

# AVIATION



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At Red Deer Airport

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Challenges and Solutions



# APROC 2018

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The twelfth edition of the Air-centric Personnel Recovery Operatives Course (APROC) was held successfully in the Netherlands for the first time in May and June. Airbase Gilze-Rijen hosted helicopters and aircraft from no less than seven countries. The Netherlands, France, Italy, Poland, Spain, Sweden and the United Kingdom all sent one or more helicopters. Dutch F-16s, two Italian EF.2000s and two E-550A Gulfstreams also participated. Belgium, Canada, Denmark, Germany and the USA took part with ground forces only.

The exercise is organised annually by the European Personnel Recovery Centre (EPRC). It is aimed at rescuing downed aircrew

or other trapped soldiers from hostile areas. The fighter aircraft provided fixed wing RESCORT (rescue escort), with Mi-24, AH-64 and AS.555 helicopters acting as rotary RESCORT. The other participating helicopters (CH-47D, NH.90, AS.332, Merlin, H-101 and UH-60) were used for the actual extraction of the aircrew. Most notably however, was the participation of the Italian E-550A Gulfstream, a brand new and unique Conformal Airborne Early Warning and Control (CAEW) aircraft.

The E-550A is based on the Gulfstream 550. To serve in the CAEW role, Israeli Aircraft Industries built in an active electronically scanned array (AESA) four-dimensional radar

providing 360° detection, identification and tracking of both airborne and surface targets. Integrated is an electronic support measures system, which measures emitters at a wide range of frequencies, also with 360° coverage.

Furthermore, the aircraft is fitted with a self-protection system (SPS) that includes active and passive sensors and countermeasures against incoming missiles, as well as a NATO-compatible communications system that has been jointly developed by Elta and Leonardo. Its ten hours endurance and 12,000 km range make the E-550 a valuable asset for surveillance. With the first aircraft delivered to the Italian Air Force at the end of 2016, and the other one in beginning of 2018, this exercise was a serious test for the heavily modified Gulfstreams. And they lived up to their task of Airborne Mission Coordinator (AMC). That was particularly useful because the planned participation of NATO and French E-3 AWACS as AMC was cancelled due to lack of available aircraft.

During the exercise, 26 missions were flown in nine days, which totalled to just over 140 sorties and 300 flying hours of participating aircraft and helicopters.

Multiple exercise areas were used in the Netherlands and Belgium, with changing groups of around five helicopters flying their respective daily missions.

This way the participants were able to train the personnel recovery mission profile in a realistic and international environment, that uses the processes and structures found in international operations, as are often carried out nowadays.

As mentioned, the exercise was a success, with all 190 participants graduating. However, the relatively new integration of both fixed-wing and rotary assets in APROC scenarios proved difficult and will no doubt be a point of focus during the next edition, which will be held in 2019 at Zaragoza Airbase in Spain. 🌐

*Spanish AS.332 taking off after picking up a wounded soldier, with the door-gun for self-protection clearly visible*



*A brand new Italian E-550A returning from an AMC mission*



*Dutch AH-64D providing air cover during a rescue mission*

