



Annex 1 Flight Operations

Introduction This annex describes the requirements for Auxiliary participation in flight operations. The intention is to migrate this information into a future standalone Auxiliary Aviation Operations Manual.

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Section A. Authority for Flights

Introduction The Federal Aviation Administration (FAA) is the authority that licenses Auxiliary pilots. The policies in this manual supplement, rather than supersede, other governing directives, such as the Federal Aviation Regulations (FAR). Auxiliarists may use an Auxiliary aircraft on any authorized mission with the approval of the Air Station Commanding officer, including the transportation of local, state, or federal officials authorized in the patrol order.

A.1. Orders *Section A of Chapter 2* provides guidance for all Auxiliary orders. The Coast Guard Air Station Commanding officer has the sole order-issuing authority (OIA) to assign Auxiliary aircraft to necessary missions. *Annex 2* lists the missions for each air crew level and their mission limitations. When Coast Guard aviation missions are assigned to other than active duty resources, Auxiliary aircraft will be given first priority for these missions (see *paragraph A.3.d of Chapter 1*). Auxiliary aircraft, while assigned to authorized Coast Guard duty, shall be deemed to be Coast Guard aircraft, public vessels of the United States, and vessels of the Coast Guard within the meaning of 14 U.S.C. § 646 and 647 and other applicable provisions of law. Subject to the provisions of 14 U.S.C. § 823(a) and 831, while assigned to duty, qualified Auxiliary pilots shall be deemed to be Coast Guard pilots.

NOTE

Commandant (G-OCA), via Commandant (G-OCX), shall be notified in advance of Coast Guard Auxiliary aircraft planning to operate within the Washington, DC area, including Andrews Air Force Base, Ronald Reagan Washington National Airport, and Washington Dulles International Airport.

A.2. Command of Aircraft Only Coast Guard Auxiliary aviators, with the requisite certifications for a given mission and flight environment, may pilot Auxiliary aircraft under orders. The terms “pilot-in-command (PIC),” “pilot,” and “operator” all refer to the Auxiliary pilot listed on the orders. Coast Guard Auxiliary aircraft under orders may fly only under the command of the pilot authorized by those orders.

A.3. Pilot Responsibilities The pilot is responsible for the safe and orderly conduct of the flight. This responsibility and authority exists from the time the pilot begins flight/mission planning until completion of the flight and related post-flight duties. All air crewmembers must understand, respond to, and comply with the pilot’s authority. A misunderstanding of this authority may jeopardize the successful completion of the mission or the safety of the crew and aircraft. All passengers and crew must respond immediately to instructions given by the pilot.

A.4. Training Missions Air Station Commanding officers may issue orders for proficiency training, such as area familiarization, pilot proficiency, observer training, etc. Auxiliary pilots should not expect Coast Guard funding to maintain FAA mandated currency.





Section B. Air Crewmember Fatigue/Physical Requirements

Introduction This section describes the fatigue/physical requirements for Auxiliary air crewmembers.

B.1. Medical Certification Auxiliary pilots must maintain medical certification in accordance with FARs.

B.2. Fatigue Standards The standards in **Table A1-1** are necessary to combat the effects of fatigue as a factor in aircraft mishaps. These standards are not intended to restrict authority for call-outs when urgent operations are required. Air Station Commanding officers may establish more stringent, comprehensive requirements considering the variety of conditions that affect the Auxiliarist assigned to their units. However, conforming to these standards is necessary to reduce the risk of fatigue related mishaps.

Table A1-1
Maximum Air Crew Use Per 24-Hour Period

Mission Fatigue Standards	Individual Flight Time (IFT)	Crew Mission Time (CMT)
Rotary-Wing, Single Piloted	6	12
Rotary-Wing, Multi Piloted	8	12
Fixed-Wing	8	12

This table indicates the maximum air crew use per 24-hour period. A new 24-hour period begins any time a crewmember has completed 10 hours of rest, 8 hours of which must be available for bed rest. IFT and CMT are cumulative unless 10 hours of rest are completed between sorties.

B.3. Application These air crew fatigue standards apply to all personnel flying, as part of the crew, in Auxiliary aircraft assigned to duty. They also apply to the performance of any task, either ground or flight, connected with the ordered mission.



B.4. Crew Mission Time

CMT begins when the crewmember reports to the appointed place to prepare for the mission. It ends when the day’s missions are complete (including post-flight duties). CMT accumulation can stop anytime adequate rest facilities are obtained in accordance **Table A1-1**.

NOTE

Stating that CMT begins with arrival for mission preparation is not intended to undermine the spirit of this regulation. For example, pilots should not consider themselves to have a fresh CMT clock if they have flown any sortie, Coast Guard or other, or have been in a stressful environment prior to arrival.

