

A-208

Aircraft and Pilot Approval



Participant Guide



Revised: November 2018

A-208 Aircraft and Pilot Approval Instructor Guide

Revision History

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A-208—Aircraft and Pilot Approval

Course Overview

Course Purpose

The purpose of this course is to provide an understanding of the policy requirements and benefits associated with approving aircraft, pilots, mechanics, and support equipment prior to the agency/bureau mission.

Target Audience

US Department of the Interior (DOI) and USDA's Forest Service (USFS) Aviation Managers

Course Objectives

At the conclusion of this course, participants will be able to:

- ❖ Discern the role of the FAA and DOI/USFS to assure aviation safety compliance.
- ❖ Understand why the US Department of the Interior (DOI) and the USDA's Forest Service (USFS) inspect aircraft, pilots, mechanics, and equipment.
- ❖ Define the standards used to assure aircraft, pilots, mechanics, and equipment are high quality and safe.
- ❖ Define the various types of interagency aviation inspectors.
- ❖ Define the characteristics of various Special Use activities conducted by the DOI/USFS.
- ❖ List major components of a typical aircraft, pilot, mechanic, and equipment inspection.

Course Materials

Optional Student Materials:

- Interagency helicopter Practical Test Standards
- Interagency fixed-wing Practical Test Standards

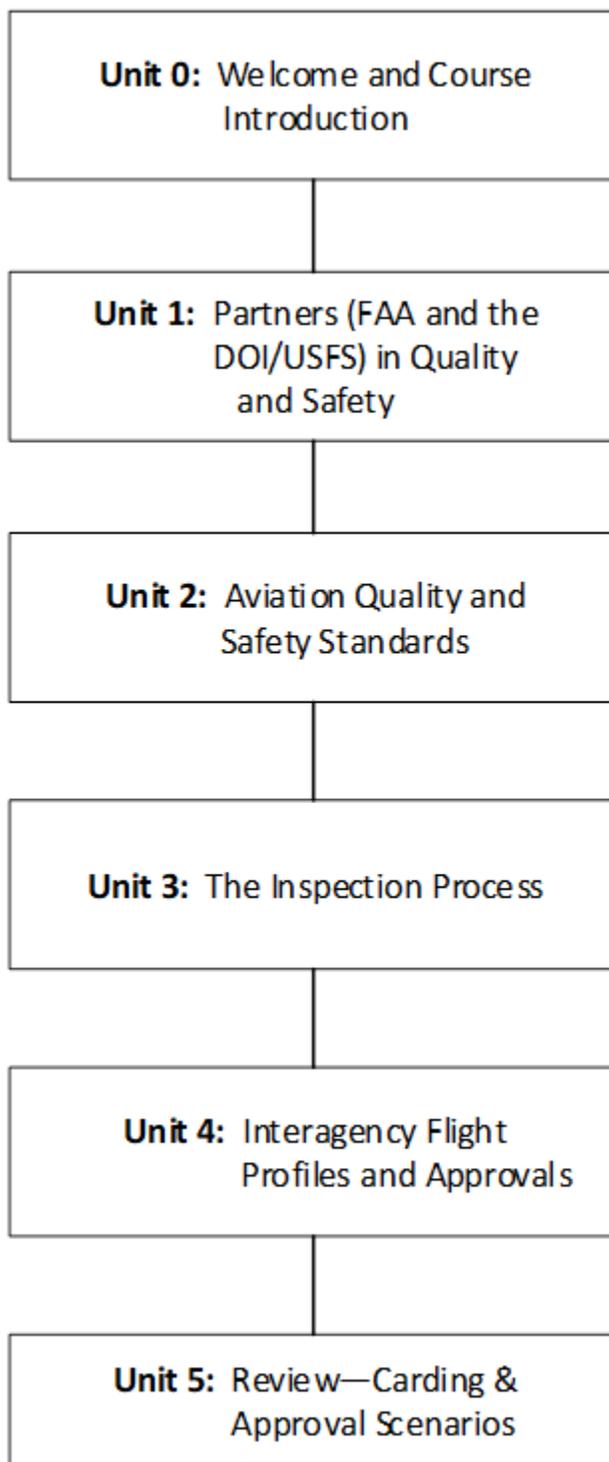
Reference Materials:

