Logging Software
Logging Strategies

Bruce Semple

WA3SWJ

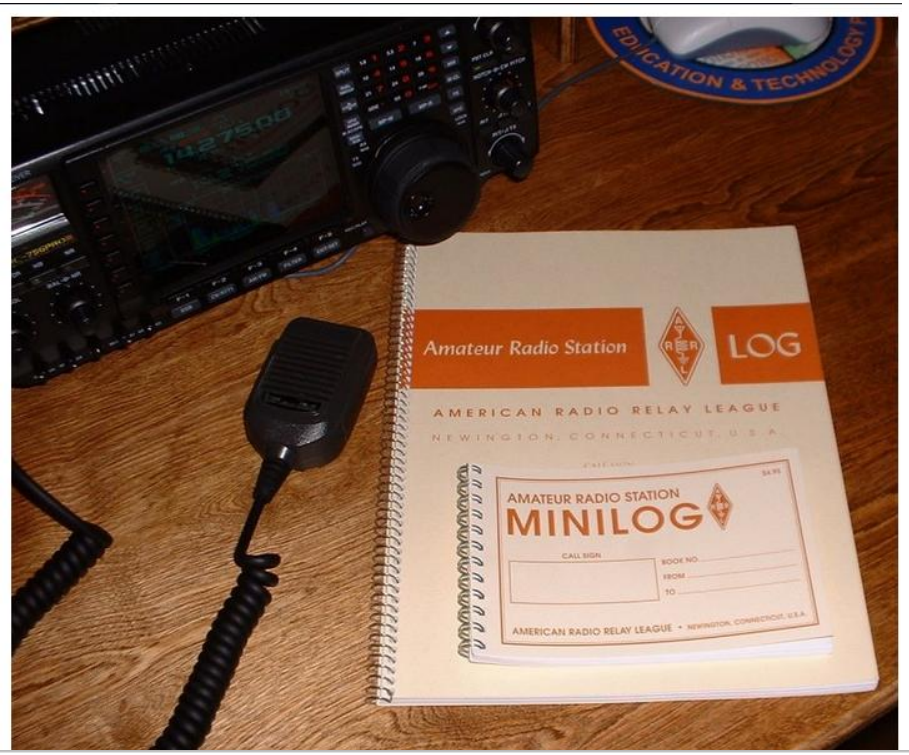
Why Log Contacts ?

1. FCC rules ?
2. Claim awards ?
3. Contest participation ?
4. Support others who are participating in contacts ?
5. Historical record?

Amateur radio operators are not legally required to log their contacts with other stations, as the FCC does not mandate log keeping; however, maintaining a log is highly recommended for personal record-keeping, verifying contacts for awards, and potentially proving compliance in case of interference complaints.

Even if you don't chase awards, being able to confirm a contact with someone who does is helpful. It's part of the ham radio experience. Now some will say, “**The FCC doesn't require a log anymore**.” They would be 100% correct, but we believe it's a great way to track your success over time.

Before the Computer – Paper Logs --



STATION CALLSIGN: _____

HF Log Sheet

PAGE____ OF_____.

DATE	UTC		FREQ	MODE	POWER	CALLSIGN	QTH	RST		COMMENTS	
	ON	OFF						SENT	RCVD		
											1
											2
											3
											4
											5
											6

Exchange QSL cards –

QSL – I acknowledge receipt

Provide Basic Contact Information

Greetings from Castlepoint Lighthouse

ZL2AS

NEW ZEALAND

CQ Zone 32 OC-036 ITU Zone 60
ILLW Lighthouse - NZ 0018

Confirming QSO with:

D	M	YR	UTC Time	Frequency	Mode	RST

Serving Hawkes Bay since 1947 ZL2AS - ZL2QS
With Repeaters on 146.700, 147.250 and 434.850

NZART Br. 13 - Hawkes Bay County Grid Square - RE89cc

73 de

The Hawkes Bay Amateur Radio Club
C/o PO Box 2403, Stortford Lodge
Hastings 4120
NEW ZEALAND

Some Logging Programs will generate a label

GBØSK

Operated by members
of Grantham ARC

QSL via G0RCI
Alan Gibson
1 Oakleigh Road,
Grantham
Lincs NG31 7NN
UK

G4IAR
ON: 03-MAY-2005 2WAY: LSB
UTC: 18:23 MHz: 7.0
REPORT: 59
Grantham ARC thanks you.
QSO certified by G0RCI

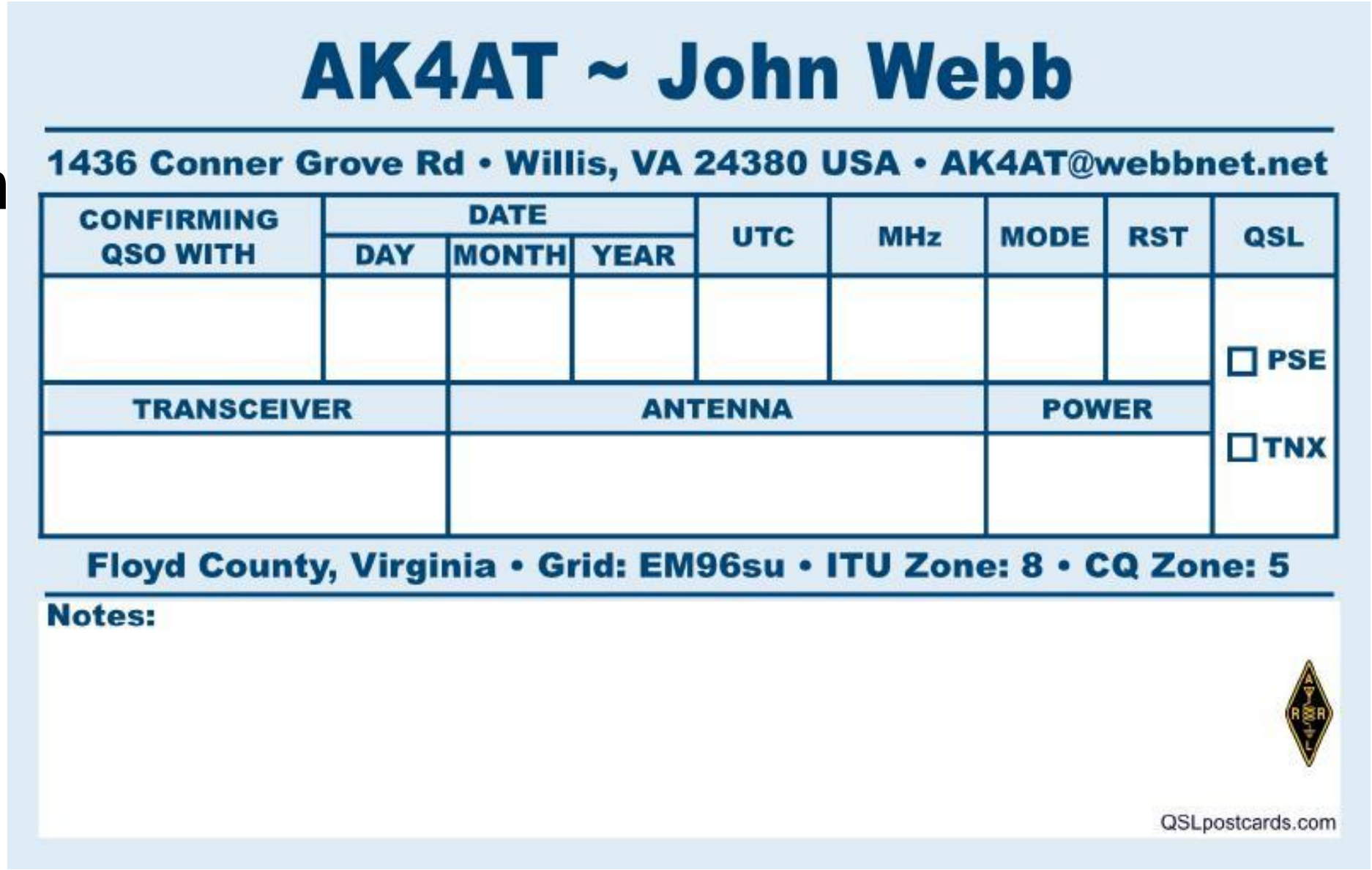
2-Way | RST

☐ Pse QSL Tnx ☐ via RSGB bureau or direct

THANKS TO THE FOLLOWING WHO SPONSORED OUR TRIP:-
WENDY SHIELDS
HAMPSONS VAN HIRE
TECHNICAL TYRE SERVICES
PELICAN CONTROL SYSTEMS LTD
A.J.CRESE NEWSAGENTS

UX5UO print

Provide additional Information



AK4AT ~ John Webb

1436 Conner Grove Rd • Willis, VA 24380 USA • AK4AT@webbnet.net

CONFIRMING QSO WITH	DATE			UTC	MHz	MODE	RST	QSL
	DAY	MONTH	YEAR					☐ PSE ☐ TNX
TRANSCEIVER		ANTENNA				POWER		

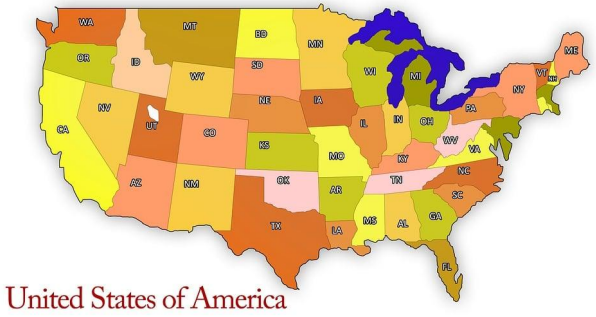
Floyd County, Virginia • Grid: EM96su • ITU Zone: 8 • CQ Zone: 5

Notes:

QSLpostcards.com

ARRL Provides a QSL "Outgoing" & "Incoming" Bureau

ARRL Incoming QSL Bureau



ARRL Outgoing QSL Bureau
Newington, CT

** Pay US postage rates to mail cards to the Outgoing QSL Bureau

"One of the greatest bargains of League membership is being able to use the ARRL Outgoing QSL Service to conveniently send your DX QSL cards overseas to foreign QSL Bureaus. "

In Order to Qualify for an Award ...
QSL Cards Card Checkers ..

