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 121—Extension of Procurement Authority for Certain Amphibious Shipbuilding Programs

This section would extend the authority granted by section 124(a)(1) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283) to fiscal year 2022.

Section 122—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 123—Multiyear Procurement Authority for Arleigh Burke Class Destroyers

This section would authorize the Secretary of the Navy to enter into one or more multiyear contracts for Arleigh Burke class destroyers and associated systems beginning in fiscal year 2023, in accordance with section 2306b of title 10, United States Code.

Section 124—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 132—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 133—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 134—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 213—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 219—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 220—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

LEGISLATIVE PROVISIONS

SUBTITLE B—AMENDMENTS TO GENERAL CONTRACTING AUTHORITIES, PROCEDURES, AND LIMITATIONS
Section 812—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 1011—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 1013—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 1014—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 1015—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 1031—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.
Section 3516—Coastwise Endorsement

This section would authorize the Secretary of the department in which the Coast Guard is operating to issue a certificate of documentation with a coastwise endorsement for the vessel WIDGEON (United States official number 1299656).
BILL LANGUAGE
Subtitle C—Navy Programs

SEC. 121. EXTENSION OF PROCUREMENT AUTHORITY FOR CERTAIN AMPHIBIOUS SHIP-BUILDING PROGRAMS.


SEC. 122 [Log 73314]. INCLUSION OF BASIC AND FUNCTIONAL DESIGN IN ASSESSMENTS REQUIRED PRIOR TO START OF CONSTRUCTION ON FIRST SHIP OF A SHIPBUILDING PROGRAM.


(1) in subsection (a)—

(A) in the matter preceding paragraph (1),

by striking “Concurrent with approving the start of construction of the first ship for any major shipbuilding program, the Secretary of the Navy shall” and inserting “The Secretary of the Navy may not enter into a contract for the construction of the first ship for any major shipbuilding program until a period of 30 days has elapsed following the date on which the Secretary”;

(B) in paragraph (1)—

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

(ii) by striking “and” at the end;

(C) in paragraph (2)—

(i) by striking “certify” and inserting “certifies”; and
(ii) by striking the period at the end

and inserting ‘; and’; and

(D) by adding at the end the following new

paragraph:

“(3) certifies to the congressional defense com-

mittees that the basic and functional design of the

vessel is complete.”; and

(2) in subsection (d), by adding at the end the

following new paragraph:

“(5) BASIC AND FUNCTIONAL DESIGN.—The

term ‘basic and functional design’, when used with

respect to a vessel, means design through computer-

aided models, that—

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

“(B) sets the hydrodynamics of the vessel;

“(C) routes all major distributive systems

of the vessel, including electricity, water, and

other utilities; and

“(D) identifies the exact positioning of pip-

ing and other outfitting within each block of the

vessel.”.
SEC. 123 [Log 73646]. MULTIYEAR PROCUREMENT AUTHORITY FOR ARLEIGH BURKE CLASS DESTROYERS.

(a) AUTHORITY FOR MULTIYEAR PROCUREMENT.—Subject to section 2306b of title 10, United States Code, the Secretary of the Navy may enter into one or more multiyear contracts for the procurement of up to 15 Arleigh Burke class Flight III guided missile destroyers.

(b) AUTHORITY FOR ADVANCE PROCUREMENT.—The Secretary of the Navy may enter into one or more contracts, beginning in fiscal year 2023, for advance procurement associated with the destroyers for which authorization to enter into a multiyear procurement contract is provided under subsection (a), and for systems and subsystems associated with such destroyers in economic order quantities when cost savings are achievable.

(c) CONDITION FOR OUT-YEAR CONTRACT PAYMENTS.—A contract entered into under subsection (a) shall provide that any obligation of the United States to make a payment under the contract for a fiscal year after fiscal year 2023 is subject to the availability of appropriations or funds for that purpose for such later fiscal year.

