

# N1MM+ Use for CMARA Field Day

By Terry G. Glagowski / W1TR

Updated 19-Jun-2019 13:16

## Briefing for CMARA Field Day Operators

Presented at the last CMARA Club Meeting Before Field Day

### Field Day Rules:

<http://www.arrl.org/files/file/Field-Day/2018/2018-Field-Day-Rules.pdf>

### N1MM WEB Site:

<http://n1mm.hamdocs.com>

### N1MM Field Day Training Videos (K8UT):

<http://videos.hamdocs.com/>

[http://n1mmplus.hamdocs.com/tiki-index.php?page=Video++N1MM+LoggerPlus+on+Field+Day#Video\\_N1MM\\_LoggerPlus\\_on\\_Field\\_Day](http://n1mmplus.hamdocs.com/tiki-index.php?page=Video++N1MM+LoggerPlus+on+Field+Day#Video_N1MM_LoggerPlus_on_Field_Day)

# TOPICS: CMARA FD N1MM+ Use

- CMARA FD Class: **6A WMA** (Six Alpha, Western Mass)
- Download and Install N1MM+ Watch K8UT Video
- N1MM+ First Run and Setup Watch K8UT Video
- Field Day Usage N1MM+ K8UT Video
- CMARA Field Day Usage N1MM W1TR Slide Show

# TOPICS: CMARA FD N1MM+ Use

## •Download and Install N1MM+ Watch K8UT Video

- Software Installation – *Full Install*, followed by *Latest Update*
  - All this is necessary so that **Networking** will work properly
  - All stations **must** use same **N1MM+ software version**
  - All stations **must** use same **log database** and **log**
  - All stations **must** use same **support files**: country file, super check partial file
  - Enable “**Run as Administrator**” on Desktop Icon  
so **Master Computer** can update Time Clock on **Slave Computers**
  - Install **Log Database** and **Support Files** provided by FD Chairman

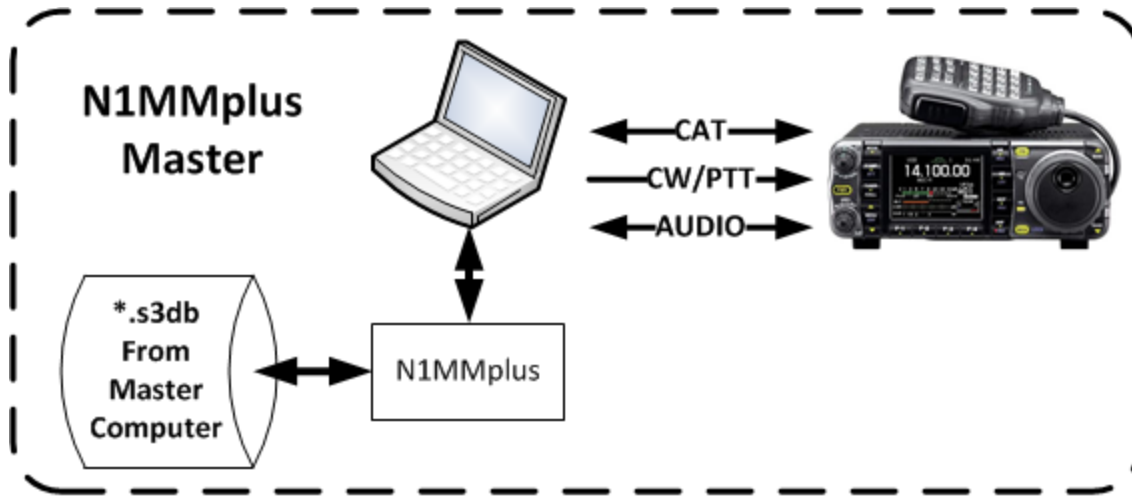
# TOPICS: CMARA FD N1MM+ Use

## •N1MM+ First Run and Setup      Watch K8UT Video

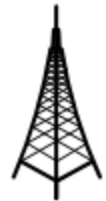
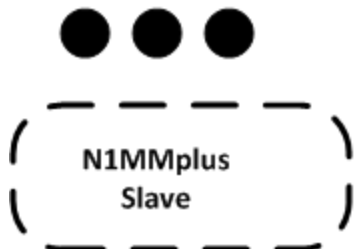
- Hardware / Software Setup – different per radio and computer
  - USB/RS-232 CAT Control – **Required** for Network Reporting of Rig Frequency
  - USB/RS-232 PTT / CW / FSK – **Optional** for Digital Voice Keyer (DVK), Automatic CW, FSK RTTY
  - Computer Sound Card Interface– **Optional** for DVK & Digital Modes
  - Digital PSK/RTTY/FT8 – **Optional**, Soundcard Interface and PTT required.
  - Available for Setup Help: Terry / W1TR
- Network Setup – Open Network Status Window and Enable Networking
- Operator Setup – use CTRL+O then callsign when starting to operate  
use **OFF**, LUNCH, DINNER, SLEEP, etc. when leaving to indicate station is idle
- Band Setup – CAT Control, or type frequency in KHz into callsign field
- Mode Setup – CAT Control, or type mode {SSB, CW, etc.} in callsign field

# Field Day Operations - System Block Diagram:

## N1MM+ Networking and Radio / Computer Interfacing



SSID = **CMARA**  
Password: **fieldday**  
USE **DHCP**  
in TCP/IP Properties  
to get IP, Mask, Gateway



N1MMplus Network

Available for network help:  
Bob / W1TAB  
Jim / KC1BHD  
Terry / W1TR

# Software Installation – Full Install

- Refer to K8UT Video: N1MMplusDownloadAndInstall\_2017.mp4
- N1MM Logger + Website  
<http://n1mm.hamdocs.com/tiki-index.php>
- Select “Files”
- Download and Install “N1MM+ Full Install”
  - **FD Chairman will provide the Full Install to use at FD meeting or FD site**
    - Install by clicking on the self-installing .exe file
    - This can also be found on the CMARA FD Thumb Drive
- Use the default directories for everything (unless...)
- After Installation
  - Right Click on N1MM+ ICON
  - Use Properties at the bottom
  - Use Compatibility Tab
  - **Check: Run this program as an administrator**
    - This will assure that the slave computers can have their date time clocks updated
- Full Install Only Needs to be Done ONCE!

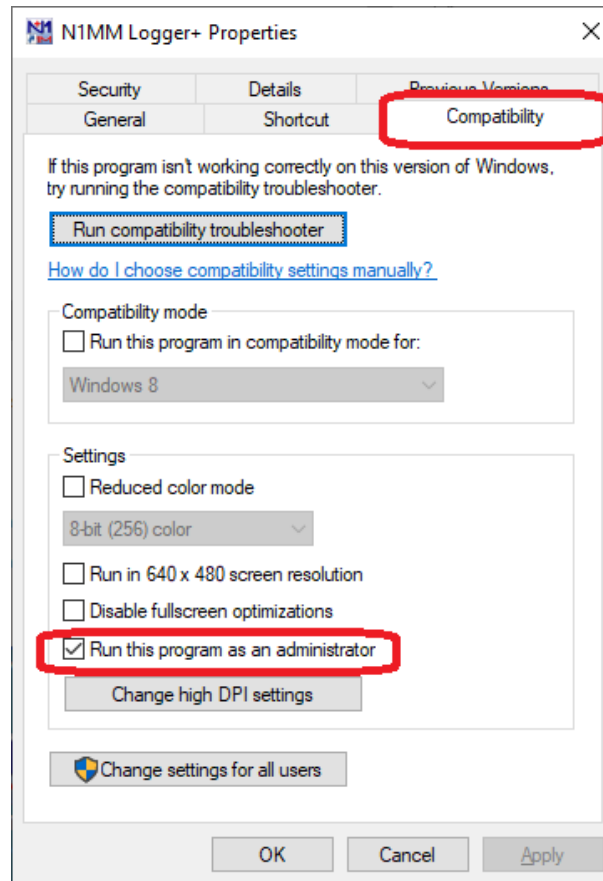
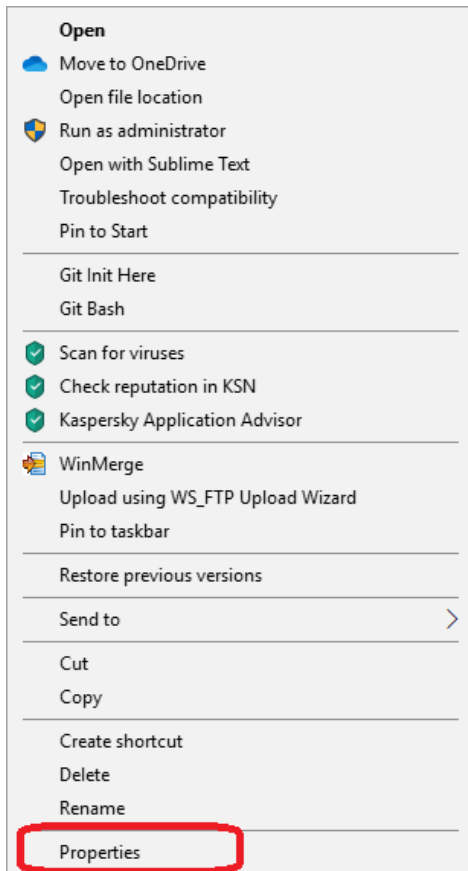
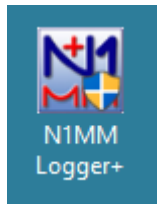
# Software Installation – Install Update

- Refer to K8UT Video: N1MMplusDownloadAndInstall\_2017.mp4
- N1MM Logger + Website  
<http://n1mm.hamdocs.com/tiki-index.php>
- Select “Files”
- Download and Install “N1MM+ Latest Update” use latest version
  - **FD Chairman will provide the latest update to use at FD meeting or FD site**
  - All computers must run the SAME version of N1MM+
  - Install by clicking on the self-installing .exe file
  - This file is also on the CMARA FD Thumb Drive
- Use the default directories for everything (unless...)
- **Read the manual!**
  - There is plenty of documentation:
  - N1MMplus Logger Manual.pdf
  - N1MMplus Quick Start Guide.pdf
  - N1MMplus User Guide.pdf
  - N1MM References (crib sheets)
- Help Files (some are on the Internet, you will need a connection)

# N1MM+ Run as Administrator

Networking requires everyone to Update Time Clocks by Master

1. Right Click on N1MM+ Icon
2. Select Properties
3. Enable Run as Administrator





# N1MM+ Installation Folder (Win 10)

C:\Program Files (x86)\N1MM Logger+

***Have a look, but don't touch !***

# N1MM+ Data Folder (Win 10)

C:\Users\<UserName>\Documents\N1MM Logger+

Name	Date modified	Type	Size
CallHistoryFiles	20-Jan-2019 16:38	File folder	
Databases	09-Jun-2019 23:34	File folder	
Diagnostics	07-Oct-2015 21:10	File folder	
ExportFiles	09-Jun-2019 23:10	File folder	
FunctionKeyMessages	04-Aug-2018 21:01	File folder	
GoalFiles	07-Oct-2015 21:10	File folder	
QsoRecording	07-Oct-2015 21:10	File folder	
SkinsAndLayouts	19-Jun-2018 22:02	File folder	
SupportFiles	05-May-2019 11:26	File folder	
SystemFiles	05-May-2019 21:27	File folder	
UserDefinedContests	05-Aug-2018 13:57	File folder	
Wav	30-Jan-2016 17:28	File folder	
LogError.txt	08-Jun-2019 16:18	Text Document	5,484 KB
N1MM Logger.ini	09-Jun-2019 23:34	Configuration sett...	10 KB
n1mm logger.ini.Sunday.bak	09-Jun-2019 08:59	BAK File	10 KB
N1MMGrayLine.ini	05-Dec-2015 18:57	Configuration sett...	1 KB
n1mmgrayline.ini.Sunday.bak	05-Dec-2015 18:57	BAK File	1 KB
N1MMRotor.ini	07-Oct-2015 21:09	Configuration sett...	1 KB
realtimescorereport.ini	07-Oct-2015 21:10	Configuration sett...	1 KB

**Databases, Logs**

**Cabrillo, ADIF Export Files**

**Function Key Macro Files**

**Country Files, Super Check Partial, State, Section, other information files**

**Pre-Recorded Audio Files for DVK**

# Software Installation – Data Files

- Networking requires everyone to:
  - Use the SAME N1MM+ **version** (1.0.7763.0)
  - Use the SAME **Country File** (wl\_cty.dat).
  - Use the SAME **Super Check Partial** file (master.scp)
  - Start with the SAME FD **Log Database** (2019 ARRL FD W1BIM.s3db) file.
  - Start with the SAME **Log** in the Database (Field Day)
- Copy the Data Files from the **CMARA Field Day Thumb Drive**:
  - From: \CMARA Field Day Thumb Drive\N1MMplus Logger\N1MMplus Latest Updates\N1MM Logger+
  - To: C:\Users\\Documents\N1MM Logger+
  - Don't Worry:
    - New Files will be added
    - Old Files will be updated
    - Other Files will be undisturbed
- Use Batch Files:
  - Field Day Thumb Drive\N1MM Logger+ Updates\N1MMplus Latest Updates\N1MM Logger+\
  - **N1MM\_Update.bat** – Updates Computer with Latest N1MM Data Files
  - **N1MM\_LogCapture.bat** – Captures Log After Field Day Contest Finishes

# Hardware / Software Setup (1)

- **Set the Computer Local Time / Zone (Eastern Daylight Time)**
  - Listen to WWV on 2.5, 5.0, 10.0, 15.0, 20.0 MHz or CHU on 3.330, 7.850, 14.670 MHz
  - Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage, NO WAY to FIX!
  - The N1MM+ Logger will override when your station is connected to the network
  - Set the time anyway in case we have a problem with networking.
- **Start N1MM+ as Administrator**
  - Right Click on N1MM+ ICON and Select Run As Administrator
  - Otherwise MASTER cannot set SLAVE Station Date/Time
  - If the properties of the ICON are already set to Run As Administrator, this is not necessary:
    - Right Click on ICON
    - Use Properties at bottom
    - Use Compatibility Tab
    - Check: Run this program as administrator
- Station Data will Already be Setup in Standard FD Log
- Configure CAT Control – Port, Baud Rate, Rig Type
- Configure PTT/CW/FSK port (optional)
- Configure Audio Interface between Radio and Computer (optional)
- Open Necessary N1MM+ Windows
- Enable Networking

# Hardware / Software Setup (2)

## Set Computer Clock

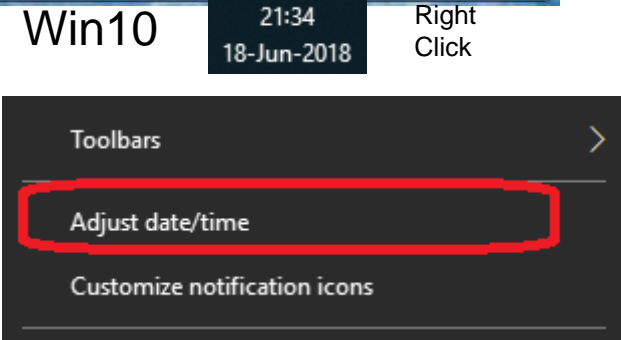
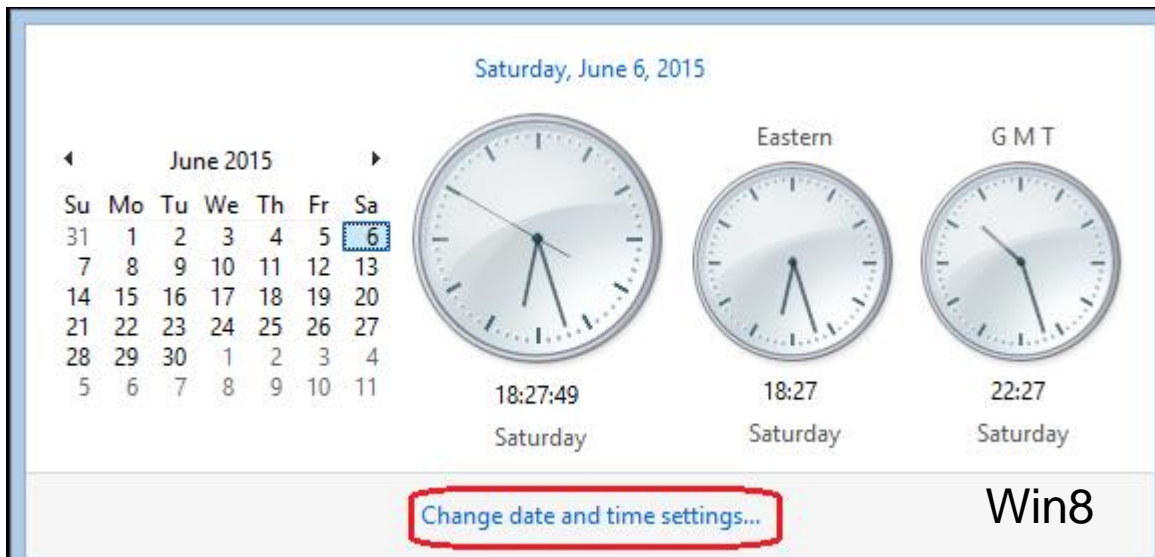
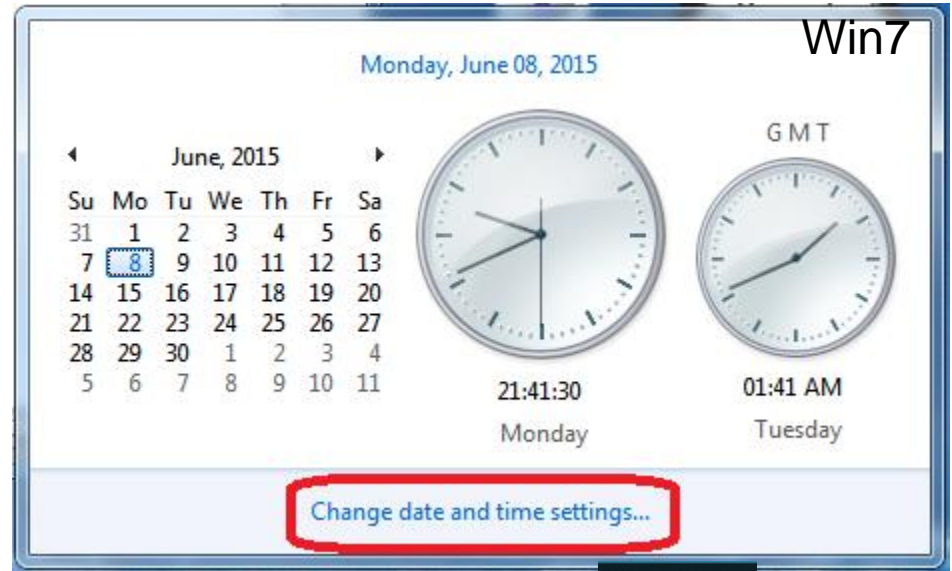
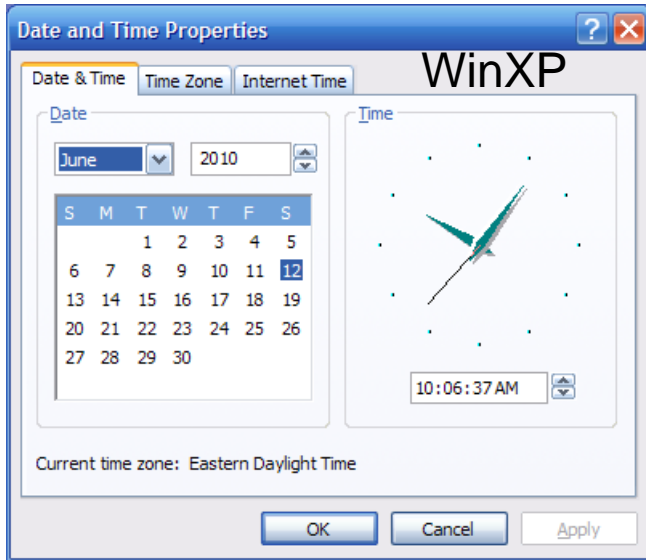
Not Necessary if Networking is Used

