

Denial of Service

As we were wrapping up this issue in late October, a coordinated cyber-attack effectively shut down several major websites, such as PayPal and Twitter, in the population centers on the U.S. east and west coasts. At this writing, it was not yet clear who was behind the attack or what their motives were. But three things became very clear very quickly:

- The attack did not focus on specific websites but rather on the infrastructure of the internet itself, targeting routing centers (one in particular) with what's called a distributed denial of service (DDOS) attack, in which huge numbers of computers make website requests at the same time, slowing throughput on the 'net to a crawl or a full stop;

- The main culprits in this attack were not traditional computers, but rather other devices that are accessed and controlled via the internet. These so-called "Internet of Things," or IoT, devices include "nanny cams," remotely-operated thermostats, garage door openers and yes, remotely controllable ham rigs. Millions of these devices had been hacked without their owners' knowledge and infected with malware that was signaled to activate at a specific time to request access to certain websites. A torrent of simultaneous requests caused the routing centers to crash.

- We can help with critical infrastructure backups in similar attacks in the future (and there *will* be similar attacks in the future), but we must begin to prepare now. Ham radio emergency communications groups need to begin looking beyond FM voice to quickly-deployable ad-hoc "MESH" data networks that can provide backup digital connectivity between critical sites in the event that standard internet pathways are clogged or down. More and more public safety agencies are becoming (overly) reliant on internet links to route 911 calls, connect dispatch centers with remote radio transmit/receive sites, and provide data links between agencies. If we can offer flexible and quickly-deployable backup pathways between these locations, we can tremendously increase our value to these served agencies. We can enhance it even more through regional or statewide coordination that will allow us to provide data as well as voice links between neighboring agencies, or between local/county and/or county/state emergency management centers. See this past October's Emergency Communications Special for examples of how some amateur radio EmComm groups are already adding broadband connectivity to their toolkits.

Technology Special

Of course, there's much more to ham radio technology than what we can offer in terms of emergency communications, and the variety of ways in which we interact with technology is the focus of this month's Technology Special. In this month's article lineup, we've got old and new, basic and advanced, hardware and software, building and operating, theory and practice. We look at antennas and receiving techniques for our soon-to-come 630-meter band, using a

single-chip FPGA (Field Programmable Gate Array) as a repeater controller, and have two articles on software-defined radio. We also go back in time to Novice rigs from 50-60 years ago (including building one today from plans of yesteryear), offer troubleshooting tips from Sherlock Holmes himself and much more.

Plus, if you're not feeling too "techy" right now, we start the issue with a report on a mini-DXpedition to Bhutan and look in on a special event station celebrating the Navajo code talkers of World War II. As usual, we try to have something for everyone in every issue of CQ.

Election Drama Down South

This has nothing to do with the general election, which was still two weeks away when this was written and will (hopefully) be decided by the time you read this. No, this is about the election for director in the ARRL's Southeastern Division, or rather, the non-election. In a very unusual move, the ARRL's Elections and Ethics Committee disqualified an incumbent director from seeking re-election, and what made it even more unusual was that the decision was made well after the committee granted routine approval for his candidacy and announced the election. What was not unusual was the way in which the process played out, in secret, with very little information provided to the members.

Back on August 25, the ARRL announced upcoming elections for director in the Southeastern and Rocky Mountain Divisions. In the southeast, the announcement said, "former Director Greg Sarratt, W4OZK, will attempt to regain that position from sitting Director Doug Rehman, K4AC ... Ballots and candidates' statements will go out to members eligible to vote ... no later than October 1, 2016, with a return deadline for completed ballots of November 18."

Then, on October 6, five days after the voting period began, the League issued the following very brief announcement: "Greg Sarratt, W4OZK, has been declared elected as Director of the ARRL Southeastern Division, to take office at noon Eastern Time on January 1, 2017."

Huh? What happened to the election? As usual in ARRL politics, there was a lot more than meets the eye going on here. Based on what we can determine — and there are conflicting accounts, of course — the board's Elections and Ethics committee voted to disqualify Rehman on the basis of actions he took following the announcement of the election, a decision that was subsequently ratified by a majority of the full board of directors. The specifics appear to be subject to interpretation, so we won't get into them here, but actually, the specifics are irrelevant in this case. What is significant is the procedure.

The cornerstone of Doug Rehman's initial campaign and of his time on the League board has been to push for greater openness and transparency in the ARRL's decision-making process, something we have been promoting for years (decades?). He even proposed making the board meetings available to members via live streaming over the internet.

What is amazing here is that the process by which Rehman was disqualified from seeking re-election

*e-mail: <w2vu@cq-amateur-radio.com>

proved his point about excessive secrecy in the League's decision-making process. The members in his division not only were not informed of the reasons for his disqualification, they weren't even told he'd been disqualified! Just a one-sentence announcement less than a week into supposed voting that the incumbent director's opponent had been declared elected. By whom? Certainly not the members. How? Unspecified. Why? None of your business.

When I tried to get more details, I was

told it was "a personnel matter." Wrong. A League director is not an employee; a League director is an elected representative of the members. And if the board is taking the extreme step of taking away the members' right to vote for their representative, then the least it can do is provide an explanation and not hide behind "a personnel matter."

Regardless of what Rehman may or may not have done in the current situation, he is on target that the League operates with far too much secrecy. It is the only membership organization we

know of that routinely prohibits members from observing board meetings, and now it has even taken away the members' right to vote in its most populous division. You might call it a denial of service. The members need to demand change now.

On a more pleasant note, all the best to all of you from all of us for a Merry Christmas, Happy Hanukkah, solstice celebration or whatever other holiday you may observe as we seek to add light to our short winter days.

– 73, Rich, W2VU
