**FY18 NPS Naval Research Program (NRP) Terms of Reference for Research Proposal**

**Purpose**: These Terms of Reference establish common understanding of intent, roles, responsibilities, and processes for development, review, approval, and process oversight of research proposals under the Naval Research Program (NRP).

**Background**: Upon identification of Navy and Marine Corps research topics from topic sponsors and NPS faculty, the Dean of Research issues a solicitation for Initial Research Estimate Forms (IREFs) to the NPS population. Researchers are encouraged to initiate dialogue with potential topic sponsors prior to and during the Naval Research Working Group meeting (NRWG). The back-and-forth exercise between researchers and topic sponsors requires some art to decipher the true needs of the topic sponsor organization. The successful researcher will have the ability to articulate these needs and formulate an IREF approach that the topic sponsor can recognize as clearly satisfying those needs. As a result of the USMC Executive Review Board (ERB) and Navy Topics Review Board (TRB), action to select those IREFs deemed to be Requirements, NPS selects those research projects that can be funded under the FY18 budget. What is now required is a full research proposal, completed using the standard template. This full proposal requires mutual agreement from both researcher and topic sponsor, affirmed through signatures prior to any NRP funds being issued.

**Definitions**:

*NRP Program Office* – the NPS NRP organizational lead, residing under the Dean of Research office.

*Topic Sponsor* – an individual, entity, or organization that has identified an issue to be addressed.

*Topic Sponsor POC* – an individual that the topic sponsor has designated as the lead for the research.

**Tasks**: The final research proposal is the culmination of iterative discussions with the topic sponsor. It provides a definitive agreement of the proposed work between the topic sponsor and the research PI. The following essential elements have been identified and are all elements are required to be included in the proposal:

1. ***Research Topic***: Describe the specific research topic question or questions being addressed and its importance to the topic sponsor.

2. ***Proposed duration of research***: Provide the period of performance. Research conducted under this program is completed in a 12 month period (Periods of Performance exceeding 12 months require consent of the NRP Program Manager).

3. ***Research Objectives:*** List the objectives or questions that the research intends to address to satisfy the research topic**.** Within the objectives,the researcher should list the research project deliverables that the topic sponsor should expect at the end of the effort. The deliverables are concrete evidence that the research topic has been fully addressed to the satisfaction of the topic sponsor (i.e. technical report, quad chart(s), debrief, product).

**NOTE: In addition to deliverables presented to the topic sponsor, the NRP Program Office requires that all projects include the following deliverables: (1) Quarterly Topic Sponsor In-Progress Reports (IPRs)(the form of these IPRs is at the discretion of the project PI),
(2) Annual Report executive summary input [per the template], and Project Completion Research Poster[per the template].**

4. ***Approach***: Clearly explain the initial concept for addressing the problem. Literature reviews and other initial scoping efforts provide a background to the research topic and help frame the approach and research direction.

5. ***Supporting Tasks***: Outline the activities that must be performed to carry out the proposed approach. An underlying requirement for any research is a mechanism to continually communicate with the topic sponsor.

6. ***Schedule and Milestones***: Research efforts establish gates to measure progress, which are reportable and can be benchmarked for project completion.

7. ***Budget*** [per the template]: Provide a well-defined and reasoned cost estimate for the effort. Budget estimates include labor, travel, equipment, and contract support. Expenditures should be justified within the proposal. A quarterly spend plan is important in case incremental funding is necessary. A complete and accurate budget estimate worksheet will accompany the proposal when submitted to the NPS NRP Program Office.

8. ***Researcher Biographies***: Submit biographies and/or resumes to make introductions.

The main purpose of the proposal is to provide full understanding of the proposed work and deliverables. The following template is used to organize the information. It contains clarifying instructions. For any other questions, contact:

Rod Abbott

CAPT, USN (Ret.)

NRP Program Manager/Senior Technical Advisor

(831) 656-2579

rpabbott@nps.edu

**Research/Studies and Analysis Area(s)**: [Navy/Marine Topic Sponsor Analysis Area (i.e. Navy or USMC organization approving your IREF [ex: N2/N6, MCSC, etc.]

**Topic Sponsor:** Title/Rank, Name, Service Phone no: xxx-xxx-xxxx

OrganizationFAX no: xxx-xxx-xxxx

Email: name@usn/usmc.mil

**Topic Sponsor POC:** Title/Rank, Name, Service Phone no: xxx-xxx-xxxx

**(if different from above)** OrganizationFAX no: xxx-xxx-xxxx

Email: name@usn/usmc.mil

**NPS NRP POC:** Mr. Rod Abbott Phone no: 831-656-2579

Email: rpabbott@nps.edu

 **Faculty PI:** Title/Rank, Name Phone no: xxx-xxx-xxxx

OrganizationFAX no: xxx-xxx-xxxx

Email: name@nps.edu

**Additional Faculty:** Title/Rank, Name Phone no: 831-656-xxxx

OrganizationEmail: xxx@nps.edu

**Students:** Title/Rank, Name Phone no: 831-656-xxxx

OrganizationEmail: xxx@nps.edu

**As the faculty Principal Investigator (PI), I have written the referenced FY18 NPS NRP Analysis Proposal for the IREF Project ID Number referenced in the header on this page in collaboration with my Topic Sponsor and by signing below I concur that I will execute the proposal as written.**

