

**H.R. 4350—FY22 NATIONAL DEFENSE
AUTHORIZATION BILL**

**SUBCOMMITTEE ON SEAPOWER AND
PROJECTION FORCES**

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DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE I—PROCUREMENT

LEGISLATIVE PROVISIONS

SUBTITLE C—NAVY PROGRAMS

Section 1XX—Inclusion of Basic and Functional Design in Assessments Required Prior to Start of Construction on First Ship of a Shipbuilding Program

This section would amend section 124 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110-181) and would require the Secretary of the Navy to ensure that certain levels of design maturity are met before funds can be authorized or appropriated for a first of a class naval vessel.

Section 1XX—Incorporation of Advanced Degaussing Systems into DDG-51 Class Destroyers

This section would require the Secretary of the Navy to ensure that an advanced degaussing system is incorporated into the contract for the next multiyear procurement contract for the DDG-51 Flight III.

SUBTITLE D—AIR FORCE PROGRAMS

Section 1xx—Limitation on Availability of Funds for the B-52 Commercial Engine Replacement Program

This section would set a cost baseline for the B-52 Commercial Engine Replacement Program.

Section 1xx—Inventory Requirements and Limitations Relating to Certain Air Refueling Tanker Aircraft

This section would address KC-135 and KC-10 retirements and limit the Air Force from moving KC-135 from Primary Mission Aircraft Inventory to Backup Aircraft Inventory in the Air Force Guard and Reserve.

Section 1xx—Minimum Inventory of Tactical Airlift Aircraft and Limitation on Modification of Air National Guard Tactical Airlift Flying Missions

This section would require the Secretary of the Air Force to retain a minimum of 287 C-130 aircraft.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

LEGISLATIVE PROVISIONS

SUBTITLE B—PROGRAM REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

Section 2XX—Test Program for Engineering Plant of DDG(X) Destroyer Vessels

This section would require the Navy to initiate a land-based test site prior to the start of construction of the DDG(X) destroyer program.

Section 2XX—Limitation on Availability of Funds for Certain C-130 Aircraft

This section would limit funds for the E-6B recapitalization until the Secretary of the Navy submits a report to the congressional defense committees with more information.

Section 2XX—Limitation on Availability of Funds for VC-25B Aircraft Program Pending Submission of Documentation

This section would limit funds for the VC-25B Presidential aircraft until the Secretary of the Air Force submits an updated schedule.

TITLE VIII—ACQUISITION POLICY, ACQUISITION MANAGEMENT, AND RELATED MATTERS

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SUBTITLE B—AMENDMENTS TO GENERAL CONTRACTING AUTHORITIES, PROCEDURES, AND LIMITATIONS

Section 8XX—Limitation on Procurement of Welded Shipboard Anchor and Mooring Chain for Naval Vessels

This section would amend section 2534 of title 10, United States Code, to require that all shipboard anchor chains be manufactured in the national technology and industrial base.

TITLE X—GENERAL PROVISIONS

LEGISLATIVE PROVISIONS

SUBTITLE B—NAVAL VESSELS

Section 10XX—Critical Components of National Sea-Based Deterrence Vessels

This section would add additional components to the continuous production authority that resides within the National Sea-Based Deterrence Fund.

Section 10XX—Revision of Sustainment Key Performance Parameters for Shipbuilding Programs

This section would require the Secretary of the Navy to include sustainment and lifecycle planning as a key performance parameter in any new ship class.

Section 10XX—Prohibition on Use of Funds for Retirement of Mark VI Patrol Boats

This section would prohibit the Secretary of the Navy from retiring any Mark VI patrol boat in fiscal year 2022. This section would also require the Secretary of the Navy to provide a report on the Mark VI patrol boat.

Section 10XX—Assessment of Security of Global Maritime Chokepoints

This section would require the Secretary of Defense to provide a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act on the security of all global maritime chokepoints.

SUBTITLE D—MISCELLANEOUS AUTHORITIES AND LIMITATIONS

Section 10XX—Navy Coordination with Coast Guard on Aircraft, Weapons, Tactics, Technique, Organization, and Equipment of Joint Concern

This section would amend section 8062(d) of title 10, United States Code, and would establish the United States Coast Guard as a matter of joint concern to the Navy.

**DIVISION C—DEPARTMENT OF ENERGY NATIONAL
SECURITY AUTHORIZATIONS AND OTHER
AUTHORIZATIONS**

TITLE XXXV—MARITIME ADMINISTRATION

LEGISLATIVE PROVISIONS

Subtitle A—Maritime Administration

Section 3501—Authorization of the Maritime Administration

This section would authorize appropriations for the Maritime Administration.

Section 3502—Maritime Administration

This section would make a conforming amendment to section 109 of title 49, United States Code.

SUBTITLE B—OTHER MATTERS

Section 3512—America's Marine Highway Program

This section would amend section 55601 of title 46, United States Code, and would require the Secretary of Transportation to establish a marine highway program.

Section 3513—Committees on Maritime Matters

This section would make various conforming amendments to section 8332(b)(1) of the Elijah E. Cummings Coast Guard Authorization Act of 2020 (division G of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283)).

Section 3514—Port Infrastructure Development Program

This section would make various conforming amendments to the Port Infrastructure Development Program.

Section 3515—Uses of Emerging Marine Technologies and Practices

This section would amend section 50307 of title 46, United States Code, and would designate the uses of emerging marine technologies and practices.

BILL LANGUAGE

1 **SEC. 1___ [Log 73314]. INCLUSION OF BASIC AND FUNC-**
2 **TIONAL DESIGN IN ASSESSMENTS REQUIRED**
3 **PRIOR TO START OF CONSTRUCTION ON**
4 **FIRST SHIP OF A SHIPBUILDING PROGRAM.**

5 Section 124 of the National Defense Authorization
6 Act for Fiscal Year 2008 (Public Law 110–181; 122 Stat.
7 28; 10 U.S.C. 8661 note) is amended—

8 (1) in subsection (a)—

9 (A) in the matter preceding paragraph (1),
10 by striking “Concurrent with approving the
11 start of construction of the first ship for any
12 major shipbuilding program, the Secretary of
13 the Navy shall” and inserting “The Secretary
14 of the Navy may not enter into a contract for
15 the construction of the first ship for any major
16 shipbuilding program until a period of 30 days
17 has elapsed following the date on which the
18 Secretary”;

19 (B) in paragraph (1)—

20 (i) by striking “submit” and inserting
21 “submits”; and

22 (ii) by striking “and” at the end;

23 (C) in paragraph (2)—

1 (i) by striking “certify” and inserting
2 “certifies”; and

3 (ii) by striking the period at the end
4 and inserting “; and”; and

5 (D) by adding at the end the following new
6 paragraph:

7 “(3) certifies to the congressional defense com-
8 mittees that the basic and functional design of the
9 vessel is complete.”; and

10 (2) in subsection (d), by adding at the end the
11 following new paragraph:

12 “(5) BASIC AND FUNCTIONAL DESIGN.—The
13 term ‘basic and functional design’, when used with
14 respect to a vessel, means design through computer-
15 aided models, that—

16 “(A) fixes the hull structure of the vessel;

17 “(B) sets the hydrodynamics of the vessel;

18 “(C) routes all major distributive systems
19 of the vessel, including electricity, water, and
20 other utilities; and

21 “(D) identifies the exact positioning of pip-
22 ing and other outfitting within each block of the
23 vessel.”.

