



AMENDMENT NO. _____

Calendar No. _____

Purpose: In the nature of a substitute.

IN THE SENATE OF THE UNITED STATES—115th Cong., 2d Sess.

S. 2511

To require the Under Secretary of Commerce for Oceans and Atmosphere to carry out a program on coordinating the assessment and acquisition by the National Oceanic and Atmospheric Administration of unmanned maritime systems, to make available to the public data collected by the Administration using such systems, and for other purposes.

Referred to the Committee on _____ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT IN THE NATURE OF A SUBSTITUTE intended to be proposed by _____

Viz:

1 Strike all after the enacting clause and insert the fol-

2 lowing:

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Commercial Engagement Through Ocean Technology
6 Act of 2018” or the “CENOTE Act of 2018”.

7 (b) **TABLE OF CONTENTS.**—The table of contents for
8 this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Definitions.

- Sec. 3. Coordination regarding assessment and acquisition by National Oceanic and Atmospheric Administration of unmanned maritime systems.
- Sec. 4. Regular assessment of unmanned maritime systems to support National Oceanic and Atmospheric Administration missions.
- Sec. 5. Acquisition of unmanned maritime systems.
- Sec. 6. Reports on unmanned maritime systems and usage for mission of the National Oceanic and Atmospheric Administration.
- Sec. 7. Funding and additional authorities.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATION.—The term “Administra-
4 tion” means the National Oceanic and Atmospheric
5 Administration.

6 (2) ADMINISTRATOR.—The term “Adminis-
7 trator” means the Under Secretary of Commerce for
8 Oceans and Atmosphere and Administrator of the
9 National Oceanic and Atmospheric Administration.

10 (3) COOPERATIVE ACTIVITIES OF THE ADMINIS-
11 TRATION.—The terms “cooperative activities of the
12 Administration” means cooperative activities be-
13 tween the Administration and an external entity,
14 such as the Cooperative Institutes, Sea Grant Col-
15 leges, National Estuarine Research Reserves, the
16 National Oceanographic Partnership Program estab-
17 lished under chapter 665 of title 10, United States
18 Code, and regional associations of the Integrated
19 Ocean Observing System.

20 (4) DATA SPECIFICATIONS.—The term “data
21 specifications” shall refer to the type, resolution, pe-

1 riodicity, and quality of data required by an program
2 of the Administration.

3 (5) TEST OR TRAINING RANGE.—

4 (A) IN GENERAL.—The term “test or
5 training range” means an area designated for
6 operating unmanned maritime systems and
7 other types of systems for the purpose of—

8 (i) evaluating the performance of such
9 systems; or

10 (ii) training personnel on operating
11 procedures for such systems.

12 (B) INCLUSIONS.—The term “test or
13 training range” may include specialized fixed or
14 portable instrumentation for the operation of
15 unmanned maritime systems and other types of
16 systems.

17 (6) UNMANNED MARITIME SYSTEMS.—

18 (A) IN GENERAL.—The term “unmanned
19 maritime systems” means remotely operated or
20 autonomous vehicles produced by the commer-
21 cial sector—

22 (i) designed to travel in the air, on or
23 under the ocean surface, on land, or any
24 combination, and that function without an
25 on-board human presence; and

1 (ii) that may include associated com-
2 ponents such as control and communica-
3 tions, instrumentation, data transmission,
4 and processing systems.

5 (B) **EXAMPLES.**—The term “unmanned
6 maritime systems” includes the following:

- 7 (i) Unmanned undersea vehicles.
8 (ii) Unmanned surface vehicles.
9 (iii) Autonomous underwater vehicles.
10 (iv) Autonomous surface vehicles.

11 (C) **TREATMENT OF AERIAL VEHICLES.**—
12 The term “unmanned maritime systems” in-
13 cludes unmanned aerial vehicles and autono-
14 mous aerial vehicles that are used to address
15 maritime issues to the extent the Administrator
16 determines it is necessary and appropriate to
17 achieve the purposes of this Act.

