

Battle Force Electronic Warfare Trainer (BEWT)

DESCRIPTION

The Battle Force Electronic Warfare Trainer (BEWT) AN/USQ-T47 (V) is a training support device that provides stimulation to onboard tactical Electronic Warfare (EW) systems resulting in afloat operators being able to train for tactical operations using the actual tactical equipment. BEWT provides the onboard training team the ability to exercise individual, team, combat systems team, and force level operational scenarios with operator keystroke capture capabilities. BEWT provides shipboard proficiency training through stimulation of onboard EW systems including the AN/SLQ-32A(V) and AN/ULQ-16.

Through digital stimulation of these systems, BEWT provides extremely realistic EW training (visual and audio) for the operator at the same console used in actual tactical situations. As a standalone system, BEWT scenarios can provide both individual skill training with very specific objectives as well as complete EW Team training encompassing all levels of crew readiness.

CERTIFICATIONS

- BFTT Certification for v2.13 and above
- BFTT 3.1 / BEWT 3.1 / AEGIS Certification (May 2002)
- BFTT 3.0.2 / BEWT 2.0.3 / AEGIS Certification (October 2000)
- Supported by the Navy Integrated Logistics Support (ILS) Program
- Department of Defense Acquisition Innovation Award, 2000

FEATURES

- The BEWT AN/USQ-T47(V)1 System is modified to support the BFTT Synthetic Theater of War (STOW) Local Area Network (LAN) and Client Server (CS) LAN migration from Fiber Distributed Data Interface (FDDI) and 10Base2 Ethernet (respectively) to Fast Ethernet (100Base-TX). This is in anticipation of the next generation network communications for the Navy and Joint Forces.
- AN/SLQ-32A Digital and Audio/Visual Stimulation Capabilities.
- BEWT Independent Training provides a stand-alone EW training capability. Ships not possessing an automated integrated Combat Systems Training System, such as BFTT or ACTS, have utilized BEWT as the core of their Combat Systems Team Training program.
- BEWT Integrated Training in conjunction with both BFTT and ACTS. BEWT operates as the EW node for BFTT during Integrated Training. During the playback of a BFTT scenario, emitter information necessary to stimulate the ship's EW systems is processed by BEWT.
- Performance Monitoring accomplished by capture of operator keystrokes made during a training scenario.
- Diagnostics Tools. BEWT has system diagnostic capability through its embedded software, assisting the BEWT operator in the verification of system operational status. Diagnostic Kit includes cable connections to troubleshoot system interfaces.
- Weapons on platforms & emitters on weapons. BEWT scenarios support weapon engagements, resulting in the option for a BEWT ship having no integrated training capability to center their Combat Systems Training Team scenarios around BEWT.
- Custom Library Capabilities. In addition to the use of the NERF database for emitter information, BEWT allows the ship the option to create EW libraries that are specific to (for instance) a particular geographic area, a particular threat, or a particular area of training need.
- COTS Based Engineering Solution
- On-line Help and Technical Manuals

SPECIFICATIONS

Size/Weight:

BMCS: 7.25"(W) x 12.3"(H) x 19.88"(D) / 26 lbs
FACS/JBOX: 5.25"(W) x 11.63"(H) x 11.53"(D) / 10 lbs
Monitor: 16.6"(W) x 17.8"(H) x 8.2"(D) / 16.5 lbs
Keyboard: 20.5"(W) x 2"(H) x 8.25"(D) / 5 lbs

Environmentals:

Temperature	Storage	Operating
BMCS	-20°C -+60°C	+10°C -40°C
FACS	-20°C -+70°C	0°C -60°C

Humidity (Non-condensing)

	Storage	Operating
BMCS	10% -90%	30% -80%
FACS	0% -90%	10% -90%

Shock:

BMCS and FACS shock tested Grade B
JBOX and associated cables shock tested Grade A

EMI/RFI:

Designed to meet FCC Class B and MIL-STD-461D

Power Requirements:

BMCS: 120VAC 60Hz (7.0 Amp Max. 1.0 Amp Typ.)
FACS/JBOX: 120VAC 60Hz (2.0 Amp Max. 0.5 Amp Typ.)
Monitor: 120VAC 60 Hz (0.6 Amp Max. 0.3 Amp Typ.)

System Interfaces

- Digital training interface provides real-time video and digital stimulation to the AN/SLQ-32A(V)
- Stretch video interface provides corresponding high fidelity audio to the AN/SLQ-32A(V) DCC and AN/ULQ-16
- Training data extraction interface with the AN/SLQ-32A(V)
- Combat Systems Training Team interface via 100BASE-TX LANs to BFTT and ACTS MK 50 RS-422/RS-485 (16C750 1MBd) two ports
High Fidelity sound is provided via monitor speakers SVGA (1280 x 1024 NI)
- Serial (RS-232), Parallel (EPP/ECP), Keyboard & Mouse (PS/2 port)

CPU Board:

- BMCS: COTS Intel Pentium III 1GHz 1024MB SDRAM ISA/PCI-bus compatible PCI Industrial Computer Manufacturers Group (PICMG) 2.0 Single Board Computer (SBC)
- FACS: COTS Intel 486-based 100MGz 8MB (EDO) SDRAM ISA-bus compatible Industrial SBC

BMCS Monitor:

BMCS: COTS 17-inch color SVGA high-resolution (1280 x 1024) LCD flat-panel multimedia monitor

BMCS Trackball Keyboard:

- Ruggedized COTS 104-key keyboard with 2-inch diameter integrated trackball

BMCS Removable Hard Drive:

- COTS IDE removable (60 GB) hard disk drive with carrier and frame providing the ability to remove and secure classified data

BMCS CD-ROM:

- COTS half-height 5.25-inch, 40X, IDE interface

BMCS Floppy Drive:

- COTS half-height 3.5-inch, 1.44MB, FDD interface

Power Supply:

- BMCS: Modified COTS 400W Industrial AT Switching Power Supply and AC Line Filter designed for shipboard use (MIL-STD-1399C Section 300)
- FACS: COTS 65W Industrial Switching Power Supply

BEWT Diagnostic Kit (Interface fault isolation) Training Provisions:

- AN/SLQ-32A(V) and AN/ULQ-16
- BFTT v2.13 and above team training via 100BASE-TX LANs
- AEGIS Combat Training System (ACTS) MK 50 v5.3.7

Options:

- Shipboard System Uninterruptable Power Supply (UPS)
- BEWT PC Variant

ORDERING INFORMATION

Part Numbers:

PN: BEWT-00000-33, AN/USQ-T47(V)1 System (B/L 3.3 Configuration)

PN: BEWT-10000-33, BMCS Assembly (B/L 3.3 Configuration)

PN: BEWT-20000-15, FACS Assembly

PN: BEWT-30000-15, JBOX Assembly

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