

Aeromedical Evacuation *par excellence!*

*The German A400M can be operated as a flying intensive care unit.
(Photos: Volker Schubert)*



A broken leg, a life-threatening injury, malaria or COVID-19 infected – EATC manages timely strategic aeromedical evacuation missions of casualties or sick persons from anywhere in the world to the home country, or to a safe place where the necessary care facilities are available.

The Aeromedical Evacuation (AE) of patients requests in-depth expertise of medical personnel combined with the know-how in aeromedical transportation. This is why EATC drew on a professional team of flight surgeons and flight nurses, integrated in the operational division: the Aeromedical Evacuation Control Centre (AECC). The team evaluates the AE requests from member nations, chooses the best suited transportation asset for the patient, plans the evacuation mission and supervises each step until the successful completion. This is done in close cooperation with the national authorities.

The overall aim is to offer efficient and effective AE missions to the nations. The patients are often deployed or posted in operations, humanitarian missions, training and exercises, overseas territories, or any

Aeromedical Evacuation Control Centre (AECC)

The AECC manages the AE of patients on a 24/7/365 basis from all over the world. The multinational team is composed of flight surgeons and flight nurses who have long-lasting experience and know-how in aeromedical transports.

The team:

- plans, coordinates and controls the execution of reliable, cost-effective strategic aeromedical evacuations of injured or sick persons by air assets from anywhere in the world to the patients' home country, or to a safe place where appropriate medical care is available;
- assesses the national requests for AE of patients and provides medical expertise to the nations;
- chooses the best transportation assets with regard to the medical requirement of the patient;
- supervises the evacuation mission;
- develops standardised procedures and cross-national certifications in the AE domain to enhance interoperability.



other temporary duty abroad. Depending on the AECC's assessment, they are evacuated with a dedicated AE asset or on existing routine missions. Any decision by the AECC is coordinated closely with the requesting nation's National Patient Evacuation Coordination Centre. These centres are EATC's single national points of contact, responsible for the medical evacuation of the personnel within the national military system.

The AECC manages approximately 1,000 patients per year. In addition, the COVID-19 pandemic put a strain on AECC and EATC. AECC managed 50% more patients in 2020 and since March 2020 (until end June 2021), the team coordinated the medical evacuation and relocation of nearly 950 infected patients.

The National Contribution: Crew, Equipment and Aircraft

The nations commit their aircraft under EATC's authority for air mobility missions. When it comes to AE missions, they offer also AE crew and the adapted AE equipment, according to the NATO and EU standards.

This entails that AECC has access to a large portfolio of assets to plan and execute AE missions. The diversity of the portfolio offers flexibility, efficiency and effectiveness.

The portfolio includes on the one hand dedicated AE assets ready within hours, such as Luxembourg's contracted civilian assets or the German A310 MRTT. Germany offers one A310 in AE configuration on permanent alert at the Cologne airbase. The aircraft can transport up to 44 patients in a lying mode or six intensive care patients. It will be decommissioned in 2021.

On the other hand, all nations offer air mobility assets that can be used under EATC authority for AE missions. For example, Italy provides assets that may be equipped with special air transport isolators for the safe transport of contagious patients. Others are operated as „flying intensive care units" and offer a maximum of medical treatment for the air transport of injured or sick people in emergency situations, such as A400M and A330 MRTT AE capabilities. The German A400M in AE configuration can be cleared for take-off within twelve hours. The aircraft can host a team of eleven medical specialists who handle six patients simultaneously: two patients for intensive care, two patients for intermediate care and two for low care. The medical crew on board concentrates on the stabilisation



of the patients and on intervening during flight if needed. It goes without saying that the asset offers state-of-the-art medical equipment, a broad range of medicines or bandages.

The multinational A330 MRTT in AE configuration will be located in Germany and operated by a German crew and equipment. It will be operational soon and will then be able to transport up to six intensive care patients over long distances under the most demanding circumstances.

Cross-National Missions: the Be All and End All of AE

AECC is constantly looking for the best solution to evacuate a patient. This means that a patient is not necessarily evacuated by an aircraft provided by his national authorities. AECC always carefully assesses the medical and operational requirements to choose an option that brings back the patient in optimised conditions. So, the patient might be evacuated by another nation's asset.

This so-called "Cross-National Cooperation" offers flexibility for the benefit of the patient. This is only possible thanks to the trust and confidence between the medical personnel, the military command and the political authorities.

Cross-National Missions undergo the same process as national missions, though, of course, the coordination is extended to all actors involved: the authorities requesting the AE, as well as those providing the asset. These missions may be executed by a multinational medical team, offering the best possible care to the patient. This presupposes a high standard of interoperability between the nations; thus, it depends on trained personnel for various national AE equipment. During a cross-national flight, all crew members, whatever their nationality, have the same privileges to execute the mission in the best possible way.

Cross-National Missions with mixed medical crew are not as yet carried out routinely. Crises situations such as the COVID-19 pandemic, however, show that the multinational cooperation is the way forward.

No Success Without Interoperability, Harmonisation and Cooperation

Today, EATC and AECC are recognised as a centre of expertise for AE. They are looking back at more than ten years of operational experience, without forgetting that interoperability and harmonisation of concepts are also key for success and safety in the AE domain. This is why the AECC contributes with AE expertise to projects and studies led by EATC's functional division. Moreover, the medical team is carefully paying attention to the nations' needs, optimising the processes accordingly and continuously engineering common approaches to support the member nations in the best possible way. When COVID-19 hit the world, AECC quickly developed procedures for the safe transport of infected patients, responding to the crisis and the nations' new challenges.

The AECC team meets the national counterparts on a yearly basis, discussing subjects, including the standardisation of basic aeromedical evacuation training or how to optimise interaction and ensure quick and reliable reaction to a scenario at hand.

EATC is also offering its expertise to entities such as the European Union Military Staff (EUMS). The first step was done in 2016 with an enhanced cooperation between functional subject matter experts. Since 2020, EATC's medical experts advise the EUMS in the sensitive subject of aeromedical evacuation of patients from EU non-executive missions.

EATC and AECC are striving for more alignment of medical equipment, aircraft configuration or airworthiness certification. This will offer increasing possibilities in a multilateral approach for the transportation of patients, and thereby the best use of EATC on a daily basis.

It is of utmost importance to offer a high standard of medical care in operation and the assurance to bring a patient swiftly home when needed.





◁ A Luxembourg aeromedical evacuation mission under EATC C2. (Photo: Luxembourg Air Ambulance)

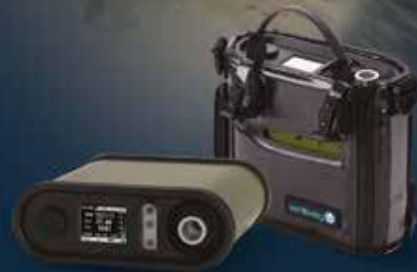


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