

NOAA Aviation Safety Policy Handbook

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SECTION 1. PURPOSE

The National Oceanic and Atmospheric Administration (NOAA) is responsible for providing a safe working environment for its workforce, and for partners who are exposed to the risks associated with flying on aircraft owned or operated by NOAA. The purpose of NOAA Administrative Order (NAO) 209-124 is to make aviation safety the number one priority for all aviation operations by creating policy that:

- a. ensures aircraft meet airworthiness and operational safety standards;
- b. ensures personnel are provided with aviation safety training and aviation life support equipment (ALSE); and
- c. establishes a corporate NOAA Aviation Safety Board (NASB) and Aviation Safety Program (ASP) to provide policies, procedures, tools and training that follow the Safety Standards Guidelines for Federal Flight Programs codified in sections 102-33.140 and 102-33.155-185 of title 41 of the Code of Federal Regulations (41 CFR 102-33.140 and 41 CFR 102-33.155-185).

SECTION 2. SCOPE

.01 Except as provided in Section 2.02, this handbook applies to all NOAA personnel flying on any aircraft in the performance of their official duties, and to all individuals flying on aircraft owned or operated by NOAA. For purposes of this order, aircraft operated by NOAA includes aircraft:

- a. rented, chartered, leased, or owned by NOAA or NOAA personnel, and used to conduct official business; and
- b. operated by public or private entities on behalf of NOAA through written support agreements with NOAA.

.02 This order does not apply to the use of:

- a. air carriers for transportation;
- b. aircraft for the acquisition of products or data (including products or data acquired through grants) where no NOAA personnel fly on the aircraft in any capacity; or
- c. aircraft for movement of cargo where no NOAA personnel fly on the aircraft in any capacity.

SECTION 3. BACKGROUND

.01 NOAA operations often require flights for transportation or mission operations accomplished in both *rotary* and *fixed wing* aircraft operated by NOAA or other federal agencies of the U.S. Government. These may include the armed forces, state and local governments, foreign governments, and civilian aviation service providers. These aircraft operators may be providing the service directly to NOAA or to another party. Examples of routine NOAA flight operations include hazardous weather research, aerial damage assessment, air chemistry, forecaster training, coastal and offshore surveys, enforcement, and remote sensing.

.02 An aircraft operated by the U.S. Government, or one owned and operated by the government of a state, the District of Columbia, or a territory or possession of the United States or a political subdivision of one of these governments, may be considered to be operating as a "public aircraft" as defined in sections 40102 and 40125 of title 49 of the U.S. Code. Except for certain airspace rules that apply to all aircraft (reference Federal Aviation Act of 1958, Title 49 U.S.C. Subtitle VII), the Federal Aviation Administration (FAA) has no legal jurisdiction over public aircraft operations. As such, public aircraft are not subject to many federal aviation regulations, including requirements relating to aircraft certification, maintenance, and pilot certification.

.03 To ensure the safety of federal employees while operating in public aircraft, federal agencies are required to develop agency-specific flight program standards that meet or exceed applicable civil or military rules. These standards must be incorporated in contracts and agreements as set forth in Safety Standards Guidelines for Federal Flight Programs codified by regulations set forth in 41 CFR 102-33.140 and 41 CFR 102-33.155-185.

SECTION 4. POLICY

.01 NOAA is responsible for ensuring that:

- a. aircraft owned or operated by NOAA meet airworthiness and operational safety standards; and
- b. all qualified non-crewmembers who fly on aircraft owned or operated by NOAA for mission operations, and all NOAA personnel who fly as qualified non-crewmembers on any aircraft for mission operations in the performance of their official duties, are:
 1. appropriately trained in aviation safety; and

2. provided appropriate ALSE.

.02 The Director, Office of Marine and Aviation Operations (OMAO). The Director, OMAO, shall broadly administer NOAA's aviation safety policy through the Aviation Safety Program Manager (ASPM). The Director, OMAO shall approve all revisions to the NOAA Aviation Safety Handbook.

.03 NOAA Aviation Safety Board (NASB).

a. The NASB is composed of both voting and non-voting personnel appointed by Line and Staff offices as governed by the Terms of Reference. The NASB is chaired by the ASPM. Duties, functions, responsibilities and procedures are delineated section 6.

b. Voting members of the NASB must meet the aviation safety training and qualification standards outlined in the NASB Terms of Reference.

SECTION 5. DEFINITIONS

.01 Accident (Aircraft) - is defined by the National Transportation Safety Board (NTSB) as an occurrence associated with the operation of an aircraft that takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

.02 Aircraft - is defined by 14 CFR 1.1 as a device that is used or intended to be used for flight in the air.

