Appendix C Samples of Survey Forms

CONGRESS OF THE UNITED STATES OF TECHNOLOGY ASSESSMENT OFFICE Survey of R & D activities in the SHIPBUILDING INDUSTRY July 1984 1) Please indicate the approximate percentage of your firm's operating budget spent on R & D activities (not ineluding Federal funds for R & D): _% a) in the past 5 years? b) in the current year? 2) Of the total spent on R & D indicated in question 1, estimate the percentage spent for each of the categories below. c. Shipbuilding research **a.** Ship design and performance % b. Ship subsystem design -____ (e.g., CAD/CAM, ship production technology, ship-_% (e.g., propulsion system, navigational equipment, etc.) yard management, etc.) d. Other (please specify below) ____ 3) If your firm received any Federal R & D funds, please indicate what percentage of your total R & D expenditures (Federal + private) the Federal monies represented? % b) in the current year _ a) in the past 5 years? _ _____% 4) If any Federal funds were received for R & D activities, which agency and program contributed them? In addition, indicate the approximate percentage of the total contribution that each agency/program contributed. 070 of Total Contribution Program Agency 07. % 07. 07. 5) Please indicate the relative influence that the following factors have on your firm's investment in R & D.

| | Very Influential | Somewhat Influential | Not Influential |
|--|-------------------------------|-------------------------|--------------------|
| Interest rates | | | |
| Availability of finance Capital | | | |
| Government policies and programs | | | |
| Market demand | | | |
| Competitive pressure | | | |
| Other (please specify) | | | |
| 6) How do the following Federal laws, re | egulations and policies affec | t your firm's investme | nt in R & D? |
| | Encourages | Discourages | Little or |
| | Investment | Investment | No Et'feet |
| Antitrust statutes | | | |
| Patent law | | | |
| U.S. tax code | | | |
| OSHA safety regulations | | | |
| Phase out of ODS/CDS | | | |

7) Please rank order the laws and regulations from question 6 according to the relative degree that they encourage or discourage R & D investment.

| Encourages Investment | | Discourages Investment |
|---|-----------------|---------------------------|
| 1 | | 1 |
| 3 | | 3 |
| 5 | | 5 |
| 7 | 7 | 7 |
| 8) Does your firm have access to the technology | ogical advances | es resulting from: |
| | Yes | No |

a. U.S. Navy R & D activities _____ b. Foreign R & D activities _____

9) Could you suggest ways the Federal government might make this information more accessible?

10) How would the following options affect your firm's incentive to invest in R & D?

| | Significant Incentive | Slight Incentive | Negative Incentive |
|---|--------------------------|---------------------|-----------------------|
| a. Extension of the Capital Construction | | | |
| Fund to R & D expenditures (allowing tax | | | |
| deferment). | | | |
| b. Availability of Federal loan guarantees | | | |
| for R & D expenditures (e.g., Title XI) | | | |
| c. Amendment of antitrust laws to permit | | | |
| research joint ventures | | | |
| d. Expansion of tax credits for R & D ex- | | | |
| penditures | | | |
| e. Increase in direct Federal support for R | | | |
| & D | | | |

11) Would you support the formation of a government-industry sponsored maritime research facility for the purposes of conducting long-term basic and applied research and for serving as a clearinghouse for Navy, foreign, and domestic civilian R & D advances?

- _____ Strongly endorse such a research facility and would be willing to participate and provide funding for cooperative research projects.
- Endorse such a facility but do not anticipate that my organization would actively participate or provide funding.
- _____ Do not endorse the concept of such a facility.

12) Do you have any suggestions for any other organizational or institutional changes within the Federal government that might improve the effectiveness of government-sponsored research?

13) Would you advocate increasing direct Federal expenditures on maritime R & D? If so, please indicate through which Federal agency or program.

14) In addition to the R & D options suggested on questions 10-13, and in light of the recent phase out of Federal construction and operating subsidies, can you suggest other Federal maritime incentives that might help revitalize the industry? Which of these, if any, would be significantly more beneficial than R & D incentives?

Classification Questions

Answers to the following questions will be used to classify the survey responses and will assist OTA in drawing conclusions from the data collected.

| 1. Is your firma participant in the Active Shipbuilding Industrial Base (ASIB)? (yes or no) | |
|--|------------|
| 2. What is the average (past three years) annual gross tonnage constructed in your shipyard? | gross tons |
| 3. Please indicate the approximate percentage of your work that is: For the U.S. Navy7 ⁰ For commercial clients % New construction—% | Repair% |
| 4. Title of survey respondent | |
| 5. Name of respondent (optional) | |

6. Affiliation (optional)

Thank you for your cooperation.