

United States Department of the Interior Office of Aviation Services 300 E Mallard Drive, Suite 200 Boise, Idaho 83706-3991

DOI OPERATIONAL PROCEDURES (OPM) MEMORANDUM NO. 29

Subject: Special Use Activities for Crewed Aircraft

Effective Date: January 1, 2024

Last Updated: July 1, 2021

Expiration: December 31, 2024

1. <u>Summary of Changes.</u> The Executive Aviation Subcommittee (EAS) reviewed on 10 November 2022, and determined that no changes were required to the OPM.

- 2. <u>Purpose.</u> This OPM identifies the specific special use activities referred to in 351 DM 1 and establishes definitions, policies and pilot qualifications and evaluation requirements for special use activities conducted by the Department of the Interior (DOI). Aircraft requirements for special use are not addressed here. This document is applicable to all crewed aircraft pilots, Fleet and Contract, conducting special use activities under the operational control of DOI.
- 3. <u>Background.</u> In DOI, Special Use Activities involve the utilization of airplanes and helicopters in flight operations which do not meet the definition of point-to-point flight (see 350 DM 1) and which require special considerations due to additional equipment and/or the increased complexity inherent in such operations. Point-to-point missions, when flown in Department owned or contracted aircraft, shall be considered civil aircraft operations and must be flown in full compliance with the applicable provisions of 14 CFR. Regardless of any status as a public aircraft, pilots must comply with the applicable provisions of 14 CFR and deviate only as authorized by published Department policy.
- **4.** <u>Authority.</u> This policy is established by the Director of the Office of Aviation Services (OAS) in accordance with the provisions of Departmental Manual 112 DM 12, 350 DM 1; and Secretarial Order 3322 dated August 23, 2012.

5. Policy.

- A. Pilots conducting special use activities for DOI must conform to the standards and requirements contained in the Department Manuals, Operational Procedures Memorandum (OPM), DOI Handbooks, applicable procurement documents (contract pilots), and National Wildfire Coordinating Group (NWCG) Standards.
- B. On a case-by-case basis, OAS pilot inspectors may extend a pilot's special use approval up to two calendar months.
- C. Requests for equivalencies, waivers, and exceptions will be in writing and routed through the bureau National Aviation Manager and Bureau Regional/State Aviation Manager to OAS Chief, Technical Services. Waivers to policy must be approved by the OAS Director.

- D. PPE: Pilots must consider PPE requirements for each individual special use activity, including aircraft category/class to ensure compliance with the Interagency Aviation Life Support Equipment (ALSE) Handbook/Guide throughout all phases of flight.
- E. Pilot approval is required for the following special use activities.

NOTE: Bureau policy may have additional requirements.

- 1) Aerial Application. (Airplane and Helicopter)
 - NOTE: Contractor provided, aerial application, procured under an end product contract is not special use and this OPM does not apply.
 - a) Agricultural operations as defined in 14 CFR 137.
 - b) Subsets include:
 - (1) Precision Spray (Helicopter) an operation where individual plants are treated with chemical herbicides from a single spray nozzle suspended on a longline.
 - (2) Herbicide Application by Projectile (Helicopter) an operation where individual plants in steep mountainous terrain are treated with chemical herbicides utilizing a specialized paintball gun to dispense spherical projectiles filled with herbicide.
 - (3) Traditional Aerial Application with booms and spreaders (Fleet Airplane and Helicopter)
 - c) Contractors conducting aerial application for DOI are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137.
 - d) When conducted in a fleet aircraft, an Agricultural Aircraft Operator Certificate is not required.
 - e) Aerial application is not applicable to application of water and/or retardant on fires.
 - f) An initial and 36-month recurrent flight evaluation is required for fleet pilots.
 - g) A one-time flight evaluation is required for contractors conducting Herbicide Application by Projectile (Helicopter).
 - h) An initial and 36-month recurrent flight evaluation is required for contractors conducting Precision Spray.
 - i) Personal protective equipment (PPE) in accordance with the Interagency Aviation Life Support Equipment (ALSE) Handbook Guide for low level flight is required.

