AMATEUR RADIO CLUB OF COLUMBIA COUNTY, INC.

GENERAL MEETING

MEETING #21

Tuesday, October 25, 2016

7 PM

INVOCATION

RECOGNIZE SPECIAL VISITORS

ARCCC, INC. AGENDA OVERVIEW

- Welcome and Introductions (Quickly)
- Presentation
- Applications for New Membership
- Treasury Report and Meeting Minutes
- Swap Table
- Upcoming Events
- New Business
- Updates from Committee Directors

WELCOME AND INTRODUCTIONS

- Please Sign In on the Attendance Log
  - Please PRINT Legibly
- Introductions
  - QUICKLY Go Around the Room and Provide Your Name and Call Sign

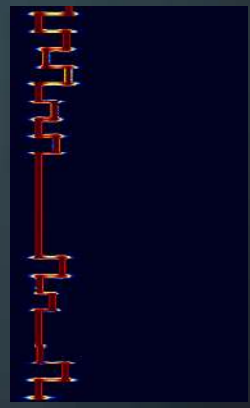
PRESENTATION

JT65A and JT9

Dan Marshall (N1ADM)

JT65A AND JT9

DIGITAL MODES ON HF



SOME BASICS

- JT65A and JT9 are weak-signal modes that are great for pulling DX out from under the noise
  - Great for low power or antenna restricted stations
  - Contacts are valid for DXCC, WAC, WAS, and are supported by LoTW
- Uses sophisticated digital signal processing, and relies on redundancy (FEC)
  - As much as 80% of the transmission can be lost and still be decoded
- Each transmission lasts 46.8 seconds; only a small amount of information is sent
  - The remaining 13 seconds is for the operator to prepare the response (usually just a mouse click)
- Requires very tight synchronization of time and frequency between transmitting and receiving stations
  - Computer clocks on both ends of the QSO must agree within ~ 2 seconds
- Stations take turns transmitting
  - One station transmits on even or odd minutes, then listens for reply during the following minute

JT65A

- JT65A is a "sub-mode" of the JT65 protocol, designed by Joe Taylor, K1JT, to optimize EME contacts
- A 1270.5 Hz synchronizing tone, and 64 additional tones to carry the information
  - On the air it sounds like someone playing strange music
- The bandwidth of a JT65A signal is177.6 Hz
- Signals decode reliably at S/N of about -22db or better

JT9

- A more recent protocol; very similar in operation to JT65A, but more sensitive and efficient
- One tone is used for synchronization, and 8 tones are used for data
- The bandwidth of a JT9 signal is 15.6 Hz
- Messages decode reliably at S/N of about -24db or better

SOME OTHER THINGS TO KNOW

- These are low power modes, even more so than PSK31
  - 10-20 watts will usually work, even for DX when band conditions are good
  - Don't crank up the power too much because it will make it difficult for others to decode weaker signals
- Set USB receive bandwidth as wide as possible to decode audio over the entire JT65/JT9 frequency range (~4 kHz)
- Carefully adjust the computer's audio output and watch the ALC meter so you don't overdrive the audio
  - Too much audio volume can cause the audio to be distorted, leading to spurs and garbage, which could cause interference or prevent message decoding
  - Turn off the computer sounds!
- The QSO procedures are different than other digital modes - JT65A and JT9 contacts are designed to exchange only the bare minimum information needed to qualify as a QSO
  - Callsigns
  - Grid Squares
  - Signal Reports
  - 73
- These are not good modes for ragchewing or contesting

JT65A AND JT9 QSO

CQ N1ADM EM83	23:03	N1ADM calls CQ
N1ADM CT1FBK IM58	23:04	CT1FBK responds
CT1FBK N1ADM -12	23:05	N1ADM sends -12db signal report
N1ADM CT1FBK R-09	23:06	CT1FBK acks, sends -9db signal report
CT1FBK N1ADM RRR	23:07	N1ADM acknowledges report
N1ADM CT1FBK 73	23:08	end of QSO

You can also send a free format text, but it is limited to 13 characters

Examples: “TU 73 FM GA” or “73 10W VERT”

JT65A AND JT9 VFO FREQUENCIES (ALL USB)

Band	JT65A	JT9
160m	1838 kHz	1840 kHz
80m	3576 kHz	3578 kHz
40m	7076 kHz*	7078 kHz
30m	10139 kHz	10140 kHz
20m	14076 kHz	14078 kHz
17m	18102 kHz	18104 kHz
15m	21076 kHz	21078 kHz
12m	24917 kHz	24919 kHz
10m	28076 kHz	28078 kHz
6m	50.276 MHz	

*7039 kHz sometimes used by European stations

There are also some alternate JT65 frequencies in some of the bands

WHAT YOU NEED FOR JT65 & JT9

If you are set up for PSK31, you probably have *almost* everything you need already!

- SSB capable HF transceiver
- Computer
  - Consumer grade, processor of 1.5GHz or better should be fine
  - Most applications will run on Windows 7, 8 or 10 (and some older versions)
  - Mac and Linux applications are also available
- Sound card/Interface (SignaLink, RigBlaster)
  - Some new transceivers have built-in sound cards
- Some additional software
  - Don't worry, it's free! (and easy, sort of…)

THE SOFTWARE

WSJT-X, by Dr. Joe Taylor, K1JT
http://physics.princeton.edu/pulsar/k1jt/wsjtx.html

- Windows, Mac, Linux versions
- Supports JT65 and JT9 (and other modes JT4, WSPR and Echo)
- Offers rig control for most modern transceivers

JT65-HF, by Joe Large, W6CQZ **http://jt65-hf.com/downloads/**

- Older software, no longer supported, but still very popular and capable
- Only supports the JT65A protocol
- Some rig control capability

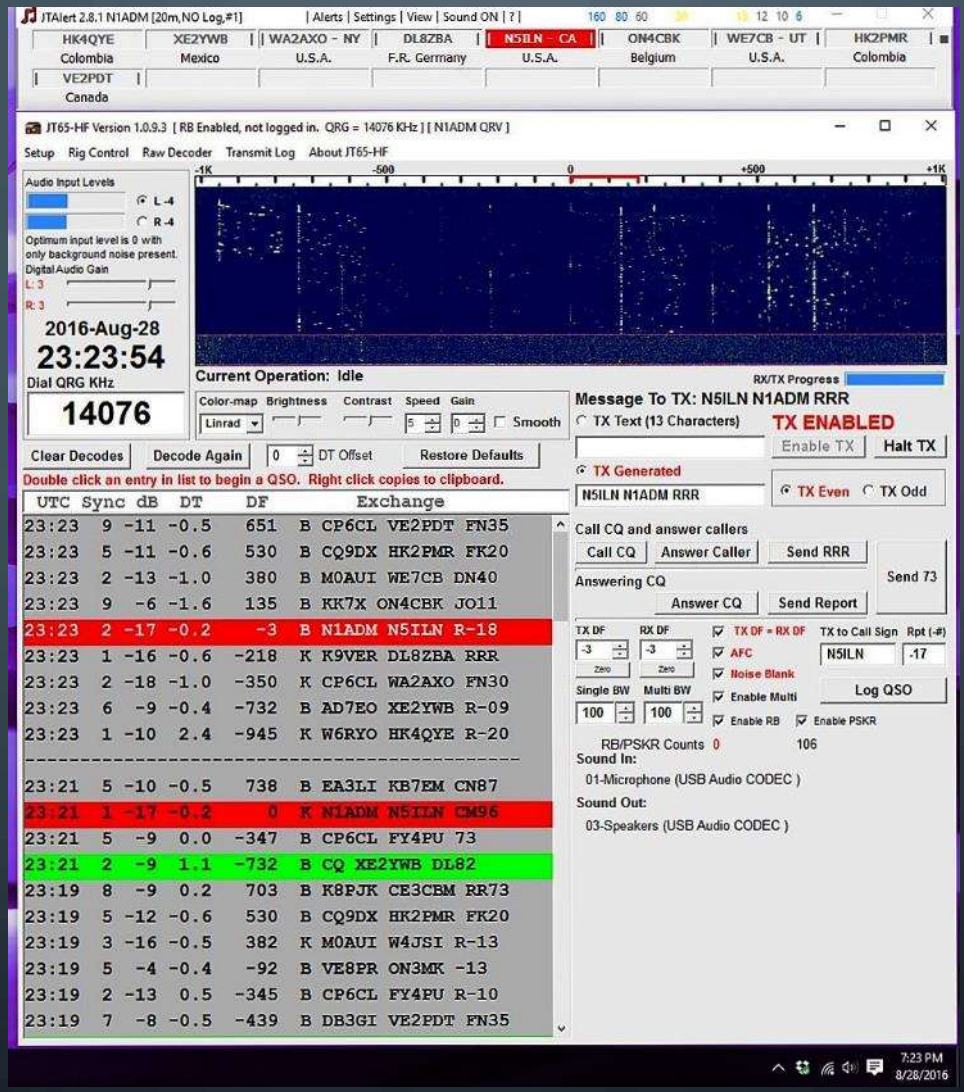
Other variations/adaptations of the JT-65HF software:

- JT65-HF HB9HQX-Edition https://sourceforge.net/projects/jt65hfhb9hqxedi/
- JT65-HF-Comfort http://funkamateure-dresden-ov-s06.de/index.php?article_id=178 (web page is in German)

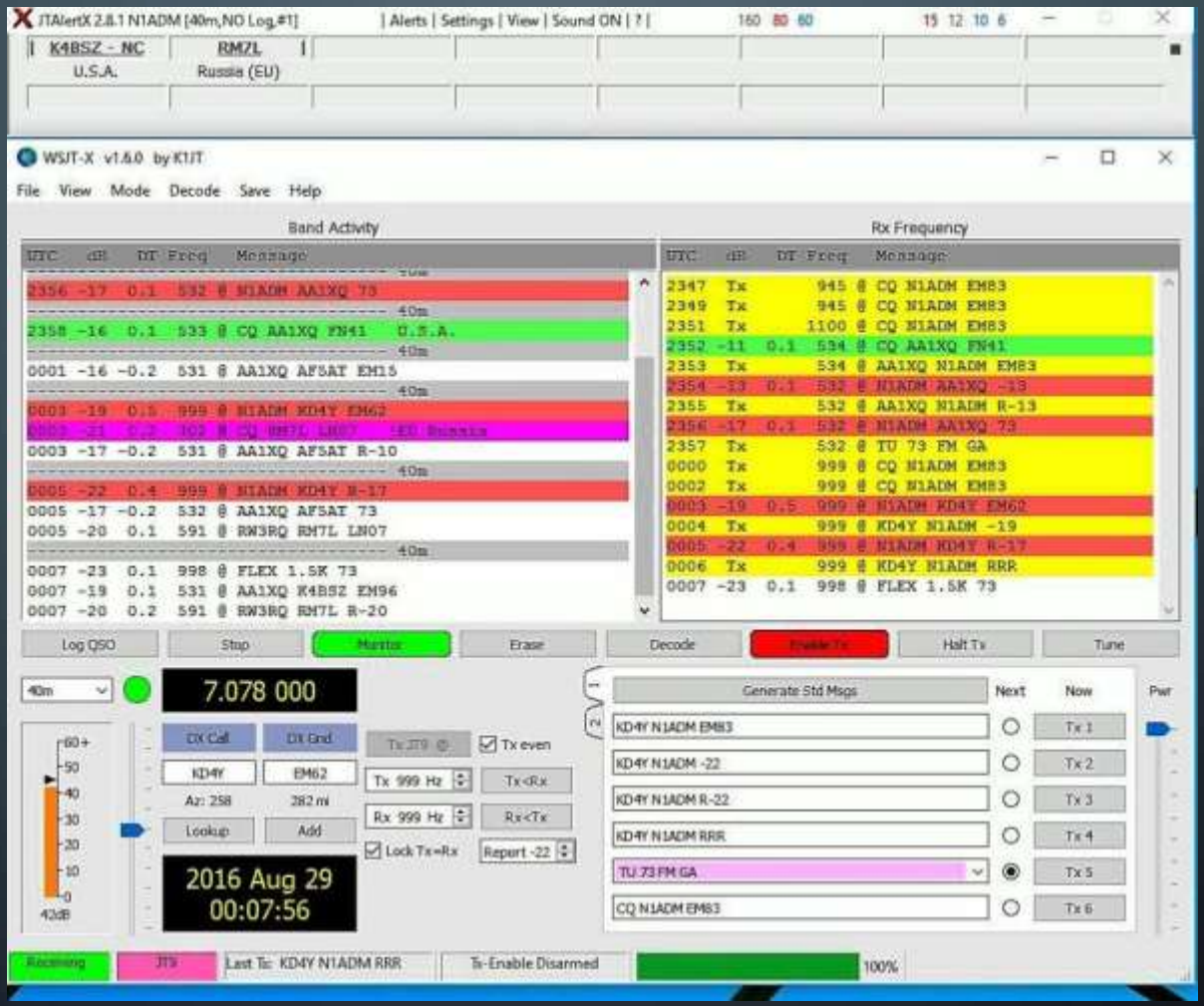
ADDITIONAL SOFTWARE AND WEB PAGES

- JTAlert (hamapps.com)
  - Great (free!) companion program that adds many useful functions to JT-65HF and WSJT-X
- HamSpots (hamspots.net)
  - Provides spotting information for digital modes
- PSKReporter (pskreporter.info/pskmap)
  - Visual display of stations receiving your digital transmissions

