Quality Assurance and OPSEC Review				
This form is an approval record for ARL generated information to be presented or disseminated external to ARL.				
CLICK TO REVIEW OR UPLOAD SOURCE MATERIALS:  ARL Network SAFE (Off Network)				
Section I - To be completed by lead ARL author or COR				
A. General Information: Abstract BAA Invention Disclosure	Multimedia Presentation Publication Report SBIR Other			
1. Today's Date:  2. Due Date:  3. Unclassified Title or Solicitation Number/Title:				
02/14/2013 03/14/2013 The BRL CA	D Package An Overview			
4. Author(s): (Last, First, MI): Dykstra, Phillip C.	5. Site & Office Symbol: 6. Telephone Number:			
	APG RDRL-SLB-S 410-278-1382			
7. Invited: Yes No				
4b. Y:\ Source Material Folder Name: Y:\ARL_Form_1\SLAD\SLB-S\Yapp.C.14Feb13_OVERVIEW  4c. POC for submission E-mail address: clifford.w.yapp.civ@mail.mil 8. Contract No.:				
4d. Division Chief's E-mail address: denise.a.jordan10.civ@army.mil ARL COR:				
10. Distribution Statement: Is manuscript subject to export control? Yes No 9. Key Words: NURBS BSpline Raytracing CSG BRL-CAD				
11. Check Appropriate Letter and Number(s). See instructions:  12. Security Classification:				
A B C D E F X 0 1 2 3 4 5 6 7 8 9 10 11 12    Control   Control				
B. Presentation Conference Presen	tation Notable Presentation Key Note Speaker Briefing			
	Conference / Meeting Location:			
	ambridge, MA			
15. Conference / Meeting Date 16. Conference / Meet	<u>`</u>			
10/09/1987				
,	rnational Agreement(s) of Foreign Nationals:			
nationals be attending?  ☐ Yes ☐ No ☐ Don't know				
C. Publication Abstract Book Book Chapter Conference Proceeding Refereed Journal Article Other				
19. Material will be submitted for publication in:				
Journal Title: Fourth Computer Graphics Workshop Proceedings	Country: USA			
D. Report ☐ Contractor Report ☐ Memorandum Report ☑ Reprint	Special Report Technical Note Technical Report			
20. Project No.: 21. Period Covered (mm/yyyy) 22. Sponsoring Agency: 10/1987 Ballistic Research Laboratory				
E. Multimedia Software Web Poster Video Clip Other				
23. Location:				
F. Author's Statement				
24. All authors have concurred in the technical content and the sequence manuscript, and all authors who have made a substantial contribution are				
ARL Lead Author or COR X Date 02/21/2013				
	klist To be completed by an ARL Trained Internal OPSEC Reviewer			
OPSEC POC: Complete and explain any positive responses in block 28.  Note: ARL must be the proponent of the proposed information for release.				
1. Does this material contain Sensitive Information?	7. Does this material contain:			
Does this information contain state-of-the-art, breakthrough technology?  ☐ YES ✓ NC  ☐ YES ✓ YES  ☐ YE	a. Any contract proposals, bids, and/or proprietary information? YES ✓ NO			
3. Does the United States hold a significant lead time in this technology?	b. Any information on inventions/patent application for which patent engrous engage have been issued?			
4. Does this information reveal aspects of reverse	c. Any weapon systems/component test results?			
engineering? YES V NC  5. Does this material reveal any security practices or	containing advice and recommendations?			
procedures? ☐ YES ✓ NC  6. Would release of this information be of economic	120 V			
benefit to a foreign entity, adversary, or allow for the development of countermeasures to the system or technology?	f. Any information on countermeasures?  ☐ YES ✓ NO ☐ YES ✓ NO ☐ YES ✓ NO			