(Available as a reference, but not issued to each student during class)

- See **Appendix A.1 References** listing

A-208 Aircraft and Pilot Approval

Instructor-Led Course Map



Est. Instruction Time: 15-30 min.	Unit 0—Welcome and Course Introduction
#1	Welcome to A-208 Aircraft and Pilot Approval
#2	<p>Class Logistics</p> <p>Make sure you are free of distractions:</p> <ul style="list-style-type: none"> • <i>Mute your cell phone</i> • <i>Close the door, etc.</i> <p>FYI: You will be asked to provide feedback at the end of the class, regarding the course content and the instructor.</p>
#3	<p>Classmates Introduce Themselves</p> <ul style="list-style-type: none"> • Your name? • Where (what Agency) do you work? • Your position/job title? • Aviation experience? • What are you looking forward to this season?
#4	<p>Participant Guide</p> <p>The Participant Guide is a workbook designed to be a guided, note-taking tool—as well as a source of valuable information and references for your review. You will be asked to refer to the Participant Guide throughout the course.</p> <p>The number in the lower right corner of the presentation slides indicates the slide number reference that students should be viewing in the Participant Guide.</p>
#5	<p>Course Purpose</p> <p>The purpose of this course is to provide an understanding of the policy requirements and benefits associated with approving aircraft, pilots, mechanics, and support equipment prior to the agency/bureau mission.</p>

Est. Instruction
Time: 15-30 min.

Unit 0—Welcome and Course Introduction

#6 & #7

Course Objectives

At the conclusion of this course, participants will be able to:

- ❖ Discern the role of the FAA and DOI/USFS to assure aviation safety compliance.
- ❖ Understand why the US Department of the Interior (DOI) and the USDA's Forest Service (USFS) inspect aircraft, pilots, mechanics, and equipment.
- ❖ Define the standards used to assure aircraft, pilots, mechanics, and equipment are high quality and safe.
- ❖ Define the various types of interagency aviation inspectors.
- ❖ Define the characteristics of various Special Use activities conducted by the DOI/USFS.
- ❖ List the major components of a typical aircraft, pilot, mechanic, and equipment inspection.

Note: As we cover each unit, specific objectives for that unit will be addressed.

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#8 & #9	<p>Unit Objectives</p> <p>After completing Unit #1, participants should be able to:</p> <ul style="list-style-type: none">❖ Discern the roles of the FAA and the DOI/USFS to assure aviation safety compliance.❖ Understand why the US Department of the Interior (DOI) and USDA's Forest Service (USFS) inspect aircraft, pilots, mechanics, and equipment. <p>To accomplish the Unit #1 objectives, we will:</p> <ul style="list-style-type: none">• Explain the oversight role the FAA has—public versus civil.• Discuss the Safety Management System aspect of “quality assurance”.• Explain the personal responsibility each employee has with respect to overseeing the safety of public aircraft.

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#10	<p>FAA Role in Safety Assurance</p> <p>The FAA inspects aircraft and pilots. The DOI and the USFS also perform aircraft and pilots inspections. Are these inspection activities redundant?</p> <p>The FAA assures adherence to Federal Aviation Regulations (FARs). The standards by which the FAA assures adherence are defined in the 14 CFR Federal Aviation Regulations in “FAR parts”.</p> <hr/> <p><i>Consider the following example:</i> 14 CFR Part 43 describes the standards for maintenance, preventative maintenance, rebuilding and alteration of aircraft.</p> <p>The FAA certifies specialized Airframe and Powerplant (A&P) aircraft mechanic schools. A&P schools certify repair stations where aircraft maintenance is performed, and teach mechanics to work on and maintain aircraft following FAA requirements. As students of A&P schools demonstrate their mechanic skills and pass rigorous FAA testing, students are certified as A&P aircraft mechanics.</p> <p>The FAA assures FARs are followed by certifying A&P schools’ curriculums and performing spot inspections of A&P mechanics’ work in the field.</p> <p>14 CFR Part 43—Maintenance, Preventive Maintenance, Rebuilding, and Alteration (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol1/CFR-2011-title14-vol1-part43)</p> <hr/>