(d) LIMITATION.—The Secretary of the Navy may not modify a contract entered into under subsection (a) if the modification would increase the target price of the destroyer by more than 10 percent above the target price.
specified in the original contract awarded for the destroyer under subsection (a).
SEC. 124 [Log 73090]. INCORPORATION OF ADVANCED DEGAUSSING SYSTEMS INTO DDG–51 CLASS DESTROYERS.

(a) IN GENERAL.—The Secretary of the Navy shall ensure that an advanced degaussing system is incorporated into any DDG–51 class destroyer procured pursuant to a covered contract.

(b) COVERED CONTRACT DEFINED.—In this section, the term “covered contract” means a multiyear contract for the procurement of a DDG–51 destroyer that is entered into by the Secretary of the Navy on or after the date of the enactment of this Act.
SEC. 132. LIMITATION ON AVAILABILITY OF FUNDS FOR THE B–52 COMMERCIAL ENGINE REPLACEMENT PROGRAM.

(a) LIMITATION.—None of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2022 for the research and development, design, procurement, or advanced procurement of materials for the B–52 Commercial Engine Replacement Program may be obligated or expended until the date on which the Secretary of Defense submits to the congressional defense committees the report described in section 2432 of title 10, United States Code, for the most recently concluded fiscal quarter for the B–52 Commercial Engine Replacement Program in accordance with subsection (b)(1).

(b) ADDITIONAL REQUIREMENTS.—

(1) TREATMENT OF BASELINE ESTIMATE.—The Secretary of Defense shall deem the Baseline Estimate for the B–52 Commercial Engine Replacement Program for fiscal year 2018 as the original Baseline Estimate for the Program.

(2) UNIT COST REPORTS AND CRITICAL COST GROWTH.—

(A) Subject to subparagraph (B), the Secretary shall carry out sections 2433 and 2433a of title 10, United States Code, with respect to the B–52 Commercial Engine Replacement Pro-
gram, as if the Department had submitted a Selected Acquisition Report for the Program that included the Baseline Estimate for the Program for fiscal year 2018 as the original Baseline Estimate, except that the Secretary shall not carry out subparagraph (B) or subparagraph (C) of section 2433a(c)(1) of such title with respect to the Program.

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

(c) DEFINITIONS.—In this section:

(1) The term “Baseline Estimate” has the meaning given the term in section 2433(a)(2) of title 10, United States Code.
(2) The term “milestone decision authority” has the meaning given the term in section 2366b(g)(3) of title 10, United States Code.

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

SEC. 133 [Log 72825]. INVENTORY REQUIREMENTS AND LIMITATIONS RELATING TO CERTAIN AIR REFUELING TANKER AIRCRAFT.

(a) Minimum Inventory Requirements for KC–10A Aircraft.—

(1) Fiscal Year 2022.—During the period beginning on October 1, 2021, and ending on October 1, 2022, the Secretary of the Air Force shall, except as provided in paragraph (3), maintain a minimum of 36 KC–10A aircraft designated as primary mission aircraft inventory.

(2) Fiscal Year 2023.—During the period beginning on October 1, 2022, and ending on October 1, 2023, the Secretary of the Air Force shall, except as provided in paragraph (3), maintain a minimum of 24 KC–10A aircraft designated as primary mission aircraft inventory.

(3) Exception.—The requirements of paragraphs (1) and (2) shall not apply to individual KC–10A aircraft that the Secretary of the Air Force determines, on a case-by-case basis, to be no longer mission capable because of mishaps, other damage, or being uneconomical to repair.

(b) Limitation on Retirement of KC–135 Air-
(1) LIMITATION.—Except as provided in paragraph (2), the Secretary of the Air Force may not retire more than 18 KC–135 aircraft during the period beginning on the date of the enactment of this Act and ending on October 1, 2023.

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

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

d) PRIMARY MISSION AIRCRAFT INVENTORY DEFINED.—In this section, the term “primary mission aircraft inventory” has the meaning given that term in section 9062(i)(2)(B) of title 10, United States Code.
SEC. 134 [Log 72826]. MINIMUM INVENTORY OF TACTICAL AIRLIFT AIRCRAFT AND LIMITATION ON MODIFICATION OF AIR NATIONAL GUARD TACTICAL AIRLIFT FLYING MISSIONS.