- Click on Desktop Clock (lower right of desktop)
- Set the Date (local time)
- Set the Time (local time)
- Set the Time Zone (eastern daylight time)
- Internet Time Will Not Work (no internet)
- **With N1MM+, Master will set time for SLAVES**  
this requires N1MM+ run as administrator

# Hardware / Software Setup (3)

Set Computer Clock

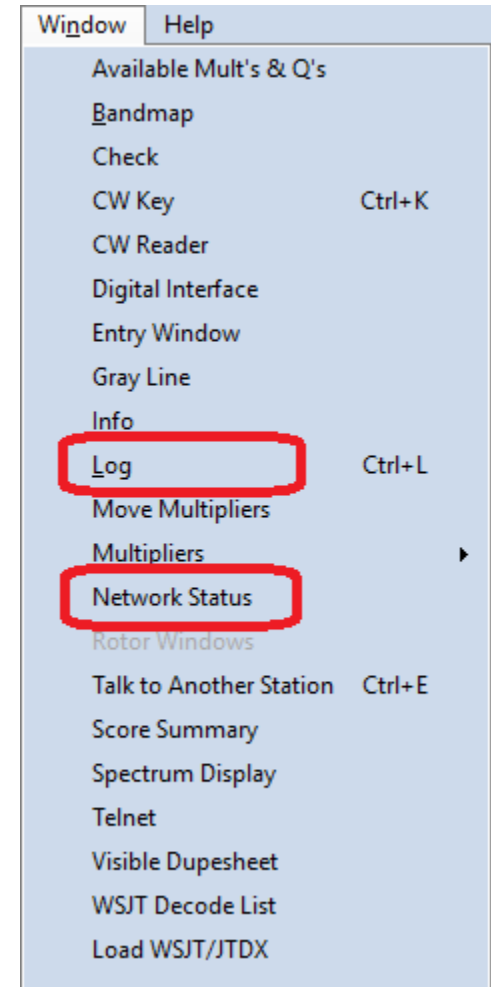
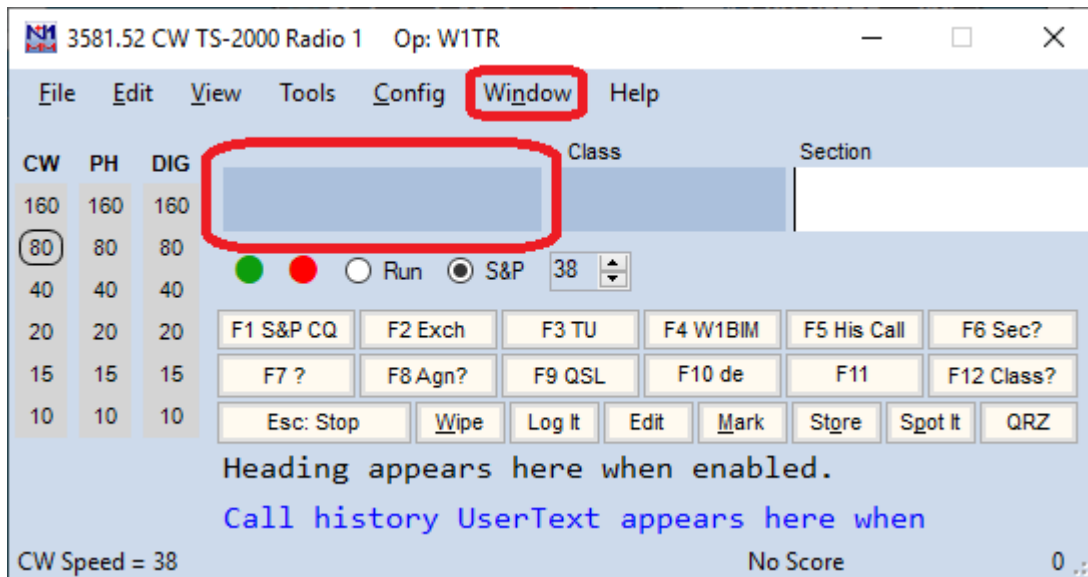
Not Necessary if Networking is Used



- 1) Set Time Automatically - ON
- 2) Set Time Zone Automatically - OFF
- 3) Time Zone - UTC-5 Eastern
- 4) Adjust for Daylight Time - ON

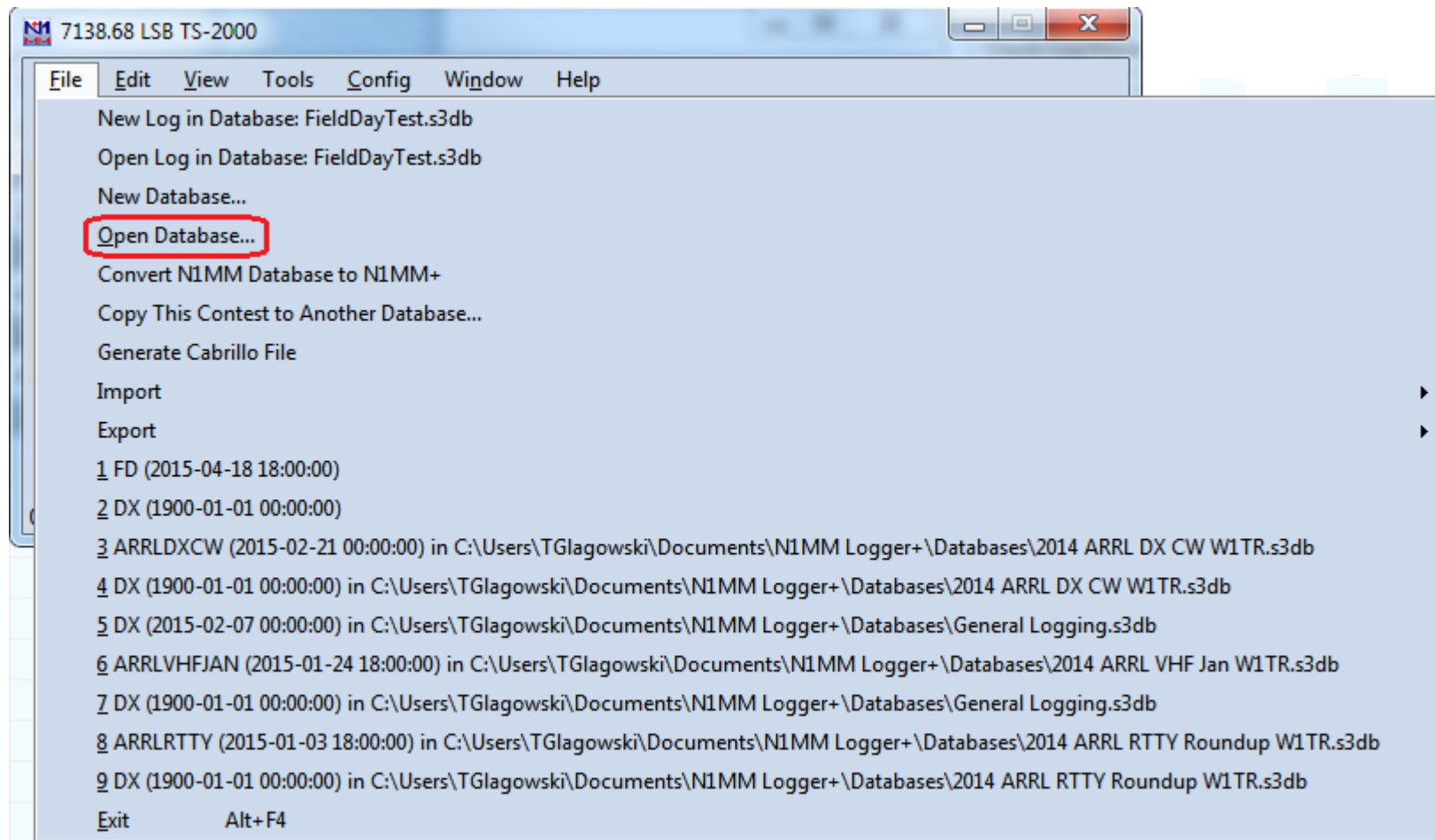
# N1MM+ QSO Entry Form

- 1) When you start N1MMplus, the Entry Window opens.
- 2) Close ALL other N1MMplus windows (for now).
- 3) Select the Window Menu Item to Open the Log.
- 4) Select the Window Menu Item to Open Network Status.
- 5) Use MOUSE to select field in the Entry Window.
- 6) Use TAB or SPACEBAR to move to next field.
- 7) The Left Most field is where the **Callsign**, **Frequency** in KHz, or **Mode** are entered.



# Open Database

Select: Open Database



# Select Database

Pretend it is 2019 not 2015

Open Existing Database

Use your OWN Username not TGlowski

This PC > SSD (C:) > Users > TGlowski > Documents > N1MM Logger+ > Databases

Search Databases

Organize New folder

Quick access

- Desktop
- Dropbox
- OneDrive
- TGlowski
- This PC
- Libraries
  - Camera Roll
  - Documents
  - HAM
  - MARS
  - Music
  - Pictures

Name	Date modified	Type	Size
2016 DX and RagChew W1TR.s3db	11-Jun-2016 13:28	S3DB File	56 KB
2017 ARRL DX CW W1TR.s3db	10-Jun-2017 17:57	S3DB File	96 KB
2017 ARRL FD W1BIM.s3db	09-Jun-2018 10:29	S3DB File	659 KB
2017 ARRL VHF JAN W1TR.s3db	17-Feb-2017 22:11	S3DB File	103 KB
2017 ARRL VHF JUN.s3db	15-Jun-2017 11:35	S3DB File	177 KB
2018 ARRL FD W1BIM.s3db	18-Jun-2018 22:16	S3DB File	659 KB
2018 ARRL VHF JUN W1TR.s3db	18-Jun-2018 22:16	S3DB File	100 KB
Do_Not_Use_Or_Erase.s3db	07-Oct-2015 21:10	S3DB File	51 KB
FieldDayTest.s3db	06-Jun-2015 18:38	S3DB File	56 KB
General Logging.s3db	16-Apr-2015 16:41	S3DB File	57 KB
GeneralLogging.s3db	25-Nov-2016 17:12	S3DB File	60 KB
ham.s3db	04-Dec-2015 17:51	S3DB File	58 KB
N1MM Admin.s3db	18-Jun-2018 22:10	S3DB File	4,763 KB
N1MM Packet Spots.s3db	18-Jun-2018 22:10	S3DB File	20 KB

File name: 2018 ARRL FD W1BIM.s3db

SQLite (\*.s3db)

Open Cancel



# Log Database Is In a Standard Place

- Log Database Folder Name

C:\Users\<<USERNAME>\Documents\N1MM Logger+\Databases

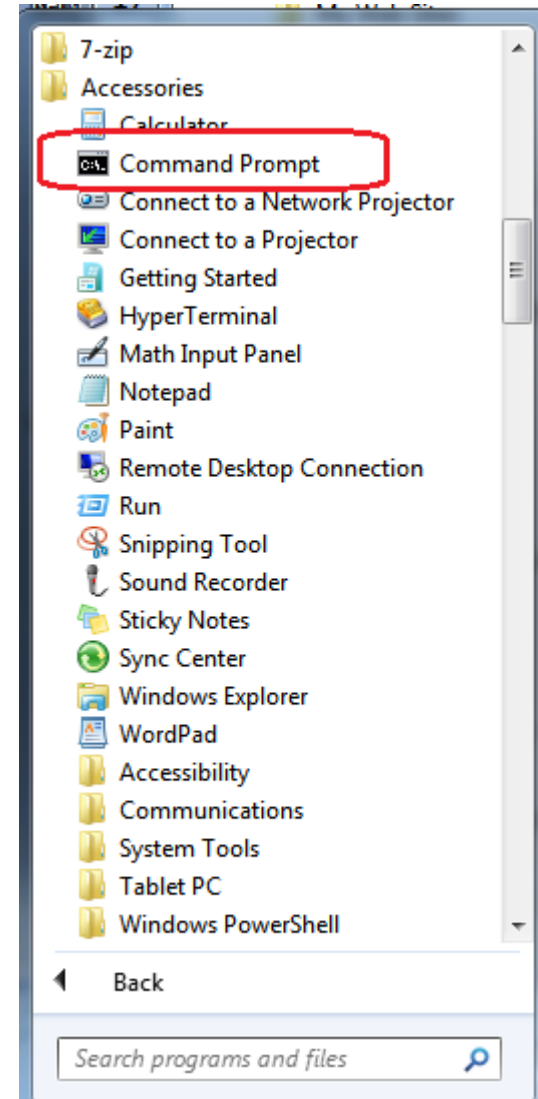
- Log Database File Name

2019 CMARA Field Day.s3db

- How to Determine <USERNAME> (next slide)
- The MASTER computer in the N1MM network will have the ENTIRE log at end of contest
- So will all the SLAVE computers !

# How To Determine <USERNAME>

- Open Command Prompt Window from Start Button
- Type SET command



# Use SET to Get Environmental Parameters

```
C:\> Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\TGlowski>SET
ALLUSERSPROFILE=C:\ProgramData
AMDAPPSDKROOT=C:\Program Files (x86)\AMD APP\AMD APP\bin
APPDATA=C:\Users\TGlowski\AppData\Roaming
asl.log=Destination=file
CommonProgramFiles=C:\Program Files
CommonProgramFiles(x86)=C:\Program Files (x86)
CommonProgramW6432=C:\Program Files (x86)
COMPUTERNAME=W1TR
ComSpec=C:\Windows\system32\cmd.exe
COPYCMD=/Y
FP_NO_HOST_CHECK=NO
HOMEDRIVE=C:
HOMEPATH=\Users\TGlowski
LOCALAPPDATA=C:\Users\TGlowski\AppData\Local
LOGONSERUER=\\W1TR
NAS=NAS3
NUMBER_OF_PROCESSORS=8
OS=Windows_NT
Path=C:\Perl\site\bin;C:\Perl\bin;C:\Program Files (x86)\Intel\iCLS Client\;C:\Program Files\Intel\iCLS Client\;C:\Program Files (x86)\Common Files\HP\Digital Imaging\bin;c:\Program Files (x86)\Microsoft Shared\MSUS Projects\Library;C:\Program Files (x86)\ATI Technologies\ATI.ACE\Core-Static;C:\Program Files\Microsoft\Web Platform Builder\BatchFiles;c:\Program Files\Saxonica\SaxonHE9.5M\bin;c:\Program Files\Saxonica\SaxonHE9.5M\bin\
PATHEXT=.COM;.EXE;.BAT;.CMD;.UBS;.UBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE=AMD64
PROCESSOR_IDENTIFIER=Intel64 Family 6 Model 42 Stepping 7. GenuineIntel
PROCESSOR_LEVEL=6
PROCESSOR_REVISION=2a07
ProgramData=C:\ProgramData
ProgramFiles=C:\Program Files
ProgramFiles(x86)=C:\Program Files (x86)
ProgramW6432=C:\Program Files (x86)
PROMPT=$P$G
PSModulePath=C:\Windows\system32\WindowsPowerShell\v1.0\Modules\
PUBLIC=C:\Users\Public
SESSIONNAME=Console
SystemDrive=C:
SystemRoot=C:\Windows
TEMP=C:\Users\TGLAGO~1\AppData\Local\Temp
TMP=C:\Users\TGLAGO~1\AppData\Local\Temp
USERDOMAIN=W1TR
USERNAME=TGlowski
USERPROFILE=C:\Users\TGlowski
Variable=Value
US100COMNTOOLS=C:\Program Files (x86)\Microsoft Visual Studio 2010 SDK\
USSDK100Install=C:\Program Files (x86)\Microsoft Visual Studio 2010 SDK\
windir=C:\Windows
windows_tracing_flags=3
windows_tracing_logfile=C:\BUTBin\Tests\installpackage\csilogfile.log

C:\Users\TGlowski>_

C:\Users\TGlowski>SET
ALLUSERSPROFILE=C:\ProgramData
AMDAPPSDKROOT=C:\Program Files (x86)\AMD APP\AMD APP\bin
APPDATA=C:\Users\TGlowski\AppData\Roaming
COMPUTERNAME=W1TR
ComSpec=C:\Windows\system32\cmd.exe
COPYCMD=/Y
FP_NO_HOST_CHECK=NO
HOMEDRIVE=C:
HOMEPATH=\Users\TGlowski
LOCALAPPDATA=C:\Users\TGlowski\AppData\Local
LOGONSERUER=\\W1TR
NAS=NAS3
NUMBER_OF_PROCESSORS=8
OS=Windows_NT
Path=C:\Perl\site\bin;C:\Perl\bin;C:\Program Files (x86)\Intel\iCLS Client\;C:\Program Files\Intel\iCLS Client\;C:\Program Files (x86)\Common Files\HP\Digital Imaging\bin;c:\Program Files (x86)\Microsoft Shared\MSUS Projects\Library;C:\Program Files (x86)\ATI Technologies\ATI.ACE\Core-Static;C:\Program Files\Microsoft\Web Platform Builder\BatchFiles;c:\Program Files\Saxonica\SaxonHE9.5M\bin;c:\Program Files\Saxonica\SaxonHE9.5M\bin\
PATHEXT=.COM;.EXE;.BAT;.CMD;.UBS;.UBE;.JS;.JSE;.WSF;.WSH;.MSC
PROCESSOR_ARCHITECTURE=AMD64
PROCESSOR_IDENTIFIER=Intel64 Family 6 Model 42 Stepping 7. GenuineIntel
PROCESSOR_LEVEL=6
PROCESSOR_REVISION=2a07
ProgramData=C:\ProgramData
ProgramFiles=C:\Program Files
ProgramFiles(x86)=C:\Program Files (x86)
ProgramW6432=C:\Program Files (x86)
PROMPT=$P$G
PSModulePath=C:\Windows\system32\WindowsPowerShell\v1.0\Modules\
PUBLIC=C:\Users\Public
SESSIONNAME=Console
SystemDrive=C:
SystemRoot=C:\Windows
TEMP=C:\Users\TGLAGO~1\AppData\Local\Temp
TMP=C:\Users\TGLAGO~1\AppData\Local\Temp
USERDOMAIN=W1TR
USERNAME=TGlowski
USERPROFILE=C:\Users\TGlowski
Variable=Value
US100COMNTOOLS=C:\Program Files (x86)\Microsoft Visual Studio 2010 SDK\
USSDK100Install=C:\Program Files (x86)\Microsoft Visual Studio 2010 SDK\
windir=C:\Windows
windows_tracing_flags=3
windows_tracing_logfile=C:\BUTBin\Tests\installpackage\csilogfile.log

C:\Users\TGlowski>_
```

# Open Log in Database

Note: 2019 not 2018

2018 ARRL FD W1BIM.s3db

Select Existing Log

Contest	Start Date	Contest Description
FD	2018-06-23 18:00:00	ARRL Field Day (June)
FD	2017-06-17 18:00:00	ARRL Field Day (June)
DX	1900-01-01 00:00:00	General Logging
DELETEDQSO	1900-01-01 00:00:00	Deleted Qs

Contest Associated Files

**DO NOT CHANGE / W1TR Will Set This**

Category   0 Contacts

Operator

Band  Note - the program does not validate categories. Check the contest rules for valid categories.

