



# THE DISPATCH

Volume 1, Issue 1

June 2011

## Special Points of Interest

- DTRIAC celebrates 50 years of service to the nation
- STARS — good and getting better

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## Contact Us

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or visit us at  
*www.dttriac.dtra.mil*



## Program Managers Corner

Welcome to the first edition of DTRIAC's "The Dispatch" after a 13-year hiatus.

DTRIAC's goal with the re-establishment of this quarterly newsletter is to help educate and inform both current and potential new users of our archives and services. While serving the Research and Development community primarily, that community is not served exclusively.

As DoD's and DTRA's official repository for nuclear-related information, the DTRIAC is working to enhance support to the nuclear weapons and WMD communities.

This edition of "The Dispatch" provides a general overview of the DTRIAC and its operations. Future editions will include more technical topics. We solicit inputs from the entire community, government, to include both DoD R&D and operational components, as well as academia and industry.

DTRIAC stands ready to support user needs with the best customer and systems support possible. This year marks our 50<sup>th</sup> anniversary of doing so. New initiatives include significant improvements with STARS to include CAC-enabled access and online product ordering. For more information on DTRIAC's history, see the upcoming 2011 issue of DTRA's "The Shield." If you have any comments or questions at all, please do not hesitate to contact me at [craig.hess@dtra.mil](mailto:craig.hess@dtra.mil) or at (505) 846-2071 and let us know how we can better serve.

Thanks,  
Lt Col Craig Hess  
DTRIAC Program Manager



## Basic Services

DTRIAC provides in-facility access and user services for the DTRIAC reference collection of more than 120,000 documents and 20,000 films dating back to 1946.

DTRIAC provides technical consultation and user services for extensive databases spanning a number of specialized data sets and scientific topics, from directed/kinetic energy effects data to nuclear and non-nuclear-related technology information. DTRIAC also prepares major authoritative handbooks and can assist with referral services and direct computer access to various DoD and open literature scientific databases.

Users can also access DTRIAC collections through the Scientific and Technical Information Archival and Retrieval System (STARS).

## In the Beginning...

In 1961, the Defense Atomic Support Agency sponsored the DASA Data Center which in 1964 was subsequently named the DASA Information Analysis Center (DASIAC).

The initial purpose for DASIAC was to create a center of knowledge for nuclear weapons effects data, an organization that would collect, preserve, and disseminate vital information. As AFSWP (1947) become DASA (1959), DNA (1971), DSWA (1996), and finally DTRA (1998), so too did DASIAC transform to support the agencies ongoing critical missions. Today the center is now known as the DTRIAC.



*Santa Barbara Facility circa 1968*

## Analysis

DTRIAC performs analyses for DTRA and other government agencies as a “white hat” entity. The basic nature of DTRIAC allows us to provide quick access to the best information, tools, and experts to all users upon demand.



As one example, DTRIAC supported US STRATCOM and DTRA CBRN consequence assessment by providing specific guidance on the application of DTRA collateral hazard prediction tools and techniques.

This guidance included an independent (“white hat”) evaluation of DTRA’s Hazard Prediction and Assessment Capability (HPAC) and each of its modules including the LandScan models and the Nuclear Weapon Detonation module.

As final technical deliverables, DTRIAC provided both US STRATCOM and DTRA with an analyst’s notebook, a DVD with the new handbook (three volumes) and all linked and referenced documentation, and the verification and evaluation documentation; all of which resulted in both USSTRATCOM and DTRA having documented model assumptions, sources of error, and confidence intervals for model inputs and outputs.

Do you have questions or concerns that would benefit from an independent look? Please contact DTRIAC, and we’ll be happy to help.

## STARS

The Scientific and Technical Information Archival and Retrieval System provides users rapid and intuitive access to critical agency knowledge and all DTRA scientific and technical information products. As an archival system, STARS provides permanent retention of DTRA’s data for posterity; as a retrieval system, STARS provides an easy-to-use and efficient means of accessing DTRA’s data.

Need a place to store your data? Submit it to STARS! The extensible architecture allows for the creation of discrete data collections that are properly protected by distribution statements, need-to-know, and classification.

Wonder if DTRA’s looked into a given R&D topic before? Want to know who answered the technical questions? STARS will help you find the answer. Contact DTRIAC for assistance.





## DTRIAC CORE Activities

*The DTRIAC provides DTRA with a safe, secure method to archive and share critical data.*

Under its core activities the DTRIAC performs four key missions; maintain and expand the DTRIAC information base, provide services and support, conduct outreach to the Threat Reduction community, and provide Scientific and Technical Information (STI) Program Support.