(a) Minimum Inventory Requirement.—During the period beginning on October 1, 2021, and ending on October 1, 2026, the Secretary of the Air Force shall maintain a total inventory of tactical airlift aircraft of not less than 287 aircraft.

(b) Limitation on Modification of Air National Guard Tactical Airlift Flying Missions.—The Secretary of the Air Force may not modify the flying mission of a tactical airlift unit of the Air National Guard unless—

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

(2) the Secretary submits to the congressional defense committees a copy of such agreement together with an explanation of the reasons for such modification.
SEC. 213 [Log 73385]. TEST PROGRAM FOR ENGINEERING PLANT OF DDG(X) DESTROYER VESSELS.

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

(b) ADMINISTRATION.—The test program required by subsection (a) shall be administered by the Senior Technical Authority for the DDG(X) destroyer class of vessels.

(c) ELEMENTS.—The test program required by subsection (a) shall include, at a minimum, testing of the following equipment in vessel-representative form:

   (1) Main reduction gear.
   (2) Electrical propulsion motors.
   (3) Other propulsion drive train components.
   (4) Main propulsion system.
   (5) Auxiliary propulsion unit.
   (6) Electrical generation and distribution systems.
   (7) Shipboard control systems.
   (8) Power control modules.

(d) TEST OBJECTIVES.—The test program required by subsection (a) shall include, at a minimum, the following test objectives demonstrated across the full range of operations of the ship's propulsion systems.
of engineering plant operations for the DDG(X) destroyer class of vessels:

(1) Test of the full propulsion drive train.

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

(3) Simulation of the full range of electrical demands to enable the investigation of load dynamics between the hull, mechanical and electrical equipment, the combat system, and auxiliary equipment.

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

(f) DEFINITIONS.—In this section:

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

(2) SENIOR TECHNICAL AUTHORITY.—The term “Senior Technical Authority” means the official designated as the Senior Technical Authority for the DDG(X) destroyer class of vessels pursuant to section 8669b of title 10, United States Code.
SEC. 219. [Log 73509]. LIMITATION ON AVAILABILITY OF FUNDS FOR CERTAIN C–130 AIRCRAFT.

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

(1) The unit cost of each such C–130 test aircraft.

(2) The life cycle sustainment plan for such C–130 aircraft.

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

(4) The total amount of funds needed to complete the procurement of such C–130 aircraft.
SEC. 220 [Log 73443]. LIMITATION ON AVAILABILITY OF
FUNDS FOR VC–25B AIRCRAFT PROGRAM
PENDING SUBMISSION OF DOCUMENTATION.

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

(b) LIMITATION.—Of the funds authorized to be ap-
propriated by this Act or otherwise made available for fis-
cal year 2022 for the Air Force for the VC–25B aircraft,
not more than 50 percent may be obligated or expended
until the date on which the Secretary of the Air Force
submits to the congressional defense committees the docu-
mentation required under subsection (a).
SEC. 812. [Log 73085]. LIMITATION ON PROCUREMENT OF WELDED SHIPBOARD ANCHOR AND MOORING CHAIN FOR NAVAL VESSELS.

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

“(F) Welded shipboard anchor and mooring chain.”.
Subtitle B—Naval Vessels

SEC. 1011 [Log 73084]. CRITICAL COMPONENTS OF NATIONAL SEA-BASED DETERRENCE VESSELS.

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

“(P) Major bulkheads and tanks.

“(Q) All major pumps and motors.

“(R) Large vertical array.

“(S) Atmosphere control equipment.

“(T) Diesel systems and components.

“(U) Hydraulic valves and components.

“(V) Bearings.

“(W) Major air and blow valves and components.

“(X) Decks and superstructure.

“(Y) Castings, forgings, and tank structure.

“(Z) Hatches and hull penetrators.”.
SEC. 1013 [Log 72933]. REVISION OF SUSTAINMENT KEY PERFORMANCE PARAMETERS FOR SHIPBUILDING PROGRAMS.