.03 Armed Forces - means the U.S. Army, Navy, Air Force, Marine Corps, and Coast Guard, including their Regular and Reserve components which includes the National Guard. The U.S. Civil Air Patrol and the U.S. Coast Guard Auxiliary are not considered armed forces.

.04 Aviation Life Support Equipment (ALSE) - is equipment that protects crewmembers and others aboard an aircraft, or assists in their safe escape, survival, and recovery during an accident or other emergency.

.05 Aviation Services - means procurement of the use of an aircraft for mission operations or transportation.

.06 Crewmember - is defined in 41 CFR 102-33.20 as a person assigned to operate or assist in operating an aircraft during flight time. Crewmembers perform duties directly related to the operation of the aircraft (e.g., as pilots, co-pilots, flight engineers, navigators) or duties assisting in operation of the aircraft (e.g., as flight directors, crew chiefs, electronics technicians, mechanics).

.07 Data Services - means the procurement of products or data that may be acquired through the use of an aircraft.

.08 Government Aircraft – is a federal aircraft or a commercial aircraft hired as a commercial aviation services aircraft (as defined by 41 CFR 102-33.20).

.09 Incident (Aircraft) - as defined by the NTSB, means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

.10 Mission Operations - are all operations other than transportation. Mission operations include, but are not limited to: aerial surveys, airborne data collection, forecaster training, and aerial photography.

.11 Near Miss - means: (1) a near midair collision associated with the operation of an aircraft in which a possibility of collision occurs as a result of unplanned proximity of less than 500 feet to another aircraft, or a report is received from a pilot or a flight crew member stating that a collision hazard existed between two or more aircraft; (2) any situation involving aircraft in which evasive action was required to avoid a collision (such as emergency maneuvering to avoid a bird strike or collision with any object); or (3) any "close-call" incident that could have resulted in a fatality or serious injury, or that could have jeopardized the safety of the flight.

.12 NOAA Aircraft – is an aircraft that NOAA owns (holds title to or has vested rights in the title) or an aircraft that NOAA leases and holds the option to purchase.

.13 NOAA Personnel - is any NOAA employee or NOAA contract employee, or any other individual who meets the definition of a NOAA employee under 5 USC Ch. 81 (Federal Employees Compensation Act).

.14 Observer - is any qualified non-crewmember who monitors the performance of the governmental function for which the aircraft is being operated. Observer status is determined by the NOAA Line/Staff Office Project Manager or Principal Investigator responsible for the flight and shall not be granted to an individual more than once every four months on average or more than three times per year over any given calendar year. As a minimum, observers will complete online training as described in this handbook.

.15 Over Water Flight - are flight operations over water and beyond power off gliding distance from a suitable emergency landing location on shore.

.16 Privately Owned Aircraft - is defined in 41 CFR 300-3.1 as an aircraft that is rented, chartered, leased, or owned by an employee for personal use. It is not rented, chartered, leased, or owned by a government agency or an employee for use in carrying out official government business.

.17 Qualified Non-Crewmember - is defined in 41 CFR 102-33.20 as a person flying onboard a government aircraft whose skills or expertise are required to perform or are associated with performing the governmental function for which the aircraft is being operated (qualified non-

crewmembers may be researchers, law enforcement agents, fire fighters, agricultural engineers, biologists, etc.).

.18 Transportation - is the use of aircraft for the exclusive purpose of moving individuals from point to point. Any individual that participates in an Over Water Flight or Cold Water operation more than once every four months, on average, or more than three times per year over any given calendar year must complete the training listed in this handbook even if the flight operation is for transportation only.

SECTION 6. RESPONSIBILITIES.

.01 NOAA Aviation Safety Board (NASB).

a. The NASB is composed of the following personnel:

Voting Members:

- Aviation Safety Program Manager (ASPM) - Chairperson
- NOAA Aircraft Operations Center (AOC) Representative
- NOAA Safety and Environmental Compliance Office Representative
- National Marine Fisheries Service (NMFS) Representative
- National Ocean Service (NOS) Representative
- Office of Oceanic and Atmospheric Research (OAR) Representative
- National Weather Service (NWS) Representative
- National Environmental Satellite, Data and Information Service (NESDIS) Representative

Non-Voting Observers:

- NOAA General Counsel Representative
- NOAA Acquisitions and Grants Office Representative
- NOAA Workforce Management Office Representative
- NOAA Program Planning and Integration Representative