18 **SEC. 3. COORDINATION REGARDING ASSESSMENT AND AC-**
19 **QUISITION BY NATIONAL OCEANIC AND AT-**
20 **MOSPHERIC ADMINISTRATION OF UN-**
21 **MANNED MARITIME SYSTEMS.**

22 (a) **ESTABLISHMENT.**—The Administrator shall di-
23 rect the Office of Oceanic and Atmospheric Research (in
24 this Act referred to as “OAR”) and the Office of Marine

1 and Aviation Operations (in this Act referred to as
2 “OMAO”)—

3 (1) to coordinate the Administration’s research,
4 assessment, and acquisition of unmanned maritime
5 systems; and

6 (2) to consider the use of unmanned maritime
7 systems in cooperative activities of the Administra-
8 tion.

9 (b) COORDINATION WITHIN THE ADMINISTRA-
10 TION.—

11 (1) AUTHORITY TO ESTABLISH COORDINATING
12 COMMITTEE.—The Administrator shall establish a
13 coordinating committee to ensure that OAR and
14 OMAO address requirements throughout the Admin-
15 istration.

16 (2) INCLUDED.—In establishing a coordinating
17 committee under paragraph (1), the Administrator
18 shall ensure that representation in the committee is
19 included from the following:

20 (A) The Office of Ocean Exploration
21 (OER).

22 (B) The program office of the Integrated
23 Ocean Observing System.

24 (C) Such other offices of the Administra-
25 tion as the Administrator determines are ac-

1 tively engaged with unmanned maritime sys-
2 tems.

3 (3) DESIGNATION.—A coordinating committee
4 established under paragraph (1) shall be known as
5 the “Unmanned Maritime Systems Ocean Tech-
6 nology Coordinating Committee”.

7 (e) COORDINATION WITH THE NAVY.—

8 (1) IN GENERAL.—In carrying out this Act, the
9 Administrator shall—

10 (A) make efforts to coordinate with the
11 Secretary of the Navy to leverage expertise in
12 the development and operational transition of
13 unmanned maritime systems;

14 (B) align with, utilize, and inform the
15 Deputy Under Secretary of Commerce for Op-
16 erations and the Oceanographer of the Navy’s
17 strategic and operational priorities, particularly
18 for missions and geography within the Adminis-
19 tration’s purview;

20 (C) seek to utilize Naval unmanned sys-
21 tems test or training ranges, such as the Gulf
22 of Mexico Unmanned Systems Test and Train-
23 ing Range of the Naval Meteorology and Ocean-
24 ography Command, and maximize interagency
25 cooperation and sharing of best practices; and

1 (D) to formalize coordination, execute a
2 memorandum of understanding with the Sec-
3 retary of the Navy that includes—

4 (i) incorporating consideration of pri-
5 orities and requirements of the Adminis-
6 tration into research and development ac-
7 tivities conducted by the Secretary of the
8 Navy;

9 (ii) consultation intended to encourage
10 and facilitate efforts by the Administration
11 to partner with the Navy to procure un-
12 manned maritime systems and to establish,
13 instrument, and operate test or training
14 ranges and related facilities;

15 (iii) adopting procedures defined by
16 the Secretary of the Navy for the Adminis-
17 tration to access and utilize test or train-
18 ing ranges or related Naval facilities for
19 purposes identified in paragraph (2)(B);
20 and

21 (iv) such other topics as the Adminis-
22 trator considers necessary or advisable, in-
23 cluding mapping, bathymetry, observations,
24 and ocean exploration.

1 (2) LOCATION.—The Administrator shall, if
2 practicable, carry out the activities authorized by
3 this Act at a facility where the Navy and the Admin-
4 istration are co-located, for the following purposes:

5 (A) Gaining efficiencies through collabora-
6 tion.

7 (B) Advancing development of unmanned
8 maritime systems, including—

9 (i) systems research and development;

10 (ii) systems testing;

11 (iii) systems modifications; and

12 (iv) systems integration.

13 (C) Accelerating transition from concept to
14 manufacturing and acquisition.

