The Department of Defense (DoD) CIM Program

Department of Defense (DoD) programs often take advantage of DACS resources through the use of special Technical Area Tasks (TATs). While the DACS has performed many of these TATs over the years, few have had the DoD wide implications as the TAT now supporting the Science and Technology (S&T) Corporate Information Management (CIM) Program. The S&T CIM is part of a broad based program whose goal is to make DoD corporate information interoperable and comparable. This program will have sweeping effects on the way that information systems are specified, purchased, and applied within the DoD. The management of the CIM program has been organized according to traditional DoD centers of responsibility. The S&T CIM is a component of the Acquisition and Technology (A&T) CIM which also includes Atomic Energy, Environmental Security, Economic Security, Procurement, Logistics, Test and Evaluation.
membership in the organization, and planning the Software Summit. Following is a short description of these activities.

**Policy Council**

The Policy Council is the centerpiece of the NSC. It is comprised of senior executives of software-centric corporations, presidents of academic institutions, and distinguished government executives. The mission of the Policy Council is to identify and analyze key national software issues and develop policy recommendations to address them. Membership in the Policy Council is by invitation of the NSC. The Policy Council is supported by the NSC Organization composed of a Board of Directors, Policy Committees, the Officers, and the Membership. The Board of Directors provides guidance and oversight for the operation of the NSC. The Board, consisting of not less than 12 persons, is elected on a representative basis from and by the various membership categories (e.g., business, academia). Therefore, it reflects a composition that is representative of the various sectors of our society. An Executive Committee manages the day-to-day operations of the NSC. The Executive Committee will consist of Board members and be nominated by the Board. The Policy Committees provide research and analysis for Policy Council operations. Based on focus areas defined by the Policy Council, the committees gather data on leading software indicators within the U.S. economy, including market share, trade balance, quality, reliability, productivity, security and safety, process maturity, workforce capability and capacity, and project performance. The indicators are analyzed to develop findings, assess consequences of current policies, and draft recommendations for policy guidance.

**Membership**

Membership in the organization is open to businesses, academic institutions, government organizations, non-profit entities, and individuals. A sliding scale of membership fees has been established. The categories include individuals, private for-profit entities, private non-for-profit entities, public entities, and academic institutions. The current membership fees structure ranges from $100 to $10,000. These are Chartering rates and will be available through the National Software Summit scheduled for 1-3 November 1995.

**Software Summit**

The National Software Summit’s theme is “Maintaining U.S. Leadership in Global Software Production.” It is an invitation only event that will be open to NSC members, prospective NSC members, and the NSC Policy Council. The Summit will gather together our nation’s software leaders to set the agenda for how to address the most important software issues affecting the nation’s economic security and well-being. It will be held at the Ritz-Carlton Hotel in Washington, DC on 1-3 November 1995. The Summit will focus on the following major issues:

- How to maintain U.S. global competitiveness in the face of growing foreign challenges to U.S. software dominance.
- How to assure U.S. software capability can sustain U.S. national security needs.
- How to significantly improve the capability of the total U.S. software sector, which includes software companies, software-intensive enterprises, the software workforce, educational institutions, and industry and professional associations.

For more information please contact:

**John Marciniak**  
DACS Technical Director  
(703) 329-7368  
marcin-alx1@kaman.com.

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Despite 50 years of progress, the software industry remains year perhaps decades--short of the mature engineering discplin needed to meet the demands of an information age socie...
The Science and Technology CIM Program

The methodology of the S&T CIM is compatible with both the larger world of DoD and the A&T CIM of which the S&T CIM is a component. While flexibility of emphasis is allowed to account for differences between functional areas, each CIM must accomplish three interrelated thrusts:

- Standardize Data
- Perform Business Process Reengineering (BPR)
- Select and Implement Migration Systems

These three thrusts are performed in parallel, but it is recognized that the findings of each thrust influence the direction of the other two and they are not performed in isolation. As discussed below, the S&T CIM Program has tailored the third thrust to better match the needs of the S&T community.

Standardize Data

Data standardization is perhaps the pivotal thrust of CIM. Data standardization requires that all information used to perform S&T be identified, and that the organization and definitions of data elements be standardized. Cost savings are expected to be derived from the availability of interoperable, comparable data and from associated reductions in the number of independent databases being maintained. Data standardization will also provide an information baseline that is independent of the choice of system architectures for future S&T AISs. These goals apply throughout the DoD and the S&T CIM, as well as other CIM programs. These programs must devote a significant effort to interfacing with other CIMs to resolve cross-functional data issues.

