The first European AAR training – EART14 – was conducted alongside the Dutch fighter exercise FRISIAN FLAG 2014 to provide crews with the opportunity to take part in dedicated AAR scenarios embedded in realistic combat situations.
(Photo: EATC)

EATC, the Air-to air Refuelling Trademark

Air-to-Air Refuelling (AAR) is pooling and sharing *par excellence.* Nowadays, during operations, AAR tankers are often a pooled asset: a tanker from one nation may be required to refuel an aircraft from another nation. Interoperability is therefore key.

AAR Extends Range, Endurance and Payload of Receiver Aircraft

All EATC nations own national or multinational AAR capabilities. This has not always been the case. For more than half a decade, AAR was identified as a capability shortfall within EU and NATO. While initially AAR was meant to exclusively refuel strategic bombers, its range widened in our days. Today, most air mobility assets deployed on a theatre of operations can be air-to-air refuelled and the demand has increased correspondingly. Nevertheless, the demand for AAR was not matched with an equivalent increase of AAR capability and Europe suffered a lack of equipment and a lack of interoperability. This situation has changed to some extend with the ramp up of AAR capable state-of-the-aircraft.

The essence of EATC is to pool and share assets, and to consolidate the operational needs from the seven member nations with the functional requirements to guarantee successful joint military air operations.

EATC, a Major Player in AAR

AAR has always been one of the main pillars of air mobility for EATC. EATC has developed over the past years a large AAR expertise in the functional and operational domain.

Today, EATC handles more than 500 AAR missions per year. As of 1 July 2021, the fleet includes the KDC10, A310 MRTT, KC767A, KC130J, C160NG, A330 MRTT and several AAR-capable A400M assets. This portfolio gives EATC access to various AAR systems probe-equipped receivers for any kind of AAR asset, helicopters for the tactical EATC fleet, receptacle-equipped receivers for KDC10, A330 MRTT and KC767. The A400M can be used as a tanker when equipped with wing pods.

Although assets such as the Dutch KDC10, German A310 MRTT or French 160NG will soon be decommissioned, the number of tankers under EATC's authority will increase in the coming years when for instance the A400M, KC130J and A330 MRTT reach full AAR operational capability. Thus, as of 2025, the number of AAR missions will increase dramatically and EATC will be confirmed as a major force provider in Europe, with large operational options and reinforced operational effectiveness.

Force Multiplier

AAR aircraft, usually called tankers, are a force multiplier and critical enabler for the projection of air power. AAR provides an essential capability that increases the range, endurance and flexibility of all capable receivers. Tankers participate in air operations to support a wide range of assets from combat aircraft to Airborne Early Warning (AEW) but also helicopters and transport aircraft. AAR is multidimensional: fuelling in-the-air allows fighters to stay airborne for several hours, offering air support to troops. AAR also maximises the use of AEW aircraft and offers transport aircraft the possibility to execute long range missions without technical stops.

EATC, a Centre of Expertise for AAR

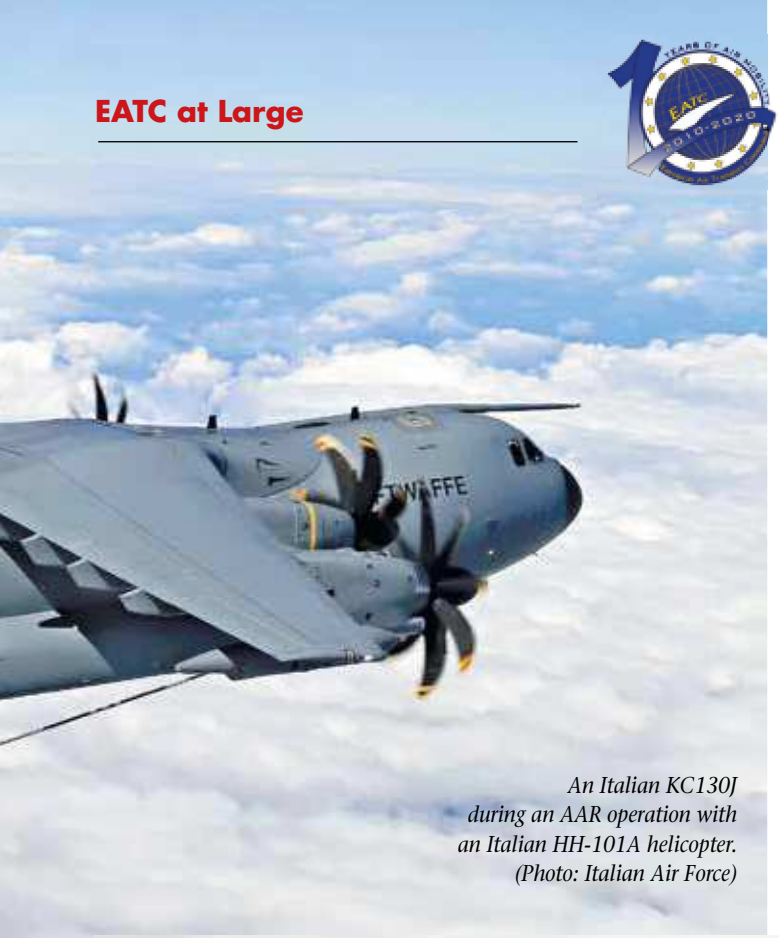
In 2014, EATC created a dedicated AAR cell in order to optimise the coordination with the national authorities and to build up an in-depth know-how in the AAR domain. This AAR cell is not vested in one single division but draws on the expertise from experts throughout EATC's structure. The cell will ramp up with the completion of the A330 MRTT fleet in 2024 and its full AAR operability.

The AAR cell is a permanent nodal hub delivering a coordinated, efficient and responsive service and ensuring coherence between the member nations. It is in close contact with the National AAR Coordination Centres or NAARCC. The NAARCC are single national point of contacts, gathering the AAR expertise both from a tanker and receiver point of view. Thanks to a continuous flow of information, the nations and EATC plan AAR missions from an early stage complying with EATC's operational process. This is all the more important that the number of missions will rise once the AAR fleet are fully operational. EATC's AAR cell is also engaged in enhancing interoperability within the AAR community and in standardising AAR related tactics, techniques and procedures in cooperation with the NAARCCs. The last-in-date project is the operations manual "Trail Missions" handbook, which aims to harmonise the planning, tasking and execution of trail missions.

In order to enhance interoperability and in consequence facilitate common operations, EATC offers a unique multinational AAR training, called the European Air Refuelling Training (EART). EATC's Training and Exercises branch leads this event in close interaction with the AAR cell. The aim is to offer realistic scenarios to train tanker crews, planners, taskers and engineers in planning and executing missions in a multinational framework. This is why EATC runs EART in cooperation with major European fighters' exercises.

Conclusion

EATC proves that it is up to lead the build-up of a European AAR capability. Our processes are well in place. We harmonise documentation, test common standards and evaluate through multinational trainings. The headquarters in Eindhoven gathers highly experienced experts coordinating daily with the national counterparts and taking into account their requirements and needs. EATC, a trademark for AAR!



An Italian KC130J during an AAR operation with an Italian HH-101A helicopter. (Photo: Italian Air Force)

EART 2017: view from the "boom' operator screen showing the AAR of a NATO Airborne Early Warning (AWACS) aircraft. (Photo: EATC)

German Air Force A400M during an AAR training mission with two German Eurofighters (Photo: German Air Force/Stefan Petersen)