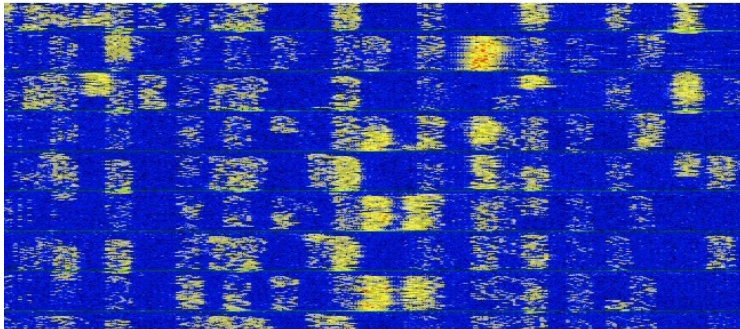
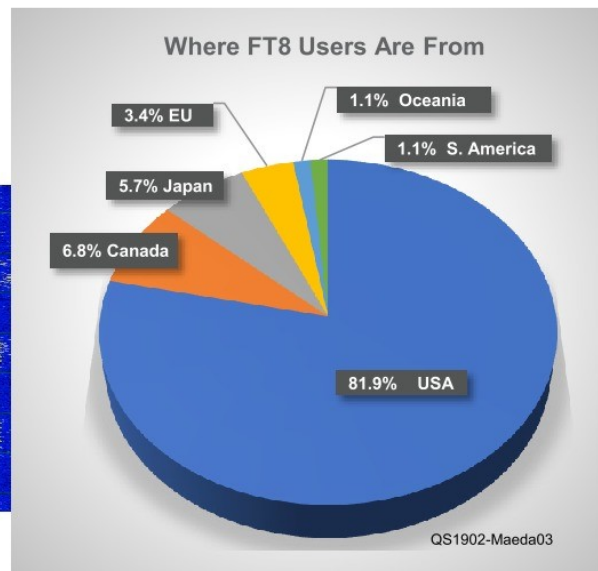


# Who's Using FT8?



An informal look at the demographics of FT8 operators.



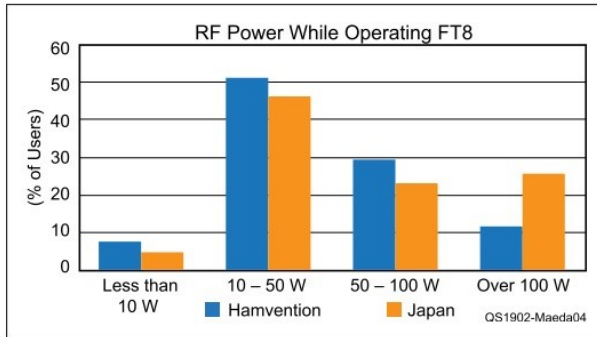
The geographical distribution of FT8 users, as supported by the results of the Hamvention 2018 questionnaire.

## Masaaki Maeda, W2/JR1AQN

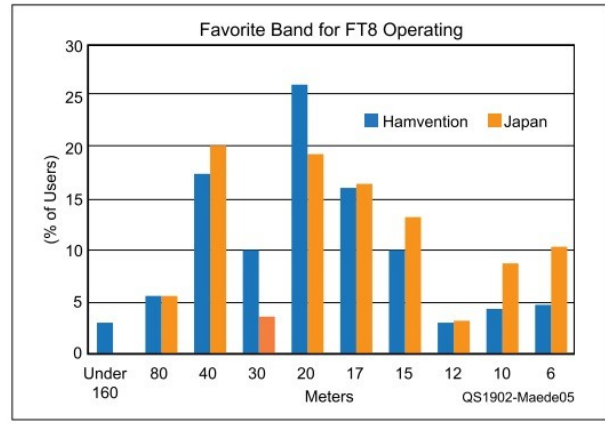
At the 2017 and 2018 Hamvention, we conducted an informal study to better understand the demographics of FT8 operators in Japan and the US. At Hamvention in 2017, we showcased JT65, and in 2018, we presented a real-time FT8 contact. Both demonstrations were met with great enthusiasm, with over 500 attendees to our booth over the course of each event. The purpose of the exhibition was to expose FT8 to those unfamiliar with the mode, and we surveyed current FT8 users with an informal, prepared questionnaire. For comparison, we gathered data from Japanese users with Facebook and a JT65 mailing list. We ended up with 80 US participants, and 100 Japanese participants.