DXCC Card Checker Master List

- DXCC Rules
- DXCC Awards Fees
- DXCC Forms
- Online DXCC Application
- DXCC FAQ
- DXCC Card Checker Search
- **DXCC Card Checker Master List**
- DXCC Applications Received

DXCC Card Checker Master List

Use this quick-reference PDF to find an authorized DXCC Card Checker.

In addition to DXCC, ARRL DXCC card checkers are authorized to check cards for these other ARRL/IARU awards:

WAS (Worked All States)
VUCC (VHF/UHF Century Club)
WAC (IARU Worked All Continents)

On The Air >> Awards >> DXCC >> DXCC Card Checker Master List

Back to Top
Having Trouble?

:420
owatelecom.net

KS
n, K0BJ
y Road
7701
884
884
kobj@gmail.com

on, K0IYA
Lane Drive
KS 67337
268
@gmail.com

ee, AB0X
er Ave
, KS 66109
139
kc.rr.com

Stamford CT 06905-
k1ta@arrl.net

EMA
Stan Laine, W1LE
PO Box 1293
Forestdale, MA 02644
(508) 833-2196
stanw1le@verizon.net

Les Peters, N1SV
33 Hayes Rd
Townsend, MA 01469
(978) 597-5370
n1sv@comcast.net

Robert C. Reiser,
AA1M
6 Savin St
Burlington, MA 01803
aa1m@arrl.net

ME
Stephen Kercel, AA4AK

Mark Tharp, KB7HDX
P.O. Box 2222
Yakima, WA 98907
(509) 952-5764
kb7hdx@arrl.net

Gary Bytnar, AD7XG
26450 Steret Road N.
Davenport, WA 99122
(509) 263-0797
ad7xg@arrl.net

Bruce Wade, N7ZA
870 E. 8th Avenue
Colville WA 99114
Day: (509) 396-3082
n7za99@gmail.com

ID
Greg Wilson, N4CC
1444 N. McKinney
Lane Boise, ID 83704
(208) 608-3216

PC Based Logging SW

- N1MM+
- DXLab DXKeeper
- Ham Radio Deluxe Logger
- N3FJP – Amateur Contact Log
- ProLog
- Log4OM

Functions:

- User Interface configurable
- Provides Upload / Download interface to cloud based logging software (LOTW, etc)
- Looks up operator information after entering call – interface to QRZ or other call sign DB's
- Interfaces with your radio to grab band / Frequency / mode information
- Can point your antennas (Azimuth) for you
- Let's you know if you have worked this person before, on the same band, with the same mode
- Support the various Contests
- Interfaces with other programs to enable auto logging when using digital modes
- BULK export / Import of Contacts

Contact Information

Minimum non-contest QSL Information

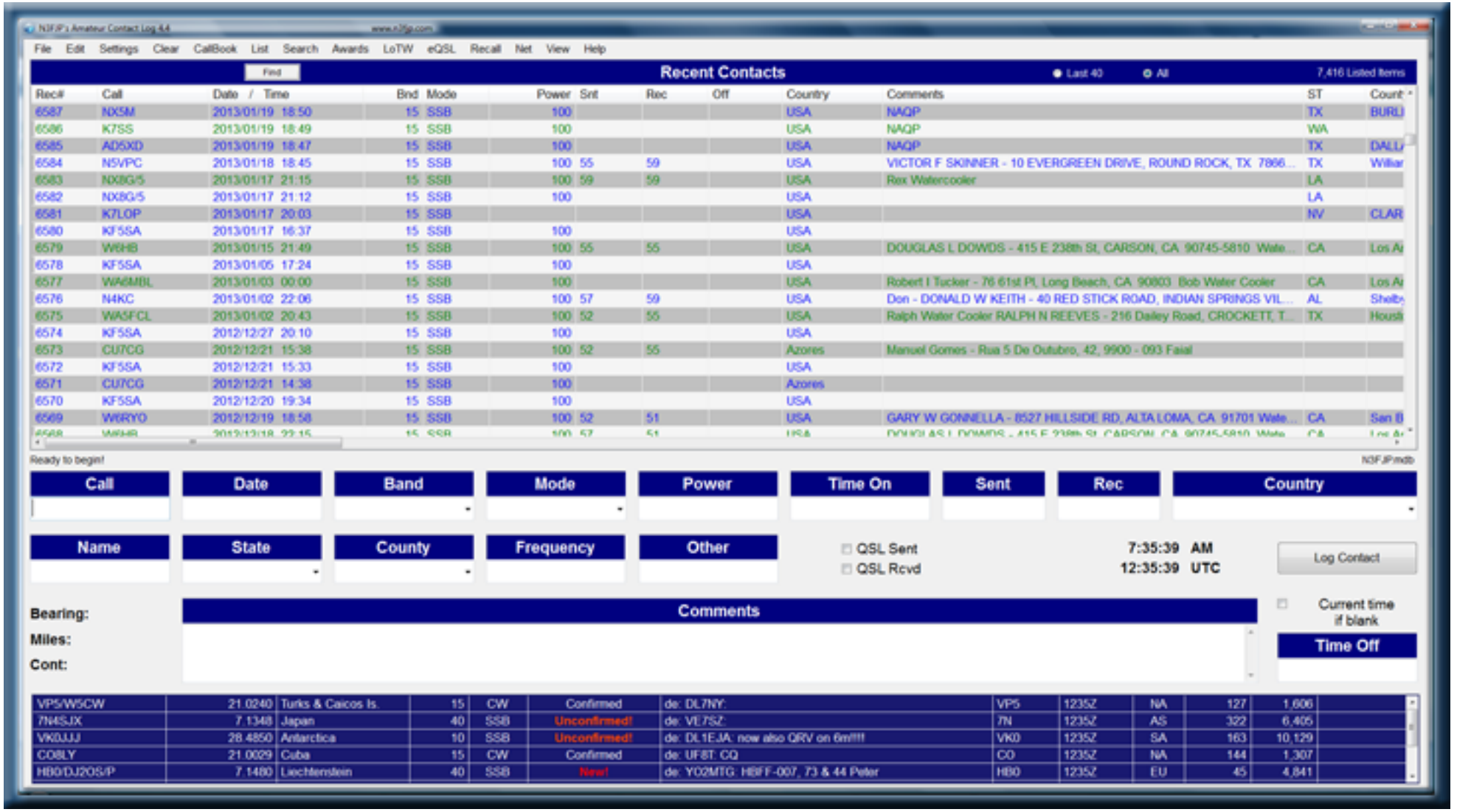
- Other Station's Call sign
- Date / Time (UTC)
- Band/Frequency
- Mode

Additional information you may want to gather

- Their Name
- Signal Report you gave / you received
- Was it part of a contest
- Your Equipment info rig / antenna / power
- Their Equipment info rig / antenna / power
- Was it a DXPedition Contact

*** *A contest will have a specific exchange that must be captured in order to qualify as a valid contest contact*.

N3FJP – Amateur Contact Log (ACLog)



N3FJP - Specialize Contesting Loggers

ARRL Contest Logs

- 10 Meter
- 160 Meter
- Field Day
- Hiram P. Maxim
- IARU HF
- Int Digital (ARRL Digital)
- Int DX (ARRL DX)
- Kids Day
- November Sweepstakes
- Rookie Roundup
- RTTY Roundup
- School Club Roundup
- VHF/UHF