Under the first area, the main focus includes maintaining and expanding the collection. It also includes providing access to users and promoting the exchange of technical data amongst the research, development, test, evaluation, and acquisition communities within DTRA's mission areas.

Under services and support, one of the most significant supporting activities is DTRIAC's Technical Inquiry service. Whether answering simple technical questions, or in depth queries, the DTRIAC staff provides the ability to fully leverage its vast experience with the DTRIAC for the benefit of the user community. Technical inquiries of up to 8 hours of research are free.

In the third mission area, key activities include providing customer service and support to DTRA directorates, DoD Component offices, other government agencies, and government contractors remotely and on site in Albuquerque and at the DTRC STI Support Center on the 3rd floor of McNamara building.

Lastly, the DTRIAC always stands ready to provide STI program support to DTRA and its directorates.

## Technical Area Tasks (TATs)



**Film Presentation**

TATs are a convenient method by which government organizations can engage DTRIAC for specialized, cost-effective, extended technical assistance that cannot otherwise be accomplished through routine technical or bibliographic inquiries under core.

TATs may take the form of technical problem solving, studies, analyses, or assessments, assembly of data collections; development of tools and databases for the collection and analysis of data; providing subject matter expertise; performing special studies; as well as other unique scientific and technical activities.

TATs are individually funded and originate from government or industry requirements that necessitate an authoritative, objective, and timely response to a subject, problem area, or need that falls within DTRIAC's mission and scope.

Any U.S. Government agency can have work performed by DTRIAC and state and local governments may also be authorized.

## Focus on EM-1



DTRA's publication "Capabilities of Nuclear Weapons: Effects Manual No. 1 (EM-1)" is the authoritative source on nuclear weapons phenomenology and effects, and is used government-wide. Its primary function is to promulgate to the military services and their contractors an official authoritative position on nuclear weapons phenomena and their effects on military systems. For researchers, EM-1 summarizes the current knowledge of these phenomena, and is therefore "the primary source document" from which new R&D programs may spring. DTRA RD-NT is currently updating EM-1, and is making considerable use of the IAC both as a source of information and as a place to archive the current work with references. For more information, please contact [tom.niner@dtra.mil](mailto:tom.niner@dtra.mil).



# THE DISPATCH

Defense Threat Reduction Information Analysis Center

## Key Additions to the DTRIAC Collection in 2010

In subsequent issues of the DTRIAC Dispatch, we will highlight all key additions to the DTRIAC collection and those posted on STARS. For this issue we chose to highlight the key additions from all of 2010.

DTRA-TR-09-2

Verification and Validation of SHAMRC for Non-Ideal Airblast (NIAB) Phenomenology.

DTRA-TR-09-9-V1

Verification and Validation (V&V) of TSRTk Impulse Generation Analysis Capability.

DTRA-TR-09-9-V2

Verification and Validation (V&V) of TSRTk TSR Analysis Capability.

DTRA-TR-09-9-V3

Verification and Validation (V&V) of TSRTk Response to Impulse Analysis Capability.

DTRA-TR-09-9-V4

Verification and Validation (V&V) of TSRTk TMS Analysis Capability.

DTRA-TR-09-16

Radiation Doses to Skin from Dermal Contamination.

DTRA-TR-09-17

National Technical Nuclear Forensic Process Optimization Systems Engineering Study - Phase I.

DTRA-TR-09-26

NuCS Satellite and Missiles Survivability Design Module (THTk), Final Report, V&V Package Appendix.

DTRA-TR-09-28

Near Surface Weapons Effects Tools-3D (NSWET-3D) - Airblast/Thermal.

DTRA-TR-09-32

Structural Damage Assessment for Near Surface Weapons Effects Tools-3D (NSWET-3D) Air-Blast/Thermal.

DTRA-TR-10-22

Collateral Damage to Satellites from an EMP Attack.

DTRA-TR-10-23

Range-Improving, Mid-IR Time Domain Spectroscopic Transceiver for SNM.

DTRA-TR-10-27

Ground Shock in Faulted Media (GSFM) Workshop.

DTRA-TR-10-32

Where Radiobiology Began in Russia: A Physician's Perspective.

DTRA-TR-10-48

Combined Injury Modeling: Radiation and Burn Workshop Report.



*Santa Barbara Facility circa 1968*

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