1 **SEC. 1** **[Log 73090]. INCORPORATION OF ADVANCED**
2 **DEGAUSSING SYSTEMS INTO DDG-51 CLASS**
3 **DESTROYERS.**

4 (a) **IN GENERAL.**—The Secretary of the Navy shall
5 ensure that an advanced degaussing system is incor-
6 porated into any DDG-51 class destroyer procured pursu-
7 ant to a covered contract.

8 (b) **COVERED CONTRACT DEFINED.**—In this section,
9 the term “covered contract” means a multiyear contract
10 for the procurement of a DDG-51 destroyer that is en-
11 tered into by the Secretary of the Navy on or after the
12 date of the enactment of this Act.

1 **SEC. 1** **[Log 73464]. LIMITATION ON AVAILABILITY OF**
2 **FUNDS FOR THE B-52 COMMERCIAL ENGINE**
3 **REPLACEMENT PROGRAM.**

4 (a) **LIMITATION.**—None of the funds authorized to
5 be appropriated by this Act or otherwise made available
6 for fiscal year 2022 for the research and development, de-
7 sign, procurement, or advanced procurement of materials
8 for the B-52 Commercial Engine Replacement Program
9 may be obligated or expended until the date on which the
10 Secretary of Defense submits to the congressional defense
11 committees the report described in section 2432 of title
12 10, United States Code, for the most recently concluded
13 fiscal quarter for the B-52 Commercial Engine Replace-
14 ment Program in accordance with subsection (b)(1).

15 (b) **ADDITIONAL REQUIREMENTS.**—

16 (1) **TREATMENT OF BASELINE ESTIMATE.**—The
17 Secretary of Defense shall deem the Baseline Esti-
18 mate for the B-52 Commercial Engine Replacement
19 Program for fiscal year 2018 as the original Base-
20 line Estimate for the Program.

21 (2) **UNIT COST REPORTS AND CRITICAL COST**
22 **GROWTH.**—

23 (A) Subject to subparagraph (B), the Sec-
24 retary shall carry out sections 2433 and 2433a

1 of title 10, United States Code, with respect to
2 the B-52 Commercial Engine Replacement Pro-
3 gram, as if the Department had submitted a
4 Selected Acquisition Report for the Program
5 that included the Baseline Estimate for the
6 Program for fiscal year 2018 as the original
7 Baseline Estimate, except that the Secretary
8 shall not carry out subparagraph (B) or sub-
9 paragraph (C) of section 2433a(c)(1) of such
10 title with respect to the Program.

11 (B) In carrying out the review required by
12 section 2433a of such title, the Secretary shall
13 not enter into a transaction under section 2371
14 or 2371b of such title, exercise an option under
15 such a transaction, or otherwise extend such a
16 transaction with respect to the B-52 Commer-
17 cial Engine Replacement Program except to the
18 extent determined necessary by the milestone
19 decision authority, on a non-delegable basis, to
20 ensure that the program can be restructured as
21 intended by the Secretary without unnecessarily
22 wasting resources.

23 (c) DEFINITIONS.—In this section:

1 (1) The term “Baseline Estimate” has the
2 meaning given the term in section 2433(a)(2) of title
3 10, United States Code.

4 (2) The term “milestone decision authority”
5 has the meaning given the term in section
6 2366b(g)(3) of title 10, United States Code.

7 (3) The term “original Baseline Estimate” has
8 the meaning given the term in section 2435(d)(1) of
9 title 10, United States Code.

10 (4) The term “Selected Acquisition Report”
11 means a Selected Acquisition Report submitted to
12 Congress under section 2432 of title 10, United
13 States Code.

1 **SEC. 1** **[Log 72825]. INVENTORY REQUIREMENTS AND**
2 **LIMITATIONS RELATING TO CERTAIN AIR RE-**
3 **FUELING TANKER AIRCRAFT.**

4 (a) **MINIMUM INVENTORY REQUIREMENTS FOR KC-**
5 **10A AIRCRAFT.—**

6 (1) **FISCAL YEAR 2022.—**During the period be-
7 ginning on October 1, 2021, and ending on October
8 1, 2022, the Secretary of the Air Force shall, except
9 as provided in paragraph (3), maintain a minimum
10 of 36 KC-10A aircraft designated as primary mis-
11 sion aircraft inventory.

12 (2) **FISCAL YEAR 2023.—**During the period be-
13 ginning on October 1, 2022, and ending on October
14 1, 2023, the Secretary of the Air Force shall, except
15 as provided in paragraph (3), maintain a minimum
16 of 24 KC-10A aircraft designated as primary mis-
17 sion aircraft inventory.

18 (3) **EXCEPTION.—**The requirements of para-
19 graphs (1) and (2) shall not apply to individual KC-
20 10A aircraft that the Secretary of the Air Force de-
21 termines, on a case-by-case basis, to be no longer
22 mission capable because of mishaps, other damage,
23 or being uneconomical to repair.

1 (b) LIMITATION ON RETIREMENT OF KC–135 AIR-
2 CRAFT.—

3 (1) LIMITATION.—Except as provided in para-
4 graph (2), the Secretary of the Air Force may not
5 retire more than 18 KC–135 aircraft during the pe-
6 riod beginning on the date of the enactment of this
7 Act and ending on October 1, 2023.

8 (2) EXCEPTION.—The limitation in paragraph
9 (1) shall not apply to individual KC–135 aircraft
10 that the Secretary of the Air Force determines, on
11 a case-by-case basis, to be no longer mission capable
12 because of mishaps, other damage, or being uneco-
13 nomical to repair.

14 (c) PROHIBITION ON REDUCTION OF KC–135 AIR-
15 CRAFT IN PMAI OF THE RESERVE COMPONENTS.—None
16 of the funds authorized to be appropriated by this Act or
17 otherwise made available for fiscal year 2022 for the Air
18 Force may be obligated or expended to reduce the number
19 of KC–135 aircraft designated as primary mission aircraft
20 inventory within the reserve components of the Air Force.

21 (d) PRIMARY MISSION AIRCRAFT INVENTORY DE-
22 FINED.—In this section, the term “primary mission air-
23 craft inventory” has the meaning given that term in sec-
24 tion 9062(i)(2)(B) of title 10, United States Code.

1 **SEC. 1** [Log 72826]. **MINIMUM INVENTORY OF TACTICAL**
2 **AIRLIFT AIRCRAFT AND LIMITATION ON**
3 **MODIFICATION OF AIR NATIONAL GUARD**
4 **TACTICAL AIRLIFT FLYING MISSIONS.**

5 (a) **MINIMUM INVENTORY REQUIREMENT.**—During
6 the period beginning on October 1, 2021, and ending on
7 October 1, 2026, the Secretary of the Air Force shall
8 maintain a total inventory of tactical airlift aircraft of not
9 less than 287 aircraft.

10 (b) **LIMITATION ON MODIFICATION OF AIR NA-**
11 **TIONAL GUARD TACTICAL AIRLIFT FLYING MISSIONS.**—
12 The Secretary of the Air Force may not modify the flying
13 mission of a tactical airlift unit of the Air National Guard
14 unless—

15 (1) the Secretary and the Governor of the State
16 concerned agree, in writing, to such modification;
17 and

18 (2) the Secretary submits to the congressional
19 defense committees a copy of such agreement to-
20 gether with an explanation of the reasons for such
21 modification.