In compliance with the accepted CIM methodology, an S&T "as-is" data model is under development. The DoD-accepted methodology for data modeling in the CIM community is the Integrated DEFINition (IDEF) methodology which uses an entity-relationship based body of rules and conventions referred to as IDEFIX. This "as-is" data model will be reengineered as a "to-be" model incorporating an efficient, standardized organization for S&T information requirements. The IDEF methodology also includes IDEF0, a body of rules and conventions for activity modeling. Activity modeling with IDEFO is used in the second CIM thrust, perform BPR.

Perform Business Process Reengineering (BPR)

CIM BPR focuses on improvements in the processes that are used to accomplish DoD S&T activities. It begins with development of an "as-is" activity model that graphically depicts the way S&T is currently performed as discrete functional activities. The activity model is hierarchical in that each activity can be further subdivided into lower-level activities to a level of detail necessary to understand the function being modeled.
The IDEF0 activity modeling convention is similar to structured analysis but is somewhat tailored for industrial processes. Activities are depicted as boxes. Arrows coming into the activity boxes from the left represent Inputs to the activity (raw materials) and arrows coming out from the right represent Outputs (products). Arrows coming into the top of the activity depict Controls such as, a regulation that must be followed. Arrows coming into the bottom are enabling Mechanisms such as, a word processor for a secretary. Figure 2 depicts a section of the top-level IDEF0 view of S&T business processes.

The S&T "as-is" model is not being developed in isolation. Higher level IDEF0 models of DoD and A&T were used as a starting point for S&T. The S&T model is top-down and necessarily from the perspective of the DDR&E. At some lower level of detail, the information management practices of the services and DoD agencies must be interfaced with this top-level view.

As with the data model, the "as-is" activity model will be re-engineered into a "to-be" model incorporating business process improvements. The process of building the IDEF0 models will result in additional knowledge about S&T and insights about functional improvements. Other opportunities for improvements may come through the need to interface with other functional area CIM programs and the recognition of new technologies that can be used to improve the way S&T is accomplished.

The third major thrust of the S&T Program is to inventory all existing AISs and identify premier systems from which S&T information requirements can be extracted.

Select and Implement Migration Systems

The third thrust requires that all AISs currently being used within a functional area such as S&T be identified, and that a functionally sufficient subset of these systems (referred to as migration systems) be selected to serve the needs of the community. Savings would be captured by eliminating systems not selected for migration and avoiding the purchase and maintenance of many different systems that perform the same work. In following this paradigm, a functional area is making the tacit assumption that AISs exist which are relatively large and have significant annual costs to maintain the software and hardware.

Migration systems are to be selected through a multi-level sifting process that collects and measures performance and functional information about each S&T AIS. The initial findings of this evaluation have shown that the S&T community is characterized by complex decision making and the use of desktop systems and this finding casts some doubt on the assumption that significant savings might be gained from the migration of AISs within the S&T community. This finding is a reflection of the nature of S&T (research and technical development) versus that of the Finance and Accounting functional area, for example, whose AISs are characterized by very high transaction throughput and large investments in computational centers.

These characteristics of the S&T community led to the decision to refocus the search for migration systems into a search for Premier Systems. The designation "Premier" reflects a wider application of high quality AISs performing S&T. In this wider view, the need to establish an S&T data architecture and identify opportunities for BPR takes precedence over selection of migration systems. The detailed assessment process has been recast to single out AISs that exhibit the highest correlation with activities identified by the as-is activity model and are therefore likely to be rich sources of S&T data requirements. This approach does not ignore the cost saving potential of migration and, if migrating to Premier Systems makes economic sense for the S&T community, a migration implementation plan will be developed.
Opportunities for Cost Effective Software Development

The CIM program, when brought fully to fruition, implies a program of reengineering and consolidation of information systems throughout the DoD. The development of the activity and data models is important for gaining an understanding of the current practices of each functional area, but it does not extend past methods of systems analysis. It is important at this point to examine design and implementation strategies that continue the ideals of BPR and do not allow the S&T CIM program to restrict itself to a traditional, sequential information system development cycle. S&T, as well as other CIM programs, should look toward an approach that emphasizes functional modularity, incremental improvement, rapid prototyping, early initial successes, maximum use of commercial off-the-shelf (COTS) products, and open architectures. The DACS will continue to support the DoD community through data modeling and standardization, AIS evaluation and selection, as well as, identifying and implementing business process improvements.

