High-tech ceremony marks construction start on next carrier

By ALLISON CONNOLLY, The Virginian-Pilot

Last updated: 10:05 PM

NEWPORT NEWS – With Navy brass, politicians and shipyard executives and workers looking on, machine hand specialist Wayne Kania made the ceremonial first cut of steel for the next-generation aircraft carrier Thursday at Northrop Grumman Newport News.

But rather than firing up a torch, Kania sat at a computer. On a touch screen, he started up the Avenger Burning Machine, which easily sliced through the 15-ton plate that will become part of the ship's hull.

The width of the steel plate is classified, but it took about two minutes for the machine's eight torches to make 12-inch cuts simultaneously in both sides of the thick plate. With that, Kania showed the crowd of more than 200 that shipbuilding has gone high-tech.

"Today we begin a new chapter in the history of aircraft carriers," said C. Michael Petters, president of Northrop Grumman Newport News.

Known as "The Carrier for the 21st Century," CVN-21 marks the first re design of a flattop in 40 years. Following the Nimitz class, CVN-21 will be the most advanced, featuring electromagnetic catapults rather than steam catapults and a wider flight deck to accommodate aircraft of the future, such as the Joint Strike Fighter and unmanned aerial vehicles. It's designed to require 500 fewer sailors to operate it.

The first ship in the class will bear the hull number CVN-78, following the George H.W. Bush, CVN-77, which is also under construction in the yard.

While they were there to celebrate the official start of construction, shipyard workers and vendors used the opportunity to express their concern about a possible delay. President Bush and Navy officials have proposed delaying the bulk of the financing by a year, to 2008, which would push the ship's delivery back a year to 2015.

Right now, the cost of building the first ship in the class is $13.7 billion, including $5.6 billion in research and development costs that the Navy won't need to spend on follow- up ships, officials from the Navy and Newport News said. Ideally, future ships should cost less than CVN-78's purchase price of $8.1 billion because shipbuilders will incorporate "lessons learned" in design and construction and be more efficient, they said.

U.S. Reps. Jo Ann Davis, R-1st District, and Robert "Bobby" Scott, D-3rd District, said they are "educating" fellow members of Congress about the need for this carrier to stay on schedule.

"Everyone knows a ship can't be built overnight," Davis told the crowd.

Northrop Grumman's suppliers say the delay would have a ripple effect on them and the vendors they rely on.

"Our everyday business has already been reduced," said Rick Giannini, president and chief executive of Milwaukee Valve Co. in New Berlin, Wis. "If they postpone funding, it will do something to the industrial base that people don't appreciate."

Many of Giannini's competitors have left the market over the past two decades as the Navy's fleet shrank from 600 ships to less than 300 today. About 80 percent of the Newport News shipyard's suppliers are sole-source, meaning they are the only companies that provide a needed service or skill.

"If we go out of business, no one's going to have that expertise," said Jerry Nicholson, president and chief executive officer of Marlo Coil, a supplier of heating and cooling marine coils in High Ridge, Mo.

Alton Glass, president of United Steelworkers of America Local 8888, which represents many of the yard's hourly workers, said he's worried about how the delay will effect production.

"If you put this back a year, we won't have places to put people and there will be layoffs," he said.

The company has made a significant up front investment in the CVN-21 program, which it hopes to recoup by making shipbuilding easier and cheaper in the long run. It is building several stand-alone fabrication shops where workers can assemble large pieces of the carrier indoors and away from bad weather, which causes delays and possible injuries.

Designers are using modeling and simulation to construct the ship virtually before any steel is cut. The company constructed two actual-sized frames of the ship's hull to test out different interior design ideas before fitting them on the ship.

"We've gotten a lot of input from the trades and the waterfront up front, more so than in the past," said Bobby Gregory, a planning supervisor.

Machine hands Robert Dawson and Aaron Sampson are excited to be working with the new machines, such as the Avenger and the 5,000-ton press that can bend the ship's thick steel plates.

"We're switching to the 21st century," Dawson said. "When my kids read history, they might read my name."

Reach Allison Connolly at (757) 446-2318 or allison.connolly@pilotonline.com.