Pump Up Your Score With
N1MM Logger+

Frankford Radio Club
January 13, 2015
John Bednar, K3CT
Hamcomm 2015
Dave Greig, N3BUO

Agenda

- Program History & Information
- Contesting Improvements
- Selected Window Changes
- Questions or Demonstrations

N1MM Logger Classic

- Released 15 years ago
- 2007 – 2014 Code Team
  - N1MM, N2AMG, N2IC, NA3M, K3CT
- Documentation & Web: N4ZR, K8UT, VE3KI
- Based on logs, the most popular contest logging program
- Language: Visual Basic 6
  - Last VB6 release 1998
  - Unsupported since 2008
- ~250k lines of code

N1MM Logger+ Program

- SQLite Database decision at Dayton 2013
- Programming started September 2013
    - N1MM, N2AMG, N2IC, K3CT, K8UT, KU7T, NA3M
- Early signs of life November 2013
- First contest use December 2013
- Widespread contest use by Development Team members by early March 2014

N1MM Logger+ Program

- Language: Visual Studio 2012 .NET
  - Last version with WinXp support
- SQLite database
- Significant architectural differences
- 500+ Files
- 13,400 subroutines and functions
- 255,000 lines of code
- ~11,500 hours of effort
- 4,550 source versions

N1MM Logger+ Manual

- Documentation: N4ZR, K8UT, VE3KI
- Web: K8UT
- Started with Logger Classic manual
  - 722 Pages
  - 4645 Sections
  - Over 400 Screenshots
- Incorporate over 100 new features & operational changes
- Replace all screenshots, add additional

N1MM Logger+ Status

- Alpha Test volunteers joined the testing in March 2014
- Beta Testers were added in June 2014
- General availability since late September 2014
- ~24,000 downloads of the V.0 Full Installer
- 20,000 downloads of the V.1 Full Installer
- Version 1.0 released December 2014
- Support for Logger Classic ended January 2015

Contesting Improvements

- New windows
    - CW Reader
    - Network Status
    - Separate Multiplier windows
    - Rotor
    - WAE contest QTC window
    - Fonts & Colors
    - Available window Band & Modes selector
- Major visual and functional changes
    - Entry, Available, Check, Info, Multiplier, Gray Line, Telnet

Contesting Improvements

- Per operator color control, fonts, & skins
- Separate program files for each user account
- Organized directory structure
- Multi-core CPU support
- Threaded CW generation, radio control, telnet
- Simple click download / install of program updates, country, and master.scp files
- Window specific FontSizer gadget ( )
- New serial port control, 99 COM ports

Contesting Improvements

- CW sending with DTR or RTS
- Contest association: function keys, master.scp, call history, goals file, Band Panel buttons, and Available window Summary Table bands
- Automatic ASCII contest history, transaction log
- Snap to window & tool tip options
- Windows forced into visible monitor area
- Editable contest start time
- Band plan (frequency to mode mapping) with Bandmap mouse clicks

Contesting Improvements

- Import of multiple call history files
- Additional call history import directives
- Self configuring local LAN, no computer limit
- Selectable master station
- QSO record stores computer ID not Station #
- Non-scrolling Digital RX window
- QSO recordings saved in directories using the contest name & date

Contesting Improvements

- Log window QSO editing
- Elimination of HF / VHF operational mode
  - Users select bands based on contest & station
- Integrated Gray Line and Score Reporting
- Rotor control improvements
- Non-Intrusive Message Box
  - Displays important program messages
  - Self clearing
  - Wider use planned

Non-Intrusive Message Box
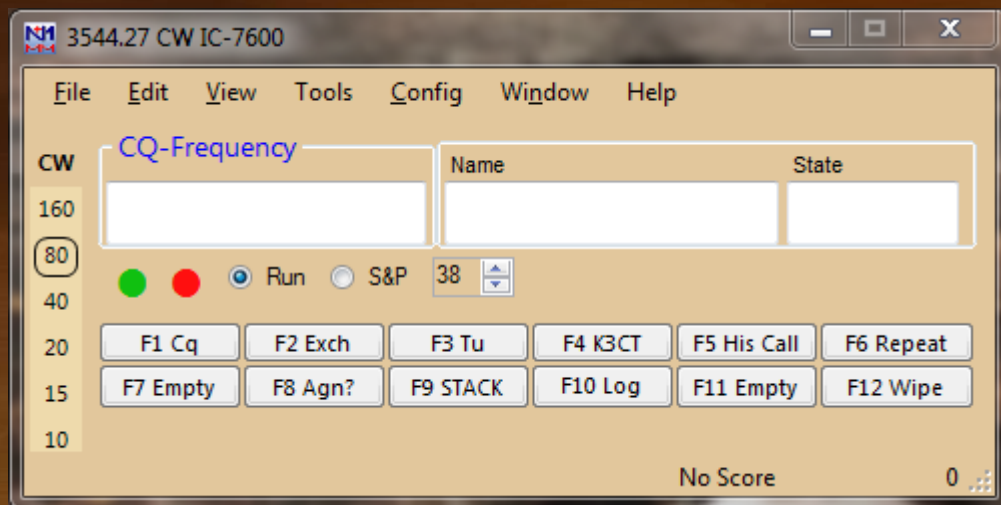
Entry Window Changes