B.5. Mission Scheduling Limitations

Air Station Commanding officers must not schedule missions during which any air crewmember will exceed, within any consecutive 24 hours, the hourly limits shown in **Table A1-1**.

B.6. Crewmember Responsibility

Each air crewmember is responsible for tracking individual flight and crew mission times. They must advise the pilot when their flight/crew time is approaching the limits in **Table A1-1**. The pilot must in turn advise the OIA.

B.7. Alcohol Consumption

Any amount of alcohol in the blood, even small amounts, can impair judgment, reflexes, and muscular control. The level of alcohol in the body varies with many things. These include the frequency and amount of alcohol intake, the length of time following the end of drinking, and an individual’s body weight. A zero alcohol level is essential for aviation personnel to meet the rigorous demands of flight operations. Detectable blood alcohol or symptomatic hangovers are causes for grounding of an air crewmember. Aviation personnel are restricted from aerial flight for 12 hours after last alcohol use, this includes the use of “low” and “no” alcohol beer, and must have no residual effects. Residual effects include lightheadedness, headache, fatigue, nausea, and lack of alertness.

B.8. Medication

Personnel engaged in flight operations shall not take any medication unless prescribed and/or approved by a flight surgeon.

NOTE

A list of approved over-the-counter medications is contained in the *Coast Guard Aviation Medicine Manual*, COMDTINST M6410.3 (series). These medications are approved for acute, episodic use in the treatment of mild, non-disqualifying conditions.



B.9. Flight Restrictions Following Blood Donations

The following restrictions on donating blood shall be observed because of the potential adverse effects of temporary blood deficiencies on air crew performance in flight:

- Aviation personnel shall notify the appropriate scheduling authority after donating blood.
- Aviation personnel shall be grounded for a period of three days (72 hours) after donation of 200 cc or more of blood.
- Aviation personnel shall be grounded for a period of 7 days after donation of 500 cc or more of blood (the standard unit of donated blood is less than 500 cc).
- Aviation personnel should not be permitted to engage in flights above 35,000 feet, night flying, or other demanding flights for a period of one week after blood donation.
- The following restrictions apply for air crew personnel selected for and undergoing bone marrow donation:
 - Aviation personnel selected for and undergoing bone marrow donation are grounded for a minimum of 30 days.
 - Return to full flight status after bone marrow donation must include examination and clearance by a flight surgeon.

B.10. Hypobaric Exposure

The following restrictions to flight, following low pressure chamber flights, or accidental hypobaric exposure apply:

- Aviation personnel shall not perform flight duties for 12 hours after exposure to low pressure chamber flight in excess of 30,000 feet. They may fly during the 12 hours as passengers in aircraft where cabin altitude does not exceed 10,000 feet.
- Individuals who have experienced a reaction to decompression (i.e., vaso-motor collapse, unconsciousness, bends, etc.) shall be immediately referred to a flight surgeon.
- Under normal circumstances, aviation personnel shall not fly or participate in low pressure chamber flights within 24 hours following scuba diving, compressed air dives, or high pressure chamber evolutions.

B.10.a. Urgent Requirements

Where an urgent operational requirement dictates, flight personnel may fly within 12 hours of scuba diving, provided no symptoms of aeroembolism develop following surfacing and the subject is examined and cleared for flight duties by a flight surgeon.

B.10.b. Training

Egress breathing device training does not limit personnel from flight or low pressure chamber training. The duration and depth of training is not normally sufficient to produce symptoms of aeroembolism.



B.11. Pregnancy

In accordance with the *Coast Guard Aviation Medicine Manual*, COMDTINST M6410.3 (series), Auxiliary aircraft shall not fly with any pregnant person (pilot, crew, passenger) onboard whose pregnancy is beyond the end of the second trimester. Pilots and crew shall not participate in any physiological training, including the dunker, shallow water egress training (SWET), swim training, etc., beyond the end of the second trimester.

From the time a pregnancy is determined, the Auxiliarist shall not participate in helicopter operations. This is to avoid potential fetal hearing damage due to the noise and pitch levels associated with helicopters.



