

N1MM+ SETUP AND OPERATIONS FOR FIELD DAY

Doug Reece

AK4AO

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Agenda

- N1MM+ Overview
- Setup
 - Installation or update of N1MM+
 - Creating the N1MM+ Database and Log for Field Day
 - Configuring Station Parameters
 - Configuring CAT and/or Keyer Control (Optional)
 - Testing configuration and logging
- Operations
 - Getting Started
 - Set Operator
 - Set Band/Frequency
 - Dupe checking
 - Backing up the log
 - The Band Map

N1MM+ OVERVIEW

N1MM+ Overview

- N1MM+ is a contest logging tool that VWS uses for Field Day, NAQP, and other events
- N1MM+ records exactly what is required for each individual contest and scores contacts according to the contest rules
- N1MM+ helps you to avoid duplicate contacts that will waste time and not add to your score
- To do these things, it has to be set up with a new log for each contest
- N1MM+ can display several windows. We'll cover the two most important in this overview.

N1MM+ Entry Window

Enter call signs,
frequency, mode, other
commands here

Enter contest exchange
here. Use space bar, tab
or mouse click to move
among fields. Press
Enter key to log.

PH

160

80

40

20

15

10

File Edit View Tools Config Window Help

Class Section

● Run ● S&P

F1 S&P CQ	F2 Exch	F3 Spare	F4 K4XY	F5 His Call	F6 Spare		
F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe		
Esc: Stop	Wipe	Log It	Edit	Mark	Store	Spot It	QRZ

Heading appears here when enabled.

Call history UserText appears here when enabled.

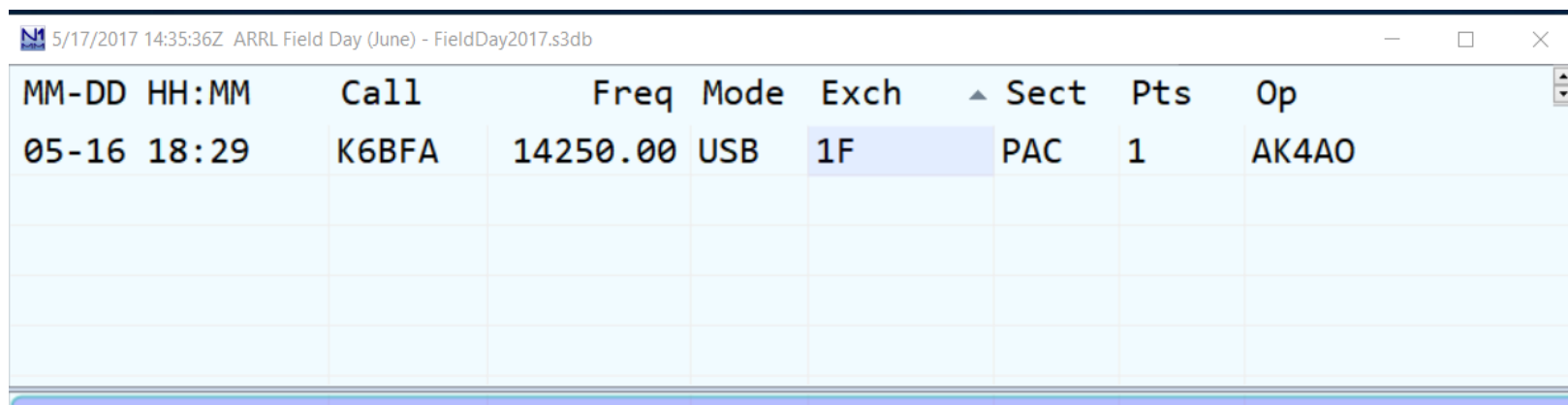
CW Speed = 20

1 2

Change band/mode by
clicking here

These buttons are (mostly) for automated
sending of messages in CW, digital, or with
voice recordings

N1MM+ Log Window



The screenshot shows the N1MM+ Log Window with the following data:

MM-DD	HH:MM	Call	Freq	Mode	Exch	Sect	Pts	Op
05-16	18:29	K6BFA	14250.00	USB	1F	PAC	1	AK4AO

Double click any field to edit it.

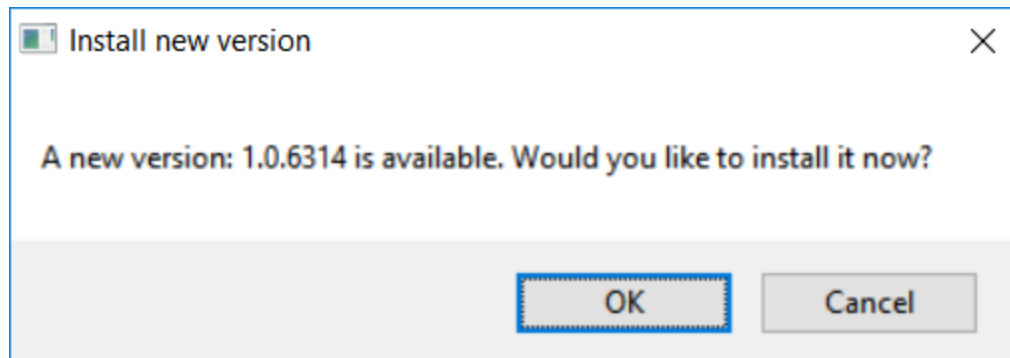
Right click an entry to get a menu for editing or deleting.

