Results: Eleven C135FR have been modified to accommodate the medical solution. The technical platform includes patient care modules (intensive care modules accommodating one mechanically ventilated patient; light care modifiable modules) and logistical modules (two racks, one preparation table, one centralized monitoring area). The medical team includes two anesthesiologists, three anesthesiology nurses, two emergency physicians, two nurses, two MEDEVAC nurses, and one medical specialist or liaison officer.
Conclusions: The MORPHEE system and its successful operational missions emphasize the versatility and efficiency of a solution based on mission-tailored "plug and play" modules easily and quickly installable aboard a non-dedicated aircraft.
Keywords: aero-evacuation; intensive care unit; military
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"Doctor on Board": What is the Optimal Skill-Mix in Military Helicopter CASEVAC?

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Introduction: Military prehospital times may be extended due to geographical or operational issues. The skill-mix of the prehospital team may vary. The aim of this study was to quantify the contribution of a physician to military prehospital care.
Methods: Joint Force Medical Command Afghanistan Medical Emergency Response Team (MERT) missions were entered into a prospective log. Patient nationality, mechanism of injury, and whether the doctor was required to perform a medical intervention during the mission were recorded.
Results: A total of 324 recent MERT missions retrieved 429 patients. The median number of patients was 1 (range 1–13). Of the troops, 56% were local nationals and 44% were coalition troops. Twenty-two percent were T1, 52% were T2, 21.5% were T3, and 4% were dead. A total of 48% patients had blast injuries, 25% had gunshot wound/s (GSWs), six patients had blast and GSWs. A total of 41 patients (9.5%) were medical, 23 (5%) received injuries in road traffic collisions, and 42 patients had other diagnoses. Median time from take-off to delivery of the casualty was 44 minutes (range 10–183 minutes). A doctor flew on 88% missions; the doctor was thought unnecessary in 77%. Of the missions where a doctor was useful, the commonest intervention was rapid sequence induction (45%), other interventions included provision of analgesia, sedation or blood products, chest drain or thoracostomy and pronouncing life extinct.
Conclusions: The MERT is a high-value asset that makes an important contribution to patient care. A relatively small proportion of missions require interventions beyond the capability of well-trained military paramedics.
Keywords: helicopter; military; physician; prehospital
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2008 Air Base 4 Clinic "Tenente Coronel Médico Viriato Garrett" Aerial Evacuations/Search and Rescue and in Flight Emergency Response

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Introduction: Air Base 4 clinic, a NATO "role 1" health unit, "Tenente Coronel Médico Viriato Garrett" scrambles medical teams for patients or injured people in need of air-medical evacuation, search-and-rescue, and/or in-flight emergencies.
Objective: The objective of this study was to characterize patients, diagnosis, and drug therapy involved in air-medical evacuations/search-and-rescue and in-flight emergencies in 2008.
Methods: This was an objective, cross-sectional, and descriptive study.
Results: Twenty passengers were evaluated following 19 in-flight emergencies (interruptions in commercial airliners). There was a predominance of males and acute cardiovascular pathology was most common. There were 13 patient air-medical evacuations from ships, with traumatic injuries and gastroenterology issues prevailing (analgesics and antiemetics were most widely administered). Eight search-and-rescue missions were accomplished, but in only one situation was a medical intervention needed to assist seven crew members with 1st degree burns, who were hoisted from a fishing vessel, then flown to a hospital.
Conclusions: Due to its central geostrategic location at the crossroads of transatlantic shipping and air lanes, Lajes Air Base plays an essential role in the stabilization and transportation of ill persons from vessels and also provide medical care to emergencies developing in commercial and military flights.
Keywords: air evacuation; in-flight emergencies; military medicine; search and rescue
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Role of Local-Regional Analgesia during Medical Evacuation

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Today, local-regional analgesia represents a simple and effective alternative to deep sedation or general anesthesia during medical transport of patients with severe traumatic injuries. Particularly for patients with fractures and/or penetrating injuries of the extremities, shoulder and/or thorax, local-regional analgesia could be performed using safe and simple methods, thus, avoiding or reducing the need for administering central nervous system depressants. Moreover, the use of long-lasting local anesthetics (e.g., L-bupivacaine) mixed with short acting local anesthetics (e.g., lidocaine) induce a rapid analgesic block. The use of an electrical nerve stimulator has no contraindications in the severely injured trauma patient, and permits a quick and precise localization of the nerves and pleuxus even by relatively unskilled attendants.

Using the tool facilitates the reception of data and creates a snapshot, which enables a global vision of the functioning