

Vol. 03, No.4

Publication of the Defense Technical Information Center

FALL 2003



New Web Site Informs of Latest Iraqi Developments

In the spirit of cooperation, DTIC has partnered with the Coalition Provisional Authority (CPA) in Iraq to develop and maintain the CPA's new Web site. This site was expressly created to inform news organizations, contractors, military personnel, and the general public of the latest reconstruction, humanitarian and peacekeeping initiatives in Iraq following the aftermath of Operation Iraqi Freedom.

The mission of the CPA is to establish a free and democratic Iraq that is "at peace with its neighbors." The CPA site contains the latest, most up-to-date press releases and media information; links to various business opportunities for interested contractors; and a variety of official documents pertaining to the CPA and the Development Fund for Iraq. It also posts selected speeches by Ambassador L. Paul Bremer III and links to numerous Iraqi ministries, including Agriculture, Electricity, Housing and Construction, and Justice, among others.

For Web visitors, Ambassador Bremer's international press conferences offer unique insight. For instance, in his August 12, 2003 address he stated that Iraqis now enjoy freedom of conscience, where "no political, religious or social belief can be a crime. Iraqi academics can read and study what colleagues around the world are thinking. Now they can travel to seminars, conferences and workshops." He also states that life in Iraq will be more open, with each Iraqi free to choose his or her own path. "This is the real meaning of the coalition's military victory: A new Iraq means new freedom."

The site is continually updated. A link is provided for customer comments, and appropriate changes, refinements and modifications will continue to be made as customer requirements dictate. Documents are posted in English and Arabic, whenever available. An Arabic version that will mirror the English site is being developed and is expected to be completed in the near future.

The CPA site will continue to report on the latest developments in U.S. policy toward Iraq. The site is located at the following URL: *http://cpa-iraq.org*.

2004 Edition of Annual Conference Scheduled

Once again, planning is well underway for a full agenda of speakers, sessions and exhibits that will be DTIC 2004, the 30th edition of the Annual Users Meeting and Training Conference. The event is scheduled from Monday through Thursday, March 29 through April 1, 2004 at the Hilton Alexandria Old Town, Alexandria, VA.

The theme of the conference is "Information: Securing Defense Through Research & Development." The four-day event will feature topics of current interest to all attendees and will address information sources and changing technologies that impact those who are involved in the Defense research and acquisition fields. It will also offer training sessions designed specifically to cater to a wide variety of needs and interests. Numerous speakers from various federal agencies, private industry, and DTIC will be in attendance.

For the first time in many years, the conference will return to the ambience of Old Town Alexandria. Attendees will find that the Hilton is an exceptional hotel, situated literally across the street from MetroRail and Amtrak, just minutes from Ronald Reagan Washington National Airport. With convenient access to the attractions of Washington, D.C. and the history and charm of Old Town Alexandria, it is truly one of the best the area has to offer.

Throughout the conference, DTIC experts will be ready to assist you with your questions and demonstrate new products, services and projects. DTIC representatives will also be available to discuss their particular areas of expertise and to demonstrate the latest developmental projects. You will also have ample opportunity to collaborate with other conference attendees, visit old friends and make new contacts. In addition, various government and commercial vendors will be on hand to demonstrate their wares, and an entertaining and informative tour will be included as part of the activities.

Information concerning the agenda and registration will be posted as it is developed. Registrations will start on or about January 5, 2004. For more information, visit *http://www.dtic.mil/dtic/annualconf/* or contact DTIC's Conference Coordinator at (703) 767-8236/DSN 427-8236. The email address is *confinfo@dtic.mil*.

Price Increase for Technical Reports Hard Copy Documents

DTIC is committed to providing its customers with high quality products for the best possible price. In order to continue to do so while accommodating increases in postage and handling, it is necessary to increase the cost of hard copy documents by \$2.60. Below is the new pricing schedule that became effective October 1, 2003.

Hard Copy Price Schedule

Codes	Pages	<u>Price</u>
AA	001 - 100	\$9.60
AB - AD	101 - 400	\$14.60
AE - AK	401 - 1000	\$44.60
AL - AS	1001 - 5001+	\$124.60

The good news is that more than 170,000 full-text documents are available online for *free*. The effort to add more and more full-text documents to DTIC's collections for downloading via the Web is continuous. If you need unclassified, unlimited full-text documents, Public STINET (*http://stinet.dtic.mil*) is your source. The unclassified, unlimited and unclassified, limited full-text documents can be downloaded using our Private STINET subscription service.

Private STINET, DTIC's newest online service for registered users, was launched on March 25, 2003 and replaced both Secure STINET and Web Enabled DROLS (WED). Private STINET combines the special features and collections of Secure STINET with the search capabilities of WED and offers access to the information resources previously available on these two systems. A subscription to Private STINET is *absolutely free* to DTIC registered users.

The registration forms for Private STINET can be found on DTIC's Homepage at the following URL: *http://www.dtic.mil/dtic/registration/ldap_reg.html*

DTIC thanks you for your continued support and your use of our products and services. If you have any questions or comments, please contact the Marketing Team at (703) 767-8267/DSN 427-8267. The email address is *bcporder@dtic.mil*.

Explore DTIC's STINFO Homepage

DTIC's Scientific and Technical Information (STINFO) Homepage was developed to help local STINFO managers and others carry out the responsibilities of the DoD Scientific and Technical Information Program.

DTIC offers the DoD STINFO Manager Training Program to expand awareness of the STINFO program and facilitate more direct information exchange among those who oversee the program at the activity level. The content of the training program is also of interest to all programs and offices that play a role in the dissemination of DoD STINFO.

To obtain access to the latest information, visit DTIC's STINFO Homepage at *http://www.dtic.mil/dtic/stinfo*. If you have questions about training, email the instructor at *stinfo@dtic.mil* or call (703)767-8240/DSN 427-8240.