Power

Mode

Overlay

Station

Assisted  Time Category

Transmitter

Sent Exchange  Omit RST. E.g. CQWW: 05 SS: A 56 EMA

Operators

Soapbox

# Station Information

Do Not Change, Provided by FD Chairman

**Edit Station Information**

Tip: You need to fill out this form or the program will not perform properly... Also, make sure your computer date and time are set to the LOCAL date and time zone for your location.

Call:

Name:

Address:

Address:

City:  State:  Zip:

Country:

Grid Square:  CQ Zone:  ITU Zone:

License:  Latitude:   Longitude:

Station TX/RX:  Power:

Antenna:  Ant. Height:  a.s.l.

ARRL Section:

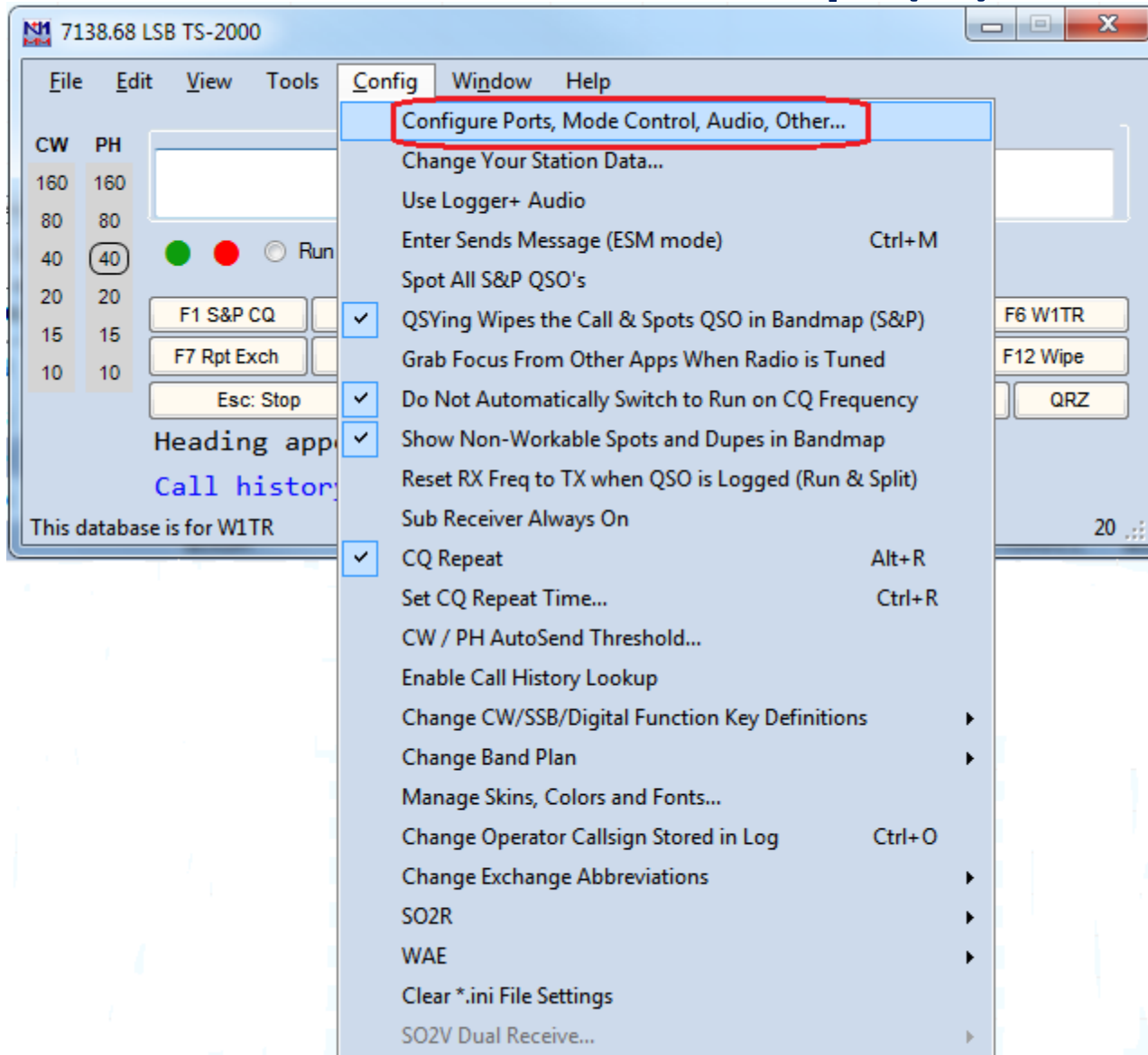
Rover QTH:

Club:

Email address:

**Email Needs Update, before submission**

# CAT Control Setup (1)



# CAT Control Setup(2)

**Radio Type**

**CAT Port**

**CW / PTT Port**

Port	Radio	Digi	CW/Other	Details
COM6	TS-2000	<input type="checkbox"/>	<input type="checkbox"/>	Set
COM7	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Set
COM8	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
COM3	TS-2000	<input type="checkbox"/>	<input type="checkbox"/>	Set
COM4	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
LPT1		<input type="checkbox"/>	<input type="checkbox"/>	Set
LPT2		<input type="checkbox"/>	<input type="checkbox"/>	Set
LPT3		<input type="checkbox"/>	<input type="checkbox"/>	Set

SO1V     SO2V     SO2R

57600,N,8,2,DTR=Always On,RTS=Always On,Tx=1  
DTR=CW,RTS=PTT,Tx=1

57600,N,8,2,DTR=Always On,RTS=Always On,Tx=2  
DTR=CW,RTS=PTT,Tx=2

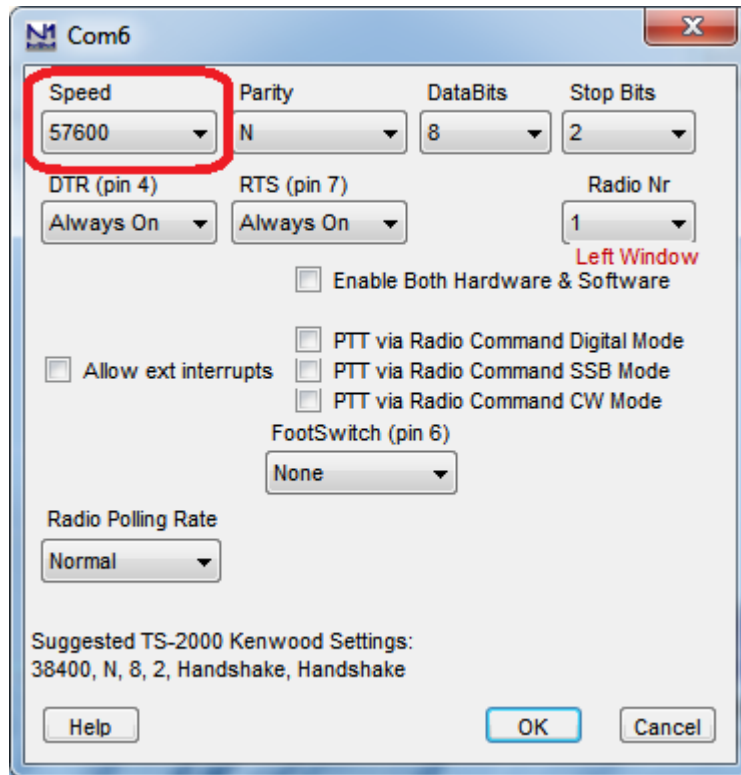
**FYI: COM3 / COM4 are for SO2R 2<sup>nd</sup> Radio**

- Use SO1V
- Setup Radio Type
- Setup CAT Port
- Setup CW/PTT Port (optional if computer CW or FSK RTTY)
- Set Details for CAT Port
- Set Details for CW/PTT Port

OK    Cancel    Help

# Details for CAT Port

- Set Speed (Baud Rate) for YOUR Radio
- For some radios (ICOM) you may need to set HEX address On Radio and on N1MM
- On Radio and on N1MM



USB to RS-232 Serial

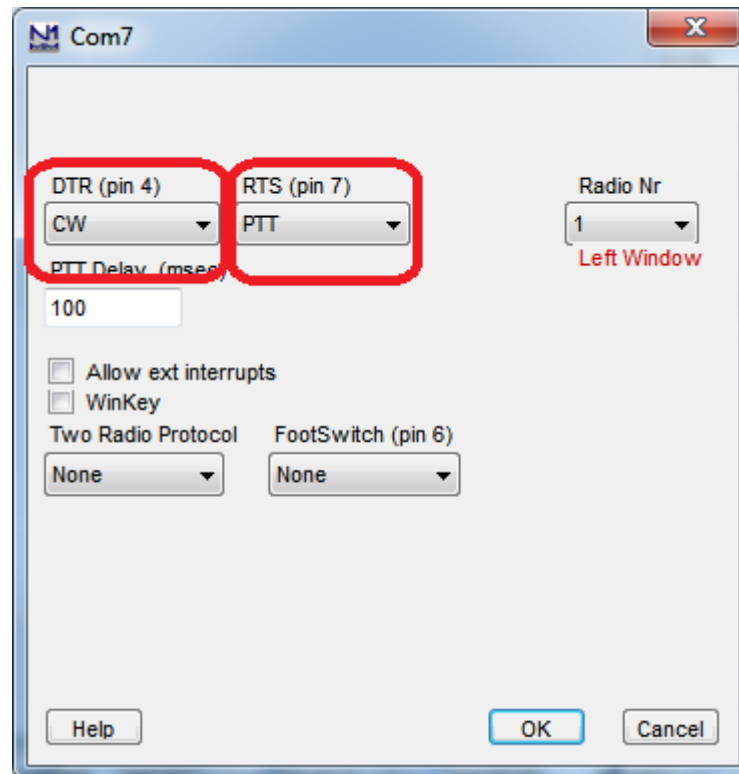


USB to Icom C-IV



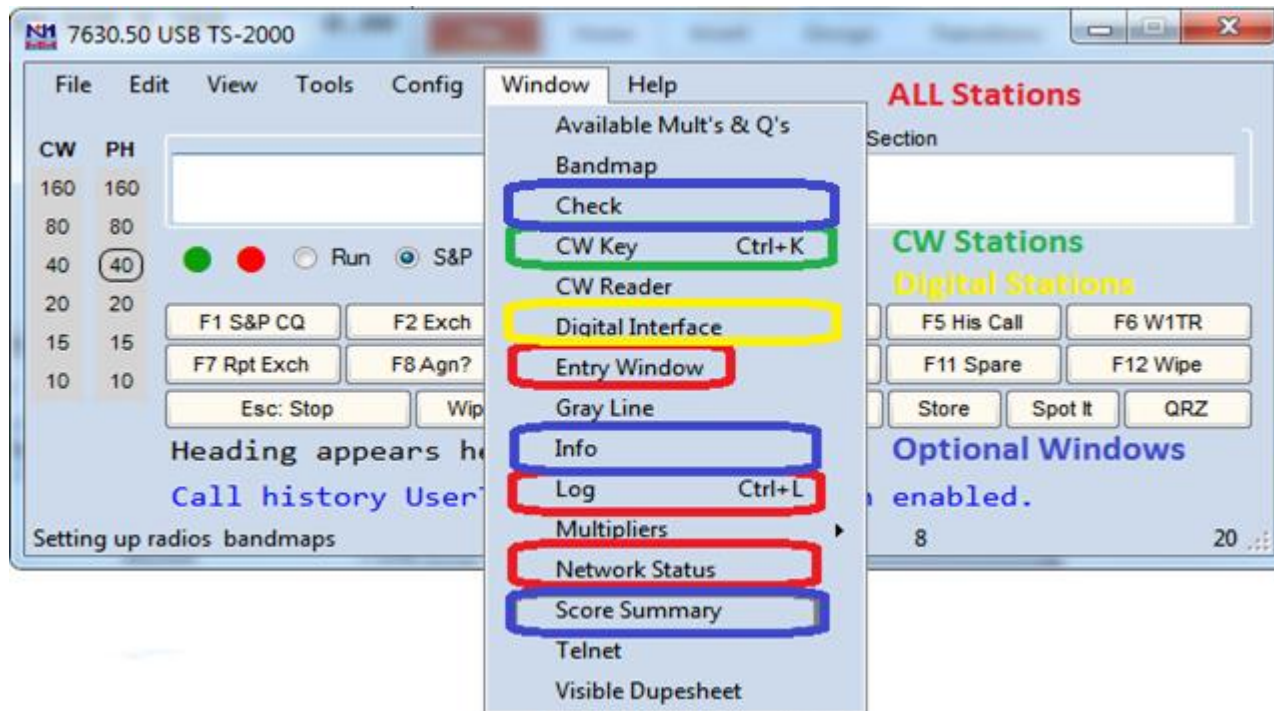
# Details for CW/PTT Port

- Set DTR = CW
- Set RTS = PTT



# Activate N1MM+ Windows

- **All Stations Use**
  - Entry Window (Default Window, already set up)
  - Network Status – to enable networking and know what other stations are doing
  - Log Window – to see what has been logged
- **Optional Windows**
  - Check – shows similar callsigns already in log, possible TYPOs
  - Info – shows QSO rate
  - Score Summary – shows score by band and mode
- **CW Stations Use CW Key for ad-lib transmissions (CTRL+K)**
- **Digital Stations Use Digital Interface**



# Entry Window

This window shows current QSO information

Callsign, Class, Section (these vary with contest type)

Title Bar at Top of Window shows Frequency, Mode, Radio Type, Radio Number, Operator.

Graphical Indicator for current band and mode

Graphical Indicator for Run / S&P

Function Keys for use with Mouse, legend key for using F-Keys on Keyboard

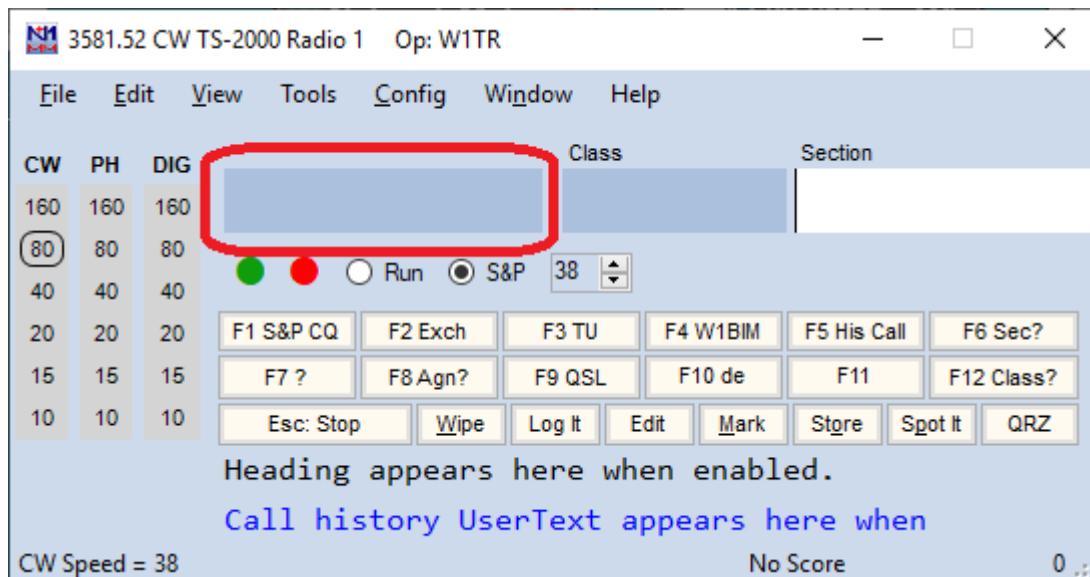
Call History when Available

Azimuth Heading when Available

Use MOUSE to select field.

Use TAB or SPACEBAR to move to next field.

Enter Callsign, Frequency (KHz), Mode in leftmost field.

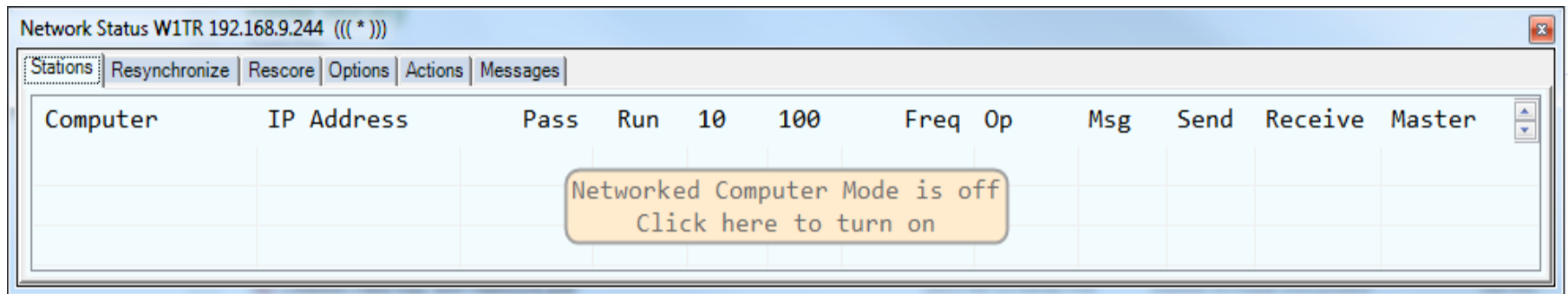


# Network Status Window (1)

This window shows computers currently on the network

Computer Name, IP, Pass Freq, Run/S&P, QSO Stats, Freq, Op, Msg, Send, Recv, Master

If the Network Status Window Looks Like This,  
Click on the Yellow / Orange Button to Start Networking.  
Do NOT check MASTER, your station is a SLAVE!