The WIPELOG command in the Entry window can be used to empty the log of all entries after testing.

SETUP

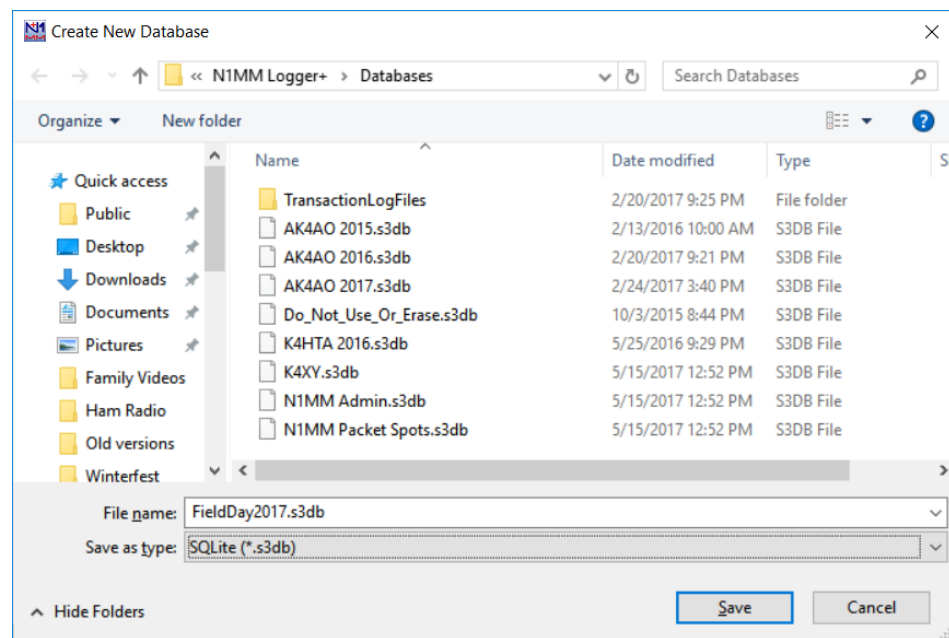
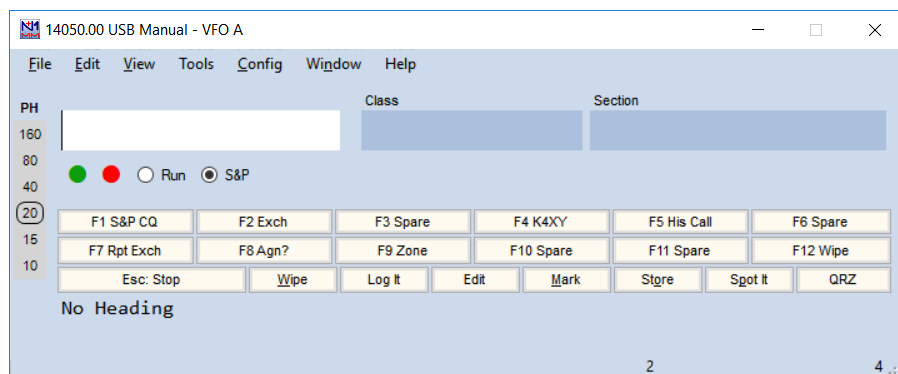
Install or Update N1MM+

- If N1MM+ is not installed first follow the Full Install instructions at this link:
 - <http://n1mm.hamdocs.com/tikiindex.php?page=Full+Install>
 - Accept defaults for locations of files
- A new installation or an existing installation should be updated to the latest version of N1MM+. Start N1MM+ while connected to the internet, and select OK when this dialog box appears:



