LoTW Update—January 2023

Logbook Committee
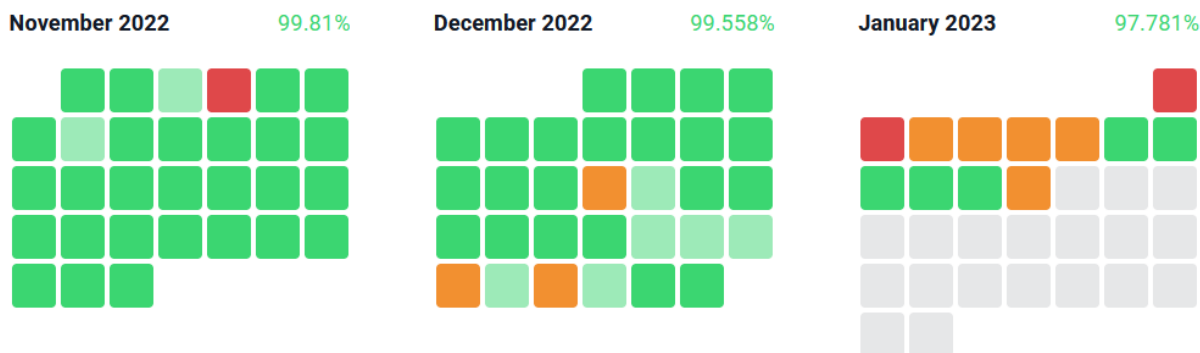

Logbook of the World Status

1,633,601,161	QSO records have been entered into the system.
358,809,461	QSL records have resulted.
166,660	Users are registered in the system
237,938	Certificates are active
66,874,869	User files have been processed

In 2022, Logbook users added over 178 million QSO records, exceeding 2021's addition of 171+ million QSO records. The total number of user files processed has increased by almost 39% since last January, again reflecting uploading smaller updates more frequently. The average number of QSOs per upload was about 9.6, compared to 12.2 in 2021. (status shown—1/7/23; post lockup, following several hours of under 1-minute queues)

Availability

In November, we were able to report that "Logbook availability continues to be excellent, at 99.903% in the last 90 days, still exceeding our 99% goal." That ended after New Year's day, 2023. As 2023 began, Logbook's queue was "stuck", and remained so for several days. It has been identified that a popular application had been inadvertently flooding Logbook's input through requests for users' entire history that were re-issued within seconds if the requests were not fulfilled. Despite the paralyzing effects of this wall of requests, no uploaded logs appear to have been lost, and the queue did successfully clear, following intervention to nullify repeated requests. This occurrence underscores this Committee's many repeated calls over a period of years for active intervention to understand and tame the processes that support Logbook on a daily basis. We emphasize that though normality has been restored, Logbook remains vulnerable, and our call for action is all the more urgent.

We normally report Logbook uptime in percent here, but though it was above 99% for all of 2022–our announced goal—the calendar view from the Logbook uptime robot (at time of writing) clearly shows the early-January event and its persistence.

We also note that the uptime robot is not sensitive to all interruptions in user access, sometimes reporting uptime while users are unable to access the site.

On a daily basis however, aside from major outages, users continue to experience few difficulties, and user questions are answered quickly through Logbook Support and ARRL-LOTW.

Committee Charter

The Logbook Committee was formed by a Board motion in January 2013, and was originally chartered as a "task force" to investigate the meltdown of processing which occurred in the Fall of 2012. The Committee was intended to sunset after its investigation, but turned out to be successful enough at restructuring Logbook's operations that it was continued until the present. The description of the committee, however, has never been re-defined to reflect its new mission.

Accordingly, in Fall of 2022, the Committee suggested a new charter for its activities, and this has been accepted by the A&F Committee, to which it reports. The revised charter is attached to this report as an Appendix. The major changes with this charter are to clarify the committee's specific responsibilities, and clarify that the head of ARRL's IT operations is a regular committee member. IT Director Steve Berry N1EZ has begun attending the committee's monthly meetings. Formerly, the IT Manager attended Logbook Committee meetings, but when this position became vacant, no formal liaison was in place until this update to the charter.

Logbook Hosting

The committee has long supported the transfer of responsibility for hosting Logbook from physical servers under ARRL IT's responsibility to some cloud resources which could also be scalable and reconfigurable as required. Parts of this process have begun months ago, with further progress anticipated.

ARRL IT has quietly been improving the hardware and server setup of those machines which support Logbook. Updates to hardware continue to be made and have speeded up the processing of incoming logs. Director McIntyre arranged for hams who work at VMware to consult with ARRL about server configuration issues. This has helped provide some improvements to our server environment as well as brought us some way closer to eventual virtualization of our servers. None of this changes or improves the underlying software that runs Logbook, however.

