

World Success of Czech Passive Radiolocation

ERA Celebrates the 20th Anniversary of the Company Founding



ERA a.s., pioneer and leading supplier of next-generation surveillance and flight tracking solutions for the air traffic management and military operations reached the 20th year of its existence.



ERA's unrivalled technological history dates back to 1963, when the first radiolocation engineers began developing passive surveillance systems for company Tesla in the former Czechoslovakia (since 1993 in the Czech Republic). The founders established their own company, ERA, in 1994 to manufacture and supply Czech Army, Air Traffic Control (ATC) authorities and other customers with professional electronic equipment, specifically using passive radiolocation techniques.

ERA is the founding developer of the respected technologies of multilateration (MLAT) and ADS-B for the civil sector and thanks to it and the company's traditional product – the VERA Passive ESM Tracker for defensive applications – ERA's systems are installed around the globe ensuring safety and efficiency of the Air Traffic Management (ATM). ERA has more than 100 installations of its system in 48 countries of five continents.

The World's First MLAT System for the Military Purpose – the Czech Army (1963)

The World's Unique and Leading PET (Passive ESM Tracker) – VERA (since 1995)

The World's Largest WAM Nationwide Coverage – Namibia (2009)



After the first Passive Surveillance System (PSS) Kopac, the legendary Ramona and Tamar came about followed by PSS VERA, a system for military purposes named after Colonel Vera Perlingerova (on the photo, nowadays), the ATM controller of the Czech Army. Her successors have made use of the ERA ATC system based on multilateration – VERA-A since 1996.

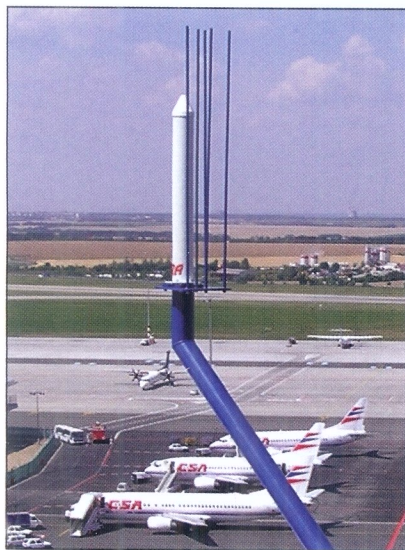


ERA has created the ultimate, world-leading and advanced Passive ESM Tracker (PET) VERA. Its 5th generation VERA-NG utilizes MLAT techniques to locate and track targets by multilateration on various electronic emissions in a broadband range. The passive technology utilized by ERA allows for a virtually undetectable operation, it emits zero electromagnetic energy making it virtually invisible to anti-radiation missiles. Basically, it sees without being seen!



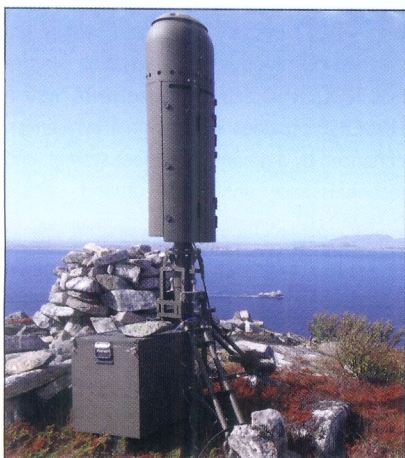
The Wide Area Multilateration (WAM) system in Namibia is the largest system of its kind in the world both in terms of area (a territory as large as Germany and France combined) and the number of ground stations deployed across the entire country. The Namibia WAM system employs 54 widely separated and unmanned ground based stations which face harsh climate challenges.

The World's First Complete Country WAM Coverage – Czech Republic (2003–2011)



The first ever WAM system deployed around Ostrava Mosnov Airport in 2003 along with the WAMs in Prague and Brno (2006 and 2009 respectively) provides nationwide coverage of the Czech Republic's airspace. The Air Navigation Services (ANS) of the Czech Republic have made extensive use of ERA's capabilities since 1999 while WAM Czech Republic currently conducts flight tracking and surveillance for the entire country.

ERA Participated in the NATO Exercise Unified Vision in Norway (2014)



ERA joined the NATO military exercise Unified Vision 2014 (UV14) with its passive radiolocation system VERA-NG and MSPSR technology demonstrator Silent Guard. UV14 was NATO's largest ever trial of Joint Intelligence, Surveillance and Reconnaissance (JISR), comprising satellites, aircraft, unmanned aerial vehicles, naval vessels, ground surveillance sensors and human intelligence from the total of 18 Alliance members.

The World's First Implementation of PET and PCL Systems – Silent Guard (2013)



The demonstrator of passive surveillance systems known as Silent Guard implemented ERA's PCL and PET (VERA-NG) systems for the 1st time ever. The PCL demonstrator has been developed as an FM based multistatic radar, utilizing a reflected signal and is therefore able to detect non-cooperative and quiet targets. The demonstrator has been used for mobile deployment in a vehicle the size of a commercial van and can thus be moved extremely quickly and with little logistical effort.

ERA Signs a NATO Contract for the Supply of Two VERA-NG Systems (2014)



In the spring of this year a contract was signed between ERA and NATO Communications and Information Agency in its headquarters in Brussels for the supply of the 5th generation of passive surveillance system VERA-NG to cover the NATO needs. The deal includes provision of two mobile VERA-NG systems and logistic support including operator training.

Photos: ERA, NCIA, Jaroslav Martinek

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