

#### DEPARTMENT OF THE NAVY

OFFICE OF NAVAL RESEARCH 875 NORTH RANDOLPH STREET SUITE 1425 ARLINGTON VA 22203-1995

ONRINST 3966.1A
ONR 03R
14 November 2013

### ONR INSTRUCTION 3966.1A

From: Chief of Naval Research

Subj: ESTABLISHMENT AND IMPLEMENTATION OF A PEER REVIEW PROGRAM

WITHIN THE OFFICE OF NAVAL RESEARCH

Ref: (a) ONRINST 5430.16A

(b) Naval S&T Strategic Plan, Sep 11

Encl: (1) Planning and Conducting Peer Review

(2) Sample Letter to Peer Review Panelists

(3) Conflict of Interest, Confidentiality Statement and Gratuitous Services Agreement for ONR Research Peer Reviewers

- 1. <u>Purpose</u>. To revise policy and procedures for implementing a Peer Review Program within the Office of Naval Research (ONR).
- 2.  $\underline{\text{Cancellation}}$ . ONRINST 3966.1. This is a complete revision and should be read in its entirety.
- 3. <u>Scope</u>. The policies and procedures set forth in this instruction apply to the Research Directorate and the Science and Technology (S&T) Departments at ONR Headquarters.
- 4. <u>Background</u>. Under reference (a), the Chief of Naval Research (CNR) leads execution of the Department of the Navy's (DON's) integrated S&T program via, in part, supervision of ONR's S&T Directorate in management and execution of the S&T program. This instruction is published in furtherance of these duties, by establishing a process whereby S&T research programs funded under Budget Activity 1 (basic research) are subjected to peer review. Peer review is a process conducted by S&T experts who provide an independent assessment of the scientific merit of the research being reviewed. The goal of the peer review process is to ensure excellence in the research funded by ONR and an opportunity for ONR Program Officers to obtain feedback from independent reviewers on the performance of their S&T portfolios.
- 5. <u>Policy</u>. Beginning in fiscal year 2011, all ONR S&T Departments initiated peer reviews of ongoing basic research

programs, following the guidelines provided in enclosure (1), and using the documents provided in enclosures (2) and (3). Research grants and awards made on or before fiscal year 2009 shall be the initial candidates for peer review. After the first round of reviews, research grants and other awards made by ONR shall be subject to peer review in the proposal phase or the  $2^{\rm nd}$  to  $3^{\rm rd}$  year following the award.

## 6. Action

- a. Director of Research (ONR 03R). In accordance with reference (a), the Director of Research (DoR) is personally responsible to the CNR for the planning, programming, budgeting and oversight of the ONR Discovery & Invention (D&I) S&T portfolio. In support of this effort, the DoR shall, through the process of peer review, assess the basic research portfolio in terms of S&T quality; scientific breakthroughs & contributions; and potential DON, Department of Defense (DoD), and other impacts to determine strengths and weaknesses of the current portfolio.
- b. S&T Department Heads. The S&T Department Heads (ONR 30, 31, 32, 33, 34, and 35) are responsible for the execution of their department's programs, including technical performance. In support of this effort, the S&T Department Heads shall conduct, through the process of peer review, technical assessments of departmental D&I efforts to ensure research breadth and quality in scientific disciplines of importance to DON and Department of Defense (DoD).

### c. S&T Division Directors/Program Officers

- (1) The S&T Division Directors ensure the successful management of the D&I programs, and report to and assist their Department Heads in this function. The Division Directors manage their Division Program Officers (POs). The peer review process may assist the Division Directors in monitoring the cost, schedule, and technical performance of the division's programs.
- (2) POs are the first line technical execution managers in the S&T Division. They ensure the successful execution of the individual D&I projects which support the focus areas described in reference (b). The S&T POs shall use the peer review process to monitor the cost, schedule, and technical performance of the projects for which they are responsible and are the direct benefactors of the peer review process. They shall report to and assist the Division Directors in this function.

7. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed in accordance with SECNAV Manual 5210.1.