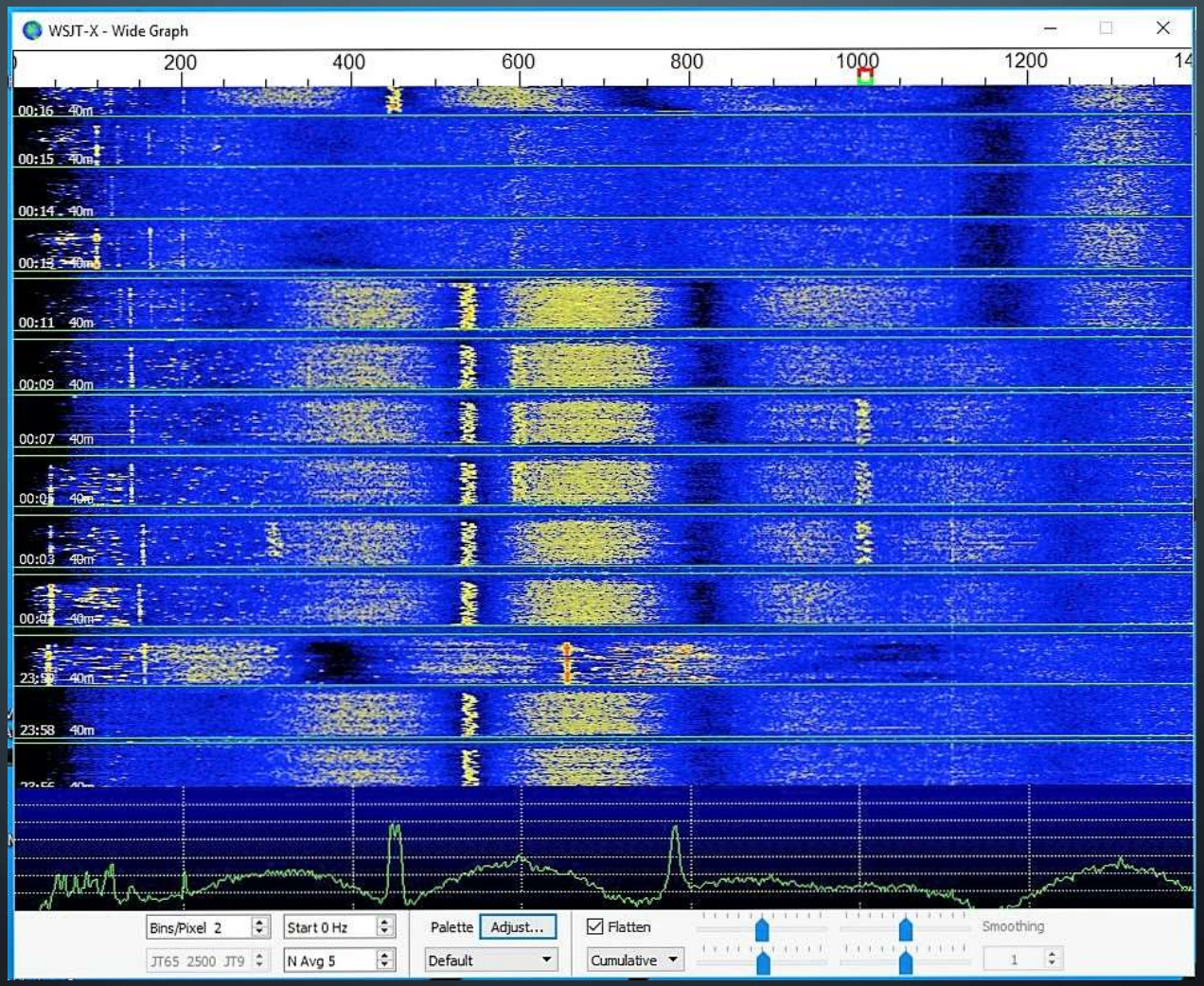
JT65-HF with JTAlert



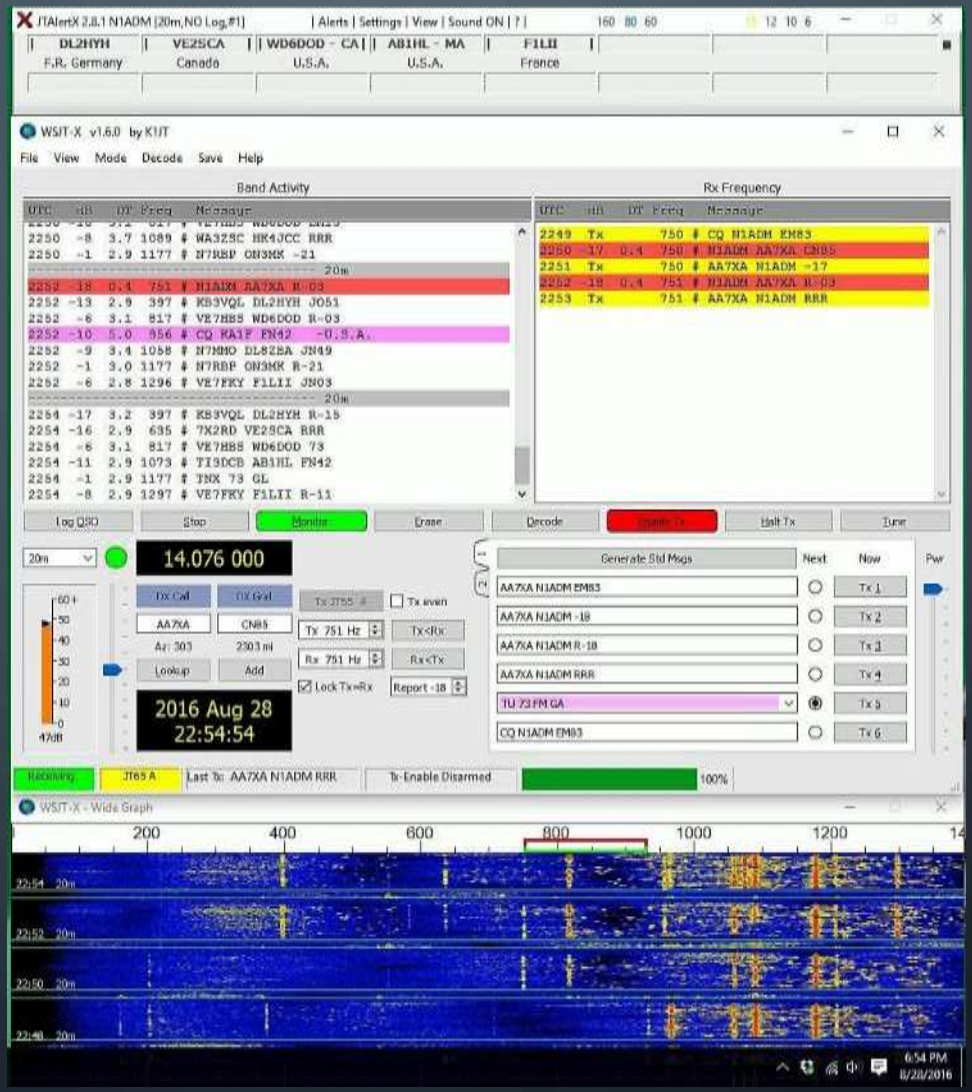
WSJT-X with
JTAlert
JT9 mode



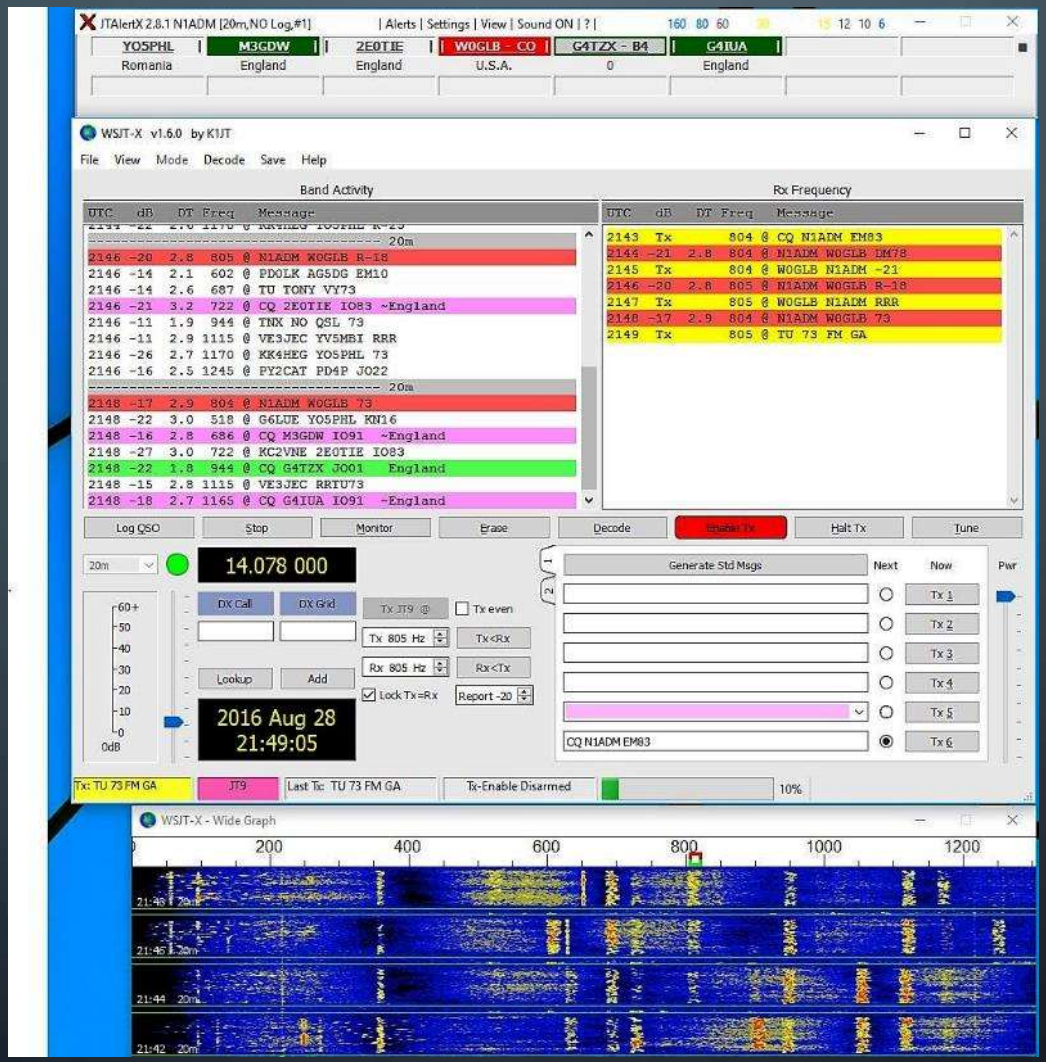
WSJT-X Graph & Waterfall JT9 mode



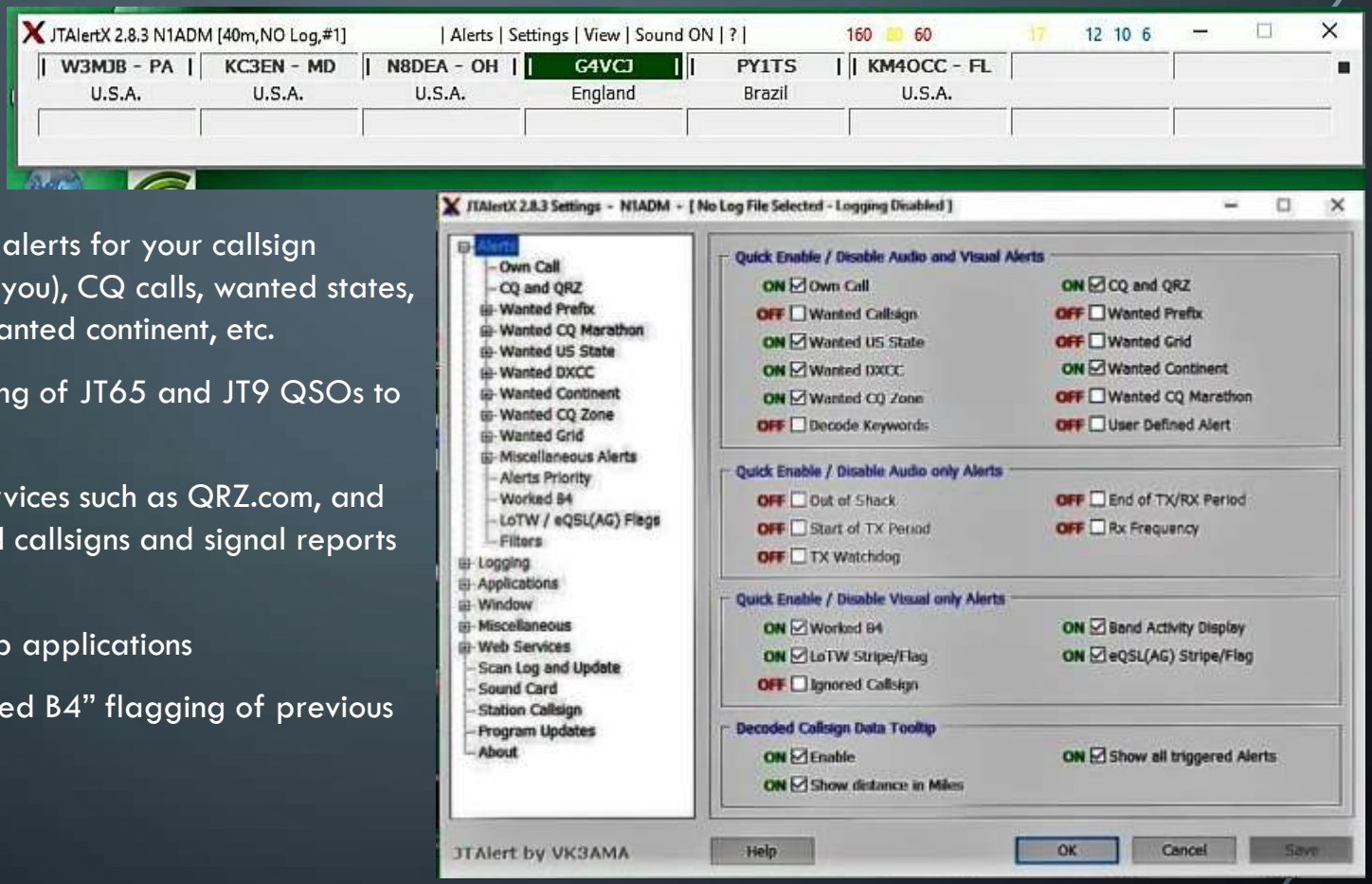
WSJT-X with
JTAlert
JT65A mode



WSJT-X with
JTAlert
JT9 mode

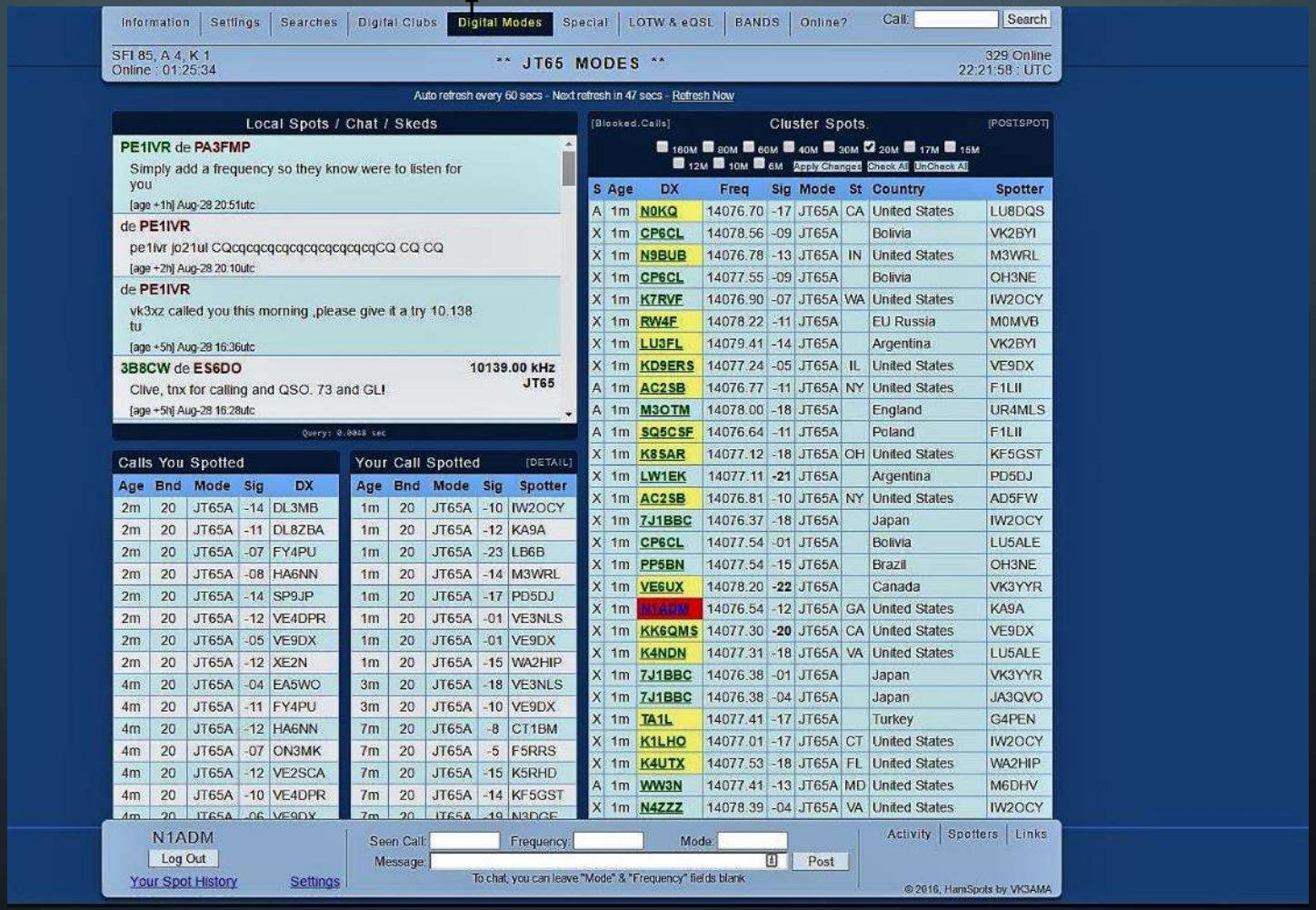


JTALERT