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Section II - OPSEC Review Checklist Continued				
h. Any Force Protection, Homeland Defense (security) information?	☐YES ✓ NO	k. Contain information with foreign policy or foreign relations implications?	YES NO	
Information on subjects of potential controve among military services or other federal agence		I. Does this information contain current ARL Esser Elements of Friendly Information (EEFI)?	ntial ☐ YES 📝 NO	
j Information on military applications in space, nuclear chemical or biological efforts: high ene				
laser information; particle beam technology; et	c?			
G. Internal OPSEC Review				
25. OPSEC Review Comments / Explanations	: / Continuations:			
26. Internal OPSEC Approval Statement:				
I, the undersigned, am aware of the adversary's best of my knowledge, the net benefit of this rele Army, or other DoD programs of which I am awa	ease out weighs the potential dar	in the subject matter of this material and that, to the mage to the essential security of all ARL, AMC,	Revise / Review	
Penny T. Willard	X			
OPSEC Reviewer Name	OPSEC Review	er Signature Dat	e 02/21/2013	
Section III - Approval to be completed by designated individual				
H. Technical Review				
Erik Greenwald				
27. Technical Reviewer Name	X Technical Reviewer Signa	Date 02/21/2013	Revise / Review	
I. Supervisor Review				
Stephanie L. Snead				
28. Supervisor Name	XSupervisor Signature	Date 02/21/2013	Revise / Review	
J. Technical Publications Editorial Revie				
	_		N/A: <b>√</b>	
29. Editor Name	X	———— Date	Revise / Review	
	Editor Signature			
	Section IV - To be	completed by designated individual.		
K. Security  30. ARL OPSEC Officer	Antonial land bearing and for	- ODOSO Deline and 18 7 / 10 NOT	4-6-6-0-0-6-6-0-6-6-6-6-6-6-6-6-6-6-6-6-	
Comments:	Material has been reviewed for	r OPSEC Policy and S VI IS NOT accep	table for public release.	
ARL OPSEC Officer Name Daniel B Cramer	X ARL OPSEC Office	r Signature Date	Revise / Review	
31. Classified Information:	AILE OF OLO OFFICE	- Oignature	N/A: ✓	
Classified by/Derived from:		Date	Revise / Review	
Declassified on date:	Security Manager X			
32. Foreign Intelligence Office (Limited distribu	ution information)		N/A:   ✓	
FIO Devilence Name		Date		
FIO Reviewer Name	X	viewer Signature Date	Revise / Review	
33. Foreign Disclosure Office	X FIO Re	viewer Signature	Revise / Review  N/A:	
33. Foreign Disclosure Office (Limited distribution information for release to foreign national	FIO Re	viewer Signature  Date		
33. Foreign Disclosure Office (Limited distribution information for release to foreign national FDO Reviewer Name	FIO Re	viewer Signature	N/A: 🗸	
33. Foreign Disclosure Office (Limited distribution information for release to foreign national FDO Reviewer Name  L. Division Chief	X FIO Re	Date eviewer Signature	N/A: ✓ Revise / Review	
33. Foreign Disclosure Office (Limited distribution information for release to foreign national FDO Reviewer Name	X FIO Re	Date eviewer Signature	N/A:  Revise / Review  table for public release.	
33. Foreign Disclosure Office (Limited distribution information for release to foreign national FDO Reviewer Name  L. Division Chief  34. The information contained in this material has Denise A. Jordan for Bob Bowen	TFIO Re  State of the state of	viewer Signature  Date  eviewer Signature  / editorial review and	N/A:  Revise / Review  table for public release.	
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ARL Form 1- October 2003 Last Modified: 28 January 2013

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## General Instructions for Completing ARL Form 1

**SECTION I.** To be completed by the lead ARL author or COR.

NOTE: Lead ARL author or COR must complete Part A and Part F for all documents receiving Form-1 approval.

Part A. General Information: To be completed for all material requiring Form-1 approval.