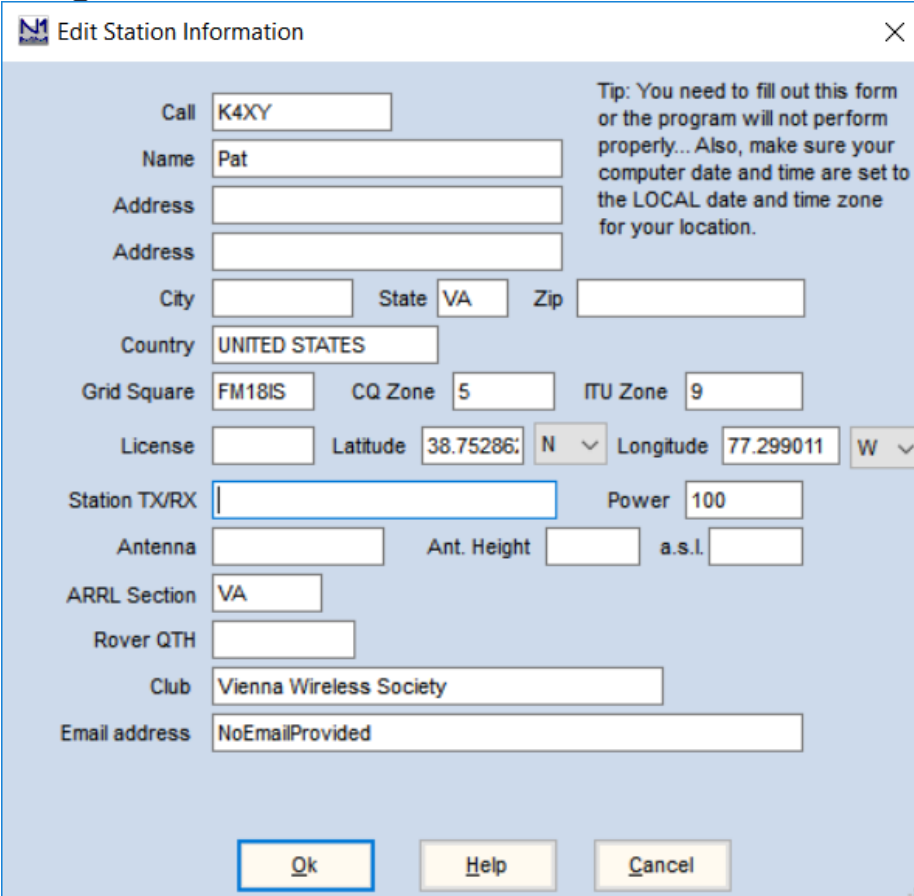
Create Database for FD 2017

- New installations – a dialog box should appear offering option to create a new database
- Existing installations – From the Entry window select File->New Database (Use an existing database ONLY if you already have one set up for K4XY at Field Day)



Configure Station Data – Mandatory!

- If the dialog box below doesn't pop up, from the Entry window select Config -> Change Your Station Data...



Edit Station Information [X]

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:

Create Log for Field Day 2017

- From Entry window select File -> New Log in Database FieldDay2017.s3db. Set station parameters:

FieldDay2017.s3db

New log for: ARRL Field Day (June)

Log Type **FD**

Start Date **2017-06-24 18:00:00**

Use Up/Down cursor keys to see long description above.

Contest **Associated Files**

Category

Operator **MULTI-OP** State for Log Type **QSOPARTY**

Band **ALL** Note - the program does not validate categories. Check the Contest rules for valid categories.

Power **LOW**

Mode **SSB**

Overlay **N/A**

Station **PORTABLE**

Assisted **NON-ASSISTED** Time Category **N/A**

Transmitter **LIMITED**

Sent Exchange **4A VA** Omit RST. E.g. CQWW: 05 SS: A 56 EMA

Operators **K4XY**

Soapbox

Select FD from drop down

Select mode(s) applicable to your station

Enter other fields as shown

Optional CAT Control and Keyer Setup

- CAT allows N1MM to sense and change frequency and mode
- Requires serial interface to PC
- From Entry window select Config ->Configure Ports, Mode Control, Audio, Others...

