

Date

Capstone Marketplace Research Topic Worksheet for Government Clients

Title of Research Topic:

Originator/Unit:

1. Statement of the Need or Problem

- a. Describe the need or problem in a clear, concise manner—using complete, “stand-alone” statements. Avoid specifying an exact, desired approach to a solution.

2. Proposed Outcomes

- a. Describe desired project outcomes and deliverables
- b. Provide general examples of alternative results which may be of value—study, experiment, prototype, demonstration, proof of principle, comparative analysis, etc.
- c. Describe how project activities and results may contribute to organization’s technical knowledge

3. Constraints

- a. Describe any factors or limitations that will constrain the solution. Try to minimize detailed requirements, especially those which are not readily verifiable or testable.

4. Application

- a. Why is this problem important to your organization? How will a solution be of benefit? (will there be improved performance, safety, reduced cost, more efficiency, etc.?)
- b. Does the need or problem align with capability gaps or R&D and technology objectives that you are pursuing?
- c. Can solutions to your problems/needs have applications and benefits outside of your organization? Is there a potential commercial application or spin off?

5. Government Furnished Equipment, Material, Information

- a. Describe any GFE, GFM, etc that your organization can make available to the research team
- b. Include your ability to evaluate, test prototypes, and assist in the conduct of demonstrations

6. Background

- a. Can you identify previous research, experience, technical data, prototypes, etc. which relate to the problem and potential solutions?
- b. Are you aware of other institutes, labs, or organizations who have worked similar problems?

7. Academic Connection

- a. Does your organization have a relationship with, or ready access to any academic institution which may facilitate your participation in a Capstone project effort?

8. Contacts and Communication

Organization: Mail Address:				
	Name	Phone	Email	Remarks
Capstone Coordinator				Coordinator oversees multiple projects at a particular unit, is single point of contact to Stevens and SERC
Project POC				Generally responsible for coordinating a particular student team within the unit. Keeps track of team's progress. Can be the same individual as the SME
SME 1				Individual knowledgeable on a skill or operational need
SME 2				
Alternates				

Send This Info to:

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Questions:

Call Bill Shepherd 757 285 2633

Notes and Expectations

- a. Capstone Marketplace projects are funded by OSD, SOCOM, and other government sponsors. Unit funds are not required.
- b. Capstone Marketplace projects are academic efforts by small teams of senior undergraduate students in engineering and other university departments. Teams may include other undergraduates or even one or more grad students on an exceptional basis.
- c. Capstone projects are generally **open to all students at a particular university**. As a general rule, no classified information can be exchanged with universities. Participating government organizations are responsible to restrict dissemination of their sensitive information. Some material may fall under ITAR sensitive or “Export Controlled” restrictions. Govt pers need to be aware of these requirements.
- d. Classified projects may be undertaken under special circumstances with Service Academies.
- e. **The projects must have academic value to students and to their institutions.**
 - i. Projects are paced according to academic schedules. Two semester projects are typical.
 - ii. Time and material resources are usually limited in comparison with industry and government R&D efforts
- f. **Government/military participants are the “customers” for the student teams.** You will be expected to:
 - i. Have Subject Matter Experts available for questions and advice
 - ii. Review students’ project plans at the beginning of the academic year
 - iii. Participate in 3 design reviews during the year as the customer
 - iv. Participate in the final presentations, demonstrations, and deliverables—at your convenience.
 - v. Total unit engagement per student team/student project is approximately 20 contact hours over the Academic Year
- g. No govt travel is required. However, student teams may want to present their work to you in person. Travel funds are provided by Capstone Marketplace.
- h. Intellectual Property rules follow government FAR regulations. Government persons may also benefit from their IP contributions according to federal guidelines.
- i. **Government sponsors are responsible for specifying what information on their Capstone project may or may not be made “public”—such as papers, competitions, symposiums, briefings to public audiences. In general, schools will be restricted from public dissemination of your project information without your authorization**