Header:

Mark the box applicable to the material being reviewed. See Definitions for further information. If "Abstract" or "Publication" is marked, complete Part C. If either "BAA", "Invention Disclosure" or "SBIR" is marked, complete Part A only. If "Presentation" is marked, complete Part B. If "Report" is marked, complete Part D. If "Multimedia" is marked, complete Part E. If "Other" is marked, complete form as needed and contact the ARL OPSEC Officer if any assistance is required.

- Enter the date the Form-1 is completed in mm/dd/yyyy format. Block 1.
- Enter the date the Form-1 is due back (if applicable) to the lead ARL author or COR with all required approvals in Block 2. mm/dd/yyyy format.
- Block 3. Enter the unclassified title of the material. If this is a BAA or SBIR, enter the solicitation number and/or title.
- Block 4. Enter the names of all coauthors, in order of contribution, with the lead author listed first.
- Enter the Site and office symbol of the lead ARL author or COR. Block 5.
- Block 6. Enter the telephone number of the lead ARL author or COR.
- Block 7. Mark "Yes" if the author was extended a personal invitation by the sponsoring organization to give a presentation or submit a publication. Otherwise, mark "No."
- If this material was contractor generated, provide the contract number and ARL COR. If not, leave blank. Block 8.
- Block 9. Enter key words or phrases identifying major subjects in the report. Note: All keywords or phrases must be unclassified.
- Mark "Yes" if information is subject to export control. Otherwise, mark "No." Block 10.
- Mark the appropriate letter for the distribution statement (ref: DoD Directive 5230.24) at the time of generation along with the valid Block 11. corresponding numbered reason(s) as follows:

### **Authorized Distribution Statements**

DISTRIBUTION STATEMENT A. Approved for public release: distribution is unlimited.

DISTRIBUTION STATEMENT B. Distribution authorized to U.S. Government Agencies only (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).

DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government Agencies and their contractors (fill in reason) (date of determination). Other requests for this document shall be referred to (insert controlling DoD office).

DISTRIBUTION STATEMENT D. Distribution authorized to the DoD and U.S. DoD contractors only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).

DISTRIBUTION STATEMENT E. Distribution authorized to DoD Components only (fill in reason) (date of determination). Other requests shall be referred to (insert controlling DoD office).

DISTRIBUTION STATEMENT F. Further dissemination only as directed by (inserting controlling DoD office) (date of determination) or higher DoD authority.

DISTRIBUTION STATEMENT X. Distribution authorized to U.S. Government Agencies and private individuals or enterprises eligible to obtain export controlled technical data in accordance with DoDD 5230.25, "Withholding of Unclassified Technical Data From Public Disclosure," (date of determination). Controlling DoD office is (insert).

Note: Statement X shall not be used on classified documents. Other requests for this document must be referred to the DoD controlling office.

Designate the highest security classification of this information. Block 12.

Part B. Presentation. Complete all blocks if "Presentation" is marked in Part A.

Mark the box applicable to the type of presentation being reviewed. See Definitions for further information. Header:

Enter the name of the conference or meeting where the presentation will be given. Also, select "TCCP" or "NATO" if applicable. Block 13.

# Possible reason(s)

- 0. Public release
- 1. Foreign government information
- 2. Proprietary information
- 3. Critical technology
- 4. Test and evaluation
- 5. Contractor performance evaluation
- 6. Premature dissemination
- 7. Administrative/operational use
- 8. Software documentation
- 9. Specific authority
- 10. Export limitations
- 11. Direct military support

# Export-control warning notice (Ref. DoD 5230.25):

Indicate (Block 10) whether this information is subject to export control (e.g., International Traffic in Arms Regulation (ITAR) or Export Administration Regulation (EAR)). A publication containing export-control technical data must carry the following statement on its cover:

Warning-This document contains technical data whose export is restricted by the Arms Export Control Act (Title 22, U.S.C., Sec. 2751 et seq.) or the Export Administration Act of 1979, as amended, Title 50, U.S.C. App 2401 et seq. Violations of these export laws are subject to severe criminal penalties. Disseminate in accordance with provisions of DoD Directive 5230.25.