Upcoming Meetings

19th Annual Computers in Libraries 2004 March 10-12, 2004 Washington, D.C.

DTIC 2004 Annual Users Meeting and Training Conference March 29 - April 1, 2004 Alexandria, VA

IEEE Computer Society International Information Assurance Workshop April 8-9, 2004 Charlotte, NC

> American Library Association Annual Conference June 24-30, 2004 Orlando, FL

The *Digest* is produced by the Defense Technical Information Center's Directorate of User Services and is intended to inform DTIC employees and customers of programs, initiatives, activities, issues, and developments in the technical information arena. Comments, views, and opinions expressed in this newsletter are those of the author(s) and do not reflect policy, views or opinions of the Defense Technical Information Center, the Defense Information Systems Agency, or the Department of Defense.

> Approved for Public Release

U.S. government work (17 USC §105). Not copyrighted in the U.S.

3

DTIC Hosts Web-Based Version of SCAMPI

In a cooperative effort involving the Joint Forces Staff College Library and the National Defense University Library, DTIC has recently agreed to host a Web-based version of the Staff College Automated Military Periodicals Index, or SCAMPI.

The Joint Forces Staff College Library is a specialized military library focusing on research in joint and multinational operations, military history and naval science, operational warfare, and operations other than war. Library staff members regularly scan the weekly news magazines, monthly and bimonthly journals such as *Military Review, Armed Forces Journal*, and quarterly publications, including NATO's Nations and Partners for Peace, RUSI Journal, and The Naval War College Review. Miscellaneous reports from RAND and the General Accounting Office are also indexed for SCAMPI.

The resulting database serves as a current and retrospective guide to articles on military and naval art and science, operational warfare, joint planning, national and international politics, and other areas researched by JFSC faculty, staff and students. The Web-based index will be updated quarterly.

A complete listing of the journals indexed for SCAMPI is provided as a resource for SCAMPI users. Several of the journals indexed in SCAMPI have independent Web sites. Visit the individual journal Homepages to see exactly what each publication makes available since many do provide fulltext articles.

The SCAMPI database provides a wealth of information for both serious and casual researchers. The page is located at the following URL: *http://www.dtic.mil/dtic/scampi*.

New Homeland Defense Resource Site Now Available

A new Homeland Defense resource site has been added to Private STINET's Special Collection feature. DTIC has decided to concentrate its Homeland Defense efforts for eligible users within its Private STINET service and has discontinued the Current Focus Web site.

Access to this Homeland Defense Special Collection resource in Private STINET requires you to be a DTIC-registered user. Eligible users are employees of DoD, U.S. government agencies and their contractors. You may register online at *http://www.dtic.mil/dtic/registration/index.html* to access this new site.

DDR&E Director Urges DoD Research Community to Submit DoD Science and Technology Data to DTIC

Dr. Ronald Sega, Director of Defense Research and Engineering, reinforced the role of DTIC as the central facility for the collection and dissemination of Scientific and Technical Information (STI) for DoD. This was released in a letter (below) informing the Defense R&D community that research organizations can now easily comply with DoD Directive 3200.12, DoD Scientific and Technical Information Program (STIP) by submitting their documents electronically to DTIC. Document types include technical reports, journal articles, briefings and multimedia.

For information about submitting documents to DTIC electronically, go to *http://www.dtic.mil/dtic/submitting/elec_subm.html* or contact DTIC's Acquisitions Branch at (703) 767-8038/DSN 427-8038.



DIRECTOR OF DEFENSE RESEARCH AND ENGINEERING 3030 DEFENSE PENTAGON WASHINGTON, D.C. 20301-3030 APR 4 2003

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Submission and Dissemination of DoD Scientific and Technical Information

A key product of the DoD Science and Technology program is knowledge. This product is made more valuable with reuse. Therefore, I strongly support and reaffirm DoD policy to aggressively pursue a coordinated and comprehensive Scientific and Technical Information Program (STIP) to meet the technological needs of the Warfighter, to enhance DoD's national security mission, and to provide the maximum contribution to the advancement of science and technology.

As outlined in DoD Directive 3200.12, DoD Scientific and Technical Information Program, the Defense Technical Information Center (DTIC) is the central facility for the collection and dissemination of Science & Technology Information (STI) for DoD. DTIC makes this information available online to the Defense community, while controlling access according to security classification and distribution limitations. All information at DTIC is also preserved and protected through disaster recovery measures. A Science and Technology Portal to various STI databases is also being developed. The portal will allow the DoD R&D community visibility into ongoing and emerging technologies.

The DoD Research, Development, Test and Engineering (RDT&E) community is responsible for ensuring that DTIC is provided with material resulting from RDT&E programs including research that is only documented in journal articles, briefings and multimedia. Additionally, RDT&E investors are responsible for sending DTIC notification of changes to classification or distribution throughout the lifetime of the material. The URL for information on submitting information to DTIC is http://www.dtic.mil/dtic/submitting.

DTIC is able to electronically accept and process documents submitted in a wide variety of formats into the Technical Reports database. Accordingly, DoD RDT&E investigators should use electronic submission to streamline the document submission process when possible.

I urge you to support this effort and continue your role in fostering and safekeeping DoD's STI. Please distribute this letter widely.

Ronald M. Sega

Thesaurus Update

Below is a listing of the latest update to the *DTIC Thesaurus*. A * indicates the hierarchy extends beyond the listed term.

New Terms

Azidothymidine

A synthetic thymidine analog that inhibits the human immunodeficiency virus that causes Acquired Immune Deficiency Syndrome.