- 2) Aerial Capture, Eradication and Tagging of Animals (ACETA). (Helicopter)
 - a) Operations conducted to perform Aerial Capture, Eradication and Tagging of Animals. Subsets of ACETA include:
 - (1) Herding
 - (2) Eradication/Darting/Marking (performed above 50 feet AGL)
 - (3) Eradication/Darting/Marking (performed below 50 feet AGL)
 - (4) Trapping
 - (5) Netgunning

NOTE: See Appendix 1 for ACETA subset base definitions Refer to the applicable contract and OPM-33: Aerial Capture, Eradication and Tagging of Animals (ACETA).

- b) An initial and 36-month recurrent flight evaluation is required.
- c) PPE in accordance with the Interagency ALSE Handbook Guide is required.
- 3) Aerial Ignition. (Helicopter)
 - a) An operation that utilizes a plastic sphere dispenser (PSD) or a helitorch for prescribed fire or for burn operations on wildland fires.
 - b) Best practices are documented in the NWCG Standards for Aerial Ignition PMS 501, which may be adopted as policy by the operating bureau.
 - c) A one-time flight evaluation is required.
 - d) PPE in accordance with the Interagency ALSE Handbook Guide is required.
- 4) Aerial Supervision Module (ASM). (Airplane)
 - a) An operation which combines a qualified leadplane pilot with a qualified air tactical group supervisor in one airplane.
 - b) Best practices are documented in the NWCG Standards for Aerial Supervision, PMS 505, which may be adopted as policy by the operating bureau.
 - c) An initial and 12-month recurrent flight evaluation is required.

- d) PPE in accordance with the Interagency ALSE Handbook/Guide for low level flight is required.
- 5) Air Attack Pilot (ATGS or HLCO). (Airplane and Helicopter)
 - a) An operation in which an air tactical group supervisor (ATGS) or helicopter coordinator (HLCO), manages airspace and air resources from an aircraft over an incident.
 - b) Best practices are documented in the NWCG Standards for Aerial Supervision, PMS 505, which may be adopted as policy by the operating bureau.
 - c) An initial and 60-month recurrent flight evaluation is required for airplane-based air attack pilots.
 - d) PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 6) Animal Classification. (Helicopter)

NOTE: General animal survey/census/inventory operations are not conducted under Animal Classification but are conducted as Low Level and Reconnaissance operations.

- a) An operation conducted to acquire a detailed animal census. Identification of specific characteristics of the animals may require the maneuvering the helicopter much lower to ground than required for an inventory survey in which animals are simply counted from higher altitudes. May also require maneuvering the helicopter to direct the animals into a position that allows identification of characteristics such as age, sex, or health to be readily identified. Animal Classification is not considered a subset of ACETA.
- b) A one-time flight evaluation is required.
- c) PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 7) External Load. (Airplane)
 - a) Any flight operation as defined in FAA Order 8400.34 (Fixed-Wing External Loads in Alaska) requiring external carriage of a load outside of the aircraft.
 - b) Conducted in accordance with FAA authorization.
 - c) A one-time flight evaluation is required.
 - d) No specific PPE required.
- 8) External Load. (Helicopter)

- a) Class B, C or D external load.
- b) Subsets of External Load (Helicopter) are:
 - (1) Belly Hook/Sling \leq 50 feet.
 - (2) Cargo Letdown An operation in which cargo is deployed from a hovering helicopter by the means of an approved webbing, descent device, and auxiliary equipment.
 - (3) Longline ->50 feet.
 - (4) Hoist Operations An operation where an aircraft mounted winch is utilized to load or unload a helicopter while in a hover.
 - (5) Rappel An operation in which personnel use ropes and friction devices to exit a helicopter while hovering.
 - (6) Rope Assisted Delivery System (RADS) An operation in which personnel use ropes to exit a helicopter while hovering, also known as fast-rope.
 - (7) Short Haul An operation in which personnel are transported from one location to another as an external load.
- c) Contractors conducting external load operations for DOI are required to have a Rotorcraft External Load Operator Certificate prescribed by 14 CFR 133.
- d) When conducted in a fleet aircraft, a Rotorcraft External Load Operator Certificate is not required.
- e) Hoist Operations follow specific DOI/Bureau or cooperator policy.
- f) RADS policy is TBD.
- g) Rappel and Cargo Letdown best practices are documented in the Interagency Helicopter Rappel Guide, which may be adopted as policy by the operating bureau.
- h) Short Haul reference OPM-32 and Bureau specific policy.
- i) A one-time flight evaluation is required for Belly Hook/Sling.