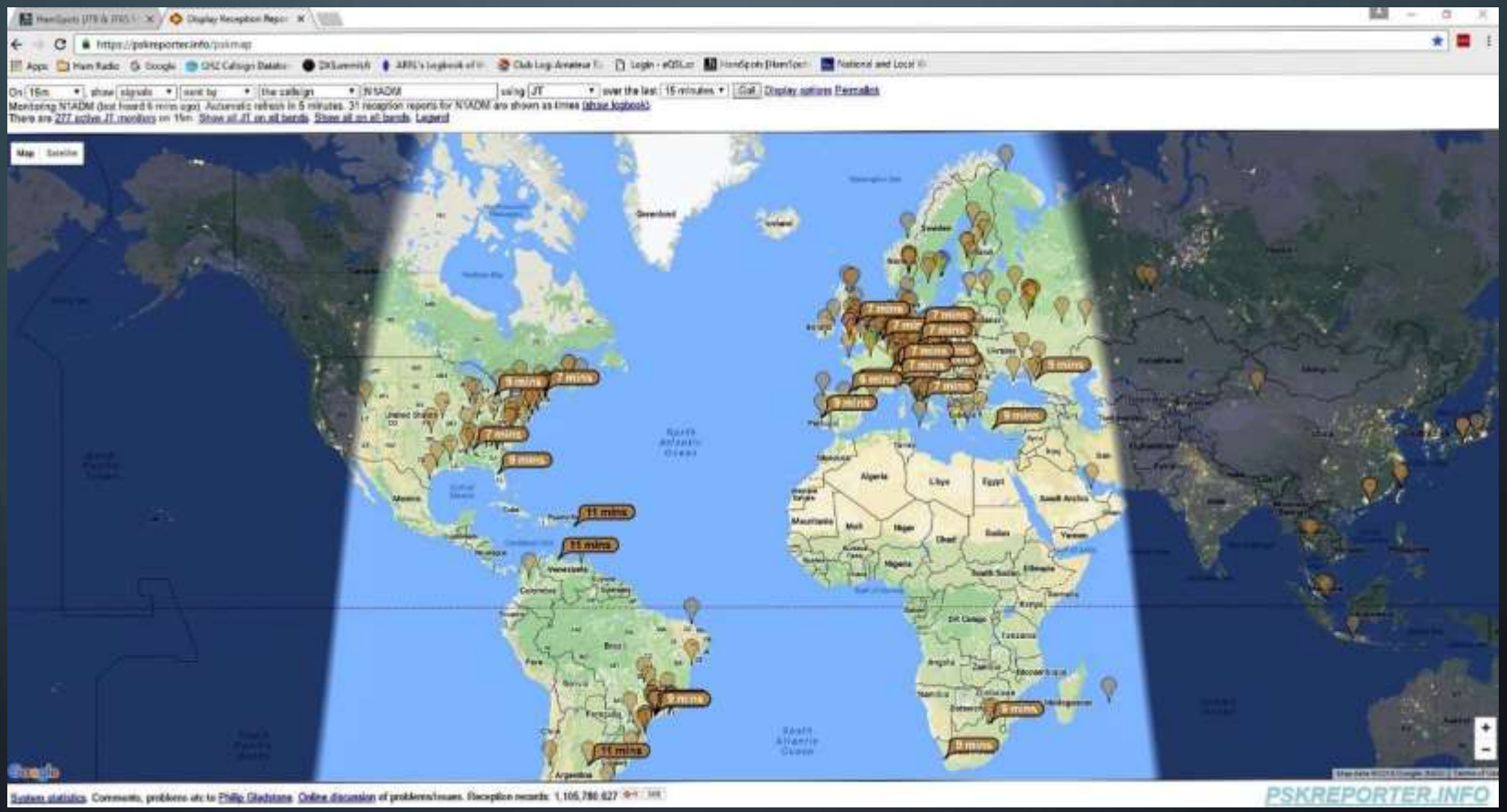
- Audio and visual alerts for your callsign (someone calling you), CQ calls, wanted states, wanted DXCC, wanted continent, etc.
- Automated logging of JT65 and JT9 QSOs to several log types
- Supports web services such as QRZ.com, and uploads decoded callsigns and signal reports to HamSpots
- Works with DXlab applications
- Automatic “Worked B4” flagging of previous QSOs