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#11	FAA Assures Adherence to the FARs <p>The FAA assures airports are the correct length and width, that general aviation pilots are trained to listed standards, that commercial aircraft meet various maintenance processes to carry paying passengers, etc.</p> <p>In most cases, the work the FAA does, by having tight controls on crew training and airworthiness assurance for commercial aircraft, is enough to meet the needs of the flying public.</p> <p>The FAA’s primary mission is Passenger Transport quality assurance—and they do it very well.</p> <p>The DOI and USFS do not require additional inspections or authorizations of aircraft, pilots, mechanics, or equipment for point-to-point flights to and from established airports.</p>
#12	The Opposite of Point-to-Point Mission = Special Use Mission <p>Non-Point-to-Point Missions are called Special Use Missions.</p> <ul style="list-style-type: none">• Question: What is a Special Use Mission?• Answer: Anything that is not a Point-to-Point Mission.

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#13	<p>Point-to-Point Mission Definitions:</p> <p><i>A flight that originates at one FAA-designated airport, seaplane base, or permanent helibase (identified in the FAA Airport/Facilities Directory, or FAA Sectional Aeronautical Charts), with the flight route directed to another FAA-designated airport, seaplane base, or permanent helibase.</i></p> <p>DOI OPM-29—Special Use Activities for Manned Aircraft (https://www.doi.gov/sites/doi.gov/files/uploads/opm-29.pdf)</p> <ul style="list-style-type: none"> • <i>The flight is conducted for the transportation of persons or cargo, for administrative purposes, only.</i> • <i>A Point-to-Point flight is conducted at elevations higher than 500 feet above ground level (AGL), except for takeoff and landing. These types of flights are typically referred to as “Administrative Use” flights, which require the aircraft and pilot be approved for Point-to-Point flight.</i> <p>FSM 5700/5710.5—Point-to-Point Missions (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700)</p> <p>Deviations Requiring Flight Reclassification:</p> <ul style="list-style-type: none"> • <i>Any Point-to-Point flight deviations, to conduct Special Use-related tasks, shall require the flight to be reclassified as a Special Use Mission.</i> • <i>Locations not on an FAA Airport/Facilities Directory, or FAA Sectional Aeronautical Chart, are Special Use Missions—and shall not be designated as Point-to-Point Missions. These exceptions may require one or more of the following:</i> <ul style="list-style-type: none"> ○ additional aircraft performance ○ additional flight equipment ○ special pilot designation ○ USFS Administrative Use of Aircraft Desk Reference 2016 <p>USDA Forest Service—Administrative Use of Aircraft Desk Reference 2016 (https://gacc.nifc.gov/rmcc/logistics/aviation/Admin_Aircraft_Desk_Reference.pdf)</p>

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#13	Point-to-Point Mission Definitions—<i>cont'd.</i> <i>Note: The BLM, BIA, NPS and USFS require all helicopter flights need to be managed by a person with a high degree of training and everyone on the flight must don PPE.</i> Alaska Approved Unprepared Landing Areas for Point-to-Point Operations (https://www.doi.gov/aviation/akro/safety_compliance/approved_landing)

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#14	<p>Introduction to Public Aircraft Operations (PAO)</p> <p>The Federal Aviation Regulations exempt some inherently governmental aircraft operations from FAA oversight and leave it to the organization performing the mission to assure safety for the operation. This exemption is called Public Use. Everything else (the opposite from Public Use) is called Civil Use.</p> <p>USFS 5700 Zero Code (Section 5705—Definitions): Public Aircraft Operation</p> <p><i>“ Limited by the statute (49 U.S.C 40102 and 49 U.S.C 40125) to certain government operations within U.S. airspace. Although these operations must comply with certain general operating rules (including those applicable to all aircraft in the National Airspace System), other civil certification and safety oversight regulations, do not apply. Whether an operation may be considered public is determined on a flight-by-flight basis, under the terms of the statute and considers aircraft ownership, operator, the purpose of the flight, and the persons on board the aircraft.”</i></p> <p>FSM 5700/Zero Code—Public Aircraft Operation (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700)</p> <p><i>Comprehensive definitions can be found in:</i></p> <p>49 CFR Part 830.2—U.S. Government Transportation Details (https://www.gpo.gov/fdsys/search/pagedetails.action?collectionCode=CFR&searchPath=Title+14%2FChapter+I&granuleId=CFR-2011-title49-vol7-sec830-2&packageId=CFR-2011-title49-vol7&oldPath=Title+14%2FChapter+III&fromPageDetails=true&collapse=true&ycord=600)</p> <p>14 CFR Part 1.1—Public Aircraft Definition (https://www.gpo.gov/fdsys/pkg/CFR-2011-title14-vol1/pdf/CFR-2011-title14-vol1-chapl.pdf)</p> <p><i>“The government entity conducting the PAO is responsible for oversight of the operation, including aircraft airworthiness and any operational requirements imposed by the government entity. The government agency contracting for the service assumes the responsibility for oversight of a PAO.”</i></p> <p><i>“...the FAA has no regulatory authority over PAO...”</i></p> <p>See complete details at [AC 00-1.1A (7e,7f)]: AC 00-1.1A—FAA Public Aircraft Operations, General (https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-1_1A.pdf)</p>

