Data & Analysis Center for Software

DACS Overview

http://iac.dtic.mil/dacs

tom.mcgibbon@itt.com

315-838-7094

Information for the Defense Community **DTIC** ®

Report Documentation Page

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
NOV 2008	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
DACS Overview	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)	8. PERFORMING ORGANIZATION REPORT NUMBER
Data & Analysis Center for Software	

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release, distribution unlimited

13. SUPPLEMENTARY NOTES
See also ADM202819. Acquisition and Life Cycle Management Symposium: Rapid Access to Technical Information Supporting Defense Acquisition held in Huntsville, Alabama on 18-19 November 2008, The original document contains color images.

14. ABSTRACT

15. SUBJECT TERMS

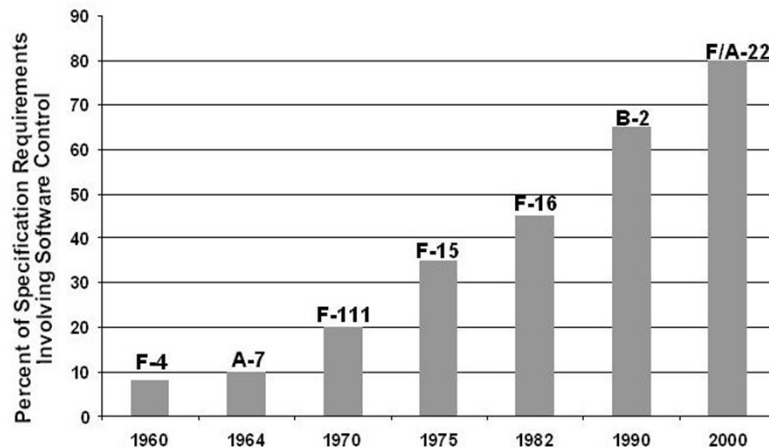| 16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**SAR**	**9**	

DACS Overview

► The DACS technical area of focus is Software Technology and Software Engineering, in its broadest sense.

► Central distribution hub for the latest software technology information sources.

► Wide variety of Technical Services to support the R&D, development, transitioning of Soft technology.
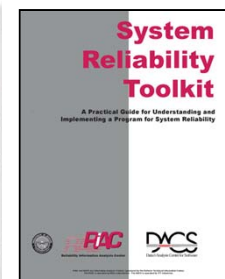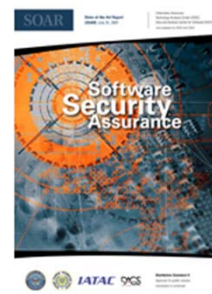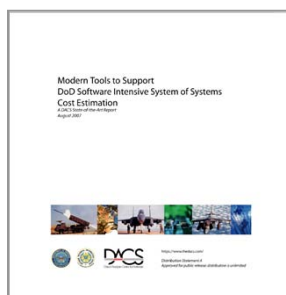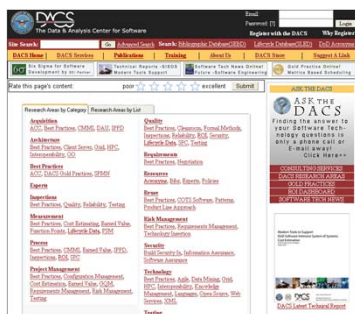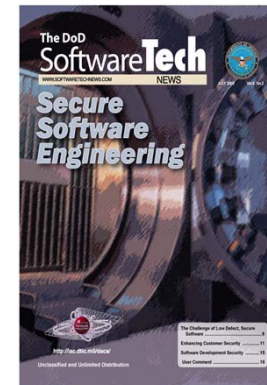
DACS STINFO Addresses Current Software Challenges

Chart: Percent of Specification Requirements Involving Software Control

- F-4 (1960): ~8
- A-7 (1964): ~10
- F-111 (1970): ~20
- F-15 (1975): ~35
- F-16 (1982): ~45
- B-2 (1990): ~65
- F/A-22 (2000): ~80

Ref: Defense Systems Management College

System Characteristics
- **10-100 MLOC**
- **30-300 Ext. I/F**
- **Depth of Supplier Tier: 6-12**
- **20-200 Coordination Groups**

Future Combat Systems:
- **12,000 SoS Requirements -> 90,000**
- **50 Critical Technologies**
- **52 Complimentary Programs**
- **40 Million Lines of Code**

