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Navy TAO(X) Oiler Shipbuilding Program: Background and Issues for Congress

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Summary

The TAO(X) oiler shipbuilding program is a program to build a new class of 17 fleet oilers for the Navy. The primary role of Navy fleet oilers is to transfer fuel to Navy surface ships that are operating at sea, so as to extend the operating endurance of these surface ships and their embarked aircraft. The Navy wants to procure the first TAO(X) in FY2016.

The Navy's proposed FY2016 budget requests $674.2 million to fully fund the procurement of the first TAO(X). The Navy is requesting this funding in its regular shipbuilding account (the Shipbuilding and Conversion, Navy, or SCN, account), rather than in the National Defense Sealift Fund (NDSF), a separate account in the Department of Defense (DOD) budget where DOD sealift ships and Navy auxiliary ships have been funded.

It was reported in January 2015 that the Navy wants to bundle the competition for the TAO(X) program with the competition for an amphibious assault ship called LHA-8 that the Navy wants to procure in FY2017 and the competition for the LX(R) program, a program to procure a new class of 11 amphibious ships, the first of which the Navy wants to procure in FY2020. It was also reported that the Navy wants to limit bidding for this bundled competition to two bidders—Ingalls Shipbuilding of Huntington Ingalls Industries (HII/Ingalls) and National Steel and Shipbuilding Company of General Dynamics (GD/NASSCO)—on the grounds that these are the only two shipbuilders that have the capability to build both TAO(X)s and LHA-8.

Issues for Congress for FY2016 regarding the TAO(X) program include:

- whether to approve, reject, or modify the Navy's FY2016 request for $674.2 million for the procurement of the first TAO(X);
- whether to fund the procurement of TAO(X)s in the SCN account, as the Navy proposes, or the NDSF; and
- whether to approve, reject, or modify the Navy's proposal to bundle together the TAO(X), LHA-8, and LX(R) competitions and limit bidding in the bundled competition to HII/Ingalls and GD/NASSCO.

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Introduction

This report provides background information and issues for Congress on the TAO(X) oiler shipbuilding program, a program to build a new class of 17 fleet oilers for the Navy. The Navy wants to procure the first TAO(X) in FY2016. The Navy's proposed FY2016 budget requests $674.2 million to fully fund the procurement of the first TAO(X).

Issues for Congress for FY2016 regarding the TAO(X) program include whether to approve, reject, or modify the Navy's FY2016 request for $674.2 million for the procurement of the first TAO(X); whether to fund the procurement of TAO(X)s in the Shipbuilding and Conversion, Navy (SCN) account, as the Navy proposes, or in the National Defense Sealift Fund (NDSF); and whether to approve, reject, or modify the Navy's proposal to bundle the competition for the TAO(X) with competitions for two amphibious shipbuilding programs and limit bidding in the bundled competition to Ingalls Shipbuilding of Huntington Ingalls Industries (HII/Ingalls) and National Steel and Shipbuilding Company of General Dynamics (GD/NASSCO).

Decisions that Congress makes regarding the program could affect Navy capabilities and funding requirements and the U.S. shipbuilding industrial base.

Background

Role of Navy Fleet Oilers

The primary role of Navy fleet oilers is to transfer fuel to Navy surface ships that are operating at sea, so as to extend the operating endurance of these surface ships and their embarked aircraft. Fleet oilers also provide other surface ships with lubricants, fresh water, and small amounts of dry cargo. Fleet oilers transfer fuel and other supplies to other surface ships in operations called underway replenishments (UNREPs). During an UNREP, an oiler steams next to the receiving ship and transfers fuel by hose (see **Figure 1**, **Figure 2**, and **Figure 3**).[1]

Oilers are one kind of Navy UNREP ship; other Navy UNREP ships include ammunition ships, dry cargo ships, and multiproduct replenishment ships. The Navy's UNREP ships are known