HAMSPOTS.NET

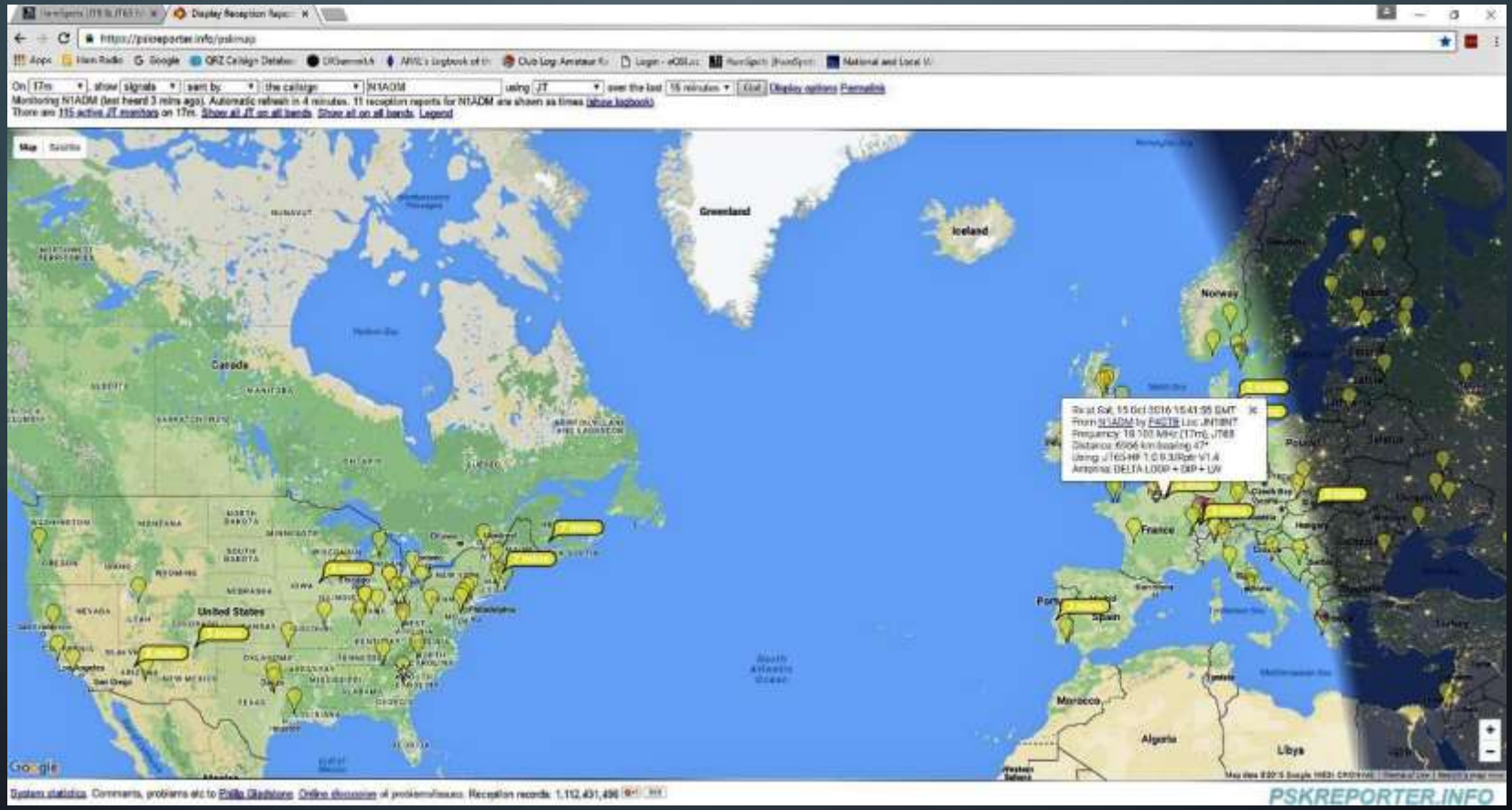


HAMSPOTS.NET

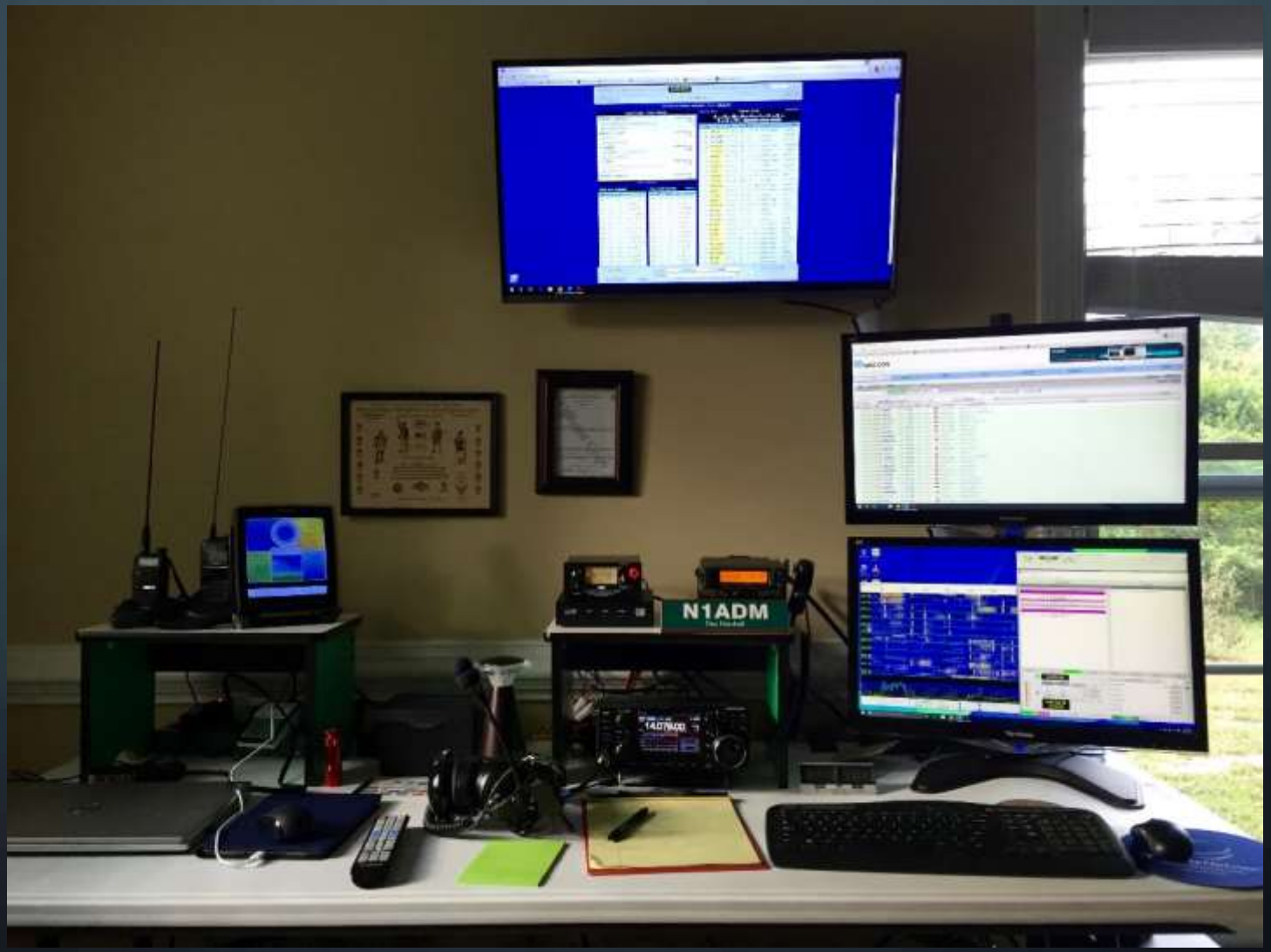
PSKREPORTER.INFO/PSKMAP



PSKREPORTER.INFO/PSKMAP



N1ADM's Station

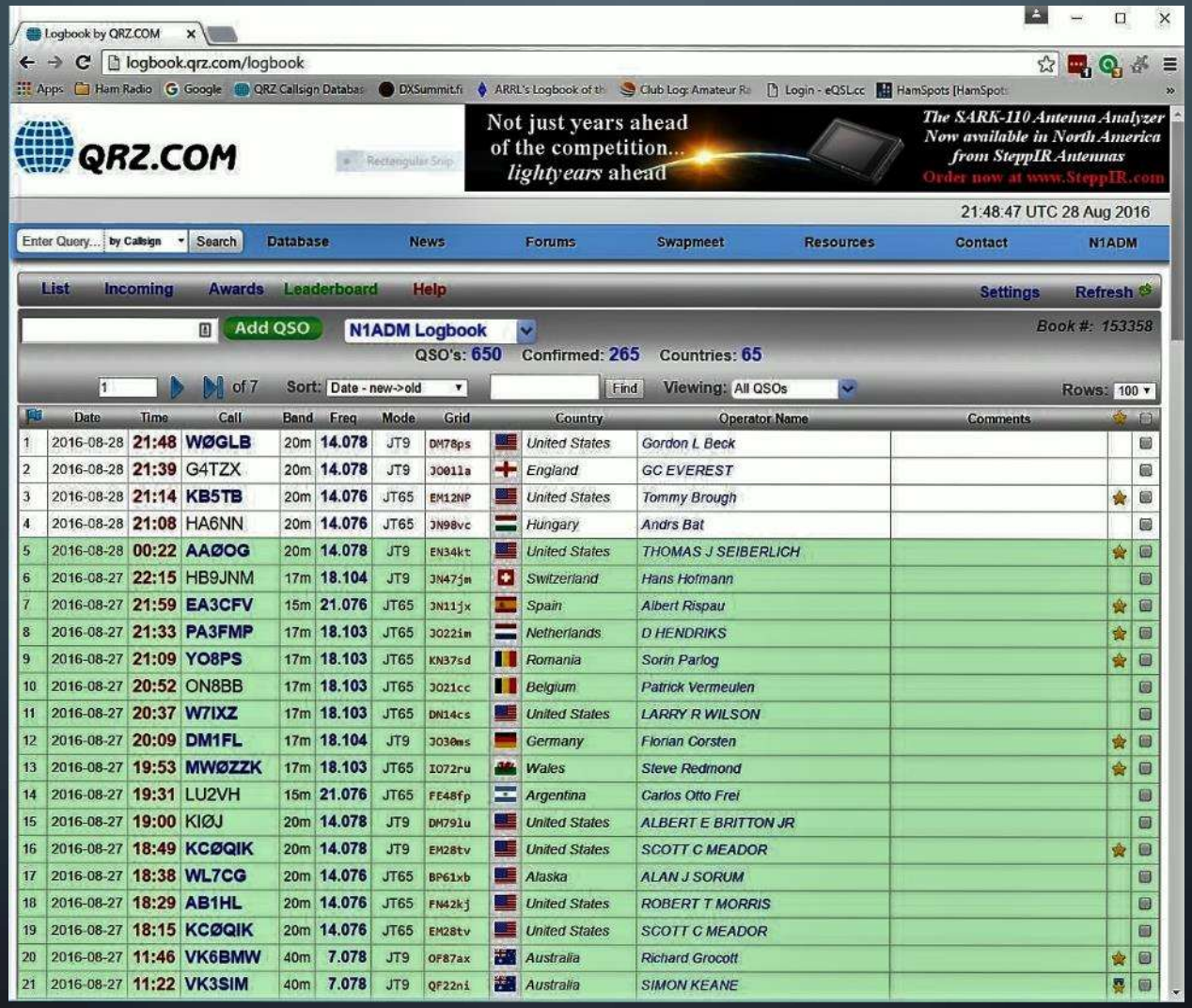


Eagle One antenna

IC-7300 on
20m JT65 freq

ICOM
IC-7300
14.076.00
USB-D
FIL1
22:19
VOX
AGC-M
AN
NB
NR
POWER
TRANSMIT
TUNER
VOX/BK-IN
PHONES
MIC
TWIN PBT
NOTCH
MULTI
RIT
ΔTX
CLEAR
SPLIT
A/B
V/M
XFC
MPAD
TX/RX
AUTO TUNE
MENU
FUNCTION
M.SCOPE
QUICK
EXIT
SPEECH