BT *Chemotherapeutic agents

RT Acquired Immune Deficiency Syndrome

AZT Use Azidothymidine

-

Carcinogenesis Use Oncogenesis

Holism

Concept of treating an entity, even when only a component seems to need fixing. Also, evaluating the whole as being worth more than the sum of its parts. BT *Systems approach

Illegal immigrants BT *Refugees

Integrins BT Glycoproteins

Inverse problems

BT *Mathematical analysis NT Convolution Integrals

Laser diagnostics

BT Diagnosis (General) *Laser applications NT Laser medical diagnosis

Laser surgery

BT *Surgery

Lidar Use Optical radar Medical screening BT *Diagnosis (Medicine)

Noble gases Use Rare gases

Nowcasting BT Forecasting

Optical recording systems BT Recording systems

Parkinsons disease BT *Motor disorders

Podiatry BT Medicine

Principle of superposition BT *Mathematical analysis

SARS

Sudden Acute Respiratory Syndrome BT *Respiratory diseases

Satellite constellations BT *Artificial satellites

Sinusoidal functions BT *Trancendental functions

Strokes (Cerebral)

A condition, with sudden onset, caused by acute vascular lesion of the brain, such as hemorrhage, embolism, thrombosis, or rupturing aneurysm, which may be marked by hemiplagia or hemiparesis, vertigo, numbness, aphasia, and dysphasia. It is often followed by permanent neurological damage. BT *Vascular diseases

Surgical lasers BT *Surgical instruments

TRICARE

Tri-Services Coordinated Health Care, which provides health care for active duty personnel, retirees, and their families. BT *Medical services Vapor barriers BT *Barriers

Virtual cathode oscillators BT *Oscillators

Vital signs BT *Signs and symptoms

Hierarchy Changes

Contractors BT *Civilian personnel

Esterases BT Enzymes (delete)

Fire protective clothing BT *Protective clothing

Goggles BT Protective equipment (add) BT Clothing (delete)

Hepatitis BT *Infectious diseases

Laser medical diagnosis BT *Laser applications (delete)

Microelectromechanical systems BT Nanotechnology

Polystyrene BT Plastics

Transcendental functions

NT Exponential functions NT Logarithm functions

Tunneling (Electronics) BT *Quantum electronics

RT Addition

Medical computer applications RT Computer aided diagnosis

5

The DTICKER: DTIC's Newest Intranet Portal

As DoD's premier information provider, DTIC takes pride in supplying the latest information technology services to both customers and staff members. A recent task undertaken by DTIC was the development of the DTICKER, an intranet portal designed specifically to provide DTIC personnel with secure, personalized access to DTIC services and information. The DTICKER was designed specifically to replace ADMINS, DTIC's former in-house intranet service.

A portal is a Web-based tool that provides a contextual framework for personalized information and Internet services. It serves as an enabler to an enterprise business model that focuses on a collaborative approach to self-service using the power of the Internet. DTIC began prototyping the portal technology as a joint effort during the summer of 2002 with the National Biological Information Infrastructure, and contractor services were procured to initiate development and deployment at DTIC in the fall of 2002.

The goal of DTIC's intranet portal is to facilitate the personalized organization of DTIC corporate information; provide integrated access to systems through applications called gadgets; implement a single sign-on feature to access multiple services and systems; incorporate the workflow for many of DTIC's primary business processes; and provide an infrastructure for community building with sophisticated document management and collaboration tools.

Key events in portal development prior to going live included a portal naming contest in October 2002 and the purchase of Plumtree seat licenses and related software/support. User orientation efforts included focus group meetings held in October and November 2002 to introduce the portal and to gather additional requirements. Content management and maintenance training was provided in November 2002 and February 2003.

The project is an ongoing team effort. Members of the DTIC Cross-Directorate Implementation Portal Team include Jack Jones, Portal Manager; Joe Kennedy, Systems Administrator; Norma Ott, Content Manager/Trainer; Connie Wiley, Assistant Portal Management/Community Coordinator/Trainer; Marjorie Powell, Interface Consultant; Sharon Palmer, Content Maintenance Support; Debra Williams and Jack Wildt, Gadget Application Development; and Joy Brunk, Graphics Design.

The implementation of the portal involves three phases. Phase I consisted of the formal release of the DTICKER to DTIC staff at Fort Belvoir on May 1, 2003, followed by a gradual implementation period in which Portal Team members provided individual assistance to each employee. In addition, a Portal User Guide was released and specific applications were created for DTIC-specific use. These included supply management, library services, a suggestion box, links to useful DISA and DTIC sites, and a DTIC employee phone book.

Phase II, which is presently undergoing implementation and drawing to a close, established portal access for DTIC's Los Angeles and Albuquerque Regional Offices on July 1, 2003 (the Dayton and Boston Regional Offices are scheduled to receive access in the fall of 2003). A single sign-on feature was implemented at the Fort Belvoir Headquarters Complex on August 1, which meant that staff no longer needed to undergo a long sign-in process. A mere click on a link to the portal was all that was needed. Videos were also added. Community and content managers continued to receive in-house training, and a customer phone book portlet was installed. (A portlet is a convenient way of organizing and grouping functionality. Each portlet provides different uses and can be linked with other portlets.)

Plans for the implementation of Phase III include:

• the addition of more communities, starting with Administrators and Directors, Training, and Travel;

• increased use of portal capabilities using Content Server and Studio Server tools (the former is a tool for creating and managing content, and the latter provides a wizard approach to enable non-programmers to create database driven portlet applications);

• the installation and implementation of Plumtree Version 5.0 software (this version contains enhancements to the community collaboration and text search tools);

• a security analysis for external access by DTIC employees on travel/telework; and

 methods to investigate workflow, business intelligence, and portal tracking software.

These plans are proceeding apace; however, one of the most difficult aspects of portal management is to establish an effective content management policy. At the present time, a draft policy is being circulated within DTIC for comment.