2022 Developments to date

TQSL has been updated to 2.6.5. Improvements in 2022 have mostly been to the interface, making it easier for new users especially to successfully make the right choices as they begin to use TQSL and Logbook.

The ADIF standard was recently updated to version 3.1.3, changing some Mode and Submode enumerations that affect Logbook, principally digital voice modes and VARA. We have been working on providing these updates to Logbook as soon as possible, but our limited resources and issues in Logbook's implementation of different mode designations have stalled this effort. Logbook continues its policy of supporting ADIF's representation for all fields it uses. However, as ADIF evolves, this will become increasingly difficult without major re-structuring of Logbook's database schema.

Personify migration

While much of the difficulty surrounding Personify has been remedied, some aspects of Logbook functioning continue to be affected. User interaction with Logbook online was

modified as a result of wholesale changes in the name of security, but changes to non-security items still need to be reversed.

Modernizing Logbook

In the Fall of 2020, this committee proposed that it was time for "Logbook 2.0". The A&F Committee responded that, instead, we needed "Project X" which would modernize the entire ARRL IT ecosystem, including ARRL.org. While the committee agrees heartily that ARRL.org and other ARRL systems need an overhaul, it continues to believe that an update to Logbook could proceed before the overhaul of ARRL.org, and would represent a more manageable task, and provide a blueprint for a larger update. In a year in which ARRL's budget is expected to be in the red, an update to Logbook's UI could be accommodated with less pain, and less drain on the endowment.

Competition

In the absence of ARRL progress in adding awards, other awarders have gained traction. QRZ.com now provides awards that are becoming increasingly popular because they are so accessible. Their awards largely mirror those from ARRL, and presumably compete with them.

In addition, additional awarding organizations are using Logbook for free to have their awards confirmed, taking advantage of Logbook's security and integrity. We have already reported that IOTA is accepting Logbook confirmations. And once again, ARRL and Logbook are having their lunch eaten by others. In particular, JARL is now accepting LotW confirmations; see the Note box at the bottom of:

https://www.jarl.org/English/4_Library/A-4-2_Awards/Award_Main.htm

This is especially ironic since at the time programming support was withdrawn from Logbook, there was a beta version of a utility under test that was intended to support the JARL award.

This is obviously one more missed revenue opportunity.

Communicate, communicate, communicate

As has been observed here before, "In the absence of information, people make things up, and what they make up is always worse than reality." Recent work by W5OV has improved this situation considerably. Bob has alerted the community to Logbook outages or slowdowns even before their effects were observed in the field, and this has not gone unnoticed. In addition, Bob created the groups.io "Feedback to ARRL" list, in which users can raise issues they have encountered, with Logbook or with other ARRL systems. Bob and his staff work to quickly resolve these, and this, too, has met with appreciation.

Submitted by,
Greg Widin, KØGW, Chair 2022
        for the Logbook Committee

Members: K3DGB, N1EZ, K7GM, KØGW, W9JJ, N4MB, K1MU/4, W5OV, W7XM, K6WX, Doug Haney

Appendix —updated charter

Logbook Committee

The Logbook Committee was created in January 2013, as the "Logbook Study Committee" and was tasked at that time with responding to specific operational issues with Logbook, and was intended to sunset after studying those issues. Ten years later, the committee continues to exist, and is more important than ever in its continuing role of monitoring Logbook performance.

There are, however, varying ideas among the Board as to the committee's function and capabilities. The original committee informally included IT as part of its membership, and this was a major benefit in coordinating activities during the Centennial QSO Party, NPOTA and the addition of CQ's WAZ to Logbook's portfolio. This coordination has been lost recently, to the detriment of Logbook's smooth operation and evolution.

As ARRL's second most highly cited member benefit, Logbook's continued smooth operation is critical. The following structure for the Logbook Committee is intended to ensure Logbook's smooth functioning and successful evolution.

Logbook Committee Duties

- Reports to A&F Committee at its quarterly meetings or as requested
- Recommends to the Board items of policy affecting Logbook
- Responds to Board questions regarding Logbook practices and implications
- Acts as a forum for decision making on issues affecting Logbook among Logbook, IT and Radiosport
- Acts as a resource for HQ staff interpreting policy and technical implications of award and contest practices
- Reviews proposed changes to Logbook and provides suggestions and recommendations related to Logbook itself, along with implications for IT and Radiosport
- Monitors Logbook operations; *however, it is* NOT an operational committee—that responsibility lies with ARRL HQ personnel
- Communicates to users via ARRL-LOTW regarding Logbook
- Interfaces to the ADIF (Amateur Data Interchange Format) Committee

Logbook Committee Membership
Members are appointed by the ARRL President as part of the annual committee appointments
Members include—

- Chair
- IT Director
- Radiosport representative (with decision-making authority)
- Liaison to A&F Committee
- TQSL representative
- Others as required