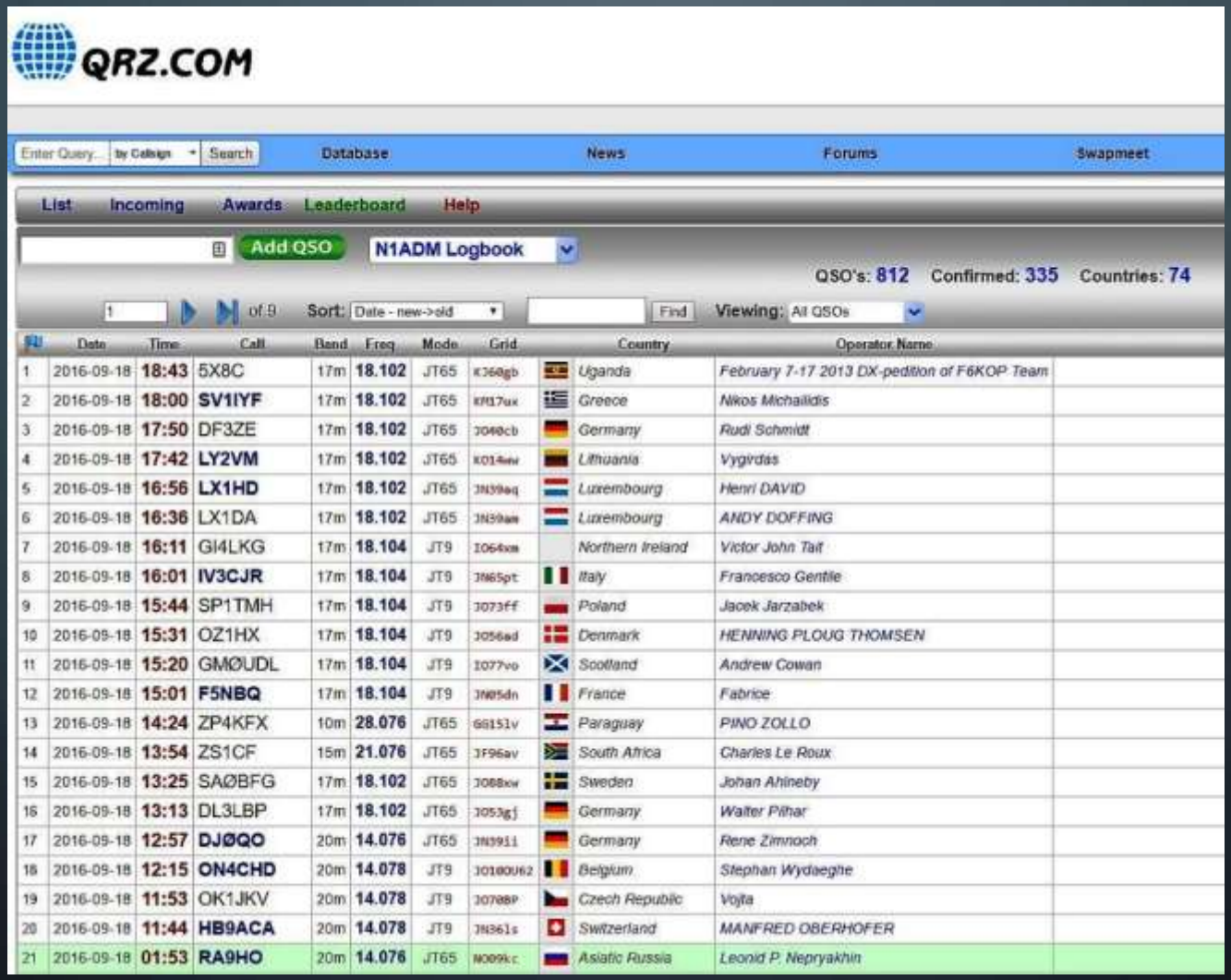
So, why would you want to use yet another digital mode, that requires installation and configuration of additional software, and can only be used to make a bare minimum QSO that takes 5 minutes to complete?



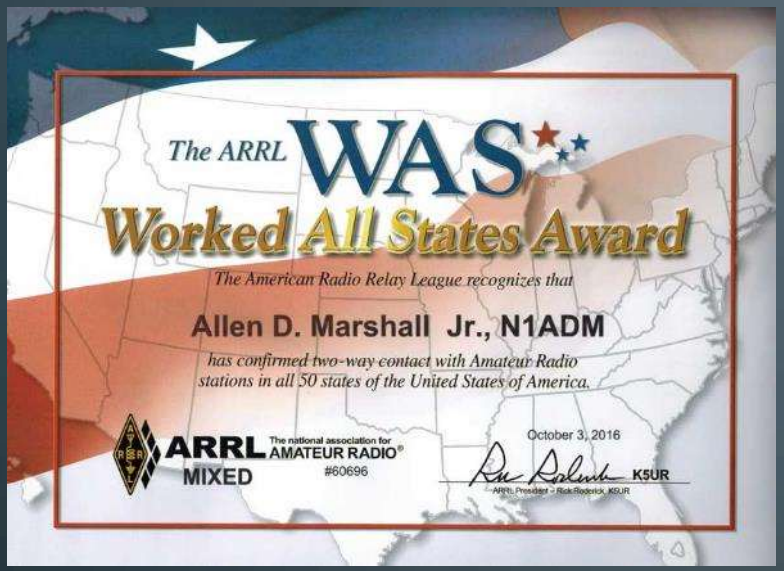
	Date	Time	Call	Band	Freq	Mode	Grid	Country	Operator Name	Comments		
1	2016-08-28	21:48	WØGLB	20m	14.078	JT9	DM78ps	United States	Gordon L Beck			
2	2016-08-28	21:39	G4TZX	20m	14.078	JT9	JO01la	England	GC EVEREST			
3	2016-08-28	21:14	KB5TB	20m	14.076	JT65	EM12NP	United States	Tommy Brough		★	
4	2016-08-28	21:08	HA6NN	20m	14.076	JT65	JN98vc	Hungary	Andrs Bat			
5	2016-08-28	00:22	AAØOG	20m	14.078	JT9	EN34kt	United States	THOMAS J SEIBERLICH		★	
6	2016-08-27	22:15	HB9JNM	17m	18.104	JT9	JN47jm	Switzerland	Hans Hofmann			
7	2016-08-27	21:59	EA3CFV	15m	21.076	JT65	JN11jx	Spain	Albert Rispau		★	
8	2016-08-27	21:33	PA3FMP	17m	18.103	JT65	JO22im	Netherlands	D HENDRIKS		★	
9	2016-08-27	21:09	YO8PS	17m	18.103	JT65	KN37sd	Romania	Sorin Parlog		★	
10	2016-08-27	20:52	ON8BB	17m	18.103	JT65	JO21cc	Belgium	Patrick Vermeulen			
11	2016-08-27	20:37	W7IXZ	17m	18.103	JT65	DN14cs	United States	LARRY R WILSON			
12	2016-08-27	20:09	DM1FL	17m	18.104	JT9	JO30ms	Germany	Florian Corsten		★	
13	2016-08-27	19:53	MWØZZK	17m	18.103	JT65	IO72ru	Wales	Steve Redmond		★	
14	2016-08-27	19:31	LU2VH	15m	21.076	JT65	FF48fp	Argentina	Carlos Otto Frei			
15	2016-08-27	19:00	KIØJ	20m	14.078	JT9	DM79lu	United States	ALBERT E BRITTON JR			
16	2016-08-27	18:49	KCØQIK	20m	14.078	JT9	EM28tv	United States	SCOTT C MEADOR		★	
17	2016-08-27	18:38	WL7CG	20m	14.076	JT65	BP61xb	Alaska	ALAN J SORUM			
18	2016-08-27	18:29	AB1HL	20m	14.076	JT65	FN42kj	United States	ROBERT T MORRIS			
19	2016-08-27	18:15	KCØQIK	20m	14.076	JT65	EM28tv	United States	SCOTT C MEADOR			
20	2016-08-27	11:46	VK6BMW	40m	7.078	JT9	OF87ax	Australia	Richard Grocott		★	
21	2016-08-27	11:22	VK3SIM	40m	7.078	JT9	QF22ni	Australia	SIMON KEANE		★	

Sometimes the JT modes bring in some great DX!

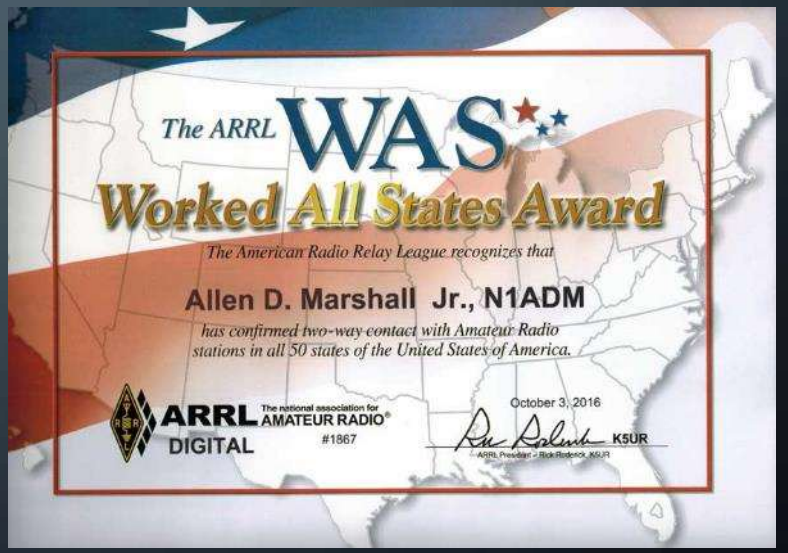
62	2016-08-23	00:33	LU8WAG	40m	7.078	JT9	FE77lf	Argentina	ARMANDO JOSE POLARI		★	
63	2016-08-23	00:20	PD4P	40m	7.078	JT9	JO22ff	Netherlands	Pieter De Hartog		★	
64	2016-08-22	23:26	IV3GKL	20m	14.078	JT9	JN65qs	Italy	Sergio Marchetti			
65	2016-08-22	23:02	KB7N	20m	14.078	JT9	CN97ap	United States	MARK E REISENAUER			
66	2016-08-21	21:38	WQ6C	20m	14.078	JT9	CM87xh	United States	Carl C Creamer			
67	2016-08-21	21:11	N7MJ	17m	18.104	JT9	DN71pd	United States	JACKIE L MITCHELL			
68	2016-08-21	21:04	F1MWV	17m	18.104	JT9	IN95lp	France	Jean-Pierre LUCAS			
69	2016-08-21	20:06	ON8BB	20m	14.078	JT9	JO21cc	Belgium	Patrick Vermeulen			
70	2016-08-21	19:30	KC9RFO	20m	14.076	JT65	EM49PR20	United States	Wendel W White			
71	2016-08-21	14:57	OZ1TMK	17m	18.104	JT9	JO45ws	Denmark	Torben Mellerup Kristensen			
72	2016-08-21	14:13	DJØQO	20m	14.078	JT9	JN39ii	Germany	Rene Zimnoch		★	
73	2016-08-21	13:46	YV5ARM	20m	14.078	JT9	FJ69cc	Venezuela	ALFONSO ROBAINA MARTIN			
74	2016-08-21	12:03	F6ARS	20m	14.078	JT9	JN18lt	France	Gerard Szente		★	
75	2016-08-21	05:03	PA3AIN	40m	7.078	JT9	JO32kj	Netherlands	Johan SCHEPERS			
76	2016-08-21	04:58	EI1DG	40m	7.078	JT9	IO63tj	Ireland	Paddy McGrath			
77	2016-08-21	04:12	UR4UM	40m	7.078	JT9	KO50be	Ukraine	Mikhail Soga			
78	2016-08-21	04:07	DL6TY	40m	7.078	JT9	JO44lo	Germany	Gerd		★	
79	2016-08-21	03:54	IW1FZR	40m	7.078	JT9	JN45bj	Italy	Luca Nerva			
80	2016-08-21	03:33	ER1PB	40m	7.078	JT9		Moldova	Simanenkov Sergei I.			
81	2016-08-21	03:24	US7VF	40m	7.078	JT9	KN58sh	Ukraine	Sergei P. Plotyan			
82	2016-08-21	03:08	UT7IS	40m	7.078	JT9	KN98aq	Ukraine	Max Burmakin			
83	2016-08-21	02:38	AA7IX	20m	14.078	JT9	DN71oe	United States	MARTIN L MC GUFFEY		★	
84	2016-08-21	02:08	K2GT	20m	14.078	JT9	BK29ln	Hawaii	GUSTAVE L TREEWATER			
85	2016-08-21	01:58	RA9HO	20m	14.078	JT9	NO09kc	Asiatic Russia	Leonid P. Nepryakhin		★	
86	2016-08-21	01:32	TI4DJ	20m	14.076	JT65	EK70VC55	Costa Rica	HERMES QUESADA		★	
87	2016-08-21	01:25	GØKLD	20m	14.076	JT65	IO83XK19	England	Charlie Wren		★	
88	2016-08-21	01:02	KB2F	40m	7.076	JT65	EM64kr	United States	Robert C Fudge II		★	
89	2016-08-21	00:46	K9MQ	80m	3.576	JT65	EN61gk	United States	MARK A SKOWRONSKI			
90	2016-08-20	23:26	PY2MR	20m	14.078	JT9	GG66NM55	Brazil	Marcos Ribeiro			
91	2016-08-20	22:54	I1SOP	20m	14.078	JT9	JN44lm	Italy	PIETRO SORBI			