1 **SEC. 2** [Log 73385]. **TEST PROGRAM FOR ENGINEERING**

2 **PLANT OF DDG(X) DESTROYER VESSELS.**

3 (a) **TEST PROGRAM REQUIRED.**—During the detailed
4 design period and prior to the construction start date of
5 the lead ship in the DDG(X) destroyer class of vessels,
6 the Secretary of the Navy shall commence a land-based
7 test program for the engineering plant of such class of
8 vessels.

9 (b) **ADMINISTRATION.**—The test program required by
10 subsection (a) shall be administered by the Senior Tech-
11 nical Authority for the DDG(X) destroyer class of vessels.

12 (c) **ELEMENTS.**—The test program required by sub-
13 section (a) shall include, at a minimum, testing of the fol-
14 lowing equipment in vessel-representative form:

- 15 (1) Main reduction gear.
- 16 (2) Electrical propulsion motors.
- 17 (3) Other propulsion drive train components.
- 18 (4) Main propulsion system.
- 19 (5) Auxiliary propulsion unit.
- 20 (6) Electrical generation and distribution sys-
21 tems.
- 22 (7) Shipboard control systems.
- 23 (8) Power control modules.

1 (d) TEST OBJECTIVES.—The test program required
2 by subsection (a) shall include, at a minimum, the fol-
3 lowing test objectives demonstrated across the full range
4 of engineering plant operations for the DDG(X) destroyer
5 class of vessels:

6 (1) Test of the full propulsion drive train.

7 (2) Test and facilitation of machinery control
8 systems integration.

9 (3) Simulation of the full range of electrical de-
10 mands to enable the investigation of load dynamics
11 between the hull, mechanical and electrical equip-
12 ment, the combat system, and auxiliary equipment.

13 (e) COMPLETION DATE.—The Secretary of the Navy
14 shall complete the test program required by subsection (a)
15 by not later than the delivery date of the lead ship in the
16 DDG(X) destroyer class of vessels.

17 (f) DEFINITIONS.—In this section:

18 (1) DELIVERY DATE.—The term “delivery
19 date” has the meaning given that term in section
20 8671 of title 10, United States Code.

21 (2) SENIOR TECHNICAL AUTHORITY.—The term
22 “Senior Technical Authority” means the official des-
23 ignated as the Senior Technical Authority for the
24 DDG(X) destroyer class of vessels pursuant to sec-
25 tion 8669b of title 10, United States Code.

1 **SEC. 2** **[Log 73509]. LIMITATION ON AVAILABILITY OF**
2 **FUNDS FOR CERTAIN C-130 AIRCRAFT.**

3 None of the funds authorized to be appropriated by
4 this Act or otherwise made available for fiscal year 2022
5 for the Navy may be obligated or expended to procure a
6 C-130 aircraft for testing and evaluation as a potential
7 replacement for the E-6B aircraft until the date on which
8 the Secretary of the Navy submits to the congressional
9 defense committees a report that includes the following in-
10 formation:

11 (1) The unit cost of each such C-130 test air-
12 craft.

13 (2) The life cycle sustainment plan for such C-
14 130 aircraft.

15 (3) A statement indicating whether such C-130
16 aircraft will be procured using multiyear contracting
17 authority under section 2306b of title 10, United
18 States Code.

19 (4) The total amount of funds needed to com-
20 plete the procurement of such C-130 aircraft.

1 **SEC. 2** **[Log 73443]. LIMITATION ON AVAILABILITY OF**
2 **FUNDS FOR VC-25B AIRCRAFT PROGRAM**
3 **PENDING SUBMISSION OF DOCUMENTATION.**

4 (a) DOCUMENTATION REQUIRED.—The Secretary of
5 the Air Force shall submit to the congressional defense
6 committees an integrated master schedule for the VC-25B
7 presidential aircraft recapitalization program of the Air
8 Force.

9 (b) LIMITATION.—Of the funds authorized to be ap-
10 propriated by this Act or otherwise made available for fis-
11 cal year 2022 for the Air Force for the VC-25B aircraft,
12 not more than 50 percent may be obligated or expended
13 until the date on which the Secretary of the Air Force
14 submits to the congressional defense committees the docu-
15 mentation required under subsection (a).

1 **SEC. 8** ____ **[Log 73085]. LIMITATION ON PROCUREMENT OF**
2 **WELDED SHIPBOARD ANCHOR AND MOORING**
3 **CHAIN FOR NAVAL VESSELS.**

4 Section 2534(a)(2) of title 10, United States Code,
5 is amended by adding at the end the following new sub-
6 paragraph:

7 “(F) Welded shipboard anchor and moor-
8 ing chain.”.

1 **SEC. 10** [Log 73084]. **CRITICAL COMPONENTS OF NA-**
2 **TIONAL SEA-BASED DETERRENCE VESSELS.**

3 Section 2218a(k)(3) of title 10, United States Code,
4 is amended by adding at the end the following new sub-
5 paragraphs:

- 6 “(P) Major bulkheads and tanks.
- 7 “(Q) All major pumps and motors.
- 8 “(R) Large vertical array.
- 9 “(S) Atmosphere control equipment.
- 10 “(T) Diesel systems and components.
- 11 “(U) Hydraulic valves and components.
- 12 “(V) Bearings.
- 13 “(W) Major air and blow valves and com-
14 ponents.
- 15 “(X) Decks and superstructure.
- 16 “(Y) Castings, forgings, and tank struc-
17 ture.
- 18 “(Z) Hatches and hull penetrators.”.

1 **SEC. 10** [Log 72933]. **REVISION OF SUSTAINMENT KEY**
2 **PERFORMANCE PARAMETERS FOR SHIP-**
3 **BUILDING PROGRAMS.**

4 (a) **IN GENERAL.**—Not later than 120 days after the
5 date of the enactment of this Act, the Secretary of Defense
6 shall update the policy for the Joint Capabilities Integra-
7 tion and Development System to ensure that the guidance
8 for setting sustainment key performance parameters for
9 shipbuilding programs accounts for all factors that could
10 affect the operational availability and materiel availability
11 of a ship. Such changes shall include—

12 (1) changing the definition of “operational
13 availability” as it applies to ships so that such defi-
14 nition applies according to mission area and includes
15 all equipment failures that affect the ability of a
16 ship to perform primary missions; and

17 (2) changing the definition of “materiel avail-
18 ability” as is it applies to ships so that such defini-
19 tion takes into account all factors that could result
20 in a ship being unavailable for operations, including
21 unplanned maintenance, unplanned losses, and
22 training.

23 (b) **REPORT REQUIRED.**—Not later than 180 days
24 after the date of the enactment of this Act, the Secretary

1 of Defense shall submit to congressional defense commit-
2 tees a report on the plan of the Secretary to—

3 (1) incorporate the sustainment key perform-
4 ance parameters revised under subsection (a) into
5 the requirement documents of new and ongoing ship-
6 building programs; and

7 (2) establish a process for translating such
8 sustainment key performance parameters into spe-
9 cific contract requirements for systems engineering
10 and ship design.

