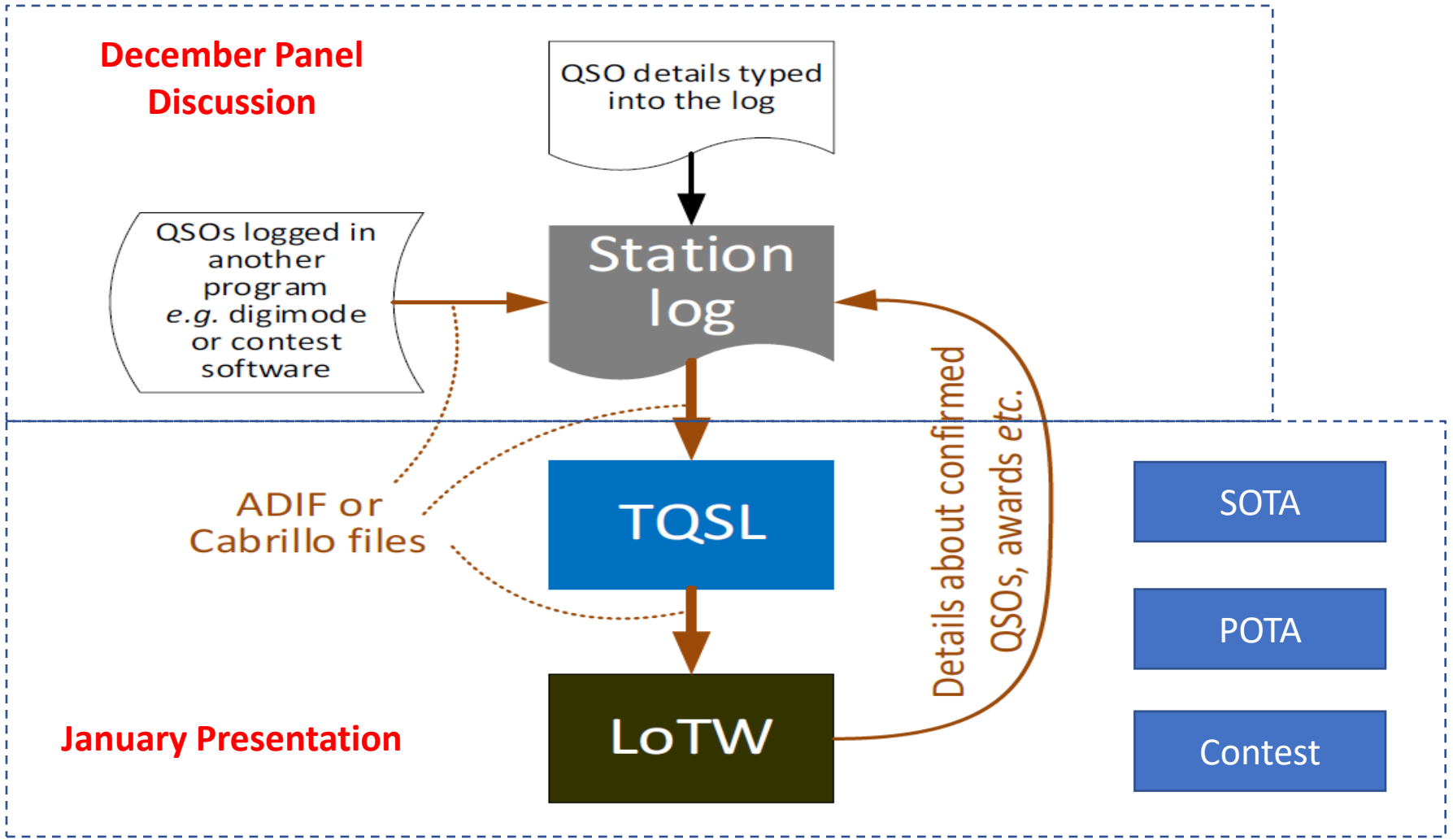
LoTW

Logbook of the World

Two-Part Presentation



Logbook of the World - overview

- Logbook of the World (LoTW) is a **FREE** online service that enables you to:
  - You do not need to be an ARRL member to use LOTW.
  - It allows for electronically submitted contacts (QSOs) for confirmation
  - You can view your submitted QSOs and resulting confirmations online
  - You can view your award progress online: WAS,DXCC, VUCC, WAZ and WPX
  - Then you can electronically submit confirmations for credit toward those awards.
  - https://lotw.arrl.org/lotw/

Logbook of the World – overview (continued)

- To use LOTW you should follow the links on this page: http://arrl.org/quick-start-tqsl
  - TQSL stands for Trusted QSL. It is a "more" secure and accurate confirmation of contacts by adding a third party authentication protocol and requires digital signatures from both parties. I will show the steps for this later in brief.
- There are also 3 YouTube videos to guide you through the initial process of obtaining your TQSL authentication: LOTW step 1, LOTW Step 2, LOTW step 3
- Now, If the information you submitted for a QSO matches the information submitted to LoTW by the your QSO partner, the LoTW Accounts of both you and your QSO partner will show the submitted QSO as confirmed.
- Via your LoTW Account, (remember it is free) you can submit your confirmed QSO's for credit in one or more of the award programs.
- A fee is only charged when submitting confirmed QSOs (QSL's) for Award Credit.
- There is also a connection to CQ for processing of a WAZ or WPX awards check those pages out.
- For more info on why use TQSL go here: tQSL-documents/faq.html

Why use LoTW?

- You have many options: eQSL, QRZ, ClubLog, CQ, HRDLOGnet, and others.
- It is free, as are the others, yet it requires one more step for authentication and makes it one step more accurate.
- In todays world all things require a signature and a digital signature is becoming a standard. The LoTW process required this a long time ago.
- So, it is the GOLD standard in certifications.
- And, all of the biggest Dxer's, expeditions, most actives use it.

ClubLog Linked to LoTW

- Clublog is one of the online log comparison tools – it provides a lot of useful information for DX chasers and DX stations –
  - Check it out here https://clublog.org/

ARRL incoming and outgoing Bureau

- To save money on QSL cards to DX stations I use the ARRL bureau both in and out. Now these do require membership in ARRL it is just one of their services for your membership.
- To send cards out you should check with the ARRL.org page: http://www.arrl.org/outgoing-qsl-service
- To get cards back you should check the incoming bureau page: http://www.arrl.org/incoming-qsl-service

Paint by numbers instructions from ARRL:

- Step 1 - Download and install the software+
- Step 2 - Request a certificate for your callsign+
- Step 3 - Authenticate your location (USA)+
- Step 3 - Authenticate your location (non-USA)+
- Step 4 - Accept Your Call Sign Certificate (TQ6 file)+
- Step 5 - Create a station location+
- Step 6 – Digitally Sign and Upload Your Log Files via the Internet

This is the link to the ARRL's LoTW Quick Start page: http://www.arrl.org/quick-start-tqsl

Step 1 - Download and install the TQSL software

- Logbook of the World uses a free software called TQSL. (Latest version 2.0)
- TQSL works with MS Windows; there are versions for Mac OS X and Linux.
- If you are using anti-spyware programs such as Bit Defender or Kaspersky or others, you must configure your software to allow TQSL to run.
- A link to the download is provided here: ARRL's LoTW Quick Start page: http://www.arrl.org/quick-start-tqsl

Step 2 - Request a certificate for your callsign

- Requesting a certificate is a simple process of entering your basic information such as your call sign, name, physical address and your e-mail address.
  - LOTW uses private key – public key encryption.
  - Using TQSL, you complete the information required and a certificate request (at TQ5 file) is sent to the ARRL. They send you a confirmation post card via snail mail and it has your pass code on it. You go to TQSL software and enter that info (your address is now authenticated) and then The ARRL replies with a TQ6 file by email. That TQ6 file is then loaded into the TQSL program as certification. And bingo, you now have your certificate to electronically sign your log files. Further info on this is at http://www.arrl.org/files/file/LoTW%20Instructions/TQSL%202_0%20201 3/Step%202%20Requesting%20Your%20Certificate_2014-4-1.pdf

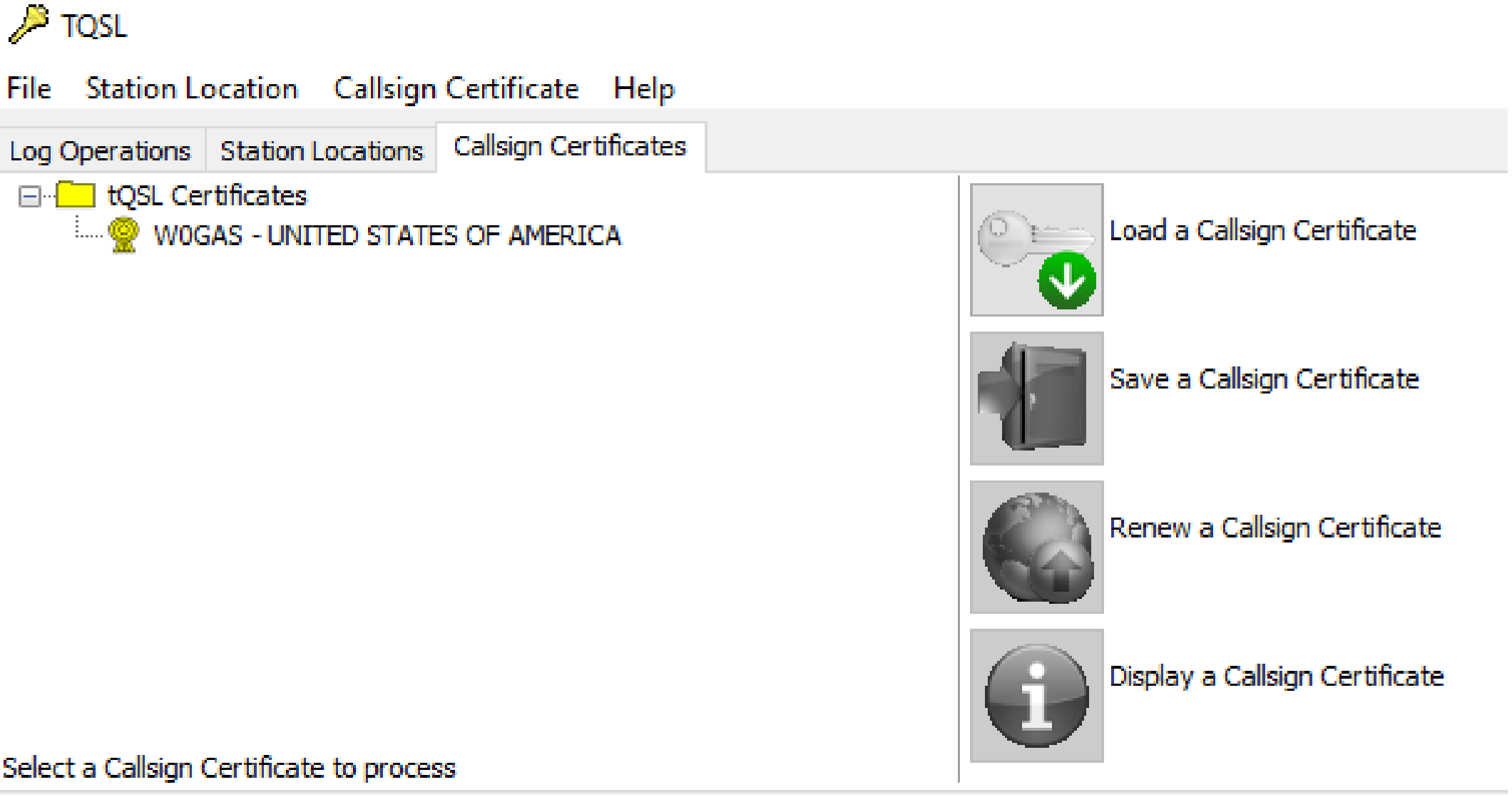
Step 3 - Authenticate your location (USA)

- For radio amateurs in the USA authentication is done with a postcard that is mailed to your address that is in the FCC database. If this address is not current please visit the FCC ULS website and update your address information.
- You will go to the LoTW web page and enter an eight digit code from the postcard after which the TQ6 file will be e-mailed to the you.