CAT Port and Rig

Keyer Port

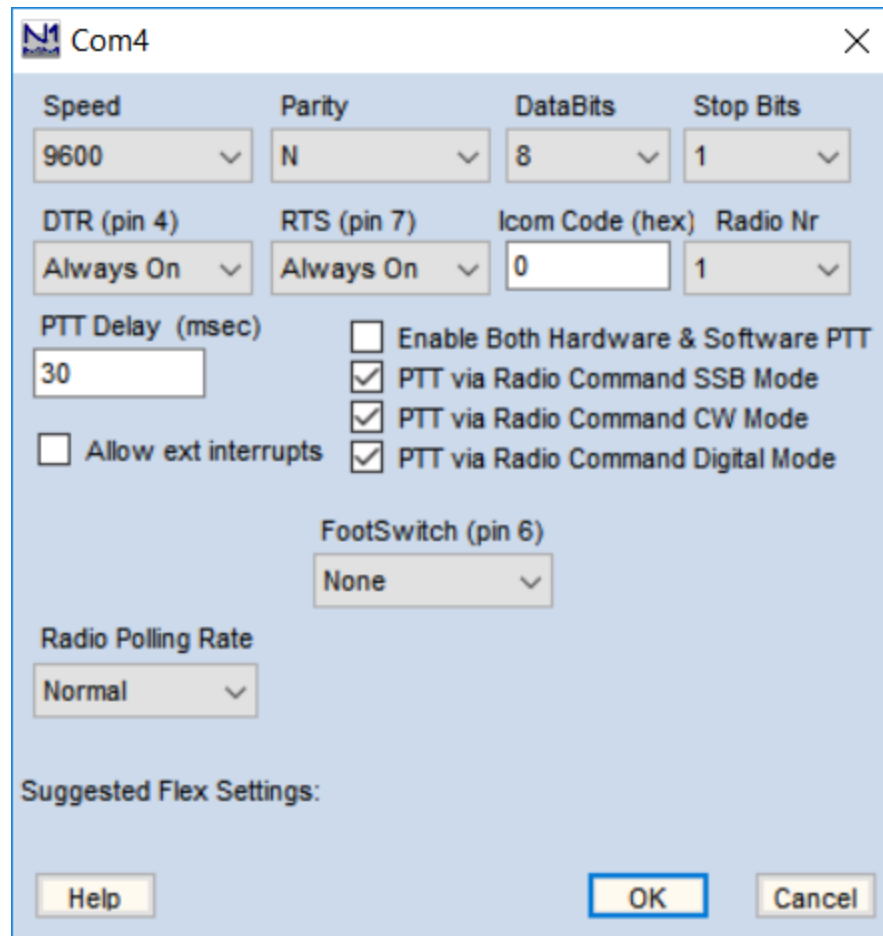
Port	Radio	Digi	CW/Other	Details
COM4	FLEX-6000 Ser	<input type="checkbox"/>	<input type="checkbox"/>	Set
COM20	None	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
None	None	<input type="checkbox"/>	<input type="checkbox"/>	Set
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"/>		Set
LPT2		<input type="checkbox"/>		Set
LPT3		<input type="checkbox"/>		Set

SO1V SO2V SO2R
 9600,N,8,1,DTR=Always On,RTS=Always On,Tx=1
 DTR=Always On,RTS=Always Off,Tx=1

OK Cancel Help

CAT Control Details

- Access this menu from Set button

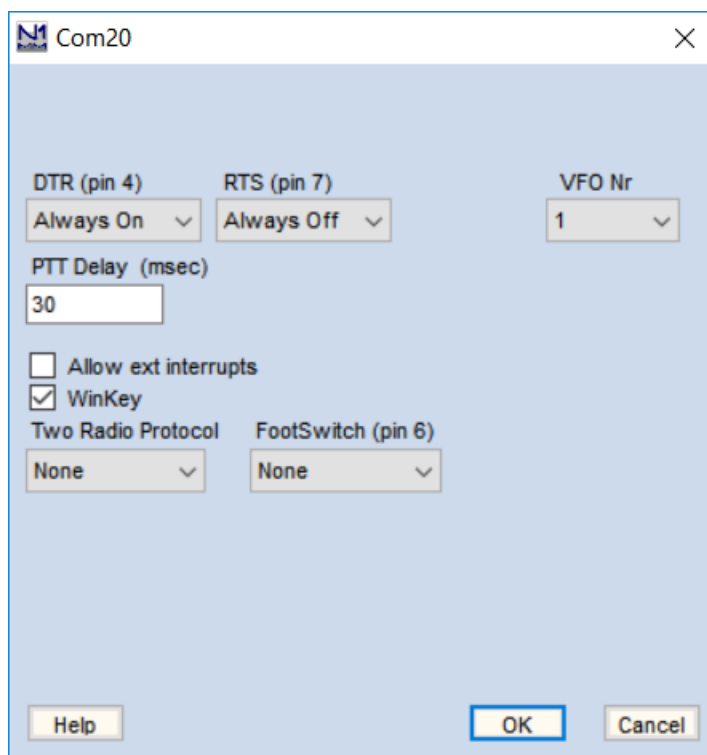


The screenshot shows a dialog box titled "Com4" with a close button (X) in the top right corner. The dialog contains several configuration options:

- Speed:** 9600 (dropdown)
- Parity:** N (dropdown)
- DataBits:** 8 (dropdown)
- Stop Bits:** 1 (dropdown)
- DTR (pin 4):** Always On (dropdown)
- RTS (pin 7):** Always On (dropdown)
- Icom Code (hex):** 0 (text input)
- Radio Nr:** 1 (dropdown)
- PTT Delay (msec):** 30 (text input)
- Enable Both Hardware & Software PTT
- PTT via Radio Command SSB Mode
- PTT via Radio Command CW Mode
- PTT via Radio Command Digital Mode
- Allow ext interrupts
- FootSwitch (pin 6):** None (dropdown)
- Radio Polling Rate:** Normal (dropdown)
- Suggested Flex Settings:** (text label)

At the bottom of the dialog are three buttons: "Help", "OK", and "Cancel".

