

	National Oceanic and Atmospheric Administration	NOAA Administrative Order 212-19	
	NOAA ADMINISTRATIVE ORDER SERIES	DATE OF ISSUANCE January 16, 2025	EFFECTIVE DATE January 16, 2025
	SUBJECT: NOAA UNCREWED MARINE SYSTEMS		

## **SECTION 1. PURPOSE.**

This Order prescribes the policy and responsibilities for the management and utilization of Uncrewed Marine Systems (UMS) in support of National Oceanic and Atmospheric Administration (NOAA) Programs. The objectives of this Order are to:

- a. Foster and facilitate cooperation within NOAA and collaboration with external stakeholders having a common interest in safe, efficient, and environmentally responsible UMS operations;
- b. Manage and minimize operational risks through implementation of risk mitigation and elimination best practices;
- c. Ensure UMS meet applicable seaworthiness, operational safety, and environmental performance standards;
- d. Foster a culture that values the skilled UMS operator;
- e. Encourage sharing of UMS-relevant information to promote efficiencies and quality in NOAA UMS Operations;
- f. Establish a NOAA UMS Advisory Board;
- g. Guide the operations of the NOAA OMAO Uncrewed Systems (UxS) Operations Center in regards to UMS;
- h. Make UMS safety a priority for all NOAA UMS operations; and
- i. Ensure UMS data management practices comply with NOAA data management directives.

## **SECTION 2. SCOPE.**

01. This Order is applicable to the operations of:
  - a. UMS operated by NOAA Federal, NOAA Corps, or NOAA contractor personnel.
  - b. UMS operated by cooperating partner organizations from NOAA vessels or facilities by the partner's personnel.
  - c. UMS owned or leased by NOAA.
02. Any deviation from the provisions of this Order may only be undertaken upon approval of a waiver. A waiver is a written authorization that permits temporary deviation from provisions of this Order for strategic or compelling operational requirements. Any request for a waiver to provisions of this Order must be presented in writing to the UMS Advisory Board. The Board will provide recommendations to the Director, UxS Operations Center, who is the approval authority for all waivers to provisions of this Order.
03. This Order is not applicable to cooperating partner organizations who are operating UMS independently to provide data to NOAA.

## **SECTION 3. DEFINITIONS.**

01. Uncrewed Marine Systems (UMS). Remotely operated or autonomous craft that can function without an onboard human presence, and that may include associated components such as control and communications. UMS do not include exclusively aerial systems of any kind. UMS include underwater, surface, and hybrid systems (i.e., systems that can operate both on and below the water's surface). For purposes of this NAO, the term UMS includes, but is not limited to, the following terms that may be used in statutes, regulations, or policies:
  - a. Unmanned systems,
  - b. Unmanned vehicles,
  - c. Autonomous systems,
  - d. Autonomous vehicles, and
  - e. Variants including:
    - Unmanned surface vehicles/systems,
    - Unmanned underwater vehicles/systems,
    - Autonomous surface vehicles/systems, and
    - Autonomous underwater vehicles/systems.

UMS as defined in this Order does not encompass buoys, drifters, or floats.

## **SECTION 4. POLICY.**

01. A NOAA UMS Standards and Procedures Manual (the Manual), consisting of a broad programmatic core manual containing approved operational standards and reference information supporting NOAA-wide applications, will be developed and maintained by the

NOAA Uncrewed Systems Operations Center (UxSOC) and UMS Advisory Board – and is to be approved by the Uncrewed System Executive Oversight Board (UxS EOB). Supplemental UMS policies and operating manuals may be developed by NOAA Programs to address their unique program and/or mission requirements.

- a. The Manual augments and supplements the policies, procedures, and guidelines in this Order and is intended to maximize the efficiency and effectiveness of NOAA UMS operations by providing for the timely development and issuance of programmatic materials to the NOAA UMS community.
  - b. The core elements of the Manual apply to all NOAA Programs and NOAA personnel involved with UMS operations and have the same force, effect, and authority as this Order.
  - c. Supplemental UMS policies and operating manuals, developed by NOAA Programs and applicable only to the specified Program and/or mission, have the same force, effect, and authority as the Manual upon review and approval as specified in section 5.02.
02. UMS owned by NOAA are categorized and identified per the scheme set forth in the Manual and listed in an annual inventory report.
  03. All UMS operators must be trained and certified, where applicable, based on UMS size, engineering complexity, nature of operations, and operating area. NOAA-wide training requirements are defined in the Manual; Program- and mission-related requirements are defined in supplemental UMS policies or operating manuals.
  04. UMS must be maintained and operated at all times in a safe and environmentally responsible manner.
  05. Appropriate training and equipment must be provided to NOAA personnel operating UMS to ensure safe and environmentally responsible operations.
  06. UMS owned or leased by NOAA may only be used for official government purposes.
  07. UMS incidents or near-misses must be reported per the requirements in the Manual.

