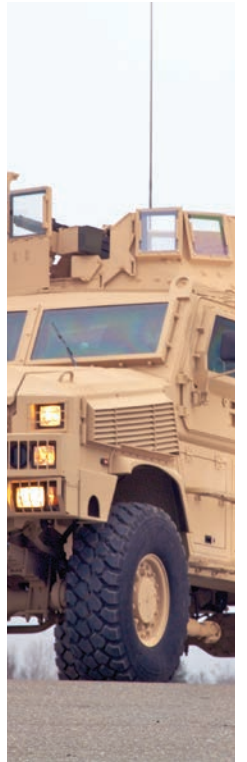
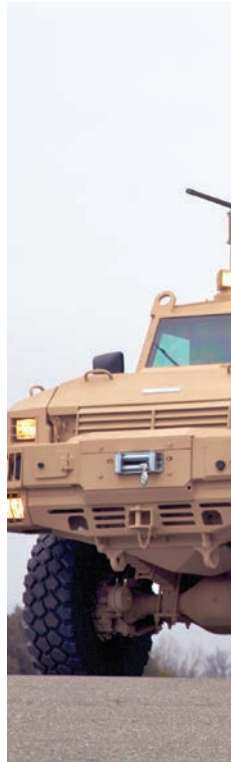
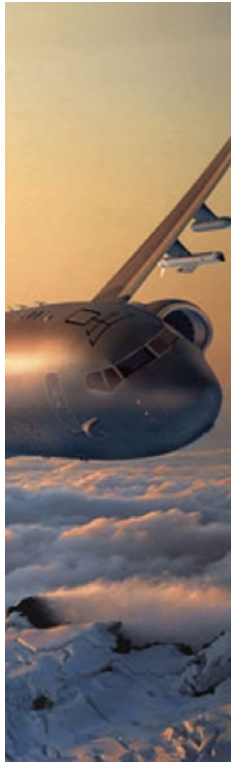
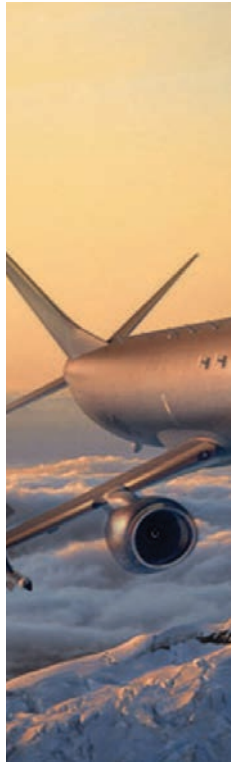


Mission Computing Capabilities

Meeting military needs for more than 40 years



Identification and Mission Computing Products

With more than 40 years of experience designing and manufacturing military mission computers and display systems, BAE Systems provides affordable, industry-leading computing capacity, reliability, and availability in flexible, open architecture designs that are ruggedized for demanding military platforms.

Enterprise-class servers

BAE Systems has pioneered the utilization of Advanced Telecommunications Computing Architecture (ATCA) for military mission computer systems by developing a suite of rugged mission computers and operator consoles for use in the U.S. Navy's P-8A program, as well as international programs.



ATCA allows for reduced SWaP on board the P-8A by consolidating the LAN switch, I/O computer, flight deck computer and other functions into the chassis. These systems are fully qualified to military, environmental, and electromagnetic interference standards.

BAE Systems has a strong history of system integration and advanced interoperability with multiple Commercial Off-The-Shelf (COTS) ATCA modules, including:

- Processing blades
- Switch blades
- iSCSI data storage blades
- Secure router/firewall and intrusion detection blades
- I/O carrier blades supporting the following AMCs:
 - Pr AMC
 - RS-232
 - RS-422/485
 - MIL-STD-1553
 - ARINC 429
 - IRIG-B
 - TADIL A
 - Various discretes
 - Video processing / display generation