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Block 14. Enter the geographic location where the conference or meeting will be held.

**Block 15.** Enter the date the presentation will be given in mm/dd/yyyy format.

Block 16. Mark the appropriate box. If conference or meeting is classified, enter the level of classification.

Block 17. Mark the appropriate box.

**Block 18.** If "Yes" is marked in block 17, identify the international agreement that authorizes release of information. Controlled unclassified information requires Foreign Disclosure Officer approval in Block 30. For assistance, contact your Intelligence/Security Division.

Part C. Publication. Complete all blocks if "Publication" is marked in Part A.

**Header:** Mark the box applicable to the type of publication being reviewed. See Definitions for further information.

**Block 19.** Enter the journal title and the country where the publication will be published.

Part D. Report. Complete all blocks if "Report" is marked in Part A.

Header: Mark the box applicable to the series of ARL report being reviewed. See Definitions for further information.

**Block 20.** Enter the ARL project number under which the work reported was carried out. This number is used only to provide a means of identifying the principal source of support for the work involved.

Block 21. Enter the inclusive dates in mm/yyyy format of the period covered, such as the life of a contract in a final contractor report.

Block 22. Enter the name of the sponsor of the work.

Part E. Multimedia. Complete all blocks if "Multimedia" is marked in Part A.

Header: Mark the box applicable to the type of multimedia material being reviewed. See Definitions for further information.

Block 23. Enter the location of where the information will be available or the audience to which the information will be disseminated. For example, the location where a poster will be hung or the URL for the Web site where the material will be posted.

## Part F. Author's Statement.

Block 24. Lead ARL author or COR reads the Author's Statement and signs this block. Enter the date in mm/dd/yyyy format.

SECTION II. To be completed by an ARL Trained Internal OPSEC Reviewer.

### Part G. Internal OPSEC Review.

ARL Internal OPSEC reviewer reviews the document, completes the OPSEC Checklist, and explains any boxes marked "Yes" in Block 28. If release is approved, the reviewer signs Block 29. An Internal OPSEC review is required for all documents.

Block 25. Internal OPSEC reviewer enters any comments/explanations/continuations regarding the OPSEC Checklist.

Block 26. If the ARL Internal OPSEC reviewer approves release, the reviewer reads the Internal OPSEC Approval Statement and enters name, signature, and date in mm/dd/yyyy format.

## Part H. Technical Review.

Lead ARL author or COR selects an ARL employee familiar with the material to review the information for technical merit and clarity. Signature indicates that the information is technically accurate and worthy of publication.

Block 27. The technical reviewer enters name, signature, and date in mm/dd/yyyy format after reviewing the document.

### Part I. Supervisor Review.

Lead ARL author or COR's first-line supervisor reviews the document for proprietary information, technical accuracy, appropriate distribution statement and security classification, and ensures the information furnished on the form is correct. For joint ARL employee/contractor documents, the supervisor confirms the document is consistent with the contract. For ARL reports, the supervisor confirms the report series and distribution list is correct.

Block 28. Lead ARL author or COR's first-line supervisor enters name, signature, and date in mm/dd/yyyy format.

**SECTION III.** To be completed by the designated individual.

## Part J. Technical Publishing Editorial Review.

Technical Publishing (Tech Pubs) reviews the document for editorial accuracy, clarity, and consistency, offering comments and suggestions. Lead ARL author or COR submits an electronic Word file of the document being reviewed along with a copy of the Form-1 with Technical and Internal OPSEC Review approvals to techpubs@arl.army.mil. This is MANDATORY for all ARL Reports, and the lead ARL author or COR must provide Tech Pubs with a completed Form-1 once all approvals and signatures are obtained. Requirement for Tech Pubs Editorial Review for document other than ARL Report is at the discretion of management. Author may choose to have documents editorially reviewed even if it's not required.