15 (d) COORDINATION WITH OTHER FEDERAL AGEN-
16 CIES.—In carrying out this Act, the Administrator and the
17 Secretary of the Navy may utilize the National Oceano-
18 graphic Partnership Program, established under chapter
19 665 of title 10, United States Code, as a mechanism for
20 providing interagency coordination for the advancement of
21 unmanned maritime systems.

22 (e) COORDINATION WITH ACADEMIC SECTOR.—In
23 carrying out this Act, the Administrator, in consultation
24 with the Secretary of the Navy, may coordinate and co-
25 locate with an academic research institution, or consor-

1 tium of academic research institutions, for the following
2 purposes:

3 (1) Maximizing opportunities for research and
4 development of unmanned maritime systems.

5 (2) Providing training in unmanned maritime
6 systems as part of an accredited certificate or degree
7 program of education.

8 (3) Facilitating the commercialization of un-
9 manned maritime systems through public-private
10 partnerships that includes academic research institu-
11 tions, private industry, and public safety agencies.

12 (4) Arranging access to and use of additional
13 facilities that support testing and assessment of or
14 training with respect to unmanned maritime systems
15 under environmental conditions of interest, increas-
16 ing operational tolerance under such conditions, cer-
17 tifying operational capacity under such conditions,
18 whether real or simulated, and training operators of
19 unmanned maritime systems in real or simulated en-
20 vironments.

21 (5) Facilitating engagement with other aca-
22 demic institutions with interest or relevant expertise
23 in unmanned maritime systems.

24 (6) Promoting information sharing between the
25 academic, environmental, and military institutions to

1 lead to more robust, mission-oriented unmanned
2 maritime systems.

3 (f) **ENGAGEMENT WITH THE PRIVATE SECTOR.**—

4 Other than as described in subsection (e), the Adminis-
5 trator, in consultation with the Secretary of the Navy,
6 may, in carrying out this Act, to the extent practicable,
7 coordinate and consult with the private sector—

8 (1) to support the commercialization of un-
9 manned maritime systems; and

10 (2) to assist with their assessment of commer-
11 cially available unmanned maritime systems to sup-
12 port the missions and goals of the Navy, the Admin-
13 istration, and cooperative activities of the Adminis-
14 tration.

15 **SEC. 4. REGULAR ASSESSMENT OF UNMANNED MARITIME**
16 **SYSTEMS TO SUPPORT NATIONAL OCEANIC**
17 **AND ATMOSPHERIC ADMINISTRATION MIS-**
18 **SIONS.**

19 (a) **IN GENERAL.**—The Administrator, acting
20 through the Assistant Administrator for Oceanic and At-
21 mospheric Research and the Director of the Office of Ma-
22 rine and Aviation Operations and the National Oceanic
23 and Atmospheric Administration Commissioned Officer
24 Corps, shall regularly assess publicly and commercially

1 available unmanned maritime systems for potential use to
2 support missions of the Administration.

3 (b) SCIENCE-BASED ASSESSMENTS.—The Adminis-
4 trator shall carry out subsection (a) through the Assistant
5 Administrator for all matters relating to assessment of the
6 suitability, feasibility, and cost-effectiveness of unmanned
7 maritime systems to meet data specifications required by
8 programs of the Administration.

9 (c) ASSESSMENT OF OPERATIONAL UTILITY.—The
10 Administrator shall carry out subsection (a) through the
11 Director for all matters relating to assessment of whether
12 unmanned maritime systems are operationally reliable,
13 feasible, and cost effective enough to make observations
14 required by programs of the Administration.

15 (d) ENGAGEMENT.—The Assistant Administrator
16 and the Director shall jointly—

17 (1) convene and consult the Unmanned Mari-
18 time Systems Ocean Technology Coordinating Com-
19 mittee established under section 3(b); and

20 (2) consult with the heads of other offices of
21 the Administration, the academic sector, and devel-
22 opers and manufacturers of unmanned maritime sys-
23 tems to conduct the assessments under subsection
24 (a).

