Preparing for the 2019 National EAS Test

The next national test of the Emergency Alert System is scheduled to happen on Aug. 7 at 2:20 p.m. EDT, almost two months earlier than last year's national EAS test. (In case of severe weather or other extenuating circumstances, FEMA has a backup test date of Aug. 21.) If you have not already done so, now would be an excellent time to cross key items off your readiness checklist.

Intro

The 2019 test will be disseminated via the EAS broadcast-based "PEP" system and not the internet-based IPAWS CAP system as it was last year. FEMA is returning to the broadcast-based test this year to help FEMA and the FCC further assess how the national EAS would function if activated. Testing the broadcast EAS relay is highly appropriate, as an actual national emergency could well occur when the internet and other forms of communication technologies are unavailable or otherwise compromised.

All broadcast and cable operations must participate in national EAS tests, otherwise known as a National Periodic Test (NPT). There is no "opting out" of National Periodic Tests or of Emergency Action Notification (EAN) transmissions. In addition to operational participation in the test, the FCC also requires broadcasters and cable operators to file several related forms online. In 2018, approximately 76% of EAS participants filed the required reports in the FCC's Electronic Test Reporting System. It's unclear why almost a quarter of broadcast and cable entities did not file, but is it is possible that they were unaware of the FCC's ETRS filing requirement.

Two months ago, the FCC released its assessment of the 2018 national EAS test. Across all broadcast and cable operations that filed test reports last year, almost 96% successfully received the test, with about 92% successfully retransmitting it. The FCC report noted that the main problems that surfaced in the 2018 test included audio quality issues, equipment misconfigurations, out-of-date software, and device failure.

The Paperwork

If you haven't already filed "Form One" on the FCC's ETRS site, keep in mind that this first form was due by July 3. Form One covers your EAS equipment status. On Aug. 7, you must also file "Form Two" to track how the system performed on the day of test. Finally, by Sept. 23, you'll need to file "Form Three," which would cover additional detail on any test issues or failures.

Revision: 1.0   Publication: FSBDAS-7119

Prepping for the Test

Next, it is essential that you ensure your station's EAS equipment can receive and process the National Periodic Test code and otherwise comply with FCC regulations. For the uninitiated, the National Periodic Test code will use the national FIPS location code shown as six zeroes on your screen.

As you prepare your gear, it is smart to update your EAS equipment software and firmware to the most recent versions. In addition, you should manually synchronize your EAS equipment clocks to the official time recognized by testing entities, in the event your equipment doesn't otherwise synchronize the time.

The FCC 2018 test report provides a number of specific items that can easily be addressed.

- Over 500 EAS participants reported "equipment failure" last year. While it might seem obvious, a fundamental step is to check whether your EAS equipment is powered on and operating. As an EAS manufacturer, there are few things more dismaying than the panicked call the day before a national EAS test (or even the day of the test) asking for replacement of an EAS device that is not functioning.

- Over 200 EAS participants reported having a "monitoring source failure." For this year's broadcast-based test (and as a matter of general system readiness), you should ensure that your EAS radio monitors are tuned to the appropriate monitoring sources as per your state or local EAS plan. Are you tuned to the right Local Primary, State Relay and/or Primary Entry Point sources?

- Software issues were also a big pain point for over 200 EAS participants. For Digital Alert Systems/Monroe Electronics EAS devices (DASDEC™ and One-Net™), be sure you are operating with at least version 3.0. (Note: If you are operating with version 2.x or earlier, you really need to upgrade to version 4.0).

- Proper equipment configuration is also a major item to check going into this test. Digital Alert Systems provides numerous resources on its website regarding DASDEC/One-Net configuration. However, if you are operating v 3.0 or v 4.0 software, there will be little you need to do aside from tuning to the right EAS monitoring sources and configuring your device outputs to whatever audio/text/video systems your particular system is using downstream. With v 3.0/v 4.0 software, the device will automatically transmit a National Periodic Test upon receipt, as specified in the FCC's rules.

- One configuration issue worth mentioning separately is system clock errors. If you are using NTP timing on a DASDEC or One-Net device and are syncing over the internet, you should have no issues. However, it's not a bad idea to double check during your configuration review to be sure the device is actually synced to the right time — including the proper time zone.

Among issues that are outside or your control (and ours) are items such as:

- Poor audio quality. There's little we can do if the audio is degraded upstream of you during the EAS transmission, as has happened in the past. If it happens, report it on Form Three.
- Power outage. This is not a likely scenario if you have proper power backup for your facility (though there were several reports of power interruption that took a station's EAS device offline). Check those power backups!
- "Equipment struck by lightning" was another item mentioned in the 2018 report. Preventing such a problem would seem to fall under the very first point about checking to see if your EAS device actually functions.
- The 2018 report also mentioned other odd and sundry issues that might or might not fall under your direct control. One of our favorites was a report of owls (possibly a protected species) nesting in the station's monitoring antennas … which apparently interfered with the station's EAS reception for a previous test. Again, see the first point.

Conclusion

The national EAS test is fairly routine occurrence at this point and should be an unremarkable EAS event requiring minimal care and preparation. Double check that your EAS equipment is installed, operating, tuned to the right EAS monitoring sources, and is up to date with the latest software from your EAS manufacturer. Also check to see if you have a copy of the EAS Operating Handbook at the ready, which helps outline EAS procedures. And review those EAS procedures – as necessary – with staff, including a review of what things to touch – and not to touch – during the national EAS test.