Block 29. Editor enters name, signature, and date in mm/dd/yyyy format after reviewing the document.

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## **SECTION IV.** To be completed by the designated individual.

### Part K. Security.

- **Block 30.** ARL OPSEC Officer reviews the document and, if approved for final release, enters name, signature, and date in mm/dd/yyyy format.
- **Block 31.** Enter the classification authority in "Classified by/Derived from:" in accordance with DoD Directive 5200.1 F, Chapters I, IV, VII, XI, App A. Indicate the specific date or event for declassification for "Declassify on".
- **Block 32.** Foreign Intelligence Office reviewer reviews document and, if the document is approved for public release, enters name, signature, and date in mm/dd/yyyy format. After signing, return to ARL OPSEC Officer.
- **Block 33.** Foreign Disclosure Officer approval for limited distribution of controlled unclassified and classified information for release to foreign nationals.

### Part L. Division Chief.

Block 34.

Division chief reviews the Form-1 and ensures that all approvals have been completed and that the material is suitable for release. After signing, the Division Chief should forward Distribution A - Public Release document to the ARL Public Affairs Office for further processing.

Division Chief reviews the Form-1, marks the appropriate box regarding approval for public release, and enters name, signature, and date in mm/dd/yyyy format.

### Part M. Public Affairs Office.

**Block 35.** Public Affairs Office reviewer reviews document and, if the document is approved for public release, enters name, signature, and date in mm/dd/yyyy format. After signing, return to Division Administrative Officer (AO).

### **DEFINITIONS**

Presentation - A description of research or information that is intended to be conveyed graphically and orally, usually using PowerPoint.

**Conference Presentation -** A competitively selected presentation to be delivered at a forum sponsored by a professional organization.

**Notable Presentation -**A high visibility presentation to an organization or set of individuals that is not competitively selected, such as presentations given to Generals or SESs.

**Keynote Presentation -** A presentation given by a notable individual who draws attention and participants to the conference or meeting.

**Briefing -** A presentation that is not a conference, notable presentation, or keynote presentation, such as team briefings or status updates.

**Publication -** A descriptive research paper published by a private sector organization.

Abstract - A synopsis of a research study that is typically one or two paragraphs, but may be as long as one to three pages.

**Book** - A lengthy research paper published independently of other research papers.

Book Chapter - A research paper that is published along with several other research papers of a common topic in a book format.

**Conference Proceedings -** A research paper or slides that describe research from an accompanying conference presentation and is published by the conference sponsor.

Refereed Journal Article - A peer reviewed research paper published in a periodical.

**Other -** A privately published document that is not defined by the preceding five categories of publication.

Report - A technical paper published by ARL.

Contractor Report - A report generated solely by contractors for ARL.

**Memorandum Report** - A report used to document segments of a project or projects that are limited in scope or significance. MR is most often used to provide interim progress reports about ongoing research or analysis.

Reprint - A report that reproduces a paper previously published in a professional journal or proceedings.

**Special Report** - A report reserved to meet administrative or informational special requirements for the various disciplines within ARL.

**Technical Report** - A report containing scientific, engineering, or technical breakthroughs of general or permanent interest to the scientific community. TR provides a significant contribution to existing knowledge, with a broader scope and distribution than other series.

**Technical Note** - A small-scale report, either in significance or physical length, that undergoes a rapid technical and editorial review before being disseminated to a limited audience.

Multimedia - A form of information published in a non-traditional venue or a non-traditional format.

**Software -** A program used to direct the operation of the computer as well as documentation giving instructions on how to use it.

Web - A depiction of research to be posted on the Internet only.

Poster - A depiction of research displayed on a single placard.

Video Clip - A visual and oral presentation of research stored in an electronic format.

Other - A form of information presented in a format that is not described by the preceding three categories of multimedia.