#	Date	Time	Call	Band	Freq	Mode	Grid	Country	Operator Name
1	2016-09-18	18:43	5X8C	17m	18.102	JT65	KJ68gb	Uganda	February 7-17 2013 DX-pedition of F6KOP Team
2	2016-09-18	18:00	SV1IYF	17m	18.102	JT65	KM17ux	Greece	Nikos Michailidis
3	2016-09-18	17:50	DF3ZE	17m	18.102	JT65	JO40cb	Germany	Rudi Schmidt
4	2016-09-18	17:42	LY2VM	17m	18.102	JT65	KO14ew	Lithuania	Vygvidas
5	2016-09-18	16:56	LX1HD	17m	18.102	JT65	JN39aq	Luxembourg	Henri DAVID
6	2016-09-18	16:36	LX1DA	17m	18.102	JT65	JN39am	Luxembourg	ANDY DOFFING
7	2016-09-18	16:11	GI4LKG	17m	18.104	JT9	IO64xm	Northern Ireland	Victor John Tait
8	2016-09-18	16:01	IV3CJR	17m	18.104	JT9	JN65pt	Italy	Francesco Gentile
9	2016-09-18	15:44	SP1TMH	17m	18.104	JT9	JO73ff	Poland	Jacek Jarzabek
10	2016-09-18	15:31	OZ1HX	17m	18.104	JT9	JO56ad	Denmark	HENNING PLOUG THOMSEN
11	2016-09-18	15:20	GMØUDL	17m	18.104	JT9	IO77vo	Scotland	Andrew Cowan
12	2016-09-18	15:01	F5NBQ	17m	18.104	JT9	JN05dn	France	Fabrice
13	2016-09-18	14:24	ZP4KFX	10m	28.076	JT65	GG15lv	Paraguay	PINO ZOLLO
14	2016-09-18	13:54	ZS1CF	15m	21.076	JT65	JF96av	South Africa	Charles Le Roux
15	2016-09-18	13:25	SAØBFG	17m	18.102	JT65	JO68xw	Sweden	Johan Ahlneby
16	2016-09-18	13:13	DL3LBP	17m	18.102	JT65	JO53gj	Germany	Walter Pilhar
17	2016-09-18	12:57	DJØQO	20m	14.076	JT65	JN39ll	Germany	Rene Zimnoch
18	2016-09-18	12:15	ON4CHD	20m	14.078	JT9	JO10OU62	Belgium	Stephan Wydaeghe
19	2016-09-18	11:53	OK1JKV	20m	14.078	JT9	JO70BP	Czech Republic	Vojta
20	2016-09-18	11:44	HB9ACA	20m	14.078	JT9	JN36ls	Switzerland	MANFRED OBERHOFER
21	2016-09-18	01:53	RA9HO	20m	14.076	JT65	NO09kc	Asiatic Russia	Leonid P. Nepryakhin



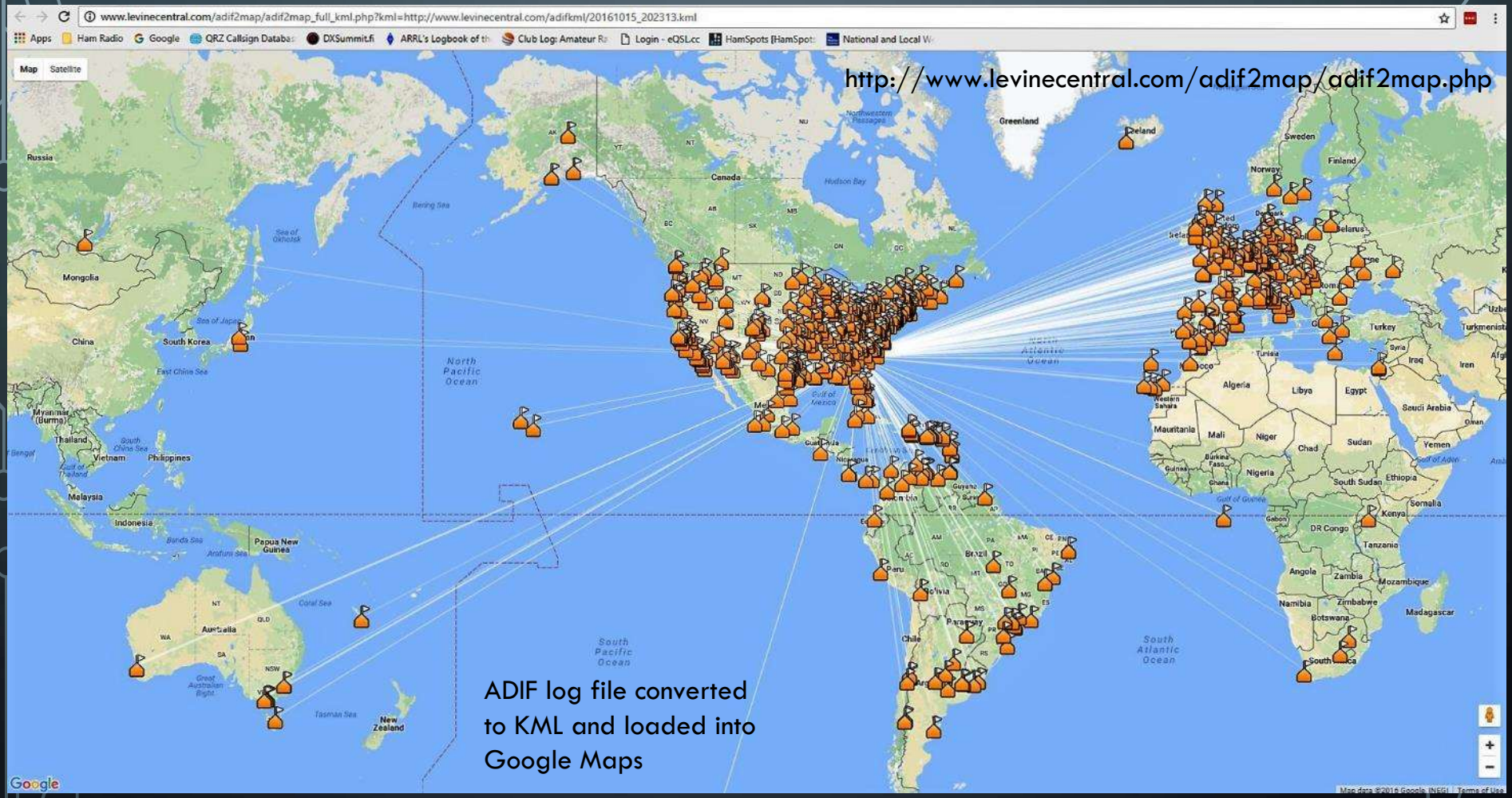
I began using JT65 in July, and JT9 in August



REFERENCES AND LINKS

- **Work The World With JT65 And JT9**, by Steve Ford, WB8IMY ARRL
  https://www.arrl.org/shop/Work-the-World-with-JT65-and-JT9/
- JT65 HF Frequency Information Digital Mode LF-MF-HF-VHF
  http://hflink.com/jt65/
- WSJT Home Page, by K1JT
  http://physics.princeton.edu/pulsar/k1jt/
- Signal Identification Wiki
  www.sigidwiki.com/wiki
- The Old Codger's Guide to JT65A and JT9
  http://obriensweb.com/wsjtx.html
- Have a Great Time with JT9
  http://www.arrl.org/have-a-great-time-with-jt9

One more thing, just for fun…



US Dept of State Geographer
© 2015 Google
Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Google Earth

Thank you Dan!

PRESENTATION

Voice of America Site B Tour

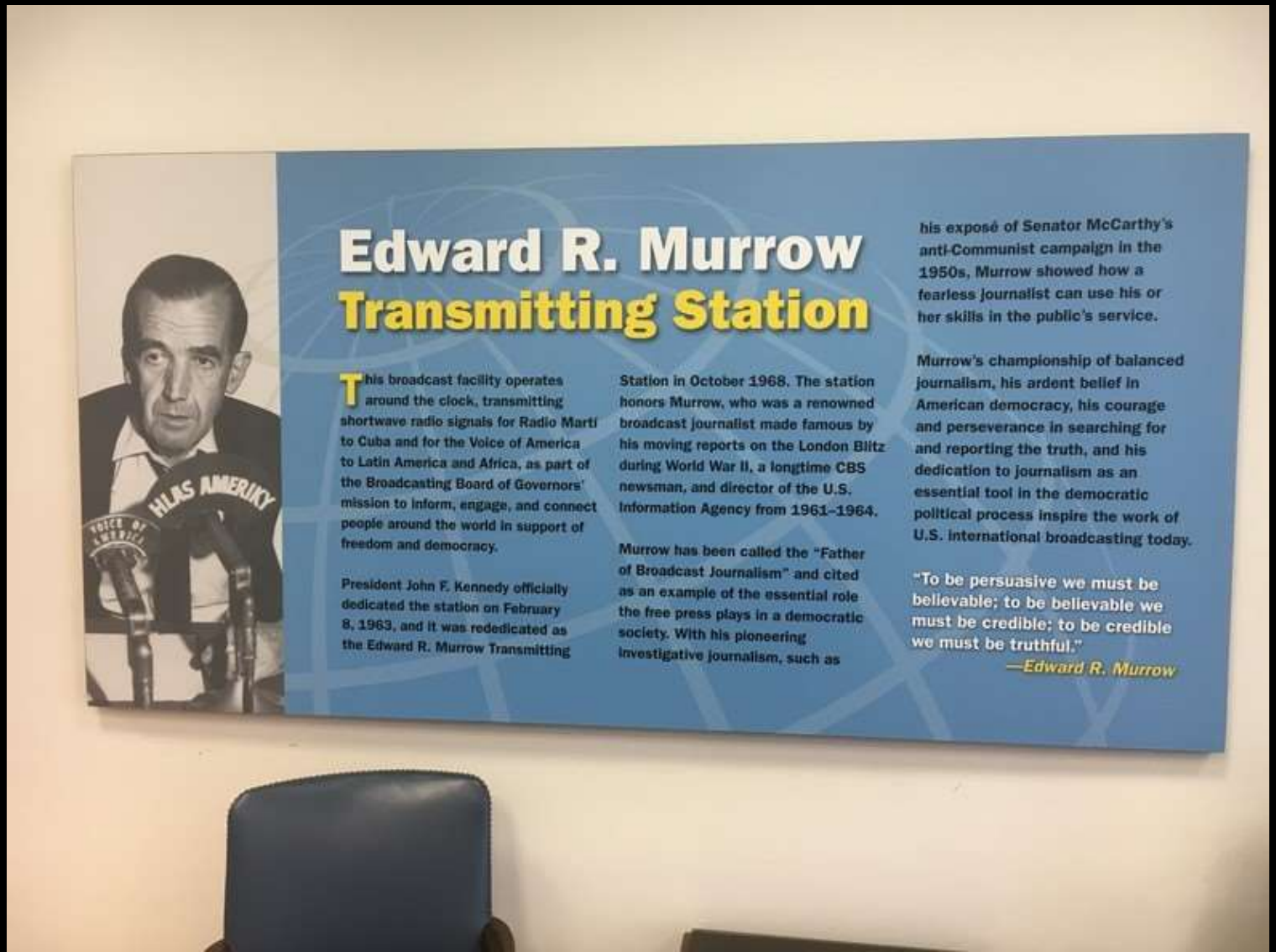
Earl Welsh (KG4HIQ)