Section C. Safety Devices and Rescue Equipment

Introduction	This section describes safety devices and rescue equipment required for Auxiliary air crew facilities.
C.1. Lap Belts and Shoulder Harnesses	<p>Each occupant of Coast Guard Auxiliary aircraft must properly fasten their lap belt and shoulder harness (if provided). All occupants must use this equipment from just before engine start until engine shutdown. The only exception is when activities require temporary removal.</p> <ul style="list-style-type: none"> • Only the pilot may authorize the unfastening of the lap belt or shoulder harness. The pilot may also authorize passengers on a transport mission to unfasten their seat belts and move about the aircraft during flight in smooth air above 1,000 feet absolute altitude. However, the pilot must be alert to anticipate turbulent flight conditions while passengers have belts unfastened. The pilot will immediately direct passengers to secure their belts as soon as possible before entering turbulent conditions. • All aircraft operating under orders must have shoulder harnesses installed for the front seats. Waivers will not be granted.
C.2. Facility Equipment	Facility equipment required for all Auxiliary flight operations includes the following communications and navigation equipment:
C.2.a. Communications Equipment	<p>Required communications equipment includes:</p> <ul style="list-style-type: none"> • VHF-FM transceiver with at least channels 16, 22A, and district required channels with an external antenna • VHF-AM transceiver with at least 121.5, 123.1, and 122.9 MHz
C.2.b. Required Navigation Equipment	Required navigation equipment includes current sectional and nautical charts of the mission area plus adjacent areas as appropriate.
C.2.c. Recommended Navigation Equipment	<p>Recommended additional navigation equipment includes:</p> <ul style="list-style-type: none"> • LORAN-C receiver • Global positioning system (GPS) • VHF/UHF DF with capability on 121.5, 156.750, 237.9, 240.6, 242.65, 243.0, 326.15, 345.0, and 379.05 MHz





Section D. Personal Protective Equipment

Introduction	Personal protective equipment (PPE) requirements are the same as for active duty Coast Guard and are described below. Air station Commanding officers will issue PPE and ensure Auxiliary aviators are properly outfitted before conducting Coast Guard missions. The District commander provides funding support specifically for Auxiliary aviation PPE. All aircraft conducting offshore operations (see <i>paragraph H.5</i> of this annex) must have one or more inspected life raft(s), together capable of holding all occupants. Air crewmembers must store the raft(s) in a position so that it may be removed without flight crewmembers leaving their flight station(s).
D.1. Helmets	Flight approved protective helmets must be worn by all pilots, crewmembers, and passengers of rotary-wing aircraft whenever the rotor(s) are turning.
D.2. Hearing Protection	All personnel must wear ear protection if a headset is not available.
D.3. Personal Flotation Equipment	<p>For offshore operations, the aircraft and its occupants must be equipped as follows:</p> <ul style="list-style-type: none">• Auxiliary aircraft shall carry one PFD for each person aboard.• All personnel onboard must wear the standard survival vest or life preserver issued to Coast Guard aviators or a PFD approved by Commandant (G-OCX) (or designee).• All PFDs used aboard aircraft facilities must have manually controllable buoyancy.• Inherently buoyant or automatically inflated PFDs are prohibited.• PFDs capable of selectable automatic or manual inflation may be worn provided the automatic inflation feature is disabled for use aboard aircraft.
D.4. Survival Equipment	<p>Air crewmembers must carry the following required survival equipment on their person and tethered to the garment worn. It is not necessary for air crewmembers to duplicate the equipment in the life raft.</p> <ul style="list-style-type: none">• Day/night flares• Signaling mirror• Portable or pocket strobe light• Dye marker or sea rescue device• Chemical emergency lights• Whistle• Survival knife



Recommended additional equipment includes:

- Insect repellent
- Space blanket
- Waterproof matches
- Sunscreen cream
- Pocket compass

Air Station Commanding officers may require additional items necessary for local conditions.

D.5. Emergency Position Indicating Radio Beacon

The aircraft must have onboard at least one class II emergency position indicating radio beacon (EPIRB), which must be carried in and tethered to one air crewmember's life jacket or survival vest.

D.6. Flight Clothing

Auxiliary air crewmembers must wear one of the following uniforms while assigned to duty:

- A Coast Guard Auxiliary flight suit, clean and neat, properly worn in a manner credible to the Coast Guard and Auxiliary. Air crewmembers may only display appropriate patches and nametags as described in the *Auxiliary Manual*, COMDTINST M16798.1 (series).
 - An authorized Auxiliary uniform – which must, in most cases, be the same for all crewmembers. Non-polyester uniforms must be worn whenever possible.
 - Anti-exposure garment approved by an Air Station Commanding officer for flight use.
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D.7. Anti-Exposure Garments

When flying offshore, air crew members shall wear anti-exposure garments in accordance with the following requirements (see **Table A1-2**):

D.7.a. SEFW Aircraft and Helicopters

Anytime the water temperature is below 60 °F, all occupants of single-engine fixed-wing (SEFW) aircraft and helicopters must wear anti-exposure garments.