#14**Introduction to Public Aircraft Operations (PAO)—cont'd.**

Some examples of Public Use (e.g. inherently government missions) include: Firefighting, Animal surveys, volcano surveys, national defense, search and rescue, law enforcement.

Why are you in this class? You may be asked to participate in aviation missions that are “public use”—which means the FAA does not assure the safety of the mission—*YOU DO!*

Virtually all aviation operations the DOI/USFS performs are not Public Use based on what has been “declared” to the local FAA office called the Flight Standards District Office or FSDO.

The DOI considers the following, regarding Public Aircraft Operations:

Public Aircraft Operations (PAO) are defined in **49 U.S.C. § 40102(a)(41)**:

- An aircraft used only for the United States Government
- An aircraft owned by the Government and operated by any person for purposes related to crew training, equipment development, or demonstration
- An aircraft owned or operated by the government of a State, DC, or a territory or possession of the U.S. or a political subdivision of one of these governments

[U.S. Gov't. Transportation Definitions—49 U.S.C. § 40102\(a\)\(41\)](https://www.gpo.gov/fdsys/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partA-subparti-chap401-sec40102.pdf)

(<https://www.gpo.gov/fdsys/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partA-subparti-chap401-sec40102.pdf>)

Qualifications for Public Aircraft Status are defined in **49 U.S.C. § 40125**:

- **Governmental Function**—an activity undertaken by a government, such as national defense, intelligence missions, **firefighting, search and rescue, law enforcement**, aeronautical research, or **biological or geological resource management**

[U.S. Gov't. Qualifications for Public Aircraft Status—49 U.S.C. § 40125\(a\)\(2\)](https://www.gpo.gov/fdsys/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partA-subparti-chap401-sec40125.pdf)

(<https://www.gpo.gov/fdsys/pkg/USCODE-2011-title49/pdf/USCODE-2011-title49-subtitleVII-partA-subparti-chap401-sec40125.pdf>)

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#14	<p>Introduction to Public Aircraft Operations (PAO)—<i>cont'd.</i></p> <hr/> <p>FAA Advisory Circular 00-1.1A, dated 2/12/14</p> <p>AC 00-1.1A—FAA Public Aircraft Operations, General (https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_00-1_1A.pdf)</p> <p>provides amplifying information with respect to Governmental Functions:</p> <p>“The statute provides several examples of governmental functions in 49 U.S.C. § 40125(a)(2). <i>This list is not inclusive and other governmental functions may exist.</i> Functions not listed should not be presumed to be acceptable; contact the International Law, Legislation, and Regulations Division (AGC-200) regarding a legal interpretation to identify additional functions.” [AC 00-1.1A (7)]</p> <ul style="list-style-type: none"> • PAO applies to appropriate manned and unmanned aircraft operations • PAO applies to civil aircraft contracted by the government to perform “government functions” • Most aspects of public aircraft operations are NOT subject to FAA oversight [AC 00-1.1A (6a), (7e)] • <i>“The government entity conducting the PAO is responsible for oversight of the operation, including aircraft airworthiness and any operational requirements imposed by the government entity. The government agency contracting for the service assumes the responsibility for oversight of a PAO”</i> [AC 00-1.1A (7e)] • <i>“...the FAA has no regulatory authority over PAO...”</i> [AC 00-1.1A (7f)] • “Contracting government entities must be aware that PAO performed by civil operators create a significant transfer of responsibility to the contracting government entity, and that most FAA oversight ceases” [AC 00-1.1A (8b/2c, 2d)] <hr/>

