

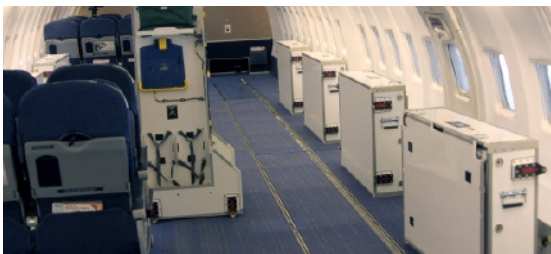
Marshall



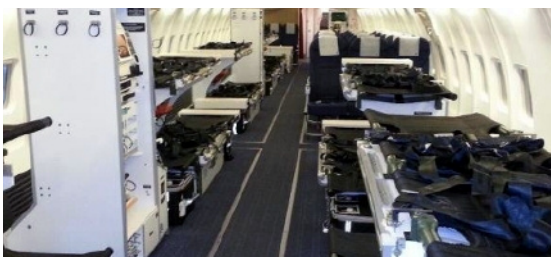
Medevac.



An SAS Boeing 737 can be pulled from service, converted and ready to fly as a MEDEVAC platform within 24 hours of notification



The equipment change takes as little as 4 hours



Marshall and Nodin developed six MEDEVAC configurations, each with its own set of technical publications



The 22 lying patient capacity and onboard intensive care units proved invaluable during a hostage crisis in Algeria in January 2013

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Marshall Aerospace and Defence Group and Nodin Aviation develop quick-change MEDEVAC role conversions for the Norwegian Armed Forces.

The Team

Following an agreement between Scandinavian Airlines (SAS) and the Norwegian Armed Forces, Nodin Aviation won a contract from the Norwegian Defence Logistics Organisation (NDLO) to design a six-configuration MEDEVAC role change kit that could convert an SAS Boeing 737 passenger jet into a medical evacuation platform within a matter of hours. However, as this modification was the first of its kind in Europe on a commercially-operated aircraft, additional support and resource would be required to bring the project to fruition

Upon the recommendation of the NDLO, Nodin Aviation asked Marshall Aerospace and Defence Group to take the lead role in providing this new and innovative capability. Marshall has a long-standing relationship with the NDLO, having provided support to the Norwegian Armed Forces' C-130 fleet for a number of years. The company's full European Aviation Safety Agency (EASA) privileges, enabling it to engineer and certify modifications to commercial platforms, meant that Marshall was a natural fit to take on responsibility for the development and certification of the role change systems.

Marshall and Nodin Aviation worked closely together to provide two role change systems, converting a Scandinavian Airlines' Boeing 737 from a normal passenger aircraft into a highly sophisticated and effective MEDEVAC platform with six different configurations. Nodin provided the system design, while Marshall designed, manufactured and sourced a variety of components and materials for stretcher support racks, medical tables, infusion poles and electro-medical equipment racks, as well as a series of bespoke aircraft cabin parts to facilitate the role change. Marshall also worked closely with EASA to certify all life support equipment on board.

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 in Engineering, Support
 Solutions and Services.**

The Capability

The first MEDEVAC role change systems were demonstrated in the presence of the Norwegian Defence Minister and EASA representatives at Gardermoen Airport in Norway and subsequently declared operational.

The equipment is specially designed and engineered to facilitate a quick role change, which takes as little as four hours to complete. This capability proved invaluable to the Norwegian Armed Forces when, in January 2013, a group of terrorists attacked the gas installations in In Amenas, Algeria. Several hundred hostages were taken, and the Norwegian Government decided to mobilise one of the Scandinavian Airlines (SAS) Boeing 737s in the MEDEVAC configuration provided by Marshall and Nodin Aviation. In keeping with the agreement with SAS, the aircraft was pulled from commercial service, the role change system was quickly put in place, and within 24 hours the medical personnel and a fully-equipped MEDEVAC aircraft were on the wings heading for Algeria. The aircraft and crew were soon ready to utilise the 22 lying patient capacity and the intensive care units on board.

To maximise the benefits of this MEDEVAC capability, the NDLO have entrusted Marshall to take on responsibility for maintaining the systems' airworthiness, and to provide the necessary support to ensure maximum availability and fast response of the MEDEVAC role change system.

Marshall and Nodin Aviation are equipped to provide similar innovative and reliable MEDEVAC role changes on a range of aircraft – and to support the solution to ensure it continues to satisfy demanding customer requirements.

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