# Network Status Window (2)

This window shows computers currently on the network

Computer Name, IP, Pass Freq, Run/S&P, QSO Stats, Freq, Op, Msg, Send, Recv, Master

Network Status W1TR 192.168.9.244 - 1 Stations in network

Stations | Resynchronize | Rescore | Options | Actions | Messages

Computer	IP Address	Pass	Run	10	100	Freq	Op	Msg	Send	Receive	Master
W1TR	192.168.9.244	0.00	S&P	60	60	7630.50	W1TR		Ok	Ok	<input checked="" type="checkbox"/>

Normally there would be other computers listed when network is fully populated

Network Status W1TR 192.168.9.244 - 1 Stations in network Options Should Be Set as Shown

Stations | Resynchronize | Rescore | Options | Actions | Messages

Run1  Run2/Mult  Don't automatically change to S&P mode  Force ALL other stations to stop transmitting when I transmit

Log QSOs at all Stations  Wipe callsign when logged by stack target  Block my Tx only if other station transmitting on same band and mode (multi-one)

Don't work non-mults  Trace Networked Computer Messages

Network Status W1TR 192.168.9.244 - 1 Stations in network Use This to Send Text Messages to Other Computers

Stations | Resynchronize | Rescore | Options | Actions | Messages Use this to Start / Stop Networking

Talk (QI-E) Stop Networking Force Time Sync Reset Serial Numbers at all Stations

Set Your Pass Frequency Edit Computer Addresses

Network Status W1TR 192.168.9.244 - 1 Stations in network Use This to View Messages

Stations | Resynchronize | Rescore | Options | Actions | Messages

# Talk Window

This Window Allows Chat with Other Stations  
Use CTRL-E to Activate Talk Window



## Upper Window Displays Received Messages

Time of Day GMT/UTC (15:38z)

Sending Computer in Braces [W1TR]

Destination Station (\*)

Message Text

## Lower Window Displays Sent Messages

Destination \* for all or Computer Name

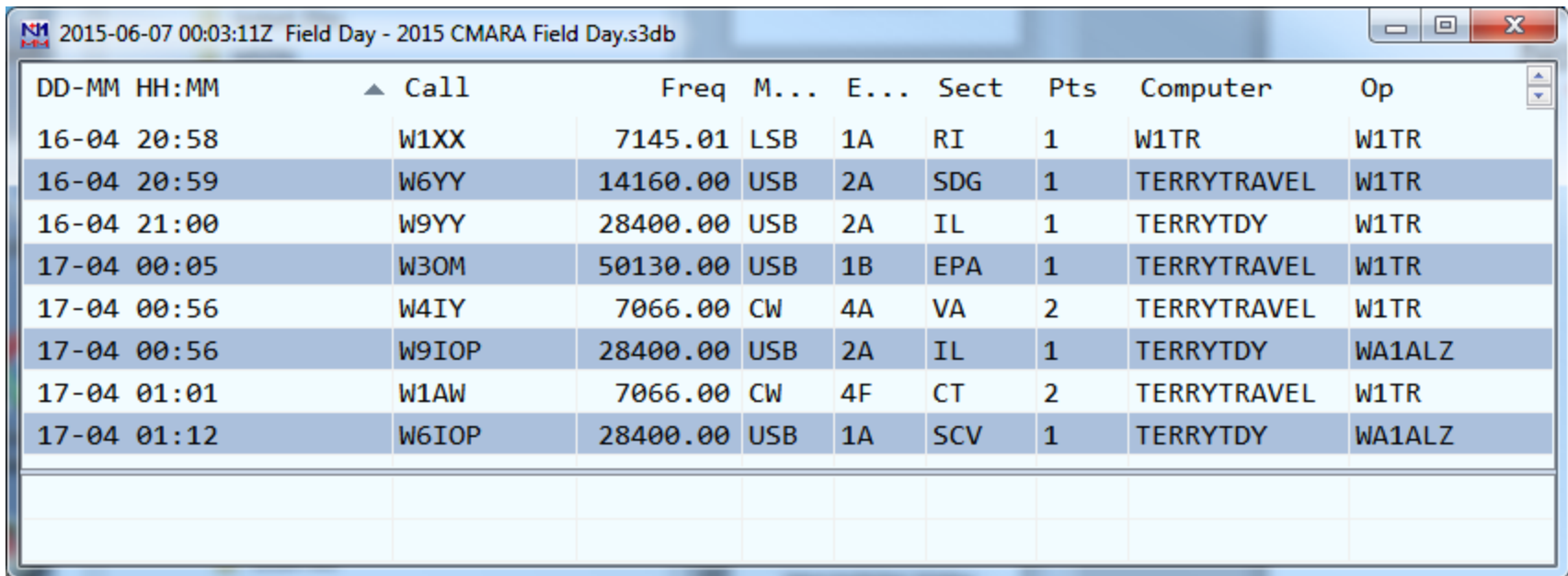
Message Text

# Log Window

This window shows stations CMARA has worked

Date, Time, Call, Frequency, Mode, Section, Points, Computer, Operator.

Title Bar at Top of Window shows Date/Time, Contest Name, Database Name.

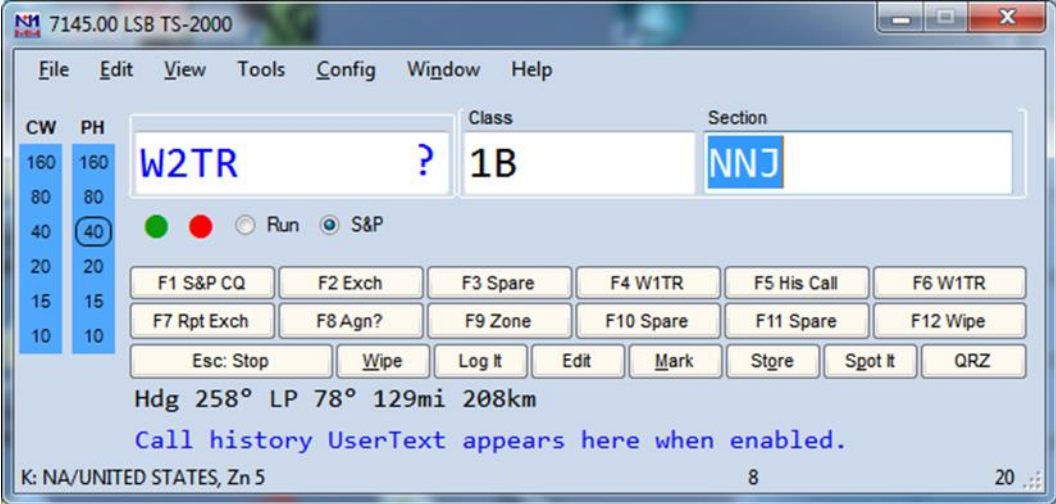


The screenshot shows a window titled "2015-06-07 00:03:11Z Field Day - 2015 CMARA Field Day.s3db". The window contains a table with the following columns: DD-MM HH:MM, Call, Freq, M..., E..., Sect, Pts, Computer, and Op. The table lists eight rows of station work logs.

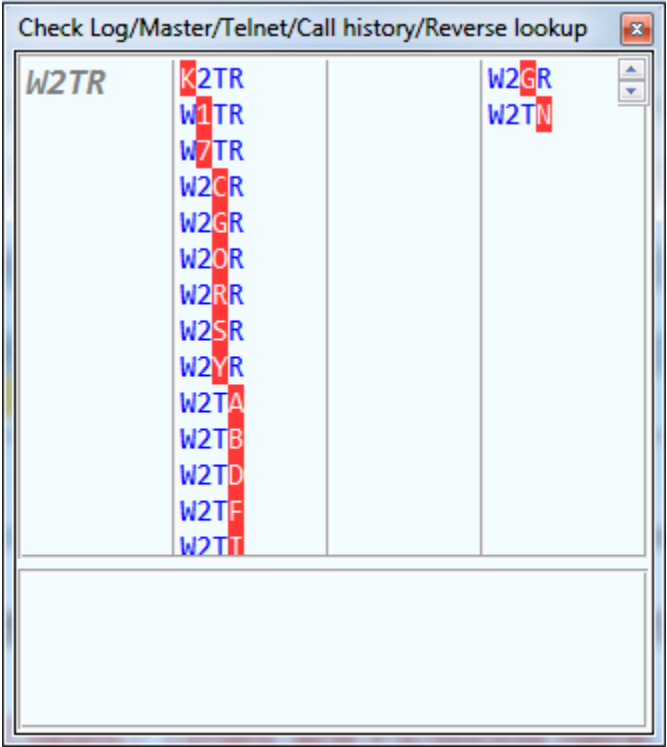
DD-MM HH:MM	Call	Freq	M...	E...	Sect	Pts	Computer	Op
16-04 20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04 01:01	W1AW	7066.00	CW	4F	CT	2	TERRYTRAVEL	W1TR
17-04 01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ

# Check Window

This Window Shows Partial Matches of Callsign in QSO Entry Window with Log, Master Callsign Database, Telnet Window, Call History File. Use to check for TYPOs or mis-copied callsigns.



Log      Callsign Master Database      Callsign History File  
Telnet





# Info Window

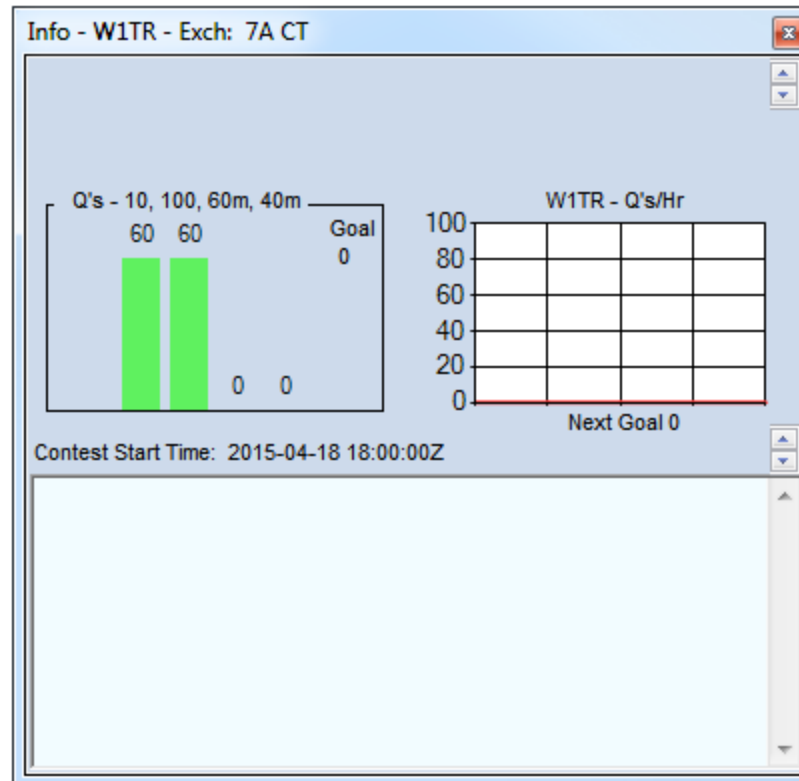
This window shows QSO rate statistics versus goals.

10 – rate for last 10 QSOs

100 – rate for last 100 QSOs

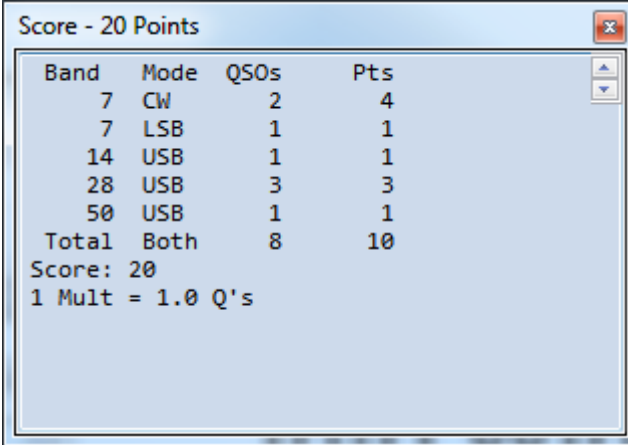
60m – rate for last 60 minutes

40m – rate for last 40 minutes



# Score Summary Window

This Window Shows Current Score by Band and Mode, and Total



Band	Mode	QSOs	Pts
7	CW	2	4
7	LSB	1	1
14	USB	1	1
28	USB	3	3
50	USB	1	1
Total	Both	8	10

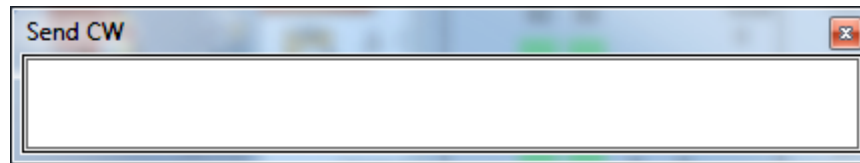
Score: 20  
1 Mult = 1.0 Q's

# CW Transmit Window

Use this Window to send CW Messages not Preset in Macros.  
Particularly Useful if NO Paddle or Key is Connected to Radio.

**ENTER Key Closes Window but Transmission Continues.**

**Window must be closed before other actions can be taken.**



# Band Map Window

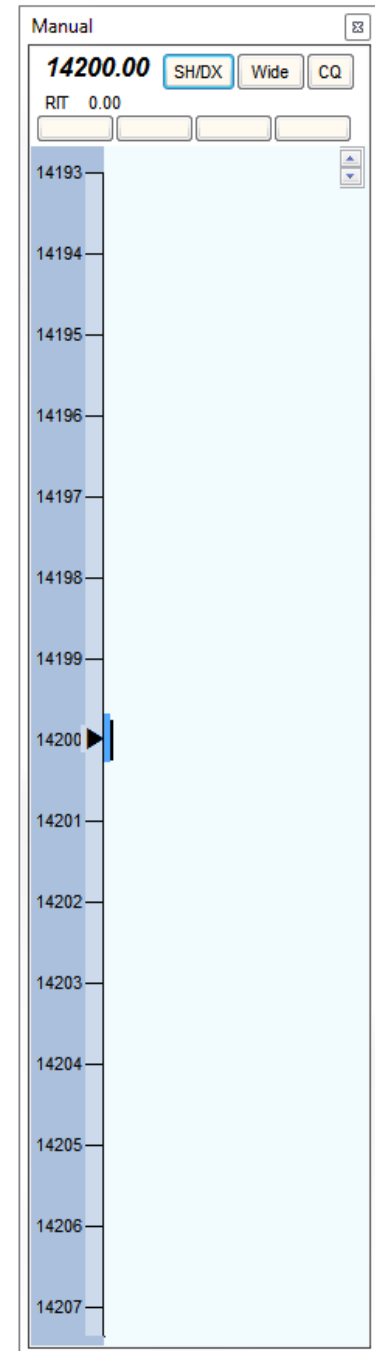
This Window Shows Spots from

1. Self
2. Others
3. Packet Cluster

Station Callsigns will be Shown Next to Frequency.

Click on Callsign to Move VFO to Frequency

Note: we are NOT using Packet Cluster!

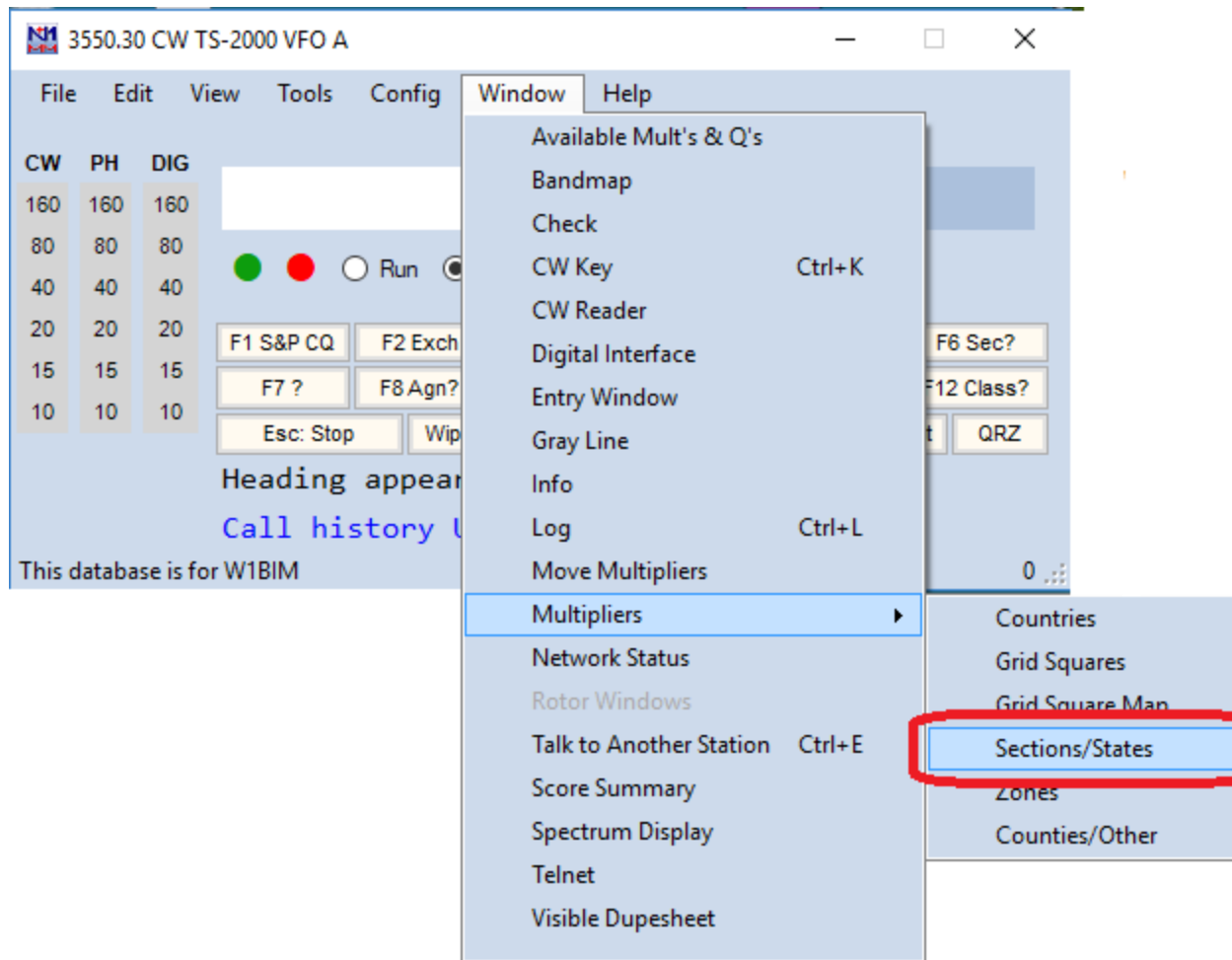


# Multiplier Window Selection

Select an Appropriate Multiplier Window.