- j) An initial and 36-month recurrent flight evaluation is required for Cargo Letdown, Hoist (no people), and Longline.
- k) An initial and 12-month recurrent flight evaluation is required for any external load operation when a live person is the load.
- 1) PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 9) Float. (Helicopter)
 - a) Fixed or hull floats only. Popouts are excluded.
 - b) A one-time flight evaluation is required PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 10) Glacier Landings-Skis. (Airplane)
 - a) Takeoff and landing ski plane operations on a glacier.
 - b) 200 hours PIC glacier ski plane experience in category; or 10 hours of ski plane flight instruction in category on glaciers.
 - c) Prerequisites Mountainous Terrain (Airplane). When pioneering sites, Low Level (Airplane).
 - d) Currency pilot must have three glacier ski plane takeoffs and landings in the previous 90 days to carry passengers.
 - e) An initial and 36-month recurrent flight evaluation is required.
 - f) No specific PPE required.
- 11) Low Level. (Airplane and Helicopter)
 - a) An operation other than takeoff or landing where flight is conducted less than 500 feet above the surface.
 - b) 200 hours PIC low level in category; or 10 hours in category of low-level flight instruction.
 - c) An initial and 36-month recurrent flight evaluation is required for airplanes.
 - d) A one-time flight evaluation is required for helicopters.
 - e) PPE in accordance with the Interagency ALSE Handbook/Guide is required.

- 12) Mountainous Terrain. (Airplane and Helicopter)
 - a) Mountainous terrain is an endorsement required for operations other than point to point conducted within 1000 feet of terrain (horizontal or vertical) in the areas designated by the FAA as mountainous IAW 14 CFR 95 Subpart B, except take off, landing and as noted here.
 - b) Operations conducted at less than 500 feet above the surface require a low-level endorsement (See 11)
 - c) Pilots applying for an initial DOI pilot qualifications card with a requirement to operate within 1000 feet of terrain (horizontal or vertical) in mountainous terrain must pass a Mountainous Terrain flight evaluation conducted in accordance with the Interagency Airplane Pilot Practical Test Standards prior to operating in mountainous terrain.
 - d) A one-time flight evaluation is required. No specific PPE required.
- 13) Night Vision Goggle (NVG). (Airplane and Helicopter)
 - a) Night flight in an aircraft aided by light enhancing goggles.
 - b) An initial and 12-month recurrent flight evaluation is required.
 - c) No specific PPE required.
- 14) Off Airport Wheels. (Airplane)
 - a) Use of airports authorized and current in the DOI Airport Directory (DAD) is not considered a special use activity.
 - (1) Off Airport take-offs and landings are considered special use activities anytime they are conducted from an airport meeting any of the following.
 - (a) Not listed in a FAA Chart Supplement
 - (b) Listed as "not maintained" in accordance with a FAA Chart Supplement
 - (2) Pilot must have documented training or experience in off airport operations.
 - (3) Prerequisites Low Level (Airplane), Mountainous Terrain (Airplane) when operating in mountainous terrain.
 - (4) Currency Pilot must have three takeoffs and landings, off-airport, in an airplane on wheels in the preceding 90 days to carry passengers.

- (5) An initial and 36-month recurrent flight evaluation is required for contract pilots.
- (6) An initial and 24-month recurrent flight evaluation is required for fleet pilots.
- (7) PPE in accordance with the Interagency ALSE Handbook/Guide for low level flight is required.

15) Offshore Platform. (Helicopter)

NOTE: Offshore Platform Landings by contract pilots is not special use.

- a) Takeoff or landing on an elevated heliport structure surrounded by water.
- b) Pilots conducting offshore platform landings must have 100 hours PIC of offshore navigation or 50 hours PIC of offshore navigation in the previous 12 months.
- c) Pilots conducting offshore platform landings must have 10 takeoffs and 10 landings to platforms or vessels, drill-ships, semi-submersible drilling platforms, or barges.
- d) A one-time flight evaluation is required. For fleet pilots an initial and 36-month recurrent flight evaluation is required.
- e) PPE in accordance with the Interagency ALSE Handbook/Guide is required.