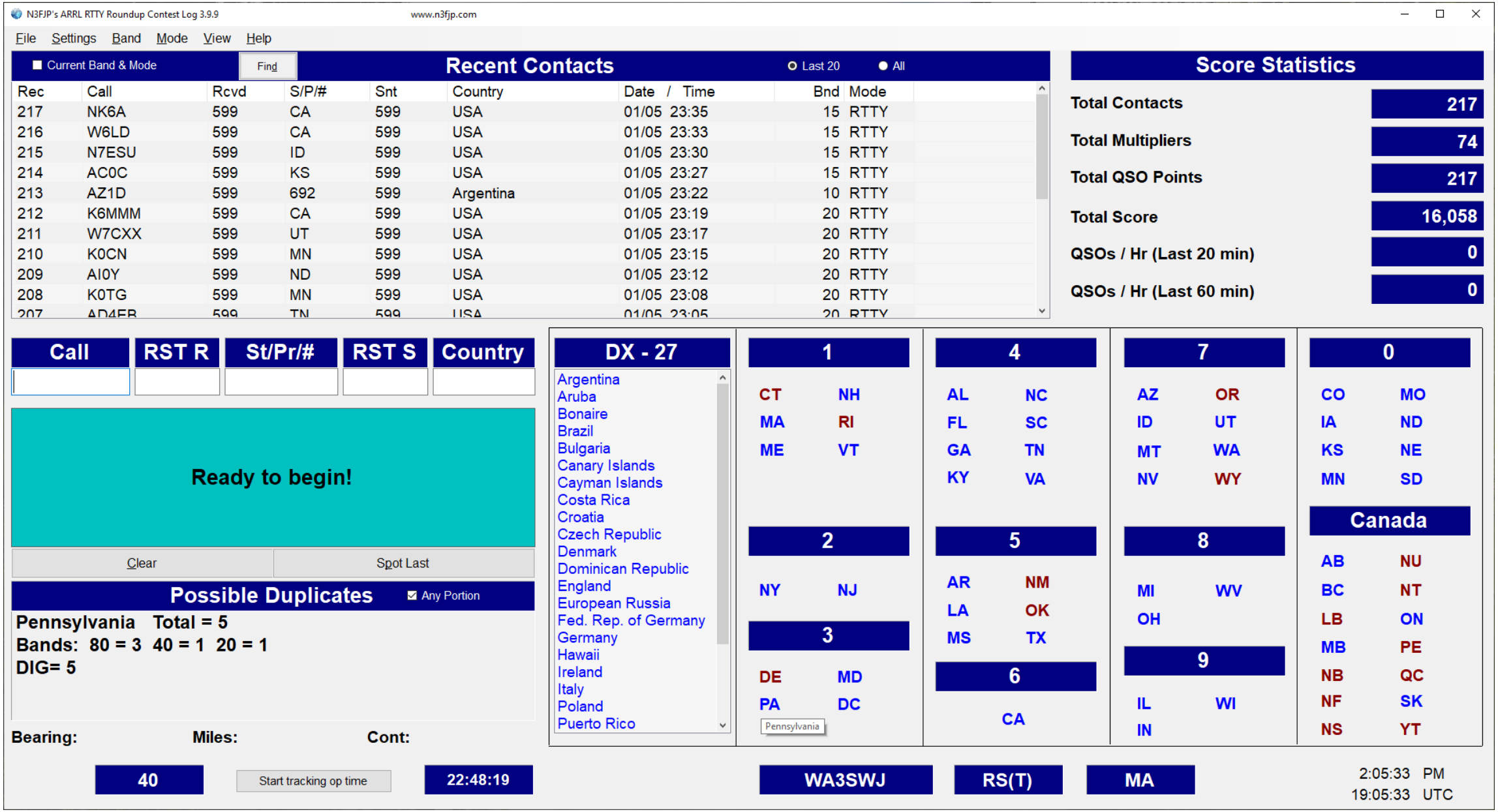
CQ Contest Logs

- CQ 160 Meter
- CQ VHF
- CQ WPX
- CQ WW DX

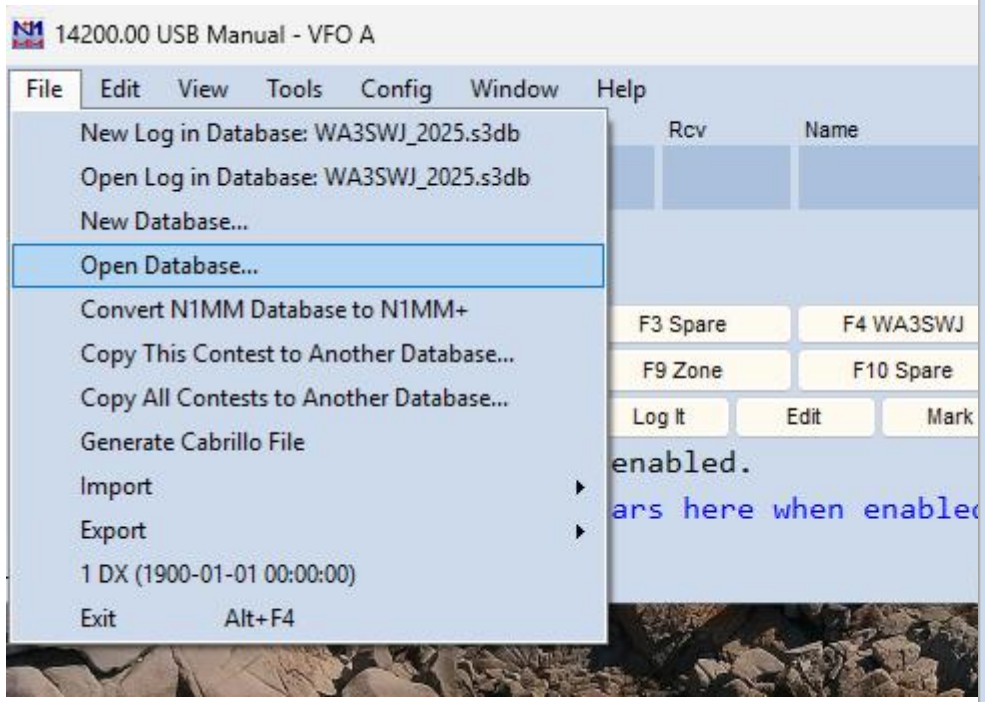
Other Contest Logs

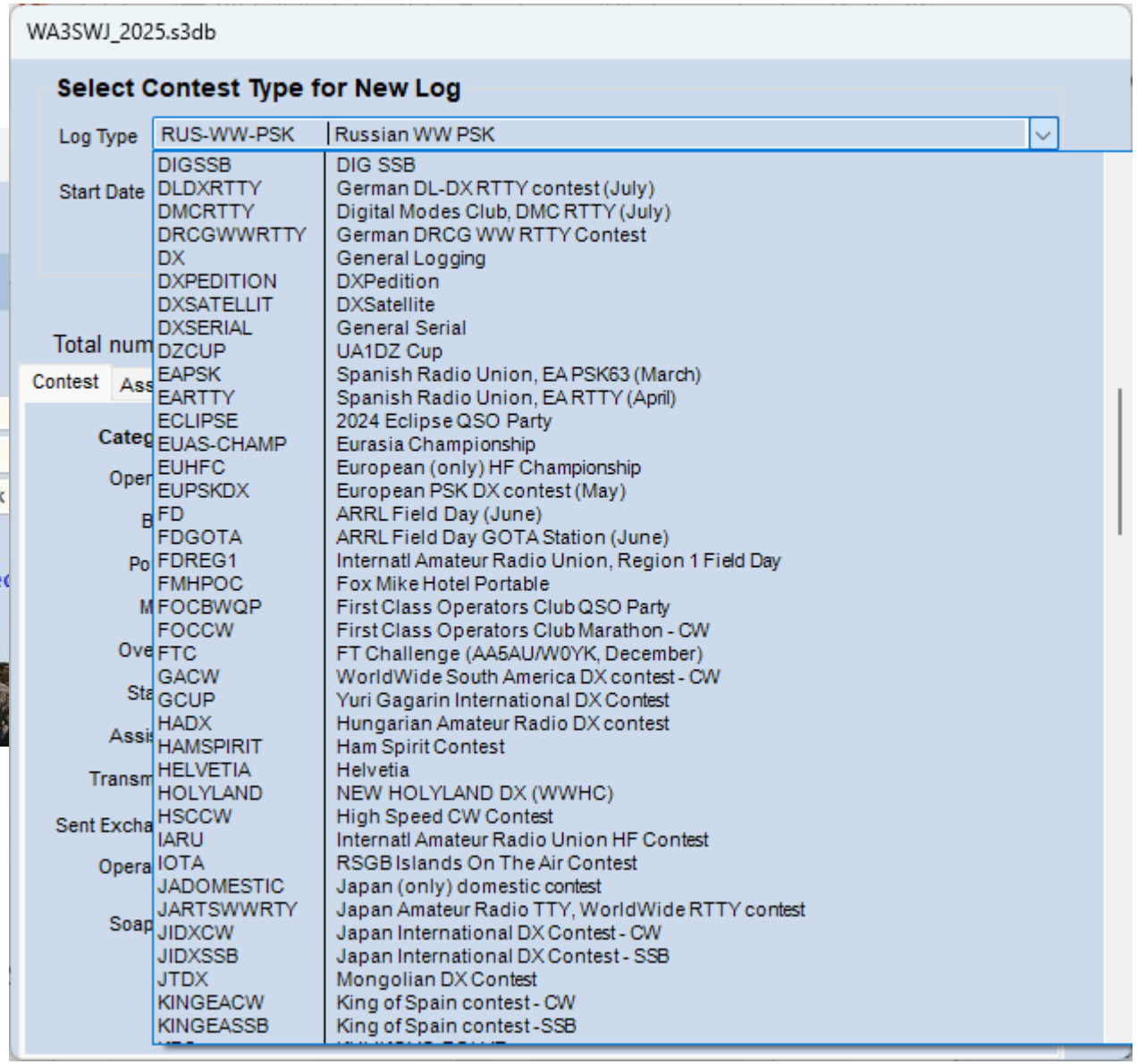
- 10-10 QSO Party
- Africa International DX
- All Asian DX
- CWops CWT & CW Open
- EU-DX
- FISTS Sprint
- FT Roundup
- ICWC Medium Speed Test
- Italian A.R.I. Int DX
- Jamboree on the Air Log
- K1USN SST
- NAQP
- NA Sprint & SSB Sprint
- Oceania DX
- QRP ARCI
- RAC
- RSGB IOTA
- State QSO Party Logs
- Stew Perry
- Winter Field Day
- Worked All Europe
- World Wide Digi DX