Keyer Control Details for Winkeyer



The screenshot shows a dialog box titled "Com20" with a close button (X) in the top right corner. The dialog contains the following settings:

- DTR (pin 4):** Always On (dropdown menu)
- RTS (pin 7):** Always Off (dropdown menu)
- VFO Nr:** 1 (dropdown menu)
- PTT Delay (msec):** 30 (text input field)
- Allow ext interrupts
- WinKey
- Two Radio Protocol:** None (dropdown menu)
- FootSwitch (pin 6):** None (dropdown menu)

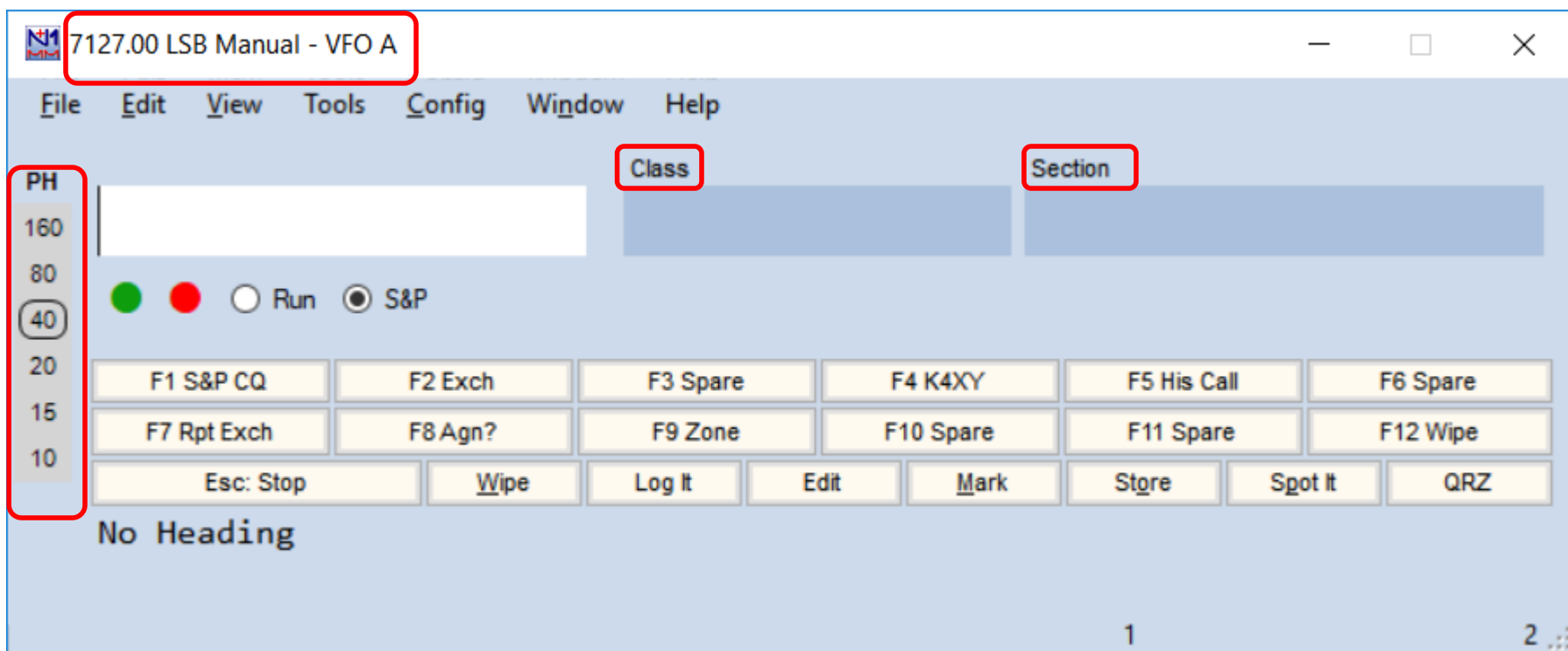
At the bottom of the dialog, there are three buttons: "Help", "OK", and "Cancel".

Special Cases

- CW and Digital stations can use macros for calling CQ, etc. See me for sample macro files and setup details.
- I have a Winkeyer available if needed for FD.
- Phone stations can use recorded voice for calling CQ, etc. Let's discuss if interested.

Testing

- Start N1MM+ and verify that the Entry window appears with expected entry fields, bands, mode(s), and CAT control (if installed and operational).



Test Logging

- Enter a dummy QSO in the Entry window

The screenshot shows the N1 14250.00 USB Manual - VFO A software interface. The main window displays a QSO entry with the following details:

- PH:** 160 (highlighted in blue)
- Call:** K6BFA (highlighted in blue)
- Class:** 1F (highlighted in blue)
- Section:** PAC

Below the call field, there are three radio buttons: a green circle, a red circle, and a white circle labeled "Run". The "S&P" radio button is selected.