16) Paracargo. (Airplane)

- a) An operation in which cargo is delivered from an airplane in flight.
- b) Best practices are documented in the Interagency Smokejumper Pilot Operations Guide, which may be adopted as policy by the operating bureau.
- c) An initial and 12-month recurrent flight evaluation is required.
- d) PPE in accordance with the Interagency ALSE Handbook/Guide for low level flight is required.

17) Reconnaissance. (Airplane and Helicopter)

a) A fundamental special use activity conducted above 500 feet AGL requiring deviation from point-to-point operations (see definitions), may involve transect-type operations, utilization of specialized equipment, or tasks involving surface observation or data collection.

- b) Prerequisites Mountainous Terrain (in category) when conducted in mountainous terrain.
- c) A one-time flight evaluation is required. Airplane No specific PPE required.
- d) Helicopter PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 18) Single-skid, Toe-in and hover Exit/entry Procedures (STEP). (Helicopter)
 - a) An operation in which personnel and/or cargo are loaded or unloaded, without the use of ropes or hoists, while the helicopter either has no contact with the ground (a low hover) or has limited contact with the ground (i.e., one skid/wheel/toe-in).
 - b) Refer to OPM-40.
 - c) An initial and 36-month recurrent flight evaluation is required.
 - d) PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 19) Skiplane. (Airplane) Contract Pilots Only
 - a) Pilots must have documented training or experience in skiplane operations.
 - b) Currency Pilots must have three take-offs and three landings to a full stop in a skiplane in the preceding 90 days prior to carrying passengers in a skiplane.
 - c) A one-time flight evaluation is required.
 - d) No specific PPE required.
- 20) Smokejumper. (Airplane)
 - a) An operation in which personnel are deployed via parachute from an airplane in flight.
 - b) Best practices are documented in the Interagency Smokejumper Pilot Operations Guide, which may be adopted as policy by the operating bureau.
 - c) An initial and 12-month recurrent flight evaluation is required.
 - d) PPE in accordance with the Interagency ALSE Handbook/Guide for low level flight is required.
- 21) Snow (deep snow). (Helicopter)

- a) Operations that require landing in snow of such depth that use of special pilot techniques is required.
- b) Reference the NWCG Standards for Helicopter Operations, PMS 510.
- c) A one-time flight evaluation is required.
- d) No specific PPE required.
- 22) Vessel. (Helicopter)
 - a) Takeoff and landing operations on vessels, drill ships, semi-submersible drilling platforms, barges, or other landing areas subject to pitch and roll of the sea.
 - b) Pilots conducting Vessel Landings must have: 200 hours PIC of offshore navigation or 100 hours PIC of offshore navigation with 50 hours PIC accomplished during the previous 12 months.
 - c) Pilots conducting Vessel Landings must have 10 offshore landings to vessels, drill- ships, semi-submersible drilling platforms, barges, or other landing areas subject to pitch and roll of the sea, this does not include fixed facilities regardless of movement.
 - d) An initial and 36-month recurrent flight evaluation is required.
 - e) PPE in accordance with the Interagency ALSE Handbook/Guide is required.
- 23) Water/Retardant Delivery. (Airplane and Helicopter)
 - a) Categories include Airtankers, Initial Attack (IA) Airtankers, Single Engine Airtanker (SEAT), Single Engine Scoopers (Fire Boss), Multi Engine Scoopers and Helicopters with buckets or fixed tanks.
 - b) SEAT/Fire Boss pilots are delineated into subcategories of Level 1 and Level II (see definitions).
 - c) Contractors are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137.
 - d) Refer to the appropriate current procurement document for pilot privileges, limitations, and qualifications.
 - e) An initial and 12-month recurrent flight evaluation is required for Level II SEAT/Fire Boss pilots.

- f) An initial and 36-month recurrent flight evaluation is required for all other pilots.
- g) PPE in accordance with the Interagency ALSE Handbook/Guide for low level flight is required.

