The U.S. Navy's Manufacturing Technology Program (ManTech)

The U.S. Navy's ManTech Program was established in 1977. Its objective is to encourage the adoption of advanced production equipment and processes to reduce the cost and delivery time of Navy systems, improve the quality of fleet hardware, improve the mobilization readiness of the Navy's industrial base, and reduce dependency on strategic and critical materials. It provides funding and other incentives for the adoption of production technologies where industry cannot provide for such advances in a timely manner.

The ManTech Program directs its efforts towards all industrial sectors that manufacture products for naval use. However, a major effort in shipbuilding technology was initiated in FY 1984, with the goal of a reduction of 10 percent in the cost of Navy ships and 25 percent in delivery time by 1990. This effort is a joint undertaking between Navy, MarAd, and the industry as represented by SNAME's Ships Production Committee. The shipbuilding technology program of ManTech will be a priority program of the Navy's for at least the next five years. The program's budget in FY 1983 and FY 1984 was \$10.27 million and \$19.12 million respectively. The projected budgets for FY 1985 and FY 1986 are \$21,37 million and \$24.70 million.

The U.S. Navy's ManTech Program is an Advanced Development Program (identified as Navy Program Element 78011N, Project Z1050). Funding in the amount of \$2.0 million per year is provided to the NSRP-SPC from the ManTech Program as the Navy's share. In addition to conducting development within the SPC, the SPC provides oversight review of the Navy's ManTech Program applicable to ship production. Criteria for selecting ManTech projects is specified in NAVMATINST 4800 and emphasizes "Return on Investment" to the Navy.

The portion of the ManTech Program supporting shipbuilding or ship performance technology development is managed by NAVSEA. The NAVSE (ships) project funding for FY 1977 through FY 1985, representing the Navy's efforts in this area over the past nine years, is as follows:

| Fiscal year | Funding (\$-millio | ns) |
|-------------|--------------------|-----|
| 1977 | | 8.9 |
| 1978 | | 7.5 |
| 1979 | | 8.2 |
| 1980 | | 5.1 |
| 1981 | | 2.1 |
| 1982 | | 1.8 |
| 1983 | | 0.3 |
| 1984 | | 9.1 |
| 1985 | | 1.4 |

| Table B-1.— Navy's ManTech Program Funding, Fiscal Years 1983-86 |
|--|
| (dollars in millions) |

| | FY 1983 | Percent | FY 1984 | Percent | FY 1985 | Percent | FY 1986 | Percent | 4-year total | Percent |
|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|-----------------|---------|
| Ships | 10.27 | 32 | 19.12 | 34 | 21.37 | 31 | 24.70 | 31 | 75.46 | 32 |
| (MarAd) ^a | (2.2) | | (2.2) | | (2.2) | | (3.0) | | (9.6) | |
| Aircraft | 7,89 | 25 | 15,639 | 28 | 16.03 | 23 | 18.58 | 23 | 58.14 | 25 |
| Electronics | 6.96 | 22 | 8.147 | 15 | 10.69 | 16 | 12.37 | 16 | 38.17 | 16 |
| Logistics | .30 | 1 | 1,1 | 2 | 5.34 | 8 | 6.20 | 8 | 12.94 | 6 |
| Manufacturing science | 3.34 | 11 | 7.92 | 14 | 10.27 | 15 | 11.90 | 15 | 33.43 | 14 |
| Administration and planning | 2.96 | 9 | 4,202 | 7 | 4.79 | 7 | 5.65 | 7 | 17.6 | 7 |
| Total | 31.72 | 100 | 56.13 | 100 | 68.49 | 100 | 79.4 | 100 | 235.74 | 100 |

^aIncluded in Ships line NOTE Percentages are rounded and may not add up to 100 m some tables

Table B-2.—U.S. Navy ManTech Program (Shipbuilding Portion) Funding by Category, Fiscal Years 1983-85 (dollars in millions)

| | FY 1983 | | FY 1984 | | FY 1985 | |
|--|---------|---------|---------|---------|---------|---------|
| Category (subject) | mount | Percent | Amount | Percent | Amount | Percent |
| Hull structure—automatic welding | . 0.0 | 0 | 1.4 | 7 | 1.1 | 5 |
| reduction gear measure | . 2.4 | 24 | 2.4 | 12 | 3.2 | 15 |
| Electrical | . 0.0 | 0 | 0.0 | 0 | 3.2 | 15 |
| flexible machining | . 1.8 | 18 | 4.8 | 25 | 3.2 | 15 |
| Outfit—robotic preparation and coating | 0.2 | 2 | 3.7 | 19 | 3.2 | 15 |
| Armament—laser metalworking | | 35 | 4.6 | 24 | 4.3 | 20 |
| Integration—computer scheduling | | 0 | 0.2 | 1 | 1.0 | 5 |
| National shipbuilding R&D-MarAd | 2.2 | 21 | 2.2 | 12 | 2.2 | 10 |
| Total | 10.3 | 100 | 19.1 | 100 | 21.4 | 100 |

NOTE Percentages are rounded, and may not add up to 100 in some tables