The Defense Technical Information Center: Information for the Defense Community

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Defense Technical Information Center

We all seem to be doing more with less these days. Take a few minutes to learn about what is available at the Defense Technical Information Center (DTIC), an organization that can save you time and money. The DTIC offers a world of information at your fingertips, whether you use a desktop or a laptop. The DTIC has information that is from the defense community, about the defense community, and for the defense community.

The DTIC is currently the largest central resource available for DoD and government-funded scientific, technical, engineering, and business-related information[1]. For more than 60 years, the DTIC has provided warfighters, engineers, researchers, scientists, and those in laboratories and universities access to more than 2 million publications covering 250 subject areas. Approximately 100 Web sites are designed, hosted, and maintained by the DTIC for other DoD agencies and programs. The DTIC also manages 10 Information Analysis Centers (IACs), which locate, analyze, and provide scientific and technical (S&T) information in specialized subject areas.

The DTIC—a DoD field activity within the office of the Under Secretary of Defense for Acquisition, Technology and Logistics that reports to the Defense Research Engineering Director—is one of several organizations whose work reaches across all segments of the DoD.

Why Use the DTIC? Why Not?

The Information Age is also the era of reduced budgets and fewer personnel, where doing more with less is an overused (but true) expression. This is certainly a reality in the federal government. The DoD Scientific and Technical Information Program Directive 3200.12 calls for the need to reduce unnecessary S&T expenditures. This is where DTIC comes in. Using the DTIC's resources can help:

- Leverage the multi-billion dollar investment in DoD research and engineering.
- Prevent unnecessary or redundant research.
- Get DoD S&T information into the hands of the *right* people in the defense community.
- DoD researchers and decision makers turn DTIC data into value-added knowledge for ongoing and new efforts.
- Offer up-to-date electronic information to the defense community using *push technology*.

- Provide information support to the federal and contractor communities.
- Build on prior knowledge.

Why *reinvent the wheel*? Sharing resources can be a boon to engineers, researchers, students, and anyone who needs information to produce new and better research that can lead to new and better technologies. We want to ensure that our collection is as complete as possible, allowing researchers to find informa-

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tion, determine if money has been spent on that kind of effort in the past, and learn about those project outcomes.

One Site, One Source

The December 2007 CROSSTALK Web Sites section highlighted one of our databases:

> The Public Scientific and Technical Information Network (STINET) is available to the general public, free of charge. It provides access to citations of unclassified unlimited documents that have been entered into the DTIC's Technical Reports Collection, as well as the electronic

full-text of many of these documents. Public STINET also provides access to the Air University Library Index to military periodicals, staff College Automated Military Periodical Index, DoD Index to Specifications and Standards, and Research and Development Descriptive summaries. [1]

With the advent of the DTIC's redesigned Web site and search systems <www.dtic.mil/dtic/search/tr/>, the acronym STINET is no longer used for our public site. The good news is that all of the information in our collection (and then some) is still offered.

As a result of the rapid growth of DTIC capabilities and inclusion of new information audiences, the DTIC's administrator, R. Paul Ryan, directed the staff (in 2007) to create a more structured (simpler) information delivery approach. The goal was met in mid-2008 when the DTIC launched a new user interface, DTIC Online <www.dtic.mil>, which offers a one-site, one-source location for DoD S&T information.

DTIC Online provides free access to citations of public release reports that describe the progress or results of research efforts and other S&T information held by the DTIC. Many of these documents are available in full-text and can be downloaded. A key feature of the new site is the ability to search more databases using DTIC's MultiSearch Enhanced <http://multisearch.dtic.mil>. This tool, a portal to the *deep-Web* for government S&T information, searches content below the *surface* Web for information not accessible through commercial and government search engines. This search feature assists the DoD community in accessing S&T information over a wide range of DoD and commercial sources. DTIC customers can now search an estimated 3.5 million documents, from more than 50 national and international sources.

New to this public DTIC Web site is the Interest Areas section, which provides

access to a broad range of contacts, associations, blogs, conferences, and research institutions appropriate to S&T research communities. Each interest area has a DTIC staff member who manages the specific page <www.dtic.mil/dtic/communities/>. Feedback and comments are welcome: <ref@dtic.mil>.

The DTIC is currently assessing various avenues as we look to revamp our access-controlled site, available to our registered customers (see the registration section).

What Is Available?