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Attachments:

Appendix 1: Definitions

Appendix 1

Definitions

- 1. ACETA (subset definitions) (see OPM-33).
 - A. Darting Use of a helicopter to chemically immobilize/sedate animals by discharging a tranquilizer dart from a specialized dart gun fired from the aircraft.
 - B. Eradication Use of a helicopter to euthanize animals by discharging a firearm from the aircraft.
 - C. Herding Use of a helicopter to haze and subsequently encourage movement of an animal or group of animals along the ground from one location to another.
 - D. Marking Use of a helicopter to mark animals with paint or dye utilizing a specialized paintball gun fired from the aircraft.
 - E. Netgunning Use of a helicopter to capture animals by deploying a capture net over the animal utilizing a specialized handheld net gun fired from the aircraft.
 - F. Trapping Use of a helicopter to capture animals by herding animals into a pen, net, trap, or set of corrals.
- 2. <u>Aircraft</u>. A helicopter (rotor wing), airplane (fixed wing) or uncrewed aircraft system (UAS). See OPM-11 for policy concerning Uncrewed Aircraft Systems.
- 3. <u>Airport.</u> Means an area of land or water that is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.
- 4. <u>DOI Airport Directory.</u> A list of authorized off airport sites and airports with modified requirements. Examples of modifications may be PPE requirements, pilot qualifications, or project aviation safety plan requirements. Authority to create and revise the Directory resides with the Bureau RAM/SAM.
- 5. <u>Helicopter External Loads.</u> (FAA definitions provided for clarification of FAA designated class A, B, C, and D loads only) (Belly Hook, Longline, Shorthaul, Rappel, and Hoist are designated special use operations that are examples of various external load operations.)
 - A. Class A External Loads Class A is a non-jettisonable external load that cannot move freely and does not extend below the landing gear. An example of a Class A operation is the carriage of supplies in an approved cargo rack, bin, or fixture affixed to the exterior of the rotorcraft. A cargo rack certification may or may not include a cargo envelope. The Federal Aviation Administration (FAA)-approved Rotorcraft Flight Manual Supplement (RFMS) required for the cargo rack installation specifies the approved configuration. If the cargo carried is within the envelope specified in the RFMS, the rotorcraft operator may operate in accordance with 14 CFR 91 or 135. Rotorcraft operators must conduct flight operations in accordance with 14 CFR 133 when the cargo rack certification does not include a cargo envelope, or the cargo carried exceeds the specified envelope.
 - B. Class B External Loads Class B is a jettisonable external load, carried above or below the skids, suspended by a cargo hook or winch, which lifts free of land and/or water. An example of a Class B operation is a cargo net attached to the belly hook or a line off of the belly hook.

- C. Class C External Loads Class C is a jettisonable external load where a portion of the load remains in contact with land or water. Examples of Class C operations are wire stringing, dragging a long pole, or towing a boat or barge.
- D. Class D External Loads Class D is an external load other than Class A, B, or C approved on an individual basis with a special authorization. Class D allows the external carriage of a person other than a crewmember or a person who is essential to and directly connected with the external load operation. Requires FAA-approved personnel lifting device and a transport category multiengine helicopter. DOI Hoist, RADS, Rappel and Shorthaul missions generally are conducted as Public Aircraft Operations not as FAA Class D external loads.
- 6. <u>Heliport.</u> Means an area of land, water, or structure used or intended to be used for the landing and takeoff of helicopters.
- 7. <u>Level I SEAT/Fire Boss Pilot.</u> Level I (journey person) Single Engine Air Tanker pilots are permitted to fly missions in the fire traffic area with or without aerial supervision and to operate in a multiple tactical aircraft environment.
- 8. <u>Level II SEAT/Fire Boss Pilot.</u> Level II (entry level) SEAT pilots are permitted to fly missions without aerial supervision in the fire traffic area with the SEAT plus one other aircraft or with aerial supervision in the fire environment airspace concurrently with multiple aircraft.
- 9. <u>Point-to-point.</u> Flights between airports (excluding operations defined in 351 DM 1 as special use) for which the route of flight is determined only by the pilot(s) based on navigational requirements.