11 (c) COMPTROLLER GENERAL REVIEW.—Not later
12 than one year after the Secretary of Defense submits the
13 report required under subsection (b), the Comptroller
14 General of the United States shall submit to the congres-
15 sional defense committees an assessment of such report
16 that includes an evaluation of—

17 (1) the sustainment key performance param-
18 eters for Department of Defense shipbuilding pro-
19 grams;

20 (2) how shipbuilding programs translate
21 sustainment key performance parameters into con-
22 tract requirements for systems engineering and ship
23 design activities; and

24 (3) any other matter the Comptroller General
25 determines appropriate.

1 **SEC. 10** ___ [Log 73050]. **PROHIBITION ON USE OF FUNDS**
2 **FOR RETIREMENT OF MARK VI PATROL**
3 **BOATS.**

4 (a) **PROHIBITION.**—None of the funds authorized to
5 be appropriated by this Act or otherwise made available
6 for fiscal year 2022 for the Navy may be obligated or ex-
7 pended to retire, prepare to retire, or place in storage any
8 Mark VI patrol boat.

9 (b) **REPORT.**—Not later than February 15, 2022, the
10 Secretary of the Navy, in consultation with the Com-
11 mandant of the Marine Corps, shall submit to the congres-
12 sional defense committees a report that includes each of
13 the following:

14 (1) The rationale for the retirement of existing
15 Mark VI patrol boats, including an operational anal-
16 ysis of the effect of such retirements on the
17 warfighting requirements of the combatant com-
18 manders.

19 (2) A review of operating concepts for escorting
20 high value units without the Mark VI patrol boat.

21 (3) A description of the manner and concept of
22 operations in which the Marine Corps could use the
23 Mark VI patrol boat to support distributed maritime
24 operations, advanced expeditionary basing oper-

1 ations, and persistent presence near maritime choke
2 points and strategic littorals in the Indo-Pacific re-
3 gion.

4 (4) An assessment of the potential for modifica-
5 tion, and the associated costs, of the Mark VI patrol
6 boat for the inclusion of loitering munitions or anti-
7 ship cruise missiles, such as the Long Range Anti
8 Ship Missile and the Naval Strike Missile, particu-
9 larly to support the concept of operations described
10 in paragraph (3).

11 (5) A description of resources required for the
12 Marine Corps to possess, man, train, and maintain
13 the Mark VI patrol boat in the performance of the
14 concept of operations described in paragraph (3) and
15 modifications described in paragraph (4).

16 (6) At the discretion of the Commandant of the
17 Marine Corps, a plan for the Marine Corps to take
18 possession of the Mark VI patrol boat not later than
19 September 30, 2022.

20 (7) Such other matters the Secretary deter-
21 mines appropriate.

1 **SEC. 10** [Log 73383]. **ASSESSMENT OF SECURITY OF**
2 **GLOBAL MARITIME CHOKEPOINTS.**

3 (a) **IN GENERAL.**—Not later than 180 days after the
4 date of the enactment of this Act, the Secretary of Defense
5 shall submit to the congressional defense committees a re-
6 port on the security of global maritime chokepoints from
7 the threat of hostile kinetic attacks, cyber disruptions, and
8 other form of sabotage. The report shall include an assess-
9 ment of each of the following with respect to each global
10 maritime chokepoint covered by the report:

11 (1) The expected length of time and resources
12 required for operations to resume at the chokepoint
13 in the event of attack, sabotage, or other disruption
14 of regular maritime operations.

15 (2) The security of any secondary chokepoint
16 that could be affected by a disruption at the global
17 maritime chokepoint.

18 (3) Options to mitigate any vulnerabilities re-
19 sulting from a hostile kinetic attack, cyber disrup-
20 tion, or other form of sabotage at the chokepoint.

21 (b) **FORM OF REPORT.**—The report required by sub-
22 section (a) shall be submitted in unclassified form, but
23 may contain a classified annex.

1 (c) GLOBAL MARITIME CHOKEPOINT.—In this sec-
2 tion, the term “global maritime chokepoint” means any
3 of the following:

4 (1) The Panama Canal.

5 (2) The Suez Canal.

6 (3) The Strait of Malacca.

7 (4) The Strait of Hormuz.

8 (5) Any other chokepoint determined appro-
9 priate by the Secretary.

1 **SEC. 10** [Log 73438]. **NAVY COORDINATION WITH COAST**
2 **GUARD ON AIRCRAFT, WEAPONS, TACTICS,**
3 **TECHNIQUE, ORGANIZATION, AND EQUIP-**
4 **MENT OF JOINT CONCERN.**

5 Section 8062(d) of title 10, United States Code, is
6 amended by inserting “the Coast Guard,” after “the Air
7 Force,”.

1 **Subtitle A—Maritime**
2 **Administration**

3 **SEC. 3501[Log 72947]. AUTHORIZATION OF THE MARITIME**
4 **ADMINISTRATION.**

5 (a) IN GENERAL.—There are authorized to be appro-
6 priated to the Department of Transportation for fiscal
7 year 2022, to be available without fiscal year limitation
8 if so provided in appropriations Acts, for programs associ-
9 ated with maintaining the United States merchant marine,
10 the following amounts:

11 (1) For expenses necessary for operations of the
12 United States Merchant Marine Academy,
13 \$90,532,000, of which—

14 (A) \$85,032,000 shall be for Academy op-
15 erations; and

16 (B) \$5,500,000 shall remain available until
17 expended for capital asset management at the
18 Academy.

19 (2) For expenses necessary to support the State
20 maritime academies, \$358,300,000, of which—

21 (A) \$2,400,000 shall remain available until
22 September 30, 2026, for the Student Incentive
23 Program; and

1 (B) \$30,500,000 shall remain available
2 until expended for maintenance and repair of
3 State maritime academy training vessels.

4 (3) For expenses necessary to support the Na-
5 tional Security Multi-Mission Vessel Program,
6 \$315,600,000, which shall remain available until ex-
7 pended.

8 (4) For expenses necessary to support Maritime
9 Administration operations and programs,
10 \$60,853,000.

11 (5) For expenses necessary to dispose of vessels
12 in the National Defense Reserve Fleet, \$10,000,000,
13 which shall remain available until expended.

14 (6) For expenses necessary to maintain and
15 preserve a United States flag merchant marine to
16 serve the national security needs of the United
17 States under chapter 531 of title 46, United States
18 Code, \$318,000,000.

19 (7) For expenses necessary for the loan guar-
20 antee program authorized under chapter 537 of title
21 46, United States Code, \$33,000,000, of which—

22 (A) \$30,000,000 may be used for the cost
23 (as defined in section 502(5) of the Federal
24 Credit Reform Act of 1990 (2 U.S.C. 661a(5)))
25 of loan guarantees under the program; and

1 (B) \$3,000,000 may be used for adminis-
2 trative expenses relating to loan guarantee com-
3 mitments under the program.

4 (8) For expenses necessary to provide for the
5 Tanker Security Fleet, as authorized under chapter
6 534 of title 46, United States Code, \$60,000,000, to
7 remain available until expended.

8 (9) For expenses necessary to support maritime
9 environmental and technical assistance activities au-
10 thorized under section 50307 of title 46, United
11 States Code, \$6,000,000, of which \$3,000,000 is au-
12 thorized to carry out activities related to port and
13 vessel air emission reduction technologies, including
14 zero emissions technologies; and

15 (10) For expenses necessary to support marine
16 highway program activities authorized under chapter
17 556 of such title, \$11,000,000.

