



AIR  
LAND  
SEA  
SPACE  
CYBER

# SENEDIA Innovation & Technology

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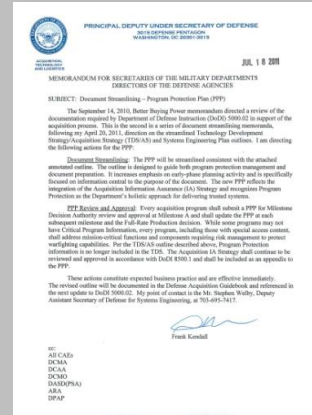
# DoD Drivers for Cyber Resilience Progression

## Old Requirements

DoD Instruction 8500.2  
Information Assurance  
(IA) Implementation –  
2007

Compliance with  
IA controls for  
Certification and  
Accreditation

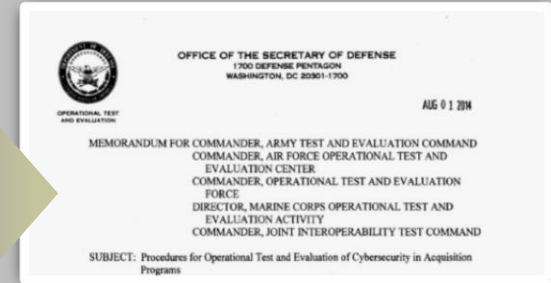
## Current and Emerging Needs



### Program Protection Plan

- Anti-Tamper
- Info Assurance
- Software Assurance
- Supply Chain RM
- Secure Systems Eng

## Sell-Off (Cyber DT&E and OT&E)



Procedures for OT&E of  
Cybersecurity in  
Acquisition Programs.

End State: “Weapon systems [that] can fight through cyber attacks and still complete the mission.” DT&E FY2011 Annual Report to Congress

# Bringing Innovation to the Undersea Arena



- **Combine technical innovation and advanced CONOPs**
- **Deploy pervasive sensors, robust networks and advanced effectors**
- **Drive down cost**
- **Solve toughest undersea challenges**

**Industry/Government Collaboration to Transform Warfare from Undersea**

# Raytheon and University Partnerships

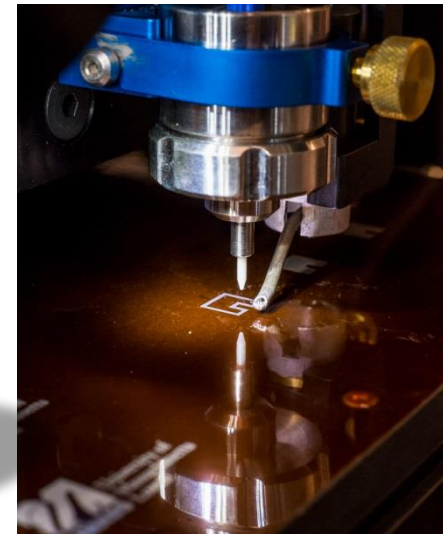
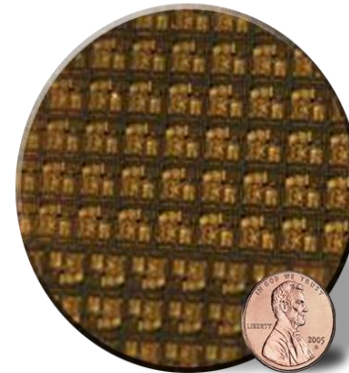
- Raytheon hires from >300 US Engineering schools with a deeper relationship with >100
- Examples range from graduate programs to full time collaboration

University	Program or Center	Efforts Supported				
		Education	Research	Laboratory	Consortium	
University of Massachusetts Lowell	UMass Lowell	RURI and PERC	X	X	X	X
UMass Amherst	UMass Amherst	Microwave MS	X	X		X
MIT	MIT	CyberSecurity@CSAIL	X	X		X
NEU	NEU	CenSSIS and ALERT	X	X		X
JOHNS HOPKINS UNIVERSITY	JHU	MS Sys Eng	X	X		
WPI	WPI	Program Protection Planning	X	X		
UT Austin	UT Austin	NASCENT	X	X		X

Each relationship is different but there are common threads

# Common Partnership Threads

- ❑ Real world problem(s) to solve
- ❑ Buy in from all parties
- ❑ Have defined success gates
- ❑ Proximity and Co-location helps keep momentum



**Successful partnerships make sense, seem effortless and benefit all**