MATTHEW L. KLUNDER

Rear Admiral, U.S. Navy

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### PLANNING AND CONDUCTING PEER REVIEW

## 1. Background

- a. The concept of peer review is strongly accepted by the scientific community and instills confidence in management, academic and other partners, other branches of government, and the public, that funds appropriated for research are expended on meritorious research ideas and projects.
- b. Peer review is intended to enhance the likelihood of success for Science & Technology (S&T) projects by leveraging existing standards and expertise and ensuring that key ingredients for project success are in place.

### 2. Peer Review Panel Members

- a. Peer review panel members are selected by written agreement between the Program Officer, Division Director, and the Department Head, with final approval by the Department Head. Final selection of the panel members shall be forwarded to the Director of Research.
- b. Peer review panel members shall be selected based on a number of considerations, including:
- (1) Expertise in the applicable scientific or technical fields.
- (2) Commitment to high quality, insightful, fair and impartial reviews.
- (3) Absence of any conflict of interest for specific projects assigned to be reviewed.
- c. The peer review panel may consist of members internal or external to the Office Naval Research (ONR). Panel members may be academic, industrial or government individuals. ONR employees may serve as panel members including civilian, military personnel, and individuals serving under an Intergovernmental Personnel Act (IPA) agreement.
- d. Each peer review panel is expected to have three or more members, but the actual number may depend on different factors, including the diversity of the projects reviewed. The final number of panel members must be approved by the Department Head.

## 4. Peer Review Panel Evaluation Criteria

- a. Peer Review Panel members shall address, at a minimum, the following criteria:
- (1) <u>Significance and Originality</u>. To what extent will the research lead to new knowledge, tools, or open new solution pathways by investigating scientific phenomena not previously considered or explored? Does the research realize its objectives by developing new concepts or using existing or emerging approaches in new or different ways? Is the science sound? Are the long-term goals appropriate? Are opportunities being missed?
- (2) <u>Scientific Merit and Accomplishment</u>. Is the program plan for organizing and carrying out the project well-specified and appropriate? Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project? What is the quality of the scientific accomplishments?
- (3) Risk and Potential Impact. What is the basic research content of the program? Is the level of difficulty appropriate and does the team understand the S&T challenges? Does the basic research have the higher risk and high payoff characteristics normally associated with basic research? What is the potential impact of the research to Department of the Navy (DON) and Department of Defense (DoD) if the goals are met? Are there broader impacts (e.g., applications to other scientific disciplines, technology developments)?
- (4) <u>Principal Investigator (PI)</u>. Are the PI's qualifications and experience sufficient for the task at hand? Is the PI making good progress?
- b. The reviewers shall submit individual written reports discussing the above criteria. The panel members may discuss technical aspects of the project among themselves, but may not submit a collaborative report, evaluation or recommendation.
- 5. Conflicts of Interest, Confidentiality Statement and Gratuitous Services Agreement. Non-federal employee peer review panel members shall execute the "Conflict-of-Interest, Confidentiality Statement and Gratuitous Services Agreement" provided as enclosure (3) to this instruction. Federal government employee peer review panel members shall execute the conflict-of-interest portion only of enclosure (3).

6. Timing and Scheduling Reviews. Every ongoing multi-year ONR basic research project shall be subject to peer review during the first to third year following initial grant or award. Peer review of basic research projects will be phased in over three years. For projects in their first three-year funding cycle, later stage reviews are preferred. Projects subject to peer review include, but are not limited to, Basic Research Challenge (BRC), Multidisciplinary University Initiative (MURI), Young Investigator Award (YIP), and Presidential Early Career Award for Scientists and Engineers (PECASE). Basic research projects peer reviewed and officially documented in the proposal phase are not subject to review during the execution phase.