You can find documents on topics ranging from acquisitions to zeta functions:

- **Public Technical Reports.** This database contains more than 2 million reports in print and non-print formats (software, datafiles, databases, and video recordings) conveying the results of defense-sponsored research, development, test, and evaluation efforts. It includes journal articles, DoD-sponsored patent applications, studies, analyses, open-source literature from foreign countries, conference proceedings, and theses. Between 30,000 and 35,000 new documents are added annually.
- **Research Summaries.** This database contains descriptions of DoD research in progress, providing information on technical content, responsible individuals and organizations, principal investigators, and funding sources[2]. The collection consists of approximately 309,000 active and inactive summaries from 1965 to the present.
- **Independent Research and Development (IR&D).** This database contains more than 173,000 descriptions (dating back to the mid-'70s) of R&D projects initiated and conducted by defense contractors independent of DoD control and without direct DoD funding. On average, in excess of 2 billion dollars worth of IR&D projects are annually submitted to the DTIC. The database includes basic and applied research and technology development efforts as well as systems and concept formulation studies. Defense contractors and potential contractors are encouraged to submit project descriptions to the IR&D database. Accessible only to DoD and select U.S. government organizations, the proprietary IR&D information is used to identify contractors with expertise in areas of interest to the DoD and to avoid DoD duplication of industry research and development efforts.

- **Technical Reports Automated Information List.** A free, publicly available electronic mailing list that, every two weeks, disseminates citations to the DTIC's recently added unclassified, unlimited technical reports.

A Leader in Utilizing the Web

As a center of excellence for information storage and retrieval, the DTIC has been able to advise DoD components concerning policy, law, best practices, and security strategies that relate to the transmission and use of all types of information. The DTIC offers full-service Web support, an established Web architecture, and customer liaisons. The DTIC hosts more than 100 Web sites, such as the Joint

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Chiefs of Staff, the Defense Prisoner of War/Missing in Action Office, and the Federal Voting Assistance Program.

To Distribute or Not to Distribute

While there is much publicly accessible material in the DTIC collection (almost one-half of the DoD's technical reports are publicly available the day they are published), some information has security classifications. The DoD's S&T information is always categorized (or *marked*, the term used in the defense community) by the office that originates the document. This marking determines how and with whom the information can be shared. Some information is marked to protect national security. DTIC databases contain such *classified* information that may be marked confidential or secret.

DTIC databases also contain informa-

tion that, although not classified, is still sensitive for various reasons. These documents are marked to show why the information is sensitive and to whom the document can be distributed. Such documents are referred to as *unclassified, limited*. Information that is neither classified nor limited (but can be released to the public) is referred to as *unclassified, unlimited*. The DTIC's collection is comprised of 51 percent unclassified, unlimited; 40 percent unclassified, limited; and 9 percent classified information.

Registration Is the Key

The first step in ensuring that you can get the information you need from us is by registering for services at <www.dtic.mil/dtic/registration>. Access to DoD classified and unclassified, limited information is controlled through this registration process. A variety of secure DoD Web sites can be accessed by authorized users. While our primary customers are those who have a legitimate business relationship with the DoD and largely include the military and defense contractors, there are other categories of customers.

Who uses DTIC information? Here is a snapshot of our registered customers:

- Acquisition instructors.
- Active duty military.
- Congressional staff.
- Directors of corporate relations.
- DoD contractors.
- Faculty at military schools.
- Historians.
- Logistics management specialists.
- Quality assurance specialists.
- Small business owners.
- Security managers.
- Software engineers and developers.

A Wealth of Information

The DTIC has a wide range of information products relating to S&T planning, budget, financial, R&D descriptions, management, test and evaluation, research results, training, law, command histories, conference proceedings, DoD Directives and Instructions, foreign documents and translations, journal articles, management summaries, security classification guides, technical reports, and summaries of works in progress.

Why does the DTIC get this information? It is required by DoD Instruction 3200.14, which mandates that DoD research, including research done in-house and/or by contractors and grantees, should be part of the DTIC collection. In other words, if there is great technology in the DoD, the DTIC should have that information for others to use and build upon. The

material comes from many sources:

- DoD organizations (civilian and military) and DoD contractors.
- U.S. government organizations and their contractors.
- Non-profit organizations working on DoD scientific, research, and engineering activities.
- Academia.
- Foreign governments.