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

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

(2) changing the definition of “materiel availability” as is it applies to ships so that such definition takes into account all factors that could result in a ship being unavailable for operations, including unplanned maintenance, unplanned losses, and training.

(b) REPORT REQUIRED.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit to congressional defense committees a report on the plan of the Secretary to—
(1) incorporate the sustainment key performance parameters revised under subsection (a) into the requirement documents of new and ongoing shipbuilding programs; and

(2) establish a process for translating such sustainment key performance parameters into specific contract requirements for systems engineering and ship design.

(e) COMPTROLLER GENERAL REVIEW.—Not later than one year after the Secretary of Defense submits the report required under subsection (b), the Comptroller General of the United States shall submit to the congressional defense committees an assessment of such report that includes an evaluation of—

(1) the sustainment key performance parameters for Department of Defense shipbuilding programs;

(2) how shipbuilding programs translate sustainment key performance parameters into contract requirements for systems engineering and ship design activities; and

(3) any other matter the Comptroller General determines appropriate.
SEC. 1014. PROHIBITION ON USE OF FUNDS FOR RETIREMENT OF MARK VI PATROL BOATS.

(a) PROHIBITION.—None of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2022 for the Navy may be obligated or expended to retire, prepare to retire, or place in storage any Mark VI patrol boat.

(b) REPORT.—Not later than February 15, 2022, the Secretary of the Navy, in consultation with the Commandant of the Marine Corps, shall submit to the congressional defense committees a report that includes each of the following:

(1) The rationale for the retirement of existing Mark VI patrol boats, including an operational analysis of the effect of such retirements on the warfighting requirements of the combatant commanders.

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

(3) A description of the manner and concept of operations in which the Marine Corps could use the Mark VI patrol boat to support distributed maritime operations, advanced expeditionary basing operations, and persistent presence near maritime choke points and strategic littorals in the Indo-Pacific region.
(4) An assessment of the potential for modification, and the associated costs, of the Mark VI patrol boat for the inclusion of loitering munitions or anti-ship cruise missiles, such as the Long Range Anti-Ship Missile and the Naval Strike Missile, particularly to support the concept of operations described in paragraph (3).

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

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

(7) Such other matters the Secretary determines appropriate.
SEC. 1015 [Log 73383]. ASSESSMENT OF SECURITY OF GLOBAL MARITIME CHOKEPOINTS.

(a) IN GENERAL.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees a report on the security of global maritime chokepoints from the threat of hostile kinetic attacks, cyber disruptions, and other form of sabotage. The report shall include an assessment of each of the following with respect to each global maritime chokepoint covered by the report:

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

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

(3) Options to mitigate any vulnerabilities resulting from a hostile kinetic attack, cyber disruption, or other form of sabotage at the chokepoint.

(b) FORM OF REPORT.—The report required by subsection (a) shall be submitted in unclassified form, but may contain a classified annex.

(e) GLOBAL MARITIME CHOKEPOINT.—In this section, the term “global maritime chokepoint” means any of the following:
(1) The Panama Canal.
(2) The Suez Canal.
(3) The Strait of Malacca.
(4) The Strait of Hormuz.
(5) Any other chokepoint determined appropriate by the Secretary.
Subtitle D—Miscellaneous
Authorities and Limitations

SEC. 1031 [Log 73438]. NAVY COORDINATION WITH COAST GUARD ON AIRCRAFT, WEAPONS, TACTICS, TECHNIQUE, ORGANIZATION, AND EQUIPMENT OF JOINT CONCERN.

Section 8062(d) of title 10, United States Code, is amended by inserting “the Coast Guard,” after “the Air Force,”.
Subtitle A—Maritime Administration

SEC. 3501. AUTHORIZATION OF THE MARITIME ADMINISTRATION.