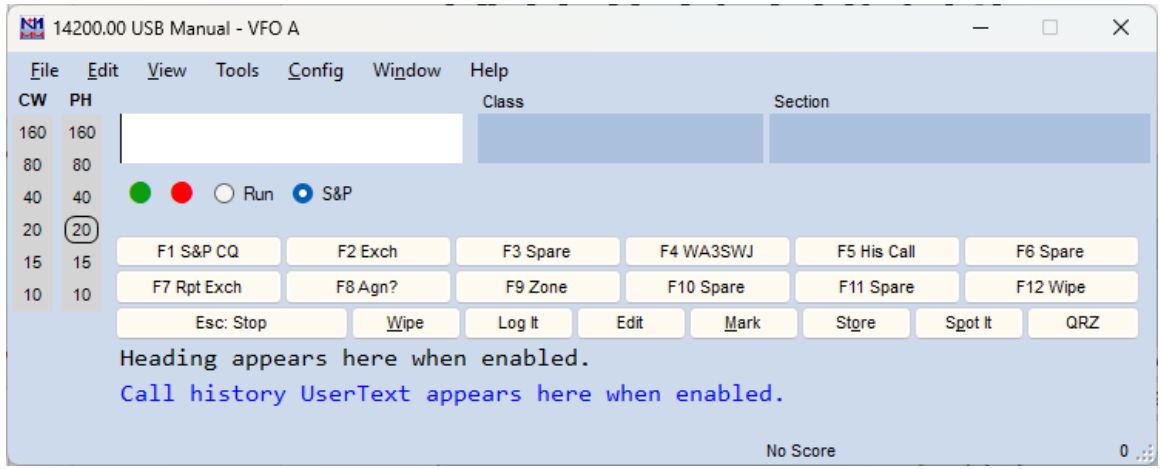
N3FJP – Contest Log – ARRL RTTY Roundup



N1MM+ Logger

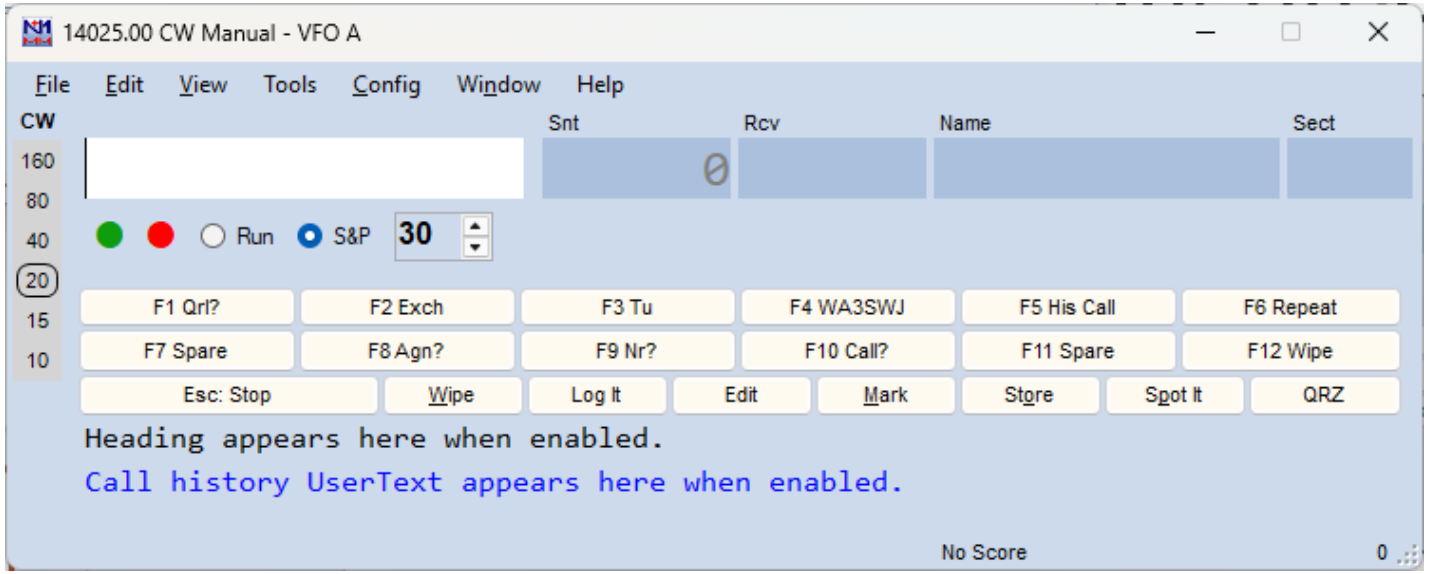

14200.00 USB Manual - VFO A
File
Edit
View
Tools
Config
Window
Help
New Log in Database: WA3SWJ_2025.s3db
Open Log in Database: WA3SWJ_2025.s3db
New Database...
Open Database...
Convert N1MM Database to N1MM+
Copy This Contest to Another Database...
Copy All Contests to Another Database...
Generate Cabrillo File
Import
Export
1 DX (1900-01-01 00:00:00)
Exit Alt+F4
Rcv
Name
F3 Spare
F4 WA3SWJ
F9 Zone
F10 Spare
Log It
Edit
Mark
enabled.
ars here when enable


WA3SWJ_2025.s3db
Select Contest Type for New Log
Log Type
RUS-WW-PSK
Russian WW PSK
Start Date
Total num
Contest
DIGSSB DIG SSB
DLDXRTTY German DL-DX RTTY contest (July)
DMCRTTY Digital Modes Club, DMC RTTY (July)
DRCGWWRTTY German DRCG WW RTTY Contest
DX General Logging
DXPEDITION DXPedition
DXSATELLIT DXSatellite
DXSERIAL General Serial
DZCUP UA1DZ Cup
EAPSK Spanish Radio Union, EA PSK63 (March)
EARTTY Spanish Radio Union, EA RTTY (April)
ECLIPSE 2024 Eclipse QSO Party
EUAS-CHAMP Eurasia Championship
EUHFC European (only) HF Championship
EUPSKDX European PSK DX contest (May)
FD ARRL Field Day (June)
FDGOTA ARRL Field Day GOTA Station (June)
FDREG1 Internatl Amateur Radio Union, Region 1 Field Day
FMHPOC Fox Mike Hotel Portable
FOCBWQP First Class Operators Club QSO Party
FOCCW First Class Operators Club Marathon - CW
FTC FT Challenge (AA5AU/W0YK, December)
GACW WorldWide South America DX contest - CW
GCUP Yuri Gagarin International DX Contest
HADX Hungarian Amateur Radio DX contest
HAMSPIRIT Ham Spirit Contest
HELVETIA Helvetia
HOLYLAND NEW HOLYLAND DX (WWHC)
HSCCW High Speed CW Contest
IARU Internatl Amateur Radio Union HF Contest
IOTA RSGB Islands On The Air Contest
JADOMESTIC Japan (only) domestic contest
JARTSWWRTY Japan Amateur Radio TTY, WorldWide RTTY contest
JIDXCW Japan International DX Contest - CW
JIDXSSB Japan International DX Contest - SSB
JTDX Mongolian DX Contest
KINGEACW King of Spain contest - CW
KINGEASSB King of Spain contest - SSB