We recently toured the VOA's Site B, Greenville, N.C

VOA's Site B is located in the middle of Carolina farm land and forests just a few miles from downtown Greenville. Administrative and broadcasting operations take place within this 23,308 square-foot building.

Our Tour was conducted by the
Station Chief Engineer Macon Dail!

The site is officially known as the Edward R. Murrow Transmitting Station. It actively beams out 2,300 hours of programming each month in the international broadcasting spectrum.

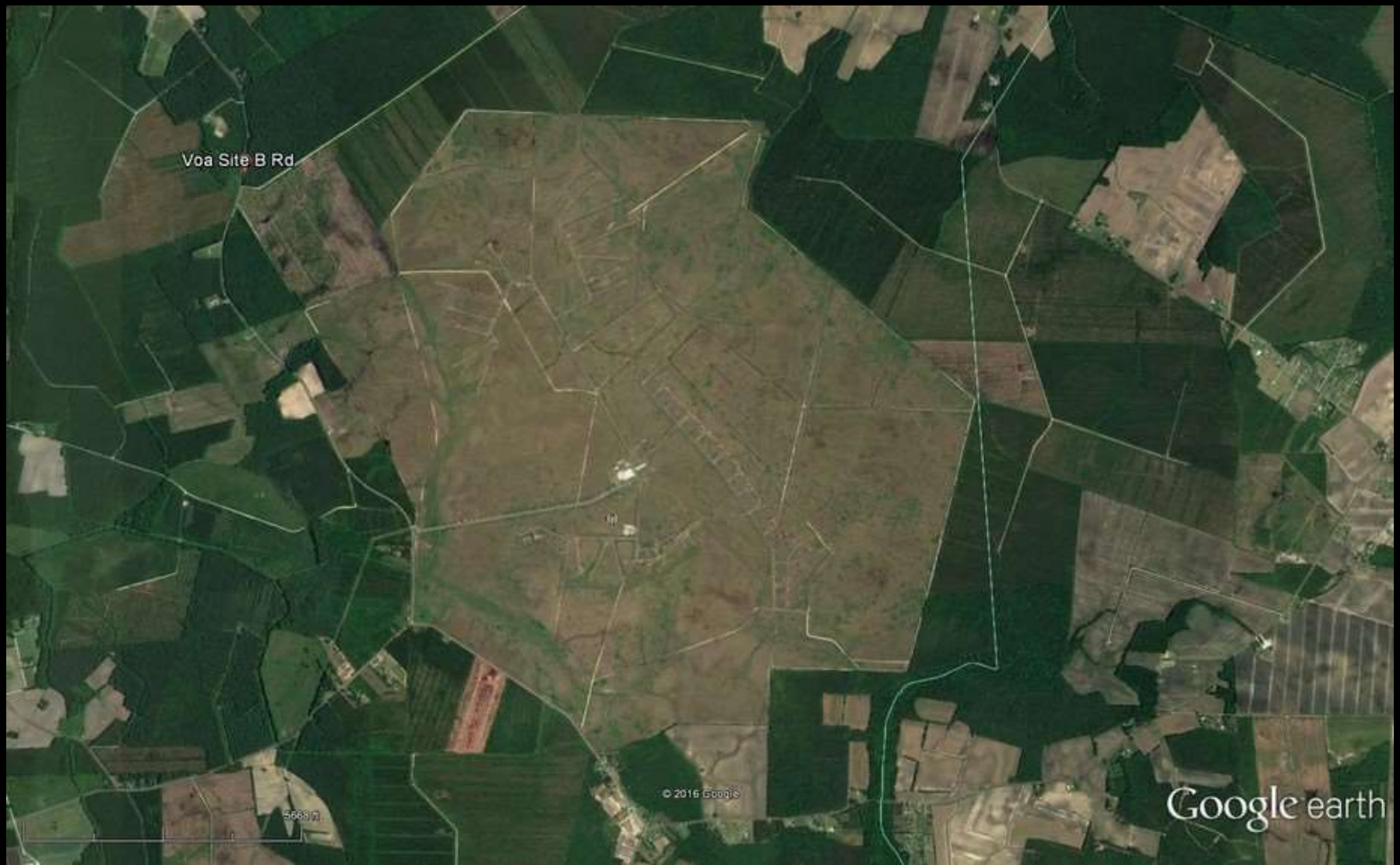


The facility was completed in 1963
and first took to the air in February 1963.

Today 16 full-time federal employees and three contract technicians work there. The facility is staffed 24 hours, a day 365 days a year by at least 2 people.

Recorded IDs are the only audio transmitted from the site.
Washington studios deliver the programming via satellite.

Some 25 miles of heavy open-wire feeders connect the high-power RF routing switcher to the site's 38 transmitting antennas, which are spread across nearly 2,800 acres of North Carolina countryside.



Although the tour starts well before you get to the guard shack, we will start inside the building.

We make our way to the elevated
control area through the a series of racks.

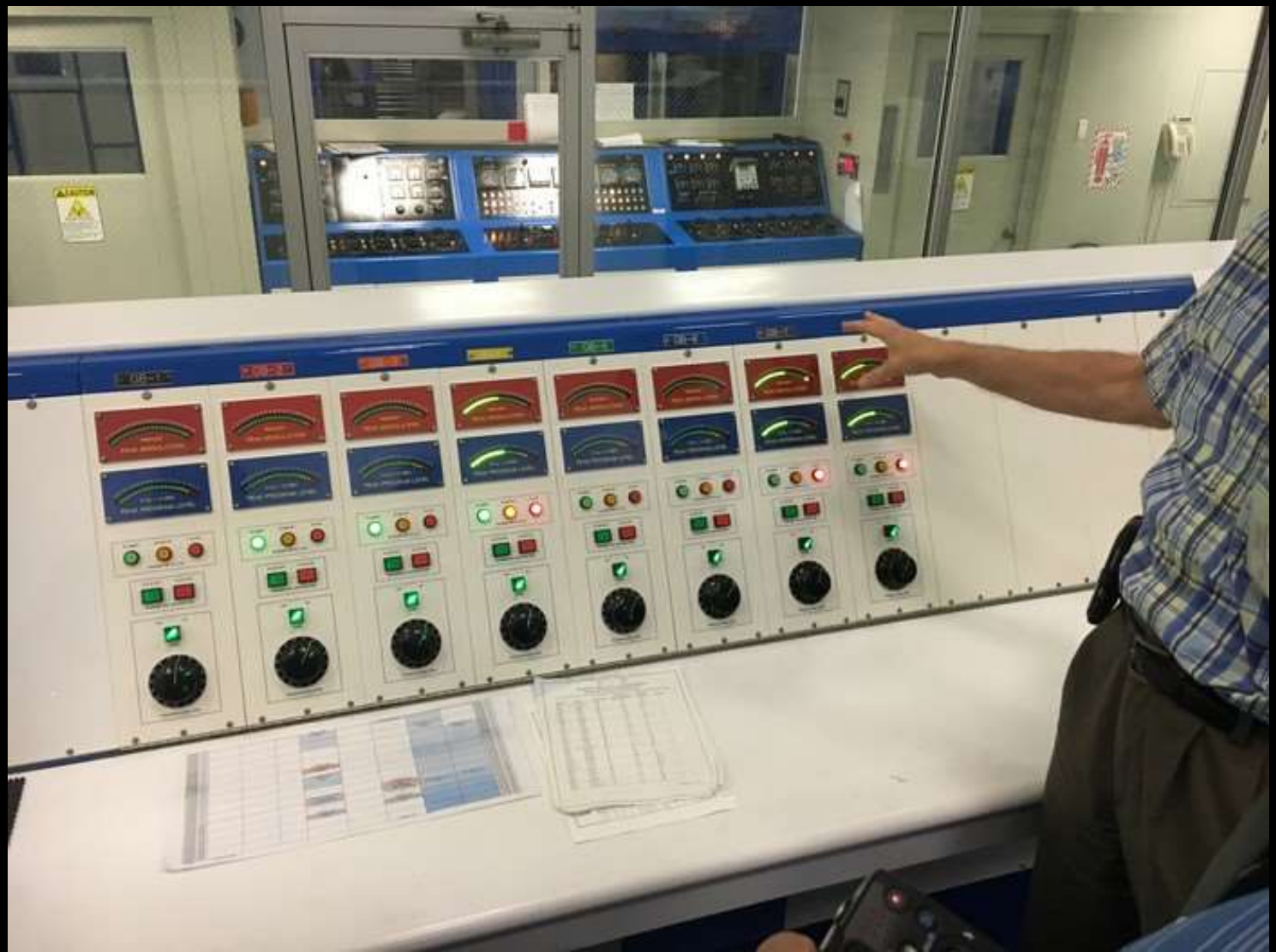
These racks house satellite receivers,
audio processing, modulation monitors, patch bays and more.

The elevated control area is where the control of the entire operation takes place.

At one time other transmitting plants located in Ohio, California and North Carolina. Today, only Greenville Site B remains.

Today 16 full-time federal employees and three contract technicians work there. The facility is staffed 24 hours, a day 365 days a year by at least 2 people.

Greenville Site B is the single largest radio transmission plant in the United States. In its heyday, the Greenville operation was the largest broadcasting site in the world.



Transmitter to antenna switch control unit.
(9 transmitters and 38 antennas)

Logging, generator control and monitoring.

Program Control

We left the control area and enter the Synthesizer and driver amp area.

RF starts here…

250 Watt Buffers

GE Transmitter

Inside the GE

GE Power Supply

Transmitters are from several manufacturers, including AEG-Telefunken, Brown Boveri Corp., Continental and General Electric. The earliest date back nearly 50 years, having been installed when the station first went on the air.

There are eight very large transmitters, all typically operate at 250 kW, one can provide 750 kW of HF energy if required. There is one 50 kW used for backup, most recently used for evaluating DRM performance in the HF bands.

Brown Boveri Corp. Transmitter

Just outside the back door are the antennas and feedlines.

…and antennas and feedlines

…and antennas and feedlines

Did I say feedlines???

The 12,000 square foot building located behind the main transmitting plant and encloses a massive remotely-controlled high-power RF routing switcher for switching transmitter outputs to various antennas.

Switching output to antennas

Always Something There to Remind Me

This sign is for someone else.

1.6 Megawatt Standby Generator

The station consumes approximately
1 million kilowatt hours of electricity each month.

