

# 2017 WARHEADS & BALLISTICS CLASSIFIED SYMPOSIUM CALL FOR PAPERS

Sponsored by the Bomb & Warhead Division of the National Defense Industrial Association

August 1-3, 2017  
Naval Postgraduate School - Monterey, CA  
Event # 7480

**Deadline for Submitting Abstracts: MARCH 6, 2017**

## ANNOUNCEMENT

The symposium combines the Ballistic Division's Seventeenth Classified Ballistics Symposium with the Bomb & Warhead Division's 65<sup>TH</sup> Annual Bomb & Warhead Technical Symposium. The symposium will be held **August 1 - 3, 2017** at the Naval Postgraduate School in Monterey, CA. The meeting provides a forum for classified, export-controlled, and limited distribution papers in the areas of ballistics, weapons effectiveness, and bomb and warhead technology. The symposium is classified at the **SECRET/NOFORN** level and is limited to the following US agencies: DoD, DoD Contractors, DoE, FBI, CIA, and DHS.

## OBJECTIVE

The objective of the Warheads and Ballistics Classified Symposium is to provide researchers, developers, and program managers (from government, academia, and industry) a forum for the exchange of information on current work related to the advancement of the technology and application of ballistics and weapon systems.

## PAPER TOPICS

**Classified, export-controlled, and limited distribution papers** are solicited on a broad range of topics, including:

### Ballistics

- Kinetic Energy Technology
- Interior Ballistics
- Launch Dynamics
- Exterior Ballistics
- Terminal Effects
- Advanced Propulsion Technologies

### Warheads

- Chemical Energy Technology
- Undersea Warheads
- Air to Air Warheads
- Hard-Target Defeat Warheads
- Agent Defeat Warheads
- Non-Traditional Warheads
- Fuel-Air Warheads
- Multi-Function Warheads
- Electromagnetic Effects Warheads
- Warhead Mechanics
- Lethal Mechanisms

### Materials

- Ballistic Materials
- Energetic Materials
- Material Dynamics
- Material Processing
- Insensitive Explosives
- Target Protection

### Armor Technologies

- Active Protection Systems (APS)
- Counter Active Protection Systems (CAPS)
- Target Vulnerability
- Personnel Armor/Protection

### Related Technologies

- Systems Integration
- Insensitive Munitions
- Precision Munitions
- Fire Control Systems
- MANTECH
- Electric Weapon Technologies
- Fuze Integration
- Hypersonic Weapons Technology
- Detonation/Deflagration Modeling

## CLASSIFICATION

The Warheads and Ballistics Classified Symposium will be conducted at the SECRET/NOFORN security level. Attendance at the Symposium and distribution of the proceedings is limited to U.S. DoD Agencies, DoD contractors, DoE, FBI, CIA, and DHS. If required by individual presentation distribution limitations, a special session may be requested for a more restricted audience. Unclassified, public releasable papers should be considered for submission to the International Ballistics Symposium.

## ABSTRACTS

The abstract must be unclassified and clearly state the impending presentation and paper's classification via a Security Classification Guide and Distribution Statement, export control, if applicable. Restricted, unclassified abstracts, presentations and papers must be assigned either a Distribution C or Distribution D Statement. Abstracts will be handled as export-controlled, non-public-release documents. Submit unclassified abstracts of 300 to 600 words by **MARCH 6, 2017** to:

Via Email: [Ciccar@detk.com](mailto:Ciccar@detk.com)  
Or on Disk: Mr. Robert D. Ciccarelli, Vice President  
DE Technologies, Inc.  
100 Queens Drive  
King of Prussia, PA 19406  
Tel: (610) 337-2800, extension 120

**DO NOT SEND A LIMITED DISTRIBUTION DOCUMENT (ABSTRACT) OVER THIS OR ANY OTHER OPEN EMAIL LINE.  
ALL LIMITED DISTRIBUTION ABSTRACTS MUST BE SUBMITTED ON A DISK TO THE SUPPLIED ADDRESS.**

You may also ftp limited distribution abstracts to [ciccar@detk.com](mailto:ciccar@detk.com) via the AMRDEC Safe Access File Exchange: <https://safe.amrdec.army.mil/safe>. You should request a receipt to ensure that your abstract was downloaded by DE Tech. You are responsible for following all directions. Do not select "encrypt email message when possible." Do select "Notify me when file(s) downloads are COMPLETED."

Use the attached form (or equivalent) to indicate each author's name, organization, and contact information. Indicate which author (if more than one) will present the paper with an asterisk. Refer to the **GUIDELINES FOR ABSTRACTS** below for instructions on abstract preparation.

## PAPER SELECTION

Papers will be selected based on technical quality, relevance, and interest to the warhead, ballistics, and effectiveness research and development communities. Preference will be given to classified, limited distribution and export-controlled papers. The emphasis should be on new work not previously reported. All candidates will be notified of paper selection by **May 1, 2017**. The primary criterion for authorship is having played a substantive role in the work reported. Management review and sponsorship without active technical contribution are more appropriately noted in an acknowledgement. Current affiliations should have no bearing on whether an active participant should be considered an author.

## PRESENTATIONS

Each presentation is allotted twenty (20) minutes, including time for questions. If you require a presentation visual-aid other than a PowerPoint or an Adobe PDF file, please indicate this requirement on the enclosed **AUTHOR'S DATA FORM**.