(a) IN GENERAL.—There are authorized to be appropriated to the Department of Transportation for fiscal year 2022, to be available without fiscal year limitation if so provided in appropriations Acts, for programs associated with maintaining the United States merchant marine, the following amounts:

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

(A) $85,032,000 shall be for Academy operations; and

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

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

(A) $2,400,000 shall remain available until September 30, 2026, for the Student Incentive Program; and
(B) $30,500,000 shall remain available until expended for maintenance and repair of State maritime academy training vessels.

(3) For expenses necessary to support the National Security Multi-Mission Vessel Program, $315,600,000, which shall remain available until expended.

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

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

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

(7) For expenses necessary for the loan guarantee program authorized under chapter 537 of title 46, United States Code, $33,000,000, of which—

(A) $30,000,000 may be used for the cost (as defined in section 502(5) of the Federal Credit Reform Act of 1990 (2 U.S.C. 661a(5))) of loan guarantees under the program; and
(B) $3,000,000 may be used for administrative expenses relating to loan guarantee commitments under the program.

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

(9) For expenses necessary to support maritime environmental and technical assistance activities authorized under section 50307 of title 46, United States Code, $6,000,000, of which $3,000,000 is authorized to carry out activities related to port and vessel air emission reduction technologies, including zero emissions technologies; and

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

(11) For expenses necessary to provide assistance to small shipyards authorized under section 54101 of title 46, United States Code, $20,000,000.

(12) For expenses necessary to support port development activities authorized under subsections (a) and (b) of section 54301 of such title (as added by this title), $750,000,000.
(b) LIMITATION.—No amounts authorized under sub-
section (a)(11) may be used to provide a grant to purchase
fully automated cargo handling equipment that is remotely
operated or remotely monitored with or without the exer-
cise of human intervention or control, if the Secretary de-
termines such equipment would result in a net loss of jobs
within a port or port terminal.
SEC. 3502[Log 73638]. MARITIME ADMINISTRATION.

(a) IN GENERAL.—

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

“CHAPTER 500—MARITIME ADMINISTRATION

§ 50001. Maritime Administration.

(b) CLERICAL AMENDMENTS.—

(1) The table of chapters for subtitle V of title 46, United States Code, as amended by this title, is further amended by inserting before the item relating to chapter 501 the following:

“500. Maritime Administration 50001”.

(2) The analysis for chapter 1 of title 49, United States Code, is amended by striking the item relating to section 109.
SEC. 3512. AMERICA'S MARINE HIGHWAY PROGRAM.

(a) AMERICA'S MARINE HIGHWAY PROGRAM.—Section 55601 of title 46, United States Code, is amended to read as follows:

"§ 55601. America's marine highway program

'(a) PROGRAM.—

'(1) IN GENERAL.—The Secretary of Transportation shall—

'(A) establish a marine highway program to be known as America's marine highway program;

'(B) designate marine highway routes under subsection (c);

'(C) designate marine highway transportation projects under subsection (d); and

'(D) subject to the availability of appropriations, provide assistance under subsection (e).

'(2) PROGRAM ACTIVITIES.—In carrying out the marine highway program established under paragraph (1), the Secretary may—

'(A) coordinate with ports, State departments of transportation, localities, other public agencies, and the private sector on the develop-
ment of landside facilities and infrastructure to support marine highway transportation;

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

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

“(D) conduct research on solutions to impediments to marine highway transportation projects designated under subsection (d).

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

“(1) provide a coordinated and capable alternative to landside transportation;

“(2) mitigate or relieve landside congestion; or

“(3) promote marine highway transportation.

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

“(d) PROJECT DESIGNATION.—The Secretary may designate a project that meets the criteria established in subsection (b) to be a marine highway transportation
project if the Secretary determines that such project uses vessels documented under chapter 121 and—

“(1) develops, expands or promotes—

“(A) marine highway transportation services;

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

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

“(2) implements strategies developed under section 55603.

“(e) ASSISTANCE.—

“(1) IN GENERAL.—The Secretary may make grants, or enter into contracts or cooperative agreements, to implement projects or components of a project designated under subsection (d).