D.7.b. ME Aircraft

Multi-engine (ME) aircraft must carry this equipment onboard. The anti-exposure garment must meet Coast Guard approval for use in aircraft.



**Table A1-2
Anti-Exposure Garment Requirements**

Water Temp (W)		Air Temp (A)	Garment
$70\text{ }^{\circ}\text{F} \leq W$	And	Any	Flight Suit
$60\text{ }^{\circ}\text{F} \leq W < 70\text{ }^{\circ}\text{F}$	And	$85\text{ }^{\circ}\text{F} \leq A$	Flight Suit
$60\text{ }^{\circ}\text{F} \leq W < 70\text{ }^{\circ}\text{F}$	And	$A < 85\text{ }^{\circ}\text{F}$	ADC/Survival Suit
$W < 60\text{ }^{\circ}\text{F}$	And	Any	ADC
<ul style="list-style-type: none"> • Aircrew dry coverall (ADC) is a gortex/nomex full dry suit worn in place of flight suit. It includes 4 levels of undergarments, wet suit mitts, and hood or surf cap. Hood and mitts shall be carried in the suit at all times. • A survival suit (Mustang, MAC-10, etc.) is a closed-cell, foam-insulated dry immersion suit which may be carried in the aircraft for post-egress wear. Although multi-engine fixed-wing crews may wear this suit during flight, rotary-wing aircraft crews are prohibited from wearing it because of the hazard involved in an inverted egress. 			

D.7.c. Deviations The Air Station Commanding officer may authorize waivers from the requirements of the anti-exposure garment information in this annex on a case-by-case basis, after a determination that the risks associated with crew performance degradation, thermal stress, and environmental considerations are offset by the benefits associated with the waivers.

Blanket waivers are not authorized. If a flight crewmember's frame size and body fat percentage cause heat tolerance and performance degradation problems when complying with these tables, the OIA may request a waiver from Commandant (G-OCA), copy to Commandant (G-OCX).

D.8. Undergarments The wearing of synthetic fabrics under flight gear may cause severe skin injury during a fire. Underwear and socks shall conform with any of the following:

- Underwear:
 - 100% cotton (T-shirts as required by the OIA)
 - Cotton/wool blend
 - 100% wool
 - Nomex
 - DSUG I, II, III (ADC undergarment)
- Socks:
 - At least 80% cotton
 - At least 80% wool

NOTE

In cold climates, cotton long underwear and socks will absorb perspiration and make the person subject to chill, hypothermia, and frostbite.





Section E. Passenger and Cargo Transportation Flights

Introduction This section describes Auxiliary aircraft usage for passenger and cargo transportation. Auxiliary passenger transport missions are “operational missions” and as such are subject to the requirements of *Section I* of this annex.

E.1. Passenger Transportation Auxiliary aviation can be a valuable tool in reducing time delays and expenses that might be encountered with scheduled airline service. In accordance with the *Coast Guard Air Operations Manual*, COMDTINST M3710.1 (series), travel by Department of Homeland Security (DHS) aircraft should be utilized when it is deemed to be cost-effective based on a cost comparison with the use of commercial transportation. Also, consideration should be given to such travel-related items as charges for excess baggage, ground transportation, subsistence costs (per diem or actual expenses), and the value of lost work time when evaluating the cost effectiveness of using Auxiliary aviation as a mode of travel.

E.2. VIP Transportation Except in an emergency, VIP passenger transportation flights for Coast Guard or Auxiliary personnel must not arrive before the latest estimated time of arrival (ETA) given to the destination. Pilots must provide changes or updated ETAs in ample time to permit notification of interested parties.

E.3. Cargo Authorization Air Station Commanding officers may authorize the transportation of cargo, including U.S. mail, on ordered Auxiliary logistics flights subject to the limitations of FAA regulations. Auxiliary aircraft may not carry hazardous cargo.