[1] The Navy states that

> A typical connected replenishment starts when a warship makes an "approach" on a CLF ship. The CLF ship maintains steady course and speed while the "customer ship" approaches and comes alongside the CLF ship, matching course and speed. The distance between the two ships is usually between 120-200 feet. The CLF ship then passes heavy metal wires, to the customer ship, that are connected at the replenishment stations. These wires are placed under tension to support fuel hoses for refueling operations or trolleys that move pallets of provisions, ammunition, or other cargo from ship to ship. Ships with flight decks can also receive provisions and ammunition via vertical replenishment. During this evolution a helicopter transfers cargo in external sling loads, or in the case of mail or passengers, inside the helicopter.
>
> (Statement of Mr. F. Scott DiLisio, Director, Strategic Mobility / Combat Logistics Division, Office of the Chief of Naval Operations, on the Logistics and Sealift Force Requirements and Force Structure Assessment Before the House Armed Services Committee Seapower and Projection Forces Subcommittee, July 30, 2014, p. 3.)

more formally as the Navy's combat logistics force (CLF). Most of the Navy's CLF ships are operated by MSC.

Navy oilers carry the designation TAO (sometimes written as T-AO). The T means that the ships are operated by the Military Sealift Command (MSC) with a mostly-civilian crew; the A means it is an auxiliary ship of some kind; and the O means that it is, specifically, an oiler.

Figure 1. Fleet Oiler Conducting An UNREP

Source: Navy photo accessed May 5, 2014, at http://www.navy.mil/view_image.asp?id=163895. The Navy states that the photo is dated October 24, 2013, and shows the oiler *Tippecanoe* (TAO-199) extending its fuel probe to the Aegis cruiser *USS Antietam* (CG-54), a part of the George Washington (CVN-73) Carrier Strike Group, in the South China Sea.

Although the role of fleet oilers might not be considered as glamorous as that of other Navy ships, fleet oilers are critical to the Navy's ability to operate in forward-deployed areas around the world on a sustained basis. The U.S. Navy's ability to perform UNREP operations in a safe and efficient manner on a routine basis is a skill that many other navies lack. An absence of fleet oilers would significantly complicate the Navy's ability to operate at sea on a sustained basis in areas such as the Western Pacific or the Indian Ocean/Persian Gulf region. The Navy states that

> the ability to rearm, refuel and re-provision our ships at sea, independent of any restrictions placed on it by a foreign country, is critical to the Navy's ability to project warfighting power from the sea.
>
> As the lifeline of resupply to Navy operating forces underway, the ships of the Navy's Combat Logistic Force (CLF) enable Carrier Strike Groups and Amphibious Ready Groups

to operate forward and remain on station during peacetime and war, with minimal reliance on host nation support.[2]

Figure 2. Fleet Oiler Conducting an UNREP

Source: Navy photo accessed May 5, 2014, at http://www.navy.mil/view_image.asp?id=61415. The Navy states that the photo is dated July 13, 2008, and shows the oiler *Leroy Grumman* (TAO-195) refueling the frigate *Underwood* (FFG-36) during an exercise with the Iwo Jima (LHD-7) Expeditionary Strike Group in the Atlantic Ocean.

Existing Henry J. Kaiser (TAO-187) Class Oilers

The Navy's existing force of fleet oilers consists of 15 Henry J. Kaiser (TAO-187) class ships (**Figure 4**).[3] These ships were procured between FY1982 and FY1989 and entered service between 1986 and 1996. They have an expected service life of 35 years; the first ship in the class will reach that age in 2021. The ships are about 677 feet long and have a full load displacement of about 41,000 tons, including about 26,500 tons of fuel and other cargo. The ships were built by Avondale Shipyards of New Orleans, LA, a shipyard that eventually became part of the

[2] Statement of Mr. F. Scott DiLisio, Director, Strategic Mobility / Combat Logistics Division, Office of the Chief of Naval Operations, on the Logistics and Sealift Force Requirements and Force Structure Assessment Before the House Armed Services Committee Seapower and Projection Forces Subcommittee, July 30, 2014, pp. 2-3.