Step 4 - Accept Your Call Sign Certificate (TQ6 file)

- At this point you have received an e-mail from LoTW with your TQ6 file. This e-mail also contains your username (your call sign) and a password to log onto the LoTW user page. This information is in the lower portion of the text in the e-mail message.
- These instructions will show you how to load the TQ6 file and more importantly how to save the certificate. The TQ6 file by itself is not your complete certificate so please be sure to use the instructions to load and save your certificate..

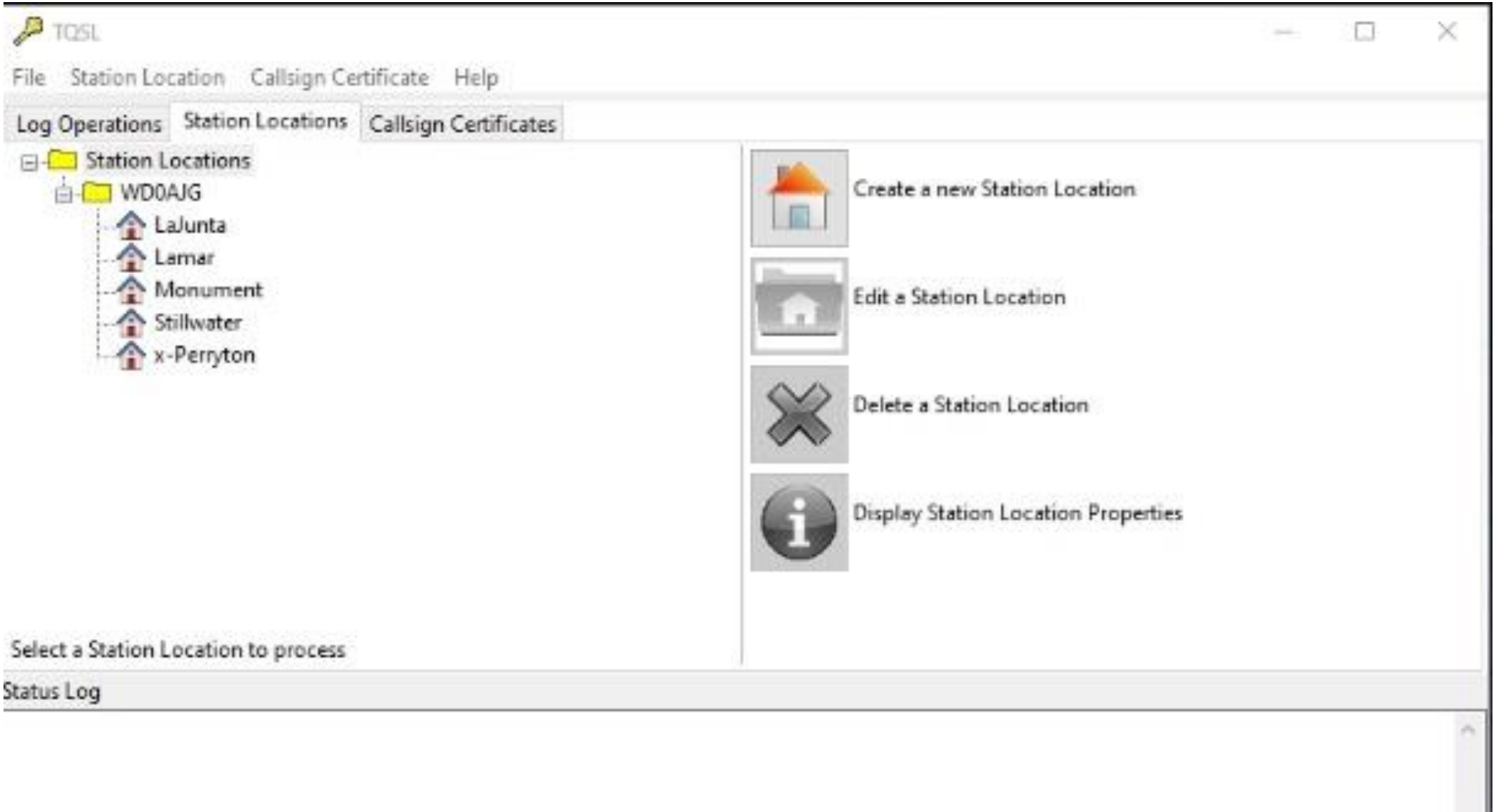
Callsign Certificates Tab



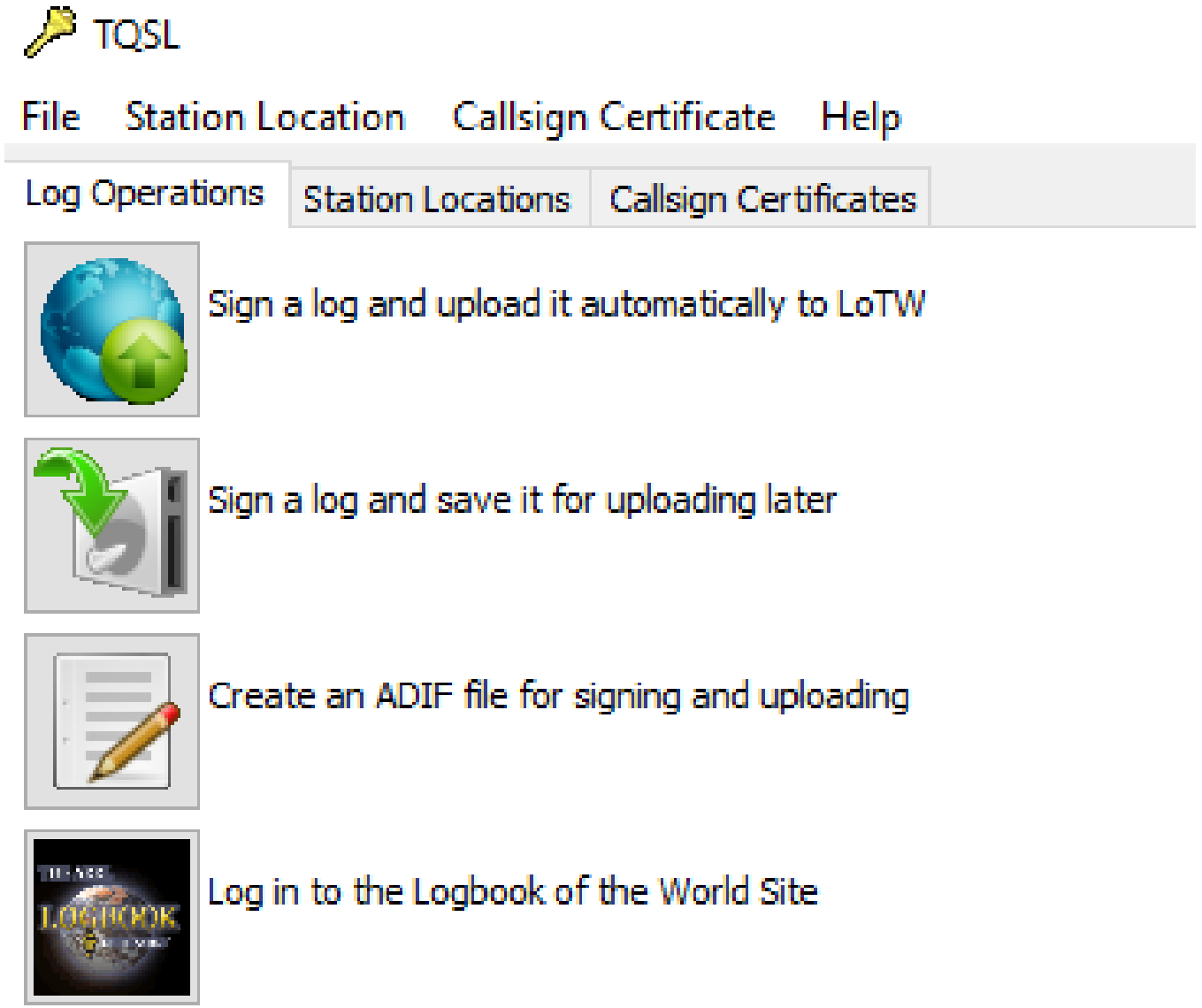
Step 5 - Create a station location

- The station location contains all of the geographic information for your operation. This includes ITU and CQ zones, grid square, US State and county and IOTA number if you operated from an IOTA island.
- Please be accurate and complete when entering the information in this step because this is how the other station will receive credit for your geographic positions from a QSO with you.
- Certain awards and the confirmation on both ends depend on an exact location – for instance – WAS has to be within 50 miles of your “certified location in TQSL”. So you may have many locations depending on operations.