Defense Technical Information Center (DTIC) Information Analysis Center (IAC) Directories Available via the Internet

by Brian McCabe/Defense Technical Information Center

DTIC is now providing IAC information via the Internet on our World Wide Web (WWW) server. Included in this IAC Directory and the IAC "Home Pages" are links to related IAC products such as newsletters, services and other general information. An IAC Directory may be obtained via gopher at:

gopher://asc.dtic.dla.mil/

To access the IAC WWW Server you need to have Internet access. You can access the IAC WWW information with any WWW browser such as NCSA Mosaic, MacWeb, lynx, etc. In order to view much of the information on the Internet, you must have WWW browser software. If you have Internet access and File Transfer Protocol (ftp) capability, you may download a free browser, NCSA Mosaic, from the NCSA server at "ftp.ncsa.uiuc.edu" then take a look at what the IACs can do for you on-line. Once you have obtained a web browser follow these steps to connect to the DTIC IAC Hub Page:

1. Under the File Menu choose: Open URL . . .
2. Type: http://www.dtic.dla.mil/iac/
3. Press: OPEN

If you have a DGIS account, you can use the character-based browser, lynx, to view this information. You will not be able to view graphics, however. To access the IAC Hub Page via DGIS:

1. Connect to DGIS
2. Type: unix lynx
3. At lynx screen, type: G
4. Follow directions at bottom of screen to navigate through the information.

The DTIC IAC HUB page will provide access to the following IAC home pages:

- CBIAIC
  Chemical Warfare/Chemical and Biological Defense IAC
- CIAC
  Ceramics IAC
- CPIA
  Chemical Propulsion Information Agency "home page not yet built" Phone: (410) 992-7308; FAX (410) 730-4969

CRSTIAC
Cold Regions Science and Technology IAC
http://www.usace.army.mil/crstiac/

CSERIAC
Crew System Ergonomics IAC
http://www.dtic.dla.mil/iac/cseriac/cseriac.html

DACS
Data & Analysis Center for Software
http://www.utica.kaman.com/8001/

GACIAC
Guidance and Control IAC
http://www.dtic.dla.mil/iac/gaciac/GCH-MFG.HTML

HTMIAC
High Temperature Materials IAC

IRIA
Infrared IAC
http://www.erim.org/IRIA/iria.html

MIAIC
Metals IAC

MMCIAC
Metal Matrix Composites IAC

MTIAC
Manufacturing Technology IAC
http://www.dtic.dla.mil/iac/mtiac/MTIAC.HTML

NTIAC
Nondestructive Testing IAC

RAC
Reliability Analysis Center
http://itfri.com/RAC/

SURVIAC
Survivability/Vulnerability IAC
http://surviac.flight.wpafb.af.mil/

TWSTIAC
Tactical Warfare Simulation and Technology IAC
A DACS Course Announcement!

Measurement Implementation and Practice - Building an Organizational Framework for Measurement
29-31 August 1995
Professor Victor Basili
University of Maryland
Center of Adult Education (Conference Center)
Building 345 on Campus Drive
College Park, Maryland 20742

About the Instructor

Victor Basili is a Professor in the Institute for Advanced Computer Studies and the Computer Science Department at the University of Maryland, College Park, Maryland. He is a world recognized expert in measurement, lecturing and consulting on this topic in the U.S., Japan and Europe.

Course Description

The seminar will highlight the following areas: Measurement and Metrics; Measurement Paradigms; and the Experience Factory. The seminar will provide a basic understanding of measurement methods and problems, discuss the practical aspects of metric collection, give examples of metrics and management indicators, discuss measurement initiatives underway throughout the world, develop an understanding of measurement techniques that are utilized in practice, discuss new paradigms for measurement, and explain the concept of an Experience Factory.

Course Fee

The fee for the course is $495 (includes course materials and refreshments) Payment either by check, DD Form 1155, DD Form 1556, or VISA/MASTER-CARD. Checks should be made payable to Kaman Sciences Corporation. All participants must be preregistered. We will be reserving a block of rooms, if you would like further information about the course and accommodations, please contact:

Anne Robinson
(315) 734-3696
Fax: (315) 734-3699
aroebinson@utica.kaman.com

The course information is also available via the DACS Home Page:
http://www.utica.kaman.com

Announcing a New DACS Handbook!