The interface includes a grid of function buttons:

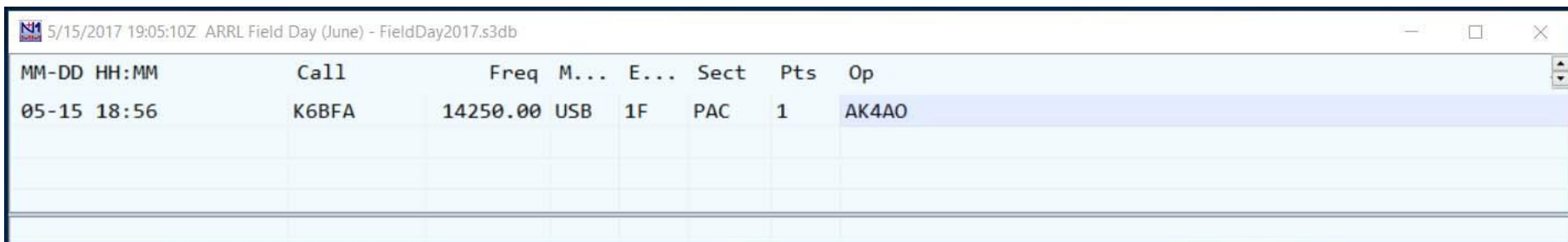
F1 S&P CQ	F2 Exch	F3 Spare	F4 K4XY	F5 His Call	F6 Spare		
F7 Rpt Exch	F8 Agn?	F9 Zone	F10 Spare	F11 Spare	F12 Wipe		
Esc: Stop	Wipe	Log It	Edit	Mark	Store	Spot It	QRZ

At the bottom of the window, the following information is displayed:

- Regional Hdg 278° LP 98° 2312mi 3721km
- Call history UserText appears here when enabled.
- K: NA/UNITED STATES, Zn 3
- No Score
- 0

Use Space Bar (preferred) or Tab to go to next field
 Use Enter to enter into log

Verify Log



5/15/2017 19:05:10Z ARRL Field Day (June) - FieldDay2017.s3db

MM-DD HH:MM	Call	Freq	M...	E...	Sect	Pts	Op
05-15 18:56	K6BFA	14250.00	USB	1F	PAC	1	AK4A0

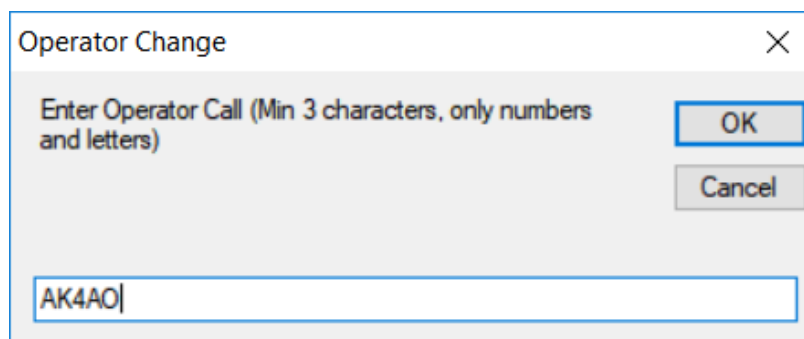
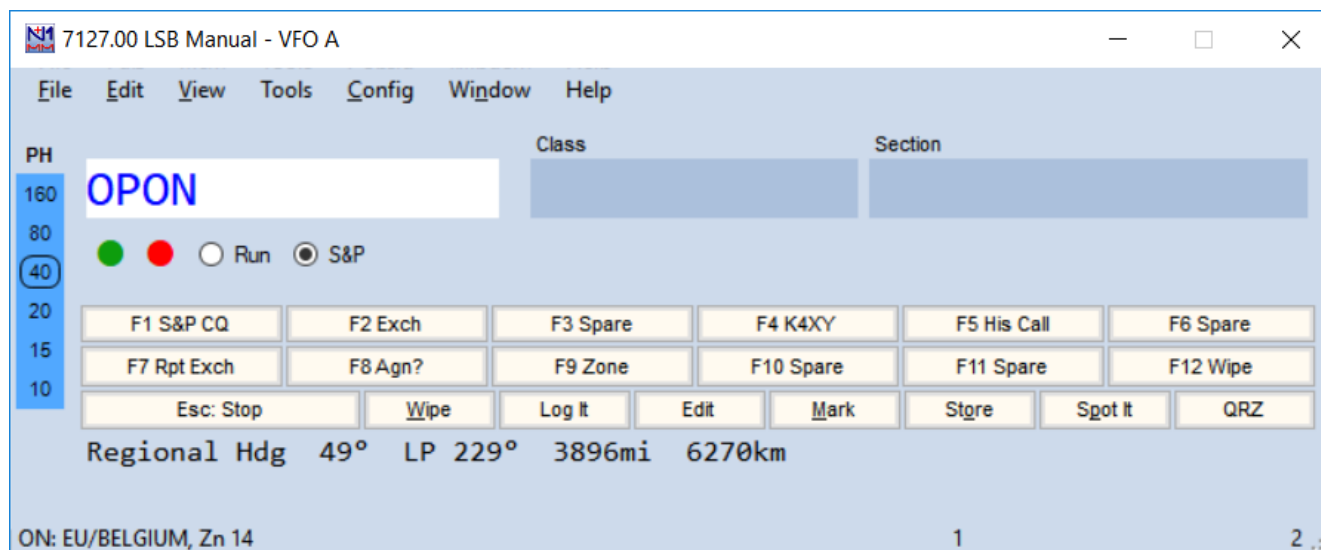
Note that the Field Day exchange is Class and ARRL Section
Most Sections are States, but there are several exceptions
Suggest keeping a list of ARRL sections handy