- Visual indicators (dupe, split, repeat, match)
- Band Buttons
    - Selectable bands
    - Displays stations needed for mult/QSO credit
    - Left click move to another band
    - Right click pass
- Highly configurable
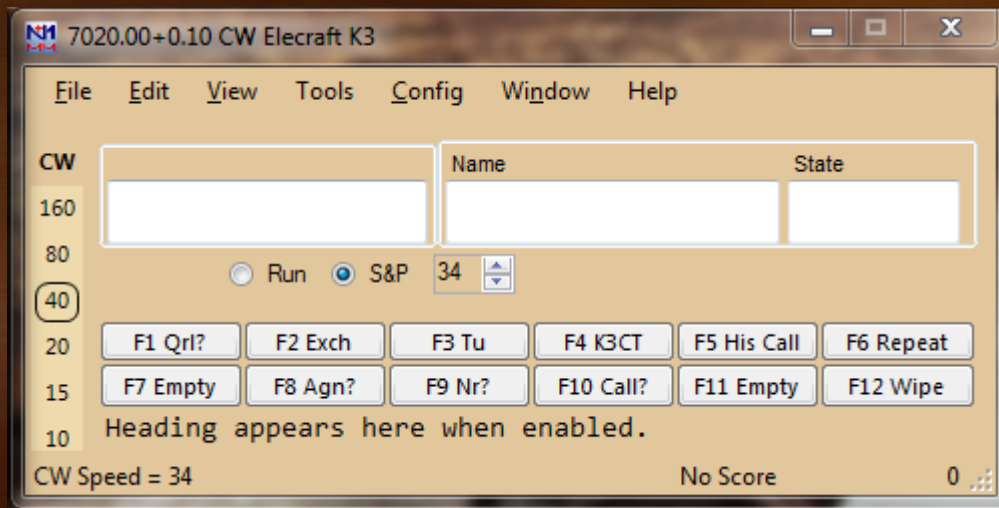- Mouse wheel radio tuning

Entry Window
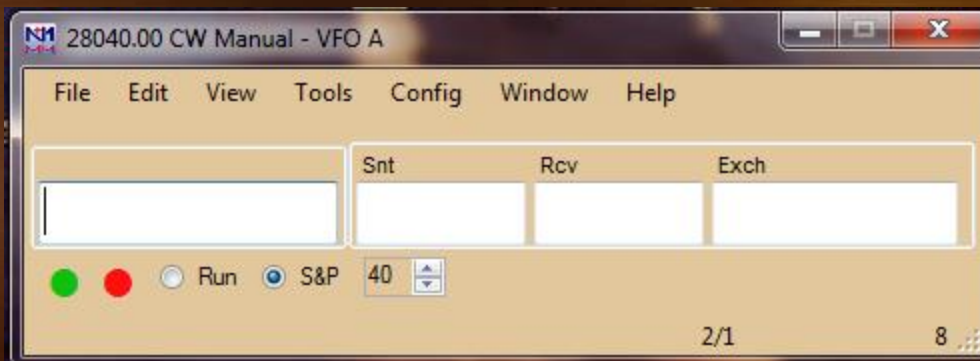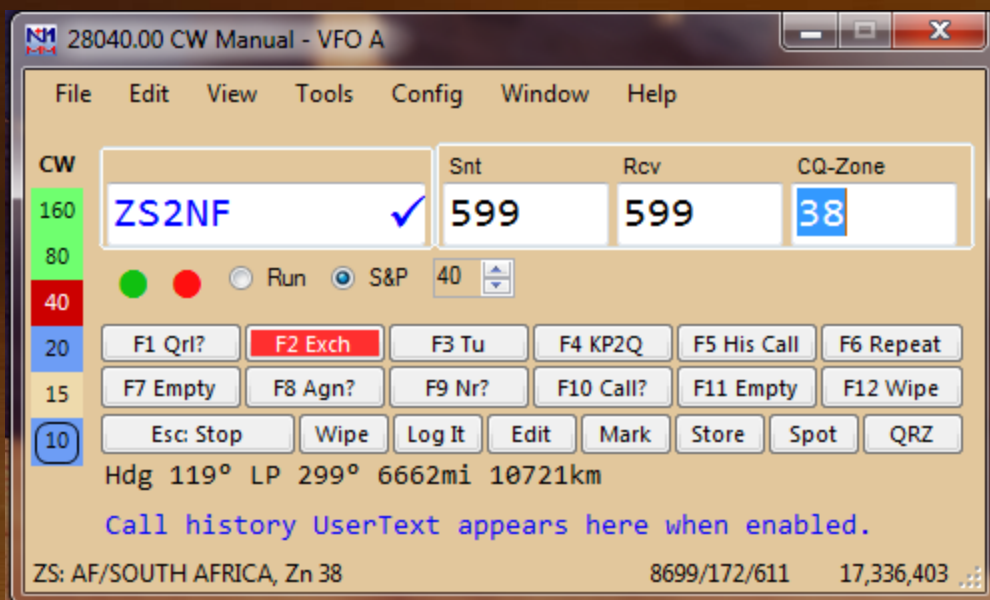
Entry Window SO2R

