Logbook of the World (LoTW) availability exceeds our 99% target almost all the time, with network availability being the primary limiting factor. As reported at the end of 2015, the number of issues reported by users and discussed on the Yahoo reflector ARRL-LoTW has been very low, and declining. LoTW continues to grow, with more than 805 million QSOs and more than 92K registered users.

### Availability

LoTW availability continued to be excellent in 2016. As the chart shows, availability has been at or above 99% except for three weeks in the charted period. The chart shows a 14-hour announced unavailability on 13 June for network maintenance on ARRL.ORG. No serious unplanned unavailability occurred in 2016. Long waits for LoTW updating after contests are a thing of the past.

### NPOTA on LoTW

Early 2016 had some rocky patches as the NPOTA event began. But the experience of Sean Kutzko, Norm Fusaro and ARRL IT working on the Centennial QSO Party enabled many possible problems to be avoided. We discovered how difficult it can be to manage data definitions for hundreds of locations, including some which partially overlapped others, but updates were made quickly when discovered. LoTW handled the addition of over 1 million NPOTA QSOs. In keeping with the improved business footing we are establishing for LoTW, we will conduct a P&L analysis of NPOTA, and use it to improve the administration of LoTW and similar programs in the future.
LoTW Second Instance

A key component of modernizing LoTW has been the update of the database and associated tools which run LoTW. A “second instance” has been completed, and is in beta test at this time. Not only does this permit the database engine to be updated, but it will provide a test bed for new LoTW developments without having to make changes in live production. It will also permit capacity testing to be performed offline, as well as provide a live failover capability for the production system.

LoTW & Awards vision exercise

Among the three major objectives in ARRL’s IT initiative, the first is updating the DXCC database. The RFQ for this work was released in October. Back in August, the LoTW group questioned whether any changes would be needed in the DXCC database to accommodate and encourage future LoTW evolution. We realized that our future requirements could only be determined from a strategic vision for LoTW in the next several years, which had not been defined.

A small group met at ARRL HQ on 9 September to develop a 5-year vision for LoTW. It became clear that merely continuing our current approach would ultimately result in other non-ARRL systems overtaking LoTW. The result was a plan for aggressively moving LoTW forward, including the objective of making LoTW at-least revenue neutral.

The EC heard a summary of the plan so far, and gave LoTW permission to continue steps to develop a 5-year plan for the LoTW/Award vision.

Additional award support in LoTW

After some informal communication with JARL, who indicated their interest, LoTW is now ready for beta testing for awards based on Japanese prefectures, etc. In general, adding award support (with associated fulfillment fees) is an important part of realizing the 5-year vision of LoTW enhancement. As reported previously, we continue to discuss these possibilities with other award sponsors.

LoTW Trusted Partners

As noted in LSC’s July report to the Board, we continue to be concerned about third-party services that store users’ secure information to login to Logbook on their behalf. We have developed a document describing the requirements for appropriately secure storage, and sent it to two major online logbooks. One of the two has already committed to implementing the system. Those services following the guideline will be listed as LoTW Trusted Partners.
TQSL

TQSL release 2.3 is now public. A short note in November 2016 QST, announced “Logbook of The World to No Longer Accept Contacts Signed by TQSL Versions Earlier Than 2.0” (p. 91). This reflects the fact that earlier versions of TQSL were much more likely to lead users into difficulty, and did not include the features of the new version which make it both more friendly and less easy to make mistakes. The new release has support for non-English languages, screen reading for low-sighted individuals, and improved dialogs for operations such as requesting a new certificate. The text in TQSL 2.3’s windows, dialog boxes, and error messages can be presented in Chinese, English, French (via Google Translate), Italian, Japanese, German, Portuguese, Russian, or Spanish. The online help incorporated in TQSL is only available in English.

Enhancing LoTW for DX stations

The value of LoTW to ARRL and users alike depends on the number of QSOs available for potential confirmation. This is one reason why users are not required to be members of ARRL in order to upload. More participants in LoTW likewise enhance LoTW’s value. Recently, non-US DXCC card checkers have been allowed to verify DX stations’ credentials. This gives DX stations a way to enroll without having to send documents concerning their licenses, which some stations objected to. While the top tier of DXers probably already have signed up for Logbook, we hope that local language in TQSL and local validation of users will encourage further DX participation.

LoTW Help

An extensive project has been undertaken, principally by AA6YQ, to create Help entries for many common actions and Frequently Asked Questions for LoTW. Besides adding topics to aid users, Dave’s Help project has uncovered outdated or incorrect advice to users, which has been corrected. As the Help files were reviewed, this also led to some simplifications in process, which benefit all users.

In addition to language localization in TQSL, work is in progress to make online Help available in several languages for LoTW itself. "Using LoTW" is available in English, and is currently undergoing translation to Russian; the navigation bar and a core set of topics are now publicly available in Russian. As for other enhancements for DX stations, the goal is to make LoTW easier to use for non-native speakers of English, thereby improving LoTW participation outside the United States. All non-English localizations in TQSL and LoTW have been created by volunteer amateurs.
True cost of LoTW

During our meetings in 2016, the LoTW group has developed a pro forma P&L for the Logbook operation. The Board of Directors had authorized the hire of two full-time programmers on the request of the LoTW committee. Reviewing the costs of LoTW, we discovered that the allocated cost consumed by Logbook is currently about 1.2 FTE, rather than the 2.0 originally applied. Adjusting this cost made a considerable positive difference to LoTW’s pro forma P&L.

Submitted by,

Greg Widin, KØGW, Chair LSC 2016
for the Logbook Study Committee

Members: KØGW, AA6YQ, N1VXY, NN1N, K1MK, K7GM, Doug Haney, K3DGB, N2ZZ, W3IZ, K1MU/4

As of 26 December 2016:

805,619,601 QSO records have been entered into the system.
139,918,203 QSL records have resulted.
  92,021 Users are registered in the system
  136,334 Certificates are active
11,207,704 User files have been processed