Portal hardware and software are required to undergo continuous security review, and lessons learned during the development of the DTICKER will be applied to the development of an extranet portal for DTIC customers in the future.

DISA Road Show Visits DTIC

This past June, representatives from the Defense Information Systems Agency (DISA) visited DTIC to brief staff members about new DISA initiatives being undertaken to ensure better services to the DoD community.

This traveling "road show" included overviews of current projects and premier programs that DISA has in the works to improve support to all DoD activities.

In addition to a new Customer Advocacy Directorate formed specifically to improve customer service, DISA is making new efforts to improve knowledge management. DISA employees now have access to a knowledge management portal, and DISA management hopes to extend access to other field activities as well. This portal makes it possible for DISA employees to record and archive knowledge, keep information close at hand, and communicate quickly with one other. Other projects include Global Information Grid Bandwith Expansion (GIG-BE) and renewed focus on Net-Centric Warfare and NetOps.

The presentation helped DTIC staff more fully understand how DISA is working to better support the warfighter. In the future, DTIC hopes to reciprocate and present our newest products and services to DISA's employees. Greater understanding of organizational efforts assists in building relationships as well as serving to enhance services we provide to the customer.

Defense Virtual Library Project Renamed

The Defense Virtual Library (DVL) project was recently renamed to better reflect its intended purpose when the system moves from prototype into full production. The new system, now known as the Defense Virtual Information Architecture (DVIA), will soon go live with data from DTIC's Technical Report and nonprint collections.

The DVL project had its beginnings in 1995 as a tri-agency program sponsored by DTIC. Funding was provided by the Defense Advanced Research Projects Agency (DARPA) and technical support services for the project were provided by the Corporation for National Research Initiatives (CNRI).

At that time, Dr. Marcia Hanna of DTIC along with Larry Lannom, Christophe Blanche, and Jane Euler of CNRI worked under the guidance of Dr. Robert Kahn, co-founder of the Internet IP theory, to research the feasibility of using digital objects and metadata across the Internet.

Standard metadata wrappings enable the objects to ultimately inter-communicate and find each other. This is accomplished through standard Internet search and retrieval protocols available with the use of digital object infrastructures. Beyond that initial objective is the follow on, the Open Archives Initiative, which will build a repository designed to intercommunicate with other repositories across the Web and create a homologous use of digital objects in general.

Previous test and evaluation between the CNRI and Cornell University proved the viability of this concept in a controlled laboratory environment. Now this same prototype will be improved and put into a production environment. Ultimately, the concept will lend an artificial intelligence motif to digital objects through standardized metadata tags to establish advanced interoperability and commonality.

Here is an example of what could happen with this new concept. Let's assume you are in search of an outline of Hamlet. To begin with, a digital object PDF of the book is located. However, this is not an outline and the book just happens to be in French. An outline generator could be accessed through a digital object tool set repository and be used to convert the text into an outline. However, the particular 'outliner' digital object can only work in English. From here the same tool set could easily locate a language interpreter similar to Babelfish for that purpose. The PDF could then be converted into English yielding the versions of Hamlet in usable form for the outliner to receive as input. Now the text can be successfully interpreted into an English outline of the original French edition of Hamlet, and the desired results returned to the requestor.

Through the employment of digital object attachment and application programming interfaces, digital object infrastructures can contain or point to other digital objects to enable such an amazing transformation to take place.

Although DTIC is presently not funded to take the concept to the limit, one begins to understand the power and concept of what a digital object can accomplish.

Chronology of Significant DTIC Events

For more than 50 years, DTIC, like any well established organization, has continually evolved to provide up-to-date scientific and technical information services to its customers. What appears below is a short list of milestones from 1945 to the present.

1945 The U.S. Army Air Corps, the U.S. Navy and the British Air Ministry established the Air Documents Research Center (ADRC) in London.

ADRC became the Air Document Division (ADD) of the Intelligence (T-2) Department of the Headquarters, Air Technical Services, Army Air Force at Wright Field, Ohio.

- **1948** ADD became the Central Air Documents Office (CADO) designed to collect, process and distribute scientific and technical reports.
- **1951** CADO became the Armed Services Technical Information Agency (ASTIA).
- **1958** ASTIA moved from Wright-Patterson AFB, Ohio to Arlington Hall Station, Virginia.
- **1962** The DoD Scientific and Technical Information (STINFO) Program was established.
- **1963** ASTIA was renamed the Defense Documentation Center (DDC) and also became a field activity of the Defense Supply Agency (DSA).
- **1972** The Defense Research, Development, Test and Evaluation Online System (DROLS) became operational.
- **1979** DDC was renamed the Defense Technical Information Center (DTIC).
- **1980** Information Analysis Centers (IACs) became a part of DTIC.
- **1983** DTIC assumed responsibility for the Manpower and Training Research Information System (MATRIS).
- **1991** DTIC transferred from the Defense Logistics Agency (DLA) to the Office of the Under Secretary of Defense (Acquisitions).
- 1995 DTIC relocated to Fort Belvoir, Virginia.
- **1998** DTIC transferred from the Office of the Under Secretary of Defense to the Defense Information Systems Agency (DISA).
- **2003** DTIC initiated Private STINET (Scientific and Technical Information Network).

Electronic Document Submission

For the past several years, DTIC has had the capability to accept and process documents electronically into the Technical Reports database. DTIC's electronic document submission process allows for the transmission of both unclassified, unlimited and unclassified, limited documents. Documents may be submitted in a wide variety of formats, including MS Word, Excel, PowerPoint, WordPerfect, ASCII text, Rich text and PDF.

An electronic transmittal system provides both immediate and long term benefits to everyone who utilizes DTIC's services. On the input side, contributors will no longer have to deal with the costs of physical document shipping, and shipping time is dramatically reduced. For the end users, documents that originally contained color graphics will retain this feature when downloaded from the Technical Reports database.