Radio 1

Radio 2

Log Window Changes

- Log window QSO editing, either pane
- Visual indications
  - Call not found in Master.scp (during the contest)
  - Varying exchanges (during the contest)
  - Multipliers
- Compact time format
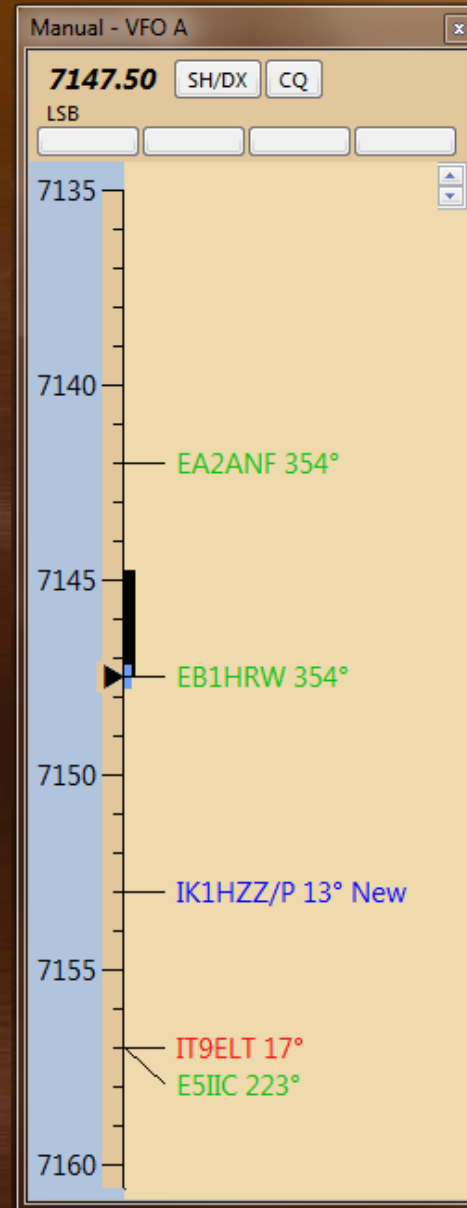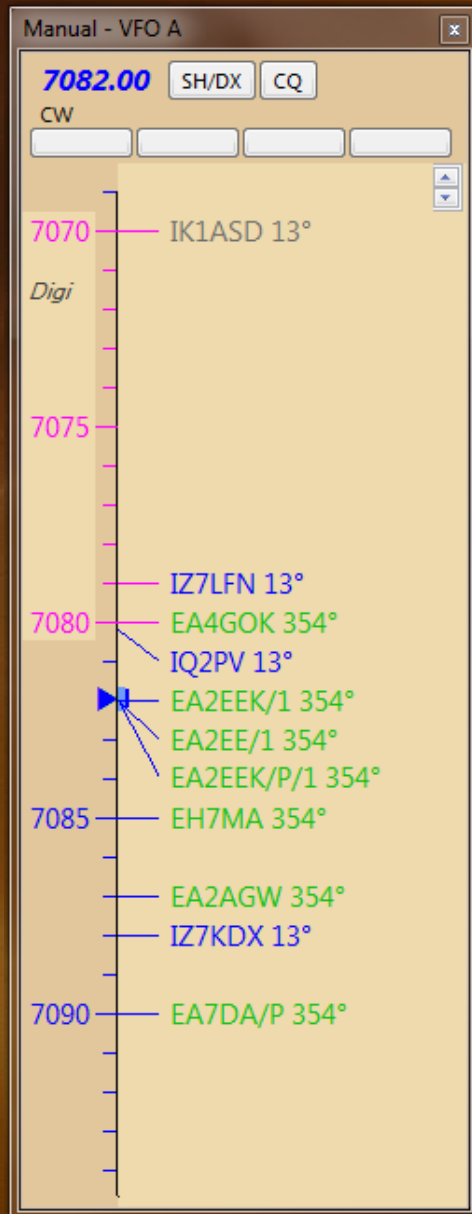- New menu option to display of rate to a selected QSO

Log Window

MM-DD HH:MM ▲	Call	Freq	Snt	Rcv	M1	ZN	M2	Pfx	Pts
01-11 00:05	LA1JJ	7030.00	599	599	✔	14	✔	LA	3
01-11 00:06	SM1WRA	7030.00	599	599		14	✔	SM	3
01-11 00:06	G3DFF	7030.00	599	599	✔	25	✔	G	3
01-12 00:04	DL1A	14030.00	599	599	✔	14	✔	DL	3
01-12 00:04	DL1A	7030.00	599	599	✔	20	✔	DL	3
01-12 00:04	DL1A	7030.00	599	599	✔	20	✔	DL	3
01-12 00:04	DL1A	14030.00	599	599	✔	14	✔	DL	3

1/11/2015 00:07:00Z CQ WW CW - vb6TestingJunk.s3db

Bandmap Window Changes

- CQ / Spot button toggles between last non-CQ frequency and Run frequency
- Programmable radio command buttons
- Visual frequency tolerance, fixed BW
- Spot history of call
- Mouse wheel click delete spot
- Mouse wheel roll changes frequency range
- Custom radio command filters saved by radio model

Bandmap Window

Manual - VFO A ✕

7082.00 | SH/DX | CQ

CW

7070 — IK1ASD 13°

Digi

7075

IZ7LFN 13°
7080 — EA4GOK 354°
IQ2PV 13°
▶ EA2EEK/1 354°
EA2EE/1 354°
EA2EEK/P/1 354°
7085 — EH7MA 354°

EA2AGW 354°
IZ7KDX 13°

7090 — EA7DA/P 354°

Manual - VFO A ✕

7147.50 | SH/DX | CQ

LSB

7135

7140

EA2ANF 354°

7145

EB1HRW 354°

7150

IK1HZZ/P 13° New

7155

IT9ELT 17°
E5IIC 223°

7160

Check Window Changes

- "Levenshtein distance" used to select the best calls and prioritize
- Five selectable panes and several options
- No need to enter ? at the missing character
- Differences and missing letters are color coded
- Reverse lookup
  - Log data, Call and/or Exchange
  - Complete or partial call/exchange
- Several new options

Check Window

Check Log/Master/Telnet/Call history/Reverse lookup

Log 5353	Master 47254	Telnet 0	Call hist 1010

Reverse lookup
6363

Check Log/Master

UA0AV	UA0A
UA0ABB	UA0AV
UA0ACG	UA0AAS
UA0APV	UA0ABB
DA0A	UA0ABK
UB0A	UA0ACG
UF0A	UA0ADX
UA0BA	UA0AGI
	UA0AKY

Available Window Changes

- Floating window to select bands & modes
- Selectable summary table bands, selection is stored with contest name
- Keyboard grab of spot, eliminates mouse use
- Mouse wheel click deletes spots
- Drag columns to reorder the table
- Compact time format
- Multiplier1 and Multiplier2 sort capability
- Hide unused columns

