

WEAPON UMBILICAL RELIABILITY TEST SET (WURTS)

Provides go/no go continuity check to resolve MIL-STD-1760 built-in-test (BIT) check failures

A BIT check failure on the flight line can lead to delayed or cancelled missions while the fault is resolved, often due to a worn or damaged interface umbilical.

DIAGNOSE THE PROBLEM

WURTS aids ground crews in diagnosing the source of aircraft BIT check fails by eliminating the umbilical from the equation on the flight line. It improves aircraft mission sortie rate and success by reducing time lost to ground-based equipment failures.

Armament crews can employ the simple-to-use continuity tester to quickly assess the end-to-end functionality of an aircraft's MIL-STD-1760 weapon umbilical cable. WURTS can test a full MIL-STD-1760 class 1 signal set, including the shell-to-shell shield, for electrical continuity and shorts.

WURTS is also designed to be compatible with joint miniature munition interfaces (JMMI) as used by the small diameter bomb family.

It is entirely self-contained in a weather-proof, plastic hard case allowing it to be kept in the cabin or flat bed of a crew vehicle until needed. The WURTS is self-powered by standard, commercially available D cell batteries, removing the need for any power leads.

The test set compliments existing pylon bay electrical test equipment by providing a "quick look" flight-line capability. It is currently in use with the United States Air Force and Royal Netherlands Air Force.

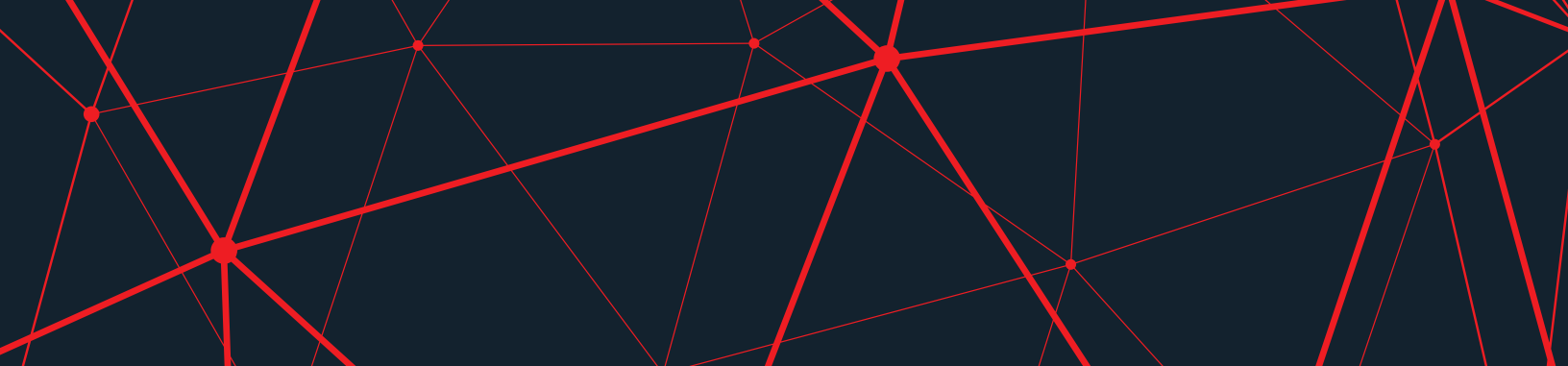


BENEFITS

- > Rugged and lightweight design allows for easy transportation in military vehicles
- > Self-contained and self-powered case eliminates need for power leads
- > Simple to use for efficient testing
- > Allows for quick continuity test of MIL-STD-1760 class 1, class 2 and JMMI



Photo credit: The U.S. National Archives



ABOVE: THE WURTS INTEGRAL CASE IS HARDENED FOR TRANSIT AND WEATHERPROOF.

LEFT: THE WURTS ALLOWS THE USER TO DO A SIMPLE PASS/FAIL TEST, OR EXAMINE EACH LINE INDIVIDUALLY FOR FAULT FINDING.

The WURTS architecture can be easily customized to any weapon interface allowing bespoke variants to be developed for other aircraft or weapon applications. WURTS is configured to test:

- > **MIL-STD-1760 Class 1**
 - F-35 weapon bay and wing pylon WUC
 - F-16 STN 3/7 WUC
- > **MIL-STD-1760 Class 2**
 - BRU-55 and -57 carrier to store umbilical cable
- > **JMMI**
 - BRU-61 carrier to store umbilical cable

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