Electronic Publishing On The World Wide Web An Engineering Approach

Introduction

This Data & Analysis Center for Software Technical Handbook provides guidelines to Internet information providers for authoring information for the World Wide Web. The handbook covers technical and managerial concerns for designing, implementing and maintaining electronic documents. The handbook is structured around a document life cycle point of view, and identifies many parallels between electronic publishing and software development. Lessons learned from software engineering research, applied to electronic publishing issues, can be used to improve the quality of WWW publishing.

Contents


Availability

The handbook is available from the DACS at a cost of $50.00 The handbook will also be implemented in hypertext form and published on the World Wide Web in June of 1995. A link will be added from the DACS Home Page (http://www.utica.kaman.com) when it is available for on-line browsing. For more information, contact:

Elaine Fedchak
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Soon after President Clinton took office in 1992, he established the Office of the Deputy Undersecretary of Defense for Acquisition Reform. The purpose for establishing this office was to increase the efficiency of the DoD acquisition process. While it has been the public perception that acquisition reform was needed because of well-publicized $600 toilet seats and $300 hammers, more fundamental issues were at the heart of acquisition reform. These fundamental issues included: 1) the inability of the DoD to support a Defense-unique industrial base given procurement budget reductions; and 2) the inability to tap technology-rich commercial products that do not meet unique military specifications and standards. Under the new office created by President Clinton, Process Action Teams (PATs) have been assembled to review acquisition processes and submit reform recommendations for the following areas:

- Use of military specifications and standards;
- Use of Electronic Data Interchange (EDI);
- Defense Acquisition Board processes;
- Contract Administration Services processes;
- Procurement processes; and
- Requirement processes.

Other initiatives aimed at enhancing the Federal Government’s procurement practices included Vice President Gore’s “Reinventing Government” review and Congress’s recent passing of the Federal Acquisition Streamlining Act of 1994. These initiatives recognize that the federal government, and the DoD in particular, must shorten its acquisition cycle times to maximize the effectiveness of reduced resources and to take full advantage of rapid technological advances occurring in commercial markets.

Reducing Acquisition Cycle Time Through Workflow Management

The DoD is an incredibly large and complex organization. It develops products for its own use and supports internal and external research and development, engineering, production, and testing. Its products are the most sophisticated and intricate in the world. Yet increasingly, the DoD must sustain its world technological leadership within sharply reduced procurement budgets and personnel resources. As a means of preparing itself for the future, the U.S. Army Armament Research and Development Engineering Center (ARDEC), located at the Picatinny Arsenal, Dover, N.J., streamlined its acquisition process through implementation of a Technical Data workflow management system.

Procuring a major military weapon system, or components for a weapon system, requires careful attention to detail. The U.S. Army maintains equipment configuration profiles of all their weapons. These profiles provide product numbers and engineering drawings for all components of each weapon system. When product enhancements are performed, or when spare parts must be ordered, careful engineering reviews must be executed to ensure that the weapon will continue to perform within specifications. Multiple engineering laboratories, hazardous materials centers, and packaging offices spread across a wide geography work together to complete the review. At ARDEC, organizations in Rock Island, IL., Dover, N.J., Troy, N.Y., and Warren, MI., work together to prepare the engineering documentation to support procurement solicitations. This review and certification process often requires hundreds of individual processing points.

Technical Data Package Processing Before Workflow Management

Prior to implementation of the TDP Workflow Management System at ARDEC, TDPs were assembled by a paperbound, serial process. In 1989, ARDEC TDPs were being completed in 190 days, on average. More importantly, ARDEC was experiencing a 33% error rate on the TDPs that were produced. The error rate was even more troubling than the extensive time
taken to complete the process because of the additional cost incurred. Once a TDP is completed, incorporated in a solicitation, and mailed to prospective bidders, correcting errors is more expensive than it would be if the error were discovered before it left the engineering centers. Prospective bidders must be notified, the bid time must be extended, and all steps included in the original solicitation must be retraced and performed again.

Figure 1 illustrates ARDEC’s manual TDP business cycle before the TDP Workflow Management System was installed. This process was bound by paper. The controlling aspect of the process was the folder that contained all the documentation included in the TDP. Additional TDP documentation was added to the folder as it moved from processing point to processing point. This serial method was inefficient because processing capacity was wasted as employees waited for work to be completed at preceding processing points.

A Technical Data Package business process review study revealed that if certifying engineers and technicians had multiple access to the data, and if electronic routing replaced the paper folder, concurrent processes could take place and certain processes could be eliminated. In addition, controls could be programmed into the system so that managers could manage the process better.