Specialized Information Solutions

Another facet of DTIC activities is the management and funding of 10 contractor-operated joint service-oriented IACs <http://iac.dtic.mil>. Chartered by the DoD, IACs locate and analyze S&T information for customers in specific subject areas. Staffed by experienced technical area scientists, engineers, and information specialists, the IACs have comprehensive knowledge bases which include historical, technical, scientific, and other data collected on a worldwide basis. Many of the IACs' products and services are free and include announcements of pertinent reports in the particular IAC's field of interest, authoritative bibliographic search reports, the latest scientific and engineering information on specific technical subjects, consultation with or referral to world-recognized technical experts, and the status of current technologies. The 10 DTIC-managed IACs (as of September 2008) are:

- AMMTIAC: Advanced Materials, Manufacturing, and Testing.
- CBRNIAC: Chemical, Biological, Radiological, and Nuclear Defense.
- CPIAC: Chemical Propulsion.
- DACS: Data and Analysis Center for Software.
- IATAC: Information Assurance Technology.
- MSIAC: Modeling and Simulation.
- RIAC: Reliability.
- SENSIAC: Military Sensing.
- SURVIAC: Survivability/Vulnerability.
- WSTIAC: Weapons Systems Technology.

Technical Area Tasks are fee-based and more extensive than basic IAC products and services. They vary from a fraction of a staff year to several staff years and can cost from a few thousand to several million dollars. These tasks can be ordered by any DoD component and on a case-by-case basis by other federal organizations.

Annual Conference

The DTIC's annual conference is held each spring in the Washington, D.C. area. Attendees typically include scientists, engineers, and professionals in the technology research, development, information science, and acquisition communities representing the DoD, other federal agencies, and contractors. The three-day conference features speakers from government, private industry, and the DTIC who address evolving information technologies and sources. A technology expo is held where exhibitors tout the latest in scientific, research, and engineering fields. The 2009 conference is scheduled for April 6-8 in Alexandria, Virginia. For more information go to: <www.dtic.mil/dtic/announcements/conference.html>.

The DTIC Review

This quarterly CD publication provides the full-text of selected technical reports and a bibliography of other references of interest in a single package. Each volume provides a sampling of documents from the DTIC collection on a specific topic of current interest. Titles in 2008 included: *Non-Lethal Weapons, Intelligent Autonomous Vehicles*, and *Human, Social, Cultural, and Behavior Modeling*.

Training

Free training in searching the DTIC's databases and handling of DoD technical information is offered to all DTIC-registered customers at our headquarters (McNamara Headquarters Complex, Fort Belvoir, VA) and four regional offices (Boston, MA; Dayton, OH; Albuquerque, NM; and Los Angeles, CA). Customized and on-site courses can be provided, with travel expenses paid by the hosting organization. For more information, go to: <www.dtic.mil/dtic/customer/training/index.html>.

No More Dead Pages

The DTIC is committed to maintaining the permanent availability of the information in its collection. Here's a real-life example: You are working against a deadline and find a Web site that has a needed resource; you click on the link and are taken to a dead page with the dreaded *Error 404* message. A solution to this problem is the DTIC's Handle Service <www.dtic.mil/dtic/stresources/dtic SearchTools/handleservice.html>. What exactly is a handle? It is a permanent name for a digital object (publication, article, research paper, and so forth) regardless of where and how the object is stored. In other words, it provides long-term access to a digital resource. Handles, added to public information in DTIC collections, link directly to full-text PDF documents.

The Power of Information

The DTIC gets information from and for the defense community—about defense issues and beyond. Having a full range of S&T and R&D within our collection ensures that technological innovations are linked to defense development and acquisitions efforts. New research efforts can begin with the highest level of information available. This, in turn, maximizes the use of DoD project dollars.◆

Reference

1. STSC. "Web Sites." CROSSTALK Dec. 2007 <www.stsc.hill.af.mil/crosstalk/2007/12/0712WebSites.html>.

Notes

1. The DTIC has been successful in providing information to the defense community by knowing how to present information. The DTIC is a vital link in the partnerships among warfighters, the acquisition community, technology providers, and information professionals. No matter what the medium, content, or dissemination method, the DTIC's job has always been to help people use information as efficiently as possible to strengthen the nation's defense. Visit us at <www.dtic.mil>.
2. Only available to registered customers, access to this collection is based on individual access restrictions.

About the Author

Sandy Schwalb is the DTIC Public Affairs Officer. Previously, she was a member of its marketing team. Schwalb has served as a speechwriter (U.S. Government Printing Office), director of government relations (Special Libraries Association), and staff assistant/legislative correspondent (former U.S. Senator Charles McC. Mathias, Jr.–Maryland). She has written and spoken extensively about defense, U.S. government, and library/information issues.

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