Field Day uses Sections.

However, Sections are NOT a Field Day Contest Score Multiplier.  
Use for Information ONLY.



# Multiplier Window

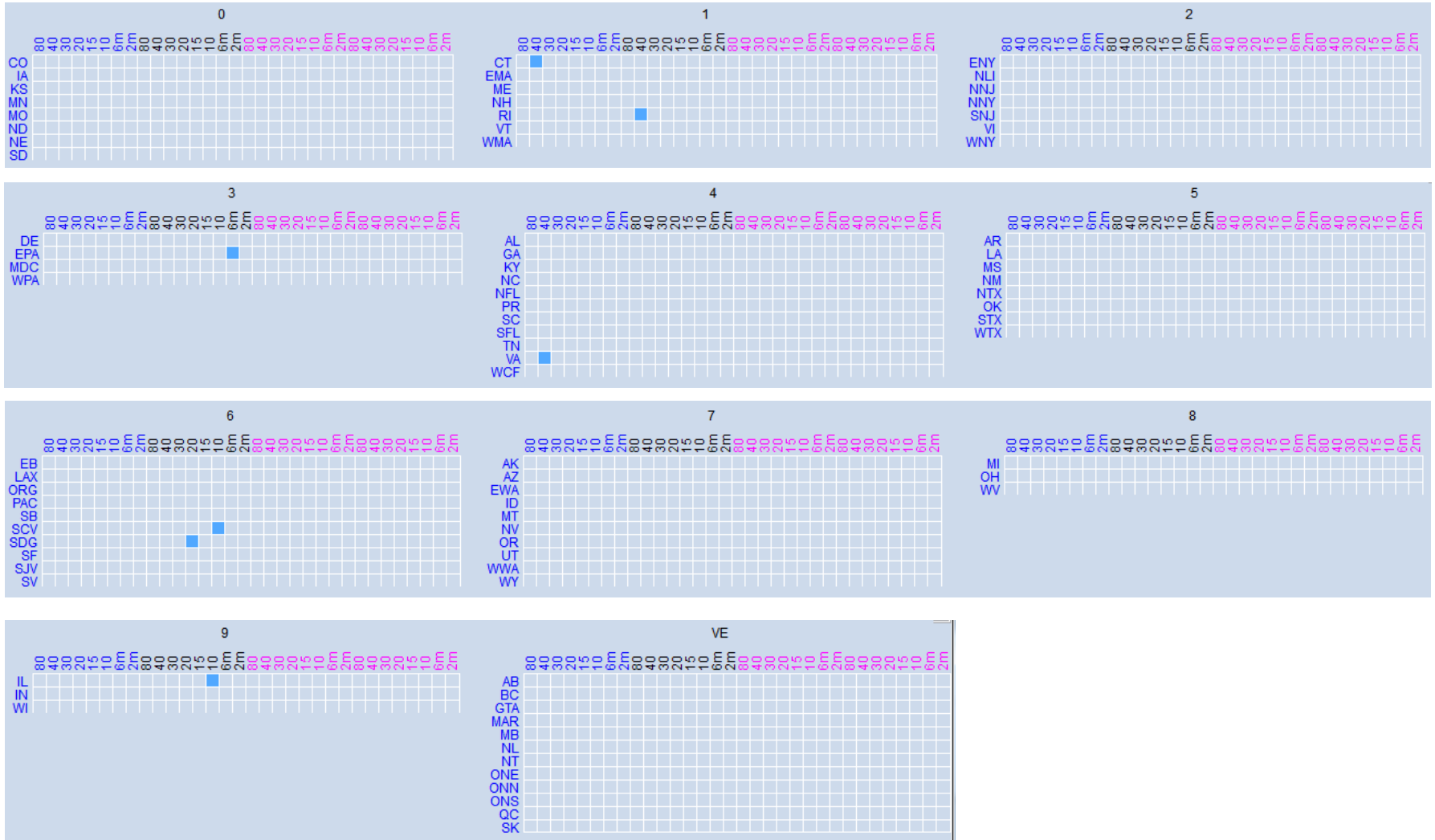
This Window Shows Sections Worked versus Band and Mode

States/Sections - 7 mults worked of 2656 possible

Modes: CW, PH, RTTY, PSK

Worked Expected Spotted Spotted (Dbl Multi)

Note: Window is Very Wide, Window Segments are shown!



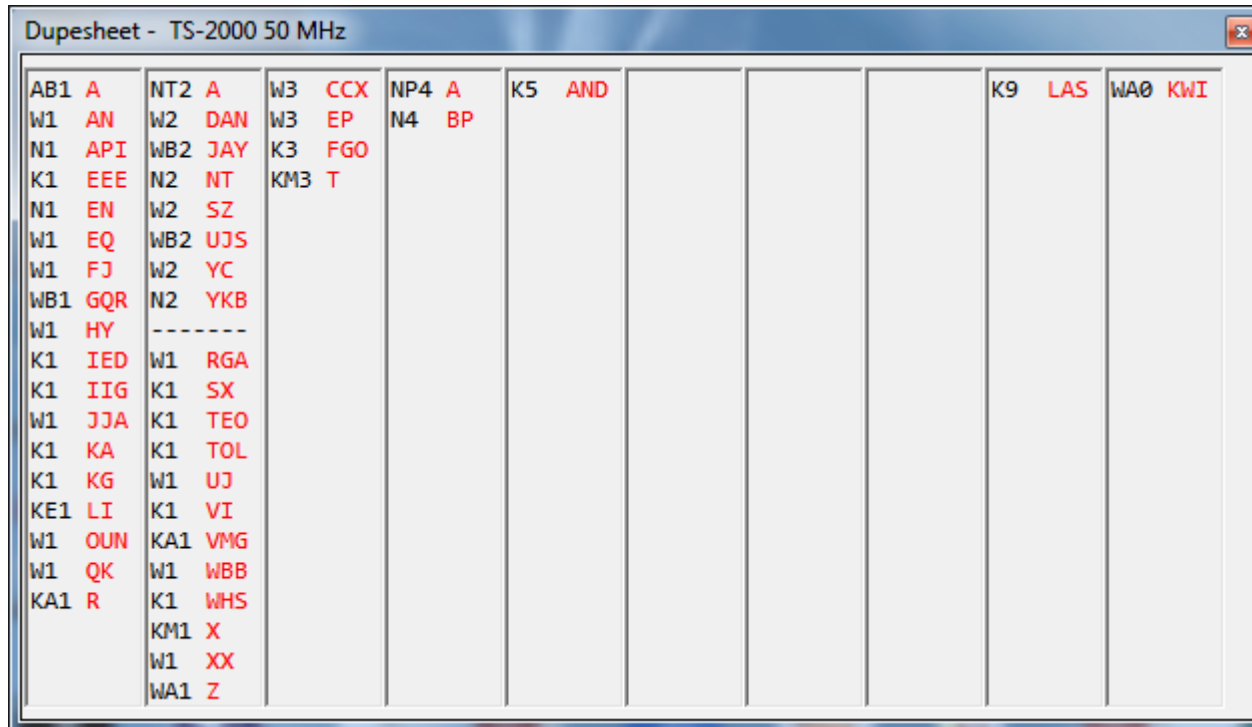
# Visible Dup Sheet

This window is useful for very quickly checking for DUPES without typing.

It is organized by call suffix within call number zone.

If there is room, each call number zone has its own column.

If there are too many calls in a zone, the column will overflow to the next column.



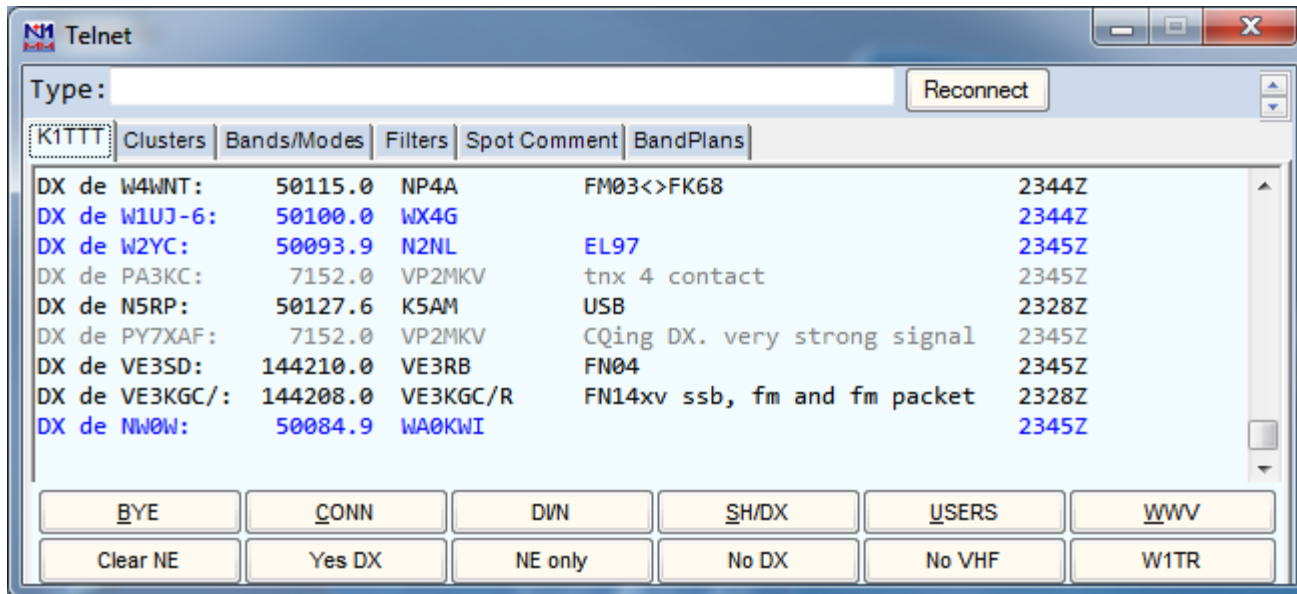
The screenshot shows a window titled "Dupesheet - TS-2000 50 MHz" with a grid of call numbers. The grid is organized into columns based on call number zones. The first column contains call numbers from AB1 to KA1. The second column contains call numbers from NT2 to WA1. The third column contains call numbers from W3 to KM3. The fourth column contains call numbers from NP4 to N4. The fifth column contains the call number K5. The sixth column is empty. The seventh column contains the call number K9. The eighth column contains the call number WA0. The ninth column contains the call number KWI. The call numbers are listed in red text on a white background.

Zone	Call Number
AB1	A
W1	AN
N1	API
K1	EEE
N1	EN
W1	EQ
W1	FJ
WB1	GQR
W1	HY
K1	IED
K1	IIG
W1	JJA
K1	KA
K1	KG
KE1	LI
W1	OUN
W1	QK
KA1	R
NT2	A
W2	DAN
WB2	JAY
N2	NT
W2	SZ
WB2	UJS
W2	YC
N2	YKB
W1	RG
K1	SX
K1	TEO
K1	TOL
W1	UJ
K1	VI
KA1	VMG
W1	WBB
K1	WHS
KM1	X
W1	XX
WA1	Z
W3	CCX
W3	EP
K3	FGO
KM3	T
NP4	A
N4	BP
K5	AND
K9	LAS
WA0	KWI

# Telnet Window

This Window Shows Spots from Internet DX Clusters

We do NOT Plan to Use DX Clusters for Spotting / Assisted Mode



The screenshot shows a Telnet window titled "NM Telnet". At the top, there is a "Type:" field and a "Reconnect" button. Below this is a tabbed interface with tabs for "K1TTT", "Clusters", "Bands/Modes", "Filters", "Spot Comment", and "BandPlans". The "K1TTT" tab is selected, displaying a list of DX spots. The list has columns for call sign, frequency, mode, comment, and time. At the bottom of the window, there are two rows of buttons for various actions.

Call Sign	Freq	Mode	Comment	Time
DX de W4WNT:	50115.0	NP4A	FM03<>FK68	2344Z
DX de W1UJ-6:	50100.0	WX4G		2344Z
DX de W2YC:	50093.9	N2NL	EL97	2345Z
DX de PA3KC:	7152.0	VP2MKV	tnx 4 contact	2345Z
DX de N5RP:	50127.6	K5AM	USB	2328Z
DX de PY7XAF:	7152.0	VP2MKV	CQing DX. very strong signal	2345Z
DX de VE3SD:	144210.0	VE3RB	FN04	2345Z
DX de VE3KGC/:	144208.0	VE3KGC/R	FN14xv ssb, fm and fm packet	2328Z
DX de NW0W:	50084.9	WA0KWI		2345Z

Buttons at the bottom:

BYE	CONN	DIVN	SH/DX	USERS	WWV
Clear NE	Yes DX	NE only	No DX	No VHF	W1TR



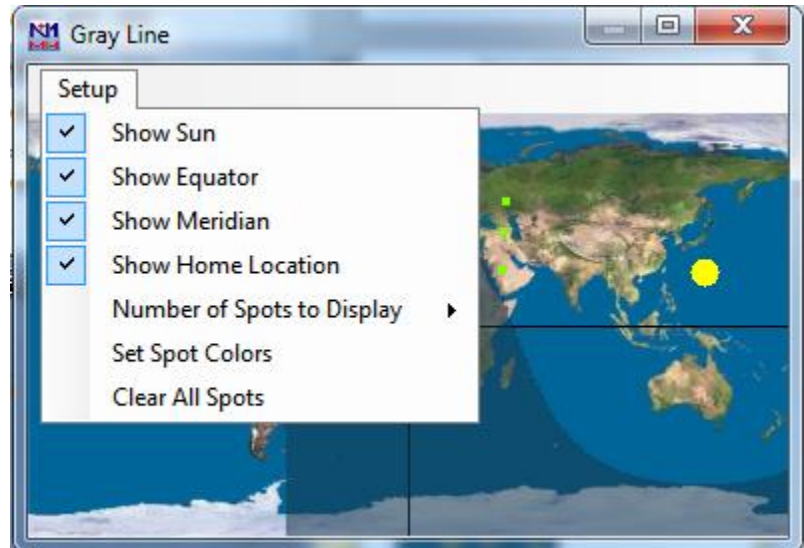
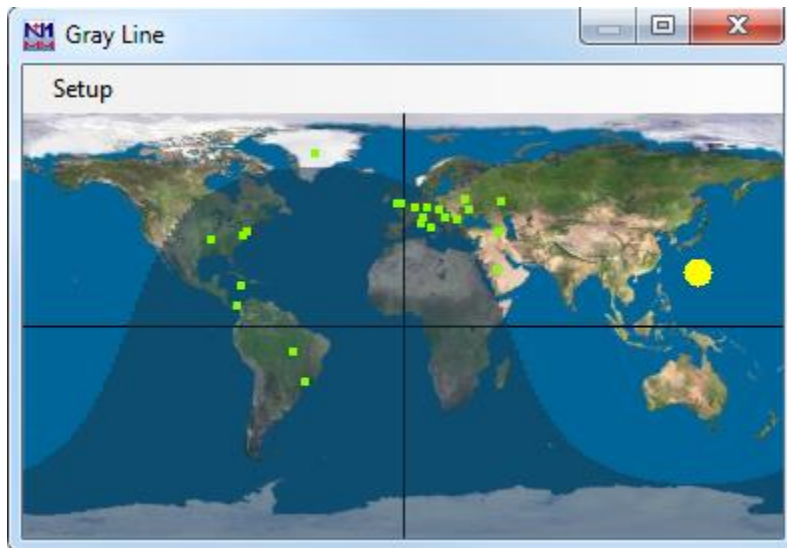
# Grey Line Window

This Window Shows

1. The Grey Line between Day Time and Night Time
2. Spots from Internet DX Clusters by Location

We do NOT Plan to Use DX Clusters for Spotting / Assisted Mode

A Setup Menu Provides a Choice of What to Display



# Band Setup

This Year, CMARA is using CAT Control 😊

So THIS should NOT Be Necessary, But Just In Case! ☹️

Use the N1MMplus QSO Entry Form to set Frequency and Mode

- **Set Frequency**

Type Frequency in KHz (e.g. 3550 or 21350) into callsign field

Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage.

With CAT control, simply use your bandswitch and VFO.

- **Set Mode**

Type Mode (e.g. CW, USB, LSB, AM, FM, RTTY, PSK31) into callsign field

Extremely Important to DO !!!, Otherwise Log Data Will Be Garbage.

With CAT control, simply use your mode switch.