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#14	<p>Introduction to Public Aircraft Operations (PAO)—<i>cont'd.</i></p> <hr/> <p>DOI OAS activities required to meet the legal requirements of PAO under 49 CFR and AC 00-1.1A include:</p> <ul style="list-style-type: none"> • Fleet aircraft inspections • Contract aircraft inspections • State cooperator aircraft inspections • Fleet pilot evaluation check rides • Contract pilot evaluation check rides • Fleet fuel facility inspections • Contract fuel service vehicle inspections • Fleet aircraft maintenance, airworthiness determination, modification, and equipment installation • Fleet pilot training • Qualified non-crewmember aviation safety training • Aviation safety and mishap prevention program • Aircraft mishap investigation program <hr/>
#15	<p>Introduction to Public and Civil Uses</p> <p>Not all Special Use Flights are “Public”.</p> <p>Contractors/cooperators still must comply with FAA regulations. Where there are no specified FAA regulations, or the FAA quality assurance falls short, the DOI/USFS has a higher standard. The FAR defines the missions that are PAO.</p>
#16	<p>Why are you in the class?</p> <p>You may be asked to participate in aviation missions that are “Inherently Governmental”—“Public Aircraft Operations”—which means the FAA does not assure the safety of the aircraft.</p>

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#17	<p>What about Unmanned Aerial Systems (UAS)/Drones?</p> <p>Quality and Safety Assurance of Unmanned Aerial Systems is ensured in the same manner as for airplanes and helicopters. At this time, however, there is no such thing as a “point-to-point” drone operator. This may change in the future as non-reconnaissance missions with UAS cross the threshold of greater reward-over-risk.</p> <p>In DOI and USFS Policy, where unmanned aircraft systems are not specifically identified, aircraft policy shall apply. Where policy or guides states “aircraft”, unless specifically defined, this shall include UAS.</p> <p>We will learn more about UAS later in the class:</p> <ul style="list-style-type: none"> • DOI: See OPM-11 DOI OPM-11—Use of Unmanned Aircraft Systems (UAS) (https://www.doi.gov/sites/doi.gov/files/uploads/opm-11.pdf) • USFS: See FSM 5713.7 FSM 5713.7—Use of Unmanned Aircraft Systems (UAS) (https://www.fs.fed.us/dirindexhome/fsm/5700/wo_5710_amend_2017-1.docx) <p><i>Approval through the USFS UAS Program Manager shall be obtained for any: USFS leased, contracted, owned, other federal agency, or cooperator UAS operations.</i></p> <p><i>UAS and UAS pilot approval for cooperators will adhere to existing cooperator aircraft and pilot approval policy in FSM 5712.4 and 5713.43.”</i></p> <p><i>“Acquisition of Unmanned Aircraft Systems shall follow Federal Acquisition Regulations as described in: FSM 5718.1.”</i></p>

#18**Exercise****Public or Civil?—Who has the Oversight?**

In which missions does oversight belong to the FAA, or to the DOI/USFS?

End Product Contracts:

- **Civil:** Unless we told the contractor providing the end product how to perform the aviation function (e.g. requiring pilots are carded, specifying where to land and takeoff, specifying training requirements of crewmembers, etc.).
- We can give the contractor options on where to land on the forest, district, or refuge—and to notify us before and after they fly, regarding public safety and known hazards, such as power lines, or local weather.

LAX or JFK:

- **Civil:** This sounds like a no brainer —generally, this type of flight would be Civil, *however*,
- **Public:** If DOI/USFS contracts for the flight and have special requirements for the mission—such as training, qualifications, or equipment—then the flight would be classified Public and we own it.

Remote Airstrip:

The airstrip has little to do with who has oversight of the flight in or out. The *purpose of the flight* determines the oversight authority. Consider these questions to determine Civil or Public:

- Did a scheduled carrier provide the flight?
>If a scheduled air carrier, the air carrier possesses operational control.

>If a scheduled air carrier with a full plane of government employees, utilizing a remote airstrip for inherently governmental purposes—operational control may only be determined by the NTSB.
- Did we crash at the remote airstrip?
>NTSB only determines operational control if there is a mishap.
- Is special training of the pilot required for this flight route and airstrip location, which is verified by the DOI/USFS?
- Are there aircrew members aboard that make the purpose of the landing essential to the mission?