### 7. Planning and Conducting a Peer Review

# a. Step 1. Initiate Peer Review

- (1) Responsibility. ONR Program Officers (PO)
- (2) Description
- (a) Execution Phase. ONR POs will schedule a face-to-face and/or virtual review of their projects. It will be the responsibility of the PO to coordinate attendance of all of his or her PIs and the logistics details concerning the date, time, and place of the review, and the facilities required to support the review. In setting up the review, POs must take care not to enter into any contract or other agreement that involves or may involve the exchange of funds. Instead, POs must refer any such arrangements to the manager of Conference Events and Exhibits in the Corporate Strategic Communications Office.
- (b) <u>Proposal Phase</u>. For those POs who would prefer to conduct a peer review in the proposal phase, a short plan of action including the process, list of panel members, panel member questionnaire form, and Department Head agreement must be submitted to the Director of Research for approval.

#### b. Step 2. Plan the Peer Review

- (1) Responsibility. ONR PO
- (2) Description
- (a) ONR POs will nominate panelists for the Peer Review Panel and present those nominations to the Division Director and Department Head. The Division Director and

Department Head will review each panel member's qualifications and upon acceptance will provide approval and final signature of the Peer Review Panel and forward the final package to the Director of Research. This package should include the signed approved list of panel members and panel members' curricula vitae (CVs). Each panel member's CV must include a detailed list of publications. After the Department Head approves the composition of the Peer Review Panel, the PO will make final arrangements with each member and empanel the Peer Review Panel.

- (b) For reviews in the execution phase, the PO will prepare an advanced notebook for each reviewer, which will include as appropriate: letter of instruction to the reviewers, a detailed schedule for the review, an overview of the S&T program being reviewed, an abstract and the initial proposal of each project, a selected list of peer-reviewed publications authored by each PI, and the briefs to be presented by the PIs. The PO will arrange with each reviewer to receive a hard or electronic copy of the notebook. An electronic copy of the notebook will also be provided for the DoR.
- (c) Each reviewer must certify that he or she has no conflicts of interest or provide a list of projects he or she cannot review due to possible conflict of interest. In addition, all non-federal employee peer reviewers shall provide a confidentiality statement and gratuitous services agreement, and confirm that he or she is available for the duration of the review for which he or she has agreed.
- (d) There are a number of things to consider when planning a peer review. The list below is intended to help with the process, but is not all-inclusive.
- $\frac{1}{\text{plan}}$  Setting Date & Venue (Recommended). To conserve costs, plan review around a technical society conference or other event in which your PIs may participate.
- <u>2</u> <u>Budget</u>. The DoR will provide funds for review panel expenses: invitational travel orders, travel reimbursement, per diem, lodging expense, etc.
- Audio Visual Equipment (Computer, Projector, Microphone, Power Strips, etc.). In the event of an online review, POs must utilize an approved DoD service such as Defense Contact Online (DCO) and coordinate all aspects with ONR OneDesk including registration, computer compatibilities, and telecon number.

- 4 Invitees/Speakers
- 5 Notebook as described above.
- 6 Review Panel. Recommend three to six recognized technical experts from government, industry and academia.
  - 7 Badges

# c. Step 3. Conduct Peer Review

- (1) Responsibility. ONR PO
- (2) <u>Description</u>. PIs will present their work to the Peer Review Panel. A copy of each presentation is to be provided in advance to each reviewer as part of the notebook.

# d. Step 4. Report Observations and Recommendations

- (1) Responsibility. Peer Review Panel
- (2) <u>Description</u>. Peer Review Panel members review the projects and individually record their evaluations. Instructions for the reviewers' individual write-ups, evaluations, and comments will be included in the letter guidance that will be provided to the Peer Review panelists. Comments must be signed by each reviewer.

### e. Step 5. Review Results

- (1) Responsibility. DoR, Department Head, Division Director and Program Officer
- (2) <u>Description</u>. The PO will review comments from the panelists and summarize and document any panel member concerns and any actions taken as a result of the peer review. The PO will review these results with the Director of Research, Department Head, Military Deputy, and Division Director. The DoR will compile and maintain Peer Review Panel comments and records for each project reviewed. Panel member evaluations and PO's actions shall become a part of the official file.



