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Cebrowski: Develop Small Aircraft Carriers From High-Speed Ships

Arthur Cebrowski, the retired three-star admiral who leads the Pentagon's transformation office, defied convention last week by suggesting the Navy, long wedded to its fleet of massive aircraft carriers, should convert high-speed vessels into "very, very small" aircraft carriers.

He briefly sketched out a concept for distributed, seabased, tactical aviation that would use large numbers of minicarriers, each carrying a handful of short-takeoff-and-vertical-landing Joint Strike Fighters armed with very small, precise weapons. It was one of several ideas he discussed Aug. 4 during remarks at a Navy research and development conference in Washington, DC.

After acknowledging he likes the carrier variant of the F-35 Joint Strike Fighter, Cebrowski touted the characteristics of the short-takeoff-and-vertical-landing variant, which can launch and land without a great deal of runway space. He praised the network structure and sensors that are common to the entire JSF program. He stressed that the Pentagon's Small Diameter Bomb program will increase the capability of any aircraft.

"We may be in a position [where] we're going to run out of targets before we run out of war," he said. "And what that means then is you have the possibility of moving to very, very small aircraft carriers in multiplicity in order to deal with the diversity of the threat."

Cebrowski's presentation included a slide about seabased, tactical aviation. The briefing depicts a carrier-like variant of a high-speed catamaran. The picture shows a slightly scaled-up version of the Joint Venture (HSV-X1) built by Incat. The original Joint Venture is 1,700 tons and 315 feet long. A fully loaded Nimitz-class aircraft carrier, which displaces about 97,000 tons, is 1,040 feet long.

The minicarrier version of Joint Venture, about 367 feet long, is depicted carrying five tactical aircraft and other items, including a couple of helicopters and some amphibious assault craft. These vessels would be network-centric and could contribute to seabasing, according to Cebrowski's briefing. Under the heading "assured access," the briefing argues the minicarrier would "correct tactical instability" and complicate enemy intelligence, surveillance and reconnaissance. The minicarrier would be more survivable against certain threats and less susceptible and vulnerable, according to the briefing. The idea would also allow the Navy to reduce manpower and costs, the briefing argues.

Large carrier-like ships "do not have to be designed around tactical fighter wings anymore," Cebrowski told the audience. "They can be designed as large open systems, multipurpose, to be used for anything, to include an aircraft carrier of today, or a large-deck amphib ship, or a command and control ship, or a maritime prepositioning ship." He noted the Joint Requirements Oversight Council recently blessed seabasing as a joint concept.

After the remarks, Rear Adm. Jay Cohen, head of the Office of Naval Research, told the audience he is a "big fan" of Cebrowski. Cohen noted Cebrowski "has pulled the stops here for his small carrier based on [an] HSV. What a platform. It's probably about 2,500 tons."

He said Cebrowski "has taken disparate technologies" including lightweight, high-speed advanced hull forms, which can be stabilized in high seas. Cebrowski "has taken" the short-takeoff-and-vertical-landing JSF, Cohen said, noting a vertical takeoff would not be necessary because of a ski-jump like feature included in the

minicarrier's design. This would avoid "a refueling scenario immediately after launch and afterburner," Cohen said.

"And when you've got a ship that can run around at 50, 60 or 70 knots, and anywhere on the ocean you've got 10 or 20 knots of wind," Cohen continued, "when you've got relative wind over the deck, how much of a catapult do you need to launch? How much of an arresting gear do you need to stop the aircraft? And what does this do to distributed, tactical airpower?"

In June 2001, amid speculation about a review of major defense programs that was under way at the time, Chief of Naval Operations Adm. Vern Clark told an audience of naval aviators in San Diego that big-deck carriers would remain in the fleet (*Inside the Navy*, June 4, 2001, p1).

"Let me assure you carriers are not going away. That's not going to happen, not anytime soon anyway," said Clark. "Hello! The product is in huge demand."

Cebrowski is known for proposing radical change. When he was president of the Naval War College a few years ago, Cebrowski advocated creating a small fast ship he dubbed "Street Fighter." The concept had fierce enemies at the time but ultimately inspired the Navy's Littoral Combat Ship program.

Cebrowski "knows he doesn't make a lot of friends," Cohen told the audience. "He gets invited to a lot of places to try to affect change."

-- *Christopher J. Castelli*