[3] The oilers shown in **Figure 1**, **Figure 2**, and **Figure 3** are also Kaiser-class class oilers.

shipbuilding firm Huntington Ingalls Industries (HII). HII is currently winding down Navy shipbuilding operations at Avondale and plans to have Avondale exit the Navy shipbuilding business. (HII continues to operate two other shipyards that build Navy ships.)

Figure 3. Fleet Oiler Conducting an UNREP

Source: Navy photo accessed May 5, 2014, at http://www.navy.mil/view_image.asp?id=1737. The Navy states that the photo is dated June 19, 2002, and shows the oiler *Walter S. Diehl* (TAO-193), at center, conducting simultaneous UNREPs with the aircraft carrier *John F. Kennedy* (CV-67) and the Aegis destroyer *Hopper* (DDG-70). CV-67, a conventionally powered carrier, has since retired from the Navy, and all of the Navy's aircraft carriers today are nuclear powered. Even so, Navy oilers continue to conduct UNREPs with Navy aircraft carriers to provide fuel for the carriers' embarked air wings.

TAO(X) Program

Program Quantity

The Navy envisages building 17 new TAO(X) oilers as replacements for the 15 Kaiser-class ships. In the designation TAO(X), the (X) means that the exact design of the ship has not yet been determined. The figure of 17 TAO(X)s was determined as part of a Force Structure Analysis (FSA) that the Navy completed in 2012 and presented to Congress in 2013. This FSA established a goal of achieving and maintaining a future Navy fleet of 306 battle force ships of various kinds, including 17 oilers.[4] The required number of oilers largely depends on the numbers and types of

[4] For more on the Navy's 306-ship plan, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans:* (continued...)

other surface ships (and their embarked aircraft) to be refueled, and the projected operational patterns for these ships and aircraft.

Figure 4. Henry J. Kaiser (TAO-187) Class Fleet Oiler

Source: U.S. Navy image accessed April 14, 2014, at http://www.navy.mil/management/photodb/photos/130703-N-TG831-240.jpg. (The oilers shown in **Figure 1**, **Figure 2**, and **Figure 3** are also Kaiser-class class oilers.)

Program Schedule

The Navy wants to procure the first TAO(X) in FY2016 and the remaining 16 ships at a rate of one per year during the period FY2018-FY2033.[5] If this procurement schedule were implemented, the Navy projects that the lead ship would enter service in FY2020 and that the remaining ships would enter service at a rate of one per year during the period FY2021-FY2036.

(...continued)

Background and Issues for Congress, by Ronald O'Rourke.

[5] The "gap" year in FY2017 is intended to give the Navy and the shipbuilder time to correct problems in the ship's design that are discovered in the process of building the first ship in the class, before those problems are built into succeeding ships in the class. Inserting a gap year between the first and second ships is a common practice in Navy shipbuilding programs.

Program Funding

Table 1 shows procurement funding for the TAO(X) program under the Navy's proposed FY2016 budget. The funding is located in the Navy's regular shipbuilding account, called the Shipbuilding and Conversion, Navy (SCN) account.

Table 1. TAO(X) Program Procurement Funding

(Millions of dollars, rounded to nearest tenth)

	FY15	FY16 (req.)	FY17 (proj.)	FY18 (proj.)	FY19 (proj.)	FY20 (proj.)
Procurement funding	0	674.2	0	576.8	579.2	590.6
Procurement quantity	0	1	0	1	1	1

Source: Navy FY2016 budget submission.

The estimated procurement cost of the lead ship includes detailed design/non-recurring engineering (DD/NRE) costs for the class. This one-time cost accounts for most of the difference in estimated procurement cost between the first ship and the follow-on ships. Incorporating most or all of the DD/NRE cost for a class of ship into the procurement cost of the lead ship in the class is a traditional budgeting practice for Navy shipbuilding programs.

Contracts for Trade Studies

On July 3, 2013, the Navy awarded three shipbuilding firms—General Dynamics' National Steel and Shipbuilding Company (GD/NASSCO) of San Diego, CA; HII's Ingalls Shipbuilding Division (HII/Ingalls) of Pascagoula, MS; and VT Halter Marine (VTHM) of Pascagoula, MS—contracts of $1.7 million each to conduct eight-month design trade-off studies for the TAO(X).[6] The studies informed Navy deliberations regarding the capabilities and cost of the TAO(X).

