
CONCLUSIONS AND RECOMMENDATIONS

Our principal conclusion regarding the aircraft carrier industrial base is this: The Newport News Shipbuilding facilities, and the supporting industrial base throughout the United States, are expected to retain the basic capabilities necessary to build large, nuclear-powered aircraft carriers into the foreseeable future, regardless of when or even whether CVN 77 is built. However, failure to start CVN 77 in the 2000–2002 time frame will inevitably lead to some decay in the quality of those capabilities and, hence, to increases in costs, schedule durations, and risks when the next carrier is started.

FINDINGS

We answer the specific research questions posed in Chapter One as follows:

1. If the current carrier force size of 12 ships is to be sustained, CVN 77 cannot be started more than a year or so beyond the currently planned date of 2002.
2. The earlier CVN 77 is started, the less it will cost. For most start dates, increasing the build period from the planned 6.5 years to 8.5 years will also reduce costs. The combination of these two effects could result in savings on the order of \$400 million in shipyard labor costs.
3. Timing of the CVN 77 start should not greatly affect the survival of vendors supplying nuclear or nonnuclear components to the shipyard. However, modest cost savings should accrue from ordering some contractor-furnished equipment two years or more in advance of the beginning of work in the shipyard.
4. Many cost-saving production processes and technologies are being implemented by builders of large, complex commercial ships but are not employed in building ships funded by the U.S. Navy. By adopting these technologies and processes, the U.S. Navy has a savings potential on CVN 77 alone, conservatively estimated, of over a quarter billion dollars.

RECOMMENDATIONS

Our findings lead to the following recommendations:

- **Begin ship fabrication before 2002.** The potential for savings here is substantial—in the hundreds of millions of dollars.
- **Order contractor-furnished equipment in advance of shipyard start.** Doing so should permit additional savings in the tens of millions of dollars.
- **Invest at least a quarter billion dollars in research and development directed toward adapting production processes and application-engineering improvements that could reduce the cost of carrier construction, operation and maintenance, and manning.** The costs involved in building and operating carriers are, in fact, so large that the Navy should consider establishing a stable annual R&D funding level for these ships.