Available Window

Available - 61 Mults 89 Qs of 90 total spots

| Mults & Qs | | | | | Bands & Modes |

	160	80	40	20	15	10
Mults	2	0	12	17	9	21
Qs	1	0	33	13	9	33
Total Qs	1	0	33	13	9	34

Call	Freq	Dir	Mode	Mult?	Time ^
DR1D	28475.0	008°	USB	No	0934Z
DL0XAX	28450.8	008°	USB	No	0934Z
IZ0MQN/P	7066.0	013°	CW	Yes 2	0934Z
IW0HQU/0	7195.6	013°	LSB	Yes 2	0934Z
UN7EG	28122.5	039°	CW	Yes 2	0935Z
DF0SX	28008.2	008°	CW	No	0935Z
DL2AA	28030.0	008°	CW	No	0935Z
F5MNC	14123.0	002°	RTTY	Yes 2	0935Z
DK3T	28485.0	008°	USB	No	0935Z
G5RR	14227.0	359°	USB	Yes 2	0935Z
EA2DCD	7100.0	354°	CW	Yes 2	0935Z
EA2EEK/P/1	7082.0	354°	RTTY	Yes 2	0935Z
PD1RO	28122.9	004°	CW	Yes 1	0935Z
EA4FTV	7060.0	354°	CW	Yes 2	0935Z
EA5RKB/P	7163.0	354°	LSB	Yes 2	0935Z
DG9SEH	28651.9	008°	USB	No	0935Z

Available Window Spot Display Filters

Radios
- [ ] Focus Radio
- [ ] Non-Focus Radio

Bands

HF	VHF	Mw

[x] 1.8	[ ] 50	[ ] 9cm
[x] 3.5	[ ] 70	[ ] 6cm
[ ] 5	[ ] 144	[ ] 3cm
[x] 7	[ ] 222	[ ] 1cm
[ ] 10		[ ] 6.4mm
[x] 14	UHF	[ ] 4mm
[ ] 18	[ ] 430	[ ] 2mm
[x] 21	[ ] 903	[ ] 1.2mm
[ ] 24	[ ] 1296	
[x] 28	[ ] 2304	

Modes

All
- [x] CW
- [x] Phone
- [x] RTTY
- [x] PSK
- [ ] Radio
- [ ] Contest

Close

Multiplier Window Changes

- Five type windows
- Can open more than one
- Selectable bands
- Color coded, clickable, unworked multiplier indicators
- Show Only Worked and Expected to Work option
  - Import/export of worked multipliers

Multiplier Windows
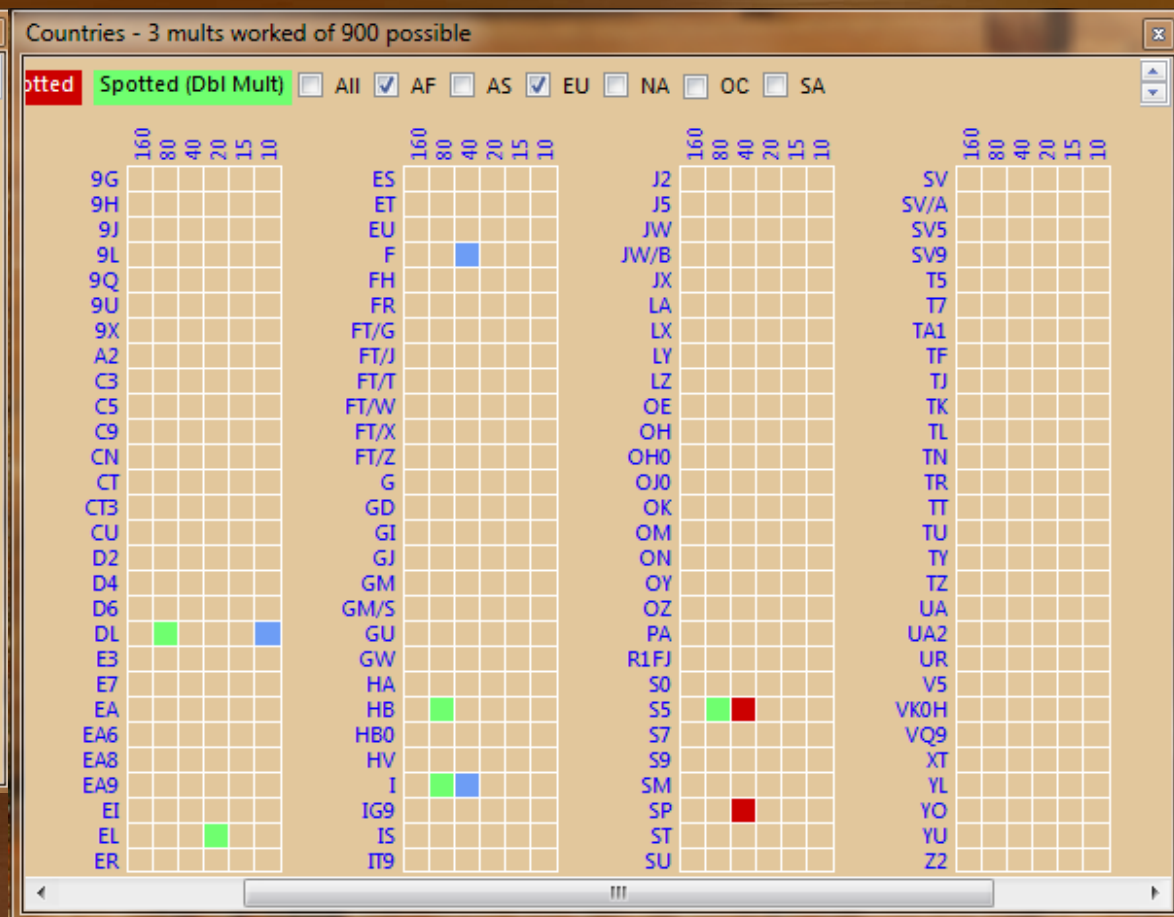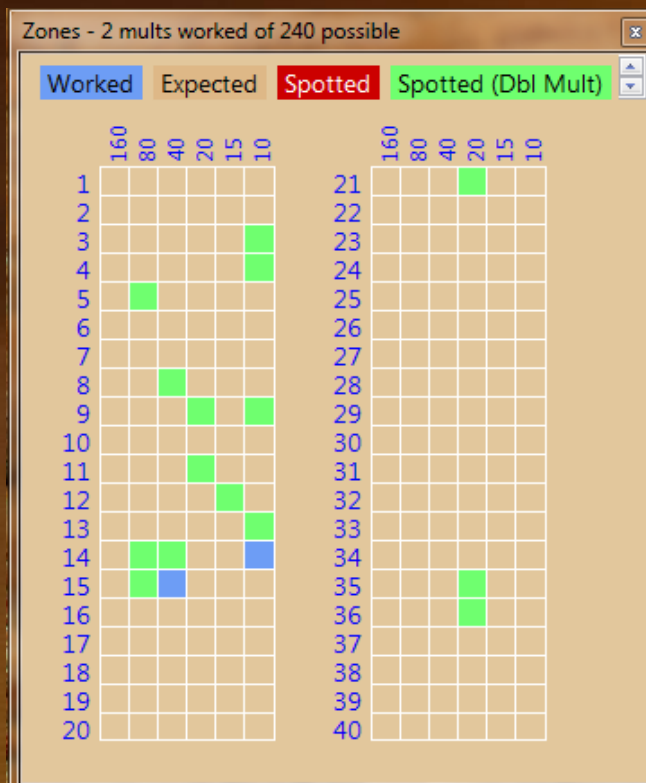
Telnet Window Changes