1 **SEC. 5. ACQUISITION OF UNMANNED MARITIME SYSTEMS.**

2 (a) IN GENERAL.—The Administrator shall coordi-
3 nate and centralize the acquisition by the Administration
4 of unmanned maritime systems to meet the prioritized list
5 of data requirements identified by OAR and OMAO in car-
6 rying out this Act in their regular assessments and ap-
7 proved by the Unmanned Maritime Systems Ocean Tech-
8 nology Coordinating Committee established under section
9 3(b).

10 (b) MEMORANDA OF UNDERSTANDING.—In order to
11 realize greater savings and efficiency, the Administrator
12 may develop and execute a memorandum of agreement
13 with the Secretary of the Navy to—

14 (1) participate in procurements conducted by
15 the signatories to the memorandum of under-
16 standing;

17 (2) accept decommissioned unmanned maritime
18 systems from the Navy;

19 (3) develop policies and procedures to share un-
20 manned maritime systems; or

21 (4) provide for other means of creating effi-
22 ciency and savings in Federal acquisition of un-
23 manned maritime systems.

24 (c) RULE OF CONSTRUCTION.—Nothing in this Act
25 shall be construed to modify Federal procurement law.

1 **SEC. 6. REPORTS ON UNMANNED MARITIME SYSTEMS AND**
2 **USAGE FOR MISSION OF THE NATIONAL OCE-**
3 **ANIC AND ATMOSPHERIC ADMINISTRATION.**

4 (a) **IN GENERAL.**—In carrying out this Act, the Ad-
5 ministrator shall, not later than one year after the date
6 of the enactment of this Act, and every 4 years thereafter,
7 submit to the appropriate committees of Congress a report
8 on the usage of unmanned maritime systems for the mis-
9 sion of the Administration.

10 (b) **CONTENTS.**—Each report submitted under sub-
11 section (a) shall include, for the period covered by the re-
12 port, the following:

13 (1) An inventory of current unmanned maritime
14 systems used by programs of the Administration, a
15 summary of the data they have returned, and the
16 benefits realized from having such data.

17 (2) A prioritized list of data requirements of
18 the Administration that could be met with un-
19 manned maritime systems, and the commercially
20 available unmanned maritime systems with the oper-
21 ational capabilities to collect such data.

22 (c) **APPROPRIATE COMMITTEES OF CONGRESS DE-**
23 **FINED.**—In this section, the term “appropriate commit-
24 tees of Congress” means—

25 (1) the Committee on Appropriations, the Com-
26 mittee on Armed Services, and the Committee on

1 Commerce, Science, and Transportation of the Sen-
2 ate; and

3 (2) the Committee on Appropriations, the Com-
4 mittee on Armed Services, the Committee on Nat-
5 ural Resources, and the Committee on Science,
6 Space, and Technology of the House of Representa-
7 tives.

8 **SEC. 7. FUNDING AND ADDITIONAL AUTHORITIES.**

9 (a) FUNDING.—The Administrator shall carry out
10 this Act using existing amounts appropriated or otherwise
11 made available to the Administration.

12 (b) ADDITIONAL AUTHORITIES.—In carrying out this
13 Act, the Administrator may—

14 (1) enter into contracts, cooperative agree-
15 ments, and other transactions with any domestic or
16 foreign government;

17 (2) notwithstanding section 1342 of title 31,
18 United States Code, accept donations and voluntary
19 and uncompensated services;

20 (3) accept funds from other Federal depart-
21 ments and agencies;

22 (4) utilize the National Oceanographic Partner-
23 ship Program established under chapter 665 of title
24 10, United States Code, to accept funds from other

1 Federal departments and agencies, to accept dona-
2 tions, and to enter into contracts and award grants;

3 (5) under an agreement entered into under
4 paragraph (1), transfer funds appropriated to carry
5 our this Act to any organization;

6 (6) use, with their consent, with or without re-
7 imbursement, and subject to the availability of ap-
8 propriations, the land, services, equipment, per-
9 sonnel, and facilities of—

10 (A) any department, agency, or instrumen-
11 tality of the United States;

12 (B) any State or local government or tribal
13 government; or

14 (C) any foreign government or inter-
15 national organization; and

16 (7) promulgate such rules and regulations as
17 may be necessary and appropriate.