Section F. Flight Plans

Introduction	This section describes flight plans for Auxiliary flight activities.
F.1. Flight Plans	<p>Auxiliary pilots must file one of the following types of flight plans for each ordered flight:</p> <ul style="list-style-type: none"> • Visual flight rules (VFR) • Instrument flight rules (IFR)
F.1.a. Visual Flight Rules	For a VFR flight, pilots may file their plan with an FAA flight service station (FSS). Air Station Commanding officers may accept local area, VFR flight plans from Auxiliary aviators provided that the flight (starts from and) returns to the same airport where the flight began. Auxiliary pilots should understand that VFR flight plans filed with the air station are not entered into the ATC system.
F.1.b. Instrument Flight Rules	For an IFR flight, pilots must file their flight plan with the nearest FSS or air traffic control tower (ATCT) unless operating from a military field. In this case, base operations may request Auxiliarists to use the Military Flight Plan Form (DD-175) instead of the FAA Form (7233-1).
F.2. Call Signs	Coast Guard Auxiliary aircraft while on Coast Guard orders shall use “Coast Guard AuxAir (tail number)” when communicating on any frequency external to the aircraft. This includes communication with ATC, FAA, and Coast Guard or other agency units/assets.
NOTE	When assigned to a SAR response mission, the aircraft facility may use “Coast Guard AuxAir Rescue (tail number)”.
F.2.a. Tactical Call Signs	When approved by the Air Station Commanding officer, tactical call signs may be used for a mission or missions when warranted by operational needs. If so assigned, a record of the designated tactical calls must be kept by the air station, referenced to the actual facilities in use.
F.3. Military Airfield Clearance	The following regulations must be followed by pilots of Auxiliary aircraft.
F.3.a. Coast Guard Air Stations	The authority for Auxiliary aircraft to use a Coast Guard air station (or other Coast Guard shore facilities) is a direct responsibility of the CO of that shore facility. The CO may elect to prohibit the departure of an Auxiliary aircraft when the weather, condition of the aircraft, or other known factors might jeopardize the safety of the proposed flight. Air station COs are responsible for proper consideration of organizational resource management (ORM) with respect to Coast Guard Auxiliary flights.



F.3.b. Other
Military Bases

If the destination or en route stop is a military installation, pilots of Auxiliary aircraft must advise the base of their arrival time. Auxiliarists must also follow the prior permission required (PPR) procedures of the military service. The pilot is responsible for making timely contact with the base to determine PPR and other requirements. Air station Auxiliary Liaison officers (AUXLOs) and other Coast Guard pilots are equipped to provide guidance and information concerning these procedures.

**F.4. Preflight
Activities**

The following preflight activities must be conducted by Auxiliary pilots prior to flight operations.

F.4.a. Weather
Briefing
Requirement

The pilot of an Auxiliary aircraft on orders must receive a thorough weather briefing before each mission.

F.4.b. Risk
Assessment
Matrix

Prior to departure, each Auxiliary PIC assigned to a flying mission must complete the Risk Assessment Matrix (*Appendix D*) in accordance with its instructions.

F.4.c. Crew
Discipline and
Mission Briefing

The pilot is responsible for ensuring the crew is properly briefed for the mission. The briefing must be specific and must include significant safety related matters. The crew must know exactly who the PIC is and must respond to his/her orders promptly. When working in conjunction with a Coast Guard aircraft, the Auxiliary crew must receive a mission brief by the Coast Guard aircraft commander/mission commander prior to sortie commencement. All briefings should include:

- Mission purpose
 - Area of operation
 - Communications procedures
 - Identities and calls of associated facilities
 - Pilot/crew responsibilities
 - Risk assessment – initial and on-going
 - CRM issues
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F.4.d.
Crew/Passenger
Safety Briefing

The pilot must make sure that all crew and passengers embarked on Coast Guard Auxiliary aircraft receive an adequate briefing. This briefing must cover at least the following items:

- Use of parachutes (if carried).
 - Use of PFDs for over water flights.
 - Applicable emergency alerting signals.
 - Action required in case of ditching or crash landing (e.g., emergency evacuation procedures).
 - Use of other emergency and survival equipment.
 - No smoking, seat belt rules, and signals.
 - Restrictions regarding butane lighters, electronic devices, etc.
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F.4.e. Preflight Inspection Before each flight, the pilot must inspect the aircraft using the recommended procedures in the applicable aircraft manual. This check must also ensure that all mission essential equipment, charts, cargo, etc., are onboard and properly secured.

F.4.f. Checklists Pilots of Auxiliary aircraft must use written checklists. Use of checklists provided in the aircraft manual will meet this requirement. However, pilots may also develop individual aircraft checklists if they contain all items recommended by the manufacturer. Each pilot may individually develop and use checklists for SAR evolutions. When a second Auxiliary pilot or observer is onboard, the air crew must use a challenge and response method for checklist items.





Section G. Aircraft Traffic Rules

Introduction Coast Guard Auxiliary pilots operating aircraft on orders must follow the appropriate rules, which include the applicable FARs; International Civil Aviation Organization (ICAO) Conventions, Procedures and Standards; and International Regulations for Preventing Collision at Sea.

G.1. Non-Compliance with FAR 91.119 and 91.159(a) FAR 91.119 (c) specifies the minimum safe altitudes and clearances (from any person, boat, vehicle or structure) for aircraft operating over other than congested areas, except for takeoffs and landings. FAR 91.159(s) requires aircraft to be operated at an altitude specified for the direction of flight during cruising operations at less than 18,000 feet MSL.