18 (11) For expenses necessary to provide assist-
19 ance to small shipyards authorized under section
20 54101 of title 46, United States Code, \$20,000,000.

21 (12) For expenses necessary to support port de-
22 velopment activities authorized under subsections (a)
23 and (b) of section 54301 of such title (as added by
24 this title), \$750,000,000.

1 (b) LIMITATION.—No amounts authorized under sub-
2 section (a)(11) may be used to provide a grant to purchase
3 fully automated cargo handling equipment that is remotely
4 operated or remotely monitored with or without the exer-
5 cise of human intervention or control, if the Secretary de-
6 termines such equipment would result in a net loss of jobs
7 within a port or port terminal.

1 **SEC. 3502[Log 73638]. MARITIME ADMINISTRATION.**

2 (a) IN GENERAL.—

3 (1) Part A of subtitle V of title 46, United
4 States Code, is amended by inserting before chapter
5 501 the following:

6 **“CHAPTER 500—MARITIME**
7 **ADMINISTRATION**

“Sec.
“50001. Maritime Administration.

8 **“§ 50001. Maritime Administration”.**

9 (2) Section 109 of title 49, United States Code,
10 is redesignated as section 50001 of title 46, United
11 States Code, and transferred to appear in chapter
12 500 of such title (as added by paragraph (1)).

13 (b) CLERICAL AMENDMENTS.—

14 (1) The table of chapters for subtitle V of title
15 46, United States Code, as amended by this title, is
16 further amended by inserting before the item relat-
17 ing to chapter 501 the following:

“500. Maritime Administration50001”.

18 (2) The analysis for chapter 1 of title 49,
19 United States Code, is amended by striking the item
20 relating to section 109.

1 **SEC. 3512[Log 73510]. AMERICA'S MARINE HIGHWAY PRO-**
2 **GRAM.**

3 (a) AMERICA'S MARINE HIGHWAY PROGRAM.—Sec-
4 tion 55601 of title 46, United States Code, is amended
5 to read as follows:

6 **“§ 55601. America's marine highway program**

7 “(a) PROGRAM.—

8 “(1) IN GENERAL.—The Secretary of Transpor-
9 tation shall—

10 “(A) establish a marine highway program
11 to be known as America's marine highway pro-
12 gram;

13 “(B) designate marine highway routes
14 under subsection (c);

15 “(C) designate marine highway transpor-
16 tation projects under subsection (d); and

17 “(D) subject to the availability of appro-
18 priations, provide assistance under subsection
19 (e).

20 “(2) PROGRAM ACTIVITIES.—In carrying out
21 the marine highway program established under para-
22 graph (1), the Secretary may—

23 “(A) coordinate with ports, State depart-
24 ments of transportation, localities, other public
25 agencies, and the private sector on the develop-

1 ment of landside facilities and infrastructure to
2 support marine highway transportation;

3 “(B) develop performance measures for
4 such marine highway program;

5 “(C) collect and disseminate data for the
6 designation and delineation of marine highway
7 transportation routes under subsection (c); and

8 “(D) conduct research on solutions to im-
9 pediments to marine highway transportation
10 projects designated under subsection (d).

11 “(b) CRITERIA.—Routes designated under subsection
12 (c) and projects designated under subsection (d) shall—

13 “(1) provide a coordinated and capable alter-
14 native to landside transportation;

15 “(2) mitigate or relieve landside congestion; or

16 “(3) promote marine highway transportation.

17 “(c) MARINE HIGHWAY TRANSPORTATION
18 ROUTES.—The Secretary shall designate marine highway
19 transportation routes that meet the criteria established in
20 subsection (b) as extensions of the surface transportation
21 system.

22 “(d) PROJECT DESIGNATION.—The Secretary may
23 designate a project that meets the criteria established in
24 subsection (b) to be a marine highway transportation

1 project if the Secretary determines that such project uses
2 vessels documented under chapter 121 and—

3 “(1) develops, expands or promotes—

4 “(A) marine highway transportation serv-
5 ices;

6 “(B) shipper utilization of marine highway
7 transportation; or

8 “(C) port and landside infrastructure for
9 which assistance is not available under section
10 54301; or

11 “(2) implements strategies developed under sec-
12 tion 55603.

13 “(e) ASSISTANCE.—

14 “(1) IN GENERAL.—The Secretary may make
15 grants, or enter into contracts or cooperative agree-
16 ments, to implement projects or components of a
17 project designated under subsection (d).

18 “(2) APPLICATION.—To receive a grant or
19 enter into a contract or cooperative agreement under
20 the program, an applicant shall—

21 “(A) submit an application to the Sec-
22 retary in such form and manner, at such time,
23 and containing such information as the Sec-
24 retary may require; and

1 “(B) demonstrate to the satisfaction of the
2 Secretary that—

3 “(i) the project is financially viable;

4 “(ii) the funds or other assistance re-
5 ceived will be spent or used efficiently and
6 effectively; and

7 “(iii) a market exists for the services
8 of the proposed project, as evidenced by
9 contracts or written statements of intent
10 from potential customers.

11 “(3) NON-FEDERAL SHARE.—An applicant shall
12 provide at least 20 percent of the project costs from
13 non-Federal sources. In awarding grants or entering
14 in contracts or cooperative agreements under this
15 subsection, the Secretary shall give a preference to
16 those projects or components that present the most
17 financially viable transportation services and require
18 the lowest percentage Federal share of the costs.”.

19 (b) MULTISTATE, STATE, AND REGIONAL TRANSPOR-
20 TATION PLANNING.—Chapter 556 of title 46, United
21 States Code, is amended by inserting after section 55602
22 the following:

1 **“§ 55603. Multistate, State, and regional transpor-**
2 **tation planning**

3 “(a) IN GENERAL.—The Secretary, in consultation
4 with Federal entities, State and local governments, and
5 the private sector, may develop strategies to encourage the
6 use of marine highway transportation for transportation
7 of passengers and cargo.

8 “(b) STRATEGIES.—In developing the strategies de-
9 scribed in subsection (a), the Secretary may—

10 “(1) assess the extent to which States and local
11 governments include marine highway transportation
12 and other marine transportation solutions in trans-
13 portation planning;

14 “(2) encourage State departments of transpor-
15 tation to develop strategies, where appropriate, to
16 incorporate marine highway transportation, ferries,
17 and other marine transportation solutions for re-
18 gional and interstate transport of freight and pas-
19 sengers in transportation planning; and

20 “(3) encourage groups of States and multi-
21 State transportation entities to determine how ma-
22 rine highways can address congestion, bottlenecks,
23 and other interstate transportation challenges.”.

24 (c) CLERICAL AMENDMENTS.—The analysis for
25 chapter 556 of title 46, United States Code, is amended—

1 (1) by striking the item relating to section
2 55601 and inserting the following:

“55601. America’s marine highway program.”; and

3 (2) by inserting after the item relating to sec-
4 tion 55602 the following:

“55603. Multistate, State, and regional transportation planning.”.

1 **SEC. 3513 [Log 73639]. COMMITTEES ON MARITIME MAT-**
2 **TERS.**

3 (a) IN GENERAL.—

4 (1) Chapter 555 of title 46, United States
5 Code, is redesignated as chapter 504 of such title
6 and transferred to appear after chapter 503 of such
7 title.