The system has an easy-to-use data entry system for submitting a "Report Documentation Page" (SF-298) along with the corresponding technical report. Since contributors should already be familiar with SF-298, electronic document submission entails no added steps or paperwork. After a contributor enters all of the available unclassified data, the browser encrypts everything and transmits it to DTIC's TR server via the Internet. Once the SF-298 and the document file reach DTIC's server, the SF-298 is inserted into the file immediately following the title page. The document file is then converted to PDF format and processed into the Electronic Document Management System.

Customers wishing to submit documents should visit DTIC's Electronic Submission page at *http://www.dtic.mil/dtic/submitting/elec_subm.html* and follow the detailed instructions to sign up for the service. Note that DTIC also provides detailed guidance for PDF documents that are submitted.

Submitters are required to have completed the DTIC online registration process. Signing up for the service is then a one-time process for both previously registered users and new customers. After receiving a login and password for the document submission system, the customer is ready to send documents electronically. Once registered, a user logs in, fills in several required data fields, and proceeds to upload documents to DTIC. DTIC accepts Web-based submissions, documents attached to email messages (unclassified, unlimited only for email) sent directly to *tr@dtic.mil*, and CD-ROMs mailed via the U.S. Postal Service. Documents contained on CD-ROMs are manually input into the TR database by DTIC staff.

All DTIC contributors are encouraged to use electronic submission as a means to streamline the document submission process as well as enhance the output product provided by DTIC. Further information on the electronic document submission process can be obtained by calling (703) 767-8038/DSN 427-8038.

Information at Your Fingertips

Current Awareness Bibliography (CAB) Electronic Current Awareness Bibliography (ECAB) Electronic Current Awareness Bibliography Documents (ECAB-DOCS)

The Product. DTIC's CAB program provides the latest information in your area of research. After establishing your subject profile, you will receive a customized bibliography twice a month. The bibliography will describe the most recent information added to the DTIC Technical Reports collection that matches your profile. It is available in either paper copy (CAB) or electronically via email (ECAB or ECAB-DOCS).

CAB provides abstracts to: unclassified, unlimited; unclassified, limited; and classified citations according to user eligibility.

ECAB contains abstracts to unclassified, unlimited citations only. All citations to unclassified, limited and unclassified citations to classified documents appear without abstracts or identifiers.

ECAB-DOCS contains an embedded link in each citation of the bibliography to the full text of the unclassified, unlimited and unclassified, limited documents. Abstracts are supplied for the unclassified, unlimited documents in the bibliography. The user is required to subscribe to Private STINET to access the full-text document links in this product.

The subject profile(s) for CAB, ECAB, or ECAB-DOCS may be changed at any time with no additional cost to the user.

The Database. DTIC's Technical Reports (TR) Bibliographic database contains nearly two million bibliographic records and abstracts of completed DoD research efforts in print and nonprint formats. The database includes citations to technical reports, regulatory publications, journal articles, DoD patent applications, conference proceedings, theses, software, data files, databases, and videos.

Benefits of CAB, ECAB, or ECAB-DOCS

- Keep up-to-date with the latest research in your subject area(s)
- ECABs and ECAB-DOCS save time and money
- ECABs and ECAB-DOCS are delivered automatically to your email box twice per month
- Send an ECAB or ECAB-DOCS to others within the organization via email
- Contributors can learn quickly when their documents have been added to the database

Eligibility/Cost. CABs, ECABs, and ECAB-DOCS are available to all DTICregistered users. Cost for CAB is \$25 per profile year. ECABs and ECAB-DOCS are free. **Note:** The full text of many of the documents represented in both ECABs and ECAB-DOCS is available through Private STINET. *ECAB-DOCs subscribers must register for Private STINET service.* Registration for Private STINET is optional for ECAB users.

How to Get Started

- To order CAB, ECAB, or ECAB-DOCS, contact a DTIC information specialist at (703) 767-8266/DSN 427-8266 or 1-800-225-3842. The email address is *bibs@dtic.mil*
- Register for Private STINET online at *http://www.dtic.mil/dtic/* registration/New_Registration.htm or call 1-800-225-3842. The email address is reghelp@dtic.mil.

BEST SELLERS

Below is a listing of DTIC's best selling documents for the fourth quarter of fiscal year 2003. Listed prices for documents are for hardcopies. Downloads are free of charge.

PRINT

AD-A405 404/NAA

Army Tank-Automotive Command, Warren, MI

Benefits of Using Photosimulation Laboratory Environment for Camouflage Assessment Meitzler, T.; Bednarz, D.; Sohn, E.; Bryk, D.; Lane, K. 12 Jul 02, 8p., \$9.60

AD-A376 888/NAA

Armed Forces Radiobiology Research Institute, Bethesda, MD *Medical Management of Radiological Casualties Handbook. First Edition* Jarrett, D.

Dec 99, 149p., \$14.60

AD-A218 438/NAA

Simula Inc., Phoenix, AZ *Aircraft Crash Survival Design Guide. Volume 5. Aircraft Postcrash Survival* Johnson, N. B.; Robertson, S. H.; Hall, D. S. Dec 89, 219p., \$14.60

AD-A218 434/NAA Simula Inc., Phoenix, AZ *Aircraft Crash Survival Design Guide. Volume 1. Design Criteria and Checklists* Zimmerman, R. E.; Merritt, N. A. Dec 89, 217p., \$14.60

AD-A218 435/NAA

Simula Inc., Phoenix, AZ *Aircraft Crash Survival Design Guide. Volume 2. Aircraft Design Crash Impact Conditions and Human Tolerance* Coltman, J. W.; Ingen, C. V.; Johnson, N. B.; Zimmerman, R. E. Dec 89, 131p., \$14.60

AD-A218 436/NAA Simula Inc., Phoenix, AZ Aircraft Crash Survival Design Guide. Volume 3. Aircraft Structural Crash Resistance Zimmerman, R. E.; Warrick, J. C.; Lane, A. D.;

Merritt, N. A.; Bolukbasi, A. O. Dec 89, 265p., \$14.60

AD-A218 437/NAA Simula Inc., Phoenix, AZ *Aircraft Crash Survival Design Guide. Volume 4. Aircraft Seats, Restraints, Litters, and Cockpit/Cabin Delethalization* Desjardins, S. P.; Zimmerman, R. E.; Bolukbasi,

A. O.; Merritt, N. A. Dec 89, 271p., \$14.60

AD-A406 176/NAA

Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA *Command Group Training in the Objective Force* Gossman, J. R.