Auxiliary aircraft under the command of an aircraft commander (AC) or first pilot (FP) conducting SAR missions ordered by the Coast Guard are exempt from the provisions of FAR 91.119 (c) and 91.159(a). These Auxiliary aircraft are under the FAA exemption granted the Coast Guard as necessary for the completion of the mission (see the *Coast Guard Air Operations Manual*, COMDTINST M3710.1 (series) and *Appendix C* of this manual).

NOTE

This exemption is not intended to be blanket authority for low-level flight on SAR cases, but to enable the pilot to offer better search assistance when deemed necessary by the pilot. Auxiliary aircraft under the command of an Auxiliary co-pilot are not included in this exemption. See the *Coast Guard Air Operations Manual*, COMDTINST M3710.1 (series).

G.2. Annoyance to Persons and Endangering Property Coast Guard Auxiliary aircraft in flight must minimize the annoyance to persons and activities on the ground. The pilot must exercise enough caution to ensure that no person on the ground could reasonably believe that life or property is in danger. Pilots must plan flights to avoid over-flight of wildlife areas, except at altitudes above those shown as minimum on aeronautical charts.

G.3. Transponder Codes Coast Guard Auxiliary aircraft may squawk mode C, code 1277 on ordered SAR missions when operating under the following conditions:

- On a VFR plan or VFR segments of a composite IFR/VFR plan; and
- En route to/from or within the designated search area.

G.4. Airspace Regulations Coast Guard Auxiliary aircraft must follow special airspace regulations. This includes warning areas, Class B airspace, etc. It is the sole responsibility of the PIC to check all Notices to Airmen (NOTAMs) and other applicable guidance prior to getting airborne.



G.5. Violation of Flight Regulations

All pilots must be aware of and follow all applicable current flight regulations. Auxiliary pilots must report any known violations of flight regulations to the OIA. Auxiliary pilots are encouraged to use the Aviation Safety Reporting System (ASRS) for self-reporting. For more information, see the ASRS web site in *Appendix F*.

G.6. Position Reporting Requirements

During all ordered missions, the pilot must establish a radio guard via direct contact with a Coast Guard or Auxiliary radio station. The pilot must pass “Ops Normal” messages to the flight-following (guard) radio station every 15 minutes for single-engine aircraft and helicopters and every 30 minutes for multi-engine fixed-wing aircraft. Each 30 minutes, the “Ops Normal” report must also include the aircraft’s present position and direction of flight. A report more than 15 minutes overdue is cause for initiation of a preliminary communications search (PRECOM). If the PRECOM is unsuccessful, the guard radio station must start SAR action for the aircraft. For flights operating under direct air traffic control or those receiving VFR flight following, radio contact with the controlling agency satisfies this requirement.



Section H. General Precautionary Rules

Introduction	This section describes general precautionary rules applicable to Auxiliary air crew and aircraft.
H.1. Fuel Reserve	Auxiliary aircraft must follow the fuel reserve requirements contained in FAR 91.151 or 91.167, as applicable.
H.2. Turbulence/Icing	Auxiliary pilots may plan flights through areas forecast to have light turbulence or icing as defined by current National Weather Service standards unless prohibited by the particular airframe flight manual. Pilots must plan all flights to avoid areas of moderate, severe, or extreme turbulence, icing conditions, or thunderstorms.
H.3. Beach Landings	Auxiliary pilots may conduct beach landings only when emergency conditions dictate.
H.4. Water Landings	The FAA approved aircraft flight manual contains procedures, limitations, and techniques dealing with water landings by seaplanes and amphibious aircraft. Pilots of floatplanes may not make non-emergency open-sea landings while on orders.
H.5. Offshore Operation	Flying beyond the gliding distance from shore (defined in <i>Appendix K</i>) is an offshore operation. Single-engine aircraft may not proceed more than 25 miles offshore unless authorized by the Air Station Commanding officer. When working with a surface facility, helicopter, or other recovery asset with which a communications guard is maintained, the shore effectively extends to the location of the communications guard. However, in no case may a single-engine aircraft operate more than 50 miles from shore. In addition, both single- and multi-engine aircraft must follow the PPE guidelines in <i>Section D</i> of this annex when operating offshore.
H.6. Formation Flying	Auxiliary aircraft may not fly in formation, of any type, including “loose” formation, while under orders.
H.7. Aerial Deliveries	Auxiliary air crew must not drop any equipment of any type from an Auxiliary aircraft for any purpose, except when the Air Station Commanding officer specifically grants in writing such authority for the aircraft. The Air Station Commanding officer must base such authority on a demonstration of deployment technique and aircraft suitability during an operational flight check.