8 (2) Chapter 504 of such title, as redesignated
9 by paragraph (1), is amended in the chapter heading
10 by striking “**MISCELLANEOUS**” and inserting
11 “**COMMITTEES**”.

12 (3) Sections 55501 and 55502 of such title are
13 redesignated as section 50401 and section 50402,
14 respectively, of such title and transferred to appear
15 in chapter 504 of such title (as redesignated by
16 paragraph (1)).

17 (4) The section heading for section 50401 of
18 such title, as redesignated by paragraph (3), is
19 amended to read as follows: “UNITED STATES COM-
20 MITTEE ON THE MARINE TRANSPORTATION SYS-
21 TEM”.

22 (b) CONFORMING AMENDMENT.—Section 8332(b)(1)
23 of the Elijah E. Cummings Coast Guard Authorization
24 Act of 2020 (division G of the William M. (Mac) Thorn-
25 berry National Defense Authorization Act for Fiscal Year

1 2021 (Public Law 116–283)) is amended by striking “sec-
2 tion 55502” and inserting “section 50402”.

3 (c) CLERICAL AMENDMENTS.—

4 (1) The analysis for chapter 504 of title 46,
5 United States Code, as redesignated by subsection

6 (a)(1), is amended to read as follows:

“CHAPTER 504—COMMITTEES

“Sec.

“50401. United States Committee on the Marine Transportation System.

“50402. Maritime Transportation System National Advisory Committee.”.

7 (2) The table of chapters for subtitle V of title
8 46, United States Code, is amended—

9 (A) by inserting after the item relating to
10 chapter 503 the following:

“504. Committees50401”; and

11 (B) by striking the item relating to chapter
12 555.

1 **SEC. 3514[Log 73640]. PORT INFRASTRUCTURE DEVELOP-**
2 **MENT PROGRAM.**

3 (a) IN GENERAL.—

4 (1) Part C of subtitle V of title 46, United
5 States Code, is amended by adding at the end the
6 following:

7 **“CHAPTER 543—PORT INFRASTRUCTURE**
8 **DEVELOPMENT PROGRAM**

“Sec.

“54301. Port infrastructure development program.

9 **“§ 54301. Port infrastructure development program”.**

10 (2) Subsections (c), (d), and (e) of section
11 50302 of such title are redesignated as subsections
12 (a), (b), and (c) of section 54301 of such title, re-
13 spectively, and transferred to appear in chapter 543
14 of such title (as added by paragraph (1)).

15 (b) AMENDMENTS TO SECTION 54301.—Section
16 54301 of such title, as redesignated by subsection (a)(2),
17 is amended—

18 (1) in subsection (a)—

19 (A) in paragraph (2) by striking “or sub-
20 section (d)” and inserting “or subsection (b)”;

21 (B) in paragraph (3)(A)(ii)—

22 (i) in subclause (II) by striking “; or”
23 and inserting a semicolon; and

1 (ii) by adding at the end the fol-
2 lowing:

3 “(IV) emissions mitigation meas-
4 ures directly related to reducing the
5 overall carbon footprint from port op-
6 erations; or”;

7 (C) in paragraph (5)—

8 (i) in subparagraph (A) by striking
9 “or subsection (d)” and inserting “or sub-
10 section (b)”;

11 (ii) in subparagraph (B) by striking
12 “subsection (d)” and inserting “subsection
13 (b)”;

14 (D) in paragraph (6)(B)—

15 (i) in clause (i) by striking “; and”
16 and inserting a semicolon;

17 (ii) in clause (ii) by striking the pe-
18 riod and inserting “; and”;

19 (iii) by adding at the end the fol-
20 lowing:

21 “(iii) projects that increase the port’s
22 resilience to sea-level rise, flooding, ex-
23 treme weather events, including events as-
24 sociated with climate change.”;

25 (E) in paragraph (7)—

1 (i) in subparagraph (B), by striking
2 “subsection (d)” in each place it appears
3 and inserting “subsection (b)”; and

4 (ii) in subparagraph (C) by striking
5 “subsection (d)(3)(A)(ii)(III)” and insert-
6 ing “subsection (b)(3)(A)(ii)(III)”;
7 (F) in paragraph (8)—

8 (i) in subparagraph (A) by striking
9 “or subsection (d)” and inserting “or sub-
10 section (b)”; and

11 (ii) in subparagraph (B)—

12 (I) in clause (i) by striking “sub-
13 section (d)” and inserting “subsection
14 (b)”; and

15 (II) in clause (ii) by striking
16 “subsection (d)” and inserting “sub-
17 section (b)”;

18 (G) in paragraph (9) by striking “sub-
19 section (d)” and inserting “subsection (b)”;

20 (H) in paragraph (10) by striking “sub-
21 section (d)” and inserting “subsection (b)”; and

22 (I) in paragraph (12)—

23 (i) by striking “subsection (d)” and
24 inserting “subsection (b)”; and

1 (ii) by adding at the end the fol-
2 lowing:

3 “(D) RESILIENCE.—The term ‘resilience’
4 means the ability to anticipate, prepare for,
5 adapt to, withstand, respond to, and recover
6 from operational disruptions and sustain critical
7 operations at ports, including disruptions
8 caused by natural or manmade hazards.

9 “(E) CARBON FOOTPRINT.—The term
10 ‘carbon footprint’ means the total carbon-based
11 pollutants, products, and any greenhouse gases
12 that are emitted into the atmosphere resulting
13 from the consumption of fossil fuels.

14 “(F) CLIMATE CHANGE.—The term ‘cli-
15 mate change’ means detectable changes in 1 or
16 more climate system components over multiple
17 decades, including—

18 “(i) changes in the average tempera-
19 ture of the atmosphere or ocean;

20 “(ii) changes in regional precipitation,
21 winds, and cloudiness; and

22 “(iii) changes in the severity or dura-
23 tion of extreme weather, including
24 droughts, floods, and storms.”;

25 (2) in subsection (b)—

1 (A) in the subsection heading by striking
2 “INLAND” and inserting “INLAND RIVER”;

3 (B) in paragraph (1) by striking “sub-
4 section (c)(7)(B)” and inserting “subsection
5 (a)(7)(B)”;

6 (C) in paragraph (3)(A)(ii)(III) by striking
7 “subsection (c)(3)(B)” and inserting “sub-
8 section (a)(3)(B)”;

9 (D) in paragraph (5)(A) by striking “sub-
10 section (c)(8)(B)” and inserting “subsection
11 (a)(8)(B)”;

12 (3) in subsection (c)—

13 (A) by striking “subsection (c) or sub-
14 section (d)” and inserting “subsection (a) or
15 subsection (b)”;

16 (B) by striking “subsection (c)(2)” and in-
17 serting “subsection (a)(2)”.

18 (c) CLERICAL AMENDMENTS.—The table of chapters
19 for subtitle V of title 46, United States Code, as amended
20 by this title, is further amended by inserting after the item
21 relating to chapter 541 the following:

“543. Port Infrastructure Development Program54301”.