Executive Secretary:

- Aviation Safety Program staff designee

b. The NASB shall:

1. approve aviation safety training and ALSE requirements;
2. approve minimum aviation safety standards to be included in NOAA's contracts for aviation services and data services;
3. approve aviation safety and risk assessment tools developed by the NOAA ASP;
4. solicit and address the aviation safety issues and needs of NOAA;

5. review reports from NOAA aviation accidents and potentially dangerous incidents and recommend preventative measures to the ASPM;
6. review results of NOAA aviation safety audits to monitor compliance with NOAA aviation safety policy;
7. review proposed revisions to the NOAA Aviation Safety Handbook and make a recommendation to the Director, OMAO, to approve changes;
8. seek pertinent expertise on aviation safety matters before the NASB; and
9. report to the NOAA Safety Council circumstances adversely impacting safety and/or efficiency of the NOAA ASP.

.02 The ASPM shall:

- a. possess significant aviation operational field experience and maintain Interagency Committee for Aviation Policy (ICAP) Federal Aviation Safety Officer credentials;
- b. maintain the Aircraft Operator Database (AOD) described in Section 7.05;
- c. facilitate the acquisition of aviation safety training identified in Section 8;
- d. acquire, distribute, and maintain ALSE identified in Section 8;
- e. provide aviation safety tools and instruction on the use of such tools, including risk assessment matrices and mishap response checklists;
- f. provide assistance to NOAA contracting officials by:
 1. providing language for inclusion in all relevant contracts and agreements that sets forth airworthiness and safety standards; and
 2. serving as a source evaluation board and technical evaluation panel advisor to evaluate potential offeror's aviation-related technical proposals;
- g. host an annual NOAA aviation safety conference;
- h. administer the NOAA aviation safety awards program; and
- i. maintain a NOAA aircraft accident and incident database and enter data from NOAA aircraft accidents and incidents into the Federal Aviation Accident Incident Reporting System (AAIRS) as required by 41 CFR 102-33.445 through 102-33.450, Management of Government Aircraft.

.03 NOAA Line Office Assistant Administrators (AAs) and Staff Office equivalents shall:

- a. designate in writing primary and alternate Line/Staff Office representatives to the NASB, as applicable;
- b. hold the Line/Staff Office NASB representatives, in their performance appraisals, accountable for NASB duties; and
- c. ensure Line/Staff Office compliance with this Order.

.04 NOAA Contracting Officers and Contracting Officers Technical Representatives (COTRs) shall ensure that:

a. contracts and agreements for which the contracting officer is responsible, that secure the use of an aircraft on which NOAA personnel will fly,

1. are only executed with:

- (a) aircraft operators listed on the AOD described in Section 7.05; or
- (b) aircraft operators exempt in accordance with Section 2.02 of NAO 209-124 (repeated in Section 2.02 of this handbook).

2. include language setting forth airworthiness and operational safety standards.

b. the ASPM or designee is consulted as a source selection board or technical evaluation panel advisor for all contracts and agreements subject to the provisions of this Order in order to evaluate the air service providers' technical proposals for ability to comply with airworthiness and operational safety standards.

.05 Crewmembers shall:

- a. have crewmember duties specified in their position description or be appointed in writing as a crewmember by the Commanding Officer of AOC;
- b. meet or exceed all crewmember certification and medical standards, training qualifications, flight experience, and flight currency prescribed in the NOAA AOC Aircraft Operations Manual for the type(s) of aircraft and the flight environment exposed to when flying for NOAA;
- c. ensure copies of all crewmember certificates, medical certificates, training received, results from standardization/evaluation check flights, and copies of flight logs are in their aviator information file at NOAA's AOC;
- d. abide by all operational procedures prescribed by the NOAA AOC Aircraft Operations Manual;

e. notify the NOAA Aviation Medical Examiner of any changes in medical condition that might impact their fitness for flight duty; and

f. when renting, chartering, or leasing an aircraft to fly operationally for NOAA, do so exclusively from operators listed on the AOD.

SECTION 7. PROCEDURES.

.01 Type of flight operation. Prior to departure, the NOAA Line/Staff Office Project Manager or Principal Investigator responsible for the flight shall determine whether the flight is for mission operations or transportation (as defined in Section 5) in order to determine whether the training and equipment requirements set forth in Section 8 apply.