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

“(A) submit an application to the Secretary in such form and manner, at such time, and containing such information as the Secretary may require; and
“(B) demonstrate to the satisfaction of the Secretary that—

“(i) the project is financially viable;

“(ii) the funds or other assistance received will be spent or used efficiently and effectively; and

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

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

(b) MULTISTATE, STATE, AND REGIONAL TRANSPORTATION PLANNING.—Chapter 556 of title 46, United States Code, is amended by inserting after section 55602 the following:
§ 55603. Multistate, State, and regional transportation planning

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

(b) STRATEGIES.—In developing the strategies described in subsection (a), the Secretary may—

(1) assess the extent to which States and local governments include marine highway transportation and other marine transportation solutions in transportation planning;

(2) encourage State departments of transportation to develop strategies, where appropriate, to incorporate marine highway transportation, ferries, and other marine transportation solutions for regional and interstate transport of freight and passengers in transportation planning; and

(3) encourage groups of States and multi-State transportation entities to determine how marine highways can address congestion, bottlenecks, and other interstate transportation challenges.”.

(c) CLERICAL AMENDMENTS.—The analysis for chapter 556 of title 46, United States Code, is amended—
(1) by striking the item relating to section 55601 and inserting the following:

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

(2) by inserting after the item relating to section 55602 the following:

“55603. Multistate, State, and regional transportation planning.”.
SEC. 3513. COMMITTEES ON MARITIME MAT-
TERS.

(a) IN GENERAL.—

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

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

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

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

(b) CONFORMING AMENDMENT.—Section 8332(b)(1)
of the Elijah E. Cummings Coast Guard Authorization
Act of 2020 (division G of the William M. (Mac) Thorn-
berry National Defense Authorization Act for Fiscal Year
2021 (Public Law 116–283) is amended by striking “section 55502” and inserting “section 50402”.

(c) CLERICAL AMENDMENTS.—

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

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

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

“504. Committees .................................................................50401”; and

(B) by striking the item relating to chapter 555.
SEC. 3514[Log 73640]. PORT INFRASTRUCTURE DEVELOPMENT PROGRAM.

(a) IN GENERAL.—

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

“CHAPTER 543—PORT INFRASTRUCTURE DEVELOPMENT PROGRAM

‘Sec.

‘54301. Port infrastructure development program.

§ 54301. Port infrastructure development program”.

(2) Subsections (c), (d), and (e) of section 50302 of such title are redesignated as subsections (a), (b), and (c) of section 54301 of such title, respectively, and transferred to appear in chapter 543 of such title (as added by paragraph (1)).

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

(1) in subsection (a)—

(A) in paragraph (2) by striking “or subsection (d)” and inserting “or subsection (b)”;

(B) in paragraph (3)(A)(ii)—

(i) in subclause (II) by striking “; or” and inserting a semicolon; and
(ii) by adding at the end the following:

“(IV) emissions mitigation measures directly related to reducing the overall carbon footprint from port operations; or”;

(C) in paragraph (5)—

(i) in subparagraph (A) by striking “or subsection (d)” and inserting “or subsection (b)”;

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

(D) in paragraph (6)(B)—

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

(ii) in clause (ii) by striking the period and inserting “; and”; and

(iii) by adding at the end the following:

“(iii) projects that increase the port’s resilience to sea-level rise, flooding, extreme weather events, including events associated with climate change.”;

(E) in paragraph (7)—
(i) in subparagraph (B), by striking “subsection (d)” in each place it appears and inserting “subsection (b)”;


(F) in paragraph (8)—

(i) in subparagraph (A) by striking “or subsection (d)” and inserting “or subsection (b)”;

(ii) in subparagraph (B)—

(I) in clause (i) by striking “subsection (d)” and inserting “subsection (b)”;

(II) in clause (ii) by striking “subsection (d)” and inserting “subsection (b)”;

(G) in paragraph (9) by striking “subsection (d)” and inserting “subsection (b)”;

(H) in paragraph (10) by striking “subsection (d)” and inserting “subsection (b)”;

(I) in paragraph (12)—

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

and

(ii) in subparagraph (B)—

(I) in clause (i) by striking “subsection (d)” and inserting “subsection (b)”;