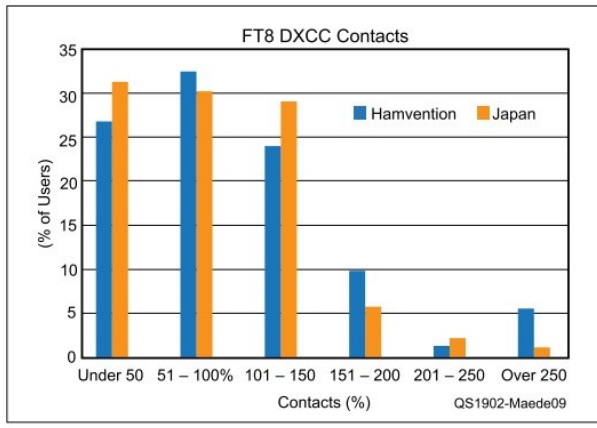
Representatives of the Japan Amateur Radio League, who conducted the informal FT8 study. Left to right: Katsumi Yamamoto, JA1CJP; Nao Mashita, JA1HGY, and Masa Maeda, JR1AQN. [Steve Ford, WB8IMY, photo]



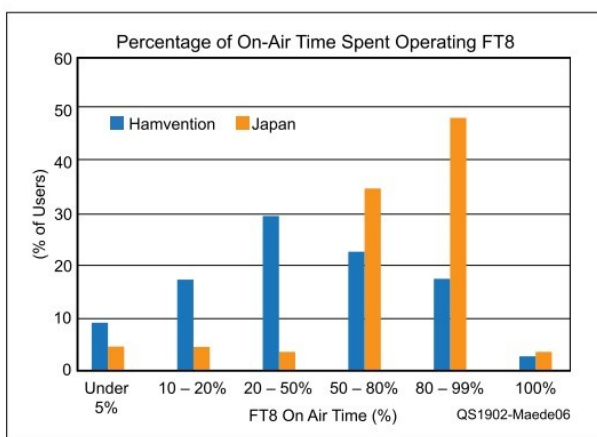
The study revealed an unexpected result in that the number of high-power stations beyond 100 W is rather high in Japan, where interference from neighboring high-power stations causes a serious problem. While FT8 stations are still on the rise, consensus about appropriate RF power is required.



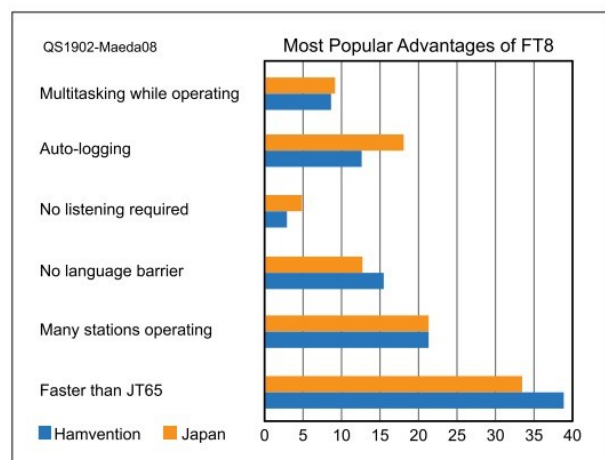
The distribution of users' favorite FT8 operating bands revealed another relatively significant contrast, especially in the gap between US and Japanese use of 30 meters. The fact that there are many high bands overall may be an influence of the housing situation in Japan (low bands require a large antenna). The unpopularity of less than 160-meter bands in Japan, and the popularity of the 6-meter band may also reflect this. (30 and 20 meters are only allowed for Class 1 and 2 license holders in Japan.)



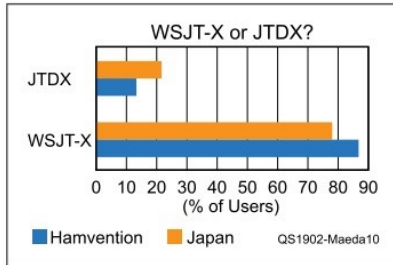
Although it is a new mode that has only been around for 1 year, everyone is actively enjoying contacting DX stations with FT8. Besides the fact that some lucky users are experiencing over 200 contacts with DXCC entities, FT8 is also making it possible for hams who were previously inhibited by location to communicate with foreign countries.



Overall, FT8 takes up the majority of on-air time. At Hamvention, I noticed that many attendees did not think of FT8 as a special mode. By contrast, in Japan, FT8 has a devoted following that almost exclusively uses FT8.



The overwhelming response was that the biggest advantage of FT8 is that it is faster than JT65. Interestingly, in 2017, most users said they didn't use JT65 — even though it had many benefits — because it was too slow, but many hams were drawn to FT8 because of the reduction in the time it takes to make a contact. Another interesting result is that most users in both Japan and the United States agree that FT8 eliminates many issues caused by language barriers, thus leading to a better, more mistake-free experience for both sides.