Ship Capabilities and Design

Although the design of the TAO(X) has not yet been determined in detail, the Navy anticipates that the ship will have capabilities similar to those of the Kaiser-class ships, and that the TAO(X) will rely on existing technologies rather than new technologies. To guard against oil spills, TAO(X)s are to be double-hulled, like modern commercial oil tankers, with a space between the two hulls to protect the inner hull against events that puncture the outer hull. (The final Kaiser-class ships were double-hulled, but earlier ships in the class were single-hulled.)

At an April 24, 2013, hearing on Navy and Air Force acquisition before the Seapower and Projection Forces subcommittee of the House Armed Services Committee, Sean Stackley, the Assistant Secretary of the Navy for Research, Development, and Acquisition (i.e., the Navy's acquisition executive), testified that

[6] See, for example, Megan Eckstein, "Navy Awards Three Trade-Off Industry Study Contracts For T-AO(X) Oilers," *Inside the Navy*, July 8, 2013.

> we're doing design studies leading up to the ultimate competition for procurement in 2016. We are, in fact, doing everything we can to just leverage mature technologies.
>
> There is no invention or breakthrough required for TAOX. We want to leverage commercial design to the extent practical, and we're working through those details right now, inside the building [i.e., the Pentagon], inside the process and with industry.[7]

A July 15, 2013, press report quoted Frank McCarthy, the Navy's program manager for support ships, boats, and craft, as stating that

> We know the [TAO(X)'s] basic capacities, the size, the relative speed, how much dry cargo we're going to hold, and whether it's going to be aircraft-capable or not, and how capable it's going to be.... So we do know those things, and we have tons of lessons learned from the T-AO-187 program and the [Lewis and Clark class] T-AKE [dry cargo ship] program because it's a similar mission ship in terms of being a shuttle [i.e., UNREP] ship. We've taken all those lessons learned and rolled them into the system specification, and we've involved our operators and users at Military Sealift Command to help inform the system specification.

The press report stated that the TAO(X) would have capabilities similar to the Kaiser-class ships, but that compared to the Kaiser-class design, the TAO(X) will have increased space for dry cargo, as well as a refueling capability for helicopters on its deck.[8]

At an April 10, 2014, hearing on Navy shipbuilding programs before the Seapower subcommittee of the Senate Armed Services Committee, the Navy testified that

> Research and development efforts continue as the Navy matures its concept for the replacement of the KAISER Class (T-AO 187) of Fleet Replenishment Oilers. The new replacement oilers, currently designated as T-AO(X), will be double-hulled and meet Oil Pollution Act 1990 and International Marine Pollution Regulations. Similar to the LHA(R) and LX(R) [amphibious ship acquisition] programs, T-AO(X) benefitted from early industry engagement in terms of cost/capability trade-off studies that will help to refine the ship specifications.[9]

At a July 30, 2014, hearing on logistics and sealift ships before the Seapower and Projection Forces subcommittee of the House Armed Services Committee, the Navy stated:

> Basically, we did a complete study of the current oiler base, [the] Kaiser class, to determine what pieces of the Kaiser class gave us our acceptable requirement set. We took the Kaiser class, [and] increased—increased some of the freeze chill [cargo-carrying] portions. [We] Increased the lift so we could handle a heavier lift. [We] Readdressed speed requirements so we have a ray [sic: an array] of different speed requirements that we went and looked at, which would bring you [i.e., imply] different propulsion sets.

[7] Transcript of hearing.

[8] Megan Eckstein, "TAO(X) Leverages Lessons From Recent Ship Classes, Uses Existing Tech," *Inside the Navy*, July 15, 2013.