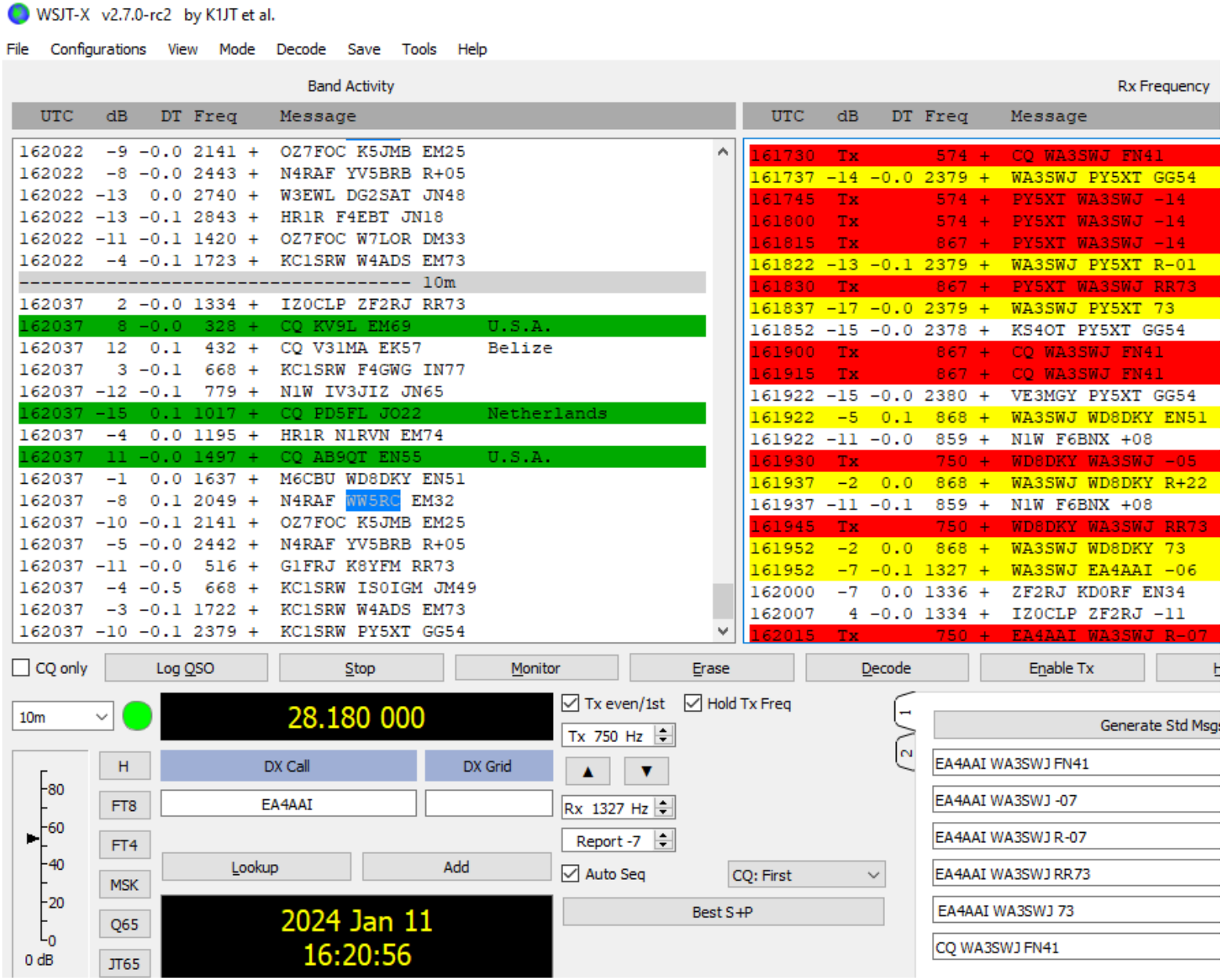


N1MM+ Configured for Winter Field Day

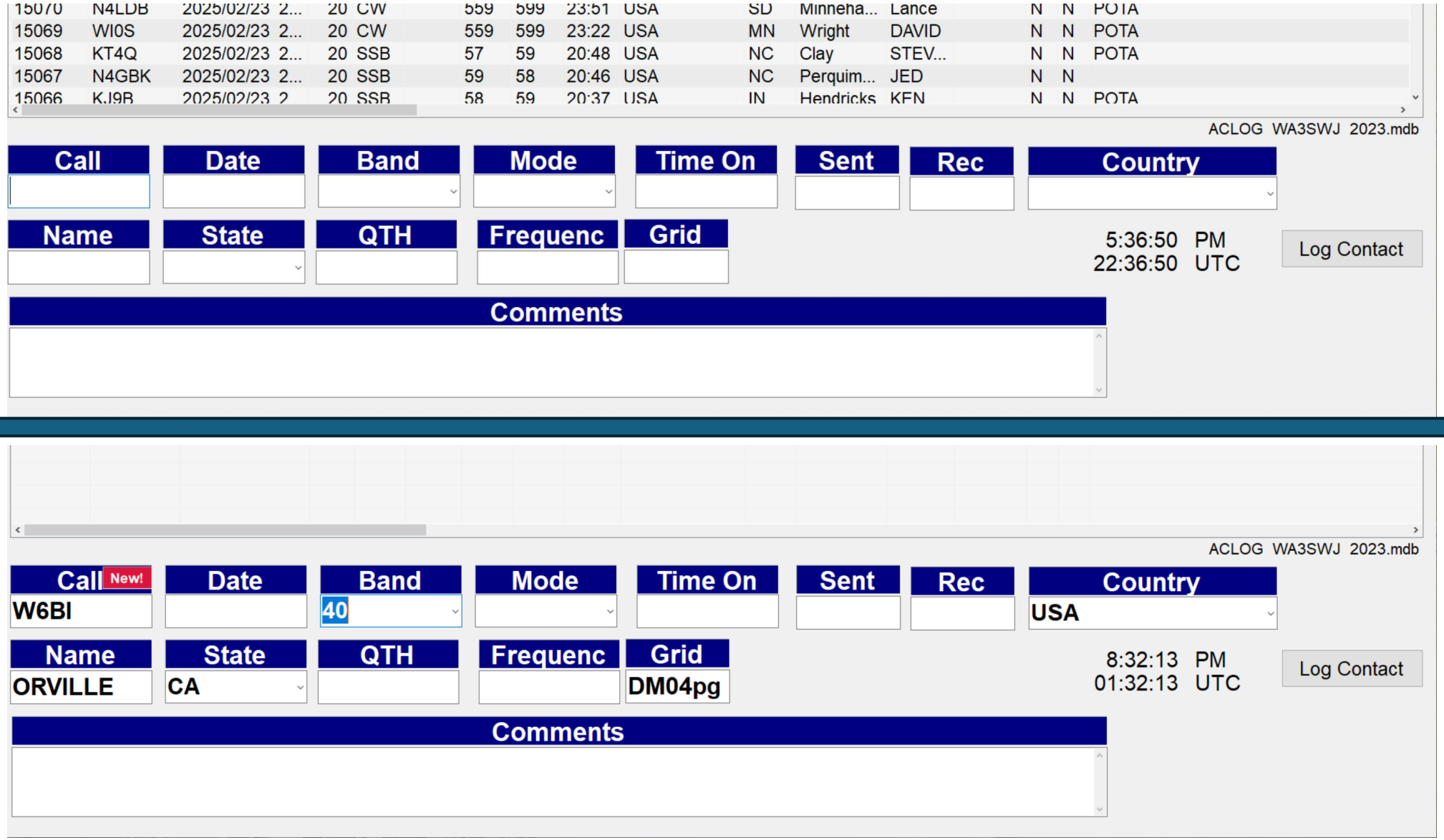
N1MM+ Configured for CW Sprint Contest



Keeping Track of “Worked Before”



Call Lookup – interface with QRZ.COM



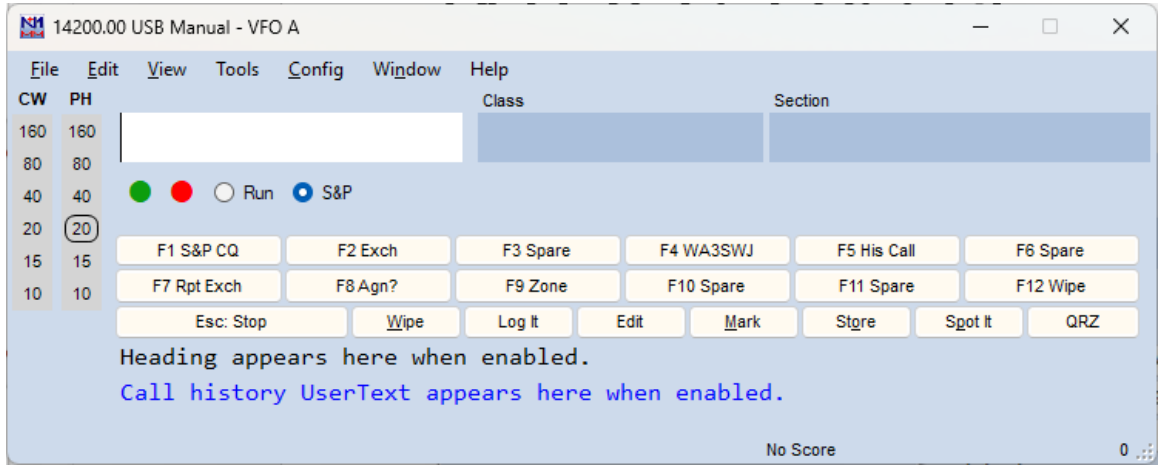
Before Entering Callsign

Enter W6BI .. And hit tab ..

Band, Name, State, Grid get filled in automatically

Logger Integration with Digital Programs “Auto Logging”