## **SECTION 5. RESPONSIBILITIES.**

01. The Director, NOAA UxSOC, is responsible for broadly administering NOAA UMS policies, procedures, and standards – and providing support and resources for UMS operations.
02. The UxS EOB is responsible for oversight of NOAA UMS operations. It will provide executive oversight and accountability, and assure that agency-wide strategies, policies, and initiatives are developed collaboratively and implemented consistently. The UxS EOB provides final review and approval of policies. The UxS EOB will review the proposed contents of the Manual, including draft supplemental UMS policies and operating manuals

developed by NOAA Programs under section 4.01, and any subsequent updates before their finalization. Approval will be indicated by signature of the Co-Chairs of the UxS EOB on the sequentially numbered Transmittal Sheets that will accompany each issuance or update to the Manual, or supplemental UMS policies and operating manuals.

03. The UMS Advisory Board.

- a. The UMS Advisory Board (UMSAB) is composed of the following members:
  - i. UxSOC UMS Division Chief – UMS Advisory Board Coordinator;
  - ii. National Marine Fisheries Service representative(s);
  - iii. National Ocean Service representative(s);
  - iv. Office of Oceanic and Atmospheric Research representative(s);
  - v. Office of Marine and Aviation Operations representative(s);
  - vi. National Weather Service representative(s); and
  - vii. National Environmental Satellite, Data, and Information Service representative(s).
- b. Each organization identified in section 5.03a (ii) through (vii) of this Order may designate one additional UMS Advisory Board member; however, for voting purposes, each of these organizations is entitled to cast a single vote.
- c. The Office of General Counsel and the Chief Data Officer may each designate a representative to advise the Board in a non-voting capacity and for situational awareness.
- d. The UMS Advisory Board serves in a support capacity to NOAA Line Offices and the UxS EOB, and provides subject matter expertise pertaining to UMS policies, procedures, and best practices. The primary functions of the UMS Advisory Board are to:
  - i. Serve as the central point of NOAA UMS expertise and coordination; and
  - ii. Develop, review, and recommend to the UxS EOB policies, procedures, and best practices for inclusion in the Manual.
- e. The UMS Advisory Board may:
  - i. Provide requirements review and advice in support of UMS procurement activities;
  - ii. Inform the UxS EOB of significant UMS issues;

- iii. Support collection and maintenance of UMS inventories; and
  - iv. Review UMS incidents and near-misses to document lessons learned and recommend risk mitigation strategies and measures.
04. NOAA Line and Program Offices. NOAA Line and Program Offices that own or operate UMS must comply with this Order, conduct UMS operations consistent with the Manual, and are responsible for the following:
- a. The safe operation, environmental performance, life cycle management, and material condition of their UMS;
  - b. Registering UMS owned by NOAA with the UxSOC per the categorization and identification scheme set forth in the Manual;
  - c. Providing timely input for NOAA UMS inventory reports;
  - d. Developing and maintaining supplemental UMS policies and operating manuals that are directly related to their program and mission requirements in order to augment the Manual; and
  - e. Designating UMSAB representatives and providing adequate time and resources for their participation on the Board.

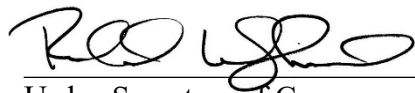
## **SECTION 6. REFERENCES.**

- 01. 33 U.S.C. § 4101 *et seq.*, “Commercial Engagement Through Ocean Technology Act of 2018.”
- 02. NAO 209-1A, “NOAA Occupational Safety and Health.”
- 03. NAO 216-6A, “Compliance with the National Environmental Policy Act,” et al.

## **SECTION 7. EFFECT ON OTHER ISSUANCES.**

The NOAA UNSEC signs because there is no delegation of authority for this NAO.

An electronic copy of this Order will be posted in accordance with chapter 100 of the NOAA Records Control Schedule on the NOAA Office of the Chief Administrative Officer website under the Administrative Programs’ NOAA Administrative Issuances Section:  
[www.noaa.gov/organization/administration/noaa-administrative-orders](http://www.noaa.gov/organization/administration/noaa-administrative-orders)

  
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Under Secretary of Commerce  
for Oceans and Atmosphere  
and NOAA Administrator

Offices of Primary Interest:

- Office of Marine and Aviation Operations