



Congress Supports GPS-Backup System, Russian Satellites Fail

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Fairfax, VA (April 4, 2014) – Resilient Navigation and Timing Foundation announced that just hours after the US House of Representatives passed legislation Tuesday to preserve infrastructure that could support a back-up system for GPS, the Russian GLONASS satellite navigation system unexpectedly went out of service for 11 hours.

On Tuesday afternoon, the first of April, the House passed the 2014 Coast Guard Authorization Act requiring the Department of Homeland Security to halt dismantling and disposal of infrastructure that could be used for a terrestrial system during times and in places where GPS is not available. The Department had announced in 2008 that it would build such a system. It never did so, and has recently begun divesting needed equipment and properties. This, in spite of a long standing presidential mandate for a system that could be used for critical infrastructure and applications in the event of a GPS outage.

Some media reports link the 11 hour failure of the GLONASS system, Russia's equivalent of GPS, to a solar storm that struck at about the same time. Others have speculated that it was cyber-attack, though most reports indicate that it was probably due to bad data being uploaded. In April of 2010, a single satellite in the US Global Positioning System failed to respond to commands after a solar flare. This is the first time an entire constellation of navigation satellites is known to have failed.

Congress has lately become more visibly concerned about the vulnerability of the nation's space systems. Late last year the 2014 National Defense Authorization Act tasked the administration with reporting on how it was going to provide necessary national security capabilities when space systems were disrupted. More recently, Congressman Duncan Hunter (R-CA), chair of the House Coast Guard and Marine Transportation Subcommittee, held a hearing at which he expressed his concern that the nation has no back-up for GPS. He also expressed his frustration with the Department of Homeland Security saying "They said they need to do a study about their study." Congressman John Garamendi (D-CA), ranking member of the committee, commented "GPS will go down one day... the question is, is there a backup..?" The legislation passed by the House was a result of Congressman Hunter and Garamendi's efforts. It also authorizes DHS to partner with public or private entities to build a system that would not only backup GPS, but also work indoors, underground and underwater.

According to Mr. Dana Goward, President of the non-profit Resilient Navigation and Timing Foundation which tracks these issues, such a project would be relatively inexpensive. "If the existing equipment and infrastructure are preserved and reused, the system could be restored and put into operation for less than half the cost to dispose of it" Goward said. "It isn't an issue of money, it is one of the government taking this problem seriously and acting on it." The foundation has as offered to partner with the government to build the system.

"Our government has known about this issue for a long time," Goward said. "At least since 2001. And there has been a standing presidential direction to obtain back-up capability since 2004. But for some reason, it hasn't yet happened."



About Resilient Navigation and Timing Foundation

The Resilient Navigation and Timing Foundation (www.rntfnd.org) is a Virginia 501(c)3 scientific and educational non-profit dedicated to:

- Educating the public and leaders about the importance of navigation and timing signals, as well as the need for resilience
- Supporting stronger laws and better enforcement to combat jamming and spoofing
- Supporting establishment of a strong, difficult-to-disrupt terrestrial signal to augment and be used alongside GNSS

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