N1MM+

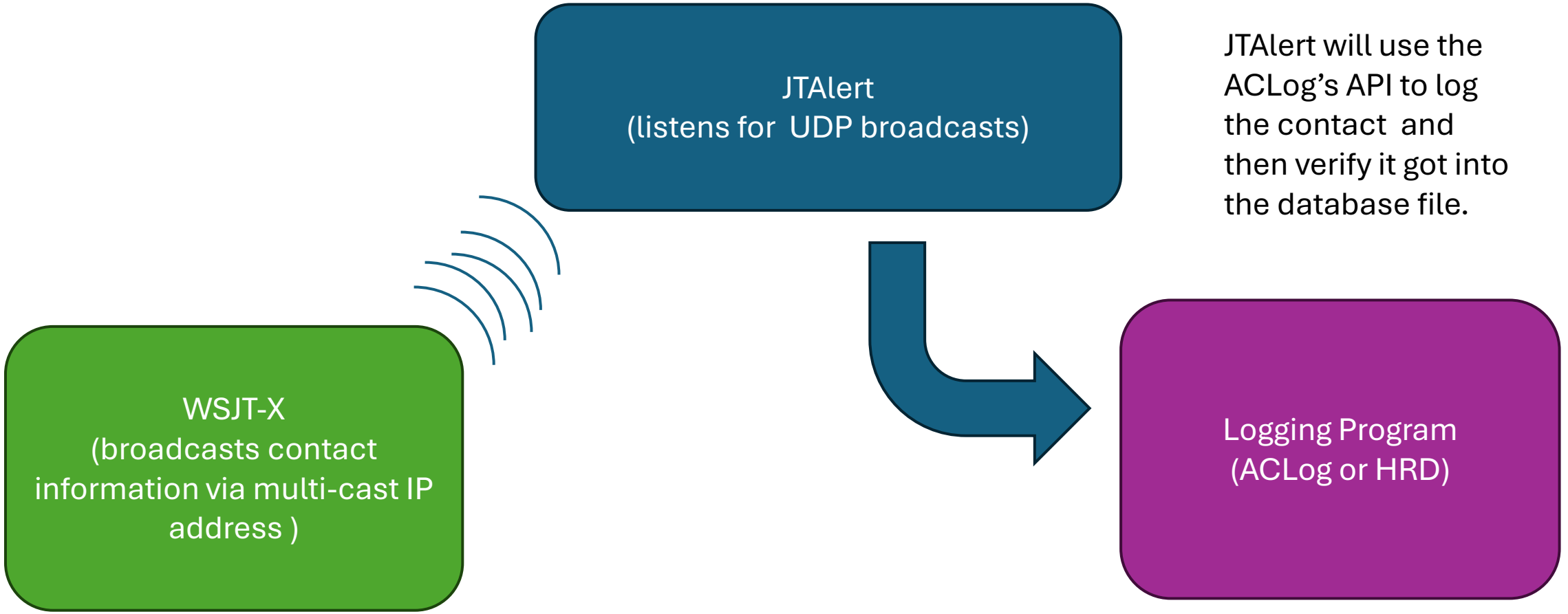


FLDIGI

-- or --

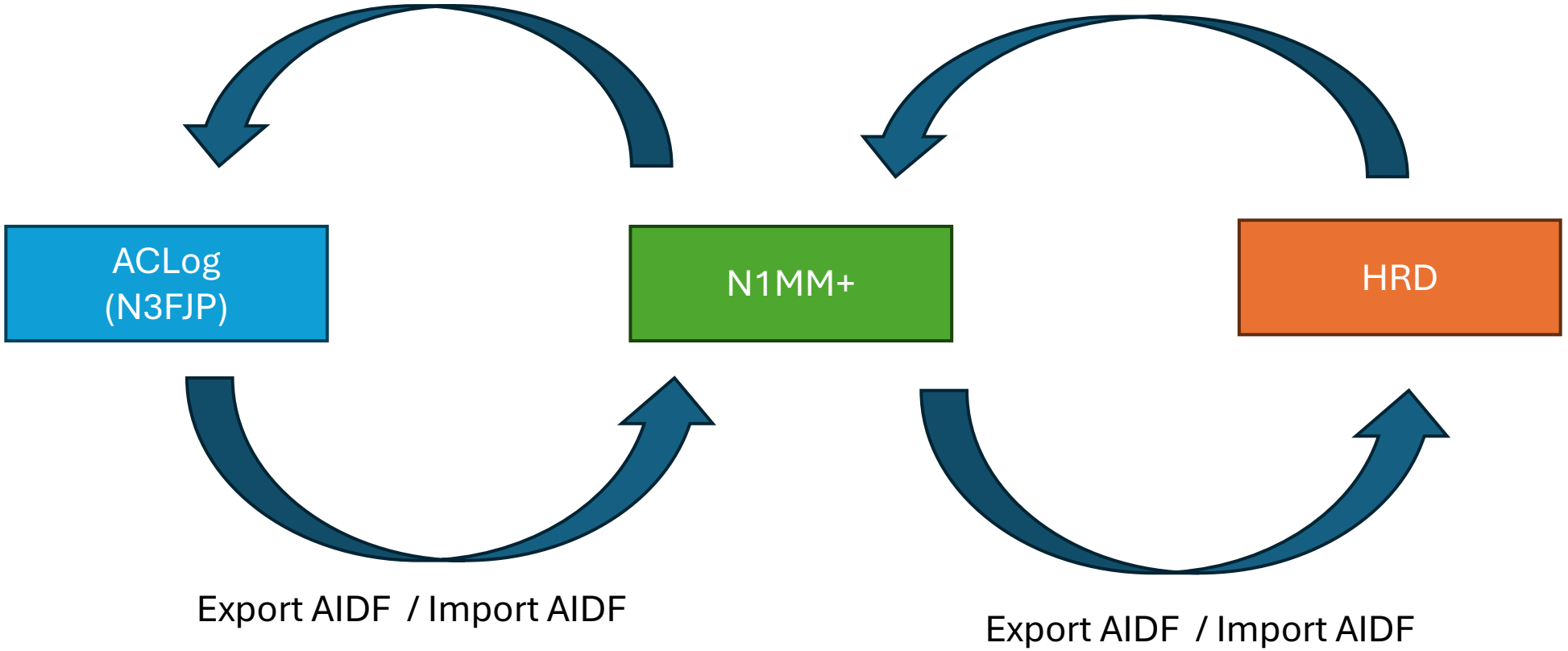
WSJT-X

Integration with WSJT-X and JTAlert (Auto Logging)



JTAlert will use the ACLog's API to log the contact and then verify it got into the database file.

Moving Between PC Logging Programs



ADIF Exchange Format (this is one record)

Amateur Data Interchange Format

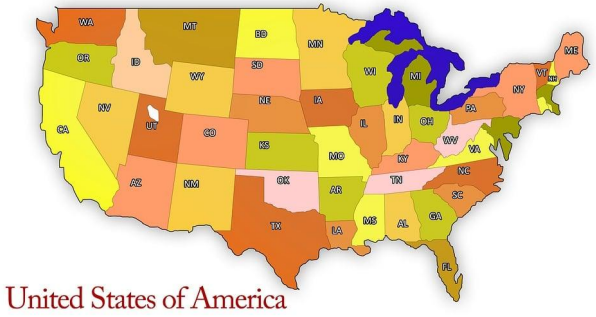
<Call:6>KA6NEI
<QSO_Date:8>20250223
<Time_On:6>202800
<Time_Off:6>202800
<Band:3>20M
<Comment:29>POTA -- 2nd Operator out of 3
<N3FJP_COMPUTERNAME:7>MNODE01
<Cont:2>NA
<Country:3>USA
<DXCC:3>291
<Cnty:13>WI,Eau Claire
<My_Cnty:13>MA,Barnstable
<CQz:2>03
<Gridsquare:6>DM43df
<My_Gridsquare:6>FN41wr
<MY_State:2>MA
<ITUz:2>06
<Mode:3>SSB
<N3FJP_ModeContest:2>PH
<Name:4>JOHN
<OPERATOR:6>WA3SWJ
<Pfx:3>KA6
<QSL_Sent:1>N
<QSL_Rcvd:1>N
<RST_Sent:2>57
<RST_Rcvd:2>59
<N3FJP_SPC:2>MA
<N3FJP_SPCNum:2>WI
<State:2>WI
<N3FJP_StationID:7>MNODE01
<eor>

CABRILLO Format

```
CREATED-BY: N1MM Logger+ 1.0.10619.0
QSO:   14239 PH 2024-01-25 1645 W1MA        3I    EMA K4XY          1O   VA
QSO:   14264 PH 2024-01-25 1657 W1MA        3I    EMA W5DXC         1O   VA
QSO:   14264 PH 2024-01-25 1658 W1MA        3I    EMA KD8VTT        1H   MI
QSO:   14264 PH 2024-01-25 1701 W1MA        3I    EMA N4KCU         1O   TN
QSO:   14264 PH 2024-01-25 1702 W1MA        3I    EMA VA2HX         1O   QC
QSO:   14264 PH 2024-01-25 1704 W1MA        3I    EMA KE2CWT        1H   WNY
QSO:   14264 PH 2024-01-25 1705 W1MA        3I    EMA K1OB          1H   VA
QSO:   14264 PH 2024-01-25 1707 W1MA        3I    EMA KE8FSR        1O   MI
QSO:   14264 PH 2024-01-25 1707 W1MA        3I    EMA KB4RQI        1H   EPA
QSO:   14264 PH 2024-01-25 1747 W1MA        3I    EMA KC1QEM        1H   EMA
QSO:   14264 PH 2024-01-25 1812 W1MA        3I    EMA KE8RV         3I   OH
QSO:   14264 PH 2024-01-25 1815 W1MA        3I    EMA VE3MIS        2I   GH
QSO:   14264 PH 2024-01-25 1816 W1MA        3I    EMA ND4H          1H   OH
QSO:   14264 PH 2024-01-25 1818 W1MA        3I    EMA N9DMT         1H   WI
QSO:   14215 PH 2024-01-25 1854 W1MA        3I    EMA EI2OARC       1O   DX
QSO:   14215 PH 2024-01-25 1857 W1MA        3I    EMA K4N           2O   NC
QSO:   14215 PH 2024-01-25 1857 W1MA        3I    EMA NN4VA         3I   VA
QSO:   14215 PH 2024-01-25 1858 W1MA        3I    EMA W3YMW         2I   MDC
QSO:   14215 PH 2024-01-25 1858 W1MA        3I    EMA WA4FJB        1H   VA
QSO:   14215 PH 2024-01-25 1859 W1MA        3I    EMA W8TAT         1H   SC
```

ARRL Provides a QSL "Outgoing" & "Incoming" Bureau

ARRL Incoming QSL Bureau



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On The Air >> Awards >> DXCC >> DXCC Card Checker Master List

Back to Top
Having Trouble?