- Options are organized in four tabs
    - Cluster
    - Bands & mode
    - Spot filtering (prefix, blacklist spot/spotters)
    - Spot comment
- Filtered spots appear in gray text
- Remaining spots are colored by mode
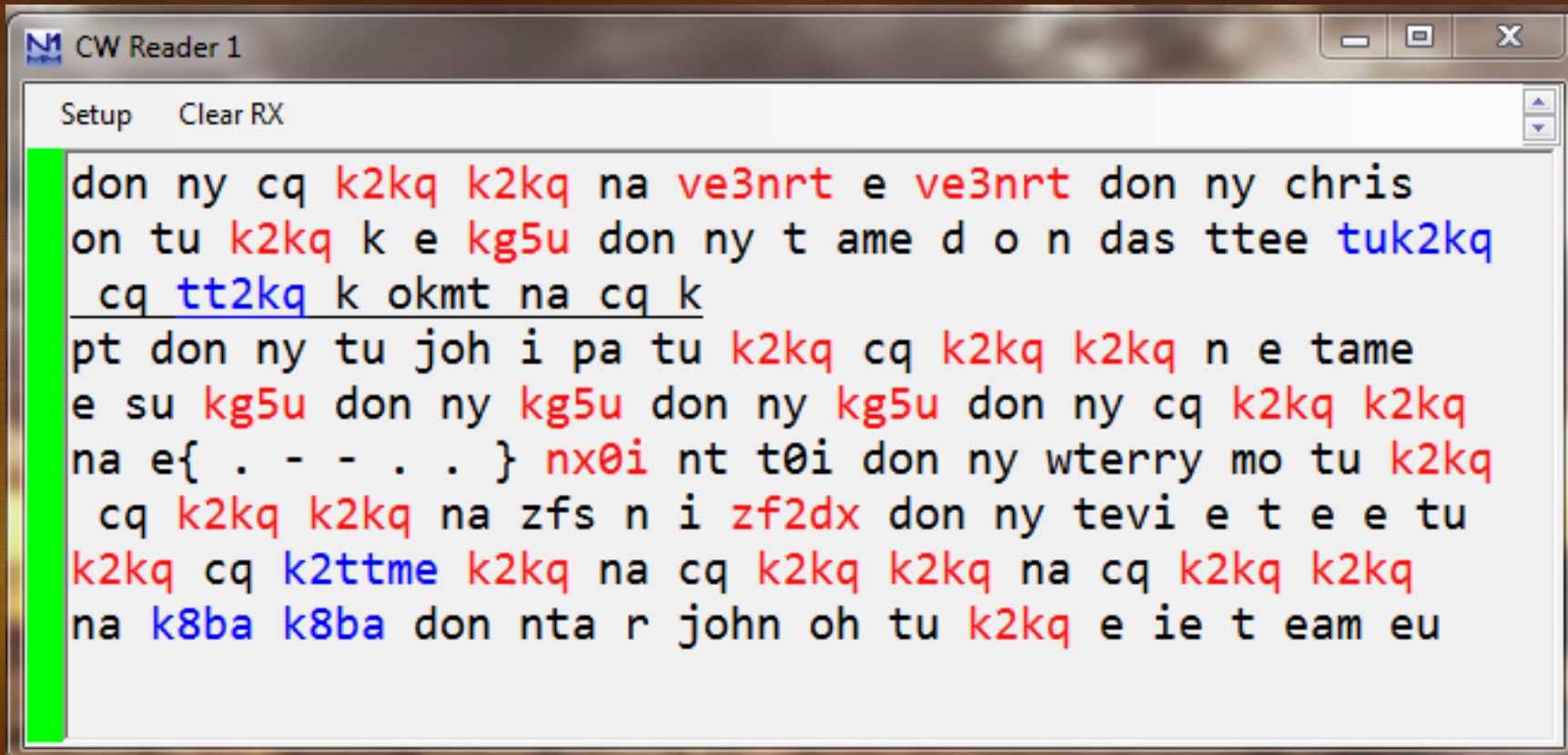- Mode added to outgoing spots