- **Very Important to Set These Items**

It is possible to correct all other items later *except*:

Date/Time (computer clock) – Slave Computer Should Synchronize with Master

Frequency – Should Be Using CAT Control

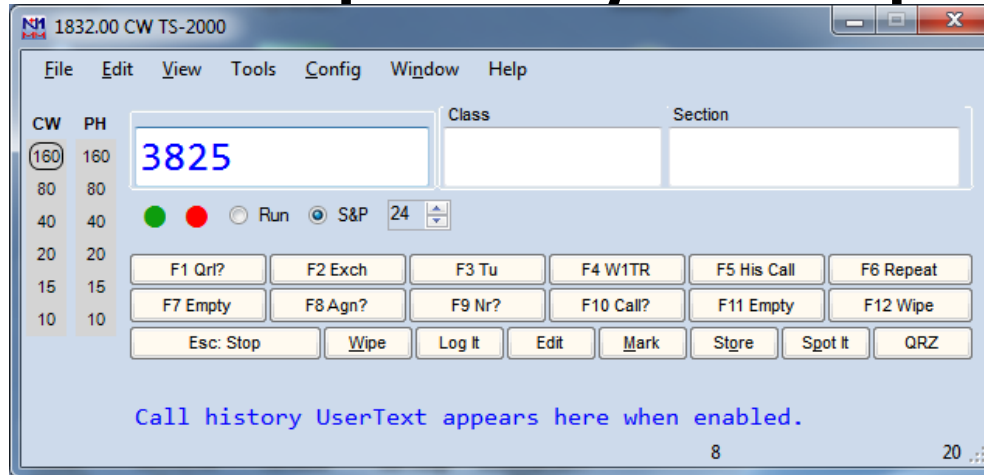
Mode – Should Be Using CAT Control

**Operator – Whenever Change of Operator Occurs (CTRL-O)**

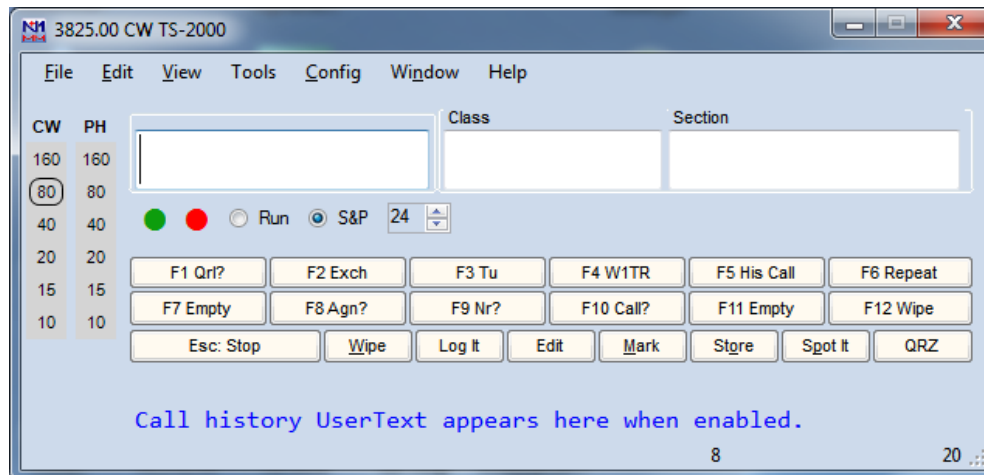
- **Use Operator = OFF** when leaving operator position

to let other stations know band / mode not in use.

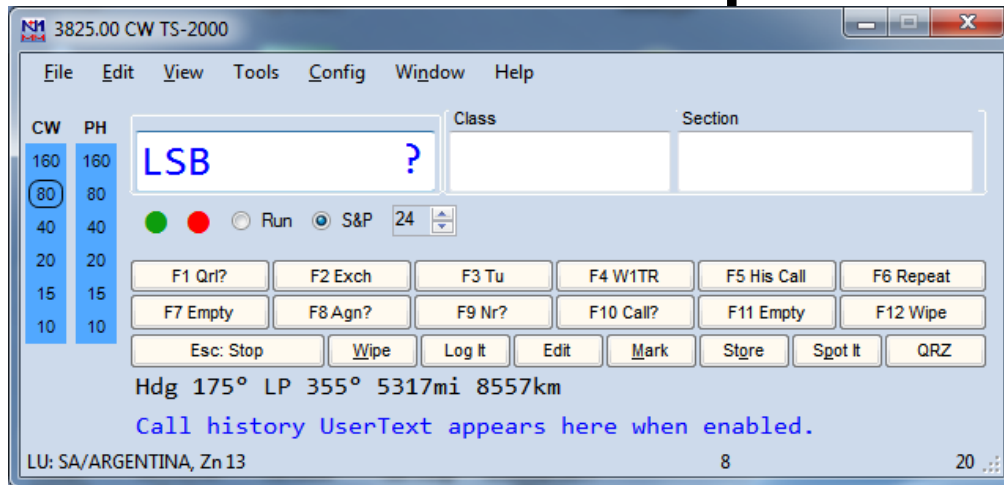
# Frequency Setup



To Set or Change Frequency:  
type the Frequency in KHz in the Callsign Field (left).  
Use a **typical Phone or CW Frequency** if **NOT CAT Controlled**,  
N1MMplus only needs to know the **Band**.  
**NO NEED to CHANGE** it as you tune up and down the band.  
Note: the Title Bar of the Main Window will reflect the change



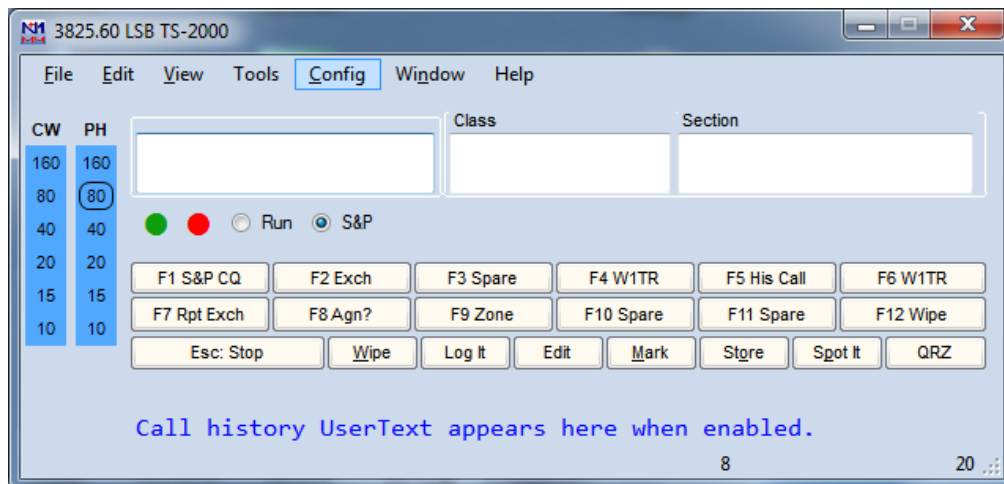
# Mode Setup



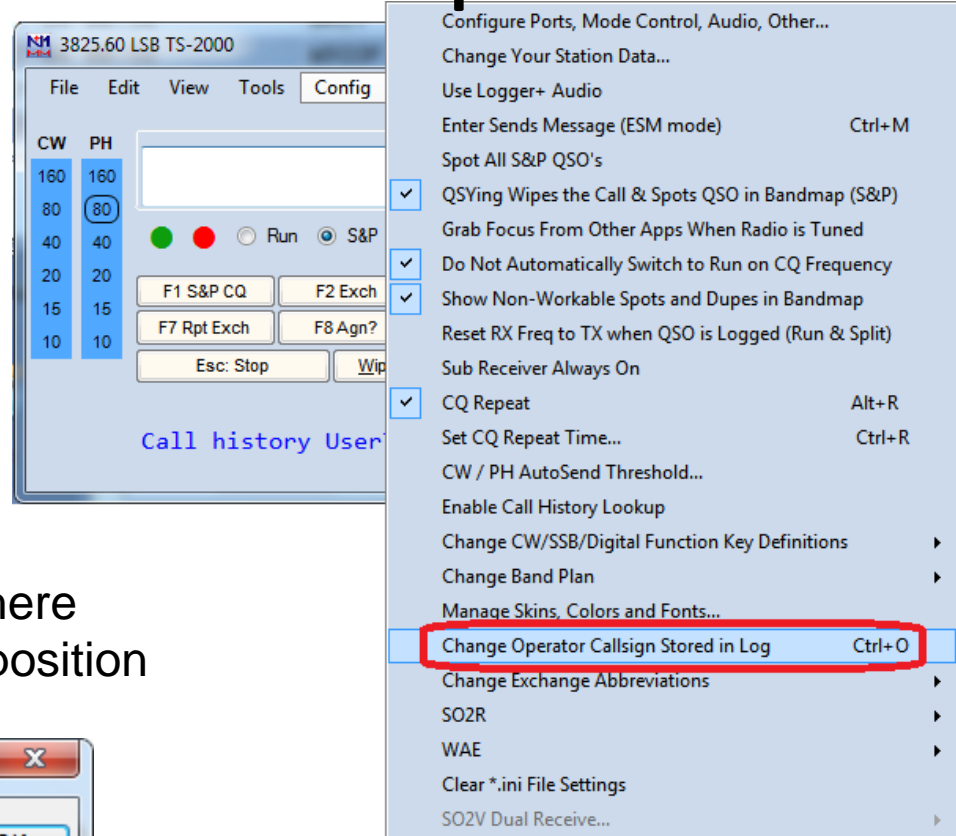
To Set or Change Mode:

Type the Mode (CW, USB, LSB, AM, FM, RTTY, PSK31) into the Callsign Field (left) **if NOT CAT controlled.**

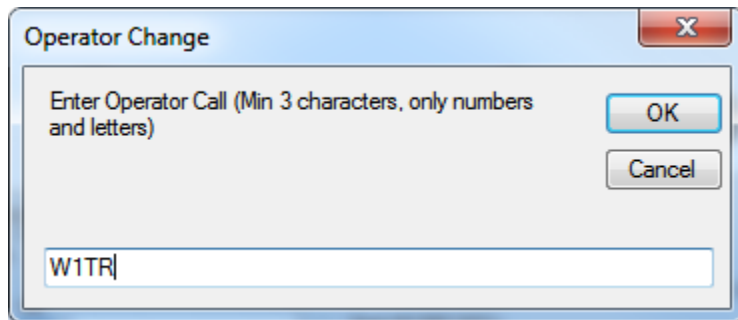
Note: the Title Bar of the Main Window will reflect the change



# Operator Setup

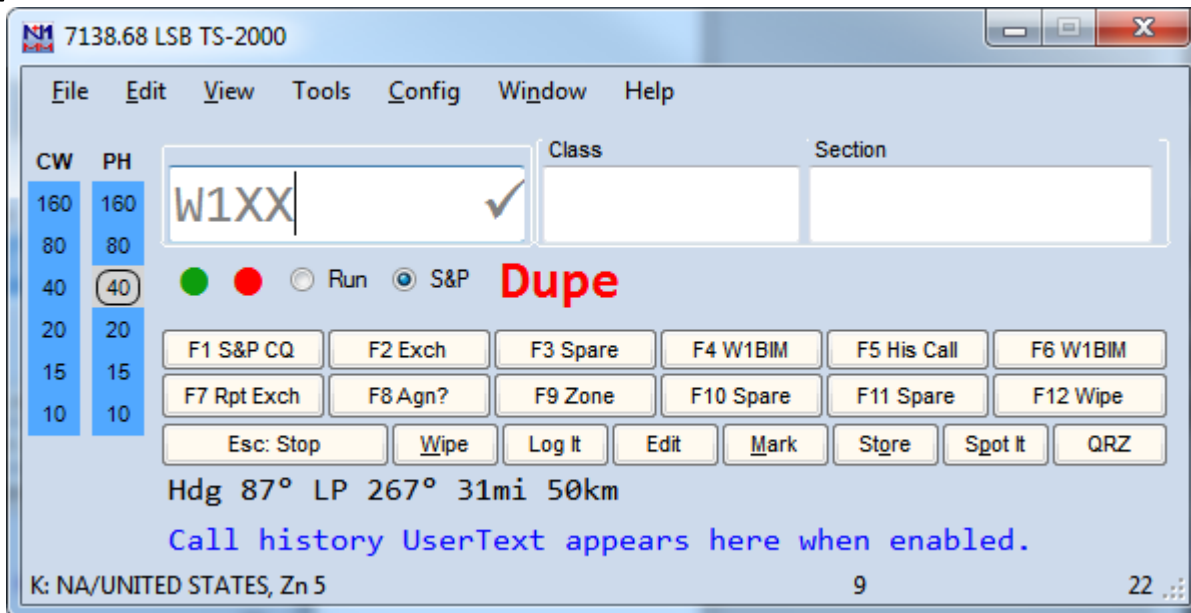


Use PERSONAL CALLSIGN here  
Use **OFF** if leaving operating position



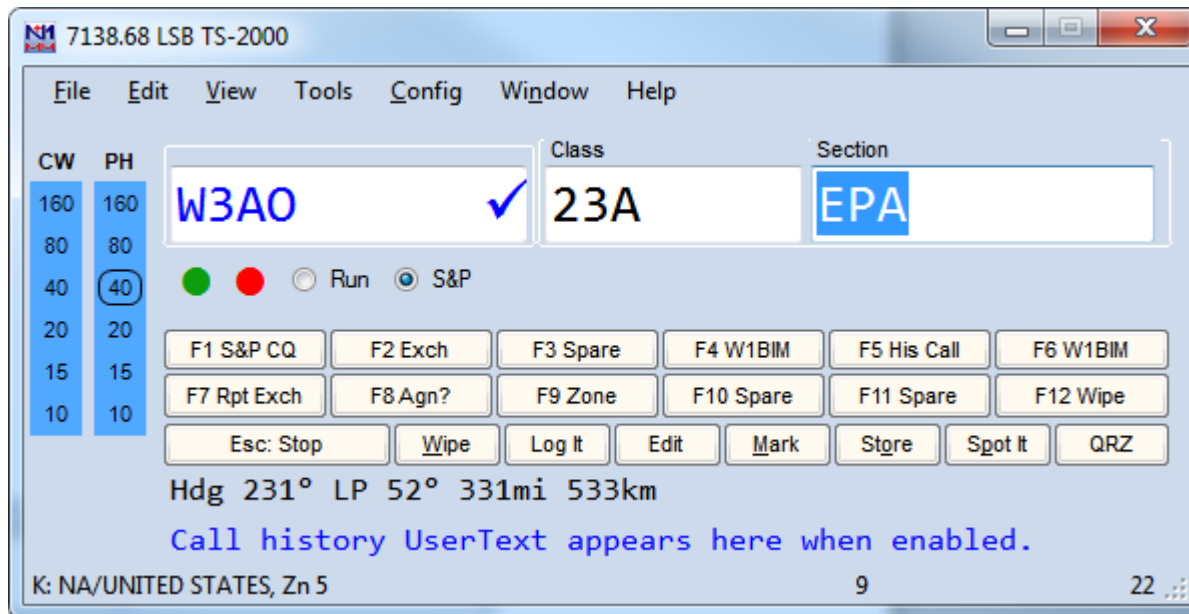
# QSO Logging

- Enter
  - Callsign
  - Class
  - Section
  - New in 2012 – Ontario is no longer **ON**  
ARRL made 4 sections out of Ontario (ON):
    - ONE – Ontario East
    - ONN – Ontario North
    - ONS – Ontario South
    - GTA - Greater Toronto Area (West)
- Dupes will be Indicated



# QSO Logging – QSO Entry Form

- Callsign Field = Prefix + Number + Suffix, e.g. **W3AO**
- Class Field = Number of Stations + Class, e.g. **23A**
- Section Field = USA Section, CANADA Province, or DX, e.g. **EPA**



The screenshot shows a software window titled "7138.68 LSB TS-2000" with a menu bar (File, Edit, View, Tools, Config, Window, Help). On the left is a vertical frequency scale with CW and PH columns and values 160, 80, 40, 20, 15, 10. The main area contains three input fields: "Callsign" with "W3AO" and a checkmark, "Class" with "23A", and "Section" with "EPA". Below these are radio buttons for "Run" and "S&P" (selected). A grid of function buttons (F1-F12) and "Esc: Stop", "Wipe", "Log It", "Edit", "Mark", "Store", "Spot It", "QRZ" is present. At the bottom, it displays "Hdg 231° LP 52° 331mi 533km" and "Call history UserText appears here when enabled." The status bar at the bottom shows "K: NA/UNITED STATES, Zn 5", "9", and "22".

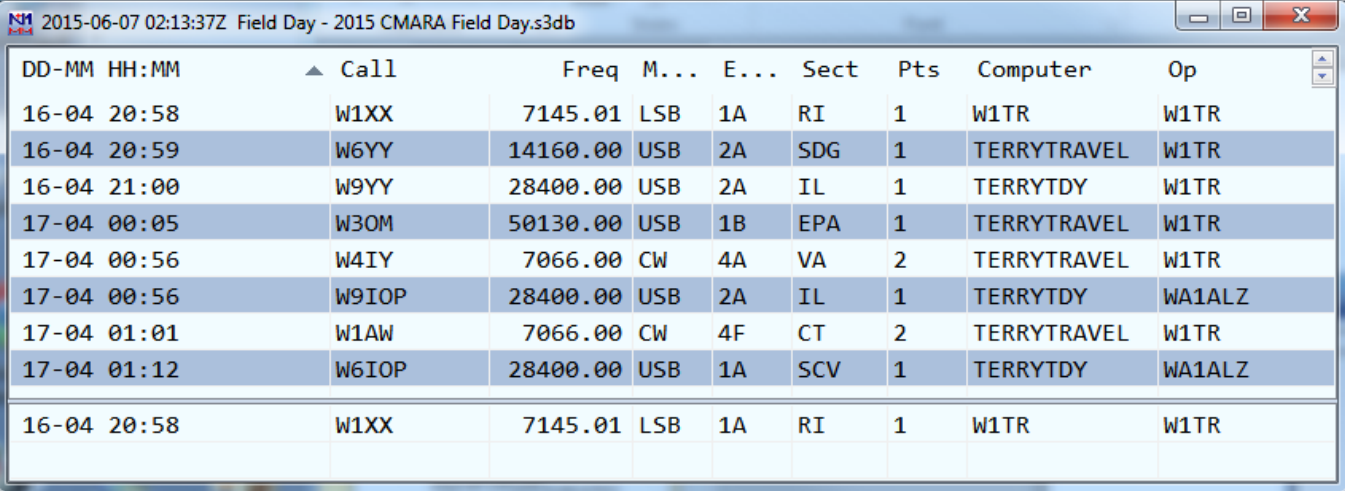
# QSO Logging - Classes

- A – Club or Non-Club Portable Operation
- B – One or two person portable
- C – Mobile
- D – Home Station
- E – Home Station, Emergency Power
- F – Official Emergency Operation Stations (EOC)



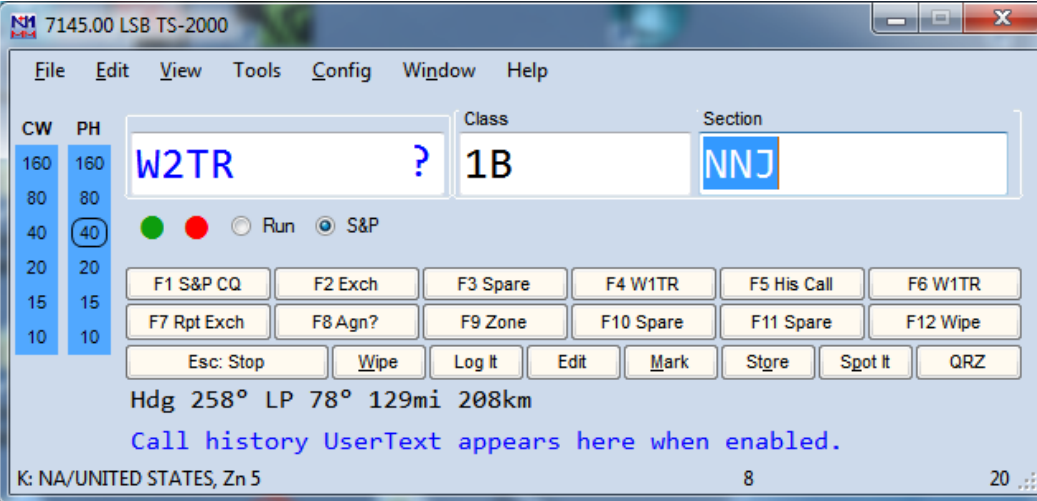


# QSO Logging – Log Window



DD-MM HH:MM	Call	Freq	M...	E...	Sect	Pts	Computer	Op
16-04 20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04 01:01	W1AW	7066.00	CW	4F	CT	2	TERRYTRAVEL	W1TR
17-04 01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ
16-04 20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR

Note: the LOG Contains Some Contacts, but NOT W2TR  
To log W2TR 1B NNJ, type the information as follows:  
Note: the ? Indicates Callsign is NOT in  
Log, Master Database, Telnet, or Call History File



7145.00 LSB TS-2000

File Edit View Tools Config Window Help

CW PH Class Section

160 160 W2TR ? 1B NNJ

80 80

40 40  Run  S&P

20 20

15 15

10 10

F1 S&P CQ F2 Exch F3 Spare F4 W1TR F5 His Call F6 W1TR

F7 Rpt Exch F8 Agn? F9 Zone F10 Spare F11 Spare F12 Wipe

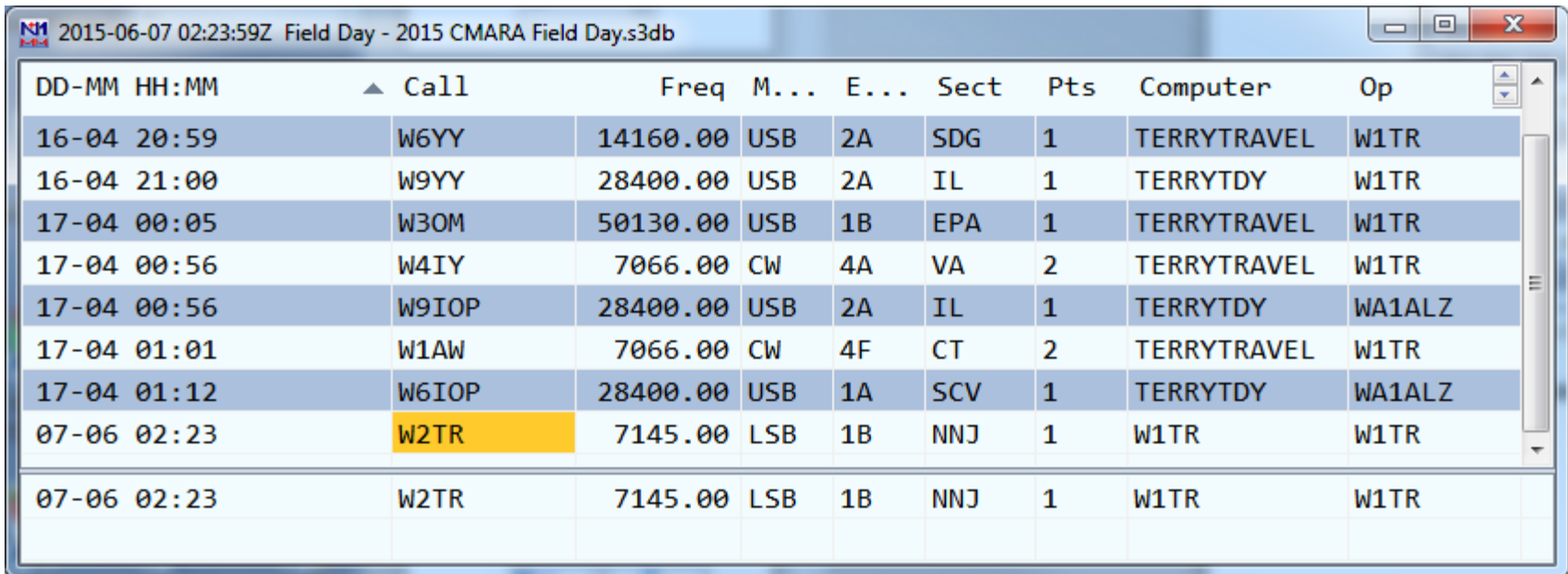
Esc: Stop Wipe Log It Edit Mark Store Spot It QRZ

Hdg 258° LP 78° 129mi 208km

Call history UserText appears here when enabled.

K: NA/UNITED STATES, Zn 5 8 20

# QSO Logging – QSO Added to Log



DD-MM HH:MM	▲ Call	Freq	M...	E...	Sect	Pts	Computer	Op
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04 01:01	W1AW	7066.00	CW	4F	CT	2	TERRYTRAVEL	W1TR
17-04 01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ
07-06 02:23	W2TR	7145.00	LSB	1B	NNJ	1	W1TR	W1TR
07-06 02:23	W2TR	7145.00	LSB	1B	NNJ	1	W1TR	W1TR

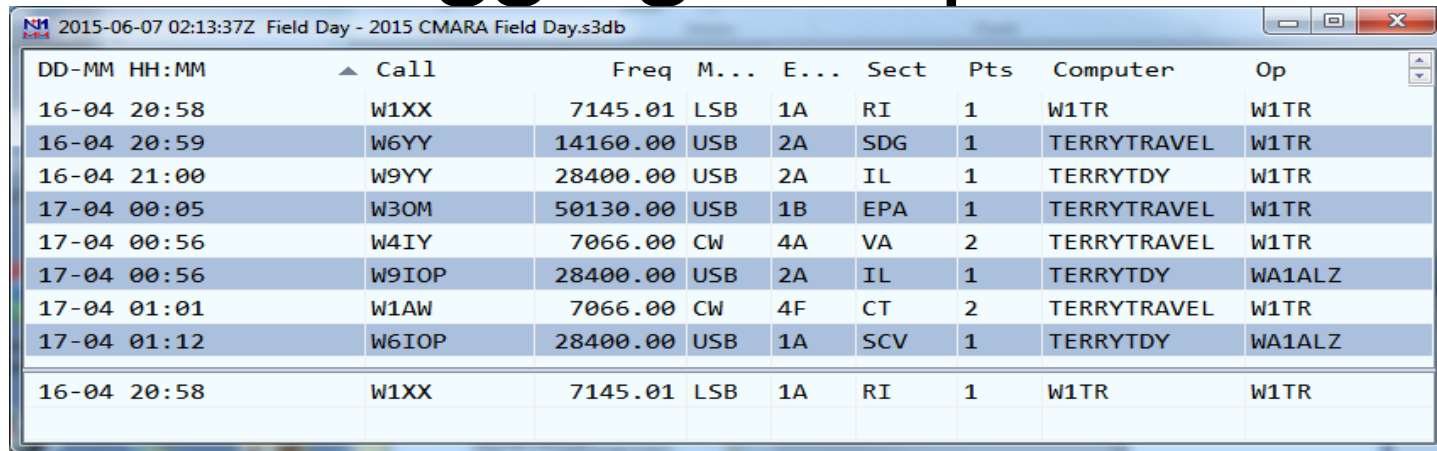
the LOG NOW Contains W2TR 1B NNJ

Note:

The **Orange Color** Indicates W2TR is NOT in  
Master Super Check Partial Callsign Database: master.scp

**Dates / Times are Fictitious here, It's a Demo!**

# QSO Logging – Dupe Check

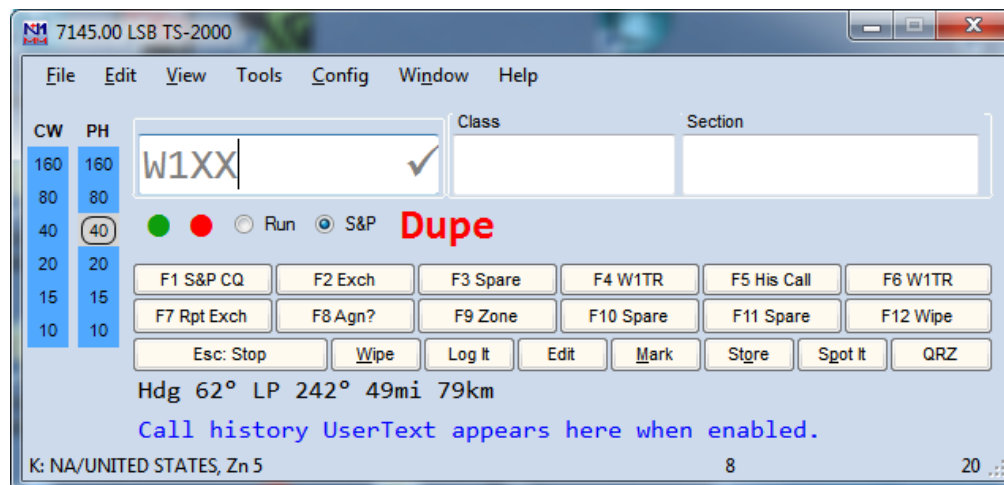


DD-MM	HH:MM	Call	Freq	M...	E...	Sect	Pts	Computer	Op
16-04	20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR
16-04	20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04	21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04	00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04	00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04	00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04	01:01	W1AW	7066.00	CW	4F	CT	2	TERRYTRAVEL	W1TR
17-04	01:12	W6IOP	28400.00	USB	1A	SCV	1	TERRYTDY	WA1ALZ
16-04	20:58	W1XX	7145.01	LSB	1A	RI	1	W1TR	W1TR

Note: We already worked W1XX on 40 LSB, that station is IN THE LOG. If we try to LOG him **again, same band, same mode**, the **DUPE!** message will show.

N1MM handles dupes OK by not scoring them.

If the other station insists, work him anyway, don't waste time arguing!



7145.00 LSB TS-2000

File Edit View Tools Config Window Help

CW PH Class Section

160 160 W1XX ✓

80 80

40 40 **Dupe**

20 20

15 15

10 10

Run S&P

F1 S&P CQ F2 Exch F3 Spare F4 W1TR F5 His Call F6 W1TR

F7 Rpt Exch F8 Agn? F9 Zone F10 Spare F11 Spare F12 Wipe

Esc: Stop Wipe Log It Edit Mark Store Spot It QRZ

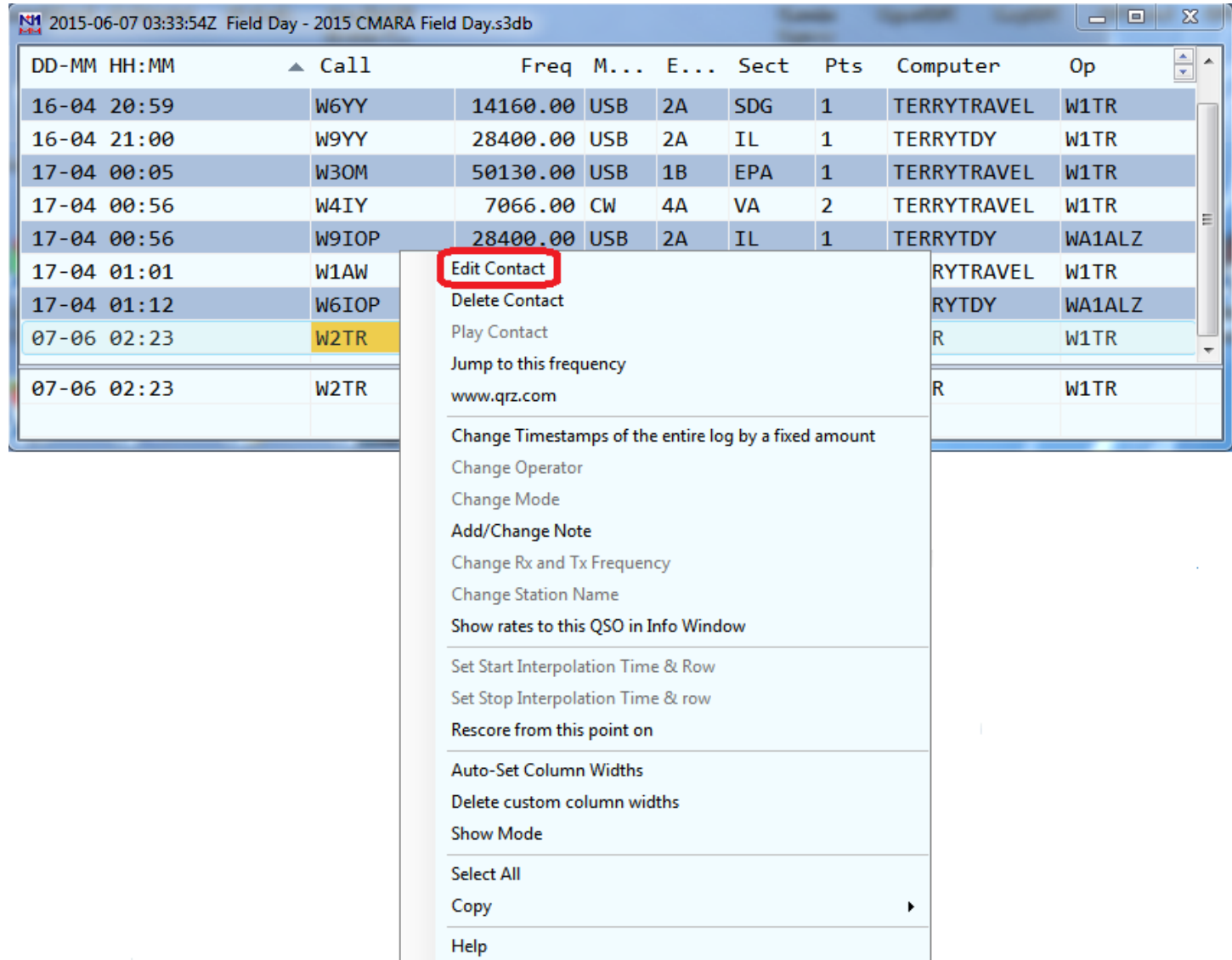
Hdg 62° LP 242° 49mi 79km

Call history UserText appears here when enabled.

K: NA/UNITED STATES, Zn 5 8 20

# Edit Log – Make Corrections

Right Click on Log Entry to be Edited



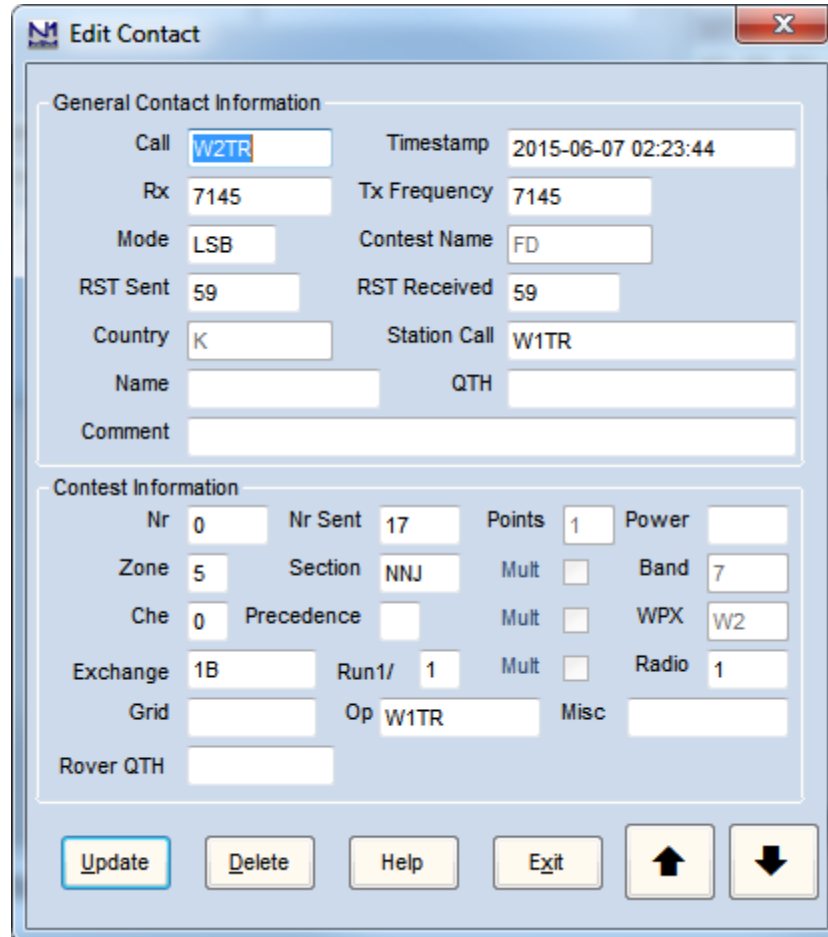
The screenshot shows a logging application window titled "2015-06-07 03:33:54Z Field Day - 2015 CMARA Field Day.s3db". The main window contains a table with columns: DD-MM HH:MM, Call, Freq, M..., E..., Sect, Pts, Computer, and Op. A right-click context menu is open over the entry "07-06 02:23 W2TR". The "Edit Contact" option is highlighted with a red box.