Jul 02, 73p., \$9.60

AD-A272 275/NAA

Lawrence Livermore National Laboratory, Livermore, CA *LLNL Explosives Handbook. Properties of Chemical Explosives and Explosive Simulants* Dobratz, B. M.; Crawford, P. C. 31 Jan 85, 524p., \$44.60

AD-A399 211/NAA

Chemical Propulsion Information Agency, Columbia, MD Solid Propellant Subscale Burning Rate Analysis Methods for U.S. and Selected NATO Facilities Fry, R. S. Jan 02, 256p., \$14.60

ELECTRONIC DOCUMENT BEST SELLERS

AD-A402 014/NAA

Defence Science and Technology Organisation Salisbury (Australia) Electronics and Surveillance Research

Application of Spoken and Natural Language Technologies to Lotus Notes Based Messaging and Communication

Lajoie, S.; Carr, O.; Coleman, M.; Hashemi-Sakhtsari, A. Jan 02, 44p., \$9.60

AD-A402 018/NAA

Army War College, Carlisle Barracks, PA *Information Operations: Computer Network Attack in the 21st Century* Williamson, J. M. 09 Apr 02, 29p., \$9.60

AD-A402 011/NAA

Defense Science and Technology Organisation Victoria (Australia) Aeronautical and Maritime Research Laboratory *The Durability of Metal-Honeycomb Sandwich Structure Exposed to High Humidity Conditions* Rider, A. Mar 02, 112p., \$14.60

AD-A402 017/NAA

Air Force Institute of Technology, Wright-Patterson AFB, Ohio *A New Look at Courage* Sisson, Logan B.

2001, 25p., \$9.60

AD-A402 166/NAA

Northwest Research Associates Inc., Bellevue, WA

Investigations of the Nature and Behavior of Plasma-Density Disturbances That May Impact GPS and Other Transionospheric Systems

Fremouw, E. J.; Holland, E. A.; Mazzella, A. 21 Oct 98, 31p., \$9.60

AD-A402 015/NAA

Army War College, Carlisle Barracks, PA *Great Leaps in Japan's Security Policy in an International Context: The Way Ahead* Kakegawa, H. 04 Apr 02, 32p., \$9.60

AD-A402 150/NAA

Atmospheric and Environmental Research Inc., Cambridge, MA FASCODE for the Environment

Snell, H. E.; Gallery, W. O.; Moncet, J. L.; Sarkisian, C. P. 20 Nov 00, 75p., \$9.60

AD-A402 016/NAA

Corps of Engineers, Washington, D.C. *Risk Assessment Handbook. Volume I: Human Health Evaluation* 31 Jan 99, 100p., \$9.60

AD-A402 019/NAA

Army War College, Carlisle Barracks, PA *Information Operations* Burnett, P. L. 09 Apr 02, 37p., \$9.60

AD-A402 008/NAA

William J. Hughes Technical Center, Atlantic City, NJ

Air-Ground Integration Experiment

DiMeo, K.; Sollenberger, R.; Kopardekar, P.; Lozito, S.; Mackintosh, M. Jan 02, 218p., \$14.60

9

DOCUMENTS ON DISPLAY

COMPUTER NETWORK DEFENSE

AD-A404 453/NAA

Corporate Author: Army War College, Carlisle Barracks, PA

Title: Computer Network Defense for the United States of America

Descriptive Note: Strategy research project **Report Date:** 09 Apr 02 **Cost:** \$9.60 51p. *Descriptors:* *computer networks, *homeland security, terrorists, politics, United States government, Defense systems, attack, vulnerability, terrorism, advisory activities, awareness, speed regulators.

Abstract: The terrorist attacks of September 11, 2001 have brought increased attention to the nation's vulnerabilities. One of these vulnerabilities is the nation's computer networks.

While a level of vulnerability was acknowledged prior to September 11, little was done to effectively implement Computer Network Defense (CND). After September 11, the nation was energized to make improvements to homeland security. Efforts to improve CND were energized as well.

After the terrorists' attacks, the president established two key positions to address the security of the nation. He created the Office of Homeland Security to be headed by former Pennsylvania Governor Tom Ridge and created the position of special advisor to the president for cyberspace security. The creation of a special advisor for cyberspace security illustrates the new awareness of the importance of CND. This paper examines our national policy for CND, organizations established for CND, the vulnerabilities and threats to the nation's computer networks and propose changes to improve national CND.

AD-A390 581/NAA

Corporate Author: Army War College, Carlisle Barracks, PA

Title: Computer Network Defense andAttack: Information Warfare in theDepartment of Defense

Descriptive Note: Research paper

Personal Author: Best, Carole N.

Report Date: 10 Apr 01 **Cost:** \$9.60 25p. *Descriptors:* *Department of Defense, *electronic security, *cyberterrorism, military

strategy, national security, protection, computer networks.

Identifier: strategy research project

Abstract: Our national military strategy paves the way for the Department of Defense (DoD) into the 21st Century. The DoD touts information superiority as being critical to our strategy. However, it has not adequately addressed two key aspects of this "enabler" the defense of our networks and, should the need arise, attack of those networks belonging to our adversaries.

