



Research and Technology Protection (RTP) Program Special Report

May 2001

- Understanding Critical Program Information -

Successful Protection

The ultimate success of the AFOSI Research & Technology Protection (RTP) Program can be measured in terms of the United States Air Force's ability to maintain a strategic and tactical superiority over those forces inimical to US interests. Support for the RTP program by program managers, facility managers, security professionals, contractors and other entities are needed in order for the RTP Specialist to provide the myriad of counterintelligence (CI) services to protect the interests of the Air Force. The RTP Program methodology and counterintelligence tools, when employed, can effectively reach an optimum level of protection for our Air Force equities.

Critical Program Information (CPI)

Identifying critical program information (CPI) is the first step to reaching optimum protection. DoD Directive 5200.39 defines CPI as *"information, technologies, or systems, that, if compromised, would degrade combat effectiveness, shorten the expected combat-effective life of a system, or alter program direction."* The definition includes classified military information as well as unclassified controlled information about such programs, technologies or systems.

CPI in the Early Stage

CPI is related to acquisition programs. However, support for the protection of CPI is essential beginning in the research stage when identification of critical technologies or information is vital to the life cycle countermeasures support. The AFOSI RTP specialists supporting laboratories, test centers/test ranges, contractor facilities, universities, and specialized centers will provide CI support for CPI and other critical equities through tailored threat assessments focusing on the threats to the critical information and research efforts.



The goal of the RTP program is to ensure that CI services are provided to critical/sensitive acquisition programs with CPI across the globe, as well as to major Research, Development, Test & Evaluation (RDT&E) facilities. Your AFOSI RTP Specialist needs to be integrated into the CPI process throughout the entire life cycle as well as at the research levels before, and as, CPI is being created and as the CPI transitions through the acquisition milestones.

Once critical RDT&E information or CPI is identified, the information is then safeguarded as it may be important to maintaining the US warfighters' advantage on the battlefield when the resulting capability becomes part of future DoD acquisition programs or systems.

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CPI versus The Class Guide

AFOSI continues to respond to questions regarding how CPI differ from information elements identified in the program's Security Classification Guide (SCG) as requiring the highest level of protection. Recently, this topic has been addressed, in part, by explaining that the SCG serves as an administrative tool to guide the marking, packaging, transmission, etc of information whereas CPI tend to be those most fundamental aspects that guide the operational activity....those root or core pieces of information that would literally kill a program or render its effectiveness useless if compromised.

CPI considerations should guide all aspects of program protection. CPI identification is the first step of the Countermeasures Lifecycle Process from which you can move on to identifying susceptibility, determining threat, determining probability, identifying vulnerability, and the development, employment, and assessment of countermeasures. An engineer working a program may have to refer to a SCG to discern the classification level of one data element from hundreds of others; however, the engineer should be intimately familiar with the CPI and use it as the basis for decisions made daily. In an idealistic world the CPI will be represented in the

SCG.... let's start the correct process now.

CPI and The Threat



Identifying CPI is a team effort. Program Managers are encouraged to include their subject matter experts, security, and their RTP Specialist as part of the team when identifying CPI. Simply put, when you "specifically" identify what you have, your RTP team is better equipped to tell you who is interested in your technology and what component of the technology they are interested in, or already have. AFOSI can contribute to the CPI process, but one of the goals of the CPI process is to help the program identify the core critical information it needs to protect. Program Managers can then use these inputs to determine appropriate countermeasures.

Accurate threat assessments are dynamic and change based on program status. As the program matures and the CPI transitions, protection must be adjusted to safeguard it. Not EVERY foreign entity is interested in gaining access to EVERYTHING you have. As these changes occur, an entity may only



Using the ink pen as an example, let's identify specific CPI rather than general CPI. Knowledge of the existence of your ink pen may be important, but your RTP experts have already told you that the adversary is aware of the existence of the ink pen. Your engineering staff contacts you to report that a spring has been added to the pen. This enhancement to your advanced pen is an "improvement" your adversary would want to acquire. The addition of the spring to the internal mechanism is the specific CPI now needed to re-establish an effective and efficient security program for the pen.

A Coordinated Protection Effort

As we have demonstrated, CI support to identified CPI may come and go, or change when dictated by the movement of technology from the research and development phase, through testing and evaluation, through fielding, subsequent modifications and upgrades, and later disposal. The bottom line; however, does not change. Your RTP Team needs to monitor CPI throughout its life cycle and modify and tailor the RTP support when necessary to meet the level of support required. Program Managers determine that level of support by engaging the RTP Team in the CPI identification process.

The full spectrum execution of both defensive and offensive tools allows the RTP team to deter a Foreign Intelligence Services' ability to counter, clone, or kill US technology in the battle space. By actively engaging a combination of AFOSI specialties and using CI investigative techniques, the RTP team can more effectively utilize limited resources and provide for more immediate support to the Air Force, and ultimately the DoD.

*In the Next Issue:
Horizontal Protection of
Technologies*