

WEBSITES TO WATCH #6
6 January 2018

Readers are invited to take a look at the website of the Resilient Navigation and Timing Foundation (RNTF, a Corresponding member of the IAIN) to be found at: www.rntfnd.org

There can be found regular news and a valuable blog contributed to at regular intervals.

For example, attention is drawn to concern among many in the field at the lack of discussion and effort on GPS/GNSS receiver resilience to software attacks. Readers and contributors are invited to indicate links to publicly available work in this area.

See also:

<https://rntfnd.org/2017/12/19/gps-software-attacks-renewed-interest-and-concern/>

Furthermore, there is concern expressed in the RNTF over the fact that the drone counter-measures industry includes GPS jamming in its equipment and yet there is no system to detect disruptions nor is there a central repository for disruption reports. The RNTF proposes an action plan to stop jammers or to protect users. Given such a lack of attention it is no surprise that businesses feel safe, touting products and features that are illegal in the USA and many other countries.

See also:

<https://rntfnd.org/2018/01/04/dont-like-drones-use-our-product-to-jam-gps-no-one-is-paying-attention/>

After the US Air Force made a minor software update to the GPS on 21 September last it received reports that several thousand receivers had been affected and it was subsequently learned that most of these were in first responder systems used in Japan and the Republic of Korea.

It is understood that the USAF provides manufacturers and users with a regularly updated GPS Interface Specification. This describes current and potential characteristics of GPS signals so that manufacturers can design equipment to receive and use them. However, manufacturers are free to design and build their equipment as they wish. If a design considers only the characteristics of the current signal, future changes to the signal, even though

they are in accordance with the published specification, can result in the receivers malfunctioning.

See also:

<https://rntfnd.org/2017/12/22/thousands-fail-after-air-force-gps-change-receivers-did-not-comply-w-specification/>

Receiver resilience

GPS/GNSS receiver resilience has been a topic of discussion within the technical community recently. A workshop is planned in Washington, DC for April. The workshop will be the subject of an open meeting on 30 January 2018 at the PTTI Conference in Reston, Virginia.

See **<https://www.ion.org/ptti/>**