Station Location Tab



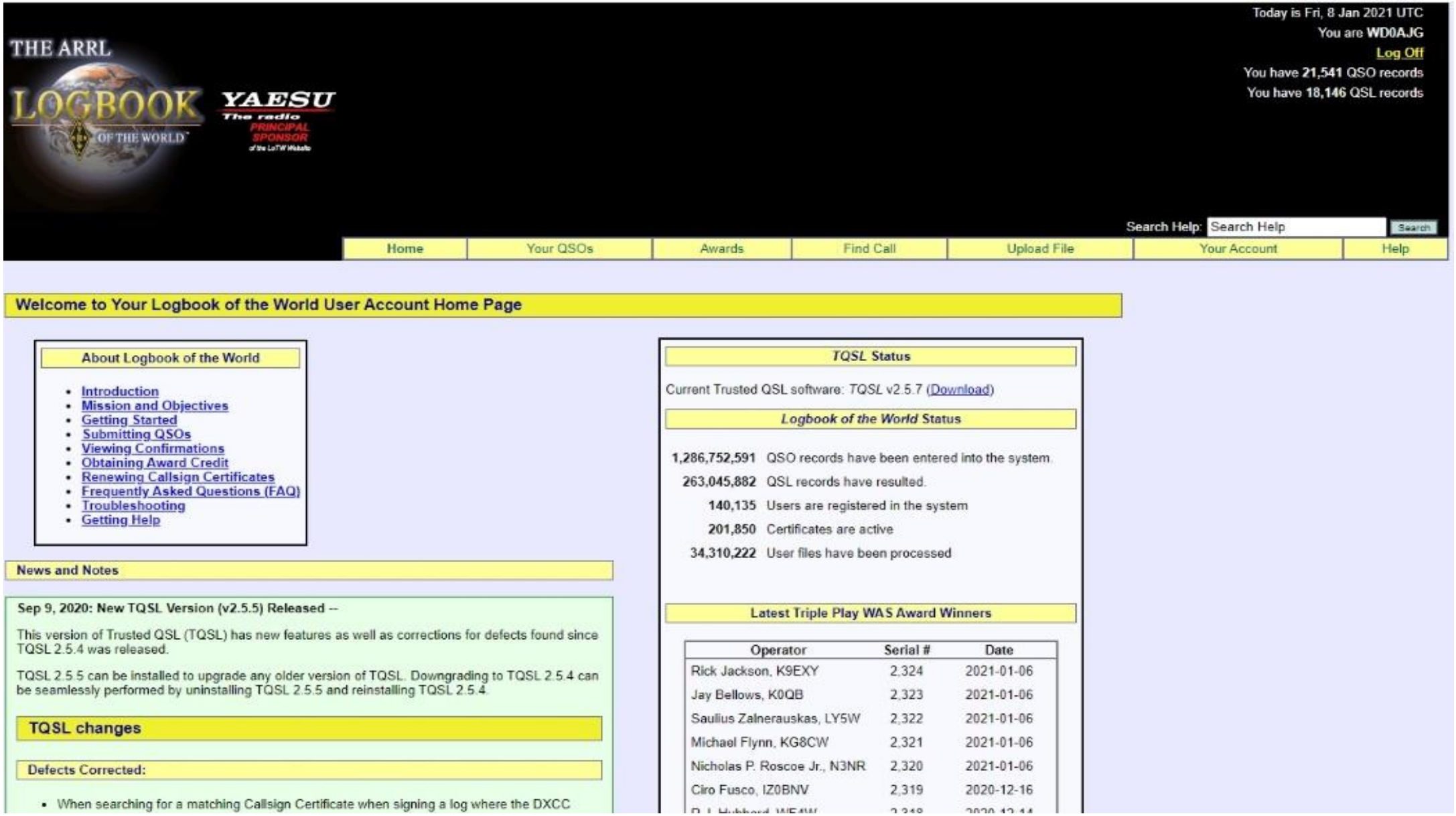
TQSL – Log Operations Tab



Step 6 - Sign Upload Your Log Files via the Internet

- When you digitally sign an ADIF (Amateur Data Interchange Format) or Cabrillo (specific contest log output) log file you are making a new file called a TQ8 file (like a QSL card but more). Let's look at what makes a TQ8 file.
  - 1. The call and DXCC entity are derived from your certificate.
  - 2. The QSO info such as the station worked, date, time, band and mode come from the ADIF file.
  - 3. The geographic information such as US State, County, grid and zones all come from your station location.
  - 4. Station locations are associated with your certificate.
- TQSL software allows you to sign and upload the log file to the LoTW system via the internet.
- Most logging programs feature a shortcut for signing and uploading your log. At minimum they should let you create the ADIF file. Check with your logging program developer's page for information on features like this.

Navigating LoTW – Home



Navigating LoTW – Your QSOs

Your QSOs

QSO Query

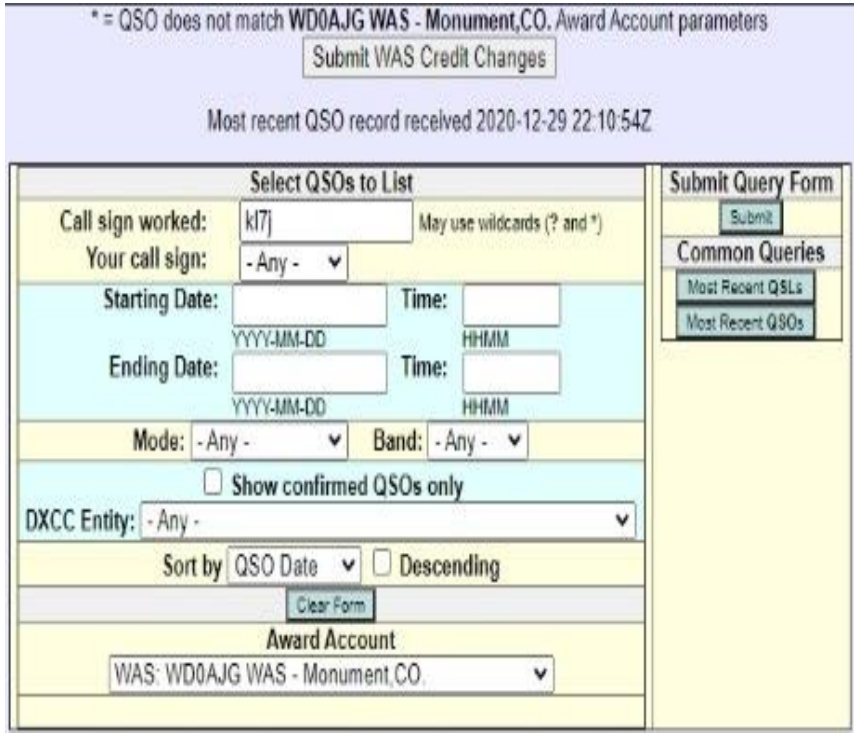
New Query

25 Records Shown (1-25)
Sorted by QSO Date (0.009480 seconds elapsed)
Showing **WAS** Award data for
WD0AJG WAS - Monument,CO.

Next

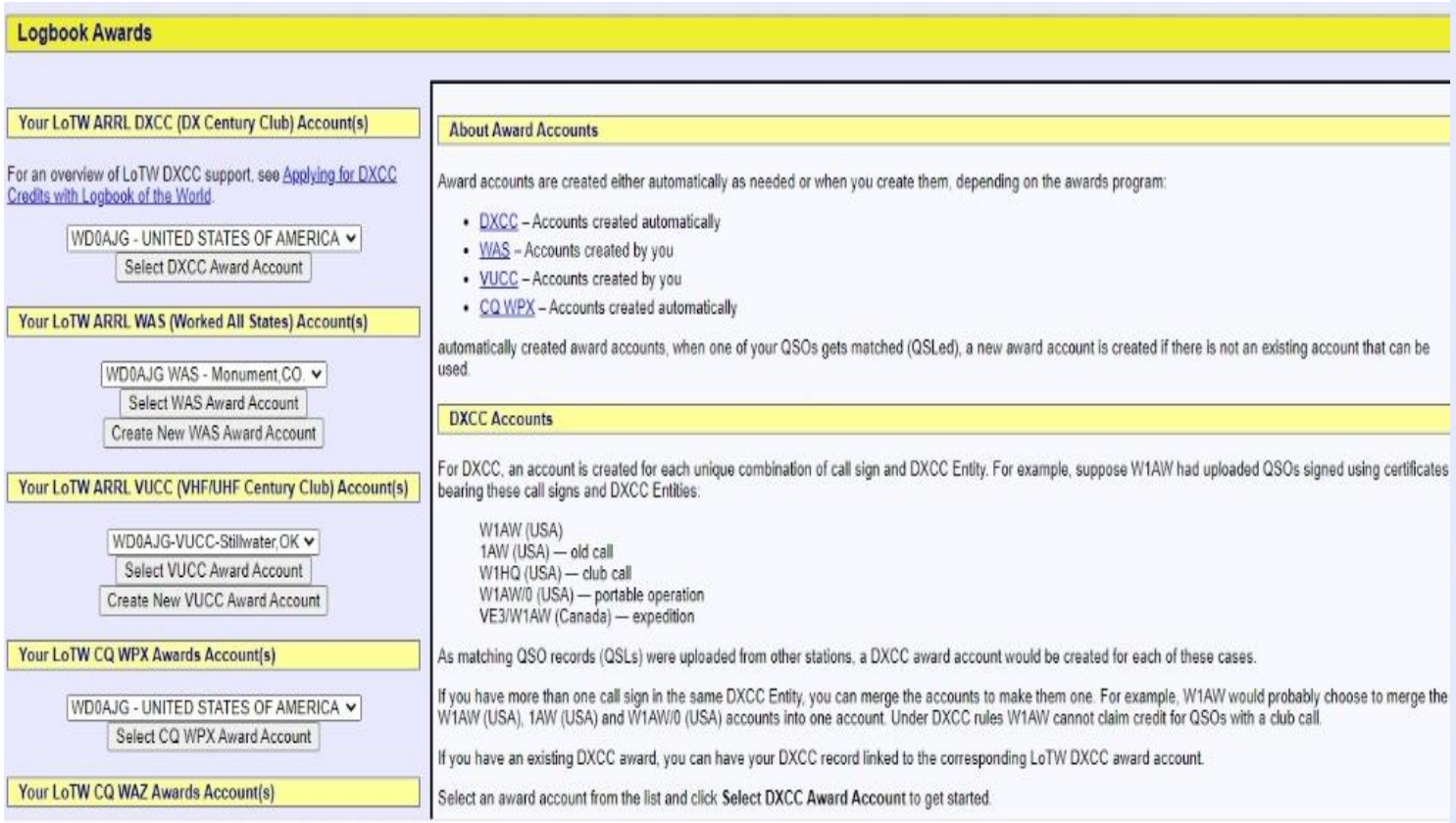
	Call sign	Worked	Date/Time	Band	Mode	Freq	QSL		WAS
Details	WD0AJG	KL7J	2012-12-30 22:22:00	17M	JT65	18.10200	ALASKA	☐*	**Alaska:** Digital; JT65; 17M Digital; 17M JT65; Triple Play
Details	WD0AJG	KL7J	2014-02-15 04:44:00	80M	JT65	3.57600	ALASKA	☐*	**Alaska:** Digital; JT65; 80M Digital; 80M JT65; Triple Play
Details	WD0AJG	KL7J	2014-03-16 04:02:00	40M	JT9	7.07800	ALASKA	☐*	**Alaska:** Digital; JT9; 40M Digital; 40M JT9; Triple Play
Details	WD0AJG	KL7J	2014-07-06 01:10:00	12M	JT65	24.91700	ALASKA	☐*	**Alaska:** Digital; JT65; 12M Digital; 12M JT65; Triple Play
Details	WD0AJG	KL7J	2015-11-22 06:15:00	80M	JT9	3.57856	ALASKA	☐*	**Alaska:** Digital; JT9; 80M Digital; 80M JT9; Triple Play
Details	WD0AJG	KL7J	2016-01-19 02:01:00	30M	JT9	10.14050	ALASKA	☐*	**Alaska:** Digital; JT9; 30M Digital; 30M JT9; Triple Play
Details	WD0AJG	KL7J	2017-10-20 00:51:00	30M	FT8	10.13790	ALASKA	☐	**Alaska:** Digital; FT8; 30M Digital; Triple Play
Details	WD0AJG	KL7J	2017-10-22 19:48:00	15M	FT8	21.07630	ALASKA	✔	**Alaska:** 15M; 15M Digital; 5-Band
Details	WD0AJG	KL7J	2017-10-30 03:17:00	40M	FT8	7.07603	ALASKA	☐	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-01-26 02:54:00	40M	FT8	7.07592			
Details	WD0AJG	KL7J	2018-02-03 05:38:00	80M	FT8	3.57471	ALASKA	☐*	**Alaska:** Digital; FT8; 80M Digital; Triple Play
Details	WD0AJG	KL7J	2018-02-20 21:14:00	20M	FT8	14.07602	ALASKA	☐	**Alaska:** Digital; FT8; 20M Digital; Triple Play
Details	WD0AJG	KL7J	2018-06-16 05:51:00	40M	FT8	7.07584	ALASKA	☐	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-07-25 04:54:00	30M	FT8	10.13764			
Details	WD0AJG	KL7J	2018-08-24 04:31:00	40M	FT8	7.07566	ALASKA	☐	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-08-25 20:03:00	17M	FT8	18.10149			
Details	WD0AJG	KL7J	2018-09-04 04:04:00	40M	FT8	7.07579	ALASKA	☐*	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-09-12 03:59:00	40M	FT8	7.07564	ALASKA	☐	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-10-20 04:33:00	80M	FT8	3.57408	ALASKA	☐	**Alaska:** Digital; FT8; 80M Digital; Triple Play
Details	WD0AJG	KL7J	2018-10-25 03:01:00	40M	FT8	7.07522	ALASKA	☐*	**Alaska:** Digital; FT8; 40M Digital; Triple Play
Details	WD0AJG	KL7J	2018-11-28 22:24:00	17M	FT8	18.10182	ALASKA	☐*	**Alaska:** Digital; FT8; 17M Digital; Triple Play
Details	WD0AJG	KL7J	2018-12-01 21:42:00	20M	FT8	14.07623			
Details	WD0AJG	KL7J	2018-12-02 05:11:00	80M	FT8	3.57476	ALASKA	☐*	**Alaska:** Digital; FT8; 80M Digital; Triple Play
Details	WD0AJG	KL7J	2018-12-20 21:46:00	17M	FT8	18.10115	ALASKA	☐	**Alaska:** Digital; FT8; 17M Digital; Triple Play
Details	WD0AJG	KL7J	2018-12-26 01:20:00	40M	FT8	7.07571	ALASKA	☐	**Alaska:** Digital; FT8; 40M Digital; Triple Play

