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Testimony

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PROCUREMENT STRATEGY FOR ACQUIRING TWO NUCLEAR
AIRCRAFT CARRIERS

STATEMENT OF
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NATIONAL SECURITY AND INTERNATIONAL AFFAIRS
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BEFORE THE CONVENTIONAL FORCES AND ALLIANCE
DEFENSE SUBCOMMITTEE AND PROJECTION FORCES AND
REGIONAL DEFENSE SUBCOMMITTEE
OF THE SENATE ARMED SERVICES COMMITTEE



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Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before the Subcommittee to discuss the Navy's request to begin buying two new aircraft carriers earlier than planned. The Navy claims it would save \$3 billion by buying them earlier. Although other very important considerations -- such as affordability, force structure impacts and industrial base needs -- must be taken into account in reaching a funding decision on the carriers, my statement deals only with the relative cost to the Navy if the two carriers are bought as proposed.

NAVY'S PROJECTED \$3 BILLION SAVINGS

The Navy's fiscal year 1988/1989 budget request contains \$1.4 billion to begin advance procurement for two new Nimitz class nuclear carriers -- CVN-74 and CVN-75. Full funding for these carriers would be requested in fiscal years 1990 and 1993 respectively. The Navy estimates the total cost for the two carriers to be about \$7 billion. The Navy estimates it would cost about \$10 billion under the fiscal year 1987 plan to buy two new carriers with full funding in fiscal years 1994 and 1996.

The \$3.0 billion in savings fall into four categories:

<u>CATEGORY</u>	<u>\$ in millions</u>
Acquisition Strategy (Economic Order Quantity)	\$ 1,100.0
Inflation	700.0
Production continuity	700.0
Configuration changes	<u>500.0</u>
Total Savings	<u><u>\$3,000.0</u></u>

ACQUISITION STRATEGIES

A \$1.1 billion estimated savings results from the Navy assuming a single ship procurement strategy for the fiscal years' 1994 and 1996 carriers and a multi-ship strategy for the fiscal years' 1990 and 1993 carriers. Approximately \$700.0 million is associated with government furnished equipment (GFE) and \$400.0 million is for contractor furnished material (CFM). A single ship acquisition strategy is more expensive because materials are bought separately for each ship rather than being combined into economic order quantity buys under a multi-ship procurement. A single ship strategy is inconsistent with the Navy's past procurement strategy for CVNs 72 and 73 and with its proposed strategy for CVNs 74 and 75. It would seem reasonable to assume that the same opportunities for a multi-ship procurement strategy would exist in the future as they do now. If the two carriers were bought in fiscal years 1994 and 1996 with a multi-ship procurement strategy, economic order quantity buying would occur just as it would occur under the proposed procurement strategy. Hence, it is inappropriate to assert a savings based on comparing dissimilar acquisition strategies.

Inflation Savings

The Navy estimates inflation savings of about \$700 million using appropriate rates and conforming with OSD/OMB guidelines. This savings estimate is based on a single ship acquisition strategy in fiscal years 1994 and 1996. Inflation savings would be less than \$700 million if the second ship was delivered earlier under a multi-ship strategy versus a single ship strategy.

Production Continuity

Planned construction for the two carriers in the proposed program is "heel-to-toe", not only with each other but with construction of CVN-73. The Navy expects to realize economies and efficiencies from an assumed 5 percent increase in learning from the series construction process, and by having a stable work force, an established sub-vendor base, and no start-up or non-recurring costs.

The Navy estimates that the savings attributable to maintaining production continuity are about \$700 million. This figure includes \$300 million for reduced start-up and nonrecurring costs and \$400 million for productivity savings by not interrupting carrier production at Newport News. To determine productivity savings the Navy compared total production and engineering manhours between the two estimates. The Navy estimates it will require an extra 6 million manhours if construction of the carriers is delayed until fiscal years 1994 and 1996.

It is logical to assume that savings are possible through production continuity but the precise magnitude of such savings is difficult to calculate because of the many variables that affect the outcome. Some of these variables include the availability of workers with critical skills and the maintenance of a sub-vendor base.

Foregone Configuration Savings

The Navy believes that if the carrier procurements are delayed to 1994 and 1996 that it would be realistic to incorporate configuration changes resulting from technological advances

occurring during that period. Some of the changes would include (1) reducing the carrier's visibility on the enemy's radar, (2) using fiber-optic technology, and (3) self-protection improvements. The Navy said it could not precisely estimate what these changes would cost and that the \$500 million was a rough order of magnitude.

ADVANCE PROCUREMENT PROFILE ANALYSIS

The Navy is requesting two years of advance procurement funds for CVN-74 and four years of advance procurement funds for CVN-75. According to the Navy this will allow it to take advantage of economic order quantities and level out total obligational authority over a longer time period. The Navy has told us that nuclear propulsion equipment bought in fiscal years 1988, 1989, 1990 and 1991, amounting to \$1.3 billion, can be used on other Nimitz class carriers if CVN-74 and/or CVN-75 are not authorized.

The Navy's request for advance procurement also includes \$1.2 billion for other equipment and materials. The equipment includes such items as the NATO Sea Sparrow Missile System, various radars, and the Close-in Weapons System. These presumably could be used elsewhere in the fleet. The materials include some steel for both the CVN-74 and CVN-75. The Navy plans to begin prefabrication after the steel is delivered and once the steel has been prefabricated it can not be used for another ship.

FUTURE COST AVOIDANCE POTENTIAL

If CVN-74 and CVN-75 are bought as proposed by the Navy, they would enter the active fleet in fiscal years 1997 and 1999 respectively. Under the Navy's current acquisition strategy,

CVN-74 and CVN-75 are planned to replace carriers that will be 45 to 50 years old in fiscal years 1997 and 1999. An analysis of the carrier force shows that the three oldest carriers at that time would be the Midway, Saratoga and Forrestal. According to the Navy, if the new carriers are not available to replace the older ones, they will be faced with increased maintenance requirements and decreased operational capabilities.

To sustain the force level at 15 deployable carriers, without the new carriers, the Navy will be faced with maintaining some carriers beyond their extended service lives of 45 years. According to the Navy, if the carriers are to be retained for more than four years beyond that time then a decision would have to be made to do either comprehensive overhauls or additional service life extension programs. These maintenance costs are further exacerbated by the difficulty of maintaining old machinery and finding spare parts for equipment that may no longer be produced. These same maintenance difficulties also diminish the operational capabilities of the older carriers.

These concerns over future maintenance difficulties and diminished operational capabilities are pertinent only if the force level of 15 deployable carriers is to be maintained.

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Mr. Chairman this concludes my prepared remarks and I would be pleased to respond to any questions you might have.