1 **SEC. 3515[Log 73641]. USES OF EMERGING MARINE TECH-**
2 **NOLOGIES AND PRACTICES.**

3 Section 50307 of title 46, United States Code, is
4 amended—

5 (1) by redesignating subsection (e) as sub-
6 section (f);

7 (2) by inserting after subsection (d) the fol-
8 lowing:

9 “(e) USES.—The results of activities conducted under
10 subsection (b)(1) shall be used to inform—

11 “(1) the policy decisions of the United States
12 related to domestic regulations; and

13 “(2) the position of the United States on mat-
14 ters before the International Maritime Organiza-
15 tion.”; and

16 (3) by adding at the end the following:

17 “(g) AIR EMISSIONS DEFINED.—In this section, the
18 term ‘air emissions’ means release into the air of—

19 “(1) air pollutants, as such term is defined in
20 section 302 of the Clean Air Act (42 U.S.C. 7602);
21 or

22 “(2) gases listed in section 731(2) of the Global
23 Environmental Protection Assistance Act of 1989
24 (22 U.S.C. 7901(2)).”.

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DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

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SHIPBUILDING AND CONVERSION, NAVY

Items of Special Interest

Aegis radar

The committee recognizes that the rapid deployment of next-generation maritime radar systems is required to address existing and emerging gaps in integrated air and missile defenses, particularly in the Indo-Pacific region. However, the committee is concerned by the apparent lack of alignment and congruent planning between three concurrent Aegis Baseline radars funded at various stages of development or production across the Navy and Missile Defense Agency. Specifically, the Navy budget includes funding for the backfit of AN/SPY-6(V), which began low-rate production in 2016 and will enter full-rate production upon the award of a hardware production and sustainment contract anticipated by the end of fiscal year 2021. The Navy budget also includes funding for the development of a digital low noise amplifier modification to the existing AN/SPY-1 radar. At the same time, the Missile Defense Agency budget includes funding for the development of a variant of the Long Range Discrimination Radar for use in Aegis Ashore applications.

The committee believes there are opportunities to better leverage common, mature radar technology in modernizing all Aegis-based platforms, including through U.S. Navy weapon systems applications aboard existing surface ships, Homeland Defense Guam, and/or defense of the continental United States from cruise missiles or air and missile defense threats. Leveraging such commonality across platforms would serve as a means to achieve critical distributed maritime operations objectives by expanding the number of deployed netted sensors while also proliferating the number of sensors capable of simultaneously defending against advanced air and missile defense threats. Moreover, the committee believes that better aligning Aegis Baseline radar investments would also serve to reduce risk and lower acquisition, lifecycle, and sustainment costs.

Therefore, the committee directs the Director of Cost Assessment and Program Evaluation to conduct a review of the three Aegis Baseline radars included in the budget request for fiscal year 2022 and to submit a report to the congressional defense committees not later than December 1, 2021, outlining the results of this review and making recommendations for achieving greater affordability, commonality, and sustainability through improved alignment of radar modernization investments.

Comptroller General review of enabling technologies for unmanned systems

The committee recognizes that, as part of the Navy's plan to counter increasing competition among nations in the maritime environment, the Navy intends to field a future fleet composed of a mix of manned and unmanned platforms. In doing so, the Navy identified core technologies and enabling capabilities it believes are necessary for its future unmanned undersea and surface vehicles. The core technologies and enabling capabilities are a broad range of efforts including autonomous management of ship systems and navigation, communications, manned-unmanned teaming, and payload development and integration among others. Congress has previously expressed concern with the Navy's proposed concurrent approach for the large unmanned surface vessel design, technology development, and integration. While the Navy takes action to address our concerns, the committee would like a better understanding of the Navy's technology development efforts for unmanned maritime systems as a whole.

The committee directs the Comptroller General of the United States to conduct a review of the Navy's core technologies and enabling capabilities for unmanned undersea and surface vehicles and to provide a briefing to the House Committee on Armed Services not later than March 1, 2022, on its findings. As part of this review, the Comptroller General should examine:

- (1) the status of the Navy's efforts to develop the core technologies and enabling capabilities for unmanned maritime systems;
- (2) the extent to which the Navy has successfully identified all critical technologies necessary for unmanned maritime systems;
- (3) the methods and documentation the Navy uses to track technology development for unmanned maritime systems;
- (4) the extent to which the technologies developed for unmanned maritime systems will meet Navy requirements and mission needs;
- (5) the Navy's process for tracking and prioritizing investments made into its technologies; and
- (6) any other areas the Comptroller General deems important.

National Security Hospital Vessel

The committee recognizes the Navy's plan to increase Role 2 afloat medical capacity through the procurement of a modified Expeditionary Fast Transport (EPF) ship called an EPF Flight II. The committee is supportive of this effort and recognizes that an embarkable Role 2 enhanced (R2E) medical capability will allow the Navy to fill gaps identified by the Naval Expeditionary Health Services Support (NEHSS) for Distributed Maritime Operations. The committee further understands that the afloat theater hospitalization Role 3 requirement will continue to be met by the Navy's aging hospital ships (T-AH). The committee believes that as an alternative to maintaining converted supertankers that were procured in the mid 1970s, the Navy could take advantage of the National Security Multi-Mission Vessel (NSMV) that the Maritime Administration is currently procuring for the

State Maritime Academies. By utilizing the NSMV hull form and production line, the Navy could minimize design costs and schedule of the T-AH(X) that is planned to replace the current T-AHs. This strategy would also allow the Navy to defer future costly maintenance availabilities on the existing T-AHs and deliver a replacement capability sooner than the current plan. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than March 1, 2022, on the feasibility of utilizing the NSMV hull form to fill the requirements of the T-AH(X).

Report on large surface combatant production transition

The committee recognizes the Navy's successful transition from the Los Angeles-class submarine to the Seawolf and Virginia submarine classes and the importance of shipbuilding schedule overlap within that transition. The committee believes that new programs such as the DDG(X) should also implement some type of overlap shipbuilding schedule, which would mitigate shipbuilding issues related to stops in lead ship build design and construction. The committee notes that absence of a proper overlap plan may adversely impact both the Navy's overall shipbuilding numbers and the associated shipyard's ability to adjust their production line accordingly.

Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees not later than December 30, 2021, that details what the proper transition between the two platforms should include. The report should be informed by early collaboration with the two current shipbuilders to maximize design and cost efficiencies and emphasize the needs of the industrial base regarding both design and construction capacity. This report shall include at a minimum:

(1) a review of the Los Angeles submarine class transition to the Seawolf and Virginia submarine classes, including shipyard schedules and operational impacts; shipyard cost impacts; effects on associated shipyard manpower and skill; impact on planned versus actual fiscal year shipbuilding numbers; and lessons learned;

(2) a review of the DDG-51 class transition to the Zumwalt DDG-1000 program, including shipyard schedules and operational impacts; shipyard cost impacts; effects on associated shipyard manpower and skill; impact on planned versus actual fiscal year shipbuilding numbers; and lessons learned;

(3) a review of the Nimitz-class carrier transition to the Ford-class carrier program, including shipyard schedules and operational impacts; shipyard cost impacts; effects on associated shipyard manpower and skill; impact on planned versus actual fiscal year shipbuilding numbers; and lessons learned;

(4) recommendations on the amount of time for a successful overlap transition period before a shipyard shifts to full-rate production of the next-generation ship; and

(5) recommendations on requirements for an ideal large surface combatant shipyard transition and next-generation shipbuilding production.