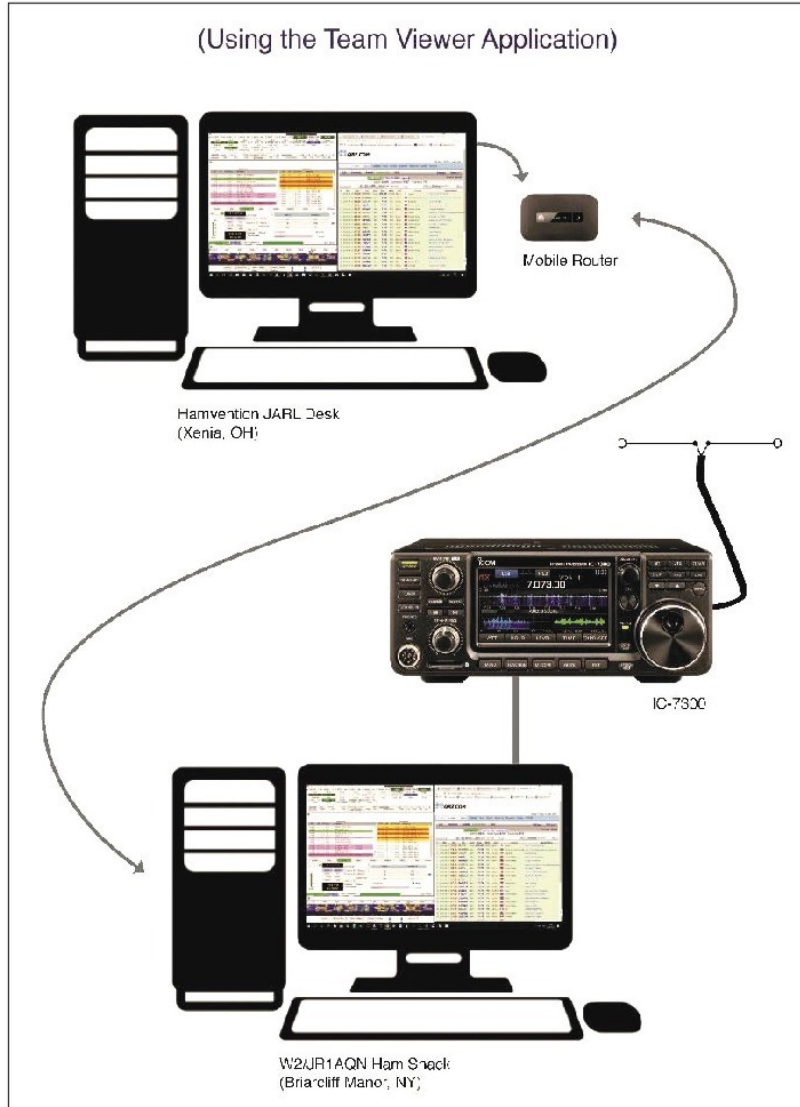
The ratio of the two main software packages used for FT8 are nearly the same in Japan and the United States.

## Conclusion

After examining the results of the questionnaires, I learned a lot about the experiences of FT8 users and how the attitudes and operations compare between the US and Japan. In comparison to last year, there was more enthusiasm about FT8, and it was no longer seen as a minor mode. With this major popularity increase, questions such as appropriate RF output must be discussed, and I hope to contribute to the continued development of FT8.

Masa Maeda, JR1AQN, has been licensed since 1969. With an MBA from MIT Sloan School of Management, he's spent 15 years working as a Senior Vice President and President & CEO for NTT DOCOMO USA, Inc., a subsidiary of Japan's largest mobile operator. He is interested in HF digital modes, such as RTTY, PSK31, JT65, and FT8. He is a core member of [JT65-DX.com](http://JT65-DX.com), a club dedicated to the weak-signal mode in Japan. Masa is an active article writer for *CQ Ham Radio*, a magazine in Japan, and he reports on US ham activities. You can reach Masa at [maeda@sloan.mit.edu](mailto:maeda@sloan.mit.edu).

For updates to this article, see the [QST Feedback](http://www.arrl.org/feedback) page at [www.arrl.org/feedback](http://www.arrl.org/feedback).



The FT8 system configuration for the Hamvention 2018 exhibition, during which the FT8 contact was transmitted directly from the venue, but remotely operated with a transceiver at a shack in New York.

## Feedback

In "Hints and Hacks" in the December 2018 issue of *QST*, Paul Dobosz, K8PD, described a circuit to allow the use of dynamic microphones with transceivers that require electret microphones. The schematic diagram in Figure 3 omits a resistor that needs to be included in series with the collector of the transistor (Q1), prior to the junction of R1 and C2. Adding a 1.2 or 1.8 k $\Omega$  resistor in series replicates the power supply impedance that the preamp was designed for. In addition, the captions of Figures 2 and 3 make reference to "phantom power." The correct terminology is "plug-in power."