:420
owatelecom.net

KS
n, K0BJ
y Road
7701
884
884
kobj@gmail.com

on, K0IYA
Lane Drive
KS 67337
268
@gmail.com

ee, AB0X
er Ave
, KS 66109
139
kc.rr.com

Stamford CT 06905-
k1ta@arrl.net

EMA
Stan Laine, W1LE
PO Box 1293
Forestdale, MA 02644
(508) 833-2196
stanw1le@verizon.net

Les Peters, N1SV
33 Hayes Rd
Townsend, MA 01469
(978) 597-5370
n1sv@comcast.net

Robert C. Reiser,
AA1M
6 Savin St
Burlington, MA 01803
aa1m@arrl.net

ME
Stephen Kercel, AA4AK

Mark Tharp, KB7HDX
P.O. Box 2222
Yakima, WA 98907
(509) 952-5764
kb7hdx@arrl.net

Gary Bytnar, AD7XG
26450 Steret Road N.
Davenport, WA 99122
(509) 263-0797
ad7xg@arrl.net

Bruce Wade, N7ZA
870 E. 8th Avenue
Colville WA 99114
Day: (509) 396-3082
n7za99@gmail.com

ID
Greg Wilson, N4CC
1444 N. McKinney
Lane Boise, ID 83704
(208) 608-3216

Logging Strategies

The “Cloud”

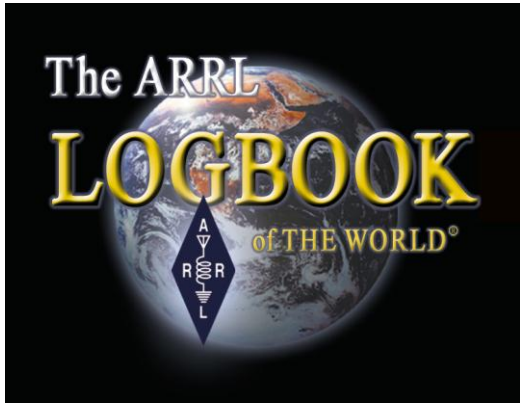
Using your PC based logging software -- Upload your contacts, Download Confirmations

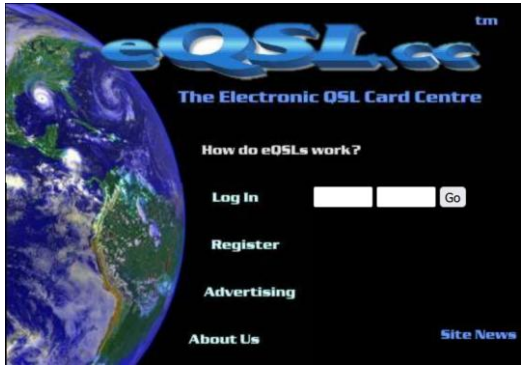
Amateurs all over the world are uploading their contacts

Cloud Based Logging Software

1. ARRL's Logbook Of The World – LOTW
   - Started September 15, 2003
   - 2,054,656,600 QSO Records
   - 476,944,741 resulting QSL records
   - 195,226 users
2. Electronic QSL Card Center – EQSL
   - Started January 2004
   - 464,820 users
3. QRZ

Note: Uploads to LOTW need to be "signed" by TQSL to verify that it is really you





QRZ

LOTW Record

Station

Call Sign	WA3SWJ
DXCC	UNITED STATES OF AMERICA (291)
CQ Zone	05
ITU Zone	08
Grid	FN41WR
State	Massachusetts (MA)
County	Barnstable

Worked Station

Worked	N4LDB
DXCC	UNITED STATES OF AMERICA (291)
CQ Zone	04
ITU Zone	07
Grid	EN13SD
State	South Dakota (SD)
County	Lincoln
Date/Time	2025-02-23 23:51:00
Mode	CW (CW)
Band	20M
QSL	2025-02-24 12:21:07

Record ID 2051944924 **Received:** 2025-02-24 03:13:13

CW

Station

Call Sign	WA3SWJ
DXCC	UNITED STATES OF AMERICA (291)
CQ Zone	05
ITU Zone	08
Grid	FN41WR
State	Massachusetts (MA)
County	Barnstable

Worked Station

Worked	US2YW
DXCC	UKRAINE (288)
CQ Zone	16
ITU Zone	29
Grid	KN28XG
Date/Time	2025-02-24 03:06:00
Mode	FT4 (DATA)
Band	40M
Frequency	7.04830
QSL	2025-02-24 18:10:17

Record ID 2051944921 **Received:** 2025-02-24 03:13:13

Digital

Station

Call Sign	WA3SWJ
DXCC	UNITED STATES OF AMERICA (291)
CQ Zone	05
ITU Zone	08
Grid	FN41WR
State	Massachusetts (MA)
County	Barnstable

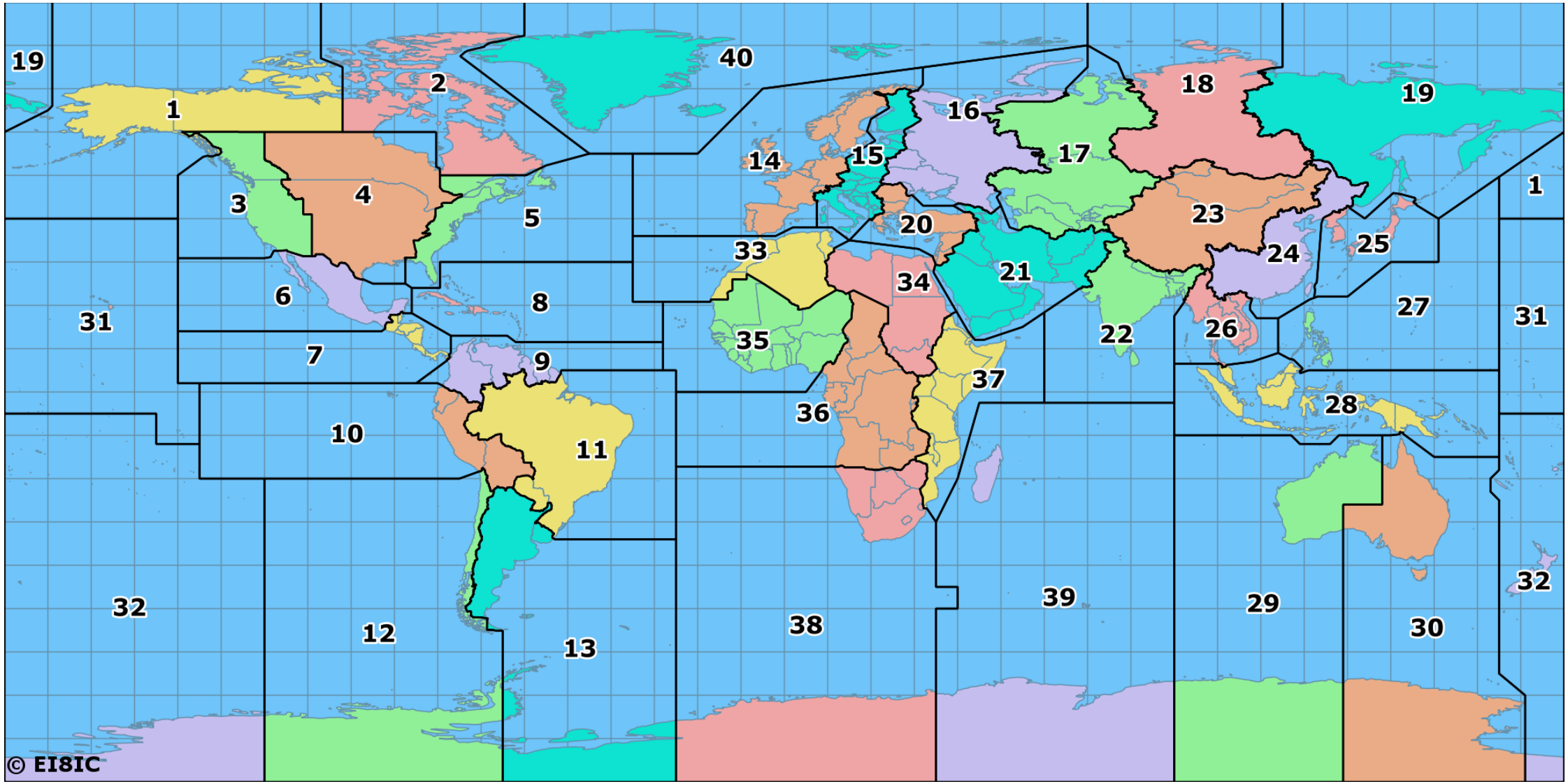
Worked Station

Worked	KJ9B
DXCC	UNITED STATES OF AMERICA (291)
CQ Zone	04
ITU Zone	08
Grid	EM68TR
State	Indiana (IN)
County	Lawrence
Date/Time	2025-02-23 20:36:00
Mode	SSB (PHONE)
Band	20M
QSL	2025-02-24 03:13:13