Affordable, open architecture designs for ruggedized military platforms

Small form factor mission computers

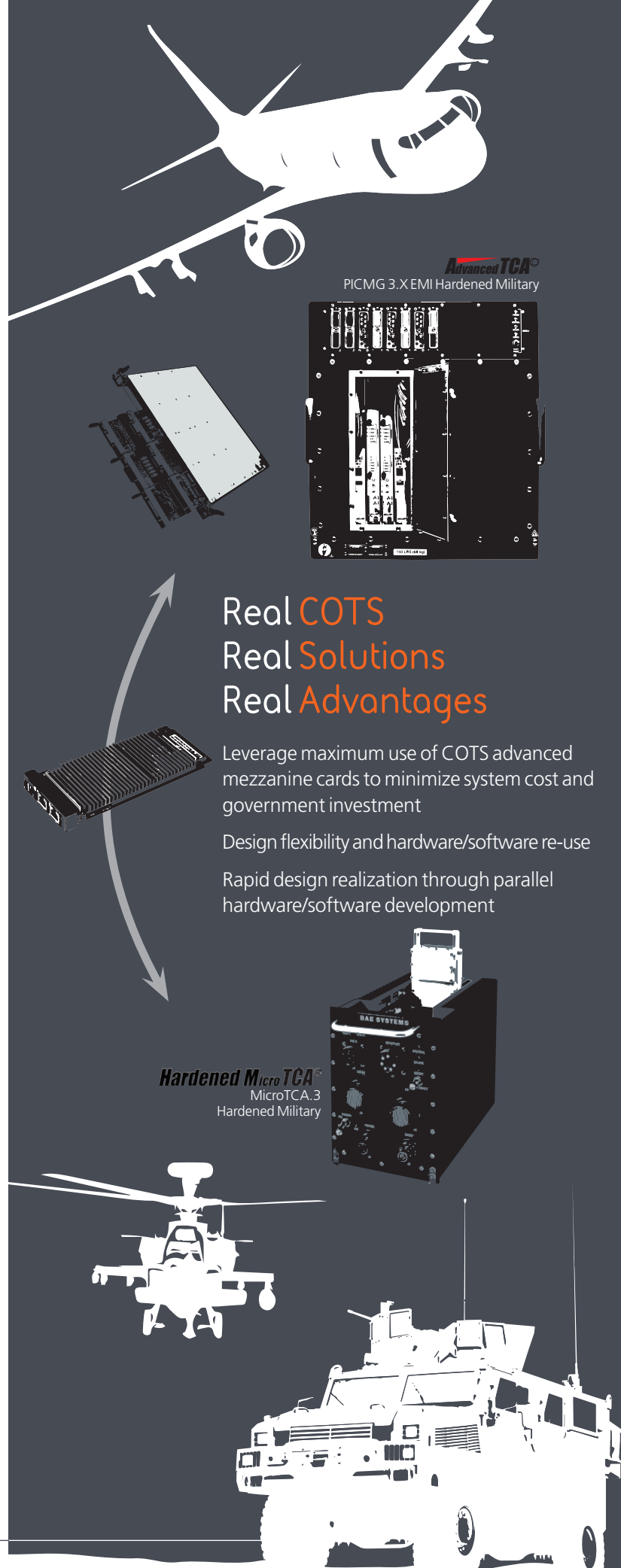
ATCA is at the core of our reduced SWaP-C form factor Micro-Telecommunications Computing Architecture (MicroTCA).

The reduced form factor makes MicroTCA attractive for SWaP constrained computing applications. MicroTCA's ability to leverage the ATCA ecosystems means that it's scalable to military needs with limited modification. Re-use of COTS modules minimizes cost and reduces development efforts.

MicroTCA is well suited for high-performance computing and network functions. It defines switched fabrics, including requirements for:

- 1GigE
- 10GigE
- 40GigE
- Peripheral Component Interconnect Express (PCIe Gen 3)
- SRIO and SATA/SAS fabrics

Fail safe redundancy built into the MicroTCA includes both power and carrier hub modules.



