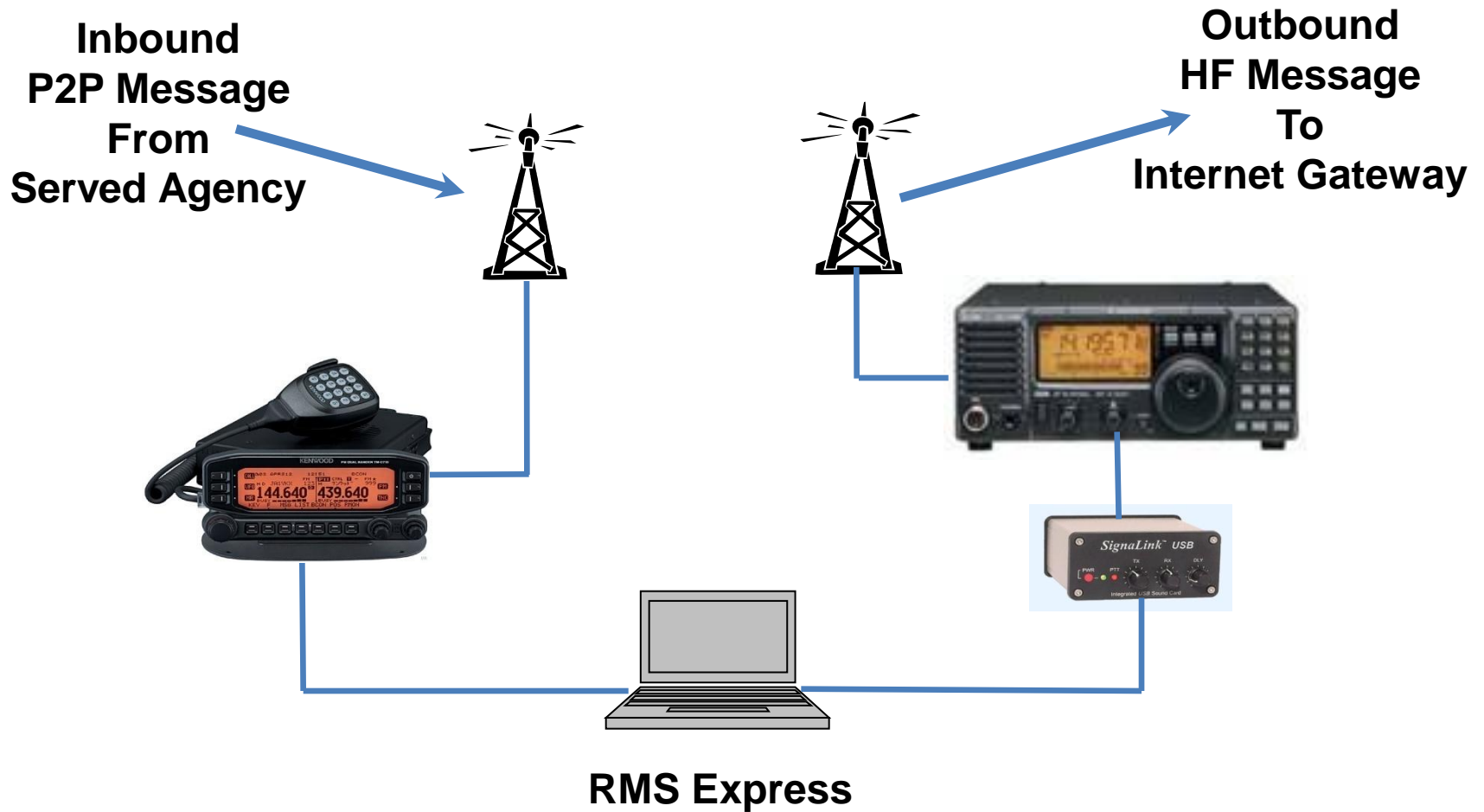


The Ideal EmComm Station

Inbound
P2P Message
From
Served Agency



The Ideal EmComm Station



Email via Radio !



*I'm ready,
are you?*

Send an email from here? No problem.

Can your radio do that?

<http://www.winlink.org>