Section I. Flight Environment

Introduction *Section A of Annex 2* establishes the authorized missions and operational limitations for co-pilots, first pilots, ACs, and instructor pilots/flight examiners. In addition to that policy, the following policy applies with respect to the flight environment.

I.1. Minimum Crew Minimum crew requirements for aircraft are as follows except as noted within this section:

- Pilot and
- Observer who may be:
 - Another Pilot
 - Certified Air Crew
 - Certified Observer
 - Observer Trainee
 - Member of the Coast Guard

NOTE *GS*

Observer trainees shall not be used in lieu of an observer on other than scheduled daylight, routine, non-SAR missions.

NOTE *GS*

Passenger transport or logistics missions (see *Appendix K*), conducted in day VMC conditions, require only a pilot. When staffed in this manner, these missions are non-divertible.

I.2. Night or IMC Operational Missions Auxiliary pilots must conduct all flights under applicable FARs and local air traffic rules. Any Auxiliary operational flight that includes flight in night or instrument meteorological conditions (IMC) must have two pilots who hold current FAA instrument ratings.

I.2.a. Pilot-in-Command The PIC must be an AC and the aircraft must be IFR equipped in accordance with applicable FARs.

I.2.b. Safety Pilot The second pilot (safety pilot) will also add to overall situational awareness. There is no requirement for dual instrumentation. Dual flight controls, but not flight instruments, are required for night or IMC flight. Auxiliary pilots must obtain an IFR clearance for all flights in IMC. Whenever practical, the safety pilot assigned to a mission should participate in the flight planning and risk assessment phases of the assigned mission. This should include, but not be limited to, scope of mission, weather evaluation, weight and balance calculations, route selection, etc. As a minimum, mission, weather, weight and balance, route selection, and risk assessment matrix shall be reviewed by the safety pilot prior to flight. It should be apparent that there is more value to the assignment of a safety pilot than merely having a “second pair of eyes” during the flight phase of a mission.

Guidance for safety pilot assignment is listed below in order of priority to maximize the use of all Coast Guard resources.



<p>I.2.b.1. Coast Guard Auxiliary Pilots</p>	<p>Coast Guard Auxiliary pilots who are current instrument rated pilots in category (airplane/rotorcraft), in accordance with FAR 61.5, are eligible.</p>
<p>I.2.b.2. Civil Air Patrol Pilots</p>	<p>In light of the existing Memorandum of Understanding (MOU) between the CAP and the Coast Guard Auxiliary, the logistical impact of the safety pilot requirement may be greatly reduced, particularly in inland areas, by utilizing CAP pilots as safety pilots. CAP pilots must be current instrument rated pilots in category (airplane/rotorcraft) to be eligible.</p>
<p>I.2.b.3. Active Duty Coast Guard Pilots</p>	<p>No FAA instrument rating is required for Coast Guard active duty pilots, however, the active duty pilot must have a current instrument qualification in accordance with the <i>Coast Guard Air Operations Manual</i>, COMDTINST M3710.1 (series). An active duty fixed-wing pilot shall not serve as safety pilot on an Auxiliary helicopter aircraft, unless the active duty pilot holds an FAA instrument-helicopter rating and is current in accordance with applicable FAA regulations. An active duty rotary-wing pilot shall not serve as safety pilot on an Auxiliary fixed-wing aircraft, unless the active duty pilot holds an FAA instrument-airplane rating and is current in accordance with applicable FAA regulations.</p>
<p>I.3. Night/IMC Logistics Missions</p>	<p>The prerequisites for single-pilot night/IMC logistics missions are as follows:</p> <ul style="list-style-type: none">• The PIC must be an AC.• The mission must only be logistical in nature, (e.g., cargo transport, pre-positioning for a later mission, transit to a search area for a first light search, or to rendezvous with a safety pilot for a night/IMC non-logistic mission).• The pilot must file and fly an IFR flight plan.• The PIC must have a minimum of 10 hours of actual or simulated night or IMC time within the last 6 months, 5 of which must be within the last 3 months. This flight time does not have to be logged while on Coast Guard orders.• An aircraft flying a mission under these guidelines is strictly non-divertible.
<p>I.4. Night/IMC Altitude Restrictions</p>	<p>Except for takeoff and landing, the following altitude restrictions apply to missions at night and/or in IMC: 1,000 feet above ground level (AGL) over water or other unobstructed areas. In other areas, the minimum altitude is 1,000 feet above the highest obstacle; in IMC the minimum altitude is the minimum vectoring altitude or minimum en route altitude (MEA) as applicable to the operational area.</p>
<p>I.5. Pilots for Special Missions</p>	<p>Only first pilots and ACs may act as PIC for SAR, communications relay, and special missions in Auxiliary aircraft. Except as provided in <i>paragraph I.2</i> of this section, Auxiliarists may fly these missions only in daylight and only when the weather on scene is forecast to meet visual meteorological conditions (VMC).</p>



**I.6.
Authorization**

An Air Station Commanding officer may authorize a night and/or IMC mission, subject to the limitations established in *paragraph I.2* of this section and in *Section A* of *Annex 2*. Once the mission is approved, the PIC must conduct appropriate planning and carry out the necessary coordination.