Specifically, time controls could be placed at each processing point in the cycle. This would allow the managers to know the status of every technical data package. With this information, managers could identify specific jobs that were exceeding normal processing times and take the appropriate actions to resolve the problem. Not only did this improve the overall process efficiency, but managers no longer had to deal with irate customers asking why the process was taking so long.

Figure 2 illustrates the reengineered TDP process at ARDEC. This reengineering task was made possible through the assistance of the DACS and the application of the DACS supported OASYS software toolset. In fact, the TDP workflow application (called TDP Tracker) actually spawned the development of OASYS (see Figure 3).

Using the TDP Tracker, ARDEC has increased its productivity over 500%. ARDEC’s current average for processing and certifying TDPs is now less than 30 days. Perhaps more importantly, ARDEC’s TDP error rate is less than 1%.

Figure 1 -- ARDEC’s manual TDP business cycle before the TDP Workflow Management System installation
The TDP process improvement task was so successful that Kaman Sciences developed a software toolset that helps developers design new workflow management applications. The OASYS toolset incorporates reusable tables and codes that are used in developing and maintaining workflow applications. This illustrates the modules included in OASYS. A short description of each module is listed below:

<table>
<thead>
<tr>
<th>Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forms Configuration Manager</td>
<td>Controls the display and printing of documents. Provides tools to design, develop and store forms.</td>
</tr>
<tr>
<td>User Interface Generator</td>
<td>Defines user display interface (i.e., graphical vs. character display). Controls menu displays based on user profiles.</td>
</tr>
<tr>
<td>System Configuration Manager</td>
<td>Defines hardware and software control parameters.</td>
</tr>
<tr>
<td>Enrollment System Configuration Manager</td>
<td>Maintains user privilege parameters, electronic signature authorizations, user security.</td>
</tr>
<tr>
<td>Model User Administrator</td>
<td>Defines user roles for system use. The role assigns certain system functions and privileges.</td>
</tr>
<tr>
<td>Flexible Workflow Router</td>
<td>Defines tables for workflow processing points and stores codes for routing algorithms.</td>
</tr>
</tbody>
</table>

Figure 2 -- ARDEC's TDP process after the TDP Workflow Management System installation

Figure 3 -- Modules included in the OASYS toolset
Software Engineering Events

First World Congress for Software Quality
20–22 June 1995
San Francisco, California
ASQC Conferences & Exhibits
PO Box 3005
Milwaukee, WI 53201-3005
800-248-1946 or (414) 272-8575
FAX (414) 272-1734

Second Working Conference on Reverse Engineering
14–16 July 1995
Toronto, Ontario
Reverse Engineering/WCRE
PO Box 400
Burlington, MA 01803
FAX (617) 272-8464
wcre@computer.org

Washington Ada Symposium (WADAS ’95)
26–30 June 1995
McLean, Virginia
Danielli & O’Keefe Associates
Conference Management
Chiswick Park
490 Boston Post Road
Sudbury, MA 01776
(508) 443-3330
FAX (508) 443-4715

Concurrent Engineering ’95
23–25 August 1995
Tysons Corner, Virginia
Annette Krug
(814) 269-2727
FAX (814) 269-2402
krug@ctcc.com
http://ce-toolkit.crd.ge.com/ce/

Tenth Annual Conference on Computer Assurance (COMPASS ’95)
26–30 June 1995
Gaithersburg, Maryland
Karen Ferraiolo
Arca Systems, Inc.
Suite 600
Vienna, VA 22182
(703) 734-5611
ferraiolo@arca.va.com

International Conference on Software Maintenance (ICSM ’95)
16–20 October 1995
Opio (Nice), France
Mari Georges
Cap Gemini Innovation
Paris, France
33 1 49 10 53 98
FAX 33 1 49 10 06 15

Tenth Knowledge-Based Software Engineering Conference (KBSE-95)
12–15 November 1995
Patti McCormick
Data & Analysis Center
pmccormick@utica.kaman.com
http://www.utica.kaman.com

ISSRE ’95 Continued
Karama Kanoun
33 61 33 62 35
kanoun@laas.fr

Sixth International Conference on Applications of Software Measurement
30 October - 2 November 1995
Software Quality Engineering
3000-2 Hartley Road
Jacksonville, FL 32257
(904) 268-8639
FAX (904) 268-0733