This paper will discuss current computer network defense and attack policy in the context of ends, ways and means, explain what is lacking in current policy and offer recommendations for improvement. These recommendations include: streamlining the interagency process; exploring a similar structure within the private sector and with our global allies; considering the concept of a separate information corps as a product of increasing emphasis in this area; linking information warfare to other military strategies; and assessing how we will fund the new tools in our information warfare kit bag.

COOPERATIVE THREAT REDUCTION

AD-A411 504/NAA

Corporate Author: Inspector General, Department of Defense, Arlington, VA **Title:** *Testimony: Statement of David K.*

Steensma Deputy Assistant Inspector General for Auditing Office of the Inspector General Department of Defense to the House Committee on Armed Services on U.S.-Russian Cooperative Threat Reduction and Non-Proliferation Programs

Descriptive Note: Testimony

Personal Author: Steensma, David K.

Report Date: 04 Mar 03 **Cost:** \$9.60 17p. Descriptors: *mass destruction weapons, *agreements, *legislation, *auditing, weapons, USSR, Congress, United States, threats, reduction, chemical ordnance, House of Representatives, panel (committee).

Identifier: U.S.-Russian Cooperative Threat Reduction Program

Abstract: This report concerns our reviews of the Cooperative Threat Reduction Program. Although progress is being made in destroying weapons of mass destruction, there is a

need for additional management oversight of the country-to-country agreements, and more cooperative sharing of program risks.

Congress enacted Public Law 102-228, the Soviet Nuclear Threat Reduction Act of 1991, to reduce the threat posed by the weapons of mass destruction remaining in the territory of the former Soviet Union. Objectives of the Act are to "destroy nuclear weapons, chemical weapons, and other weapons; transport, store, disable, and safeguard weapons in connection with their destruction; and establish verifiable safeguards against the proliferation of such weapons." The Act designated DoD as the executive agent for what came to be called the Cooperative Threat Reduction Program.

TIME-CRITICAL TARGETS

AD-A397 204/NAA

Corporate Author: General Accounting Office, Washington, D.C.

Title: Joint Warfighting: Attacking Time-Critical Targets

Personal Author: Lewis, Jerry

Report Date: Nov 01 Cost: \$9.60 8p.

Descriptors: *cruise missiles, *surface-to-air missiles, *guided missile targets, *launching sites, *theater missile defense, computer programs, military forces (United States), guided missiles, Department of Defense, skills, Persian Gulf, interoperability, attack, moving targets, targets, stationary barriers, communication and radio systems, enemy, data displays, battles, reconnaissance, exchange.

Abstract: While DoD has developed and fielded considerable capability to detect, assess, and attack most fixed enemy targets, experiences in the Persian Gulf and Kosovo revealed that DoD has limited ability to rapidly identity and strike time-critical targets, such as mobile Scud and surface-to-air missile sites. Such targets proved to be elusive when our adversaries were able to move critical assets to safety in a shorter time frame than it takes us to implement the sensor-toshooter process. In fact, the time needed to effectively attack mobile targets is much shorter than DoD's established 30 to 72 hour targeting cycle for attacking most fixed targets.

DoD studies have pointed to a variety of

reasons for why it takes too long to be in a position to strike time-critical targets. Chiefly, the systems involved in the sensor-to- shooter process do not operate effectively together. There are over 100 command, control, communications, intelligence, surveillance, and reconnaissance systems that are needed to identity and strike targets. But these are separately owned and operated by each of the military services as well as other DoD and intelligence agencies. These separate systems have limited ability to interoperate, both technically (such as incompatible data formats) and operationally. As a result, they cannot easily and quickly exchange data; communication systems must be patched together to make this happen. Compounding this problem is the fact that each service has its own command, control, and communications structure that may present barriers to interoperability. In fact, in a battle situation, the Joint Forces Commander is faced with integrating, in an ad hoc manner, more than 400 different mission and software applications.

NETWORK CENTRIC WARFARE

AD-A415 482/NAA

Corporate Author: Joint Military Operations Department, Naval War College, Newport, RI

Title: The Issue of Decision Up-Creep in Network Centric Warfare

Personal Author: Hakimzadeh, Kavon Report Date: 03 Feb 03 Cost: \$9.60 24p. *Descriptors:* *tactical data systems, warfare, political science, decision making, managment, military commanders, military art. Identifiers: *network centric warfare *Abstract:* Network Centric Warfare (NCW) will provide operational commanders with unprecedented access to tactical level information. Depending on any number of exter-

nal factors from politics to personality, access to this information may tempt operational commanders to micromanage the tactical actions of their subordinates.

While it is the commander's prerogative to make decisions for any level of the force, the problem of "decision up-creep" could undermine synchronization on the tactical level and undo many of the fighting benefits derived from a fully netted force. This paper serves three purposes. First, through the use of examples from recent operations, it shows that the unprecedented "reach" provided by network centric warfare will increase the operational commander's temptation to micromanage tactical actions. Second this paper shows that decision up-creep would virtually negate all of the benefits of network centric warfare. Finally, this paper presents organizational, doctrinal and cultural alternatives for mitigating decision up-creep.

AD-A415 477/NAA

Corporate Author: Joint Military Operations Department, Naval War College, Newport, RI

Title: Network Centric Warfare and its Impact on Operational Functions

Personal Author: Garth, Dennis **Report Date:** 03 Feb 03 **Cost:** \$9.60 23p.

Descriptors: *military operations, *combat effectiveness, *combat readiness, weapons, detectors, decision making, impact, information transfer, military forces (foreign), enemy, military commanders, tactical warfare.

