

ANTI-TAMPER (AT) MISSION

TO DETER THE REVERSE ENGINEERING AND EXPLOITATION OF OUR MILITARY'S CRITICAL TECHNOLOGY IN ORDER TO IMPEDE TECHNOLOGY TRANSFER, STOP ALTERATION OF SYSTEM CAPABILITY, AND PREVENT THE DEVELOPMENT OF COUNTERMEASURES TO U.S. SYSTEMS.

ANTI-TAMPER OBJECTIVES

- IMPEDE UNAPPROVED TECHNOLOGY TRANSFER, ALTERATION OF SYSTEM CAPABILITY, OR COUNTERMEASURE DEVELOPMENT
- ENHANCE U.S./COALITION WARFIGHTING CAPABILITY AND INTEROPERABILITY BY ENABLING ADDITIONAL EXPORTS OF STATE-OF-THE-ART U.S. WEAPON SYSTEMS
- EXTEND THE EFFECTIVE OPERATIONAL LIFE OF U.S. AND COALITION WARFIGHTING CAPABILITIES
- EDUCATE THE DoD COMMUNITY ON THE ANTI-TAMPER PROCESS
- INSTITUTIONALIZE ANTI-TAMPER WITHIN THE DoD

ANTI-TAMPER IS REQUIRED PER THE 5000 SERIES FOR

- All new start programs
- All pre-planned product improvement (P3I) or technology insertion efforts
- All programs that did not reach Milestone B by 1 May 2000

IMPORTANCE OF ANTI-TAMPER



THE OPPORTUNITIES FOR EXPLOITATION OF U.S. SYSTEMS ARE INCREASING

- Foreign military sales, direct commercial sales, and international co-production
- Exposure during the global war on terrorism, contingency operations, and cooperative activities
- System loss on the battlefield



AH-64 Apache in Iraq, 2003

CRITICAL TECHNOLOGY (CT)

CT is a subset of Critical Information (e.g. CPI) resident on a weapon system, maintenance support equipment, or weapon system trainer that if lost, compromised, or stolen could enable an adversary to clone or counter a leading-edge U.S. technological capability.

ANTI-TAMPER IMPLEMENTATION IN THE INTEGRATED DEFENSE ACQUISITION, TECHNOLOGY, AND LOGISTICS LIFE CYCLE MANAGEMENT FRAMEWORK

Concept Decision: Initial Capabilities Document (ICD)

Concept Refinement Phase

- Technology Protection Plan

MILESTONE A: Preferred System Concept

Technology Development Phase

- Draft Capability Development Document (CDD)
- AT design and implementation is the most cost efficient if integrated with technology development
- Review of CPI and identification of CT
- Development of an initial AT approach
- Technology Protection Plan (TPP) Annex
- Program Protection Plan (PPP) AT Annex

MILESTONE B: CDD

System Integration Phase

- Initiate Evolutionary Acquisition Strategy in preparation for the design readiness review
- Approved Capability Development Document
- Evaluate CT exposures and develop AT approaches
- Final AT Plan

Critical Design Review:

System Demonstration Phase

- AT verification and development testing

MILESTONE C:

Low Rate Initial Production Phase

- AT verification report due at the end of developmental testing
- AT validation during operational testing
- AT Accreditation at Full Rate Production Decision

AT PROGRAM SUPPORT FOR PROGRAM AND TECHNOLOGY PROTECTION PLANS

The ATSPI Technology Office has the expertise to assist Program Managers and System Engineers in the development of appropriate protection plans including AT plans.

- TPP evaluation and support
- PPP evaluation and support
- AT Annex Template

ANTI-TAMPER REFERENCES

- USD(A&T) Memorandum, "Guidelines for Implementation of Anti-Tamper (AT) Techniques in Weapon Systems Acquisition Programs," 1 May 2000
- DoD Instruction 5000.2, "Operation of the Defense Acquisition System," 12 May 2003
- Defense Acquisition Guidebook (www.dau.mil)
- Military Critical Technologies List (www.dtic.mil/mctl)
- DoD Directive 5200.39, "Security, Intelligence, and Counterintelligence Support to Acquisition Program Protection," 16 July 2008
- USD(A&T) Memorandum, "Implementing Anti-Tamper (AT)," 5 January 2001
- Safe Array Compartment Security Classification Guide, 11 July 2005, SAF/AQL
- CJCSI 3170.01D, "Joint Capabilities Integration and Development System," 1 May 2007

RESOURCES AND SUPPORT

AT Resources:

- AT Guidelines
- PM Process Guide & Checklist for AT
- AT Quick Reference
- AT Annex Template
- CPI/CT Tool (CPI Identification)

Courses:

- DAU Learning Module (dau.mil) (CLE 022)
- AT Short Course (Available 2009)

ATSPI Technology Office

AFRL/RYT

2241 Avionics Circle

WPAFB, OH 45433-7320

(937) 320-9095 x150

AT-SPI_outreach@wpafb.af.mil

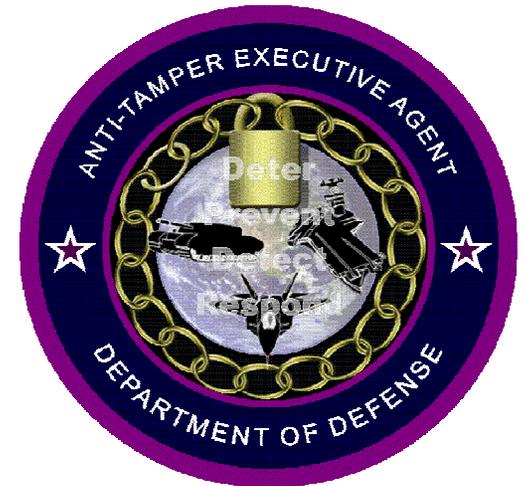
<http://at.dod.mil>



27 May 2008

PA# WPAFB-08-3418

Anti-Tamper Program



<http://at.dod.mil>