Also: If the QSO isn't logged when Enter is pressed, one of the entry fields is wrong – likely the section!

OPERATIONS

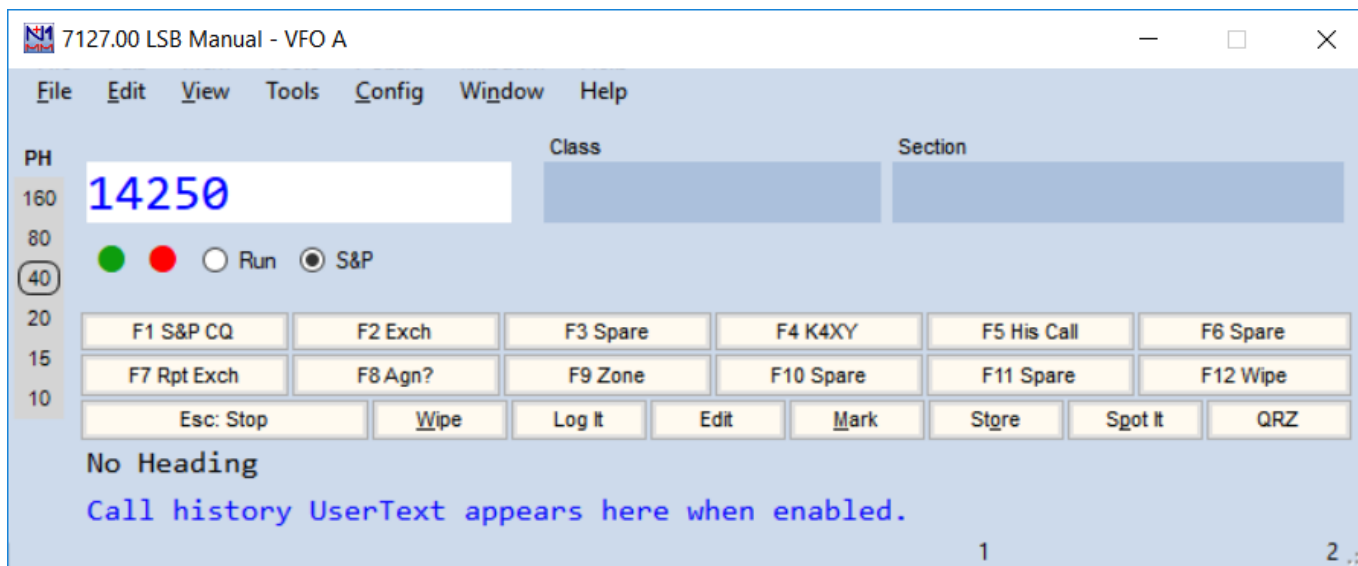
Setting Operator (each time op changes)

- Set the operator by entering OPON in the Entry Window or pressing <CTRL>O



Setting Frequency

- With CAT control, just verify that Entry window shows radio dial frequency and correct mode
- Without CAT control, either click band/mode at left of Entry window or enter frequency in kHz



Set Run or S&P

- Run = I will call CQ
- S&P = “Search and Pounce” – I will answer CQs

The screenshot shows the software interface for the 14250.00 USB Manual - VFO A. The interface includes a menu bar (File, Edit, View, Tools, Config, Window, Help) and a control panel. The control panel features a vertical frequency scale on the left (PH, 160, 80, 40, 20, 15, 10) and a central area with two radio buttons: "Run" (unselected) and "S&P" (selected). The "S&P" button is highlighted with a red box. Below the radio buttons is a grid of function buttons (F1-F12) and other controls (Esc: Stop, Wipe, Log It, Edit, Mark, Store, Spot It, QRZ). The interface also displays "No Heading" and "Call history UserText appears here when enabled." at the bottom.

