



CAPITOL COLLEGE

1927

# FISSEA March 25, 2009



**Dr. Vic Maconachy**

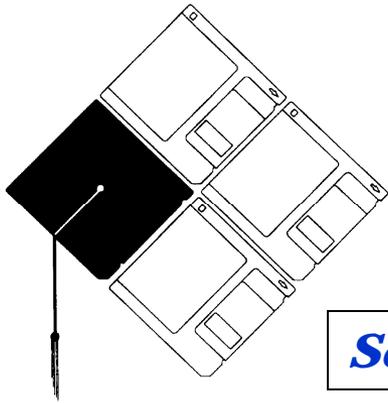
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**While America Slept: The Human Element of  
National Cyber Readiness**



# Thank You



***Serving the Federal Sector Since 1987 – 22 Years....***

## **Look how far you have come !**

Remember the diskette logo?

Remember the decision to keep the conference fee VERY affordable?

First to recognize the contributions of IA educators and trainers !

## **So many contributors:**

**Phil Sibert**

**Doothea de Zafra**

**John Tressler**

**John Ippolito**

**Sadie Pitcher**

**Mark Wilson**

**George Bieber**

**Roger Quan**

**Kelly Arnold**

**And, of course...Lou Numkin**

**And many others.....**

- Last Year:
  - We spoke of Silos of excellence



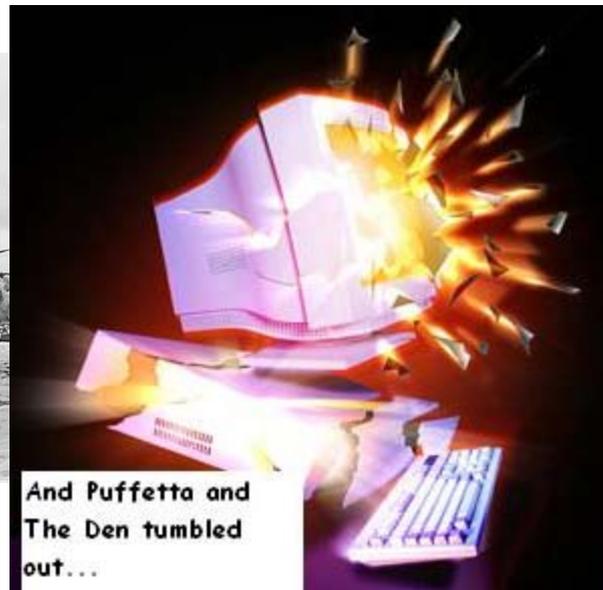
- This Year:
  - We will address the critical role of ALT & E in cyber work force readiness.





The U.S. needs leaders who understand the need for creating and implementing strategies of resiliency, or methods for ensuring that basic structures and systems of global, national, and local economies remain strong even after a cyber attack or other malicious acts or acts of war.

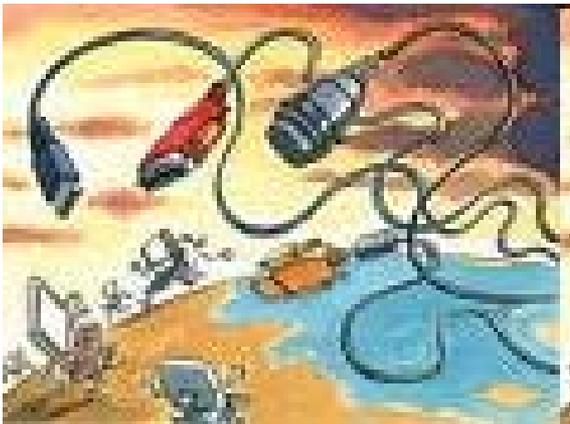
# Growing Up in the 50's



Were we caught sleeping?

The nature of warfare was changing.

**The latest trends in cybercrime**  
**Latest global report on cyber crime,**  
**published in Estonian media showed**  
**some worrying trends:**



- -Cyber criminals enjoy practical immunity in countries such as Russia and China.
- -The strategical planning of cyber criminals become more and more sophisticated, but the Governments remain slumbering and ignorant on dealing with the issue.
- -One of the greatest challenges for dealing with the issue of cyber crime is absence of relevant international law.
- -The law regulating e-commerce is especially insufficient.
- -Collecting the digital evidence and managing it in courts is unfortunately also inept.
- -The number of so-called spamming zombie-computers has quadrupled during the last quarter. They are able to send 100 billion spam messages daily.
- -E-criminals are among the winners of global economic recession.
- -There are already more than 7500 websites in the Internet directly under the control of terrorists.
- -Cyber criminals will very soon be capable of attacking a country's electrical, water and gas supplies and internet banking systems.