DD-MM HH:MM	Call	Freq	M...	E...	Sect	Pts	Computer	Op
16-04 20:59	W6YY	14160.00	USB	2A	SDG	1	TERRYTRAVEL	W1TR
16-04 21:00	W9YY	28400.00	USB	2A	IL	1	TERRYTDY	W1TR
17-04 00:05	W3OM	50130.00	USB	1B	EPA	1	TERRYTRAVEL	W1TR
17-04 00:56	W4IY	7066.00	CW	4A	VA	2	TERRYTRAVEL	W1TR
17-04 00:56	W9IOP	28400.00	USB	2A	IL	1	TERRYTDY	WA1ALZ
17-04 01:01	W1AW						RYTRAVEL	W1TR
17-04 01:12	W6IOP						RYTDY	WA1ALZ
07-06 02:23	W2TR						R	W1TR
07-06 02:23	W2TR						R	W1TR

- Edit Contact
- Delete Contact
- Play Contact
- Jump to this frequency
- www.qrz.com
- Change Timestamps of the entire log by a fixed amount
- Change Operator
- Change Mode
- Add/Change Note
- Change Rx and Tx Frequency
- Change Station Name
- Show rates to this QSO in Info Window
- Set Start Interpolation Time & Row
- Set Stop Interpolation Time & row
- Rescore from this point on
- Auto-Set Column Widths
- Delete custom column widths
- Show Mode
- Select All
- Copy
- Help

# Edit Log – Log Edit Form

Make Changes in Edit Contact Form



**Edit Contact**

**General Contact Information**

Call:  Timestamp:

Rx:  Tx Frequency:

Mode:  Contest Name:

RST Sent:  RST Received:

Country:  Station Call:

Name:  QTH:

Comment:

**Contest Information**

Nr:  Nr Sent:  Points:  Power:

Zone:  Section:  Mult:  Band:

Che:  Precedence:  Mult:  WPX:

Exchange:  Run1/:  Mult:  Radio:

Grid:  Op:  Misc:

Rover QTH:

# Restarting N1MM Mid Contest

- If a Computer Fails, Substitute a NEW computer.  
Do NOT Name the NEW Computer Same as the OLD.  
Use a DIFFERENT Name.
- If the Generator Goes Out,  
or Station (Computer) is Shut Down Normally...
  - N1MMplus should REMEMBER  
what Database and Log it is using and restart OK.
  - After Restart, or Changing Operators  
Check the Network Status Window to see  
Who is on What Bands and Modes Before Operating
  - The Database and Log Name Appear at the  
Title Bar at the TOP of the Log Window
  - IF NOT Correct:
    - File / Open Database instead of New Database
    - File / Open Log in Database instead of New Log In Database

# Contingency Plan

## If Networking Doesn't Work

- All Stations will be assigned a fixed set of Bands and Modes to avoid DUPES.
- Each Station will have its own individual Log Database.
- The Field Day Chairman will collect the individual logs and consolidate them.
- Any Questions, Ask the Field Day Chairman



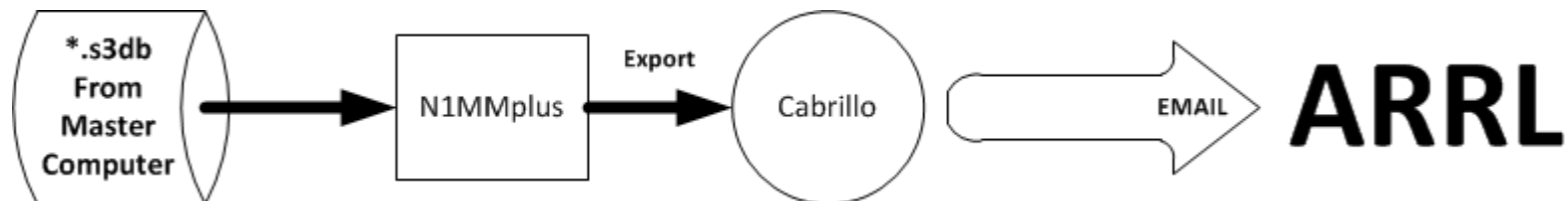
# At End of Field Day ...

- Close N1MMplus Logger
- Copy the Log Database (\*.s3db) file to the Thumb Drive (in case of log troubles)
- Return the Thumb Drive to the FD Chairman
- Wait for the FD Chairman  
to check that the FD Log seems OK on Master  
ALL QSOs should be in the log on everyone's computer,  
SLAVES and MASTER.
- Any Questions, Ask the FD Chairman

# Log Consolidation and Submittal

This is what the Field Day Chairman will do to submit FD Logs to ARRL:

- 1) Check that Log is OK on Master Computer
- 2) Give OK to Shut Down Computers, Stations
- 3) If NOT OK, Problem Resolution will Begin  
Computers stay ON  
Stations can Begin Tear Down
- 4) The Field Day Log, \*.s3db, will be Loaded into N1MMplus
- 5) The Log will be Exported to Cabrillo Format for ARRL Submission
- 6) The Cabrillo File will be sent to ARRL via EMAIL



# User Support

- N1MMplus Web

<http://n1mm.hamdocs.com/tiki-index.php>

Home source of information about N1MM, downloads, documentation, etc.

- N1MMplus Email User Groups

[http://n1mm.hamdocs.com/tiki-index.php?page=Overview#N1MM Logger Discussion Groups](http://n1mm.hamdocs.com/tiki-index.php?page=Overview#N1MM%20Logger%20Discussion%20Groups)

Get notification of bugs and hints & kinks on how to use N1MM

Post questions, comments, and report BUGS to the developers

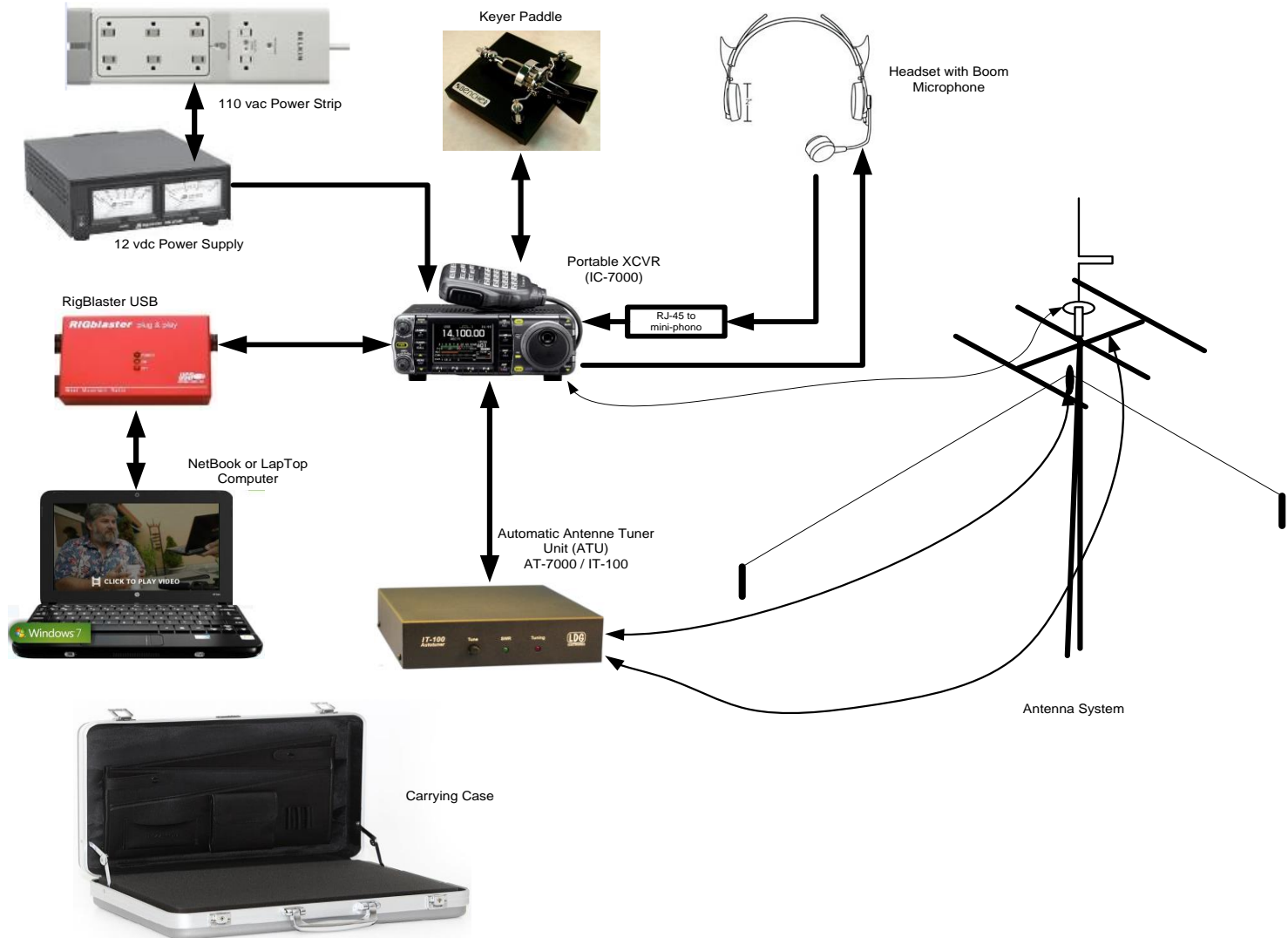
# Summary

- Free !! 😊 😊
- Widely Used and Supported 😊
- Works on Microsoft Windows (only), XP thru Win 8 😞
- Supports nearly EVERY contest 😊
- Works with most radios, coupled, or stand alone 😊
- CW automatic keying
- Digital Voice Keying (uses computer sound card)
- Digital sound card modes: MMTTY, MMVARI, FLDIGI
- Easy to setup
- Easy to use
- Remember to Setup:  
Operator – CTRL+O  
Frequency and Mode are Automatic – CAT Control  
Date / Time are Automatic – N1MMplus Networking

# Extra Topics

- W1TR Go-Kit Diagram
- CAT Control
- CW Keying
- Digital Voice Keying (DVK)
- Audio Files
- Audacity Audio Editor
- Digital Modes (RTTY, PSK, Etc.)

# W1TR Go-Kit Diagram



# CAT Control

- USB or RS-232 to CI-V translator to Rig (ICOM)
- RS-232 directly to Rig (Kenwood)
- RS-232 to TTL converter to Rig (Yaesu)
- USB to RS-232 converter may be needed  
Most USB to RS-232 converters work OK for CAT control  
and for PTT, CW, FSK RTTY using EXTFSK
- CAT Control Monitors Rig Data (frequency, mode)
- CAT Control Can Control Rig Data (frequency, mode)
- Other items can be Monitored / Controlled  
Mic Gain, CW Speed, RF Gain (depends on RIG)

# CW Keying

- RS-232 or LPT used
- USB to RS-232 may be needed
- RS-232 DTR for CW Keying
- RS-232 RTS for PTT
- RS-232 TXD for RTTY FSK
- Need RS-232 ( $\pm 12$  VDC) to TTL (0/+5 vdc)  
Level Converter (RigBlaster Provides This)
- Function Key Macros Automatically Send CW
- Ctrl-K Keyboard Window  
Eliminates Need for Keyer Paddle  
Most Operators Keep the Keyer Paddle Anyway, Just In Case !!



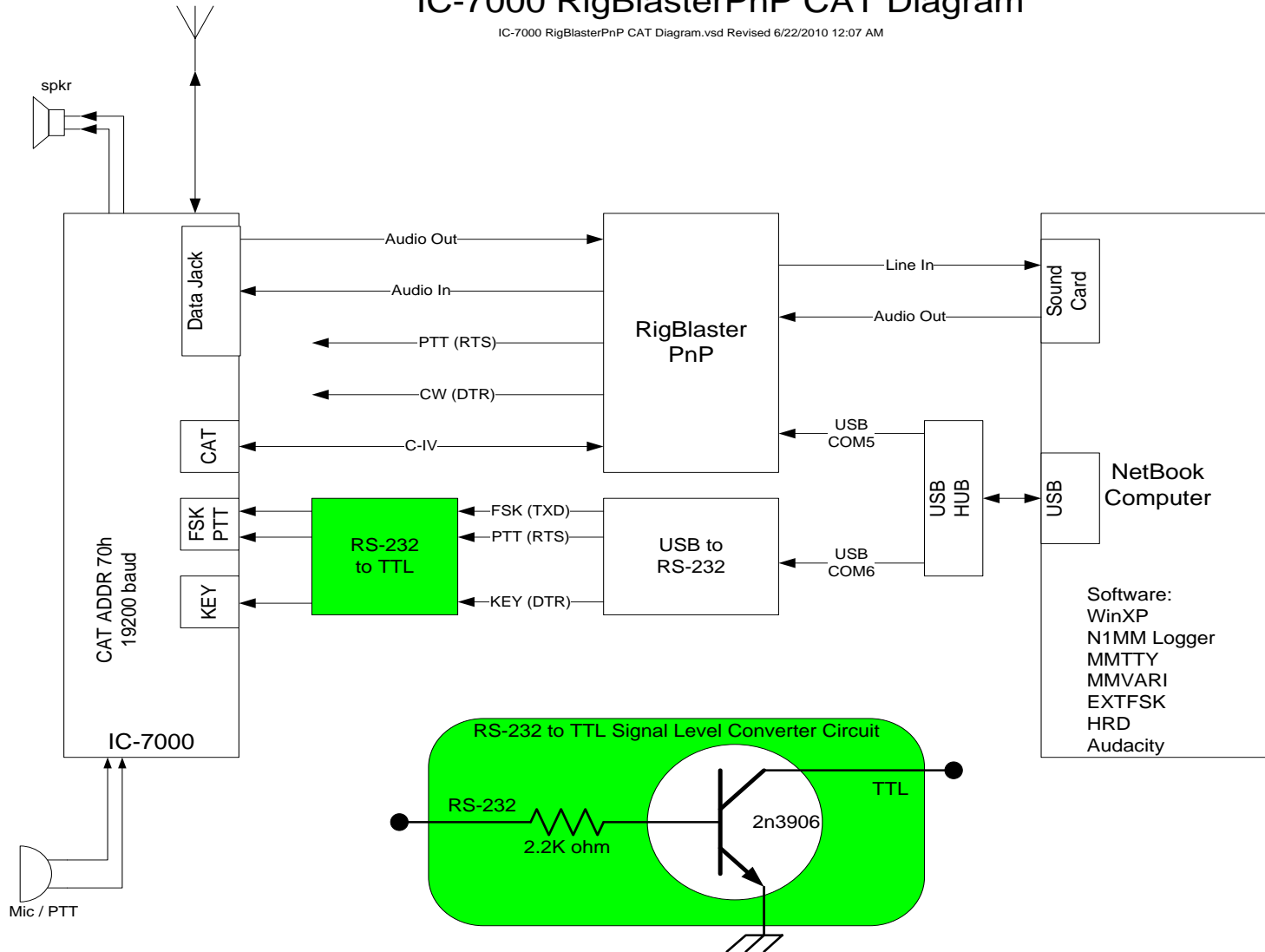
# Digital Voice Keying

- Use Computer Sound Card
- Computer Microphone to Rig Speaker Output
- Computer Speaker Out to Rig Microphone Input
- Isolation Transformer for Both  
(RigBlaster Provides This)
- All Modulation and Demodulation in Software  
(Digital Modes)

# Digital Modes Equipment Interconnect

## IC-7000 RigBlasterPnP CAT Diagram

IC-7000 RigBlasterPnP CAT Diagram.vsd Revised 6/22/2010 12:07 AM



# Audio Files

- Pre-Recorded Messages (CQ, This Is..., etc)
- Letters (Phonetics) and Numbers, Pieced Together
- N1MMplus can play back messages  
as defined in macro files associated with program function keys (Function Keys)
- N1MMplus can play back internal data items
  - Callsign of other station
  - Your callsign
  - Signal report
  - Contest exchange
  - using letter phonetics and numbers pieced together
- It is possible to work a phone contest  
**without ever saying a single word**  
into the microphone

# Audacity Audio Editor

- Use Audacity to Edit Audio Phrases
- Audacity Web Site  
<http://audacity.sourceforge.net/download/>

# Digital Modes (RTTY, PSK, Etc.)

- N1MMplus does NOT do Digital Modes by Itself
- N1MMplus works with MMTTY for RTTY (FSK)  
Use of USB to Serial Device for FSK MAY need EXTFSK driver (software)  
<http://mmhamsoft.amateur-radio.ca/>
- N1MMplus works with MMVARI for Digital Modes  
<http://mmhamsoft.amateur-radio.ca/>
- N1MMplus works with FLDIGI for Digital Modes  
<http://www.w1hkj.com/Fldigi.html>

# N1MM Videos - YouTube

- Google Search: **N1MM Video**
- N1MM Instructional Videos (K8UT)  
<http://n1mm.hamdocs.com/tiki-index.php?page=Instructional+Videos>
- N1MM Plus for Beginners  
<https://www.youtube.com/watch?v=KxHOCMAxyVQ>
- N1MM Basics  
<https://www.youtube.com/watch?v=SAS5iHPg78c>
- N1MM Plus  
<https://www.youtube.com/watch?v=fONJ2dOfGxA>
- N1MM and ARRL Field Day VE3DVY  
<https://www.youtube.com/watch?v=s6wQK4c1s7M>
- N1MM RTTY FSK, Spectrum Display, VSPE K0PIR  
<https://www.youtube.com/watch?v=YaOo3D3NAIQ>
- N1MM FLDIGI CW Contesting K0PIR  
<https://www.youtube.com/watch?v=T-qavP7clSk>
- N1MM CW Interface  
<https://www.youtube.com/watch?v=tgT5xJPPsFg>
- N1MM Automated SSB Contesting  
<https://www.youtube.com/watch?v=cSzsqqH6prc>
- N1MM CW & RIG Control  
<http://slideplayer.com/slide/9816742/>

# N1MMplus Quick Sheet

- **Set Date/Time on Computer to WWV (2.5,5,10,15,20 MHz)**  
CHU on 3.330, 7.850, 14.670 MHz  
N1MM Networking should take care of this.
- Install N1MMplus Software (Full Install then a Recent Update)
- Recent Update will be provided by the Field Day Chairman (W1TR)
- Open Existing Database ...\\2018 CMARA Field Day.s3db
- Open Log In Database - FD
- All Station and Contest Parameters are Already Setup
- **Set Operator Callsign (KB1VUA, etc) not to be confused with Station Callsign – CTRL-O**
- **Set Frequency in KHz (e.g. 3550, 3850) use typical CW or SSB frequency accordingly**
- **Set Mode (USB, LSB, CW, AM, FM)**
- **With CAT Control, just dial up Frequency and Mode with Bandswitch, VFO, Mode Switch**
- **Enter QSO: Callsign, Class, Section while logging**
- **Remember ON (Ontario) is now ONN, ONE, ONS, GTA starting Fall 2012**
- Edit or Quick Edit to fix Errors
- Delete to Remove bad QSOs

# EXTRA SLIDES



# N1MM+ Overview

- **Totally FREE ! (no license fee)**
- Runs on Windows XP, Vista, Win7, 8, 8.1, 10(32 or 64 bit) (not Win95, Win98)
- Does NOT run on other operating systems (MAC, Linux)
- Nearly ALL Versions are compatible with one another (same file format)  
N1MMplus and N1MM database formats are NOT compatible  
N1MMplus can import N1MM databases, but NOT vice versa
- Supports almost EVERY contest
- Used by nearly ALL big-time contesters (and small timers)
- Actively Supported, User Groups
- Stand-Alone operation (no connection to radio required)
- Automatic Computer-Aided-Transceiver (CAT) control available
- CW Keyer with PTT (keyboard window CTRL-K)
- Voice Keyer with PTT (prerecorded phonetics & messages)  
Need Soundcard Interface
- Interface to MMTTY, MMOVARI, FLDIGI, and other Soundcard Mode software
- Export to ADIF and Cabrillo Format, Import from ADIF

# CMARA Field Day WiFi Network

## WiFi SSID:

Router: W1BIM

Repeater#1: W1BIM\_South

Repeater#2: W1BIM\_North

Password: open / no password