14250.00 USB Manual - VFO A

File Edit View Tools Config Window Help

PH Class Section

160

80

40

20

15

10

Run S&P

F1 S&P CQ F2 Exch F3 Spare F4 K4XY F5 His Call F6 Spare

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

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

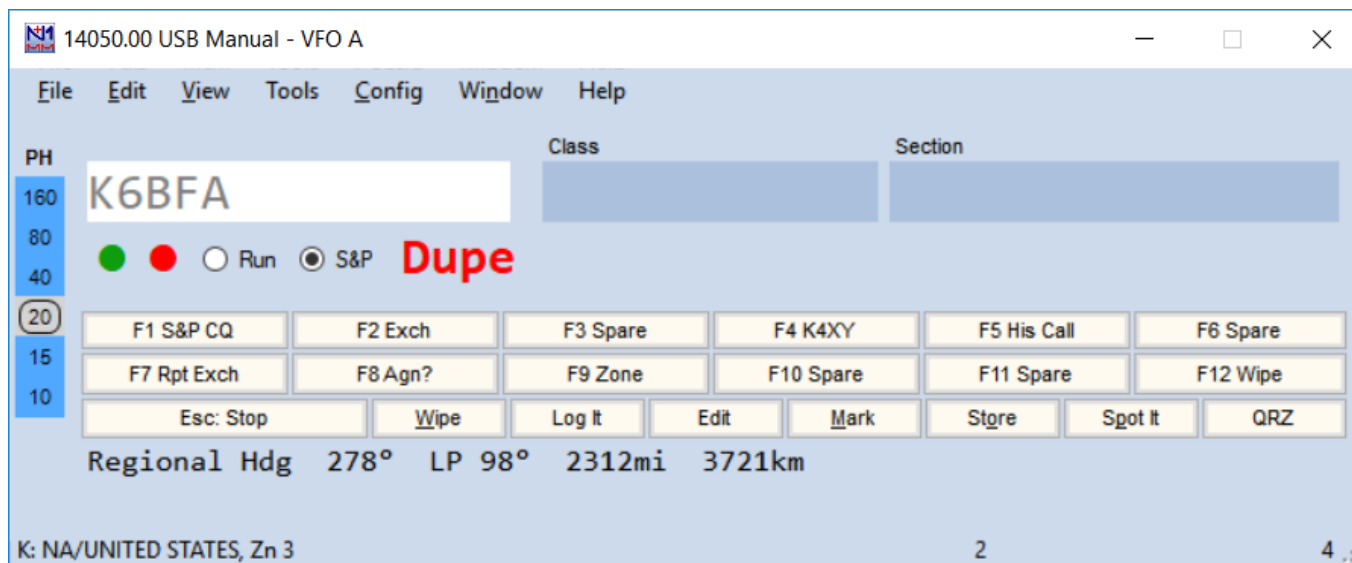
No Heading

Call history UserText appears here when enabled.

1 2

Dupe Checking

- A “Dupe” is a station already worked on the current band and mode. Working a dupe doesn’t add to our score.
- N1MM+ will identify a duplicate station when the call sign is entered

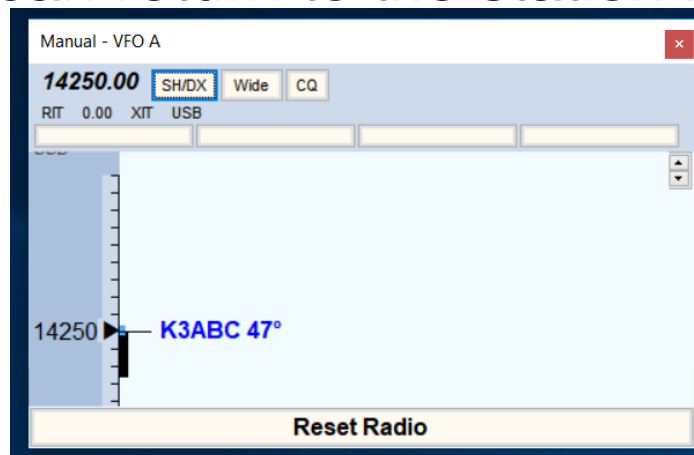


Backing Up the Log

- Backing up periodically to a thumb drive during FD is recommended
- A copy of the log is needed at the end of FD
- Recommended procedure
 - From the Entry window select File -> Export -> Export ADIF to File->Export ADIF to File...
 - Select a directory on your thumb drive and give the backup a unique name.
 - For the final version at end of Field Day, please name it something like “Final 2017 FD 80-20 CW.ADI”

The Bandmap

- You can use the Bandmap window to return to a station you need but can't work at the moment
- Open the Bandmap window by selecting Window - >Bandmap from the Entry window
- Enter at least the call sign in the Entry window, then click "Store"
- With CAT control, you can return to the station by clicking on the bandmap entry



Final Note

- N1MM+ is thoroughly documented. See this link:
<https://n1mm.hamdocs.com/tiki-index.php>