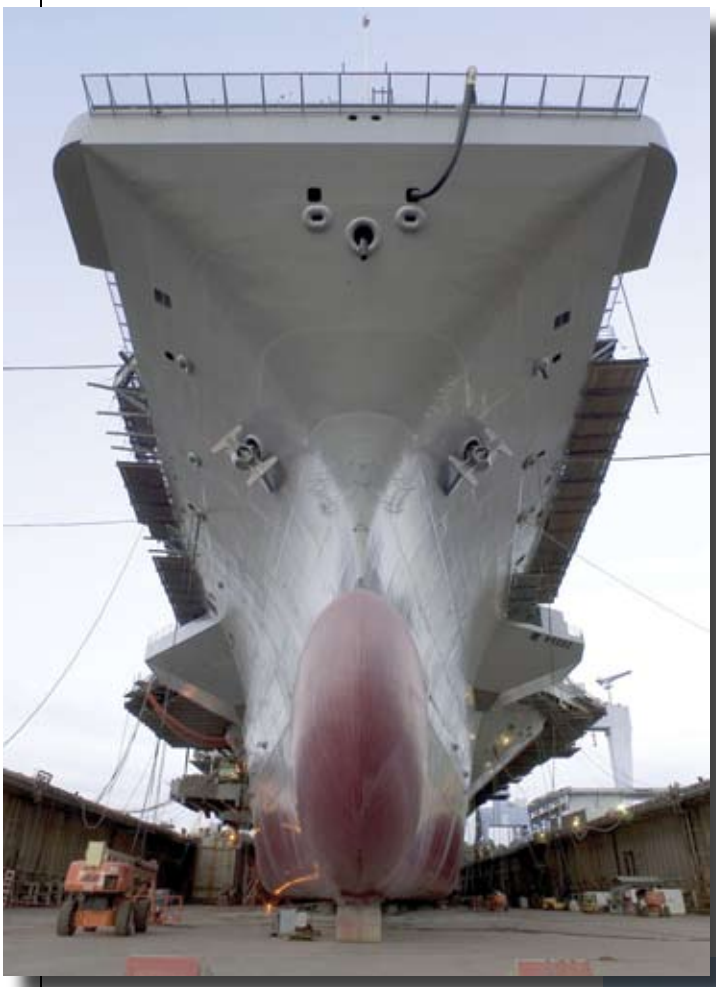
WILL BROOKS • DIRECTOR, ROA NAVAL SERVICES SECTION

# Tomorrow's Navy

## *Shipbuilding programs offer a glimpse into the future fleet.*



*The USS* George H.W. Bush*, left, is expected to enter service in 2008 (Photo by Chris Oxley/Northrop Grumman Ship Building). Below, the USS* Hawaii*, the latest Virginia-class attack submarine, nuclear, below, was commissioned May 7. (Photo by John Narewski/USN)*

If the future of the U.S. Navy can be judged by changes in its shipbuilding program, then this month proved significant. In looking at the House Armed Services Committee, Seapower and Expeditionary Forces Subcommittee's markup of H.R. 1585, the National Defense Authorization Act for Fiscal Year (FY) 2008, three key items emerged that provided a glimpse at the Navy's future.

### Carriers

With $2.724 billion authorized in markup, CVN 78 is the first of the next generation aircraft carriers that will join the fleet. The first will be named the USS *Gerald R. Ford* and is expected to enter service in 2015 replacing the USS *Enterprise* (CVN-65), which will then be 53 years old.

Maintaining 11 aircraft carriers in the fleet is the current shipbuilding plan. This is based on the chief of Naval Operations' (CNO) 30-year shipbuilding plan that strives to ensure availability during a crisis.

The last of the Nimitz-class carriers, the USS *George H.W. Bush* is expected to enter service in 2008 as a replacement to the USS *Kitty Hawk* (CV-63). While the hull of the Ford-class carrier is virtually the same as the Nimitz, there are significant changes between the two, including the following:

- Projected $5 billion dollar reduction in total operating costs throughout the life of the carrier;
- 500 to 900 personnel reduction from current aircraft carrier manning levels;
- 30 percent less maintenance required due to improved design (reduction of half the valves on board is an example);
- 25 percent increase in aircraft sorties.

The Aircraft Carrier Industrial Base Coalition (ACIBC), an organization that represents more than 2,000 companies within the industry that builds and maintain carriers, sees the new Ford class as a significant step in keeping the industry alive and a vital step in supporting U.S. national security.

### Submarines

The submarine community has been advocating an increase in submarine procurement from one a year to two, beginning in FY 2012. A one per year rate would ultimately decrease the SSN (attack submarine, nuclear) force to almost 30 submarines, a level thought to be inadequate for today's threats. Support from the CNO

will only come when production costs drop approximately $0.5 billion per submarine from the current $2.5 billion cost per boat.

The Seapower and Expeditionary Forces Subcommittee, chaired by Rep. Gene Taylor (D-Miss.), approved an additional $588 million to allow the Navy to begin procurement of an additional nuclear reactor and propulsion plant for the Virginia-class submarine program. "This additional ship-set of equipment will give the committee flexibility to increase production of the Virginia-class submarine program to two per year prior to the Navy's current goal of 2012," Rep. Taylor said in his statement to the committee on May 3.

This leaves the submarine community poised to increase product rates at a later date, but the future is still not clear.

## Nuclear Power

Perhaps the most significant future development relates to power plants aboard surface ships.

The Seapower and Expeditionary Forces Subcommittee approved a markup containing a legislative proposal that would require new classes of combatant surface ships to be constructed with nuclear power systems. This is a significant change in current Navy policy in which only aircraft carriers and submarines are nuclear powered.

The committee's ranking Republican, Maryland's Roscoe Bartlett, said in his opening statement, "The provision requiring ... nuclear propulsion is simply the right thing to do. Just this week, another study commissioned by the Department of Defense found that risks associated with the cost and supply of oil will make the U.S. military's ability to rapidly deploy on demand 'unsustainable in the long term.'" Rep. Taylor supported this sentiment, displaying much bipartisanship within the committee.

While nuclear power offers an alternative source of energy from conventional fuel, it seems more debate on the topic may be coming. Additional costs and force structuring should be considered in addition to the issue of reliance on fossil fuels. One should not forget that the Navy previously had nuclear powered surface cruisers that were removed from the fleet in the 1980s and '90s. Understanding the reasons these ships were removed may help to shape today's debate to bring them back.