[9] Statement of The Honorable Sean J. Stackley, Assistant Secretary of the Navy (Research, Development and Acquisition) and Vice Admiral Joseph P. Mulloy, Deputy Chief of Naval Operations for Integration of Capabilities and Resources and Vice Admiral William H. Hilardes, Commander, Naval Sea Systems Command, Before the Subcommittee on Seapower of the Senate Armed Services Committee on Department of the Navy Shipbuilding Programs, April 10, 2014, p. 16.

> So—so, basically, we're looking at what is does a carrier need to take oil? And provisions—what does the rest of the [carrier] strike group need? So, you get a strike group answer, you get an ARG answer, and then you get a—basically, a rest of the strike group answer. So, we were looking [at] kind of a middle of the road [approach]. We have a very good class of ships right now in the Kaiser class. So, we didn't have to go too far from the Kaiser class [design] to get to something that we liked [for the TAO-X requirements].
>
> Then we want to use the—the competition in the industry to take us the rest of the way with some interesting ideas on how to manage energy, get the O&S [operation and support] costs down, and—and see if we can get the number of mariners [needed to operate the ship] down, as well.
>
> So—so, basically, we're pretty happy with our current [Kaiser-class] oiler. What we're looking for is something new. Something as fast as we could get it, that could do multi-product [replenishment work], and continue the workforce development that we currently enjoy.[10]

January 2015 Report of Bundled Competition Limited to Two Builders

It was reported in January 2015 that the Navy wants to bundle the competition for the TAO(X) program with the competition for an amphibious assault ship called LHA-8 that the Navy wants to procure in FY2017 and the competition for the LX(R) program, a program to procure a new class of 11 amphibious ships, the first of which the Navy wants to procure in FY2020. It was also reported that the Navy wants to limit bidding for this bundled competition to two bidders—Ingalls Shipbuilding of Huntington Ingalls Industries (HII/Ingalls) and National Steel and Shipbuilding Company of General Dynamics (GD/NASSCO)—on the grounds that these are the only two shipbuilders that have the capability to build both TAO(X)s and LHA-8.[11]

FY2016 Procurement Funding Request

The Navy's proposed FY2016 budget requests $674.2 million in procurement funding for the procurement of the first TAO(X). The Navy is requesting this funding in the Navy's regular shipbuilding account, called the Shipbuilding and Conversion, Navy (SCN) account, rather than in the National Defense Sealift Fund (NDSF), an account in DOD's budget that has been used in recent years for funding the construction of new DOD sealift ships and Navy auxiliary ships.

The Navy states that it is requesting procurement funding for TAO(X)s in the SCN account rather than in the NDSF because the Navy judged that it has received a signal from Congress that Congress wants to fund the procurement of TAO(X)s in the SCN account rather than the NDSF.[12] The Navy states that there were three components to this perceived signal:

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[10] Spoken remarks of F. Scott DiLisio, Director, Strategic Mobility / Combat Logistics Division, Office of the Chief of Naval Operations, during the question-and-answer portion of hearing, as shown in transcript of hearing.

[11] See Christopher P. Cavas, "Bidding for new Oiler, Amphibs to be Bundled," *Defense News*, January 30, 2015; and Lara Seligman, "Ingalls, NASSCO Will Compete For Single Contract For New Amphibs, Oiler," *Inside the Navy*, January 30, 2015 (with additional reporting by Lee Hudson).

[12] Source for this discussion: Verbal explanation provided by Navy officials to CRS following the Department of the Navy's FY2016 budget rollout briefing for the House Armed Services Committee on February 6, 2015, which CRS attended.

- Congress' decision to fund research and development work for the TAO(X) program not in the NDSF account, as the Navy had requested, but in the Navy's regular research and development account;
- Senate Appropriations Committee report language on the FY2015 DOD Appropriations Act;[13] and
- Bill language in the enacted FY2015 DOD Appropriations Act.[14]

Issues for Congress

The Navy's proposals for the TAO(X) program raise certain issues for Congress for FY2016, including those discussed below.