Next



You can only search your uploaded QSOs.
You cannot see anyone else's contacts.

Navigating LoTW – Awards



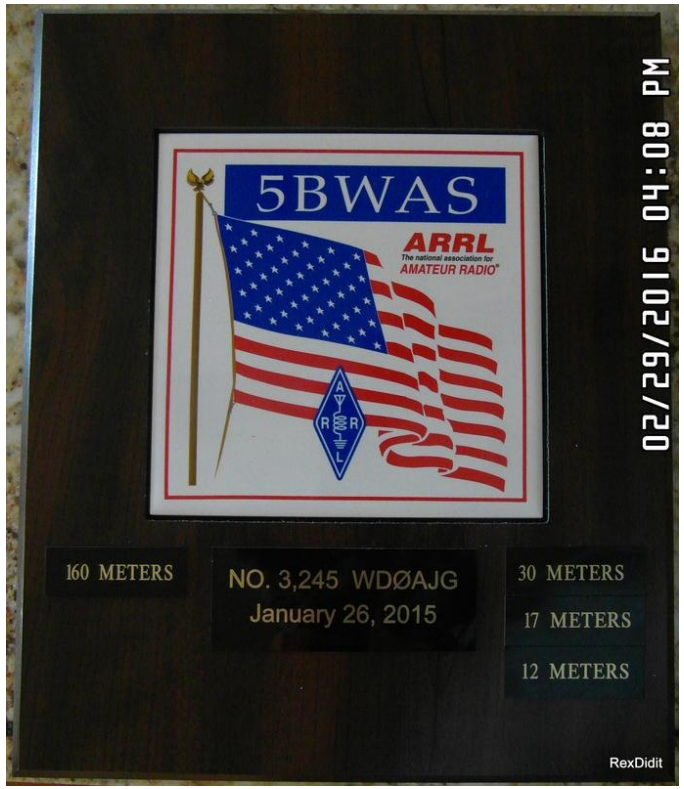
- You need to create the award you are seeking in order to see your status for the award, although some are automatically created like DXCC per your certificate.
- You must also for WAS &VUCC set some rules to see your QSO's and apply them to the awards.

Account Status

WAS Award	New LoTW QSLs	LoTW QSLs in Process	WAS Credits Awarded	Total
Mixed *	0	0	50	50
160M *	0	0	50	50
80M *	0	0	50	50
40M *	0	0	50	50
30M *	0	0	50	50
20M *	0	0	50	50
17M *	0	0	50	50
15M *	0	0	50	50
12M *	0	0	50	50
10M *	0	0	50	50
6M	36	0	0	36
Digital	50	0	0	50
CONTESTI	1	0	0	1
DOMINO	1	0	0	1
FT4	1	0	0	1
FT8	50	0	0	50
JT65	10	0	0	10
JT9	3	0	0	3
OLIVIA	2	0	0	2
PSK31	24	0	0	24
RTTY	35	0	0	35
Digital 160M	50	0	0	50
80M Digital	50	0	0	50
80M OLIVIA	1	0	0	1
80M PSK31	16	0	0	16
80M RTTY	28	0	0	28
40M Digital	50	0	0	50
40M CONTESTI	1	0	0	1
40M DOMINO	1	0	0	1
40M JT65	5	0	0	5
40M JT9	3	0	0	3

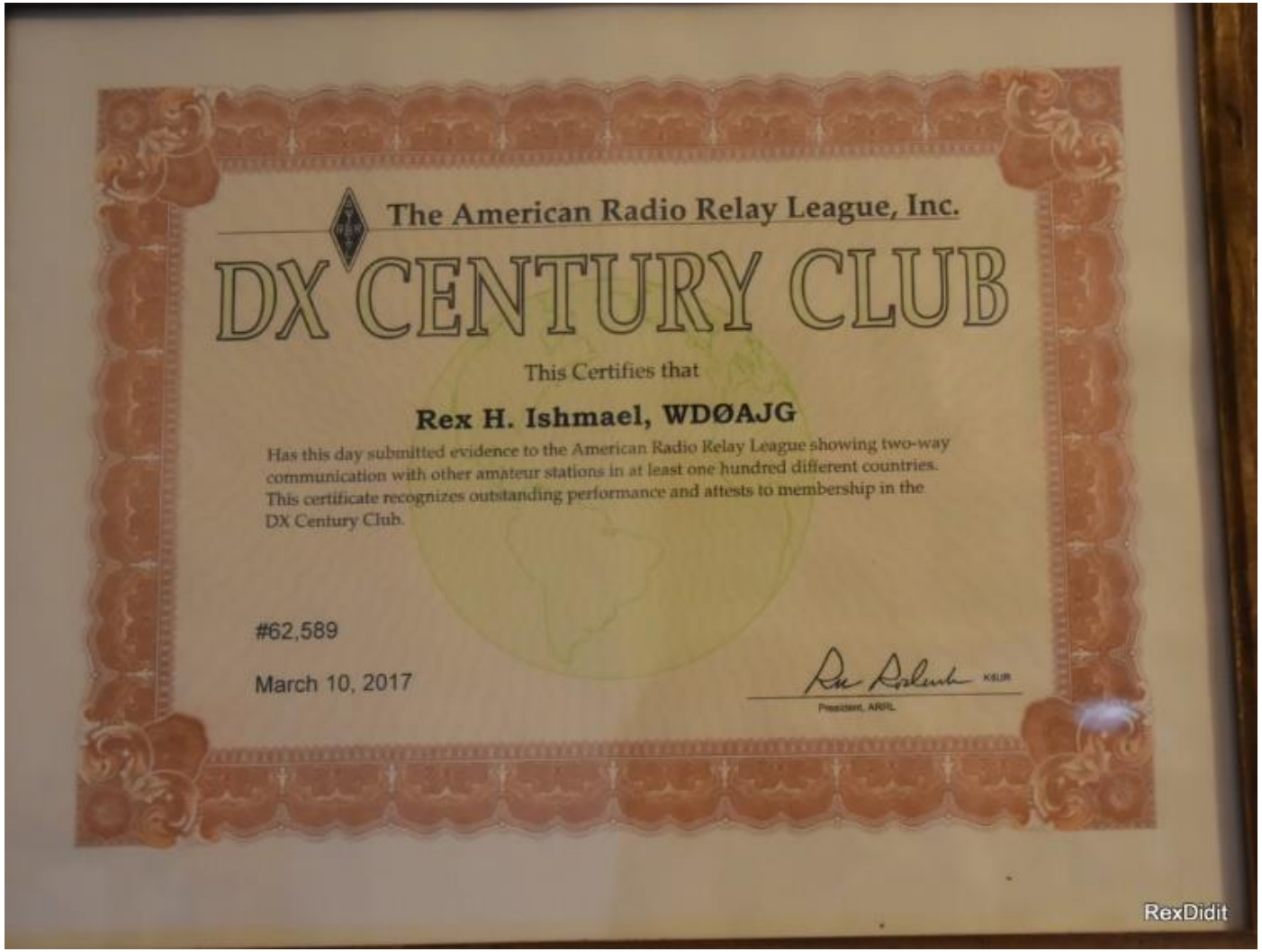
WAS & DXCC Awards

- WAS awards show that you have made a successful contact with other hams in all 50 US states.