## What does this NATO report mean?

1. Speaks to the **INTERNATIONAL** cyber arena
2. Translates to the **NATIONAL** level
3. Appears at the **PERSONAL** level

**Our shoreline no longer defends us !**

# What can we do?

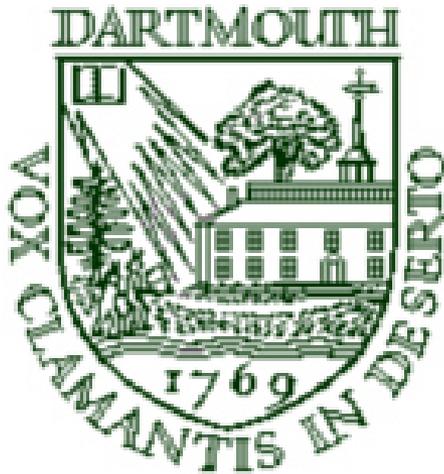


## Progress to date:

1. Academia
2. Industry
3. Government



# Dartmouth College Report



- Collaborative Approach
- Security Metrics
- International Framework
- Human Dimension of Cyber Security

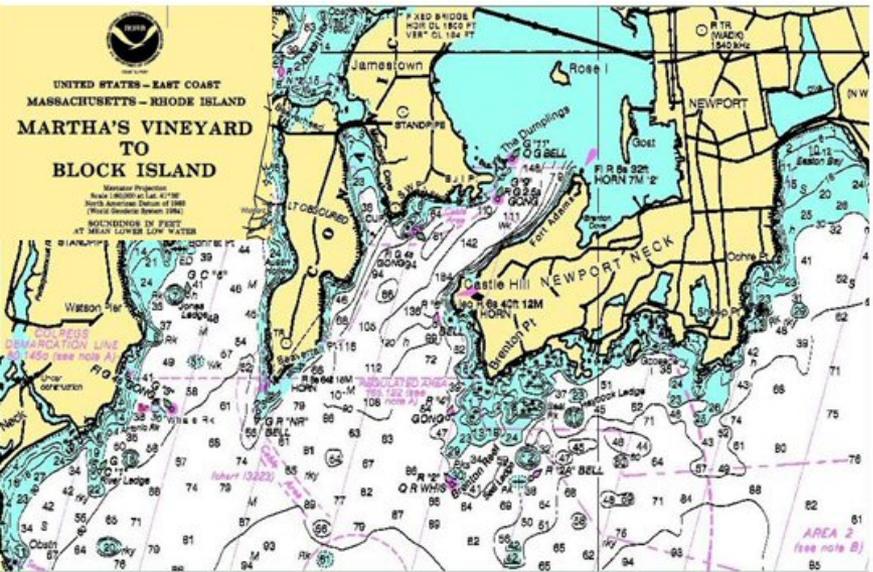


Where do we begin?

## Current State of IA in Academia:

Unlike the 50's I A as a field of study is relatively undefined  
SO:

1. We need to recruit and educate a corps of IA teachers
2. Academic I A research needs a major infusion of funds



**Ships are lost for many reasons, including:**

- failure of the ship's equipment
- instability
- navigation errors
- bad weather
- warfare and piracy

**??: Is cloud computing equated to ship navigation??  
If so, what comparable security measures should be in place?  
If so, should this be regulated?**



**Computers are compromised for many reasons:**  
**Software issues**  
**Hardware issues**  
**Operator error**  
**Malware**  
**Attacks, bots, etc...**

## How Will History Judge Us?

- **Can we move from credentialing to professionalization?**
- **Will we invest enough and in time?**
- **Will what we do make a positive difference for future generations?**



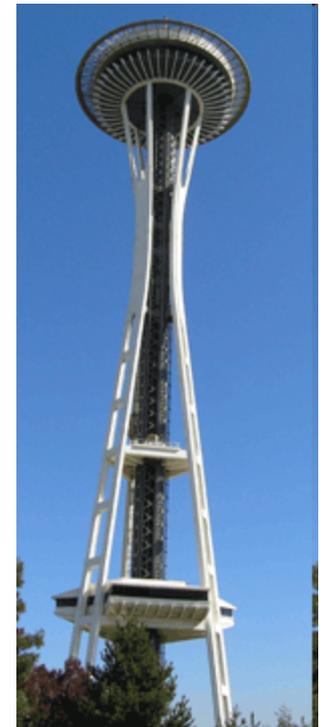


*CISSE*



**The 13th Colloquium for  
Information Systems Security Education  
June 1-3, 2009  
Red Lion Hotel on Fifth Avenue Seattle, Washington**

“Bootcamp” May 31<sup>st</sup>.



<http://cisse.info/current/registration/registration.html>