Sentinel-class Fast Response Cutter

The committee looks forward to reviewing the Navy's updated force structure assessment and shipbuilding plan. The committee understands the Navy intends to change the fleet architecture reflected in the 355-ship force-level goal to reflect a more distributed fleet mix with a smaller proportion of larger ships and a larger proportion of smaller manned ships as well as unmanned vessels. The committee supports incorporating a mix of smaller manned ships into the fleet and encourages the Navy to consider the capabilities the U.S. Coast Guard's Sentinel-class Fast Response Cutter could provide to the fleet and the concept of operations and associated requirements that would support acquisition of these vessels.

Further, the committee is aware the U.S. Coast Guard has contract options for 12 additional Sentinel-class Fast Response Cutters with firm fixed pricing in place until May of 2023. Exercising these contract options in advance of their expiration would lock in favorable pricing on Sentinel-class Fast Response Cutters should the Navy determine that they add value to the fleet.

Given the successes of the U.S. Coast Guard's Sentinel-class Fast Response Cutter in support of the Navy's Fifth Fleet as a part of Patrol Forces Southwest Asia, the committee believes there are similar roles for Sentinel-class Fast Response Cutters in other areas of responsibility. Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees not later than February 1, 2022, that details the current mission sets and operating requirements for the Sentinel-class Fast Response Cutter and expands on how successes in the U.S. Central Command area of responsibility would translate to other regions, including the U.S. Indo-Pacific Command. Further, the committee directs the Secretary of the Navy to assess the requisite upgrades to the Sentinel-class Fast Response Cutter required to meet Navy standards and evaluate the concept of operations for employing these vessels in Southeast Asia. This report should be unclassified but may include a classified annex.

OTHER PROCUREMENT, NAVY

Items of Special Interest

Joint force tiltrotor training

The committee recognizes that tiltrotor aircraft will be a significant part of the Department of Defense for the foreseeable future. The tiltrotor community is the only Department of Defense undergraduate pilot training program without a dedicated, technologically comparable aircraft to conduct undergraduate-level pilot training. Utilizing an initial pilot training platform that can more efficiently and effectively train new tiltrotor pilots could lower training costs. The committee

directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by May 2, 2022, that discusses current initial pilot tiltrotor training program requirements including aircraft, sorties/hours, planned student throughput, and training locations; training effectiveness of using fixed-wing and rotary-wing training to train new tiltrotor pilots; hours/sorties required to transition new pilots from initial fixed-wing/rotary-wing aircraft to instrument qualification in the V-22; impacts of initial training sorties/hours on overall V-22 readiness and sustainment; and feasibility of using current and future vertical lift technology platforms to support and streamline initial joint force pilot tiltrotor qualification training.

Mine-hunting capabilities from Expeditionary Sea Base platforms

The committee notes that while the Mine Countermeasures (MCM) Mission Package (MP) was designed to be employed on the Littoral Combat Ship (LCS), operational tests of this system on LCS have faced technical challenges and delays in fielding. Legacy MCM platforms have remained in service well past their intended service life, but it is imperative that the Navy fill an equal or greater capability before the legacy platforms can be retired. Various components of the MCM MP have successfully deployed from Expeditionary Sea Base (ESB) 4 and have potential when operated from this platform, either in conjunction with or independently from LCS, to provide a robust mine countermeasures package, which is urgently needed. The committee recognizes that the ESB has command, control, communications, computers, and intelligence (C4I) spaces that could provide mission planning and execution of MCM operations. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the Committee on Armed Services of the House of Representatives by March 1, 2022, on the feasibility and cost of incorporating MCM capabilities on all ESB platforms.

Underwater ranges

The committee supports the acceleration of the upgrading of our underwater ranges. These ranges are critical as they facilitate training, tactics development, and test and evaluations. Most of the Navy's underwater ranges are multi-environmental and are capable of supporting surface, subsurface, air, and space operations simultaneously. These ranges are in need of continuous modernization and upkeep. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 1, 2022, on the status and timeline of upgrades and planned maintenance of all naval underwater ranges.

AIRCRAFT PROCUREMENT, AIR FORCE

Items of Special Interest

Airlift tactical data link

The committee understands airlift aircraft will be required to operate in a contested environment and is concerned with the lack of situational awareness upgrades for these aircraft. The committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by December 30, 2021, that provides a modification plan to provide situational awareness for airlift aircraft.

C-130H propellers/engines

The committee notes that the C-130H aircraft that are flown primarily by the Air National Guard and Air Force Reserve continue to provide critical tactical airlift capabilities and will continue to support this mission for years to come. The committee is once again disappointed with the amount of time it has taken for the Air Force to address a safety of flight issue with the legacy propeller system of the C-130H.

Procurement of new composite propeller blades is the obvious solution to this serious safety of flight and readiness issue. The Air Force has moved slowly in addressing the issue and still refers to the propeller upgrade as an enhancement and not a safety requirement. A new composite blade would also decrease maintenance time and improve logistics support, which will result in increased readiness. Delays are unacceptable considering the inherent safety of flight and readiness risks surrounding this issue.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by January 31, 2022, updating the acquisition strategy for procuring new blades. This plan should include updated estimated costs, timelines, and a unit upgrade schedule. The briefing should also include the Air Force plan to incorporate C-130H T-56 Series 3.5 Engine Enhancement Packages. Congress has repeatedly added additional funds for these upgrades and the Air Force has yet to budget for them despite the demonstrated performance benefits and fuel efficiencies.

KC-135 modernization

The committee understands the KC-135 is projected to fly for potentially another 30 years and needs to modernize to operate in a contested environment. Accordingly, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by December 30, 2021, that provides the pros and cons of designating a single point of contact to prioritize and deconflict all modernization efforts for the KC-135.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, NAVY

Items of Special Interest

Shipboard High Energy Laser

The committee is encouraged by the Navy's continued progress in testing and deploying High Energy Laser Systems (HELs). The integration of the 150kW class Solid State Laser Technology Maturation on the USS Portland (Landing Platform/Dock- 27) in 2019 is a significant improvement in lethality over the Laser Weapons System and will provide a valuable capability to counter unmanned aerial systems and fast inshore attack craft, as well as intelligence, surveillance, and reconnaissance capabilities on its upcoming deployment. The committee is also encouraged by the planned integration of the 60kW HELIOS and 30 kW Optical Dazzler Interdictor Navy on identified Arleigh Burke-class destroyer ships beginning in 2021. The committee is eager to facilitate the widespread adoption of this necessary capability, but is concerned about inadequate Space, Weight, Power and Cooling, Service Life Allowances in currently deployed ships and a robust industrial base. Lastly, the committee would like to avoid backfitting costs by ensuring future ship design plans include HELs.

The committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by December 1, 2021, on a plan describing a path forward for integration of HEL Systems with more than 150kW of power on the DDG(X) ship class, and address installation plans on other surface combatants Arleigh Burke-class destroyers.

TITLE X—GENERAL PROVISIONS

ITEMS OF SPECIAL INTEREST

OTHER MATTERS

USNS Bridge and USNS Rainier

The committee understands that there is a lack of organic seagoing tanker capacity in the Navy's Combat Logistics Force (CLF). The committee further recognizes that the USNS Bridge and USNS Rainier were deactivated with additional service life remaining as a cost savings measure and are currently in reserve status. These two ships could immediately add additional, much-needed CLF capability in the critical U.S. Indo-Pacific Command area of responsibility. Therefore, the committee directs the Secretary of the Navy to provide a briefing to

the House Committee on Armed Services by March 1, 2022, on the cost benefit of reactivating the USNS Bridge and USNS Rainier.