► **Softwa...**
- ► Model Based Development Paradigm
- ► Net Centric Integration of Existing Systems
- ► COTS Integration
- ► Systems of Systems
- ► Ultra Large Systems

DACS STINFO Addresses DoD Software Needs

- **Technology**
  - **Lifecycle Development**
  - **State of the Art**
  - **Trends**
- **Best Practices in Software Engineering**
- **Emerging Practices**
- **Acquisition Issues**
- **Software Project Management**

Customers

- JIEDDO
- AFRL
- DARPA
- ODUSD(A&T)
- AAMDC
- DDR&E
- NSWC
- USACE
- ONR
- MDA

Classes of Users
- Developers
- Researchers
- Acquirers
- Managers

Information for the Defense Community DTIC®

Rich Resources for Users from the DACS

Hundreds of Resources

4 Hours Free

Download DACS Tech Journal

Benefits of SPI

Gold Practices – Practical Guidance

Software & Web Development Online Training

Reports on Topics of Interest

STINFO Resources of Interest to Software Acquisition Community

- **Reports**
  - System of Systems Cost Estimation
  - Software Reliability
  - ROI of Process Improvement
  - Gold Practices
    - Formal Risk M
    - Standards/Op
    - Manage Requ
    - Metrics Based Scheduling
    - Track Earned Value

- **Training**
  - Software Affordability
  - On-Line Training
- **Newsletters**
  - IR and Software
  - CMMI
  - Measurement
  - many more…

DACS Expertise

Focus Areas

- Software Testing
- Software Quality
- Software Reliability
- Agile Development
- Software Architectu
- Process Improveme
- Measurement
- Cost Estimation
- Information Technology
- Software/IT Training

- Net Centric Operations
- Software Economic Analysis
- Information Fusion
- Software Producibility
- Architectures
- System Modeling and Simulation

Established Relationships with World Class Experts Provides
State of the Art and Timely Scientific and Technical Information

Information for the Defense Community DTIC®
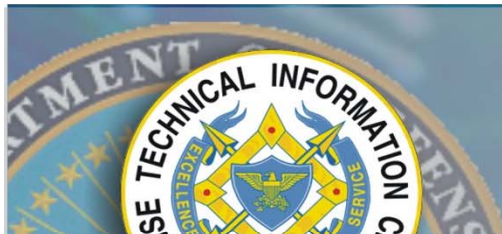
ADA School, FCS, and Warfighter Support

Combat Architectures

- Supported Multiple Major Army Studies over 25 Years
- Supported Development of Requirements / JCIDS Documentation for Major Army Combat and C2 Systems
- Supported Organizational Design
- Support Future Army BMC4I Architecture / Concepts Design
- Performed Integrated Systems Analysis
- Performed Regional Coverage Analysis

FUTURE FORCE ARCHITECTS

Training Development

- Support Development of Training and Doctrinal Products:
  - Field Manuals
  - Graduate Level Training Courses
  - OIF Lessons Learned Database / Tracking
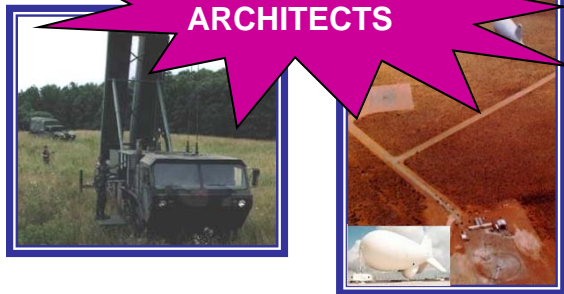 - Training Plans and Support Packages
  - Scenario Generation for Multi-Echelon Training
- Web page design and implementation

FUTURE / CURRENT FORCE TRAINING PRODUCTS

Operational AMD Unit

- Support to 32d AAMDC and ADA Brigades / Battalions in:
  - Training, Operations, Personnel, Communications (JTIDS), and Logistics
  - Executed AMD Training -30 exercises per year at Drive Up System Training Facility
  - Contingency Operations
    - OIF (Deployed)
    - ONE (Deployed)
    - OEF
  - Provide Information Technology services

SUPPORTS THE WARFIGHTER

Information for the Defense Community **DTIC**®

For More Information…

Tom McGibbon, CSDP
DACS Director

tom.mcgibbon@itt.com