Continental Power Supply

Continental Transmitters

Continental Controls

Small Parts and Test Equipment

The Work Shop

Screen Room

Thousands of spare parts, including
large and small vacuum tubes, are kept
on site to maintain the huge shortwave transmitters.

Humidity Controlled Room

Humidity Controlled Room II

The facility also has a complete machine shop for fabricating transmitter components and assemblies that are no longer available from their manufacturers.

In the observation tower.

Saying Goodbye

Saying Goodbye

Thank you Earl!

MEMBERSHIP APPLICATIONS

- Are there any additional ARCCC, Inc. Membership Applications which need to be turned in before we vote?

ARCCC, INC. REPORTS

- Treasurer's Report
- Secretary's Report
  - Posted on Website

AmazonSmile

- Log into https://smile.amazon.com/
- Select the Amateur Radio Club of Columbia County, Inc. as your charity
- Amazon Gives!

SWAP TABLE

UPCOMING EVENTS

- 11-05-2016 – Stone Mountain Hamfest
- 11-22-2016 – ARCCC, Inc. Meeting
- 12-08-2016 – ARCCC, Inc. Christmas Party
  - Olive Garden
  - December 2016 Meeting Cancelled

OLD BUSINESS

- Any Old Business?
  - Previous Motions to follow up on not otherwise covered by a committee?

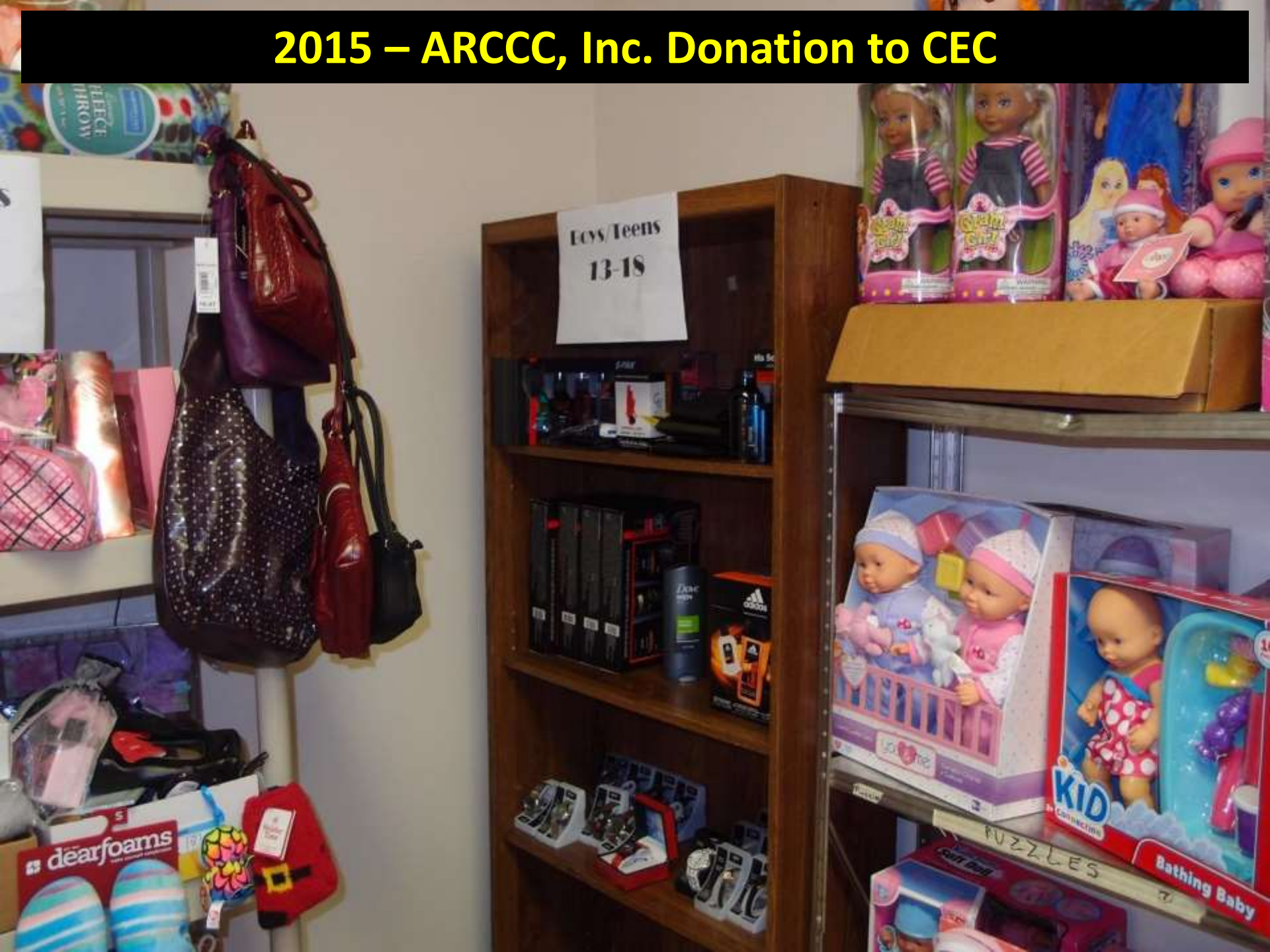
CHILD ENRICHMENT CENTER

- Notes for receiving donated toys for the Child Enrichment Center:

- The Child Enrichment Center accepts unwrapped toys for boys and girls ages newborn to 18 years of age.

- 2015 – Pete LaPierre learned one very important tid bit - very few gifts are donated for boys 13 to 18. They have a huge need in this category (see the next to the last picture). Something to remember for next year.

2015 – ARCCC, Inc. Donation to CEC



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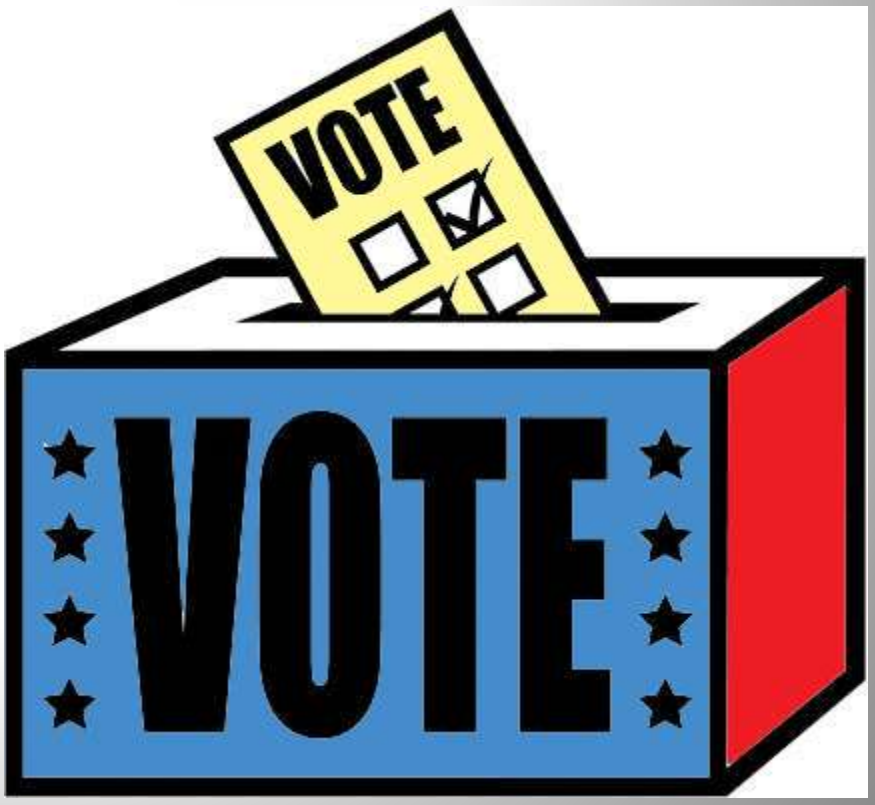
ARCCC, INC. ELECTION REMINDER

- Nominations offered in October 2016
- Elections held in November 2016



ELECTIONS

NOMINATIONS

- **Article II. MEMBERS OF THE BOARD OF DIRECTORS**
  - Section 2.07
    - The Board of Directors will be elected every two years at the November meeting of the organization. Nominations will be offered at the October or other designated meeting by the Board and nominations will also be accepted from the floor. Nominees must confirm that they are willing to accept if they are present or in writing if they are not present. Nominees will be listed and the list distributed to Full Members via e-mail at least two weeks prior to the November meeting. Only Full Members in good standing and at least 18 years old may hold office in the organization. A term for a Board Member is defined as two years. A Board Member can serve in the same position for no more than 5 years. The nominating committee will be the Board, unless a nominating committee is established by the Board of Directors.

NOMINATION COMMITTEE

- Earl Welsh – Committee Director
  - Nomination Slate
    - President
      - Rusty Welsh – KG4HIR (Incumbent)
    - Vice President
      - Walter Brumbeloe – W4EFS (Incumbent)
    - Secretary
      - Shannon Covington – KK4MED (Incumbent)
    - Treasurer
      - Howard Weeks – K5JCP (Incumbent)
    - Board Member at Large
      - Eric Cagle – KK4ZHT
      - Norm Selby – K0RFR

NOMINATION COMMITTEE

- Earl Welsh – Committee Director
  - Move to Accept Nominations from Floor for the following Board Positions
    - President
    - Vice President
    - Secretary
    - Treasurer
    - Board Member at Large

NOMINATION COMMITTEE

- Earl Welsh – Committee Director
  - Move to close the floor nominations and present the nomination Slate
    - President
      - Rusty Welsh – KG4HIR (Incumbent)
    - Vice President
      - Walter Brumbeloe – W4EFS (Incumbent)
    - Secretary
      - Shannon Covington – KK4MED (Incumbent)
    - Treasurer
      - Howard Weeks – K5JCP (Incumbent)
    - Board Member at Large
      - Eric Cagle – KK4ZHT
      - Norm Selby –K0RFR

NET UPDATES

- Devon Harris (KM4PHT) – Net Director
  - Net Controllers WANTED!!!
- ARCCC, Inc. Net
  - Monday's at 7:30 PM Local Time on 146.985 TSql 71.9
- East Central GA ARES Net
  - Need Net Controllers!!!
  - Monday's at 20:30 on 147.120, No Tone
- AmRRON Net
  - Monday's at 21:00 on 146.985, 71.9 TSql

COMMITTEE UPDATES

- Directors should provide QUICK UPDATES on their committees
  - Who has an update?

COMMITTEE UPDATES

- Outreach Committee – Dan Marshall (N1ADM)
  - Oliver Hardy Festival
  - Request for additional clip board for outreach materials (Delivered)

Outreach Committee: Oliver Hardy Festival 10-01-2016

Outreach Committee: Oliver Hardy Festival 10-01-2016

Outreach Committee: Oliver Hardy Festival 10-01-2016

COMMITTEE UPDATES

- Repeater Committee
  - Echolink
  - Belair Road Repeater Site Update
    - Too Much to List – See Photos

ARCCC, Inc. Facebook Page

DONATIONS NEEDED!

- 146.985 Repeater Building Repair

- Rohn 45G Tower for Sell
  - 18” Face
  - 9 – 10’ Sections
    - 1 Section has about 3’ which is Bent

MEETING AGENDA ITEMS

- Anyone wishing to place an item on the ARCCC, Inc. Meeting Agenda should provide their request via email to the ARCCC, Inc. President at least 7 days prior to the upcoming meeting.

PHOTOS OF THE HOBBY

- TAKE PHOTOS!!!
- Share the photos with the ARCCC, Inc. Board so they can be placed on the website and other outreach materials.
- Take photos in order so they tell a story in chronological order
- Be certain Camera Date and Time are Correct

ANY OTHER BUSINESS?

- New Business?

REVIEW

- Review Motions and Assignments

MEETING RAFFLE

- All ARCCC, Inc. Members get a free ticket
- Additional Tickets may be purchased for $1 each
- Nonmembers may purchase Tickets for $1 each

THANK YOU!!!