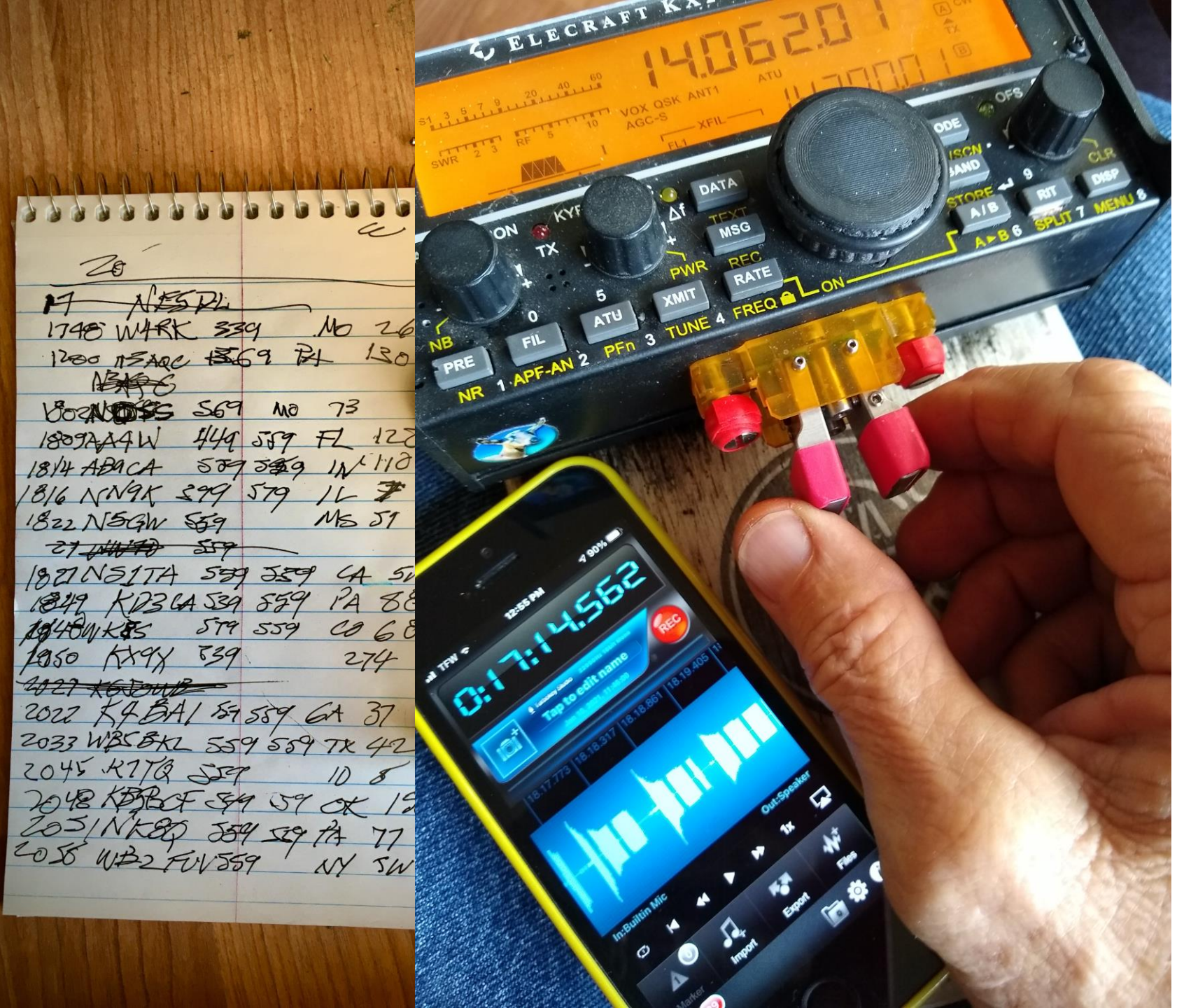
WAS & DXCC Awards

- DXCC Awards



SOTA – Summits on the Air

- Steve WG0AT



SOTA – Summits on the Air

W0TLM Amateur Radio Club

- Log via paper/pencil
- Log with “Recorder Plus” APP on cell

Simple text editor (Notepad) saved as .CSV

FR063 02 21.csv

```
V2,WG0AT,W0C/FR-063,2021-01-10,18:05,7MHz,CW,WB6POT,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:05,7MHz,CW,N5PJ,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:06,7MHz,CW,NW7E,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:06,7MHz,CW,W7HO,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:07,7MHz,CW,K6YK,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:07,7MHz,CW,W0MNA,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:08,7MHz,CW,K0GWR,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:09,7MHz,CW,W0ERI,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:10,7MHz,CW,KR7RK,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:11,7MHz,CW,K7TP,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:11,7MHz,CW,K7MK,