Real **COTS**
Real **Solutions**
Real **Advantages**

Leverage maximum use of COTS advanced mezzanine cards to minimize system cost and government investment

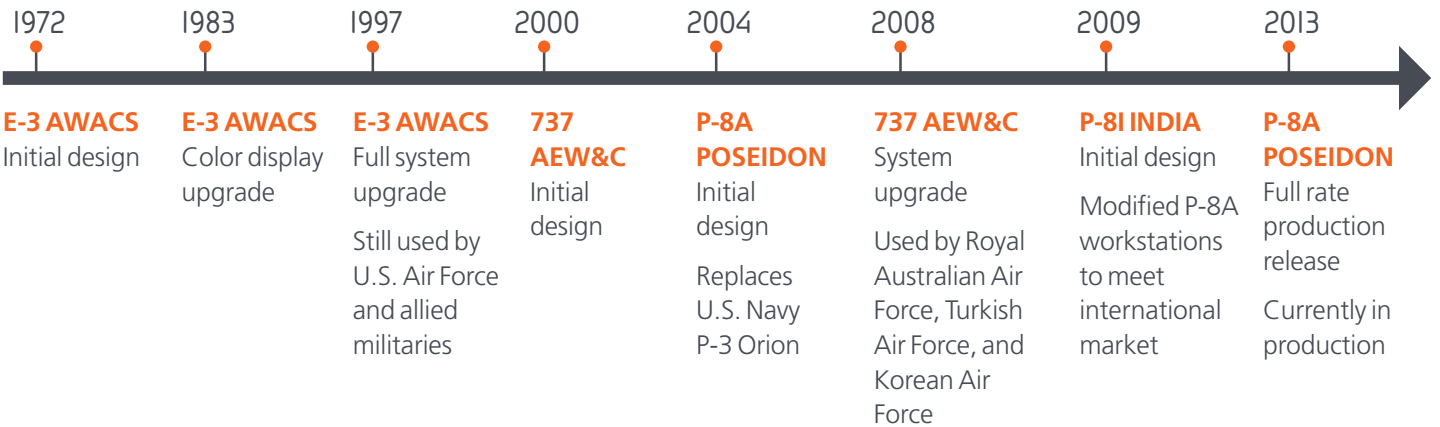
Design flexibility and hardware/software re-use

Rapid design realization through parallel hardware/software development

Hardened MicroTCA
MicroTCA.3
Hardened Military

Mission Crew Workstations

BAE Systems' workstation expertise includes packaging, development, and qualification of composite consoles, flat panel monitors, and COTS computer and display processors.



Custom designs

BAE Systems has developed modular, open architecture computer systems based upon VITA, PICMG 2.X and PICMG 3.X for military programs such as E-3A, 737 AEW&C, and P-8A.

BAE Systems has extensive experience working with common architectures such as VME, VPX, Open VPX, MicroTCA, Advanced TCA, and cPCI. Our team has a thorough understanding of network infrastructure and switching, video architecture, storage, I/O, and general purpose processing. Our work with industry consortiums, including executive membership of PICMG, has produced several key relationships with low-cost suppliers.

The scalability and flexibility of our custom designs allow for unique form factor computers while remaining compliant to open architecture standards. BAE Systems is active in the working groups developing FACE, OMS and VICTORY open standards and continues to invest in multi-level security solutions.



For more information contact:

BAE Systems
 Kevin Raffloer
 450 Pulaski Road
 Greenlawn, New York 11740-1606
T: 631 262 8220
W: www.baesystems.com

Cleared for open publication on 06/14

Disclaimer and copyright

This document gives only a general description of the product(s) and service(s) and, except where expressly provided otherwise, shall not form any part of any contract. From time to time, changes may be made in the products or the conditions of supply.

BAE SYSTEMS is a registered trademark of BAE Systems plc.
 ©2017 BAE Systems. All rights reserved.
 Various platform photos courtesy of U.S. Air Force and U.S. Army.
 CS-17-F81