FY2016 Procurement Funding

One issue for Congress is whether to approve, reject, or modify the Navy's FY2016 request for $674.2 million for the procurement of the first TAO(X). Decisions on this issue could depend in

[13] S.Rept. 113-211 of July 17, 2014 on the FY2015 DOD Appropriations Act (H.R. 4870) stated (emboldening added for emphasis:

> National Defense Sealift Fund [NDSF].—In the fiscal year 2015 budget request, the Navy proposes the elimination of the National Defense Sealift Fund [NDSF], which was established in fiscal year 1993 to address shortfalls in U.S. sealift capabilities. While the Committee has lingering concerns over some previous application of NDSF funds, the Committee sees no reason to eliminate the NDSF in its entirety. Therefore, the Committee recommends retaining the NDSF and transferring funds included in the Shipbuilding and Conversion, Navy; Research, Development, Test and Evaluation, Navy; and Operation and Maintenance, Navy accounts for functions previously funded in the NDSF back into the NDSF. **The Committee directs that none of these funds may be used for the development or acquisition of ships.** (Page 245.)

[14] The paragraph in the enacted FY2015 DOD appropriations act (Division C of H.R. 83/P.L. 113-235 of December 16, 2014) that appropriates funding for the NDSF included a newly added proviso, shown below in bold:

> For National Defense Sealift Fund programs, projects, and activities, and for expenses of the National Defense Reserve Fleet, as established by section 11 of the Merchant Ship Sales Act of 1946 (50 U.S.C. App. 1744), and for the necessary expenses to maintain and preserve a U.S.-flag merchant fleet to serve the national security needs of the United States, $485,012,000, to remain available until expended: *Provided*, That none of the funds provided in this paragraph shall be used to award a new contract that provides for the acquisition of any of the following major components unless such components are manufactured in the United States: auxiliary equipment, including pumps, for all shipboard services; propulsion system components (engines, reduction gears, and propellers); shipboard cranes; and spreaders for shipboard cranes: *Provided further*, That the exercise of an option in a contract awarded through the obligation of previously appropriated funds shall not be considered to be the award of a new contract: ***Provided further*, That none of the funds provided in this paragraph shall be used to award a new contract for the construction, acquisition, or conversion of vessels, including procurement of critical, long lead time components and designs for vessels to be constructed or converted in the future:** *Provided further*, That the Secretary of the military department responsible for such procurement may waive the restrictions in the first proviso on a case-by-case basis by certifying in writing to the Committees on Appropriations of the House of Representatives and the Senate that adequate domestic supplies are not available to meet Department of Defense requirements on a timely basis and that such an acquisition must be made in order to acquire capability for national security purposes.

part on assessments as to whether the Navy has accurately estimated the procurement cost of the first TAO(X).

Whether to Fund Procurement of TAO(X)s in SCN account or NDSF

A second issue for Congress is whether to fund the procurement of TAO(X)s in the Navy's regular shipbuilding account, called the Shipbuilding and Conversion, Navy (SCN) account, or in the National Defense Sealift Fund (NDSF), an account in DOD's budget that has been used in recent years for funding the construction of new DOD sealift ships and Navy auxiliary ships. As noted above, the Navy's FY2016 budget submission proposes funding the procurement of the ships in the SCN account.

The NDSF was established by the FY1993 Defense Authorization Act, as amended by the FY1993 Defense Appropriations Act, to fund the construction of Department of Defense (DOD) sealift ships.[15] The provision in the U.S. Code governing the NDSF (10 U.S.C. 2218) was amended in 1999 to, among other things, permit the NDSF to also be used for the construction of CLF ships and other auxiliary support ships.[16] Consistent with congressional views expressed in committee reports on the FY2001 Defense Authorization Bill, the NDSF since FY2003 has been used to fund the construction of Navy auxiliaries.[17] The NDSF was established and later amended in large part so that DOD sealift ships and Navy auxiliary ships would not have to compete directly against Navy combat ships for finite shipbuilding funds in the SCN account.

In considering whether to fund the procurement of TAO(X)s in the SCN account of the NDSF, issues that Congress may consider include differences in how shipbuilding funds in the two accounts may be used, and differences in U.S. content requirements for ships funded through the two accounts.