### Sample Letter to Peer Review Panelists

Dear Review Panel:

Thank you for agreeing to review the								. The	review		
will	be hel	d		. The	review	wil	l star	t with	presen	tations	by
the	program	offic	cers on	their	vision	and	plans	follow	wed by	day	s of
pres	entatio	ns by	invest	igators	s. I v	vill	provid	e your	review	s to the	Э
Divi	sion Di	rector	, Depa	rtment	Head,	and	ONR's	Directo	or of R	esearch	

Enclosed you will find a "Conflict of Interest, Confidentiality Statement, and Gratuitous Services Agreement for Office of Naval Research Peer Reviewers." This document must be executed by you before you can participate as a peer reviewer. Please carefully review this document, execute it, and return to me. If for any reason you find that you cannot execute the document, please contact me immediately.

We	seek	your	indiv	ldua	al op	pinion	of	the	quality	of	the
		/P:	rogram	in	the	follo	wing	are	eas:		

- <u>Significance</u> and <u>Originality</u>. To what extent will the research lead to new knowledge, tools, or open new solution pathways by investigating scientific phenomena not previously considered or explored? Does the research realize its objectives by developing new concepts or using existing or emerging approaches in new or different ways? Is the science sound? Are the long-term goals appropriate? Are opportunities being missed?
- <u>Scientific Merit and Accomplishment</u>. Is the program plan for organizing and carrying out the project well-specified and appropriate? Are the conceptual framework, design, methods, and analyses adequately developed, well-integrated, and appropriate to the aims of the project? What is the quality of the scientific accomplishments?
- Risk and Potential Impact. What is the basic research content of the program? Is the level of difficulty appropriate and does the team understand the science and technology challenges? Does the basic research have the higher risk and high payoff characteristics normally associated with basic research? What is the potential impact of the research to the Department of the Navy and Department of Defense if the goals are met? Are there broader impacts (e.g., applications to other scientific disciplines, technology developments)?
- <u>Principal Investigator (PI)</u>. Are the PI's qualifications and experience sufficient for the task at hand? Is the PI making good progress? At the completion of the review, we ask that you take some

Enclosure: Conflict-of-Interest, Confidentiality Statement and Gratuitous Services Agreement for Office of Naval Research Peer Review

# Conflicts-of-Interest, Confidentiality Statement and Gratuitous Services Agreement for Office of Naval Research Peer Reviewers

- 1. <u>Conflicts of Interest</u>. Your designation as an ONR PEER reviewer requires that you be aware of potential conflicts of interest that may arise. Examples of situations, affiliations or relationships that may present a conflict of interest include but are not limited to:
- a. Your Affiliations with an Institution. You may have a conflict of interest if you:
- (1) Are currently employed by the institution whose work you are reviewing under this agreement as a professor, adjunct professor, visiting professor, or similar position;
- (2) Have other employment, position, or arrangement with the institution (such as a consulting or advisory arrangement);
- (3) Were previously employed by the institution within the last 12 months;
- (4) Are being considered for employment at the institution;
- (5) Have a formal or informal reemployment arrangement with the institution;
- (6) Own securities of or have another financial interest in the institution;
- (7) Are a current member of a visiting committee or similar body affiliated with the institution (any conflict of interest under this situation would extend only to proposals or applications originating with the department, school, or facility that the visiting committee or similar body advises);
- (8) Hold any office, governing board membership, or relevant committee chairpersonship with the institution (ordinary membership in a professional society or association is not considered an office);
- (9) Are currently enrolled as a student in the institution (any conflict of interest under this situation would arise only for proposals or applications that originate from the department or school in which you are a student); or