Telnet Window

Telnet Window

Info Window Changes

- Rate & goals graphs
- Selectable message pane and display text
- Selectable moving average period
- Display rates of all networked stations
- Edit, export, import goals

Info Window
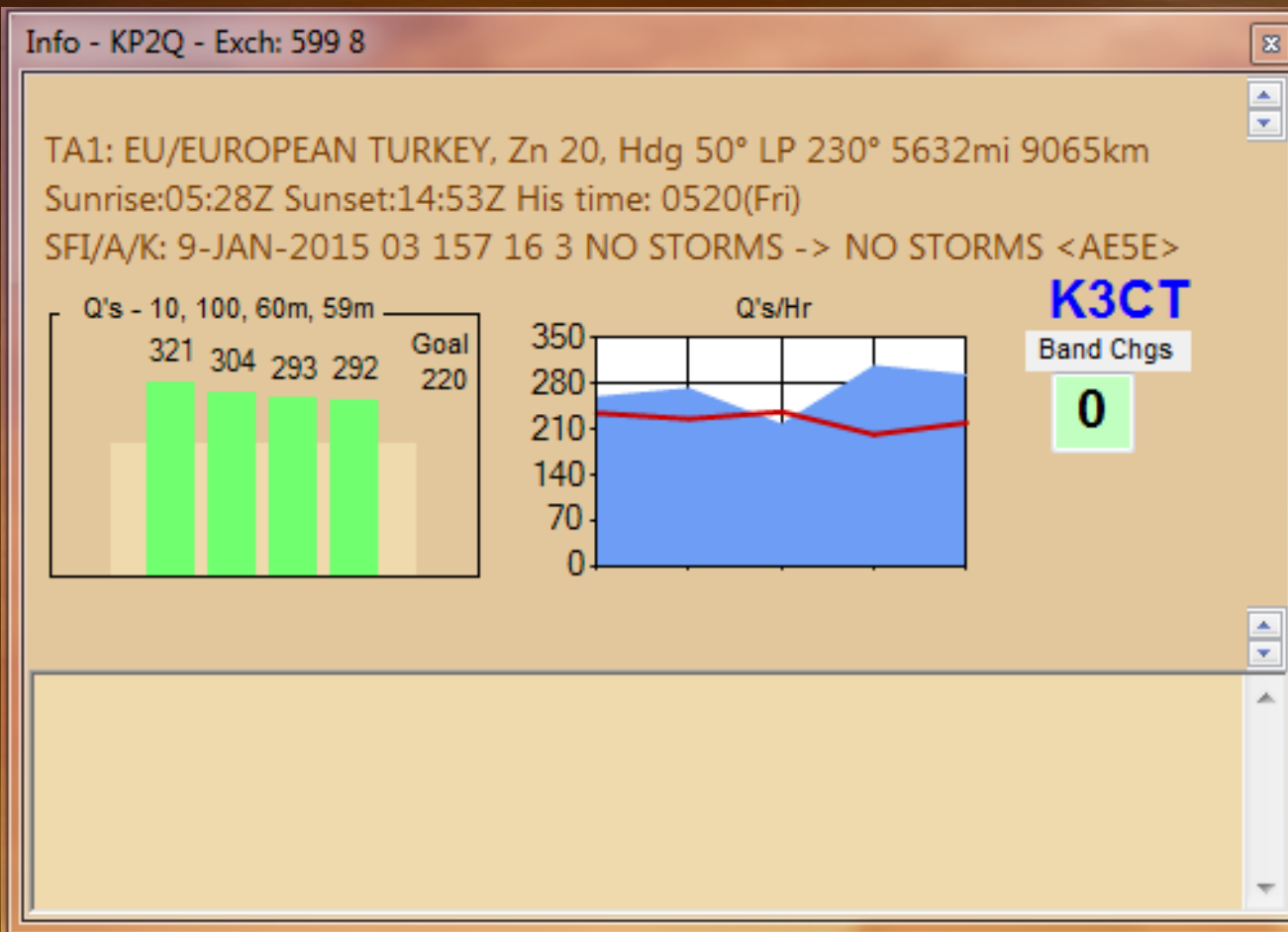
CW Reader Window

- Fldigi or CWGet engine
- Callsign matching, click to enter

Digital Interface Window

Statistics Window

Statistics for CQWWCW - 11/29/2014 - Band by Hour

File

Statistics | Graph

Day	Hr	1.8	3.5	7	14	21	28	Tot	Accum
2014-11-29	00			157	145	8		310	310
2014-11-29	01		14	96	149			259	569
2014-11-29	02		91	36	145			272	841
2014-11-29	03	22		156	39			217	1058
2014-11-29	04			168	139			307	1365
2014-11-29	05			166	126			292	1657
2014-11-29	06	15	20	112	7			154	1811
2014-11-29	07	56	42	59				157	1968
2014-11-29	08	12	86	61	4			163	2131
2014-11-29	12					151	137	288	2419
2014-11-29	13					173	163	336	2755
2014-11-29	14					97	37	134	2889
2014-11-29	15					120	137	257	3146
2014-11-29	16					116	171	287	3433
2014-11-29	17					56	75	131	3564
2014-11-29	18					129	136	265	3829
2014-11-29	19					51	157	208	4037
2014-11-29	20					180	76	256	4293
2014-11-29	21			42	87	65	17	211	4504
2014-11-29	22			35	65	55	5	160	4664
2014-11-29	23				94	59		153	4817