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:12,7MHz,CW,W5ODS,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:12,7MHz,CW,AK8A,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:12,7MHz,CW,AC7P,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:13,7MHz,CW,K0LAF,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:13,7MHz,CW,WB7BWZ,,
V2,WG0AT,W0C/FR-063,2021-01-10,18:14,7MHz,CW,WW7D,,
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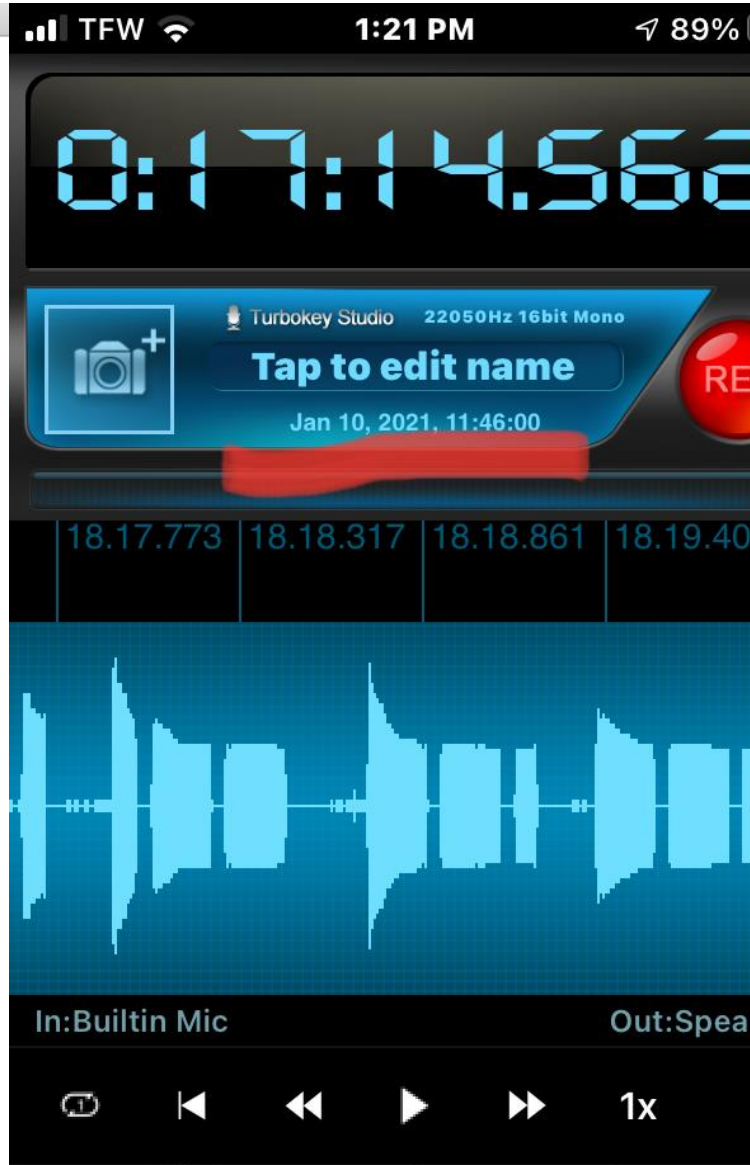
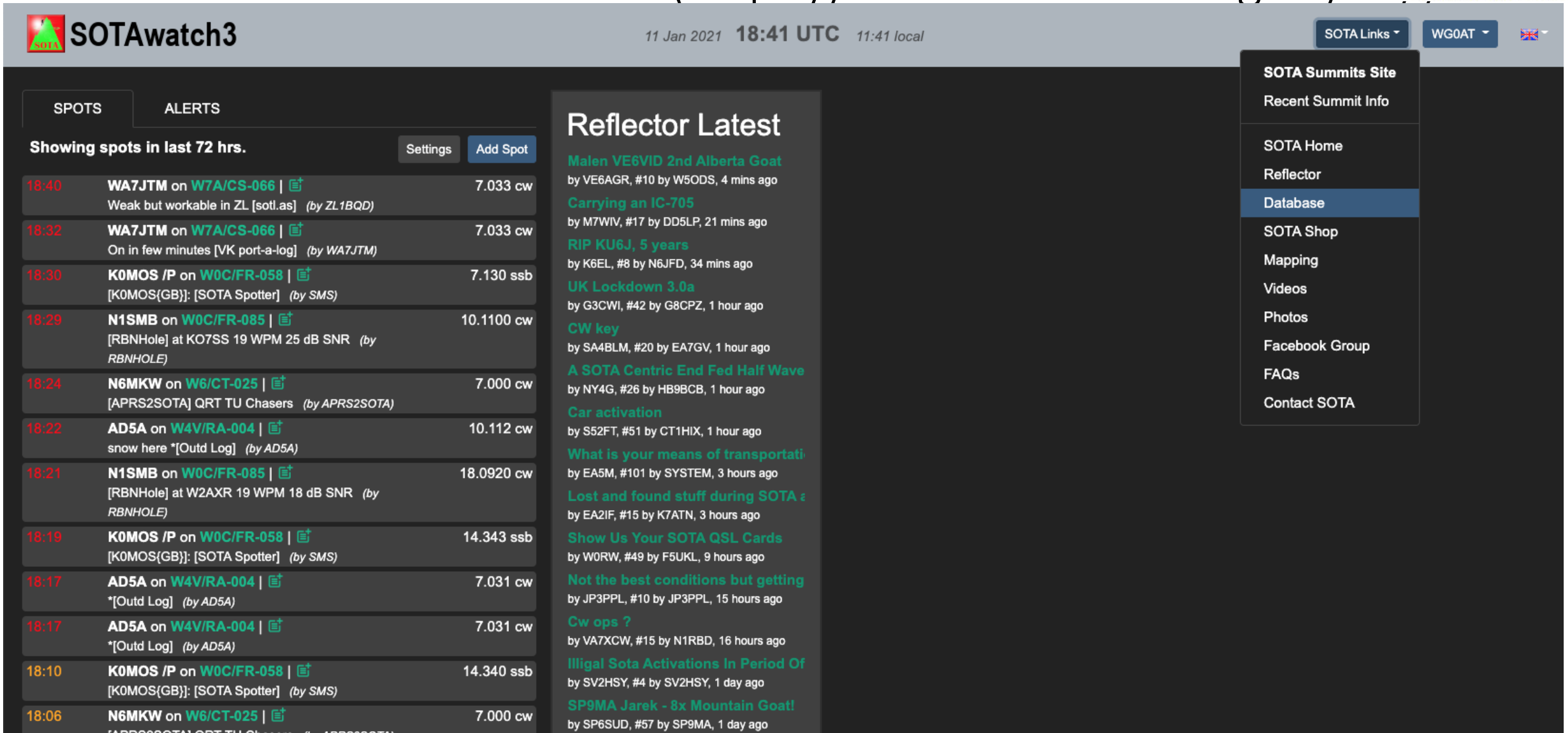
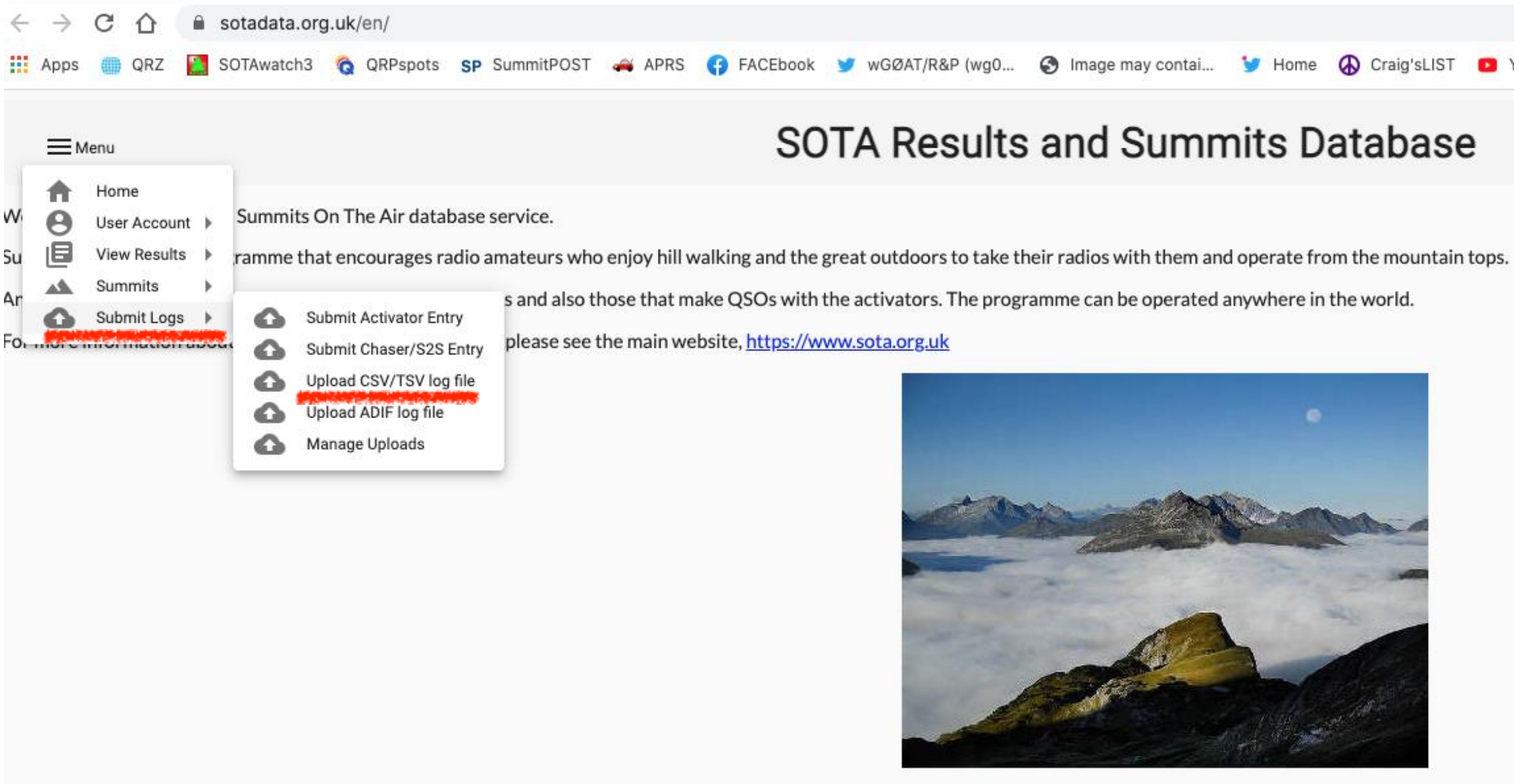


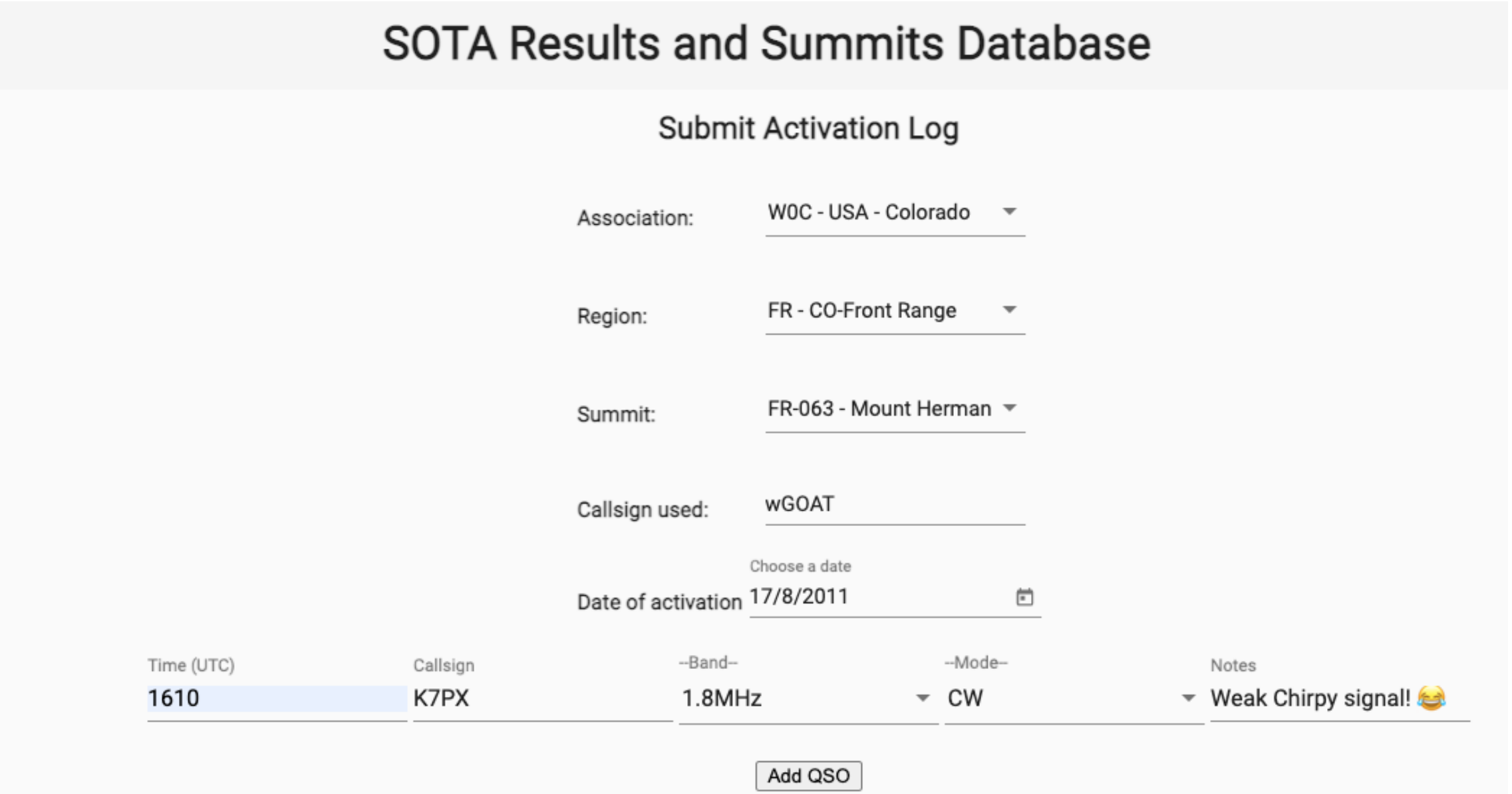
Go to SOTAwatch3 (https://sotawatch.sota.org.uk/en)



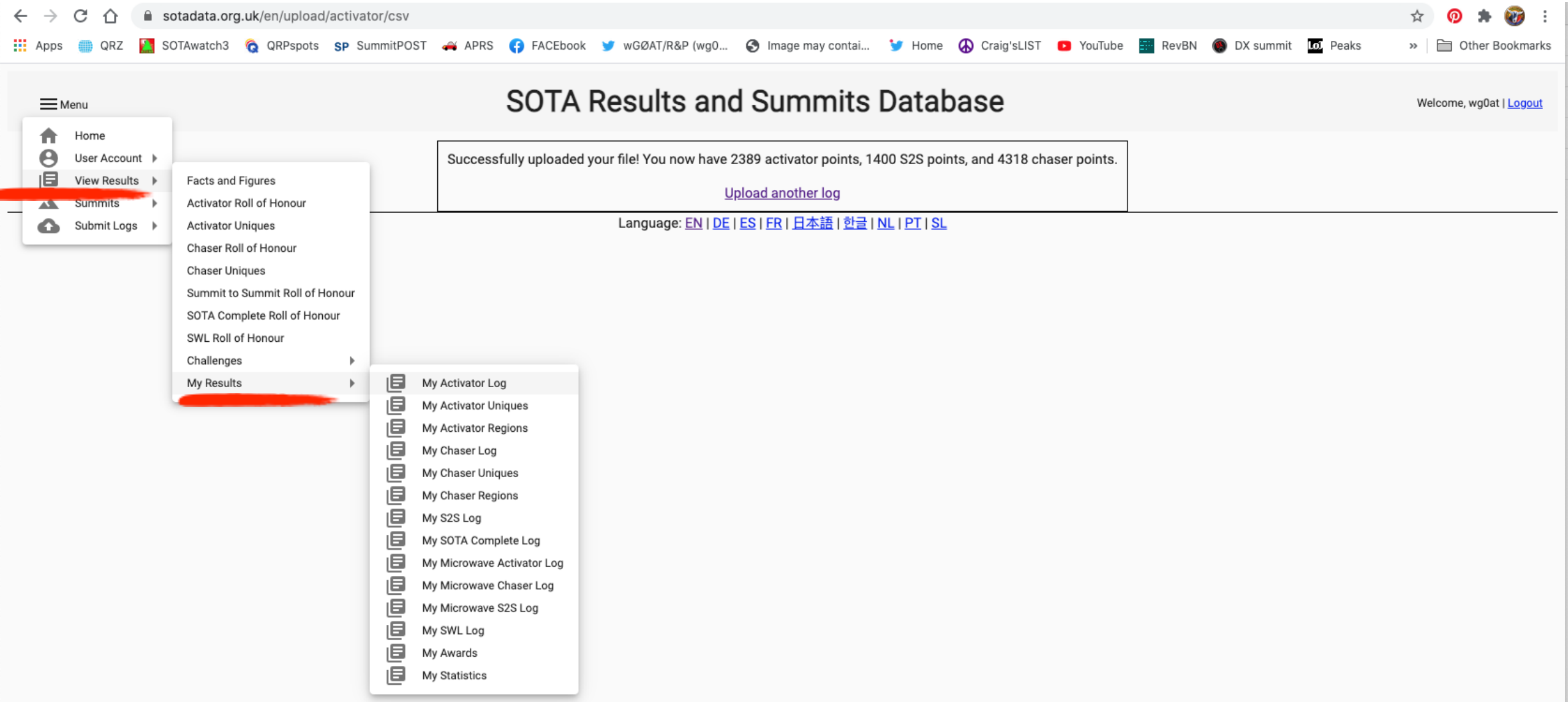
Unload CSV file to the SOTA database



Manual entry - good for several entries



Once uploaded View your Results



SOTA & POTA – Parks on the Air &Contest Logs – Cabrillo Format

- Bob K0NR

SOTA, POTA, Contest Logging

Bob Witte, KØNR
bob@k0nr.com

Tri-Lakes Monument Radio Association
www.w0tlm.com

File Formats

CSV

K0NR_log_20190613.csv - Notepad

File Edit Format View Help

