

# w o r l d report

## REPORT FROM EW LIVE REAL-WORLD TECHNOLOGY DEMONSTRATION

Undeterred by real-world weather conditions, the “2019 EW Live” electronic warfare (EW) equipment exhibition and live demonstration event was held from April 9-11, in Tartu, Estonia. Estonia is directly south of Finland (across the Gulf of Finland); with the Vainameri (Baltic) Sea bordering it to the west, Latvia to the south, and Russia to the east. So, while it may not be one of the most generally-familiar countries in the world, in terms of its location in the new Eastern Europe, it’s definitely in a strategic location.

Relative to this, and pointing out Estonia’s position as one of the world’s most digitally-advanced societies, and in particular, its focus on the rapid development of its IT and cyber sector, Major General Indrek Sirel, Deputy Commander, Estonian Defence Forces, opened EW Live exhibition, noting that, the opening of the Cyber Security Exercises and Training Centre CR14 and the NATO Cyber Range Capability, was held the previous day in Tallinn, Estonia, the country’s capital. “The digital world doesn’t recognize national borders,” he stated, “and it’s very important that we share our knowledge and experience, and that we merge them together, so that we are stronger when it comes to confronting future threats.”

The 2019 EW Live event built upon the experience and success of the inaugural event, which was held in the fall of 2017 in Tartu. Sponsored by the Republic of Estonia Ministry of Defence and the Estonian Defence Industry Association, and organized by Tangent Link (Slough, UK), EW Live is unique in that it features live demonstrations of EW and SIGINT equipment and systems in an actual field environment.

With the theme, “Delivering Knowledge Through Demonstration,” the 2019 event provided a “live COMINT & ELINT threat spectrum setting presenting the

threat context to current and new types of EW operational equipment.”

Unlike most industry trade events, EW Live is organized around “delegations” of attendees representing individual countries. This year, there were more than 280 attendees representing 23 countries and organizations, including (in no particular order) Estonia, Turkey, Latvia, Hungary, Singapore, Poland, Indonesia, Croatia, Czech Republic, France, Italy, Switzerland, Germany, Spain, Algeria, Morocco, South Africa, Bahrain, Saudi Arabia, Lithuania, Finland, Norway, Sweden, Taiwan, the USA, Canada, the UAE, the UK and NATO. *JED* was the official media partner and attended classroom and field demonstrations as a mixed-nation delegation representing the AOC.

The event was held at the Tartu Airport with the industry exhibition stands in the facility’s main hangar, while the live demonstrations were set up in the area outside the hangar, in classroom space provided by the co-located Estonian Aviation Academy, and at remote tented and heated areas sited within the boundaries of the Tartu airfield.

In addition, a highlight of this year’s event included two days of live counter-drone technology demonstrations. Due to concerns over openly radiating jamming signals aimed at the drone’s WiFi control links and GPS receivers, these were held at the Estonian MOD Defence League’s Utsali Shooting Range in Kirma, Estonia (approximately 20 minutes from Tartu Airport). In total, the event’s nearly-30 participating companies conducted more than 230 live demonstrations over the three-day experience. Participating companies included Allen-Vanguard, AP-Flyer, Battlespace Simulations, Chemring Technology Solutions, COMINT Consulting, Communications Audit, CRFS, Decodio, Exfo Homeland Security, Glenair, Hidrolab, Invisible Interdiction, IZT, L3 TRL Technology, National Instruments,

Novator Solutions, Patria, Procitec, Plath, Rohde & Schwarz, Saab Grintek Defence, Sagax Communications, Sesofusion, Tehnoturg-T Raadiosidekeskus, Teledyne Defence & Space, and Textron Systems Electronic Systems.

Speaking at the welcoming reception hosted at the Estonian National Museum on the evening of the first day of the show, Mr. Kusti Salm, National Armaments Director, Director of Defence Investments Department, Estonian Ministry of Defence, stated that the event “provides a live electromagnetic environment where EW subject matter experts have the opportunity to personally witness and test the best electronic warfare products and equipment currently available on the market, including new counter-UAS technology, based on real-life scenarios. It emphasizes to the international EW community the importance of the sharing electronic spectrum knowledge and operational experience in the context of the 21st century battlefield, and allows us all to meet with experts in their field to further our collective knowledge.” – *J. Haystead*

## MBDA UNVEILS SPEAR-EW STAND-IN JAMMER

The UK arm of European missile manufacturer MBDA (Stevenage, UK) has revealed the ongoing development of an air-launched stand-in jamming/electronic warfare (EW) decoy variant of its SPEAR stand-off miniature precision-strike missile.

Designed to meet the UK’s Selective Precision Effects At Range Capability 3 (SPEAR Cap 3) requirement, the SPEAR weapon system is being developed under a four-year, £411 million contract awarded by the Ministry of Defence in March 2016. SPEAR Cap 3 calls for an intermediate range (>100 km) all-weather precision weapon to prosecute fixed, mobile and re-locatable targets in complex, hostile environments bound by restrictive Rules of Engagement.

The SPEAR technical solution is a sub-100-kg weapon featuring a Pratt & Whitney TJ-150-3 turbojet engine, dorsal flip-out wing surfaces, mid-course guidance via a combined GPS/inertial navigation subsystem (with a two-way datalink