Use of Funds

The NDSF is located in a part of the DOD budget that is outside the procurement title of the annual DOD appropriations act. Consequently, ships whose construction is funded through the

[15] Section 1024 of the FY1993 Defense Authorization Act (H.R. 5006/P.L. 102-484 of October 23, 1992; see pages 178-181 of H.Rept. 102-966 of October 1, 1992, the conference report on the act), as amended by Title V of the FY1993 Defense Appropriations Act (H.R. 5504/P.L. 102-396 of October 6, 1992). Although P.L. 102-396 was signed into law before P.L. 102-484, the paragraph on the NDSF in Title V of P.L. 102-396 states: "That for purposes of this paragraph, this Act shall be treated as having been enacted after the National Defense Authorization Act for Fiscal Year 1993 (regardless of the actual dates of enactment)."

[16] Section 1014(b) of the FY2000 39 Defense Authorization Act (S. 1059/P.L. 106-65 of October 5, 1999; see pages 792-793 of H.Rept. 106-301 of August 6 (legislative day, August 5), 1999, the conference report on the act).

[17] See H.Rept. 106-616 of May 12, 2000, the House Armed Services Committee report on the FY2001 Defense Authorization Bill (H.R. 4205), page 89; S.Rept. 106-292 of May 12, 2000, the Senate Armed Services Committee report on the FY2001 Defense Authorization Bill (S. 2549), page 93. See also H.Rept. 106-945 of October 6, 2000, the conference report on the FY2001 Defense Authorization Act (H.R. 4205/P.L. 106-398 of October 30, 2000), page 35 (§127).

For an earlier discussion of the issue of the changing composition of the SCN account, including the transfer to the NDSF of ships previously funded in the SCN account, see Statement of Ronald O'Rourke, Specialist in National Defense, Congressional Research Service, before the House Armed Services Committee Subcommittee on Military Procurement hearing on The Navy's Proposed Shipbuilding Program for FY2003, March 20, 2002, pp. CRS-20 to CRS-23.

NDSF are not subject to the DOD full funding policy in the same way as are ships and other DOD procurement programs that are funded through the procurement title of the annual DOD appropriations act.[18] In explaining the use of NDSF funding, DOD in 1995 stated:

> The National Defense Sealift Fund (NDSF) is not a procurement appropriation but a revolving fund. Dollars appropriated by Congress for the fund are not appropriated to purchase specific hulls as in the case of, for example the Navy's DDG-51 [destroyer] program. Rather, dollars made available to the NDSF are executed on an oldest money first basis. Therefore, full funding provisions as normally understood for ship acquisition do not apply.[19]

For NDSF-funded ships, what this has meant is that although Congress in a given year would nominally fund the construction of an individual ship of a certain class, the Navy in practice could allocate that amount across multiple ships in that class. This is what happened with both the NDSF-funded Lewis and Clark (TAKE-1) class dry cargo ships and, before that, an NDSF-funded class of DOD sealift ships called Large, Medium-Speed Roll-on/Roll-off (LMSR) ships. In both cases, the result was that although ships in these two programs were each nominally fully funded in a single year, they in fact had their construction financed with funds from amounts that were nominally appropriated in other fiscal years for other ships in the class.[20]

The Navy's ability to use NDSF funds in this manner permits the Navy to, among other things, marginally reduce the procurement cost of ships funded through the NDSF by batch-ordering certain components of multiple ships in a shipbuilding program before some of the ships in question are funded—something that the Navy cannot do with a shipbuilding program funded through the SCN account unless the Navy receives approval from Congress to execute the program through a multiyear procurement (MYP) contract.[21]

U.S. Content

In recent years, the paragraph in the annual DOD appropriations act that appropriates funds for the NDSF has contained a provision that states:

> *Provided*, That none of the funds provided in this paragraph shall be used to award a new contract that provides for the acquisition of any of the following major components unless such components are manufactured in the United States: auxiliary equipment, including

[18] For more on the full funding policy, see CRS Report RL31404, *Defense Procurement: Full Funding Policy—Background, Issues, and Options for Congress*, by Ronald O'Rourke and Stephen Daggett.