.02 NOAA personnel are authorized to fly on the following aircraft:

a. NOAA aircraft;

b. non-NOAA aircraft owned by an air service provider listed on the AOD;

c. non-NOAA aircraft owned and operated by other departments, agencies, or instrumentalities of the United States; by state or local governments; or by the governments of countries that meet the Federal Aviation Administration International Aviation Safety Assessment Program Category 1 rating (including the armed forces of those countries); or

d. privately owned aircraft (POA) owned by NOAA personnel, provided that: use of a POA is authorized by NOAA in accordance with the Federal Travel Regulations; the POA is used exclusively for transportation; and the pilot carries no other personnel onboard.

.03 NOAA personnel are authorized to fly mission operations:

a. while serving as a qualified non-crewmember, when the individual:

1. has completed the appropriate aviation safety training prescribed in this handbook, or if deemed an observer (see definition below) by the Line/Staff Office Project Manager or Principal Investigator responsible for the flight, has received a pre-flight safety briefing from a member of the aircraft flight crew; and

2. possesses, or has immediately accessible in the aircraft, applicable aviation life support equipment (ALSE) as prescribed in NAO 209-124 and described in Section 8; or

b. while serving as a crewmember, when the individual meets the medical standards, aviation safety training, and ALSE requirements set forth in the NOAA AOC Aircraft Operations Manual for the position assigned.

.04 Non-NOAA personnel may be authorized to fly on aircraft owned or operated by NOAA.

In instances involving mission operations, non-NOAA personnel serving as qualified non-crewmembers must satisfy the following conditions:

- a. completion of appropriate aviation safety training prescribed in this handbook, or if deemed an observer (see definition in Section 5) by the NOAA Line/Staff Office Project Manager or Principal Investigator responsible for the flight, receipt of a pre-flight safety briefing from a member of the aircraft flight crew; and
- b. possession of, or has immediate access in the aircraft to applicable ALSE prescribed in NAO 209-124 and described in Section 8.

.05 Aircraft Operator Database (AOD). The NOAA Aviation Safety Program Manager (ASPM) shall maintain a web-based AOD, which is a list of air service providers (both foreign and domestic) qualified to provide aviation services to NOAA. Operators in this database are found to meet or exceed NOAA airworthiness and operational safety standards.

- a. Use of aircraft in the database shall be limited to those types of operations for which they have been qualified (e.g., an aircraft qualified for remote sensing may not be used for transportation unless specifically cleared for transportation). POA will not be listed on the AOD.
- b. NOAA personnel may request additional aircraft operators be evaluated for inclusion on the AOD by submission of a written request to the NOAA ASPM.

.06 Aviation Safety Training is required for all personnel serving as qualified non-crewmembers unless they are deemed an observer by the NOAA Line/Staff Office Project Manager or Principal Investigator responsible for the flight. Section 8 lists aviation safety training required for NOAA personnel who fly as qualified non-crewmembers on any aircraft for mission operations in the performance of their official duties and for all qualified non-crewmembers who fly on aircraft owned or operated by NOAA for mission operations. Each NOAA Line/Staff Office Project Manager or Principal Investigator shall be responsible for ensuring all individuals under their supervision who are required to fly receive the aviation safety training required by this Order.

.07 ALSE will be provided to individuals who fly on aircraft owned or operated by NOAA. Examples of NOAA ALSE are in Section 8. ALSE shall be:

- a. issued by the Aviation Safety Program (ASP) to NOAA units in sufficient quantity to support unit flight requirements;
- b. issued to the individual by the NOAA unit, or provided by the aircraft operator as required by contractual agreement;
- c. maintained and inspected to industry standards by the ASP if owned by NOAA; and
- d. worn by, or readily accessible to, personnel at all times while in flight.

.08 Aircraft Accidents and Incidents are required to be reported to the NTSB as prescribed by 49

CFR 830, "Notification and Reporting of Aircraft Accidents or Incidents and Overdue Aircraft, and Preservation of Aircraft Wreckage, Mail, Cargo, and Records."

a. All NTSB reportable accidents and incidents that occur while conducting official NOAA business must be reported by the aircraft operator working under contract or other written agreement with NOAA:

1. to the NOAA ASPM; and
2. to the NOAA Contracting Officer overseeing the contract.

b. NOAA personnel involved in an accident, incident, or near-miss involving an aircraft owned or operated by NOAA must report the occurrence in accordance with NAO 209-1, NOAA Safety Policy, and any superseding Department of Commerce (DOC) and/or NOAA guidance.

c. Accidents and incidents involving aircraft owned or operated by NOAA will be investigated in accordance with the policies and procedures set forth by the NOAA Incident Investigation Program.