- (10) Received and retained an honorarium or award from the institution within the last 12 months.
- b. Your Relationship with an Investigator, Project
  Director, or Other Person who has a Personal Interest in the
  Project. You may have a conflict of interest if you and an investigator, project director, or other person who has a personal interest in the project:
- (1) have a known family relationship, such as spouse, child, sibling, or parent;
- (2) have now or had within the last five years a business or professional partnership;
- (3) had an association as thesis advisor or thesis student within the last five years; or
- (4) collaborated on a project or on a book, article, report, or paper within the last three years.
- c. Your Other Affiliations or Relationships. You may also have a conflict of interest if you:
- (1) have a relationship, other than those described above, such as a close personal friendship or a long-standing scientific or personal conflict, that you think might tend to affect your judgment or be seen as doing so by a reasonable person familiar with the relationship; or
- (2) hold any position, other than those described above, that would allow you to gain or lose financially from the outcome of the review.
- (3) For the purpose of paragraphs 1b and c above, interests of the following persons are to be treated as if they were yours: your spouse, minor child, a relative living in your immediate household or anyone who is legally your domestic partner.

As an ONR reviewer, should any conflict arise during your term, you must bring the matter to the attention of the ONR Program Officer (PO). This official will determine how the matter should be handled and will tell you what further steps, if any, to take.

(Please Print)	-
Reviewer's Signature:	
Date:	

## 2. Confidentiality Statement

- a. No Use of "Insider" Information. If your designation gives you access to information not generally available to the public, you must not use that information for your personal benefit or make it available for the personal benefit of any other individual or organization.
- b. Your Obligation to Maintain the Confidentiality of Information. You must not copy, quote, or otherwise use or disclose to anyone, including your graduate students or post-doctoral or research associates, any information from any project you are asked to review. During a review, you may be asked to execute a specific non-disclosure agreement pursuant to the Defense Federal Acquisition Regulation Supplement (DFARS) covering the terms of use for particular information, material, technical data or computer software which may be business confidential, proprietary, sensitive or otherwise privileged.
- c. Your Obligation to Maintain the Confidentiality of the Review Process and Review. ONR keeps reviews and your identity as a reviewer of specific projects confidential to the maximum extent possible, except that we may send to PIs reviews of their own projects without your name, affiliation, or other identifying information. Please respect the confidentiality of all PIs and other reviewers. Do not disclose their identities, the relative assessments or rankings of projects by peer reviewers, or other details about the peer review.
- d. Your Identity as a Reviewer of a Specific Project will be Kept Confidential. I understand my identity as a reviewer of specific projects will be kept confidential to the maximum extent possible. Copies of written reviews that I submit may be sent to the PIs without my name and affiliation.
- e. Your Agreement Regarding Conflicts of Interest and Confidentiality. I have read the list of affiliations and relationships that could prevent my participation in matters involving such individuals or institutions. To the best of my knowledge, I have no affiliation or relationship that would

prevent me from performing my panel duties. I understand that I must contact the ONR PO if a conflict exists or arises during my service. I further understand that I must sign and return this Conflict-of-Interest and Confidentiality Statement to ONR before I may participate on a peer review panel. By signing below, I agree not to divulge or use any business confidential, proprietary, sensitive or otherwise privileged information during my service. I acknowledge that the owner of any proprietary information is a third-party beneficiary of this agreement. That third-party beneficiary, in addition to any other rights he may have, shall have the right of direct action against me to seek damages from any alleged breach of the confidentiality provisions of this Agreement or to otherwise enforce those provisions. This right of action extends as well against any person to whom the business confidential, proprietary, sensitive or otherwise privileged information was allegedly disclosed. I further acknowledge that violation of this Agreement as regards safeguarding non-public information could subject me to criminal and/or civil penalties. I agree to either destroying or returning all review material within one week after submitting my review comment forms to ONR.

Reviewer's Signature:	
Date:	
3. <u>Gratuitous Services Agreement</u> . By signing this Agreement, understand that the voluntary services I am rendering to ONR a completely "gratuitous," i.e., without compensation. I agree not to seek compensation from the Federal Government for any services I provide under this Agreement. I further understand that as a gratuitous service volunteer, I will not be consider a Federal employee for any purpose. I also understand that my provision of services does not entitle me to employment with a Federal agency or organization.	re

Reviewer's Name: \_\_\_\_

(Please Print)

Reviewer's Name: (Please Print)

Date:

Reviewer's Signature: