



# Navy Nuclear Aircraft Carrier (CVN) Homeporting at Mayport: Background and Issues for Congress

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## Summary

On January 14, 2009, the Navy announced that it wants to transfer one of its nuclear-powered aircraft carriers (CVNs) to the Navy home port at Mayport, FL, known formally as Naval Station (NAVSTA) Mayport. On April 10, 2009, the Department of Defense (DOD) announced that it had decided to delay a final decision on whether to propose transferring a CVN to Mayport until it reviews the issue as part of its 2009-2010 Quadrennial Defense Review (QDR). The Navy's proposed FY2010 budget requests \$46.3 million in Military Construction (MilCon) funding for channel dredging at Mayport. DOD states that it "intends to dredge the Mayport channel in fiscal 2010 to allow the Navy port to dock a nuclear-powered aircraft carrier. This action would provide an alternative port for a carrier on the East Coast if a manmade or natural disaster or other emergency closes the Navy's base in Norfolk, Va., or the surrounding sea approaches. The dredging of the Mayport channel will support any future decisions to permanently homeport a nuclear-powered aircraft carrier."

The Navy's desire to transfer a CVN to Mayport is an issue of interest to some Members of Congress. Many observers expect that transferring a CVN to Mayport would result in a CVN being transferred out of Norfolk, known formally as NAVSTA Norfolk. Transferring a CVN from Norfolk to Mayport would shift from Norfolk to Mayport the local economic activity associated with homeporting a CVN, which some sources estimate as being worth hundreds of millions of dollars per year to the economy of the home port area. Transferring a CVN to Mayport would require congressional approval of MilCon funding for dredging and construction work to make Mayport capable of homeporting a CVN.

The Navy states that a key reason it wants to transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities at Norfolk, VA, and nearby Newport News, VA. All CVNs based on the Atlantic Coast are currently homeported at Norfolk and Newport News. Since a key reason the Navy wants to transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities in Virginia, potential questions for Congress to consider include the following:

- What is the risk of a catastrophic event damaging Atlantic Coast CVN homeporting facilities, and how might that risk be altered by homeporting a CVN at Mayport?
- If a catastrophic event were to damage Atlantic Coast CVN homeporting facilities, what would be the operational impact on the Navy, and how quickly could the Navy repair the damage and return to normal operations?
- Are the costs associated with homeporting a CVN at Mayport worth the benefits in terms of hedging against the risk of a catastrophic event damaging Atlantic Coast CVN homeporting facilities?

In assessing these and other questions relating to the Navy's desire to transfer a CVN to Mayport, Congress may consider several specific issues, including the following: the projected size of the Navy and its allocation between the Pacific and Atlantic Fleets; recurring and nonrecurring costs for homeporting a CVN at Mayport; transit times from Norfolk and Mayport to key destinations; the vulnerability of Norfolk and Mayport to natural and man-made catastrophes; other factors that might differentiate Norfolk and Mayport; the Final Environmental Impact Statement (FEIS) on Mayport homeporting options; potential options for Mayport homeporting other than those studied in the FEIS, and alternative uses of the funding that would be required for homeporting a CVN at Mayport. This report will be updated as events warrant.

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## Introduction

On January 14, 2009, the Navy announced that it wants to transfer one of its nuclear-powered aircraft carriers (CVNs) to the Navy home port at Mayport, FL, known formally as Naval Station (NAVSTA) Mayport. Mayport is located in northeast Florida, on the Atlantic Coast, near Jacksonville. On April 10, 2009, the Department of Defense (DOD) announced that it has decided to delay a final decision on whether to propose transferring a CVN to Mayport until it reviews the issue as part of its 2009-2010 Quadrennial Defense Review (QDR).

The Navy's proposed FY2010 budget requests \$46.3 million in Military Construction (MilCon) funding for channel dredging at Mayport. DOD states that it "intends to dredge the Mayport channel in fiscal 2010 to allow the Navy port to dock a nuclear-powered aircraft carrier. This action would provide an alternative port for a carrier on the East Coast if a manmade or natural disaster or other emergency closes the Navy's base in Norfolk, Va., or the surrounding sea approaches. The dredging of the Mayport channel will support any future decisions to permanently homeport a nuclear-powered aircraft carrier."<sup>1</sup>

The Navy states that a key reason it wants to transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities at Norfolk, VA, and nearby Newport News, VA. All CVNs based on the Atlantic Coast are currently homeported at Norfolk and Newport News.

The Navy's desire to transfer a CVN to Mayport has become an issue of interest to some Members of Congress, particularly certain Members from Florida and Virginia. Many observers expect that transferring a CVN to Mayport would result in a CVN being transferred out of Norfolk, known formally as NAVSTA Norfolk.<sup>2</sup> Transferring a CVN from Norfolk to Mayport<sup>3</sup> would shift from Norfolk to Mayport the local economic activity associated with homeporting a CVN, which some sources estimate as being worth hundreds of millions of dollars per year to the economy of the home port area.

Transferring a CVN to Mayport would require congressional approval of \$456 million in MilCon funding for dredging, infrastructure improvements, wharf improvements, and construction of CVN nuclear propulsion plant maintenance facilities. Transferring a CVN to Mayport would also involve a one-time maintenance cost of \$85 million and \$24 million in personnel change of station (PCS) costs.

Under the Navy's original schedule, if Congress were to approve the funding needed to transfer a CVN to Mayport, the ship could be transferred to Mayport as early as 2014. This "as early as"

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<sup>1</sup> DOD News Release No. 233-09 of April 10, 2009, entitled "Quadrennial Defense Review To Determine Aircraft Carrier Homeporting In Mayport," available online at <http://www.defenselink.mil/releases/release.aspx?releaseid=12600>.

<sup>2</sup> The Navy has not identified which specific CVN it would transfer, and a CVN transferred to Mayport could come from any of the Navy's current CVN home ports. Many observers, however, expect that the Navy would either transfer a CVN directly from Norfolk to Mayport, or transfer a CVN from Norfolk to a home port other than Mayport while also transferring a CVN from a home port other than Norfolk to Mayport. In either case, Mayport would gain a CVN while Norfolk would lose one.

<sup>3</sup> For purposes of convenience, this CRS report uses the phrase "transferring a CVN from Norfolk to Mayport," even though the CVN that would be transferred to Mayport may not be the same CVN that would be transferred out of Norfolk.

date, however, may have been pushed back by DOD's announcement to delay a final decision on whether to propose transferring a CVN to Mayport until it reviews the issue as part of its 2009-2010 Quadrennial Defense Review (QDR).

The Navy's desire to transfer a CVN to Mayport was announced during the final days of the George W. Bush administration. Obama administration officials testified in January 2009 that they would review the issue.<sup>4</sup> A Navy official testified on March 25, 2009, that "The Chief of Naval Operations and the Secretary of Defense have been talking about this issue, and it's under discussion and deliberation right now as to whether or—what is the best decision. And no decision's really been made at this point yet as to whether it should be done or not."<sup>5</sup> The April 10, 2009, DOD news release about DOD's review of the Navy's decision stated:

The Department of Defense (DoD) announced today that the final decision on whether to permanently homeport an aircraft carrier in Mayport, Fla., will be made during the 2010 Quadrennial Defense Review (QDR). The QDR will assess the need for carrier strategic

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<sup>4</sup> Secretary of Defense Robert Gates testified on January 27, 2009, that both he and the new Secretary of the Navy would review the issue; and William J. Lynn III, the Deputy Secretary of Defense, made a similar commitment in testimony at his confirmation hearing on January 15, 2009.

At a January 27, 2009, hearing before the House Armed Services Committee, Representative J. Randy Forbes of Virginia stated the following to Secretary Gates:

As to the decision to move a carrier from Norfolk to Mayport, Admiral Robert Thomas, the director of Navy strategy and policy decision, who wrote the strategic disbursement analysis that was used as the primary basis of making that recommendation has specifically stated that no one, not you, not the secretary of the Navy, no one asked him to quantify the probability of risk that something would happen that would justify having to move that carrier down there.

And my question is don't you feel that it's a critical aspect of making those kind of decisions when we are setting our priorities today to at least ask the question about the probability of risk that we're trying to avoid. And if we're not asking those kind of questions, how do we have much confidence that we're making the proper allocations when we have such limited resources?

Secretary Gates replied:

I think that asking for an evaluation of the risk is certainly legitimate. I do know we have two home ports for aircraft carriers on the West Coast. I do worry about everything being concentrated in one on the East Coast which does receive a lot of hurricanes.

We had an aircraft carrier in Mayport until the John F. Kennedy was decommissioned. But I am absolutely confident that this issue—first of all, it's six or seven years in the offing—and I am absolutely confident that this issue and the kinds of questions you're asking are certainly to be reviewed by a new Navy secretary. And I will review them as well.

At a January 15, 2009, hearing before the Senate Armed Services Committee to consider the nominations of Lynn and three other people nominated for senior Department of Defense (DOD) positions, Senator Jim Webb of Virginia raised the issue of homeporting a CVN at Mayport and asked Lynn for "a commitment to examine this at the OSD level" and again "for your commitments, take a look at this at the OSD level, in terms of strategy and budget priorities." Mr. Lynn replied: "Senator, you—we're going to have to look at the entire Navy program as well as the other services. As you said, this is a major budget item. I will commit to you that we will review it and we will consult with you and Congress about where we think we need to go on this program."

Source: Transcripts of hearings.

<sup>5</sup> Transcript of spoken testimony of Rear Admiral Philip Cullom, Director, Fleet Readiness Division, Deputy Chief of Naval Operations for Fleet Readiness and Logistics, at a March 25, 2009, hearing on the readiness and sustainment of the Navy's surface fleet before the Readiness subcommittee of the House Armed Services Committee. Cullom made this statement in response to a question about the Mayport homeporting issue from Representative Glenn Nye. Upon hearing Cullom's statement, Representative Nye stated: "OK, so if I understand your question correctly, this issue is still under review and no final decision has been put forth." Cullom responded: "Yes, sir. That's correct."

dispersal in the broad context of future threats, future Navy force structure, and likely cost effectiveness.

The DoD intends to dredge the Mayport channel in fiscal 2010 to allow the Navy port to dock a nuclear-powered aircraft carrier. This action would provide an alternative port for a carrier on the East Coast if a manmade or natural disaster or other emergency closes the Navy's base in Norfolk, Va., or the surrounding sea approaches.

The dredging of the Mayport channel will support any future decisions to permanently homeport a nuclear-powered aircraft carrier. Additional work to permanently homeport a carrier would include follow-on wharf improvements, infrastructure upgrades for nuclear propulsion plant maintenance facilities, as well as any changes needed to comply with the National Environmental Policy Act. The DoD will carefully review these potential costs and will assess the potential benefits associated with an additional homeport on the East Coast before committing to any future direction.<sup>6</sup>

The issue for the 111<sup>th</sup> Congress is how to respond to the Navy's January announcement of its desire to transfer a CVN to Mayport, and to DOD's April announcement of its decision to review the issue as part of the 2009-2010 QDR. Congress' decision on the issue could affect Navy capabilities and funding requirements, and the local economies of Mayport and Norfolk.

## **Background**

### **The Navy's Aircraft Carrier Force**

The Navy operates 11 aircraft carriers, all of them nuclear powered. The Navy since the 1960s has been replacing its older conventionally powered carriers (CVs) as they have retired with new CVNs. The Navy achieved an all-CVN carrier force on January 31, 2009, with the retirement of its last operational CV, the Kitty Hawk (CV-63). Prior to being decommissioned, the Kitty Hawk operated in the Pacific Fleet and was homeported in Yokosuka, Japan.<sup>7</sup> The last operational CV in the Atlantic Fleet was the John F. Kennedy (CV-67), which was decommissioned on August 1, 2007. Prior to being decommissioned, the Kennedy was homeported at Mayport.

### **Navy Home Ports**

#### **CVN Home Ports**

**Table 1** shows home ports for the Navy's 11 CVNs as of early-February 2009.

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<sup>6</sup> DOD News Release No. 233-09 of April 10, 2009, entitled "Quadrennial Defense Review To Determine Aircraft Carrier Homeporting In Mayport," available online at <http://www.defenselink.mil/releases/release.aspx?releaseid=12600>.

<sup>7</sup> Although the Navy states that the CVN based at Yokosuka is forward deployed to Yokosuka, the ship is commonly referred to as being homeported or forward-homeported there. The Navy includes Yokosuka on lists of Navy home ports, and does not show an alternate U.S. location as the home port of the ship.

**Table 1. Current CVN Home Ports**

Location	Number of CVNs homeported
Atlantic home ports	
Norfolk, VA	5
Newport News, VA	1 <sup>a</sup>
Pacific home ports	
San Diego, CA	2
Everett, WA	1
Bremerton, WA	1
Yokosuka, Japan	1 <sup>b</sup>

**Source:** E-mail from Navy Office of Legislative Affairs to CRS, February 5, 2009.

- a. The CVN based at Newport News, VA, is homeported there because it is undergoing a mid-life refueling complex overhaul (RCOH) at the Northrop Grumman Newport News (NGNN) shipyard. The Navy currently is in the midst of a multiyear plan to perform several CVN RCOHs in serial fashion at NGNN. CVNs from both the Atlantic Fleet and Pacific fleet are having their RCOHs performed at NGNN. The carrier currently homeported at Newport News is scheduled to be transferred to San Diego, CA, following the completion of its RCOH. The next CVN in line for an RCOH will then be transferred to Newport News.
- b. Although the Navy states that the CVN based at Yokosuka is forward deployed to Yokosuka, the ship is commonly referred to as being homeported or forward-homeported there. The Navy includes Yokosuka on lists of Navy home ports, and does not show an alternate U.S. location as the home port of the ship.

Norfolk and Newport News are located about 6 or 7 nautical miles from one another (depending on the exact points used to measure the distance),<sup>8</sup> on opposite sides of the James River/Hampton Roads waterway that leads to the southern end of the Chesapeake Bay and the Atlantic Ocean. The CVN based at Newport News, VA, is homeported there because it is undergoing a mid-life refueling complex overhaul (RCOH) at the Northrop Grumman Newport News (NGNN) shipyard.<sup>9</sup>

Everett and Bremerton are located about 32 nautical miles from one another,<sup>10</sup> on opposite sides of Puget Sound, which leads to the Pacific Ocean.

## Home Ports For Other Ship Types

**Table 2** shows Atlantic and Pacific Fleet home ports for other types of Navy ships as of early-February 2009.

<sup>8</sup> This is the straight-line distance measured from maps.

<sup>9</sup> The Navy currently is in the midst of a multiyear plan to perform several CVN RCOHs in serial fashion at NGNN. CVNs from both the Atlantic Fleet and the Pacific Fleet are having their RCOHs performed at NGNN. The carrier currently homeported at Newport News is scheduled to be transferred to San Diego, CA, following the completion of its RCOH. The next CVN in line for an RCOH will then be transferred to Newport News.

<sup>10</sup> This is the straight-line distance between the two locations, as calculated by the “How Fair Is It?” online distance calculator available at <http://www.indo.com/cgi-bin/dist>.



**Table 2. Home Ports for Other Navy Ships**

Ship type	No. of ships in that fleet	No. of home port locations	Location(s) <sup>a</sup>
Atlantic Fleet			
SSBNs	6	1	Kings Bay, GA
SSGNs	2	1	Kings Bay, GA
SSNs	25	2	Groton, CT, and Norfolk, VA
CGs/DDGs/FFGs	54	2	Norfolk, VA, and Mayport, FL
LHAs/LHDs	5	1	Norfolk, VA
LPDs/LSDs	10	2 <sup>b</sup>	Norfolk, VA, and Little Creek, VA <sup>b</sup>
MCMs	9	1	Ingleside, TX
Pacific Fleet			
SSBNs	8	1	Bangor, WA
SSGNs	2	1	Bangor, WA,
SSNs	27	4	Pearl Harbor, HI, San Diego, CA, Kitsap-Bremerton, WA, and Guam
CGs/DDGs/FFGs	54	4	San Diego, CA, Pearl Harbor, HI, Yokosuka, Japan, Everett, WA
LHAs/LHDs	5	2	San Diego, CA, and Sasebo, Japan
LPDs/LSDs	11	2	San Diego, CA, and Sasebo, Japan
MCMs	5	2	Manama, Bahrain, and Sasebo, Japan

**Source:** Navy list of home ports and ships assigned, available at <http://www.navy.mil/navydata/ships/lists/homeport.asp>, accessed on February 3, 2009.

**Notes:** **SSBNs** are nuclear-powered ballistic missile submarines; **SSGNs** are nuclear-powered cruise missile and special operations forces submarines; **SSNs** are nuclear-powered attack submarines, **CGs/DDGs/FFGs** are cruisers, destroyers, and frigates; **LHAs/LHDs** are large-deck amphibious assault ships; **LPDs/LSDs** are other amphibious ships, and **MCMs** are mine countermeasures ships.

- a. Although the Navy states that ships based at locations outside the United States (e.g., Yokosuka, Japan, Sasebo, Japan, and Manama, Bahrain) are forward deployed to those locations, the ships are often referred to as being homeported or forward-homeported at those locations. The Navy includes locations such as Yokosuka, Sasebo, and Bahrain on lists of Navy home ports, and does not show alternate U.S. locations as the home ports of these ships.
- b. Little Creek is located a few miles from Norfolk, on the same side of the Hampton Roads waterway, and is sometimes referred to as Norfolk (Little Creek). In assessing the strategic dispersion of Navy ships, some observers might consider Norfolk and Little Creek as one location rather than two.

## Norfolk and Mayport

### *Norfolk, Little Creek, and Newport News*

In terms of numbers of ships homeported, Norfolk is the Navy's largest Atlantic Fleet home port. As of early-February 2009, 56 ships of various types—CVNs, attack submarines (SSNs), cruisers

(CGs), destroyers, (DDGs), frigates (FFGs), large-deck amphibious assault ships (LHAs/LHDs),<sup>11</sup> and other amphibious ships (LPDs)—were homeported at Norfolk. The home port at Little Creek, VA, is roughly 7 nautical miles to the east of Norfolk (depending on the exact points used to measure the distance),<sup>12</sup> on the same side of the Hampton Roads waterway,<sup>13</sup> and is sometimes referred to as Norfolk (Little Creek). Nine amphibious ships (LSDs) and patrol boats (PCs) were homeported there as of early-February 2009. The CVN undergoing an RCOH at NGNN is the only ship homeported at Newport News. Thus, as of early-February 2009, a total of 66 ships were homeported in the greater Hampton Roads area, including Norfolk, Little Creek, and Newport News.

### *Mayport*

Mayport is located in northeast Florida, on the Atlantic Coast, near Jacksonville. It is roughly 469 nautical miles south-southwest of Norfolk.<sup>14</sup> In terms of numbers of ships homeported, Mayport is the Navy's second-largest Atlantic Fleet home port. As of early-February 2009, 20 CGs, DDGs, and FFGs were homeported at Mayport. Some of these ships, particularly the FFGs, are scheduled for decommissioning in coming years, and the Navy projects that unless additional ships are homeported at Mayport, the total number of ships homeported there will decline to 11 by 2014 due to decommissionings.

In addition to homeporting CGs, DDGs, and FFGs, Mayport has also served as a CV home port at various times since the 1950s, and most recently was the home port for the Kennedy, until that ship was decommissioned in 2007. Navy records dating back to 1979 indicate that Mayport served as a home port for two CVs (the Forrestal [CV-59] and the Saratoga [CV-60]) in 1979-1980, 1985-1987, and 1989-1991. (During the period 1980-1985, first CV-60 and then CV-59 underwent Service Life Extension Program (SLEP) overhauls at the Philadelphia Naval Shipyard.)<sup>15</sup> Homeporting of Navy ships at Mayport reached recent peak of more than 30 ships, including two CVs, in 1987, when the Navy as a whole reached a recent peak of 568 ships, including 15 CVs and CVNs.

Mayport has not previously served as a CVN home port, and would require certain facility upgrades to be capable of homeporting a CVN, including dredging and the construction of CVN nuclear propulsion plant maintenance facilities.

## **Navy Announcement in January 2009 Record of Decision (ROD)**

The Navy announced its desire to transfer a CVN to Mayport in a Record of Decision (ROD) document dated January 14, 2009. The Navy stated in the ROD that a key reason it wants to

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<sup>11</sup> LHAs and LHDs resemble medium-sized aircraft carriers and are sometimes referred to as helicopter carriers or (in British parlance) commando carriers.

<sup>12</sup> This is the straight-line distance measured from maps.

<sup>13</sup> The home ports of Norfolk and Little Creek are separated by the downtown portion of Norfolk itself.

<sup>14</sup> This is the straight-line distance between the two locations, as calculated by the "How Fair Is It?" online distance calculator available at <http://www.indo.com/cgi-bin/dist>.

<sup>15</sup> Source: Navy Listing of U.S. Naval Ship Battle Forces for 1979 to the present. CV-59 underwent SLEP overhaul in 1983-1985; CV-60 did so in 1980-1983.

transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities in the Hampton Roads area of Virginia. The ROD states:

The DON decision to utilize the capacity at NAVSTA Mayport to homeport a CVN is the culmination of a two and a half year process involving environmental analysis under the National Environmental Policy Act (NEPA), identification of the recurring and nonrecurring costs associated with homeporting surface ships at NAVSTA Mayport, and an assessment of strategic concerns....

The decision reached by the DON, as further explained later in this Record of Decision, is based upon the DON's environmental, operational, and strategic expertise and represents the best military judgment of the DON's leadership. The need to develop a hedge against the potentially crippling results of a catastrophic event was ultimately the determining factor in this decision-making process. The consolidation of CVN capabilities in the Hampton Roads area on the East Coast presents a unique set of risks. CVNs assigned to the West Coast are spread among three homeports. Maintenance and repair infrastructure exists at three locations as well. As a result, there are strategic options available to Pacific Fleet CVNs should a catastrophic event occur. By contrast, NAVSTA Norfolk is homeport to all five of the CVNs assigned to the Atlantic Fleet and the Hampton Roads area is the only East Coast location where CVN maintenance and repair infrastructure exists. It is the only location in the U.S. capable of CVN construction and refueling. The Hampton Roads area also houses all Atlantic Fleet CVN trained crews and associated community support infrastructure. There are no strategic options available outside the Hampton Roads area for Atlantic Fleet CVNs should a catastrophic event occur.<sup>16</sup>

Additional excerpts from the ROD are presented in **Appendix B**.

## **Analyses Informing Navy Desire to Transfer a CVN to Mayport**

The Navy states that its desire to transfer a CVN to Mayport is informed by three analyses:

- a “strategic laydown analysis” that projected the future size and composition of the Navy, and then apportioned that Navy between the Pacific Fleet and the Atlantic Fleet,
- a Final Environmental Impact Statement (FEIS) on alternatives for homeporting additional surface ships at Mayport, and
- an analysis of the nonrecurring and recurring costs of homeporting ships at Mayport.<sup>17</sup>

Each of these is discussed below.

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<sup>16</sup> Department of the Navy, *Record of Decision for Homeporting of Additional Surface Ships at Naval Station Mayport, Florida*, January 14, 2009, pp. 1-2.

<sup>17</sup> Navy briefing to CRS, December 5, 2008, on Mayport homeporting. The Navy stated at the briefing that the strategic laydown analysis began with an examination of Navy force structure requirements, meaning the numbers and types of ships that the Navy would need in the future to perform its various missions. The force structure analysis, the Navy stated, was followed by a global maritime posture for the year 2020 that in turn led to the Navy's current plan for a achieving and maintaining a 313-ship fleet. The 313-ship fleet, the Navy stated, became the baseline for the strategic laydown. The Navy stated that it then examined response times, maritime strategy, and direction from the 2006 Quadrennial Defense Review (QDR) to determine the apportionment of the fleet between the Atlantic Coast, Pacific Coast, and forward-deployed home ports.

## Strategic Laydown Analysis

The strategic laydown analysis projected a future Navy fleet of 313 ships, including 11 CVNs. (Navy plans since early-2006 have called for achieving and maintaining a 313-ship fleet with 11 CVNs.<sup>18</sup>) Based on an examination of projected future mission demands and other factors, the Navy assigned 181 of these 313 ships (including 6 CVNs) to the Pacific Fleet, and 132 ships (including 5 CVNs) to the Atlantic Fleet. This apportionment was then used to analyze the amount of homeporting capacity that would be needed in coming years for Atlantic Fleet ships. Homeporting capacity was measured in terms of linear feet of pier space, and expressed in terms of cruiser equivalents (CGEs), with one CVN equaling four CGEs.

The analysis concluded that, given the 132 ships to be homeported on the Atlantic Coast and the amount of homeporting capacity available at Norfolk and Little Creek, the Navy in coming years would need 13 CGEs of surface ship homeporting capacity at an Atlantic Fleet location other than Norfolk and Little Creek. The calculation assumed no double-breasting (i.e., side-by-side mooring of two ships at a single pier) at Norfolk and Little Creek, and no construction of additional pier space at Norfolk and Little Creek. As shown in **Table 2**, Mayport is currently the Navy's principal Atlantic Fleet location other than Norfolk and Little Creek for homeporting larger surface ships.

## Final Environmental Impact Statement (FEIS)

A Final Environmental Impact Statement (FEIS) on Mayport homeporting alternatives was released in November 2008. The FEIS examined 12 alternatives for homeporting additional surface ships at Mayport. Four of the 12 alternatives involved homeporting a CVN; another four involved making Mayport *capable* of homeporting a CVN, but not immediately homeporting a CVN there; and the remaining four did not involve making Mayport capable of homeporting a CVN. Ten of the 12 alternatives also involved transferring additional ships other than a CVN—various combinations of cruisers, destroyers, frigates, large-deck amphibious assault ships (LHDs), and other amphibious ships (LPDs and LSDs)—to Mayport. The FEIS also assessed a 13<sup>th</sup> alternative of homeporting no additional ships at Mayport. Homeporting a single additional ship—a CVN—was Alternative 4.

The FEIS identified Alternative 4 as the Navy's preferred alternative. The FEIS, like the January 2009 ROD, stated that a key reason for the Navy's desire to transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities in the Hampton Roads area of Virginia. The FEIS stated:

Based on a thorough review of the alternatives, the Department of the Navy has determined Alternative 4 to be its Preferred Alternative. Alternative 4 involves homeporting one CVN, dredging, infrastructure and wharf improvements, and construction of CVN nuclear propulsion plant maintenance facilities. Factors that influenced selection of Alternative 4 as the Preferred Alternative included impact analysis in the EIS, estimated costs of implementation, including military construction and other operation and sustainment costs, and strategic dispersal considerations. Homeporting a CVN at NAVSTA Mayport would enhance distribution of CVN homeport locations to reduce risks to fleet resources in the event of natural disaster, manmade calamity, or attack by foreign nations or terrorists. This

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<sup>18</sup> For a discussion, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

includes risks to aircraft carriers, industrial support facilities, and the people that operate and maintain those crucial assets.

The aircraft carriers of the United States Navy are vital strategic assets that serve our national interests in both peace and war. The President calls upon them for their unique ability to provide both deterrence and combat support in times of crisis. Of the 11 aircraft carriers currently in service, five are assigned to the Atlantic Fleet. Utilizing the capacity at NAVSTA Mayport to homeport a CVN disperses critical Atlantic Fleet assets to reduce risks, thereby enhancing operational readiness. Operational readiness is fundamental to the Navy's mission and obligation to the Commander in Chief.<sup>19</sup>

## **Nonrecurring and Recurring Costs**

The Navy estimated the nonrecurring and recurring costs of each of the 12 options examined in the FEIS for homeporting additional surface ships at Mayport. The Navy estimates the nonrecurring (i.e., initial) cost of transferring a CVN to Mayport at \$565 million. This figure includes \$456 million in Military Construction (MilCon) funding, a one-time maintenance cost of \$85 million, and \$24 million in personnel change of station (PCS) costs. The \$456 million in MilCon funding includes \$30 million for planning and design work, and \$426 million for dredging, infrastructure improvements, wharf improvements, and construction of CVN nuclear propulsion plant maintenance facilities.<sup>20</sup>

The Navy estimates that, compared to the cost of homeporting a CVN at Norfolk, homeporting a CVN at Mayport would result in an additional recurring (i.e., annual) cost of \$25.5 million in constant calendar year 2010 (CY10) dollars. This estimate is a revision of an earlier estimate of \$20.4 million in recurring costs that was briefed to Congressional offices following the release of the FEIS. The Navy states that the estimate of \$25.5 million in additional recurring costs

is based on an approximate yearly recurring cost of Base Operating Support (BOS) and Sustainment, Restoration, and Modernization (SRM) at \$8.3M, Operations at \$0.8M, travel/per-diem for transitory maintenance labor which occur two of every three 32-month operating cycles but annualized at \$12.9M, permanent on-site labor at \$5M and bi-annual maintenance dredging to maintain the depth necessary for unrestricted carrier access averaged out to \$0.1M per year. It is anticipated that Basic Allowance for Housing (BAH) would show an annual savings of \$1.6M.<sup>21</sup>

## **Navy Summary of Its Comparison of Mayport and Norfolk**

**Table 3** reproduces a Navy table that summarizes the Navy's comparison of Mayport and Norfolk in terms of certain operational characteristics and risk factors.

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<sup>19</sup> Naval Facilities Engineering Command, Southeast, *Final EIS for the Proposed Homeporting of Additional Surface Ships At Naval Station Mayport, FL, Volume: Final Environmental Impact Statement*, November 2008, p. ES-16.

<sup>20</sup> Source: Navy briefing entitled "Final Environmental Impact Statement (FEIS) for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL," November 18, 2008, presented to CRS on December 5, 2008.

<sup>21</sup> Source: Department of Defense information paper responding to questions from CRS, dated December 23, 2008 and provided to CRS on January 6, 2009.

**Table 3. Navy Table Comparing Mayport and Norfolk**

	Response times to COCOMs	Transit times to Respective Training Ranges	Hurricane Risk	Man-Made Disaster Risk	Physical Force Protection
Norfolk	Slight Advantage		No Advantage		
Mayport	Slight <b>SOUTHCOM</b> Advantage (HADR/GFS)	Slight Advantage	No Advantage	Slight Advantage	Slight Advantage

**Source:** Reproduction of Navy briefing slide entitled “Norfolk vs. Mayport,” in Navy briefing entitled “Final Environmental Impact Statement (FEIS) for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL,” November 18, 2008, presented to CRS on December 5, 2008. Emboldening as in the original. At the bottom of the briefing slide, below the table, the slide stated: “**Bottom Line:** Most Compelling Strategic Rationale to Homeport a CVN/LHA in Mayport is as a hedge against a catastrophic event in Norfolk..”

**Notes:** **COCOMs** means U.S. regional combatant commanders; **SOUTHCOM** means U.S. Southern Command; **HADR/GFS** means humanitarian assistance and disaster response operations/Global Fleet Station. A GFS is a Navy formation of one or more forward-deployed Navy ships that operates in an area so as to facilitate peacetime U.S. engagement with one or more countries in that area. Amphibious and high-speed sealift ships have served as the core ships of GFSs.

### Local Economic Value of Homeporting a CVN

Serving as the home port for a CVN can generate substantial economic activity in the home port area. This activity includes, among other things, the ship’s crew of more than 3,000 sailors spending its pay at local businesses, the Navy purchasing supplies for the ship from local businesses, and Navy expenditures for performing maintenance on the ship while it is in the home port.

Various estimates have been reported of the value of homeporting a CVN to the economy of the home port area. The FEIS estimates that transferring a CVN at Mayport would result in 2,900 more jobs, \$220 million more in direct payroll, \$208 million more in disposable income, and \$10 million more in local tax contributions for the Mayport area.<sup>22</sup> An August 2007 press report stated

<sup>22</sup> The FEIS estimated the socioeconomic impacts of the various homeporting alternatives for Mayport. These impacts were measured in relation to a 2006 baseline situation in which Mayport served as a home port to 22 ships, including the carrier Kennedy. The FEIS assumed that homeporting a CVN at Mayport—Alternative 4—would result in a situation of one CVN and 11 other surface ships being homeported at Mayport in 2014. The FEIS stated that, for the Mayport area:

Under Alternative 4, the estimated construction impacts would total approximately \$671 million and result in 7,400 jobs. It is anticipated that the percent change for total dependents would be -13 percent [compared to the 2006 baseline], and total school age children would be reduced by 12 percent [compared to the 2006 baseline]. Average annual growth in direct jobs would be -2.1 percent [compared to the 2006 baseline], and total change in employment would be approximately -2,000 jobs [compared to the 2006 baseline]. Direct payroll would be reduced by \$150 million [compared to the 2006 baseline], and change in disposable income would be reduced by a total of \$141 million [compared to the 2006 baseline]. Estimated local tax contributions would be reduced by approximately \$6 million [compared to the 2006 baseline].

[Department of the Navy, *Final EIS for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL, Volume I: Final Environmental Impact Statement*, November 2008, pp. ES-29.]

(continued...)



that “some reports put the [earlier] loss of the [aircraft carrier] George Washington at \$450 million in payroll and 8,200 military and civilian jobs in Norfolk.”<sup>23</sup> A November 2008 press report from a Norfolk newspaper stated that “The regional chamber of commerce estimates a carrier creates 11,000 jobs and \$650 million in annual economic activity.”<sup>24</sup> Another November 2008 press report states that “Jacksonville mayor John Peyton said the new carrier would bring about 3,190 military jobs and pump about \$500 million a year into the north Florida economy in salaries and spending.”<sup>25</sup> Another November 2008 press report states that “Virginians calculate that the economic activity related to one carrier can reach \$1 billion a year.”<sup>26</sup>

The Navy estimates that the initial \$426 million in military construction work at Mayport would generate a total of \$671 million in initial economic activity.<sup>27</sup>

(...continued)

Under the 13<sup>th</sup> alternative—the No Action Alternative—no additional ships would be homeported at Mayport, and Mayport in 2014 would serve as the homeport to 11 surface ships, none of them a CVN. The FEIS stated that, for the Mayport area:

Under the No Action Alternative, the percent change for total dependents would be -35 percent and total school age children would decline by 32 percent as compared to the 2006 baseline. Average annual growth in direct jobs would be -5.7 percent [compared to the 2006 baseline] and total change in employment would be a loss of approximately 4,900 jobs [compared to the 2006 baseline]. Direct payroll would be reduced by \$370 million [compared to the 2006 baseline], and change in disposable income would decline by a total of \$349 million [compared to the 2006 baseline]. Estimated local tax contributions would decrease by approximately \$16 million [compared to the 2006 baseline]. The NAVSTA Mayport population would decline, resulting in a decline in on- and off-Station housing demand and occupancy rate.

[Department of the Navy, *Final EIS for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL, Volume I: Final Environmental Impact Statement*, November 2008, pp. ES-31.]

The difference between Alternative 4 and the No Action Alternative is the presence of the CVN (Alternative 4) or absence of the CVN (No Action Alternative). Compared to the No Action Alternative, under Alternative 4 in the 2014 end state, there would be 2,900 more jobs (the difference between a loss of 2,000 jobs and a loss of 4,900 jobs), \$220 million more in direct payroll (the difference between a reduction in direct payroll of \$150 million and a reduction in direct payroll of \$370 million), \$208 million more in disposable income (the difference between a decline in disposable income of \$141 million and a decline in disposable income of \$349 million.), and \$10 million more in local tax contributions (the difference between a reduction in estimated local tax contributions of \$6 million and a reduction in estimated local tax contributions of \$16 million).

<sup>23</sup> Andrew Scutro, “Senators Lobby Mullen for Mayport Flattop,” *NavyTimes.com*, August 13, 2007.

<sup>24</sup> Louis Hansen, “Use of Florida Site Vital to Carrier Safety, Navy Report Says,” *Norfolk Virginian-Pilot*, November 22, 2008. These figures were repeated in Dale Eisman and Louis Hansen, “Va. Senators Try New Tack On Plan To Move Carrier,” *Norfolk Virginian-Pilot*, December 9, 2008; Dale Eisman and Louis Hansen, “Navy Appears To Have Made Decision To Put Carrier In Florida,” *Norfolk Virginian-Pilot*, December 20, 2008; Dale Eisman and Louis Hansen, “Navy Backs Plan To Move A Carrier To Mayport, Florida,” *Norfolk Virginian-Pilot*, January 15, 2009; Dale Eisman, “Next Defense Team To Weigh Carrier’s Florida Move,” *Norfolk Virginian-Pilot*, January 16, 2009.

<sup>25</sup> Ron Word, “Fla. Officials: Do Not Delay Carrier Decision,” *NavyTimes.com (Associated Press)*, November 25, 2008.

<sup>26</sup> Roxana Tiron, “Nuclear Carrier Rift Expected To Spark Battle Between Dems,” *The Hill*, November 19, 2008.

<sup>27</sup> The Navy states that:

The amount of \$671M represents the estimated economic benefit to the region resulting from the federal investment of military construction dollars (i.e., the “ripple effect”), not just the budgeted construction costs. The figure is derived from [the] IMPLAN model, a regional economic modeling program. The \$671M includes direct impacts (\$426M in MILCON), indirect impacts (\$91M in related economic sector expenditures), and induced impacts (\$154M in additional household spending derived from income gained through direct and indirect effects).

(Source: Department of Defense information paper responding to questions from congressional (continued...))

## Issues for Congress

Since a key reason the Navy wants to transfer a CVN to Mayport is to hedge against the risk of a catastrophic event that could damage the Navy's CVN homeporting facilities in the Hampton Roads area of Virginia, potential questions for Congress to consider include the following:

- What is the risk of a catastrophic event damaging Atlantic Coast CVN homeporting facilities, and how might that risk be altered by homeporting a CVN at Mayport?
- If a catastrophic event were to damage Atlantic Coast CVN homeporting facilities, what would be the operational impact on the Navy, and how quickly could the Navy repair the damage and return to normal operations?
- Are the costs associated with homeporting a CVN at Mayport worth the benefits in terms of hedging against the risk of a catastrophic event damaging Atlantic Coast CVN homeporting facilities?

In assessing these and other questions relating to the Navy's desire to transfer a CVN to Mayport, Congress may consider several specific issues, including the following:

- the Navy's strategic laydown analysis;
- the Navy's estimated recurring and nonrecurring costs for homeporting a CVN at Mayport;
- transit times from Norfolk and Mayport to key destinations;
- the vulnerability of Norfolk and Mayport to natural and man-made catastrophes;
- other factors that might differentiate Norfolk and Mayport;
- the Final Environmental Impact Statement (FEIS) on Mayport homeporting options;
- potential options for Mayport homeporting other than those studied in the FEIS; and
- potential alternative uses of the funding that would be required for homeporting a CVN at Mayport.

Each of these specific issues is discussed below.

### Strategic Laydown Analysis

One issue that Congress may consider is the Navy's strategic laydown analysis. As mentioned earlier, this analysis projected a future fleet of 313 ships (including 11 CVNs), of which 181 ships (including 6 CVNs) would be assigned to the Pacific Fleet and 132 ships (including 5 CVNs) would be assigned to the Atlantic Fleet.

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offices, dated December 19, 2008, and provided to CRS on January 6, 2009, question/request 42.)



Some observers in recent years have raised questions about the affordability of the Navy's shipbuilding plans, and thus about the Navy's prospective ability to increase the fleet from its current size of about 280 ships<sup>28</sup> to the planned size of 313 ships.<sup>29</sup> Supporters of keeping all Atlantic Fleet CVNs homeported at Norfolk could argue that if the Navy in coming years includes fewer than 313 ships or fewer than 11 CVNs, there will be less need to shift a CVN from Norfolk to Mayport for reasons relating to homeporting capacity. Supporters of homeporting a CVN at Mayport could argue that if the Navy in coming years includes fewer than 313 ships or fewer than 11 CVNs, each ship or each CVN would represent a larger percentage of the Navy's overall capability, making the need to hedge against a catastrophic event in the Hampton Roads area more important.

Additional factors that Congress may consider in connection with the strategic laydown analysis include the Navy's projected apportionment of the fleet between the Pacific and Atlantic Coasts (which reflects, among other things, a Navy judgment about likely potential missions for the Navy), the potential for "breasting" (i.e., side-by-side mooring of two or more ships at a single pier), and the cost of increasing homeporting capacity at Norfolk through construction of additional pier space and other facilities.

## **Nonrecurring and Recurring Costs**

A second issue that Congress may consider is whether the Navy has accurately estimated the nonrecurring and recurring costs of homeporting a CVN at Mayport. Other things held equal, if the Navy has underestimated or overestimated these costs, it might weaken or strengthen, respectively, the argument for homeporting a CVN at Mayport.

## **Transit Times**

A third issue that Congress may consider is whether the Navy has accurately assessed the relative merits of Norfolk and Mayport in terms of transit times to key overseas operating areas and training ranges, as shown in the first two columns of **Table 3**. Transit times are a function of transit distance and transit speed.

With regard to transit times to key overseas operating areas, one key destination is the Strait of Gibraltar, which is used to support operations in the Mediterranean and (via the Suez canal) the Indian Ocean and Persian Gulf. Other key destinations include the Cape of Good Hope (a longer route to the Indian Ocean and Persian Gulf, but one that avoids the need to transit the Suez canal), and Puerto Rico (which might be considered a representative destination for supporting operations in the Caribbean). **Table 4** shows transit times from Norfolk and Mayport to these three destinations at 14 knots (a typical transit speed for routine forward deployments) and 20 knots (an elevated transit speed that might be more likely for responding to a contingency).

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<sup>28</sup> The Navy as of February 9, 2009, included 283 ships.

<sup>29</sup> For more on the Navy's planned 313-ship fleet, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

**Table 4. Transit Times To Key Destinations**

In days, as a function of transit speed

Destination	From	Transit speed	
		14 knots	20 knots
Strait of Gibraltar	Mayport	11.1	7.6
	Norfolk	9.9	7.0
Cape of Good Hope	Mayport	34.8	24.4
	Norfolk	34.8	24.3
Puerto Rico	Mayport	6.2	4.3
	Norfolk	6.9	4.8

**Source:** Navy briefing slide entitled “Average Transit Times East/West,” in Navy briefing entitled “Final Environmental Impact Statement (FEIS) for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL,” November 18, 2008, presented to CRS on December 5, 2008; and (for Puerto Rico) Department of Defense information paper responding to questions from CRS, dated December 23, 2008 and provided to CRS on January 6, 2009.

## Port Vulnerability

A fourth issue that Congress may consider is whether the Navy has accurately assessed vulnerability-related factors at Norfolk and Mayport, including the risk of a natural or man-made catastrophic event damaging CVN homeporting facilities, and the Navy’s ability to defend against such an event at either site. The Navy’s summary of its assessments of these factors is shown in the third, fourth and fifth columns of **Table 3**.

In assessing the question of port vulnerability, one factor that might be considered is the current degree of concentration or dispersion of Navy ships other than Atlantic Fleet CVNs. For example, supporters of transferring a CVN to Mayport might observe from **Table 1** that the Navy’s Pacific Fleet CVN homeporting facilities are currently located in three widely separated areas (San Diego, the Puget Sound area of Washington state, and Yokosuka, Japan), while supporters of keeping all Atlantic Fleet CVNs homeported at Norfolk might observe from **Table 2** that the Navy’s Pacific Fleet and Atlantic Fleet ballistic missile submarines (SSBNs)—which, like CVNs, are low-quantity, high-value assets—are homeported at a single site on each coast (Bangor, WA, and Kings Bay, GA, respectively). **Table 1** and **Table 2** can be used to support additional observations concerning concentration or dispersion of other types of ships.

## Natural Disaster

As shown in **Table 3**, hurricanes were the principal type of natural disaster analyzed in comparing the relative risk of a natural disaster at Hampton Roads and Mayport. The Navy assesses that, historically, the hurricane risk to Norfolk is similar to the risk to Jacksonville, which is close to Mayport. Information provided by the Navy regarding the risk of hurricanes at Norfolk and Mayport is presented in the **Appendix C** of this report.

## Man-Made Disaster

Potential man-made disasters include but are not limited to shipping accidents, conventional or nuclear military attacks by foreign countries, and terrorist attacks.

During the Cold War, the Navy was concerned about the potential for a conventional military attack on U.S. home ports by Soviet military forces. One possibility was a covert mining of U.S. Navy home ports by Soviet submarines and Warsaw Pact merchant ships prior to the start of a NATO-Warsaw Pact conflict. Another possibility was a cruise missile strike by Soviet submarines against Navy port facilities or ships in port. Concern over the potential for a conventional military attack on U.S. home ports by Soviet military forces was the central reason for the Navy's strategic homeporting program of the 1980s, which dispersed some of the Navy's ships away from the Navy's major home ports.<sup>30</sup>

The end of the Cold War reduced the apparent risk of a conventional military attack on U.S. Navy home ports by a foreign country, and led to a reconsideration of the strategic homeporting program.<sup>31</sup> China is modernizing its naval and other military forces,<sup>32</sup> but any potential ability China might have in coming years for conducting a conventional attack on U.S. home ports might be more of an issue for Pacific Fleet home ports than for Atlantic Fleet home ports.

The terrorist attack of October 12, 2000, on the destroyer Cole (DDG-67) in the port of Aden, Yemen,<sup>33</sup> and the terrorist attacks of September 11, 2001, have led to increased focus on the potential for terrorist attacks on U.S. port areas.

The Navy states that Department of Defense (DOD) and other U.S. government entities conducted several vulnerability assessments for Norfolk and Mayport between 2006 and 2008.<sup>34</sup> The contents of these assessments are generally classified.

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<sup>30</sup> See CRS Issue Brief IB85193, *The Navy's Strategic Homeporting Program: Issues for Congress*, by Ronald O'Rourke. This issue brief is out of print and is available directly from the author.

<sup>31</sup> See CRS Issue Brief IB90077, *Strategic Homeporting Reconsidered*, by Ronald O'Rourke. This issue brief is out of print and is available directly from the author.

<sup>32</sup> See CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

<sup>33</sup> For a discussion of this attack, see CRS Report RS20721, *Terrorist Attack on USS Cole: Background and Issues for Congress*, by Raphael F. Perl and Ronald O'Rourke.

<sup>34</sup> In response to a question from CRS regarding vulnerability assessments for Norfolk and Mayport, the Navy stated the following (which has been edited for ease of reading): The Joint Staff sponsored a Joint Staff Integrated Vulnerability Assessment (JSIVA) on Naval Station Norfolk that was conducted from August 6 to August 11, 2006. The team conducting the assessment was composed of seven specialists from the Defense Threat Reduction Agency (DTRA). The Naval Criminal Investigative Service (NCIS) conducted a Chief of Naval Operations Integrated Vulnerability Assessment (CNOIVA) for Naval Station Mayport from January 21 to January 26, 2007. Threat assessments conducted by NCIS through the Multiple Threat Alert Center (MTAC) prior to specific events, such as air shows, also serve as threat updates for other Department of the Navy commands located in the geographic area. NCIS also conducts Port Integrated Vulnerability Assessments (PIVA) for ports and facilities that are not USN bases. Additional vulnerability and threat assessments that were completed include the following: a Southeast Virginia Threat Assessment that was conducted from August 27 to October 7, 2008; a Mayport Threat Assessment dated May 30, 2008; a Jacksonville Threat Assessment dated October 1, 2008; an FBI assessment entitled "Domestic Maritime Domain Terrorist Threat Assessment" dated March 28, 2008; an update to that assessment entitled "Domestic Maritime Domain Terrorist Threat Assessment (Update)" dated April 17, 2008; a Department of Homeland Security assessment entitled "Homeland Security Threat Assessment: Evaluating Threats 2008-2013" dated July 18, 2008; a U.S. Coast Guard assessment entitled "The Terrorist Threat to the U.S. Maritime Domain" dated March 25, 2004; and a Director of (continued...)

The Navy states that it used statistics on shipping volumes at the ports of Norfolk and Jacksonville (near Mayport) as one measure of the relative risk of a man-made disaster at Norfolk and Mayport, the idea being that certain elements of the risk of man-made disaster are somewhat proportional to the volume of shipping. The Navy states that in 2006, 2.05 million cargo containers and 16.6 million tons of cargo passed through the port of Norfolk, while 768,200 cargo containers and 8.31 million tons of cargo passed through the port of Jacksonville.<sup>35</sup> The Navy further states that the center of the shipping channel in the port of Norfolk is about 500 yards from the carrier piers, and that the channel is separated from the piers by a line of buoys but no fixed obstruction, while the center of the shipping channel in the port of Jacksonville is also about 500 yards from the carrier pier, but is separated from the carrier pier by a 200-yard-wide spit of land.<sup>36</sup>

## **Other Factors That Might Differentiate Norfolk and Mayport**

A fifth issue that Congress may consider is whether the Navy has overlooked or not given adequate weight to other factors in evaluating the merits of Mayport and Norfolk as Navy home ports. Possibilities might include things such as the interaction of the base facilities at Mayport or Norfolk with other regional military facilities (such as naval air stations), or the possible effect of CVN homeporting on Navy recruiting in the area surrounding the home port.

## **Final Environmental Impact Statement (FEIS)<sup>37</sup>**

A sixth issue that Congress may consider is the adequacy of the FEIS that the Navy prepared to assess the potential environmental impacts of locating a nuclear carrier at Mayport. The National Environmental Policy Act (NEPA) requires all federal agencies to prepare environmental impact statements for major actions that would significantly affect the environment. The scope of these statements are broader than the environment per se, as agencies are required to examine not only the potential impacts on the natural environment but also the socio-economic impacts of a proposed action. Some observers have questioned whether the Navy thoroughly assessed these sets of impacts when it selected Mayport for the location of a CVN.<sup>38</sup>

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National Intelligence assessment entitled “The Terrorist Threat to the US Homeland” dated July 2007. (Source: Department of Defense information paper responding to questions from CRS, dated December 23, 2008 and provided to CRS on January 6, 2009.)

<sup>35</sup> The cargo containers were measured in Twenty-Foot Equivalent Units (TEUs), a standard metric for counting cargo containers.

<sup>36</sup> Source: Slide entitled “Shipping—Man Made Disaster Risk,” from Navy briefing entitled “Final Environmental Impact Statement (FEIS) for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL,” November 18, 2008, presented to CRS on December 5, 2008.

<sup>37</sup> This section was drafted by David M. Bearden, Specialist in Environmental Policy, Resources, Science, and Industry Division.

<sup>38</sup> See, for example, Dale Eisman and Louis, “Va. Senators Try New Tack On Plan To Move Carrier,” *Norfolk Virginian-Pilot*, December 9, 2008.

## **Mayport Homeporting Options Other Than Those Studied**

A seventh issue that Congress may consider are potential options for homeporting additional ships at Mayport that differ from the 12 alternatives studied in the FEIS. One such possibility, which the FEIS mentioned but did not examine in detail, would be to homeport some number of Littoral Combat Ships (LCSs) at Mayport. LCSs, which are just beginning to enter service with the Navy, are somewhat smaller than the Navy's frigates and are to have much smaller crews.<sup>39</sup> Another possibility would be to homeport two CVNs rather than one CVN at Mayport. As mentioned earlier, Mayport served as a home port for two CVs for several years during the 1980s.

## **Alternative Uses of Funding**

An eighth issue that Congress may consider are potential alternative uses by the Navy or some other part of DOD of the funding that would be needed for homeporting a CVN at Mayport, and how the benefits of those potential alternative uses would compare to the benefits of homeporting a CVN at Mayport.

## **Legislative Activity for FY2010**

### **FY2010 Military Construction Funding Request**

The Navy's proposed FY2010 budget requests \$46.303 million in Military Construction (MilCon) funding for channel dredging at Mayport to support the ability of a CVN to enter Mayport.

The budget also requests \$29.682 million in MilCon funding to repair a wharf at Mayport, but this request is *not* related to Mayport's ability to support a CVN—it is related to Mayport's current role as a home port to CGs, DDGs, and FFGs.

Together, a total of \$75.985 million is requested for channel dredging (CVN related) and wharf repair (not CVN related) at Mayport.

### **FY2010 Defense Authorization Bill (H.R. 2647)**

#### **House**

Section 2201(a) of H.R. 2647 as reported by the House Armed Services Committee on June 18, 2009, would authorize a total of \$56.042 million in MilCon funding for Mayport. This figure is greater than the amount of funding requested for CVN-related channel dredging (\$46.303 million) and greater than the amount of funding requested for non-CVN-related wharf repair at Mayport (\$29.682 million), but less than the combined amount requested for both projects (\$75.985 million). Section 2201(a) does not state how the \$56.042 million is to be allocated between channel dredging, wharf repair, or some other project at Mayport. As of the time of this

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<sup>39</sup> For more on the LCS program, see CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background, Oversight Issues, and Options for Congress*, by Ronald O'Rourke.

report update (11:30 am on June 19, 2009), the text of the committee's report on H.R. 2647 (H.Rept. 111-166) was not posted on the Legislative Information System (LIS). The committee's summary of major provisions of H.R. 2647, which is available from the committee's website, does not state how the \$56.042 million is to be allocated between channel dredging, wharf repair, or some other project at Mayport.

## **Appendix A. Prior-Year Legislative Activity**

### **FY2009 Defense Authorization Act**

Section 2207 of the FY2009 defense authorization bill as passed by the House (H.R. 5658; H.Rept. 110-652 of May 16, 2008) stated:

SEC. 2207. REPORT ON IMPACTS OF SURFACE SHIP HOMEPORTING ALTERNATIVES.

(a) Report Required- The Secretary of the Navy shall not issue a record of decision for the proposed action of homeporting additional surface ships at Naval Station Mayport, Florida, until at least 30 days after the date on which the Secretary submits to Congress a report containing an analysis of the socio-economic impacts and an economic justification on each location from which a vessel is proposed to be removed for homeporting at Naval Station Mayport under the preferred alternative identified in the final environmental impact statement for the proposed action.

(b) Additional Reporting Requirement- If the final environmental impact statement does not contain a preferred alternative or if the Secretary intends to select an alternative other than the preferred alternative in the record of decision, then the Secretary shall submit to Congress a report (in the case where no preferred alternative is identified) or an additional report (in the case where the preferred alternative is not selected) containing an analysis of the socio-economic impacts and an economic justification on each location from which a vessel is proposed to be removed for homeporting at Naval Station Mayport.

The FY2009 defense authorization bill as passed by the Senate (S. 3001; S.Rept. 110-335 of May 12, 2008) did not contain a provision similar to Section 2207 of H.R. 5658.

In lieu of a conference report, there was compromise version of S. 3001 that was accompanied by a joint explanatory statement. The compromise version of S. 3001, which was signed into law as P.L. 110-417 of October 14, 2008, did not contain a provision similar to Section 2207 of H.R. 5658.

### **FY2008 Defense Authorization Act**

The House Armed Services Committee, in its report (H.Rept. 110-146 of May 11, 2007) on the FY2008 defense authorization bill (H.R. 1585), stated:

#### **Carrier Basing**

The committee understands that the Navy has unused capacity at Naval Station Mayport, Florida, and is conducting an environmental impact statement on the feasibility of stationing additional surface ships, including a nuclear aircraft carrier, at Naval Station Mayport. The committee believes that Naval Station Mayport is an important defense asset that should be fully utilized. The committee is concerned that Naval Station Mayport has not previously served as homeport for a nuclear carrier and does not contain the considerable specialized infrastructure necessary to sustain and maintain such a vessel. Therefore, before the Secretary of the Navy recommends the stationing of a nuclear carrier at Naval Station Mayport, the committee directs the Secretary to determine the full range of costs associated with the construction of nuclear infrastructure and port improvements at Naval Station



Mayport necessary to support a nuclear carrier, including a detailed assessment of alternative sites, and submit the results of this analysis to the congressional defense committees by October 1, 2007. (Page 518)

## **FY2008 Military Construction, Veteran Affairs, and Related Agencies Appropriations Act**

The House Appropriations Committee, in its report (H.Rept. 110-186 of June 11, 2007) on H.R. 2642, which at that point was the FY2008 military construction, veteran affairs, and related agencies appropriations bill, stated:

*Carrier Homeporting.*—The Committee understands that it is the Navy’s publicly stated policy to maintain two nuclear carrier-capable homeports on the east coast. The Committee further understands that the Navy is in the process of drafting an environmental impact statement (EIS) that includes the evaluation of the necessary infrastructure and dredging required to make Naval Station Mayport the second such homeport in addition to Naval Station Norfolk, and that a draft EIS will be released in early 2008. The Committee directs the Navy to provide a report to the Committee identifying the military construction requirements and an estimated timetable for completion for making Mayport a nuclear carrier-capable homeport no later than 30 days after release of the draft EIS. (Page 17)

H.R. 2642 later became the FY2008 supplemental appropriations act (P.L. 110-252 of June 30, 2008). The FY2008 military construction, veteran affairs, and related agencies appropriations bill was eventually enacted as part of the FY2008 consolidated appropriations act (H.R. 2764/P.L. 110-161 of December 26, 2007).

## **FY2007 Defense Authorization Act**

The Senate Armed Services Committee, in its report (S.Rept. 109-254 of May 9, 2006) on the FY2007 defense authorization bill (S. 2766), stated:

The committee maintains its concern, expressed in the Senate report accompanying S. 1042 (S.Rept. 109-69) of the National Defense Authorization Act for Fiscal Year 2006, regarding the declining size of the naval force and the reduction to the number of aircraft carriers. The committee agrees, however, with the Navy’s determination that it is not feasible to maintain 12 operational aircraft carriers by restoring the USS John F. Kennedy (CV-67) to a deployable, fully mission-capable platform. The committee believes that it is vital to the national security of the United States that a fleet of at least 11 aircraft carriers be maintained to support the National Military Strategy, and has taken extraordinary action to support the CNO’s force structure plan by authorizing increased procurement for shipbuilding and, specific to aircraft carriers, by authorizing additional advance procurement and incremental funding for the construction of the first 3 CVN-21 class aircraft carriers.

Further, recognizing the increased need for timeliness of surge operations that today’s smaller force structure places on the Fleet Response Plan, the committee reaffirms the judgment that the Chief of Naval Operations, Admiral Clark, provided in testimony before the Committee on Armed Services in February 2005, that the Atlantic Fleet should continue to be dispersed in two homeports. (Page 380)

S.Rept. 109-254 also presented additional views of Senator Bill Nelson relating to the homeporting of aircraft carriers on the Atlantic Coast. (See pages 528-529)



The conference report (H.Rept. 109-702 of September 29, 2006) on the FY2007 defense authorization bill (H.R. 5122) stated:

The conferees agree with the CNO statement in his letter dated August 14, 2006, to the Ranking Member of the Committee on Armed Services of the Senate, that ‘‘Naval Station Mayport and the many resources of the Jacksonville area remain vitally important to Navy readiness,’’ and support the CNO commitment ‘‘to maintaining the infrastructure necessary to support the strategic dispersal of the Atlantic Fleet at this key east coast port.’’ (Page 805)

## Appendix B. Excerpts from January 2009 Navy Record of Decision (ROD)

This appendix presents excerpts from the January 2009 Navy Record of Decision (ROD) document announcing the Navy's desire to transfer a CVN to Mayport. The document stated in part:

**SUMMARY:** The Department of the Navy (DON), after carefully weighing the strategic, operational, and environmental consequences of the proposed action, announces its decision to homeport one nuclear-powered aircraft carrier (CVN) at Naval Station (NAVSTA) Mayport. Today's decision does not relocate a specific CVN to NAVSTA Mayport. It does initiate a multiyear process for developing operational, maintenance, and support facilities at NAVSTA Mayport to support homeporting of one CVN. This multiyear process includes implementing projects for dredging and dredged material disposal, construction of CVN nuclear propulsion plant maintenance facilities, wharf improvements, transportation improvements, and construction of a parking structure to replace existing parking that would be displaced by development of the CVN nuclear propulsion plant maintenance facilities. The projects necessary to create the capacity to support CVN homeporting could be completed as early as 2014.<sup>40</sup> No CVN homeport change will occur before operational, maintenance, and support facility projects are completed. Selection of the CVN to be homeported at NAVSTA Mayport would not occur until approximately one year prior to the ship's transfer to NAVSTA Mayport. Selection of a specific CVN for homeporting at NAVSTA Mayport will be based upon then current operational needs, strategic considerations, and maintenance cycles.

The DON decision to utilize the capacity at NAVSTA Mayport to homeport a CVN is the culmination of a two and a half year process involving environmental analysis under the National Environmental Policy Act (NEPA), identification of the recurring and nonrecurring costs associated with homeporting surface ships at NAVSTA Mayport, and an assessment of strategic concerns.

The DON environmental analysis included extensive studies regarding impacts associated with dredging, facility construction, and homeport operations. The environmental analysis undertaken by the DON included lengthy and detailed consultations with regulatory agencies, such as the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), regarding impacts to endangered and threatened species, and the U.S. Army Corps of Engineers (USACE) and the Environmental Protection Agency (EPA) regarding dredging operations and the in-water disposal of dredged materials. Public awareness and participation were integral components of the Environmental Impact Statement (EIS) process. The DON ensured that members of the public, state agencies, and federal agencies had the opportunity to help define the scope of the DON's analysis as well as examine and consider the studies undertaken by the DON. Public review and comment on the DON's interpretation of those studies and the conclusions drawn from the DON's interpretation of associated data were robust.

The decision reached by the DON, as further explained later in this Record of Decision, is based upon the DON's environmental, operational, and strategic expertise and represents the

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<sup>40</sup> As mentioned earlier, this "as early as" date may have been pushed back by DOD's announcement to delay a final decision on whether to propose transferring a CVN to Mayport until it reviews the issue as part of its 2009-2010 Quadrennial Defense Review (QDR).

best military judgment of the DON's leadership. The need to develop a hedge against the potentially crippling results of a catastrophic event was ultimately the determining factor in this decision-making process. The consolidation of CVN capabilities in the Hampton Roads area on the East Coast presents a unique set of risks. CVNs assigned to the West Coast are spread among three homeports. Maintenance and repair infrastructure exists at three locations as well. As a result, there are strategic options available to Pacific Fleet CVNs should a catastrophic event occur. By contrast, NAVSTA Norfolk is homeport to all five of the CVNs assigned to the Atlantic Fleet and the Hampton Roads area is the only East Coast location where CVN maintenance and repair infrastructure exists. It is the only location in the U.S. capable of CVN construction and refueling. The Hampton Roads area also houses all Atlantic Fleet CVN trained crews and associated community support infrastructure. There are no strategic options available outside the Hampton Roads area for Atlantic Fleet CVNs should a catastrophic event occur....

**ALTERNATIVES CONSIDERED:** The Draft and Final EIS assessed the impacts of 12 action alternatives and the no action alternative. Consistent with the purpose and need for the proposed action, the alternatives addressed only options for utilizing capacities at NAVSTA Mayport for homeporting additional surface ships. Examination of homeporting options at other geographic locations was not relevant to the established purpose and need, so no such alternatives were considered. The 12 action alternatives evaluated a broad range of options for homeporting surface ships at NAVSTA Mayport. The alternatives included ship types currently homeported at NAVSTA Mayport: destroyers (DDGs), and frigates (FFGs), as well as additional types of ships identified by the Chief of Naval Operations (CNO), including amphibious assault ships (LHDs), amphibious transport dock ships (LPDs), dock landing ships (LSDs), and a CVN.

In the Final EIS, the DON identified Alternative 4, as the Preferred Alternative. Alternative 4 involves homeporting one CVN at NAVSTA Mayport and included dredging, infrastructure and wharf improvements, on-station road and parking improvements, and construction of CVN nuclear propulsion plant maintenance facilities at NAVSTA Mayport. Factors that influenced selection of Alternative 4 as the Preferred Alternative included impact analyses in the EIS, estimated costs of implementation, including military construction and other operation and sustainment costs, and strategic considerations.

Regulations implementing NEPA require the identification of the environmentally preferred alternative. The environmentally preferred alternative for this EIS is Alternative 2, homeporting two LHDs at NAVSTA Mayport. LHD homeporting would require no dredging or other major construction activities compared to dredging and construction activities required to implement the Preferred Alternative to homeport a single CVN. As such, the Preferred Alternative (Alternative 4) would have greater environmental impact than the environmentally preferred alternative (Alternative 2) on earth resources, water resources, air quality, noise, biological resources, and utilities. While the environmentally preferred alternative would have less environmental impact than the Preferred Alternative, it does not address strategic concerns or reduce risks to critical Atlantic Fleet assets and infrastructure.

**ENVIRONMENTAL IMPACTS:** The EIS analyzed environmental impacts and the potential magnitude of those impacts relative to the following categories of environmental resources: earth resources, land and offshore use, water resources, air quality, noise, biological resources, cultural resources, traffic, socioeconomics, general services, utilities, and environmental health and safety. Analysis of these categories also included the radiological aspects of CVN homeporting. Only environmental impacts to NAVSTA Mayport and the project area were evaluated. There were no environmental impacts to the human environment outside of NAVSTA Mayport and the project area that were interrelated to the natural or physical environmental effects of the proposed action.

The environmental impact of implementing each alternative was evaluated against the 2006 baseline. The baseline year 2006 best represents recent and historical operations at NAVSTA Mayport, and 2014 represents the end-state year by which all alternatives evaluated in the EIS could be implemented. Many impacts were found to be common among the alternatives....

**DECISION:** After considering the environmental impacts analyzed in the EIS, the recurring and nonrecurring costs associated with homeporting additional surface ships at NAVSTA Mayport, and strategic implications of a second CVN homeport on the East Coast to support the Atlantic Fleet, the DON elected to implement Alternative 4, the Preferred Alternative. That alternative provides for homeporting one CVN at Naval Station (NAVSTA) Mayport. The DON decision does not immediately relocate a specific CVN to NAVSTA Mayport. It does initiate a multiyear process for developing operational, maintenance, and support facilities at NAVSTA Mayport to support homeporting of one CVN. This multiyear process includes implementing projects for dredging and dredged material disposal, construction of CVN nuclear propulsion plant maintenance facilities, wharf improvements, transportation improvements, and construction of a parking structure to replace existing parking that would be displaced by development of the CVN nuclear propulsion plant maintenance facilities. The projects necessary to create the capacity to support CVN homeporting could be completed as early as 2014.

No CVN homeport change will occur before operational, maintenance, and support facility projects are completed. Selection of the CVN to be homeported at NAVSTA Mayport would not occur until approximately one year prior to the ship's transfer to NAVSTA Mayport. Selection of a specific CVN for homeporting at NAVSTA Mayport will be based upon then current operational needs, strategic considerations, and maintenance cycles.

The most critical considerations in the DON's decision-making process were the environmental impacts associated with the action, recurring and nonrecurring costs associated with changes in surface ship homeporting options, and strategic dispersal considerations. The need to develop a hedge against the potentially crippling results of a catastrophic event was ultimately the determining factor in this decision-making process. The consolidation of CVN capabilities in the Hampton Roads area on the East Coast presents a unique set of risks. CVNs assigned to the West Coast are spread among three homeports. Maintenance and repair infrastructure exists at three locations as well. As a result, there are strategic options available to Pacific Fleet CVNs if a catastrophic event occurred. By contrast, NAVSTA Norfolk is homeport to all five of the CVNs assigned to the Atlantic Fleet and the Hampton Roads area is the only East Coast location where CVN maintenance and repair infrastructure exists. It is the only location in the U.S. capable of CVN construction and refueling. The Hampton Roads area also houses all Atlantic Fleet CVN trained crews and associated community support infrastructure. There are no strategic options available outside the Hampton Roads area for Atlantic Fleet CVNs if a catastrophic event occurred.

**Environmental impacts:** Environmental impacts were identified through studies and data collection efforts. The information culled from the studies and collected data was assessed and conclusions were drawn regarding the significance of environmental impacts. These conclusions, along with the underlying studies and data, were the subject of discussions and consultations with federal/state regulators over the course of the EIS process. This interagency process led to identification of mitigation measures, where appropriate, to address environmental impacts. Based on these consultations with regulators and their subject matter experts, the DON has committed to implementation of specific mitigation measures as outlined earlier in this Record of Decision. There are no environmental impacts associated with homeporting a CVN at NAVSTA Mayport that cannot be appropriately

addressed or mitigated, including impacts to endangered species such as the NARW, Florida Manatee, and sea turtles.

**Recurring and nonrecurring costs:** The DON's analysis and assessment of socioeconomic impacts in the EIS associated with the range of alternatives addressed short-term and long-term local economic impacts in the Mayport area. In addition to the socioeconomic impacts considered in the EIS, recurring and onetime costs associated with changes to surface ship homeporting were projected and considered in the DON's decisionmaking process. Recurring and nonrecurring costs for the preferred alternative are less than 10% of the cost of a single CVN and less than 1% of the cost of the DON's CVN assets. That investment in homeport capacity at NAVSTA Mayport provides additional security for CVN assets and enhances the DON's ability to maintain its effectiveness at a time when the ability to address contingencies and respond to the unexpected is essential. In terms of risk mitigation, DON gains a dispersal capability and its benefits at a fraction of the cost of an aircraft carrier.

Recurring costs included costs associated with Sustainment, Restoration, and Modernization (SRM), Base Operations Support (BOS), training, air wing transportation, nuclear maintenance labor, and Basic Allowance for Housing (BAH) for Sailors and their families. Sustainment costs are for activities necessary to keep facilities in good condition and therefore enable them to achieve their intended useful life. Restoration and Modernization costs are life-cycle investments required to provide for recapitalized facilities that support new missions, return facilities to good condition, and improve facilities beyond original conditions or capabilities. BOS costs included Facilities Operations costs such as Utilities, Facility Services, Facility Management, and Fire and Emergency Services.

Onetime costs included costs associated with MILCON projects (construction and Planning and Design), onetime maintenance costs for management and Industrial Plant Equipment (IPE) costs, and Permanent Change of Station (PCS) associated with the initial CVN homeport assignment at NAVSTA Mayport. PCS costs are those costs associated with moving the ship's crew and dependents to NAVSTA Mayport. PCS costs were estimated costs because the location from which crews and their families would be moved remains undetermined.

**Strategic dispersal:** The strategic dispersal of surface ships, especially vital strategic assets such as CVNs that serve our national interests in both peace and war, was assessed through examination of potential vulnerabilities. These potential vulnerabilities were examined in the context of operational, training and maintenance requirements of East Coast assets.

Strategic dispersal factors considered included: transit times to various deployment and training areas; shipping traffic volumes and associated risk of a maritime accident; port force protection postures and risk mitigation measures; integrated vulnerability and threat assessments; historic aircraft carrier loading; physical pier capacity; nuclear maintenance capability; homeporting options in response to a catastrophic event; geographic location of the aircraft carrier aircraft squadrons; transit times from port to the open sea; historic sortie rates due to hurricanes or other natural phenomena; and the risk to the ships, infrastructure and personnel who man, service and repair aircraft carriers associated with natural or man-made catastrophic events. In terms of these factors, the analysis concluded that the strategic value of NAVSTA Norfolk and NAVSTA Mayport as CVN homeports essentially was equal. The DON's strategic analysis, however, also demonstrated the value of having both NAVSTA Norfolk and NAVSTA Mayport as CVN homeports. Establishing CVN homeport capacity at NAVSTA Mayport can be accomplished without any adverse impacts on operations while at the same time providing the added strategic value of a second CVN homeport on the East Coast.

The most significant strategic advantage offered by development of an additional East Coast CVN homeport is a hedge against a catastrophic event that may impact NAVSTA Norfolk, the only existing CVN homeport for Atlantic Fleet CVNs. It is difficult to quantify the likelihood of a catastrophic event, whether natural or man-made. Nonetheless, there is a need to plan and prepare for any such event. That planning and preparation must address CVN maintenance and repair infrastructure as well as operational considerations. The fact that quantifying the likelihood of a catastrophic event is so difficult underscores the need to ensure that our planning and preparation efforts do not underestimate or overlook the long-term effects of such event. Hurricane Katrina is a clear and recent example. The level of devastation in New Orleans in the aftermath of Hurricane Katrina was so extensive and so pervasive that more than three years after Katrina hit, the New Orleans industrial infrastructure, work force, and community support functions have not fully recovered.

The potential impact of similar man-made or natural catastrophic events in the Hampton Roads area requires the DON to plan and prepare. A failure to do so presents an unacceptable risk. The aircraft carriers of the United States DON are vital strategic assets that serve our national interests in both peace and war. The President calls upon them for their unique ability to provide both deterrence and combat support in times of crisis. Of the 11 aircraft carriers currently in service, five are assigned to the Atlantic Fleet. NAVSTA Norfolk is homeport to all five of the CVNs assigned to the Atlantic Fleet and the Hampton Roads area is the only East Coast location where CVN maintenance and repair infrastructure exists. It is the only location in the U.S. capable of CVN construction and refueling. The Hampton Roads area also houses all Atlantic Fleet CVN trained crews and associated community support infrastructure. A second CVN homeport on the East Coast will provide additional CVN maintenance infrastructure, thereby providing added strategic value and allowing the DON to extract the added operational value of two CVN homeports in meeting its national defense obligations.

Homeporting a CVN at NAVSTA Mayport would provide strategic options in case of a catastrophic event in the Hampton Roads area, and enhance distribution of CVN assets, thereby reducing the risks to aircraft carriers and associated maintenance and repair infrastructure supporting those crucial assets....

**CONCLUSION:** The decision to create the capacity to homeport a CVN at NAVSTA Mayport represents the best military judgment of the DON's leadership regarding strategic considerations. In reaching that decision, the DON considered the environmental impacts analyzed in the EIS, comments from regulatory agencies as well as those received from members of the public, mitigation measures that would lessen the extent and severity of environmental impacts, recurring and nonrecurring costs, and the strategic implications of developing a second CVN homeport on the East Coast to support Atlantic Fleet operational, training and maintenance needs.

There will be no significant adverse environmental impacts associated with the CVN homeporting. That conclusion is based on the data collected and analyzed in the EIS, on interagency consultations, and on the mitigation measures developed as part of that consultation process.

The cost of developing a CVN homeport at NAVSTA Mayport was balanced against the strategic need to create a hedge against a catastrophic event in the Hampton Roads area. The cost of developing a CVN homeport at NAVSTA Mayport is more than offset by the added security for CVN assets and enhanced operational effectiveness provided by the ability to operate out of two homeports.

Ultimately, the need to develop a hedge against the potentially crippling results of a catastrophic event was the driver behind the decision to homeport a CVN at NAVSTA



Mayport. Developing a second CVN homeport on the East Coast not only reduces potential risk to CVN assets through dispersal of those critical assets, it provides some maintenance and repair infrastructure and ensures access to that infrastructure by CVNs deployed at the time a catastrophic event in Hampton Roads occurred. Mayport allows DON to obtain the advantages of fleet dispersal and survivability without impacting operational availability. On the West Coast DON has accepted reduced operational availability in the interest of dispersal. By homeporting CVNs in the Northwestern U.S., DON loses operational availability during the additional transit time required to reach operational and training areas. By establishing a second CVN homeport on the East Coast, DON can gain the dispersal advantage without the increased transit time. The proximity to training areas and transit time to operating areas is about equal from Norfolk and Mayport.

West Coast CVN homeports and maintenance facilities are not viable options in planning for Atlantic Fleet CVN assets in the event a catastrophic event occurs in the Hampton Roads area. The nuclear powered aircraft carriers are too large to transit the Panama Canal, requiring a 12,700 nautical mile voyage around South America to reach the closest CVN homeport on the West Coast at [<sup>41</sup>]San Diego.

Neither the DON, nor the nation, nor its citizens can wait for a catastrophic event to occur before recognizing the potential impacts of such an event and appropriately planning and preparing for continuity of operations. This lesson was learned all too well in the aftermath of recent catastrophic events such as Hurricane Katrina. The DON looked at the possible crippling effects - immediate and long-term - of a catastrophic event in the Hampton Roads area and recognized its responsibility to develop a hedge against such an event. That hedge is homeporting a CVN at NAVSTA Mayport and developing the requisite operational, training, maintenance and support facilities.

Homeporting one CVN at NAVSTA Mayport best serves the interests of the DON and the nation, and can be accomplished in a manner that keeps environmental impacts at a less than significant level.<sup>42</sup>

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<sup>41</sup> At this point in the text, a handwritten note deletes the word "NAVSTA."

<sup>42</sup> Department of the Navy, *Record of Decision for Homeporting of Additional Surface Ships at Naval Station Mayport, Florida*, January 14, 2009, pp. 1-2, 5-6, 18-22, 31-32.

## **Appendix C. Navy Data on Hurricane Risk**

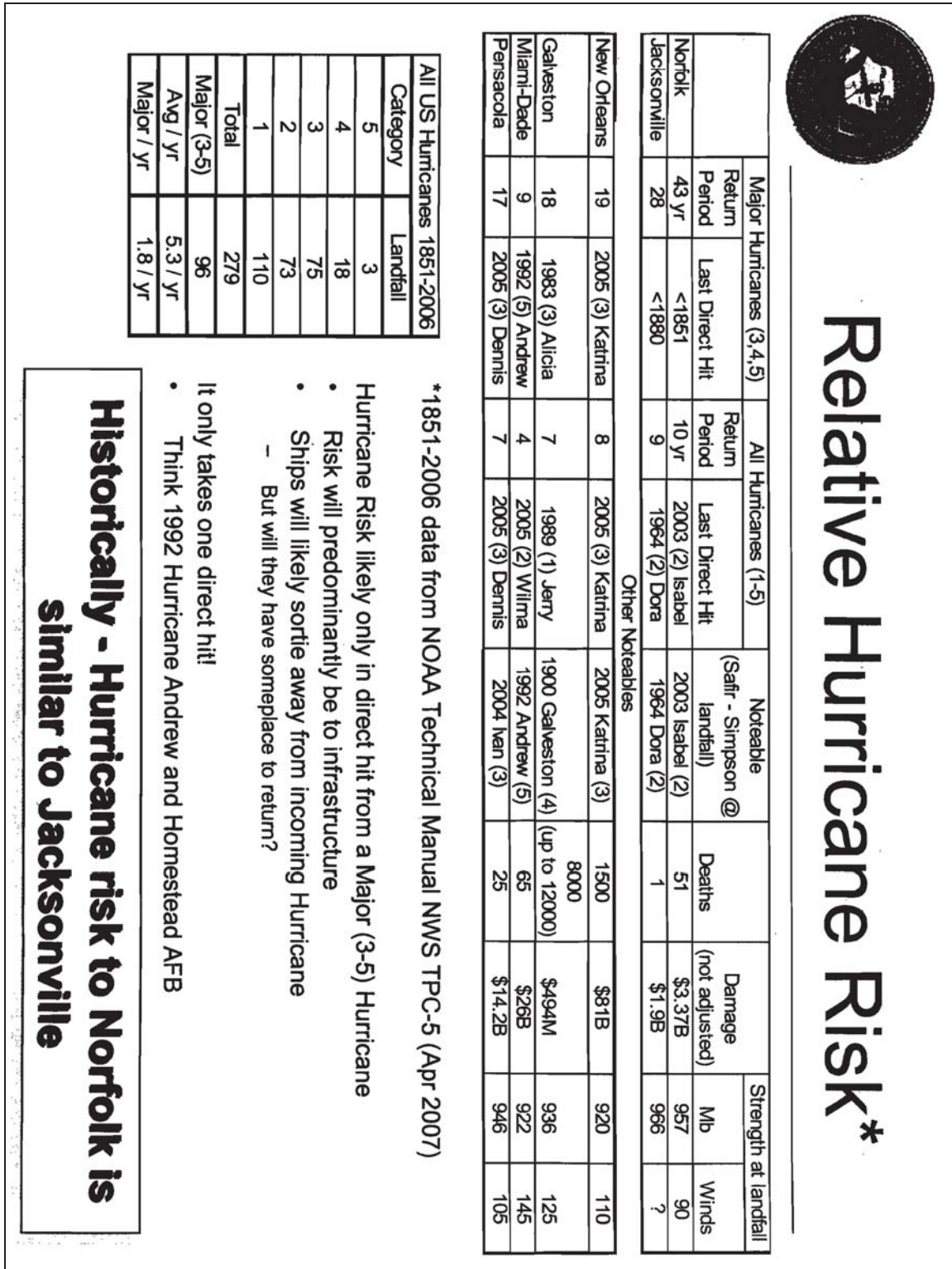
This appendix presents information that the Navy has provided regarding the risk of hurricanes at Norfolk and Mayport.

### **Navy Briefing Slide**

**Figure C-1** is a Navy briefing slide on relative hurricane risk for the port of Norfolk and the port of Jacksonville, which is near Mayport.



Figure C-1. Navy Briefing Slide on Relative Hurricane Risk



Source: Slide entitled "Relative Hurricane Risk," from Navy briefing entitled "Final Environmental Impact Statement (FEIS) for the Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, FL," November 18, 2008, presented to CRS on December 5, 2008.

## **Excerpt from DOD Information Paper**

In response to questions and requests for information from congressional offices, the Navy in December 2008 provided, among other things, supplementary historical data regarding hurricanes in the Hampton Roads area and Mayport and their effect on Navy facilities and ship operations. The questions/requests for information regarding hurricanes, and the Navy's responses, are reproduced below.<sup>43</sup>

**QUESTION/REQUEST:** How much collateral damage did Norfolk and Mayport sustain from hurricanes that did NOT make a direct hit over the analyzed time period of 1851-2006?

**RESPONSE:**

a. **MAYPORT:**

- Since 1995, 8 named storms—of which 1 was a hurricane—have had a CPA of 75 nm or closer to NAVSTA Mayport
- From 1851-2008, there were 51 tropical cyclones that were classified as hurricanes at some point in their life that passed within 180 nm of Mayport. Of these, 22 came within 50 nm.
- Collateral damage (back to 2004): \$6.1M

b. **NORFOLK:**

- Since 1995, 15 named storms—of which 4 were hurricanes—came within 75 nm or closer to NAVSTA Norfolk
- From 1851-2008, there were 54 tropical cyclones that were classified as hurricanes at some point in their life that passed within 180 nm of Norfolk. Of these, 14 came within 50 nm.
- Collateral damage (all hurricanes, direct hit and near miss back to 1999): \$11.8M

c. Some ships undergoing maintenance must occasionally remain in port during hurricanes. A review of records since the 2004 hurricane season indicated no resulting ship damage for those ships remaining inport.

**QUESTION/REQUEST:** How much hurricane damage has NAVSTA Norfolk and NAVSTA Mayport sustained over the time period analyzed?

**RESPONSE:** Historical hurricane damage costs available include:

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<sup>43</sup> Source: Department of Defense information paper responding to questions from congressional offices, dated December 19, 2008, and provided to CRS on January 6, 2009, questions/requests 5 through 10. The reproduction here omits the question/request numbers and incorporates some slight formatting changes to accommodate CRS report formatting. NAVSTA means Naval Station (a home port), CPA means closest point of approach, nm means nautical mile, M means millions (of dollars). The Navy informed CRS that this data accounts for all hurricanes that have affected Mayport or Norfolk, including hurricanes that approached Mayport from the west. (Department of Defense information paper responding to questions from CRS, dated December 23, 2008 and provided to CRS on January 6, 2009.)

- Mayport:
  - FY04: \$1.2M
  - FY05: \$4.1M
  - FY08: \$0.8M
- Norfolk
  - FY99: \$1.0M
  - FY03: \$10.8M

QUESTION/REQUEST: How many evacuation orders (sorties) have been issued to Navy ships at Norfolk and Mayport because of inclement weather? Provide historical data to the maximum extent possible.

RESPONSE: Since 1995, ships at Mayport have sortied 6 times and ships at Norfolk have sortied 5 times:

a. Mayport:

- i. Bertha (1996)
- ii. Bonnie (1998)
- iii. Floyd (1999)
- iv. Charley (2004)
- v. Ophelia (2005)
- vi. Fay (2008)

b. Norfolk:

- i. Felix (1995)
- ii. Bertha (1996)
- iii. Bonnie (1998)
- iv. Floyd (1999)
- v. Isabel (2003)

Carrier Sorties due to Hurricanes

Dates	Units Affected	Type of Impact	Homeport
8-10 Sep 05	USS JOHN F KENNEDY	Dedicated sail, hurricane avoidance	Mayport
16-20 Sep 03	USS THEODORE ROOSEVELT	Extended underway, hurricane avoidance	Norfolk
11-20 Sep 03	USS GEORGE WASHINGTON	Interrupted carrier qualifications, hurricane avoidance	Norfolk
16-20 Sep 03	USS RONALD REAGAN	Dedicated sail, hurricane avoidance	Norfolk
22-27 Sep 02	USS HARRY S TRUMAN	Already underway for COMPTUEX, hurricane avoidance	Norfolk
14-17 Sep 99	USS JOHN F KENNEDY	Dedicated underway 5 days prior to deployment	Mayport
15-18 Sep 99	USS DWIGHT D EISENHOWER	Dedicated sail, hurricane avoidance	Norfolk
15-18 Sep 99	USS GEORGE WASHINGTON	Dedicated sail, hurricane avoidance	Norfolk
15-18 Sep 99	USS HARRY S TRUMAN	Dedicated sail, hurricane avoidance	Norfolk
25-28 Aug 98	USS ENTERPRISE	Dedicated sail, hurricane avoidance	Norfolk
22-26 Aug 98	USS JOHN F KENNEDY	Delayed return to homeport, hurricane avoidance	Mayport
25-27 Aug 98	USS THEODORE ROOSEVELT	Dedicated sail, hurricane avoidance	Norfolk
15-19 Aug 95	USS AMERICA	Dedicated sail, hurricane avoidance during POM	Norfolk
15-20 Aug 95	USS GEORGE WASHINGTON	Dedicated sail, hurricane avoidance	Norfolk
30 Aug-02 Sep 93	USS JOHN F KENNEDY	Dedicated sail, hurricane avoidance	Norfolk
24 Aug 92	USS FORRESTAL	Dedicated sail, hurricane avoidance	Pensacola

Notes:

Data prior to 1992 is incomplete for tracking of hurricane sorties.

