# A Closer Look at the Housing Bubbles and Requirements Management

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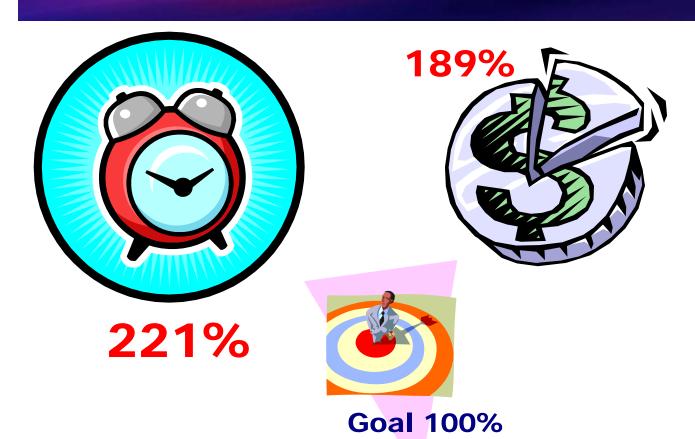
#### **Presentation Outline**



- Alarming Facts
- Potential Causes
- Case Studies
- Lessons Learned
- Recommendations
- Q&A



#### **The Numbers**



Source: Defense Software Report, Nov 2000 - Defense Science Board Task Force



#### Facts:

- Only 16%

   (1 of 6)
   projects
   completed

   on time, on budget.
- Nearly

   1/3 IT
   projects
   were

   cancelled.



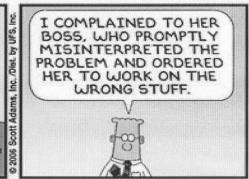
#### **The Problem?**



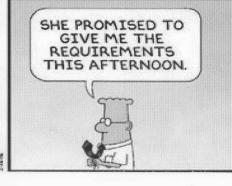




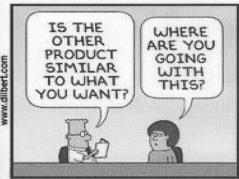












# Case Study 1: The Good

- Program Office: Navy Communications Satellite (PMW-146)
- Project: Ultra High Frequency Follow-On (UFO)
- Purpose: Provides tactical narrowband SATCOM to the warfighters
- Budget: \$2.1B
- Period of Performance: 1988 2002
- Accomplishments:
  - 11 consecutive successful launches of UFO birds
  - Secured a \$6.3B replacement constellation the Mobile User Objective System (MUOS)



# Case Study 2: The Bad

- Program Office: Maritime Surveillance Systems (PMW-183/PMS-485)
- Project: Advanced Deployable System (ADS)
- Purpose: Provides rapidly deployable systems for littoral maritime surveillance
- Budget: PTD approximately \$.5B
- Period of Performance: 1995 present
- Lack of Accomplishment:
  - No system fielded to date
  - To be cancelled in 2007



# Case Study 3: The Chaos

- Company: SAIC
- Office: Maritime Surveillance and Security Division (MSSD)
- Purpose: Provides systems engineering and integration for maritime surveillance, AT/FP, and Ports security for government and commercial customers
- Budget: \$30M annually
- Period of Performance: varies from months to years
- Characteristics:
  - Constantly in reactive mode
  - No consistency



# **Lessons Learned**

Attributes	PMW-146	PMS-485	MSSD
Well-Defined Requirements			
Strong Management		0	0
Capable People			
Documented Processes			
Consistent Tools			0
Available Training			
Common Product			0
Accountability			



#### Recommendations

- Disciplined Tools
  - CORE, DOORS, Rationale Pro
  - Excel
- Disciplined Processes
  - Requirement -> Functional -> Physical -> Verification
  - Actively manage Requirement Verification Matrix
- Disciplined People
  - Conduct SRR to establish a baseline
  - "If it's not written down, then it doesn't exist."
- Disciplined Governance Policy
  - Training to have qualified people
  - Accountability



# This is Your Conference... Please Ask Questions