[19] DOD information paper on strategic sealift acquisition program provided to CRS by U.S. Navy Office of Legislative Affairs, January 25, 1995, p. 1. For additional discussion, see the subsection entitled "DOD Sealift and Auxiliary Ships in NDSF" in the Background section of CRS Report RL31404, *Defense Procurement: Full Funding Policy—Background, Issues, and Options for Congress*. For a similar discussion, see the section entitled "DOD LMSR-Type Sealift Ships" in Appendix C to CRS Report RL32776, *Navy Ship Procurement: Alternative Funding Approaches—Background and Options for Congress*, by Ronald O'Rourke.

[20] This situation can be summarized in a funding matrix of hulls vs. funding sources of the kind shown for the LMSR program in Table 1 on page CRS-6 of CRS Report 96-257 F*, Sealift (LMSR) Shipbuilding and Conversion Program: Background and Status*, by Valerie Bailey Grasso. This report is out of print and is available from Ronald O'Rourke.

[21] For more on MYP contracting, including batch-ordering of components, see CRS Report R41909, *Multiyear Procurement (MYP) and Block Buy Contracting in Defense Acquisition: Background and Issues for Congress*, by Ronald O'Rourke and Moshe Schwartz. For programs being executed under MYP contracts, the batch orders of components are referred to as Economic Order Quantity (EOQ) procurements.

> pumps, for all shipboard services; propulsion system components (engines, reduction gears, and propellers); shipboard cranes; and spreaders for shipboard cranes....

The paragraph in the annual DOD appropriations act that appropriates funds for the SCN account does not contain exactly the same provision.[22] During Congress' consideration of the Navy's proposed FY2015 budget (which proposed disestablishing the NDSF—a proposal that Congress did not agree to), this led to concern among firms that manufacture the ship components listed in the above provision, and among supporters of those firms, that disestablishing the NDSF and shifting the execution of the TAO(X) program and other future auxiliary and sealift shipbuilding programs from the NDSF to the SCN account would lead to the Navy possibly selecting foreign firms rather than U.S. firms to make these components for the TAO(X) program and other future auxiliary and sealift shipbuilding programs, unless the paragraph in the annual DOD appropriations act that appropriates funds for the SCN account were amended to include a provision with the same key wording as the provision in the paragraph that appropriates funds for the NDSF.[23]

Navy's Proposal For Bundled Competition Limited to Two Builders

A third issue for Congress is whether to approve, reject, or modify the Navy's proposal to bundle together the TAO(X), LHA-8, and LX(R) competitions and limit bidding in the bundled competition to HII/Ingalls and GD/NASSCO. Potential matters to consider include the Navy's rationale for bundling the competitions (which may relate, in part at least, to achieving effective competition in the bidding for all of the programs being bundled) and the potential impact on various shipyards of the Navy's proposal to limit bidding to HII/Ingalls and GD/NASSCO.

Legislative Activity for FY2016

FY2016 Budget

The Navy's proposed FY2016 budget requests $674.2 million in procurement funding in the SCN account for the procurement of the first TAO(X).

[22] The SCN account includes a provision that states: "*Provided further*, That none of the funds provided under this heading for the construction or conversion of any naval vessel to be constructed in shipyards in the United States shall be expended in foreign facilities for the construction of major components of such vessel ... " This provision does not define "major components" and does not specifically mention "auxiliary equipment, including pumps, for all shipboard services; propulsion system components (engines, reduction gears, and propellers); shipboard cranes; and spreaders for shipboard cranes," as does the paragraph that appropriates funds for the NDSF.

[23] Lara Seligman, "Suppliers: Navy's Plan Could Open TAO(X) Parts To Foreign Manufacturers," *Inside the Navy*, November 14, 2014; Sydney J. Freedberg Jr., "Engine Maker 'At Risk;' Wants Navy Help," *Breaking Defense (*http://breakingdefense.com*)*, November 14, 2014; Philip Ewing, "Engine Maker: Navy Should Stick With U.S.-Made," *Politico Pro Defense*, November 13, 2014.

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