QUESTION/REQUEST: Have any Navy ships remained pierside during past hurricane evacuation orders? If so, what happened?

RESPONSE: No records exist that indicate any aircraft carriers were unable to sortie. Note: Shipyards are designated “safe havens,” therefore CVNs in the shipyards are not required to sortie. Recent examples of non-aircraft carriers remaining inport during hurricanes include:

a. In August 2005, the following ships were pierside at Northrop Grumman Shipbuilding—Ingalls Operations and NGSB Avondale Operations during Hurricane Katrina:

- i. DDG 98 (FORREST SHERMAN)
- ii. DDG 100 (KIDD)
- iii. LPD 17 (SAN ANTONIO)

iv. LPD 19 (MESA VERDE)

v. LPD 18 (NEW ORLEANS)

LPD 17 and DDG 98 sustained minor damage during the storm and DDG 100 sustained more extensive hull damage. The cost of repairs is classified as “Business Sensitive.”

b. During hurricanes Gustav and Ike in 2008, the following ships were pierside at NGSB Avondale and NGSB Ingalls and did not sustain any damage:

i. LPD 20 (GREEN BAY)

ii. DDG 103 (TRUXTUN)

iii. DDG 105 (DEWEY)

QUESTION/REQUEST: Historically, how have hurricanes negatively affected CVN operations on the East Coast?

RESPONSE: Hurricanes can and have affected aircraft carrier operations during all phases of the carrier schedule. CVNs inport will sortie when directed by the Fleet Commander and conduct hurricane avoidance. CVNs underway for training will suspend or cancel training evolutions and maneuver to avoid the hurricane’s predicted track.

QUESTION/REQUEST: Compare the amount of time required to sortie ships from Norfolk and Mayport.

RESPONSE: Following issuance of the sortie order, ships in Mayport require approximately 1 hour to reach the open sea and ships in Norfolk require between 4 to 4.5 hours to reach open sea.

QUESTION/REQUEST: When, if ever, has the Navy NOT been able to sortie ships?

RESPONSE: Ships in maintenance at Norfolk Naval Shipyard and Northrop Grumman Newport News Shipbuilding do not sortie since the shipyards are considered safe havens for ships during hurricanes. No records exist that indicate any aircraft carriers not in safe havens were unable to sortie.

## Appendix D. Executive Summary of Paper From Senator Webb's Office

In January 2009, the office of Senator Jim Webb released a 29-page paper questioning the Navy's desire to transfer a CVN to Mayport. The entire paper is available for downloading from Senator Webb's website.<sup>44</sup> The executive summary of the paper states:

### Executive Summary

The Navy has made no compelling argument to justify its proposal to homeport a nuclear-powered aircraft carrier at Naval Station Mayport. There is little or no evidence that the Navy's preferred homeporting alternative is supported by either strategic necessity or economic logic. Given the unavoidable adverse impact that today's economic crisis will have on defense programs, the Navy would be irresponsible to incur costs (already projected to exceed \$600 million) for a poorly justified project to duplicate existing nuclear-support facilities that the service itself describes as an "insurance policy."

The Navy's flawed and incomplete analysis does not demonstrate a strategic necessity or the economic logic for homeporting a nuclear-powered aircraft carrier in Mayport. Of note:

- **There is no indication the Navy conducted a formal, comparative threat/survivability intelligence assessment to validate its claim that dispersing a nuclear-powered aircraft carrier to Mayport will reduce risk or increase operational readiness.** The Navy has provided no documentation of a cohesive, focused assessment of current and projected military threats for its homeporting proposal that included estimated levels of risk, potential vulnerabilities, and the implications for survivability, consequence management, and physical security programs;
- **The Coast Guard currently assesses the port-security risk for the Hampton Roads region and the port of Jacksonville/Mayport to be the same.** The Navy did not request the U.S. Coast Guard to provide an independent assessment of maritime security risk in Hampton Roads, Virginia., or Mayport, Florida. The U.S. Coast Guard has statutory responsibilities for assessing maritime security risk in major U.S. seaports.
- **The concept of strategic dispersal was challenged by critics even at the height of the Cold War.** In 1986, for example, the GAO reported that the Navy's decision to disperse the fleet as part of its strategic homeporting plan was not based on a formal threat analysis, deeming the conventional threat to U.S. ports as relatively low.
- **The Navy fails to acknowledge the more than \$111-million investment federal agencies have made to improve port security in Hampton Roads to mitigate significantly the risk of a terrorist attack.**
- **The Navy's proposal is fiscally irresponsible. The Navy estimated that it had \$4.6 billion in unfunded budget priorities for fiscal year 2009.** The Navy does not account for the impact the project's approximately \$600 million to \$1 billion cost would have on the Navy's inadequately funded accounts for shipbuilding and aircraft procurement, shore

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<sup>44</sup> The paper can be downloaded at <http://webb.senate.gov/contact/homeport/CriticalAssessmentMayportHomeporting.pdf>

readiness, and military construction. The proposal also runs counter to the Navy's "Shore Investment Strategy" which calls for consolidating the Navy's shore footprint to save money and improve physical security.

- **The Navy did not acknowledge that aircraft carriers homeported in Norfolk are supported by multiple military and civilian airfields, including an outlying airfield necessary to support carrier-qualification training requirements for the Atlantic Fleet carrier air wings.** In 2006, the citizens of Jacksonville had the chance to reopen the Naval Air Station Cecil Field for military use, but they voted not to do so.

- **The Navy issued its Final Environmental Impact Statement (FEIS) for homeporting alternatives in Mayport prior to the receipt of other agencies' statutory biological assessments.** The Navy also sought to fast-track the environmental review process so that it could issue its Record of Decision in early January. Virginia Governor Timothy M. Kaine described the Navy's FEIS as "legally insufficient and technically flawed."

- **Naval Station Norfolk is home to one of the largest regional concentrations of naval and military installations in the world, but the Navy did not apparently assess the impact that relocating a nuclear-powered aircraft carrier to Naval Station Mayport would have on assigned crew members and their families.** Any assessment of the impact of a permanent change of station should include all relevant training, career progression, sea-shore rotation, permanent change of station, and quality-of-life factors.

- **There is no evidence the Navy evaluated the comparative advantages for the private sector's ship-repair industrial base in Jacksonville resulting from an alternative homeporting arrangement encompassing a larger number of surface-combatant warships.**

It is my strong belief that no funds should be made available for the relocation of a nuclear-powered aircraft carrier to Naval Station Mayport unless the Navy fully justifies such a move in a comprehensive report to the appropriate congressional defense committees.<sup>45</sup>

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<sup>45</sup> *The U.S. Navy's Proposed Homeporting of Additional Surface Ships at Naval Station Mayport, Florida[:]* A Critical Assessment, Office of Senator Jim Webb, January 2009, 29 pp. Emphasis as in the original.



## Appendix E. Statement From Representative Crenshaw

A December 7, 2008, statement from Representative Ander Crenshaw that has been endorsed by Senator Mel Martinez, Senator Bill Nelson, and Representative Corrine Brown states:

Recently, the Navy announced a decision to homeport a nuclear carrier at Naval Station Mayport, Florida, establishing a second nuclear port on the east coast.<sup>46</sup> The decision was based on neither economic input nor political influence. It was a decision to protect our strategic assets and sailors. A decision based on national security—pure and simple. The facts supporting the Navy’s decision are overwhelming and simply irrefutable.

First of all, strategic dispersal has always been the Navy’s rule rather than the exception, which is why there are three nuclear carrier homeports and maintenance facilities on the west coast and not just one.

Yet, today, all 5 of the current east coast aircraft carriers, and the only nuclear maintenance facility for these vessels, are located in the Norfolk area. This year, all 5 of our nuclear aircraft carriers were in port simultaneously for 35 days. And most alarming, normal operating schedules put 2 or more of our 5 aircraft carriers in port or undergoing routine maintenance in Norfolk 81% of the time.

But, in today’s dangerous world, homeporting all of the east coast carriers in the same place is irresponsible and it is a dereliction of duty to keep taking chances with the Atlantic fleet of carriers especially when Norfolk is considered the most vulnerable port according to the Department of Homeland Security’s assessment.

More troubling is the concern that if tragedy, man-made or nature-created, rendered the Norfolk nuclear maintenance facility inoperative, our service personnel and ships would be forced to journey almost a month around the tip of South America to receive such maintenance on the west coast. That is a long time for a carrier with serious problems to be underway.

Secondly, the Navy’s decision was based on years of research, national security concerns, and military strategy. The Navy presented an irrefutable case for their decision in a recently completed 2½ year Environmental Impact Study (EIS) to examine the feasibility of creating a second nuclear carrier homeport. There was no rush to judgment. Every fact was reviewed and deliberated. In fact, the final decision was not included in the Draft EIS which was released earlier this year to guarantee the Navy enough time to review the strategic findings and implications of the Navy’s entire fleet dispersal plan.

The Navy’s decision is a culmination of a series of objective and non-political proceedings that led to the release of an exhaustive 1,200 page report detailing the facts and reasoning for its decision. The Navy’s decision is sound and correctly focused on national security.

Finally, Mayport has a tremendous and unequivocal geographic benefit over the Norfolk area. Ships homeported at Mayport have a huge advantage in their ability to reach operational areas at sea. Norfolk based carriers have to travel under a bridge and over a

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<sup>46</sup> Note: This refers to the November 2008 Final Environmental Impact Statement (FEIS) on Mayport homeporting alternatives, which identified homeporting a CVN at Mayport as the Navy’s preferred alternative.



tunnel during an 8 hour journey to reach operational areas off the Virginia coast. A Mayport based carrier takes only a 1 hour journey and is protected by a natural land barrier that separates it from commercial shipping lanes—a feature that Norfolk doesn't have. Those are staggering differences, and further affirm the Navy's decision.

I am more confident than ever that the Navy made the best decision to protect its service personnel, our strongest tools of national defense—our aircraft carriers, and the American public. It was made in a non-political fashion, ensuring that the ultimate decision was strategic and based solely on national security.

Sixty-seven years ago today, over 2,400 brave men and women in uniform were tragically killed and another 1,200 were wounded in the Japanese attack at Pearl Harbor. Over 21 Pacific Fleet ships were destroyed along with 75% of their aircraft.

Following the attacks, President Roosevelt appointed a commission which later found that Admiral Husband Kimmel had been guilty of “dereliction of duty” and “errors of judgment.” He was demoted and swiftly retired from service. December 7, 1941, taught this nation an important lesson—do not concentrate your resources in one place. The Navy began a policy of strategic dispersal of its assets.

On the commemoration of this horrific attack, it is troubling that anyone would attempt to insert politics into a decision that has already been made and made without political considerations. We should never place a price tag on national security - our brave men and women deserve better than having their fate hinge upon a political or financial debate.

Anything short of implementing the Navy's decision places us in the dangerous position of ignoring history.<sup>47</sup>

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<sup>47</sup> December 7, 2008, statement from Representative Ander Crenshaw entitled “*The Case for Two East Coast Homeports is ‘Overwhelming and Simply Irrefutable.’*” The statement is available online at [http://crenshaw.house.gov/index.cfm?FuseAction=PressOffice.Columns&ContentRecord\\_id=02D8D4DF-19B9-B4B1-12C7-523FF8ADB05](http://crenshaw.house.gov/index.cfm?FuseAction=PressOffice.Columns&ContentRecord_id=02D8D4DF-19B9-B4B1-12C7-523FF8ADB05)

A copy of the statement was provided to CRS on February 24, 2009 by the office of Senator Bill Nelson. In providing the statement to CRS, Senator Nelson's office stated that it had spoken with the offices of Senator Martinez and Representative Corrine Brown and confirmed those offices' endorsement of the statement.