## PAPERS

The classified proceedings of this meeting will be published with distribution limited to U.S. Agencies and their contractors. Authors **must** submit a **written paper** for these proceedings. Selected papers must be submitted in final electronic format by **July 3, 2017**. **Failure to submit a publishable paper will result in deletion of the presentation from the agenda**. Instructions for preparing papers and presentations will accompany the acceptance letter.

## SUMMARY

The following table defines the timeline for the **2017 WARHEADS & BALLISTICS CLASSIFIED SYMPOSIUM**.

EVENT	DATE
ABSTRACTS DUE	6 MARCH 2017
PAPER SELECTION	24 APRIL 2017
AUTHOR NOTIFICATION	1 May 2017
FINAL PAPERS DUE	3 JULY 2017
2015 SYMPOSIUM	1 - 3 AUGUST 2017

## GUIDELINES FOR ABSTRACTS

The primary purpose of the abstract is to enable members of the Paper Selection Committee to quickly understand and evaluate your proposal for presentation. The abstract should answer the following questions:

- \* Is the work original or based upon prior work, either by the author(s) or others?
- \* What is the significance of any new findings of the paper?
- \* Has the work been previously presented? If so, where and why should it be presented again?

To answer these questions, the abstract must be sufficiently detailed and must show a grasp of prior related work in the field of the proposed paper. To allow your abstract the most objective review and to expedite the process of paper selection, we have included the following instructions:

## CRITERIA

### Length

Abstracts that are too short lack the detail to provide a clear understanding of the nature of the work and the advancements in technology. Lengthy abstracts are taxing and unfair to the reviewers. Abstracts should be **300 to 600 words and no more than two (2) pages including all text, graphics, and references**.

### References to Previous Work

The abstract should define how the work compares with and relates to prior work. Appropriate citations to prior related work must be included and discussed. Abstracts should contain all appropriate key citations to prior work in order to indicate the author's familiarity with the research. This information will serve to increase the rating of the proposed paper.

### Interpretation of Results

The abstract needs to define the significance of the work by indicating how the results illuminate the problem and possibly provide some insights not previously available.

### Use of Figures

If one or two figures can significantly contribute to a better understanding by the reviewers of the work being reported, then authors are encouraged to include such figures, within the 2-page limit of the abstract.

### General Advice

Please abide by the criteria listed above, both to increase the rating of your paper and out of consideration for the reviewers who must examine and judge many abstracts. Abstracts that do not meet the criteria may be rejected or downgraded relative to well-prepared abstracts.

### Presentation and Paper Classification

The abstract must identify the expected classification and distribution statement of the presentation and paper. All papers whether classified or not, must have a distribution statement. Distribution A is for use on fully public releasable

documents and are not, in most cases, appropriate for this symposium. All others should use either Distribution C or Distribution D. Distribution F documents will only be accepted on a case-by-case basis and will require a written justification and approval by the committee prior to paper selection. Please note that For Official Use Only (FOUO) is not a sufficient distribution limitation and must be accompanied by an appropriate Distribution statement. PLEASE ALSO NOTE THAT INCORRECTLY MARKED PAPERS WILL NOT BE INCLUDED IN THE PROCEEDINGS AND AUTHORS WILL NOT BE ALLOWED TO PRESENT THEIR PAPERS AT THE SYMPOSIUM.

### **THE JOHN ULRICH MERITORIOUS SERVICE AWARD**

The Bomb & Warhead Division recognizes the outstanding contributions of individuals to the warhead community through its John Ulrich Meritorious Service Award. The basic criteria for the award are technical accomplishment, leadership, innovation, creativity, and sustained service having national and long-term impact. We encourage the participation of the Bomb and Warhead community in the nomination of outstanding individuals in our field. For information on the nomination procedure, contact:

**Mr. Robert D. Ciccarelli, Vice President**  
**DE Technologies, Inc.**  
**100 Queens Drive**  
**King of Prussia, PA 19406**  
**Ph: (610) 337-2800 x.120 Fax: (610) 337-2900**  
**Email: Ciccar@detk.com**

**BOMB & WARHEAD DIVISION Chair**  
**Mr. Robert D. Ciccarelli**  
**DE Technologies, Inc.**  
**Ciccar@detk.com**

**AUTHOR'S DATA FORM**  
**2017 Warheads and Ballistics Classified Symposium – August 1 – 3, 2017**

Title of Paper: \_\_\_\_\_

AUTHOR(S): Full name as it should appear in program, including honorific: Mr., Mrs., Dr., LTC, etc.  
Asterisk\* presenter's name and address if there are multiple authors.

Author: \_\_\_\_\_  
\_\_\_\_\_

Company/ Organization: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

**Ballistics**

- Kinetic Energy Technology
- Interior Ballistics
- Launch Dynamics
- Exterior Ballistics
- Terminal Effects
- Advanced Propulsion Technologies

**Warheads**

- Chemical Energy Technology
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**Related Technologies**

- Systems Integration
- Insensitive Munitions
- Precision Munitions
- Fire Control Systems
- MANTECH
- Electric Weapon Technologies
- Fuze Integration

**Paper Classification:**

Secret  Confidential  Export Controlled  Limited Public Release

If Classified, Source Document: \_\_\_\_\_

Government Contract Number: \_\_\_\_\_

**Visual Aid Requirement(s):**

Overhead  35mm  Electronic  Other (please specify \_\_\_\_\_)

**Abstracts:**

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