Identifier: *network centric warfare

Abstract: Network centric warfare, or network centric operations, is a term that evokes strong opinions. The proponents of network centric warfare look to the future and see sensor grids, weapons platforms netted together, and the free flow of information relating the minute details of friendly and enemy forces. The opponents of network centric warfare claim that the ability of network centric operations to give the commander detailed information about the battlespace will flatten the command hierarchy and tempt operational commanders to dabble in tactical decisions rather than concentrating on operational art.

The use of network centric tools in modern warfare has not hampered warfighting. On the contrary, they have provided the synthesis of information needed to conduct operations, greatly enhancing the warfighting capability of the modern commander. For network centric warfare to mature from the current tactical to the future operational level, it must support the operational commander and his/her staff in the functions of operational art. Network centric warfare as it exists today and in the near future can provide the operational commander with the tools to plan, collaborate and increase the speed with which the staff perform. It is through network centric warfare that the operational commander will react quicker thereby shocking the adversary or thwarting an enemy timetable for victory. Network centric warfare will, in the future, bring these about.

UNMANNED AERIAL VEHICLES

AD-A368 090/NAA

Corporate Author: Army Command and General Staff College, Fort Leavenworth, KS **Title:** *The New Close Air Support Weapon: Unmanned Combat Aerial Vehicle in 2010 and Beyond*

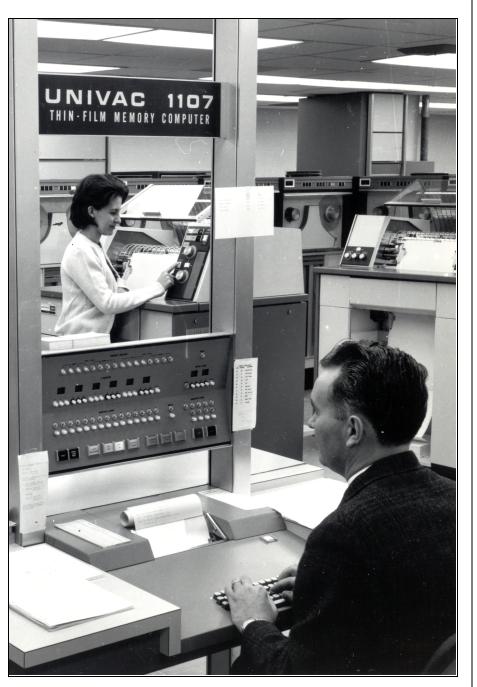
Personal Author: Holmes, Sharon L.

Report Date: 04 Jun 99 **Cost:** \$9.60 95p. *Descriptors:* *aircraft, *close support, *tactical air support, *unmanned, *combat vehicles, warfare, strategic analysis, demonstrations, airborne, theses, targeting, military planning, shortages, accelerated testing, national defense, doctrine, infrastructure.

Identifiers: *UAVs (Unmanned Aerial Vehicles), *UCAVs (Unmanned Combat Aerial Vehicles)

Abstract: This study investigates the viability of employing unmanned aerial vehicles in the close air support role on the future battlefield of 2010 and beyond. The concept of employing unmanned aerial vehicles in a strike role is currently in the advanced technology demonstration phase of design. Budgetary constraints, aircraft shortfalls, and theater commander-in-chief (CINC) requirements have combined to form an impetus for accelerated research in unmanned aircraft capabilities, and refocused DoD on fiscally conservative methods to ensure national defense and equip military forces for war. This study evaluates the historical and doctrinal underpinnings of unmanned aerial vehicles and the close air support infrastructure to establish a basis for compatibility.

Enhanced UAV technology and accelerated information technology advances combine to form an information architecture robust enough to handle unmanned aircraft in a strike role. Future employment of UAVs in a strike role is possible technologically by 2010, however doctrine and the military will lag while U.S. Air Force leaders grapple with the proper unmannedmanned force. The unmanned combat aerial vehicle technology, time critical targeting infrastructure, and refined joint doctrine combined synergistically with the military will offer the theater CINC one more combat multiplier. Prudent strategic planning for research, design, development and employment of unmanned aerial vehicles will keep the U.S. military prepared to fight any conflict, any time, any place.



Moments in time

Since its establishment at the close of World War II, DTIC and its predecessor organizations have taken pride in offering customers access to the latest scientific and technical information. As one might surmise, the ease by which customers have been able to obtain documents has changed dramatically over the years.

In this 1963 photo, the Defense Documentation Center (as DTIC was then known) utilized the Univac 1107 Thin Film Memory Computer to identify the hundreds of thousands of documents in its master file. Here operators are shown printing out complete bibliographic records, which were then mailed to individual customers.

Today, Internet access enables both the general public and DTIC subscribers to choose and download any number of citations and documents from thousands contained in the DTIC collection by utilizing both Public and Private STINET.

WHAT'S INSIDE

Price Increase for Technical	
Reports Hard Copy Documents	2
Explore DTIC's	~
STINFO Homepage	2
Upcoming Meetings	2
DTIC Hosts Web-Based Version	
of SCAMPI	3
New Homeland Defense Resource	
<u>Site Now Available</u>	3
DDR&E Director Urges DoD	
Research Community to Submit DoD	
Science and Technology Data to DTIC	<u> </u>
Thesaurus Update	4
The DTICKER: DTIC's Newest	
Intranet Portal	5
intranet i ortai	
DISA Road Show Visits DTIC	5
Defense Virtual Library	•
Project Renamed	6
Chronology of Significant	
DTIC Events	6
Electronic Document	
Submission	7
Information at Your Fingertips	7
Best Sellers	8
Documents on Display	9-10
Documents on Display	3-10

Need guidance on how to use DTIC products and services?

Curious about what DTIC has to offer in support of your research project?

For the answers to these and other questions, call DTIC's Customer Service Call Center at 1-800-CAL-DTIC (225-3842).