```
Signature,Call (activator),Full Reference (activator),Date,Time,Band,Mode,Call (chaser)
v2,K0NR,W0C/SR-003,07-08-11,15:30,144MHz,FM,N0B,,Steve WG0AT on Handies,10,0
v2,K0NR,W0C/SR-003,07-08-11,15:37,144MHz,FM,WE7C,,Glen - Mt Bierstadt,,
v2,K0NR,W0C/SR-003,07-08-11,15:38,144MHz,FM,KC0VFO,,Terry - east of Parker,,
v2,K0NR,W0C/SR-003,07-08-11,15:40,144MHz,FM,KM5TY,,"Gary near Jefferson, CO",,
v2,K0NR,W0C/SR-003,07-08-11,15:42,144MHz,FM,AC0SZ,,Brian - Mt Sherman,,
v2,K0NR,W0C/SR-003,07-08-11,15:43,433MHz,FM,N0KM,,Dave,,
v2,K0NR,W0C/SR-003,07-08-11,15:53,433MHz,FM,KI7F,,Bill - near Centennial Airport,,
v2,K0NR,W0C/SR-003,07-08-11,15:54,144MHz,FM,KN0TPC,,Randy - Pikes Peak,,
v2,K0NR,W0C/SR-003,07-08-11,15:56,144MHz,FM,N0TDY,,Patty - Pikes Peak,,
v2,K0NR,W0C/SR-003,07-08-11,16:23,144MHz,FM,KI6ASW,,Vincent - Mt Lindsay,,
v2,K0NR,W0C/SR-003,07-08-11,16:23,144MHz,FM,KD0KOB,,Stan - Mt Evans,,
v2,K0NR,W0C/SR-003,07-08-11,16:24,144MHz,FM,KD0MKG,,Mark - Pikes Peak,,
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v2,K0NR,W0C/SR-003,07-08-11,17:33,144MHz,FM,KC0SBV,,,,
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v2,K0NR,W0C/FR-051,15-07-12,22:02,144MHz,FM,N0NKG,,,,
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v2,K0NR,W0C/FR-051,15-07-12,22:09,144MHz,FM,W7RTX,,,,
v2,K0NR,W0C/FR-051,15-07-12,22:21,144MHz,FM,WB9QDL,,,,
v2,K0NR,W0C/FR-051,15-07-12,22:34,144MHz,FM,K0DEN,,,,
v2,K0NR,W0C/FR-051,15-07-12,22:36,144MHz,FM,WX0PIX,,,,
v2,K0NR,W0C/UR-001,05-08-12,15:34,144MHz,SSB,N0KE,,,10,0
```

ADIF

K0NR@K-4404-20210101.adi - Notepad

File Edit Format View Help

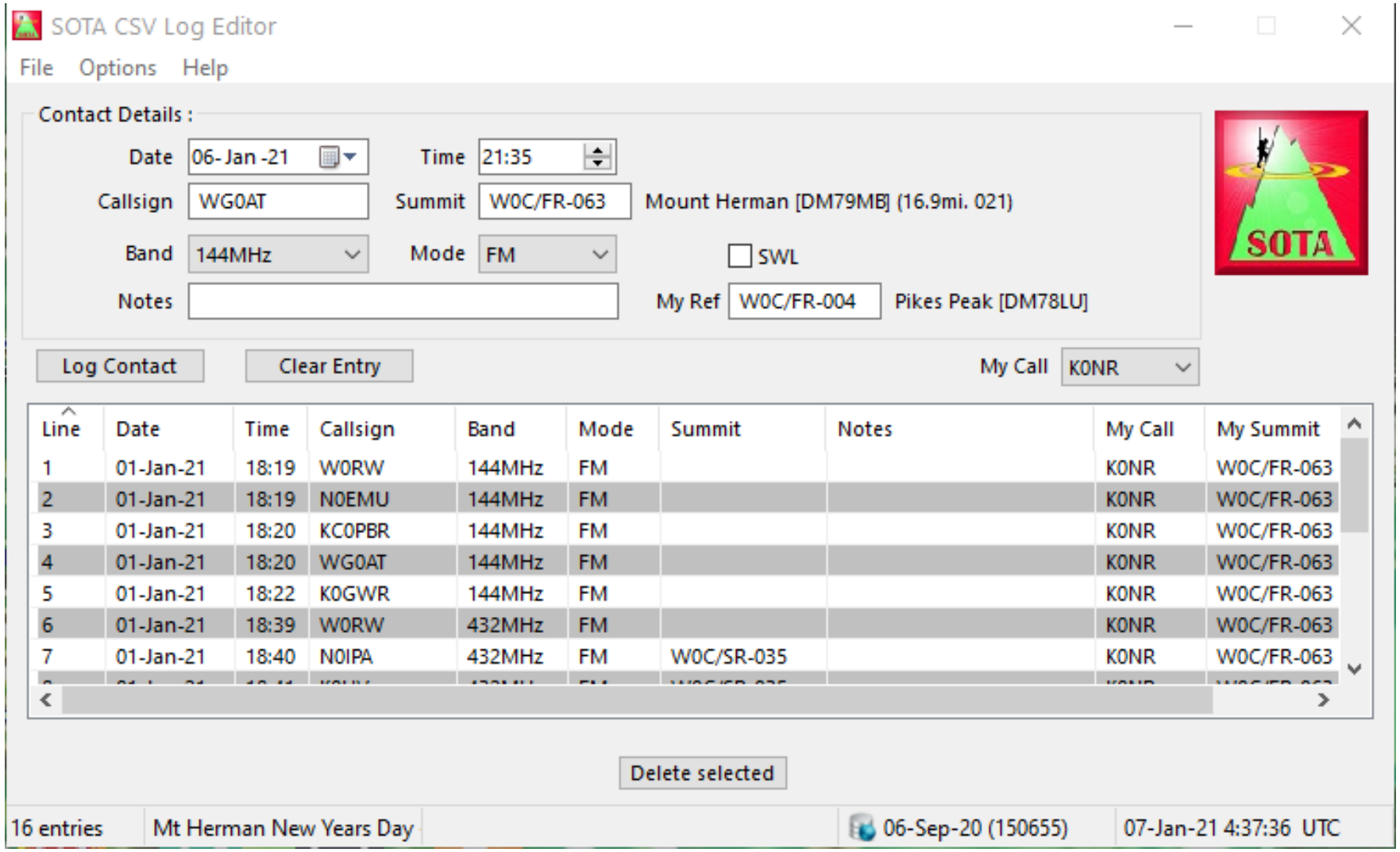
```
Exported by SOTA CSV Log Editor Copyright (c) 2011-2020
<ADIF_VER:5>3.0.4
<PROGRAMID:19>SOTA CSV Log Editor
<PROGRAMVERSION:7>1.5.7.4
<EOH>

<STATION_CALLSIGN:4>K0NR
<OPERATOR:4>K0NR
<QSO_DATE:8>20210101
<TIME_ON:4>1819
<CALL:5>N0EMU
<MODE:2>FM
<BAND:2>2m
<RST_RCVD:2>59
<RST_SENT:2>59
<MY_SOTA_REF:10>W0C/FR-063
<MY_GRIDSQUARE:6>DM79MB
<EOR>

<STATION_CALLSIGN:4>K0NR
<OPERATOR:4>K0NR
<QSO_DATE:8>20210101
<TIME_ON:4>1819
<CALL:4>W0RW
<MODE:2>FM
<BAND:2>2m
<RST_RCVD:2>59
<RST_SENT:2>59
<MY_SOTA_REF:10>W0C/FR-063
<MY_GRIDSQUARE:6>DM79MB
<EOR>

