

OVERVIEW

This report provides the results of the military utility assessment (MUA) of the Mobile Oxygen Storage Tank (MOST) while employed in a Mobile Aeromedical Staging Facility (MASF). The assessment was conducted at the Experimental, Exercises & Technology Insertion (XTI) facility, Fort Detrick, MD, from 22 through 24 April 2003.

In recent years, the Air Force Medical Service (AFMS) has recognized that the Portable Therapeutic Liquid Oxygen (PTLOX) System in use for EMEDS, MASF, and aeromedical evacuation (AE) requirements has become logistically difficult to support.

A proposed solution is to use a combination of deployable oxygen generation systems and a high-pressure portable oxygen storage tank, the MOST, to replace the PTLOX on both AFMS ground and AE unit type code (UTC) equipment assemblages. At its designed operating pressure of 2,250 pounds per square inch (psi), the MOST will hold approximately 10,050 liters of gaseous oxygen.

The primary goal for the assessment of the MOST was to evaluate the effectiveness and suitability of the MOST to operate in a MASF operational environment.

Results

The following are the key results from the MUA of the MOST in support of MASF operations:

System Characteristic	Rating
Pressure Stability	▲
Oxygen Flow Capability	▲
System Controls	▲
System Gauges	▲
Ease of Use	▲
Size	▲
Weight	▲
Compatibility with MASF Operations	▲
Oxygen Fill Operations	▲
Hazardous Environment Operational Capability	▲
Logistics Supportability	▲

Legend: ▲ Excellent demonstration of capability/characteristic
▲ Good demonstration of capability/characteristic