.09 Requests for Waiver to provisions of this handbook shall be presented in writing to the Director, OMAO, with a copy to the ASPM. Based on waiver requests, the ASPM will assemble a Review Board to recommend appropriate waiver response to the Director, OMAO. The Director, OMAO, is the approval authority for all waivers to provisions.

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Section 8. NOAA AVIATION SAFETY TRAINING AND ALSO REQUIREMENTS.

Note: Aviation Safety Training and Aviation Life Support Equipment (ALSE) Requirements may be modified by the NASB. The most current information will be posted at (<http://www.oma.noaa.gov/aviationsafety>).

.01 Aviation safety training is an essential component of the NOAA Aviation Safety Program. The following table outlines training requirements for qualified non-crewmembers participating in Mission Operations flights for NOAA:

Aviation Safety Training							
Training Method		NOAA E-Learning			Egress Video	Classroom & Hands-on*	Classroom & Hands-on*
Training Frequency		Annual	Annual	Annual	Annual	Once every 5 years	One time
Flight Purpose and Environmental Conditions	Personnel	NOAA Aviation Policy and Procedures	Basic Aviation Safety and Survival	Aviation Health	Water Ditching, Safety and Survival		Aviation Safety and Cold Weather Survival
Operations over land	NOAA	✓	✓	✓			
	Non-NOAA		✓	✓			
Operations over water	NOAA	✓	✓	✓	✓	✓	
	Non-NOAA		✓	✓	✓	✓	
Operations in cold weather (<32°F)	NOAA	✓	✓	✓			✓
	Non-NOAA		✓	✓			✓

***Note:** Reasonable Accommodations may be considered for a qualified individual with a disability.

Note: NOAA Personnel may request more frequent training than what is listed above.

.02 In addition to aviation safety training requirements, NOAA has a requirement for use of ALSE as indicated in the table below:

Aviation Life Support Equipment (ALSE) required to be carried in the aircraft or worn by personnel				
Flight Purpose and Environmental Conditions	Life Raft of sufficient capacity for all aircraft occupants	Personal Flotation Device (PFD) (Life Vest)	Personal Emergency Locator Transmitter	Anti-Exposure Suit
Operations over water	✓	✓	✓	
Operations over cold water (<59° water temp and/or <32° air temp)	✓	✓	✓	✓

Note: Personal issue and/or use of a Helicopter Emergency Egress Device (HEED), Helicopter Aircrew Breathing Device (HABD), or other compressed air breathing device for underwater egress is only authorized for individuals who have received training to use the particular device.

SECTION 9. AUTHORITIES

5 USC Chapter 81:

http://finduslaw.com/federal_employment_compensation_act_feca_5_u_s_code_chapter_81

14 CFR 1.1:

[http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?
c=ecfr&rgn=div8&view=text&node=14:1.0.1.1.1.0.1.1&idno=14](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div8&view=text&node=14:1.0.1.1.1.0.1.1&idno=14)

41 CFR 102-33.20:

<http://law.justia.com/cfr/title41/41-3.1.1.2.9.html>

49 U.S.C. Subtitle VII:

http://www.tsa.gov/assets/pdf/49_USC_Chapters_401_to_501.pdf

49 CFR 830:

[http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/
49cfr830_main_02.tpl](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfr830_main_02.tpl)

49 CFR sections 40102 and 40125 International Civil Aviation Organization (ICAO), a United Nations agency, Annexes 1, 6, and 8 of the Chicago Convention standards. Federal Aviation Administration International Aviation Safety Assessment Program:

<http://www.faa.gov/about/initiatives/iasa/>

SECTION 10. REFERENCES

NAO 209-1, NOAA Safety Policy: [http://www.corporateservices.noaa.gov/~ames/NAOs/
Chap_209/naos_209_1.html](http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_209/naos_209_1.html)

NAO 216-104, Management and Utilization of Aircraft:

http://www.rdc.noaa.gov/ames/NAOs/Chap_216/naos_216_104.html

NAO 217-106, Transportation of Non-government Personnel as Passengers on NOAA Vessels, Aircraft, and Motor Vehicles:

http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_217/naos_217_106.html

NOAA Aviation Safety Board Terms of Reference: [http://www.oma.noaa.gov/aviationsafety/
safety_board/AvnSafetyBoardTOR.pdf](http://www.oma.noaa.gov/aviationsafety/safety_board/AvnSafetyBoardTOR.pdf)

NOAA Aircraft Operations Center (AOC) Aircraft Operations Manual: in Draft available from AOC