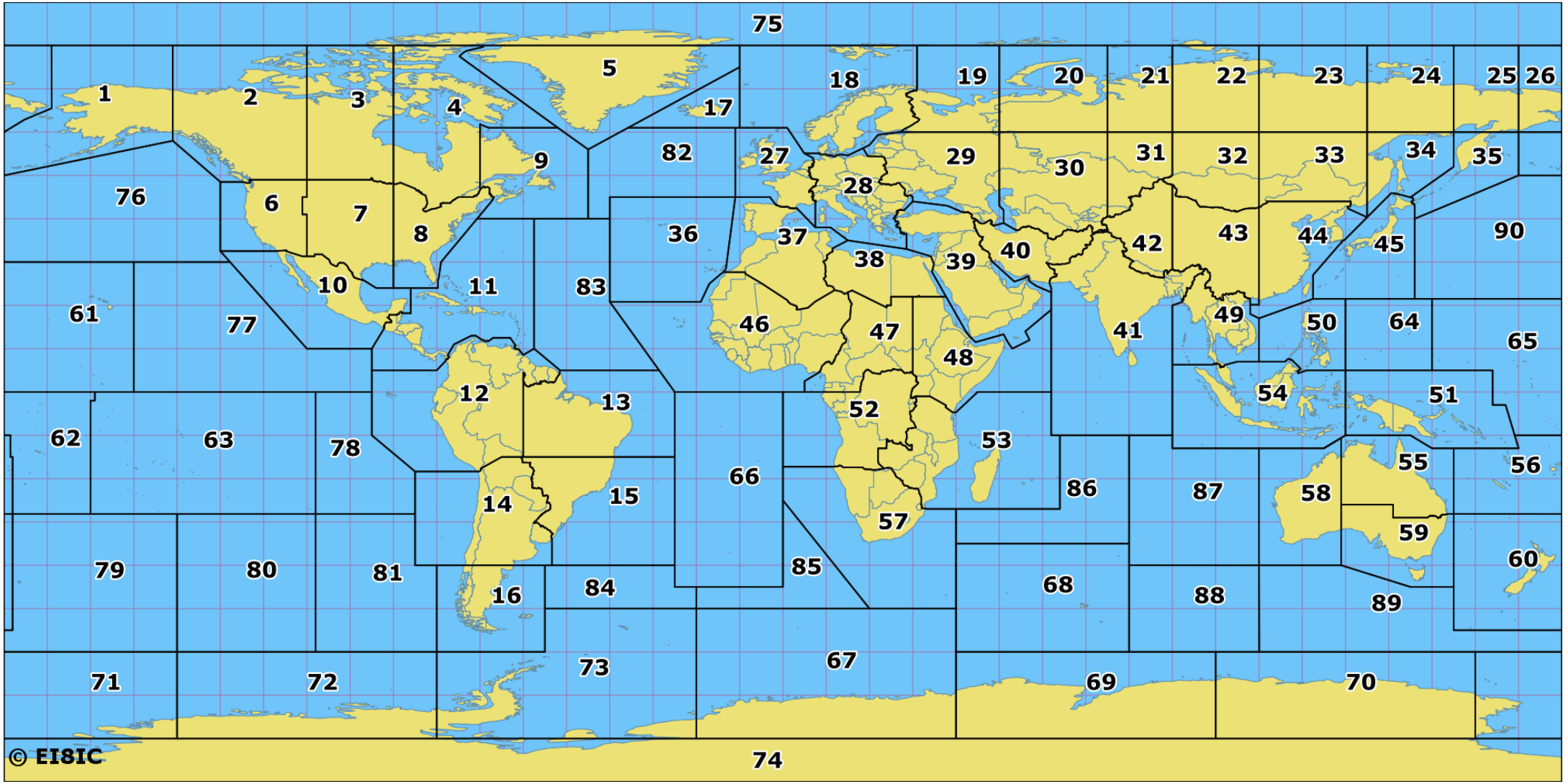
Record ID 2051944928 **Received:** 2025-02-24 03:13:13

SSB

CQ Zones - Cape Cod – Zone 5



ITU Zones – Cape Cod – Zone 8 (International Telecommunication Union)



Award Categories .. Worked All States (WAS)

Mixed
160M
80M
40M
30M
20M
17M
15M
12M
10M
6M
2M

CW
Phone
Digital *
FT4
FT8
RTTY
Digital 160M
80M Phone
80M CW
80M Digital
80M RTTY
40M Phone
40M CW
40M Digital
40M RTTY
30M Digital

20M Phone
20M CW
20M Digital
20M RTTY
17M Digital
15M Phone
15M CW
15M Digital
15M RTTY
12M Digital
10M Phone
10M CW
10M Digital
Phone 6M
Digital 6M
Phone 2M
Triple Play
5-Band *

DXCC – DX Century Club ..

- Mixed *
- CW
- Phone
- Digital
- Satellite
- 160M
- 80M
- 40M
- 30M
- 20M
- 17M
- 15M
- 12M
- 10M
- 6M
- 2M
- 70CM
- Challenge

There are currently 580 DX CC entities

DXCC Entity	160M	80M	40M	30M	20M	17M	15M	12M	10M	6M
ANTARCTICA										
ANTIGUA & BARBUDA									V26K	
ARGENTINA			LV5V	LW6HAR	LV5V		LP1H		LU1DSP	
ARMENIA			EK/RX3DPK			EK/RX3DPK	EK3GM		EK/RX3DPK	
ARUBA		P49X	P49X		P49X		P49X		P49X	
ASCENSION ISLAND										
ASIATIC RUSSIA					RA9JB					
AUSTRAL ISLANDS										
AUSTRALIA			VK3BL	VK3AUX	VK5NE	VK7AC	VK7GS	VK3AWA		
AUSTRIA		OE6TNO	OE1HNA	OE3UKW	OE1MCU	OE8YML	OE3DXA		OE8SKQ	
AVES ISLAND										
AZERBAIJAN										
AZORES		CU3AK	CU2AO	CQ8WWA	CU2BV		CU3AT		CU2AP	
BAHAMAS							C6ANA		C6AKD	
BAHRAIN									A92AA	

QRZ.COM

WA1NLG

USA

NORMAN R CANTIN
5 Cross Street, PO BOX 845
Brewster, MA 02631
USA

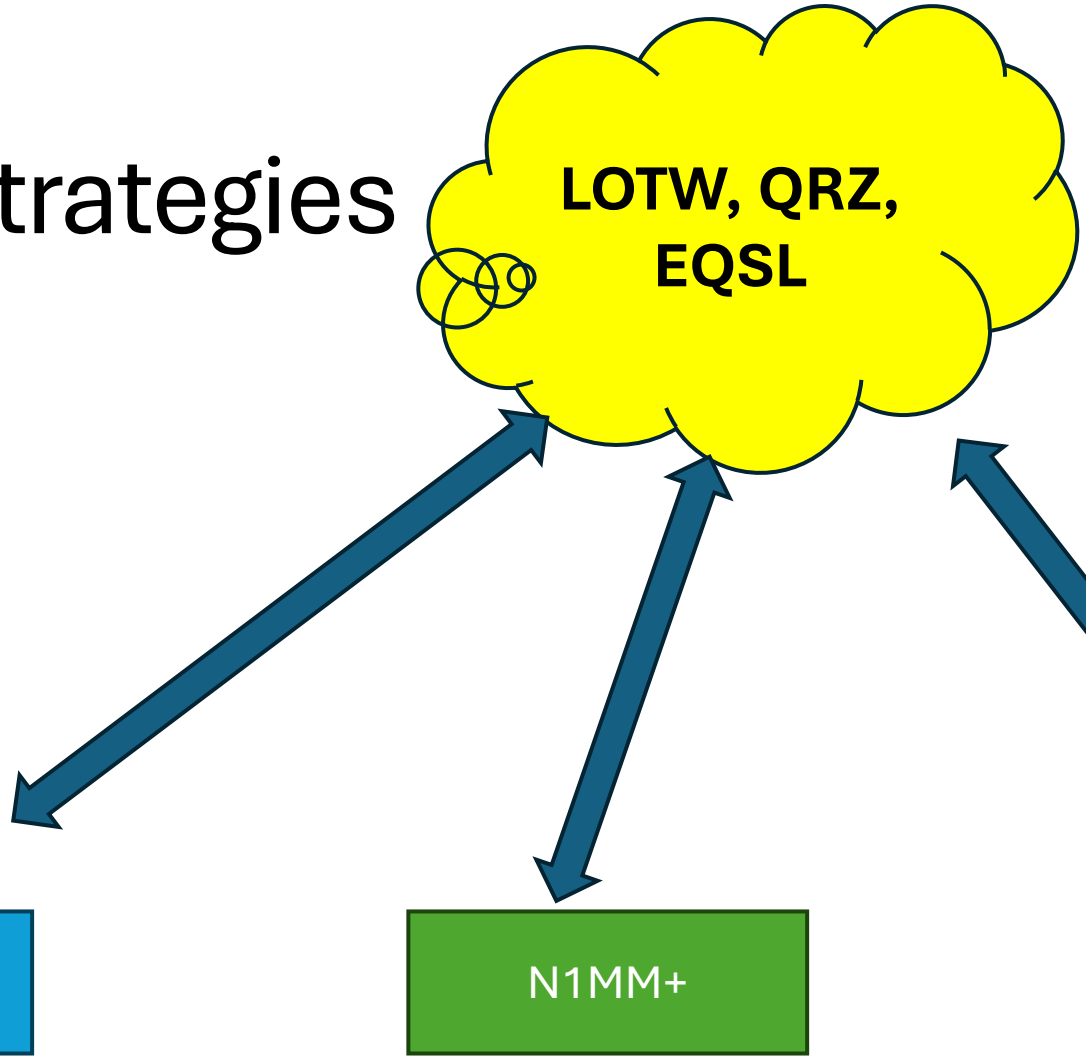
QSL: DIRECT, QRZ, LOTW, BUREAU

Email: Use mouse to view..

Premium Subscriber **Lookups: 22112** Label

Biography | Detail | Web 335 | Awards 14

Logging Strategies



Let the Cloud be the "Mother Ship" or "Master Log"

Use a combination of PC based logging SW