TRI-Ada ’95
5–10 November 1995
Anaheim, California
Danielli & O’Keefe Associates
Conference Management
Chiswick Park
490 Boston Post Road
Sudbury, MA 01776
(508) 443-3330
FAX (508) 443-4715

The DACS Presents a Technical Paper at the Fifth Annual Dual-Use Applications and Technology Conference in Utica, New York

Elaine Fedchak of the DACS, presented a technical paper titled “Software Engineering of Electronically Published Material,” at the Fifth Annual Dual-Use Applications & Technology Conference at the State University of New York Institute of Technology at Utica / Rome. The paper focuses on electronic publishing using the World Wide Web (WWW) as a distribution medium. The theme of the paper is that electronic publishing on the Internet is in many ways analogous to developing software. Therefore, the principles and practices of software engineering that have emerged can be applied to electronic publishing.

If you would like a copy of this paper or more information, please contact:

Elaine Fedchak
(315) 734-3646
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The Seventh Annual Software Technology Conference
by John Marciniak, DACS/Kaman Sciences Corporation

The Seventh Annual Software Technology Conference (STC) was held between 9 and 14 April 1995 in Salt Lake City, Utah. Sponsored by the Department of the Air Force, Department of the Army, and the Department of the Navy, the format consists of tutorials, technical sessions, and exhibits and exhibitor presentations.

Over 2,700 persons attended the STC. There were 12 tutorials covering subjects such as process improvement, Ada 9X, Inspections, Reengineering, and Metrics. There were 141 exhibitors and over 75 exhibitor presentations including one by Jim Reed of the DACS and there were eleven technical tracks over two and one-half days.

The first days plenary session was conducted by Major General Stephen Condon (USAF) with distinguished featured speakers from the services to include: Lt. General Carl O’Berry (USAF), Lt. General Otto Guenther (USA), and Rear Admiral John Hekman (DoN). Grady Booch gave the keynote and Capers Jones talked about function points and contrasted the accuracy of function points with source lines of code as a means for comparing the productivity of software. Jack McGarry of the Naval Undersea Warfare Command described the draft Joint Logistics Commanders (JLC) developed Practical Software Measurement guidebook. At the conclusion of his presentation the guidebook was distributed to all attendees.

The conference was formally closed in a plenary session on Thursday, the 13th of April. On Friday, the 14th of April, there were 7 sponsored tracks and a workshop on Business Process Reengineering. The Thursday Plenary session was conducted by Mr. Lloyd Mosemann, Deputy Assistant Secretary of the Air Force for Communications, Computers, and Support Systems. It included a highly entertaining talk by General Bill creech (USAF, Retired) on quality. There were also presentations by Dr. Ed Feigenbaum, Chief Scientist of the USAF on aspects of Artificial Intelligence, Tom McCabe President of McCabe Associates on Metrics, and John Marciniak of the DACS who discussed the National Software Council initiative.

The STC is the conference to attend if you are interested in software engineering practice and the practitioners point of view, particularly in the DoD. It presents a strong contrast to many conferences that focus on leading state of the art techniques of an exploratory nature, thus, it has a fresh, down to earth atmosphere.

The general sessions will be published in the following issues of CrossTalk. The CD-ROM is available at $45 for the USA and $50 for non-USA, plus shipping for non-conference attendees from Utah State University.

If you need further information about the STC, please contact:

Dallas Holmes
STSC
(801) 797-0039

The Seventeenth Minnowbrook Workshop on Software Engineering on 24-28 July 1995

The Seventeenth Minnowbrook Workshop on Software Engineering will be held at the Minnowbrook Conference Center in Blue Mountain Lake, New York on 24-28 July 1995. This year’s theme is “Improving the State of DoD Software Measurement Practice.” The conference is sponsored by Syracuse University in cooperation with Rome Laboratory.

If you would like registration, schedule, or travel information, please contact:

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About the DACS Newsletter

The DACS Newsletter is the current awareness publication of the Data & Analysis Center for Software (DACS), a centralized source for current, readily available data and information concerning software engineering and measurement technology. The DACS is a Department of Defense (DoD) Information Analysis Center (IAC) which is administratively managed by the Defense Technical Information Center (DTIC) under the DoD IAC Program. The DACS is technically managed by Rome Laboratory (RL) and operated by Kaman Sciences Corporation. Suggestions and submissions of articles for inclusion in the DACS Newsletter are welcome and encouraged. Inquiries and comments regarding DACS’ capabilities, products, or services may be addressed to:

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