**Requirement - Faculty PI Signature:**

**Requirement - Topic Sponsor Approval:**

**As the Topic Sponsor/Advocate, I have read the FY18 NPS NRP Analysis Proposal for the IREF Project ID Number referenced in the header on this page and by signing below I concur with the proposal as written.**

**Concurrence by:**

**Note: A Digital Signature option is provided and preferred. However, once either of the two digital signature is added the document will no longer be editable.**

**ABSTRACT**

[This is a brief (150-200 words) comprehensive summary of the research proposal. The tuning head and the page number 2 are typed in the lower right-hand corner of the page. The word “Abstract” is centered as the first line of type on this page. Type the abstract as a single paragraph in block format (i.e., without paragraph indentation). You may also want to list keywords from your paper in your abstract. To do this, center the text and type *Keywords:* (italicized) and then list your keywords. Listing your keywords will help NPS Naval Research Program and topic sponsors find your work in databases.]

**BACKGROUND**

[This paragraph will contain a short narrative on the historical and operational background of the effort that is to be conducted. Acting as an abbreviated literature review, past research should be referenced in this section. Finally, please discuss the specifics of the research that is being proposed, including how it will integrate with the topic sponsor’s command requirements/aid in their mission accomplishment].

**RESEARCH/ STUDY AND ANALYSIS OBJECTIVES**

[This paragraph will outline the specific issues that will be addressed. Please include possible interested groups the study may affect such as manpower, operations, etc. Include additional issues as warranted.

* A
* B
* C
* Etc.

The potential utility of your research/ and/or study can be: 1) an addition to current knowledge of a problem; 2) to put theory to an empirical test; 3) to better understand the relationship between variables; or 4) to determine the effectiveness of a method, technology, or program.

**APPROACH**

[This section will provide a complete description of the methodology for the study. It should contain a detailed discussion on the data collection approach as well as expected data analysis that will be conducted. Discuss whether interviews will be conducted, sources of raw data and the expected reliability of that raw data. After a brief discussion on the data that is to be collected, discuss what mathematical or analytical approaches will be taken to breakdown the data for the stakeholders involved. Identify the role that students may play in the effort].

**TASKS**

[This format is a template that may be adjusted, depending on the nature of the research proposal. The Tasks section provides the details of the effort. Table 1 lists completion dates and descriptions of deliverables for the proposal. ***With exceptions of tasks for quarterly feedback (in-progress review) and a final out-brief to the topic sponsor, tasks are dependent on the study and should be adjusted as necessary to address the effort.***

All projects and studies under the Naval Research Program include mandatory quarterly in-progress reviews with the requirement owner Completion of a study includes formal out-brief with the final delivery, completion of an Executive Summary, and a research poster of the research project results. Additional topic sponsor data requirements should be identified as soon as possible.]

**Task 1:** Identify Data Requirements / Literature Review

[Discuss previous work that supports or impacts the proposed effort. Researchers should outline data needs from the requirement owner or other agencies. The Literature Review should include a minimum of six (6) journal or publication articles.]

**Task 2:** Develop Conceptual Model

[A conceptual model may help the stakeholders involved. Please note that each task should have a corresponding description where this paragraph occurs. Each task will also appear on the following page, in the ‘proposed deliverables and tasks’ section. ]

**Task 3:** Provide Empirical Evidence

[A brief discussion of the empirical evidence, such as information on sample sizes, sources of data, etc. may be helpful. Please be as specific as possible].

**Task 4:** Present Initial Findings

[Add and remove tasks as required by the requirements of the study. Additionally, all research should conclude with the delivery of a final product].

**Task 5:** Developmental Pilot Program (if required)

**Task 6:** Quarterly In-Progress Reviews (IPR) Schedule. (NOTE: These feedback mechanisms are required for all NPS Research Program efforts).

**Task 7:** Deliver Final Report/ Final Presentation Schedule

**Table 1: Proposal Deliverables and Task Completion Milestones Example**

**This table and the displayed columns are required. Additional columns may be added as needed. All milestones listed should be directly linked back to the tasks that are identified in the previous pages.**

All period of performance and milestone dates, in all three documents (Proposal, Budget, Routing Form), must match.

Deliverables:

|  |  |  |
| --- | --- | --- |
| **Tasks** | **Tasks Description[Deliverable to Topic Sponsor/NRP]** | **Task Completion Date** |
| 1 | Review Prior Lit. |    |
| 2 | Develop Model |   |
| 6 | IPR#1 (Required) |  |
| 3 | Provide Evidence |   |
| 4/6 | IPR#2 (Required): Present Findings |   |
| 5 | Develop Pilot Program |  |
| 6 | IPR#3 (Required) |   |
| 6/7 | IPR#4 (Required) / Deliver Report |   |
| 8 | NRP Executive Summary & Project Poster (Required) | 9/30/2018 |

**BIOGRAPHIES/CV/RESUME**

Provide background for primary researchers, including students, who will be involved with the effort. One page per researcher is sufficient.