Refresh | Row | Hour ▼ | Column | Band ▼

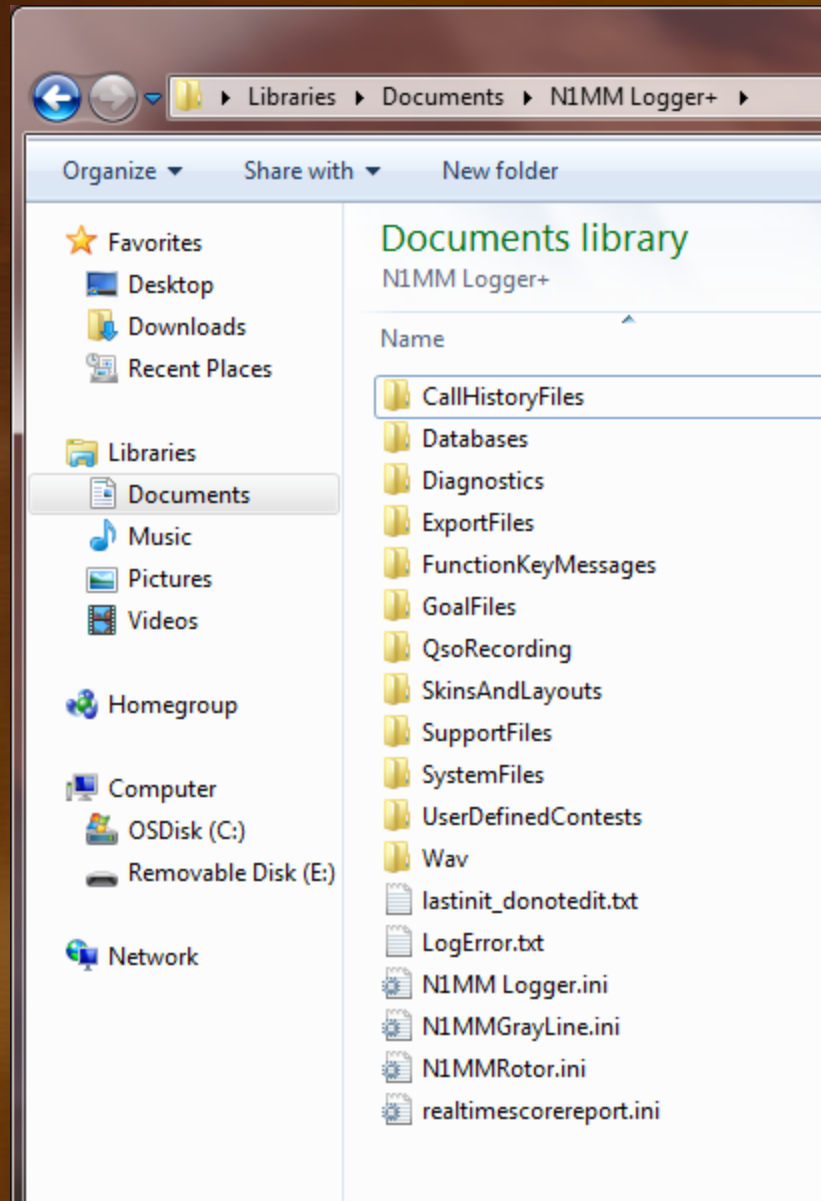# Statistics Window Changes
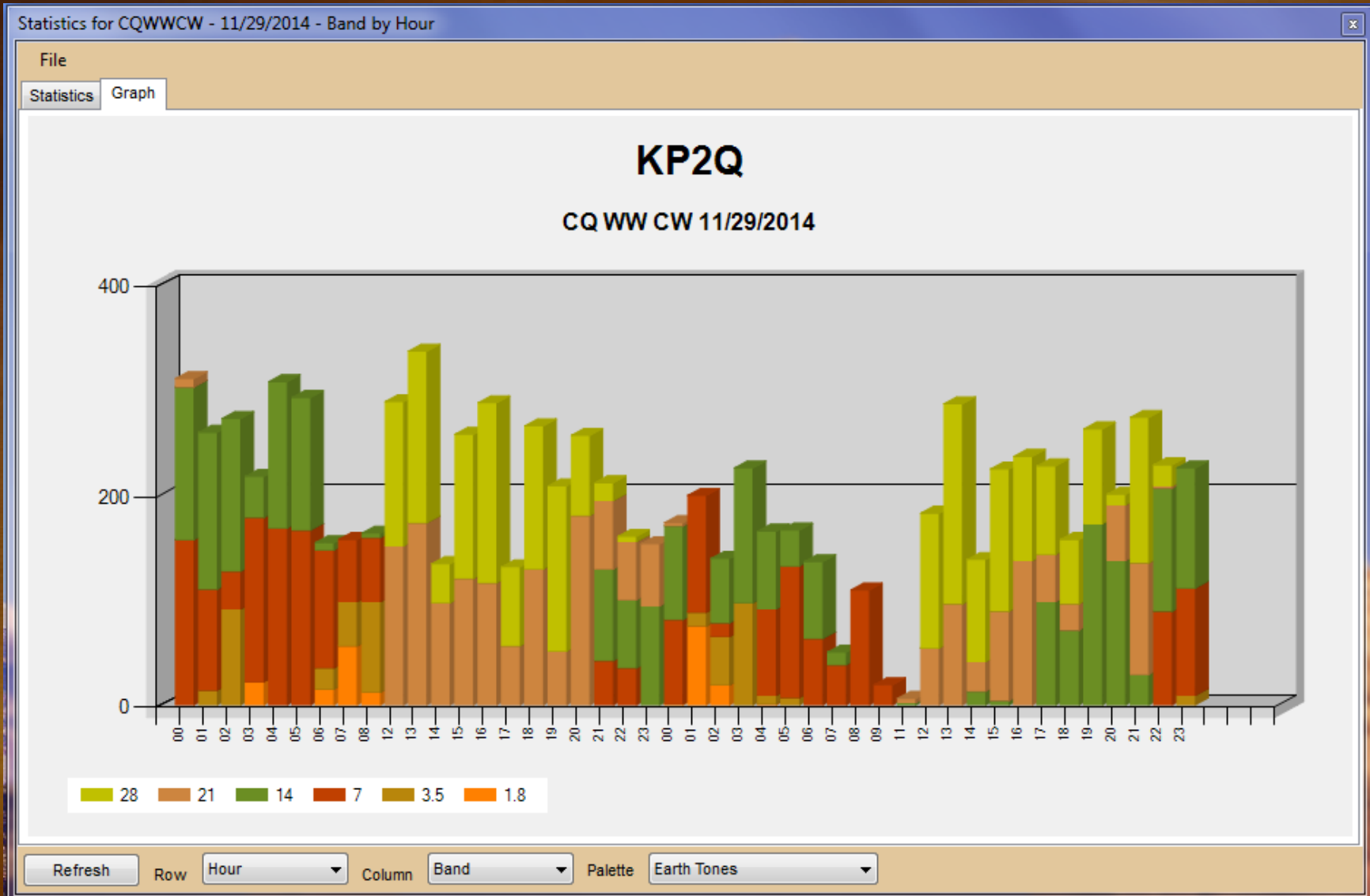
Gray Line Window
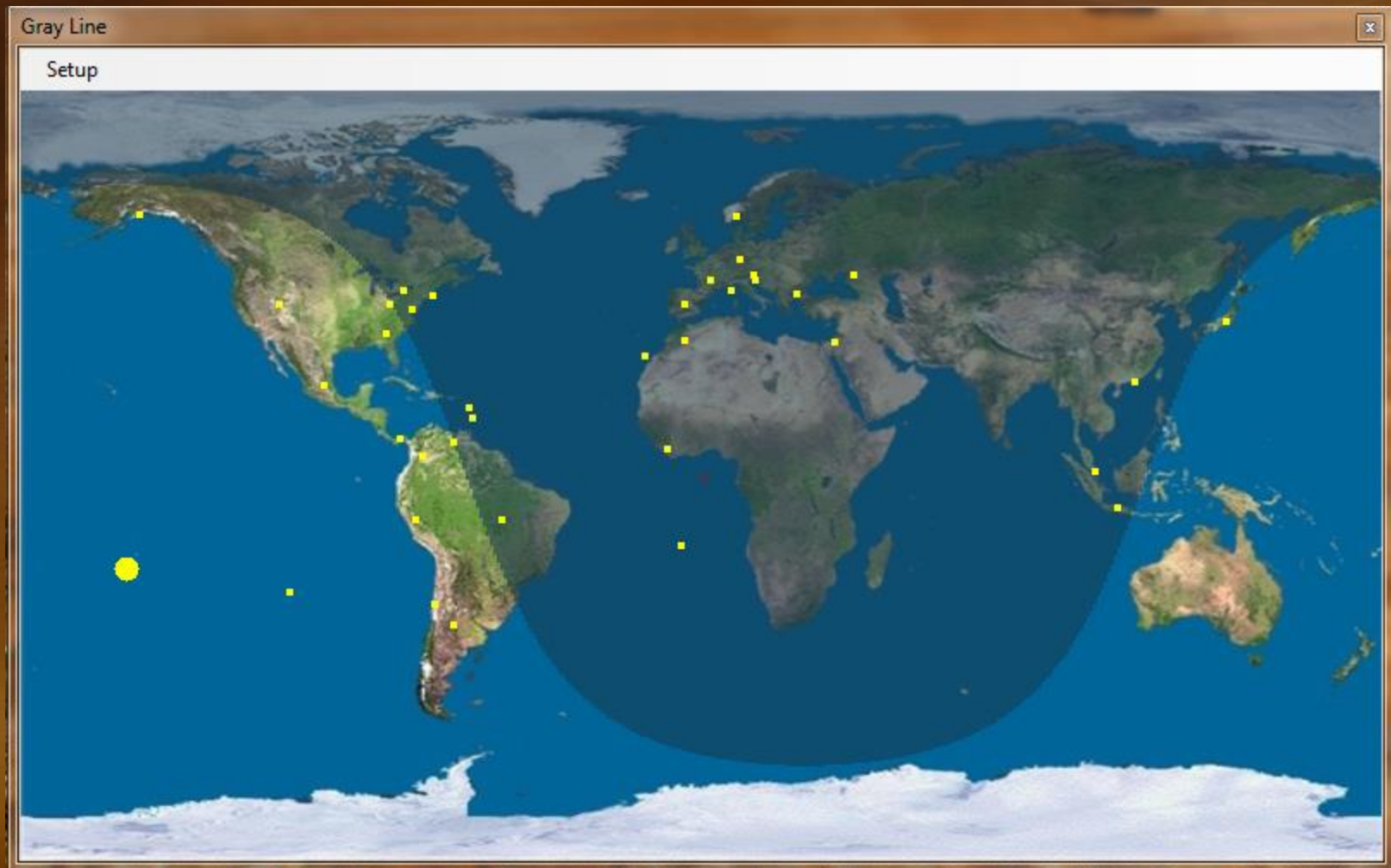
Logger+ Audio

- Functional, supports all configurations
- Under development
- Windows Vista and newer

User Files Directory

Questions?
Demonstrations?