**I.7. Patrol
Missions**

Patrol missions, including PWCS, ATON, ELT, MEP, ice operations, and chart updating, may be conducted only in daylight and only when the weather on scene is forecast to meet VMC.





Section J. Air Intercept Exercise Support Mission Requirements

Introduction Air Intercept (AI) operations require a high degree of skill, training, coordination, and a mutual understanding among all participants if missions are to be accomplished safely and mishaps avoided. The primary consideration in all AI operations is flight safety. The objective of the flight safety program in the context of AI is to maintain the highest level of intercept readiness commensurate with accident-free operations. AI entails unique risks that must be carefully considered by all planners and flight crews to ensure that an adequate margin of safety is maintained. In order for an Auxiliary air crew to fly this mission, a high level of qualification, skill, and crew training is required to maintain the level of safety and to ensure mission success.

NOTE

Auxiliary aircraft shall only serve as the target aircraft and never as the intercepting aircraft.

J.1. Crewing All AI missions shall be carried out with a minimum two-person crew consisting of the following:

J.1.a. Daytime Missions Daytime missions shall be carried out by the PIC and safety pilot or aircrew-qualified crew. The safety pilot or aircrew responsibility is to monitor all flight instruments, maintain altitude guard for the pilot, and maintain visual contact with the intercepting aircraft when possible.

J.1.b. Nighttime Missions Nighttime missions shall be carried out by the PIC and safety pilot. The PIC and safety pilot shall have the following minimum qualifications:

- The PIC shall meet all requirements of *paragraph I.2* of this annex.
- The safety pilot shall be an instrument rated, and current, Auxiliary pilot. The safety pilot's responsibility is to monitor all flight instruments, maintain altitude guard for the pilot, and maintain visual contact with the intercepting aircraft when possible.

J.2. Facility Requirements Facilities must be currently certified and equipped as required for the mission environment, including:

- Dual flight controls are required for all missions, both day and night.
- Aircraft shall be equipped with a complete set of instruments for IFR flight in accordance with applicable FARs.

J.3. Briefing A pre-flight briefing with all crews shall be held prior to the mission. The briefing shall cover issues such as intercept flight profiles, airspace, weather, emergency procedures including loss of visual contact by the intercepting aircraft, communications including air-to-air, radio guard, radar controller frequencies, and AI terminology.



J.4. Weather

All aircraft must maintain VMC throughout the mission. Anytime aircraft cannot meet the minimum VMC visibility requirements, the training mission must be halted until better conditions can be obtained.

J.5. Mission Altitudes

The minimum altitude to be flown on the AI mission by the intercepted aircraft shall under no circumstances be less than 1000 feet AWL/AGL, except during takeoff and landing.

J.6. Training Requirements

Training will include ground and aircraft-specific information. This information shall be provided by the air station for a series of missions, or may be included in a specific mission briefing. Training must have been received or updated within the past 12 months to be mission-current.

J.6.a. Ground Training

Ground training shall include information regarding applicable airspace considerations for the area of operations and AI procedures.

J.6.b. Aircraft Type Specific Training

The Auxiliary air crew will be briefed on the types of Coast Guard aircraft to be used in the specific mission(s) proposed, along with their flight characteristics and intercept plans. Emergency procedures such as breakout maneuvers and other requirements which utilize flying skills beyond those normally performed by Auxiliary aviators will not be expected or required on missions unless pilots are specifically trained and briefed on these maneuvers.

J.7. Responsibility

Final responsibility for the safe conduct of AI operations rests with each individual PIC. When operations involving Coast Guard and Coast Guard Auxiliary aircraft require deviations from the procedures briefed for the mission, such deviations must only be made with the knowledge of the air on-scene coordinator.

J.8. Security

Physical security, communications security (COMSEC), and operational security (OPSEC) are vital to the success of law enforcement missions. In order to intercept, track, and apprehend an aircraft attempting to remain undetected, Coast Guard assets and information must be protected from sabotage or disclosure. Therefore, methods and results of intercept training are not to be disclosed to unauthorized personnel.