<STATION_CALLSIGN:4>K0NR
<OPERATOR:4>K0NR
<QSO_DATE:8>20210101
<TIME_ON:4>1820
<CALL:5>WG0AT
<MODE:2>FM
<BAND:2>2m
<RST_RCVD:2>59
<RST_SENT:2>59
<MY_SOTA_REF:10>W0C/FR-063
<MY_GRIDSQUARE:6>DM79MB
<EOR>
```

Logging For SOTA



SOTA CSV Log Editor by G0LGS

Windows only

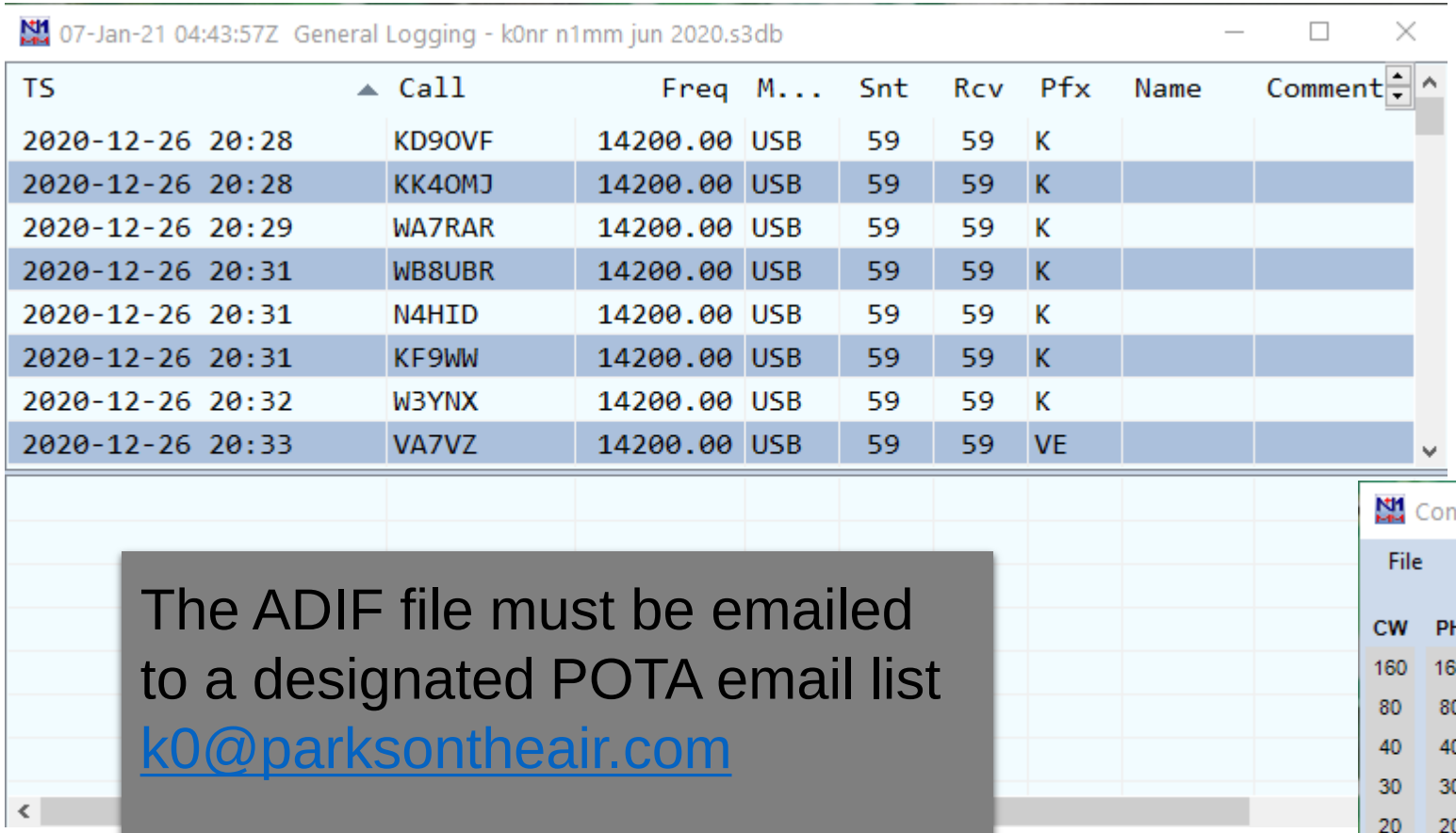
Free software

Aware of SOTA designators

Upload CSV or ADIF file to SOTA database

Can also be used for POTA (generate ADIF file)

Logging For POTA



The ADIF file must be emailed to a designated POTA email list k0@parksontheair.com

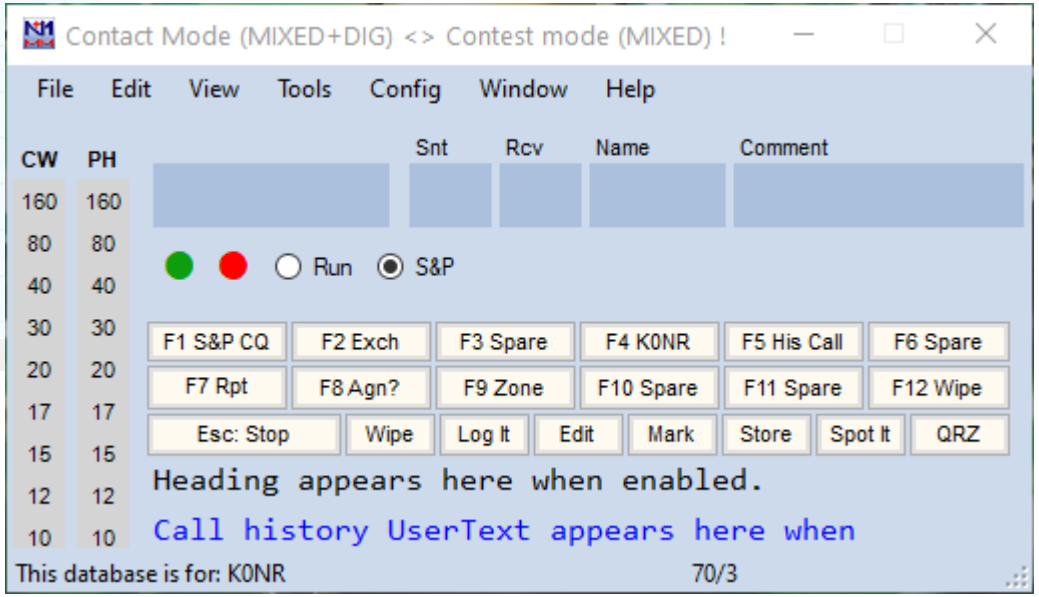
Example of file name format: K0NR@K-4404-20210101.adi

N1MM+ Logging Software

Use “DX” contest

Windows, Linux and Apple OSs

Free software

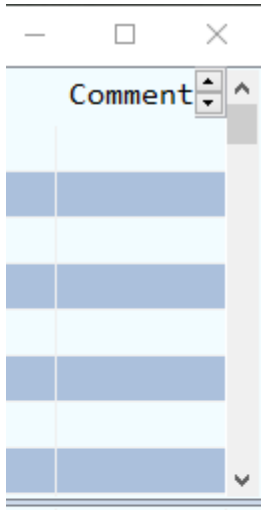


Cabrillo

K0NR.log - Notepad

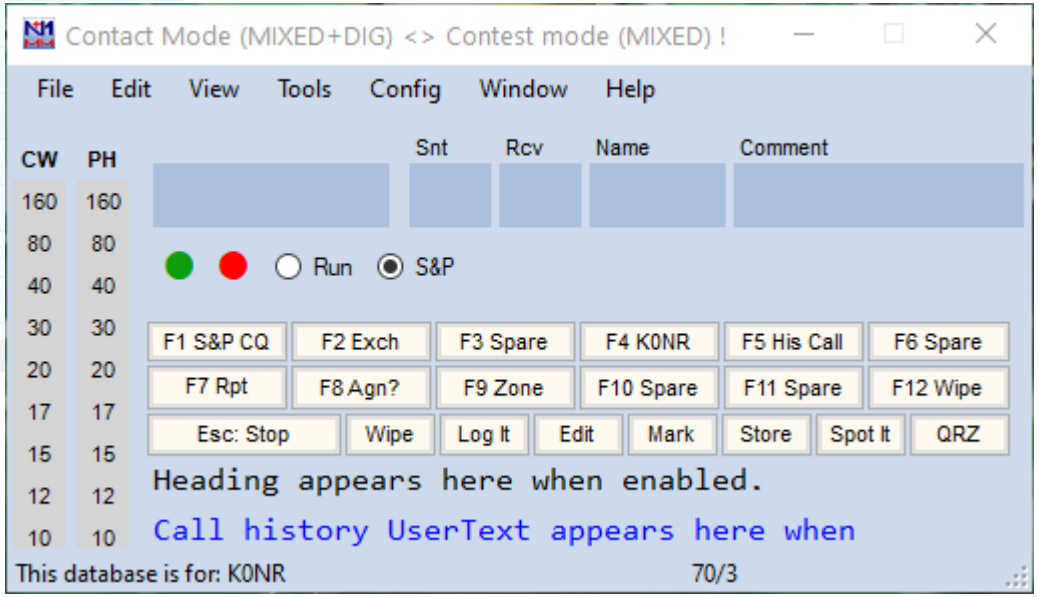
File Edit Format View Help

```
START-OF-LOG: 3.0
LOCATION: CO
CALLSIGN: K0NR
CLUB:  Grand Mesa Contesters of Colorado
CONTEST: ARRL-VHF-JUN
CATEGORY-OPERATOR: SINGLE-OP
CATEGORY-ASSISTED: ASSISTED
CATEGORY-BAND: VHF-3-BAND
CATEGORY-MODE: MIXED
CATEGORY-POWER: LOW
CATEGORY-STATION: FIXED
CATEGORY-TRANSMITTER: ONE
CLAIMED-SCORE: 29606
OPERATORS: K0NR
NAME: Bob Witte
ADDRESS: 21060 Capella Drive
ADDRESS-CITY: Monument
ADDRESS-STATE-PROVINCE: CO
ADDRESS-POSTALCODE: 80132
ADDRESS-COUNTRY: UNITED STATES
EMAIL: bob@k0nr.com
CREATED-BY: N1MM Logger+ 1.0.8465.0
QSO:    144 PH 2020-06-13 1801 K0NR          DM78   W0ETT      DM79
QSO:    144 PH 2020-06-13 1802 K0NR          DM78   AB0YM/R    DM79
QSO:    144 PH 2020-06-13 1805 K0NR          DM78   NC0B       DN70
QSO:    144 PH 2020-06-13 1806 K0NR          DM78   W0ZA       DM79
QSO:     50 PH 2020-06-13 1810 K0NR          DM78   KG5MD      EM36
QSO:     50 PH 2020-06-13 1812 K0NR          DM78   KC5VIJ     DM79
QSO:     50 PH 2020-06-13 1814 K0NR          DM78   AA4ZZ      EM96
QSO:     50 PH 2020-06-13 1814 K0NR          DM78   KZ9O       EM46
QSO:    144 PH 2020-06-13 1820 K0NR          DM78   W0LSD      DM68
QSO:    144 PH 2020-06-13 1821 K0NR          DM78   KC0COU     DN70
QSO:     50 RY 2020-06-13 1832 K0NR          DM78   N4NT       EM86
QSO:     50 RY 2020-06-13 1836 K0NR          DM78   AK4R       EM65
QSO:     50 RY 2020-06-13 1842 K0NR          DM78   KS9W       DM68
QSO:     50 RY 2020-06-13 1847 K0NR          DM78   W4SNA      EM96
QSO:     50 RY 2020-06-13 1848 K0NR          DM78   N4GLE      EM64
QSO:    144 PH 2020-06-13 1850 K0NR          DM78   N6YEL      DM79
QSO:     50 RY 2020-06-13 1850 K0NR          DM78   N4FV       EM86
QSO:     50 RY 2020-06-13 1851 K0NR          DM78   N7KDT      EM64
QSO:     50 RY 2020-06-13 1852 K0NR          DM78   W4FDU      EM65
QSO:     50 RY 2020-06-13 1856 K0NR          DM78   AA4DD      EM86
QSO:     50 RY 2020-06-13 1900 K0NR          DM78   AG4W       EM64
```



N1MM+ Logging Software

Select whatever contest you are participating in

Email the Cabrillo file to the contest sponsor

Can also be uploaded to LoTW but ADIF is better