(II) in clause (ii) by striking “subsection (d)” and inserting “subsection (b)”;

(G) in paragraph (9) by striking “subsection (d)” and inserting “subsection (b)”;

(H) in paragraph (10) by striking “subsection (d)” and inserting “subsection (b)”;

(I) in paragraph (12)—

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

and
(ii) by adding at the end the following:

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

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

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

“(i) changes in the average temperature of the atmosphere or ocean;

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

“(iii) changes in the severity or duration of extreme weather, including droughts, floods, and storms.”;

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

(B) in paragraph (1) by striking “subsection (c)(7)(B)” and inserting “subsection (a)(7)(B)”;

(C) in paragraph (3)(A)(ii)(III) by striking “subsection (e)(3)(B)” and inserting “subsection (a)(3)(B)”; and

(D) in paragraph (5)(A) by striking “subsection (c)(8)(B)” and inserting “subsection (a)(8)(B)”;

(3) in subsection (c)—

(A) by striking “subsection (c) or subsection (d)” and inserting “subsection (a) or subsection (b)”;

(B) by striking “subsection (e)(2)” and inserting “subsection (a)(2)”.

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

“543. Port Infrastructure Development Program ..........................54301”.
Section 50307 of title 46, United States Code, is amended—

(1) by redesignating subsection (e) as subsection (f);

(2) by inserting after subsection (d) the following:

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

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

“(2) the position of the United States on matters before the International Maritime Organization.”; and

(3) by adding at the end the following:

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

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

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

SEC. 3515[Log 73641]. USES OF EMERGING MARINE TECHNOLOGIES AND PRACTICES.
SEC. 3516 [Log 73645]. COASTWISE ENDORSEMENT.

Notwithstanding sections 12112 of title 46, United States Code, the Secretary of the department in which the Coast Guard is operating may issue a certificate of documentation with a coastwise endorsement for the vessel WIDGEON (United States official number 1299656).
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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 a redesigned EPF or the National Security Multi-Mission Vessel (NSMV) that the Maritime Administration is currently procuring for the 6 State Maritime Academies to meet this
Role 3 requirement. By utilizing the NSMV or the EPF hull form and an ongoing 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 EPF or the NSMV hull forms 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
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.

**Virginia Class Submarine Spare Parts**

The committee notes a March 2021 report by the Congressional Budget Office, prepared as part of its ongoing work to evaluate submarine maintenance issues first requested by the House Seapower and Projection Forces and Readiness Subcommittees in 2015, found that “Administrative data from NAVSEA suggest that cannibalization associated with submarine maintenance has increased over the past two years.” The increase was particularly acute for the Virginia class program, with data showing an increase in the number of cannibalized parts from 146 in 2017 to 485 in 2019. CBO also found that certain VCS overhauls “took longer and that most required more labor than the class plan estimated for each ship... in part because some parts had to be replaced earlier than expected,” and that the Virginia
class was designed to require less maintenance than the Los Angeles class, in part because the Virginia class featured more parts that were designed to last the life of the ship...at this early stage in the class’s life cycle, the reverse has been the case, though that could change as the shipyards gain more experience with the class.”

The committee recognizes that as the Navy begins to take delivery of more Virginia class submarines (VCS), spare parts will be at an increased demand. Due to the shortage of existing spares and earlier than expected failures of parts, the Navy has resorted to the cannibalization of spares from other submarines. This has led to increased maintenance timelines and a higher possibility of damaging the parts as they are changed out between submarines. This problem is only exacerbated when the Navy chooses to redirect spares funding to higher priority needs. Rather than chasing the problems as they arise, the Navy should take an experienced based process that tracks the types of spares that are in highest demand and closely monitor which components are failing ahead of their expected design life.

Therefore, the committee directs the Secretary of the Navy to brief the House committee on Armed Services no later than February 1, 2022 on what efforts the Navy is taking to reduce the backlog of spares and cannibalization on Virginia class submarines.

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

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.