

SUMMARY

This report provides the results of a military utility assessment (MUA) of the Special Medical Emergency Evacuation Device (SMEED) platform. The MUA was conducted during the Civil Reserve Air Fleet (CRAF) aero medical Evacuation (AE) Ship set exercise, which took place 9-20 January 2002, aboard scheduled AE flights and at various United States Air Force (USAF) facilities located throughout the continental United States. The exercise was conducted using a civilian aircraft reconfigured to facilitate the installation of a CRAF/AE Ship set. The Ship set that was installed on the Boeing 767 aircraft used in this exercise is designed to accommodate 87 litters and included three main subsystems: the patient transport litter stanchion subsystem, the medical oxygen subsystem, and the aero medical operations subsystem.

There is currently no deployed critical care support platform (CCSP) that provides a quick, efficient, and effective way to secure identified critical medical care equipment to the standard North Atlantic Treaty Organization (NATO) litter. The SMEED was designed to secure and transport a variety of medical patient movement items (PMI) and their associated cables, tubes, and sensors as an integrated system. It is attached to the patient litter to facilitate enroute patient care during the AE process.

The SMEED is a U-shaped aluminum and stainless steel frame platform that attaches to a standard NATO litter by means of two specially designed clamps (see Figure 1). The platform is designed to have a low height profile and reduced side projection. The SMEED platform meets the minimal critical design elements for the CCSP; it is lightweight, rugged, inexpensive to produce and maintain, and can easily accommodate a variety of existing and future medical care equipment.

The exercise schedule included in-flight patient care scenarios; ground based patient care activities, and patient enplaning/deplaning operations at various USAF bases. Three SMEED platforms were deployed throughout this assessment. Subjective data were collected during the MUA, including the training program, via user/subject matter expert (SME) surveys and direct interviews.

On-site observations by Det 1 AFOTEC assessor personnel at the Raytheon Aircraft Integration Facility, Greenville, TX, and at Charleston Air Force Base (AFB), Charleston, SC, provided additional feedback regarding the maturity, suitability, reliability, and interoperability of the SMEED platform. Recommendations were obtained from users and SMEs regarding the maturity and medical utility of the platform.