Est. Instruction Time: 10 min.	Unit 1—FAA and the DOI/USFS as Partners in Quality and Safety
#18 Exercise	Public or Civil?—Who has the Oversight?—<i>cont'd.</i> <hr/> Rappelling Into Wildland Fires: <ul style="list-style-type: none">• Public: This is why PAO rules have been defined—to allow the government to perform inherently governmental missions, such as rappel, without a strict set of standards from the FAA that may make the rappel operation unfeasible. <hr/> UAS: <ul style="list-style-type: none">• The FAA retains sole authority to regulate UAS in the National Airspace System. If a Certificate of Authorization is in place, we must follow it. The only determination of Public versus Civil will come after a mishap occurs.• Did the UAS crash? >NTSB only determines operational control if there is a mishap. <hr/>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#19 & #20	<p>Unit Objectives</p> <p>After completing Unit #2, participants should be able to:</p> <ul style="list-style-type: none"> ❖ Understand why the US Department of the Interior (DOI) and USDA’s Forest Service (USFS) inspect aircraft, pilots, mechanics, and equipment. ❖ Define the standards used to assure aircraft, pilots, mechanics, and equipment are high quality and safe. <p>To accomplish the Unit #2 objectives, we will:</p> <ul style="list-style-type: none"> • Explain where to find the quality and safety standards for fleet and contract aircraft. • Explain standards differences between contract, fleet, and cooperator aircraft. • Discuss the Safety Management System aspect of “quality assurance”.
#21	<p>Three Sets of Standards for Quality and Safety of Flight</p> <ul style="list-style-type: none"> ❖ Fleet Standards ❖ Contract Standards ❖ Cooperator Standards

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#22 & #23	<p>DOI/USFS Fleet Aircraft & Pilot Standards—Set in Policy</p> <ul style="list-style-type: none"> DOI: Departmental Manual DM 350-354 and subsequent Operational Procedure Memorandum's (OPM's) DOI OAS—Department Manuals DM350–354 (https://www.doi.gov/sites/doi.gov/files/uploads/ALL_OAS_DM.pdf) DOI OAS—Operational Procedures Memorandums (OPMs) (https://www.doi.gov/aviation/library/opm) USFS: Forest Service Handbook FSH 5709.16 & Manual FSM 5700 Aviation Management. Forest Service Handbook (FSH) 5709.16!.. (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?5709.16!..) Forest Service Manual (FSM) 5700 (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700!..) <p>Fleet Aircraft: DOI/USFS fleet aircraft and pilots are subject to surveillance inspections by the FAA. The primary responsibility for overseeing these aircraft and pilots, however, rests with the DOI/USFS. Generally, <i>all</i> DOI/USFS fleet aircraft hold FAA certification and are maintained to a standard greater than that required by 14 CFR Part 91. Inspection of the aircraft focuses on assessing the quality of maintenance performed, the condition of the aircraft, and confirmation that any modifications made to the aircraft are fully documented, either as Supplemental Type Certificates (STCs), or as FAA Form 337 (Major Repair & Alteration to Airframe, Powerplant, Propeller, or Flight Appliance) field approvals.</p> <p>14 CFR Part 91—General Operating and Flight Rules (https://www.gpo.gov/fdsys/granule/CFR-2012-title14-vol2/CFR-2012-title14-vol2-part91/content-detail.html)</p> <p>An STC that has already been approved by the FAA, is the only notification required. Alternatively, FAA Form 337 is the required form used to document an aircraft major repair and/or an aircraft alteration. When a Mechanic is not using “approved” procedures, the FAA reviews the procedures, in the field, and approves them for one-time use by signing the Form 337.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#22 & #23	<p>DOI/USFS Fleet Aircraft & Pilot Standards—Set in Policy—<i>cont'd.</i></p> <p>Fleet Pilots: DOI/USFS fleet pilots also hold FAA certificates. The FAA, however, exercises little oversight regarding DOI/USFS pilot qualifications and proficiency. DOI/USFS are responsible for conducting flight evaluations to ensure pilots possess the required skills to safely operate the aircraft, pass equipment checks, and can safely perform required Special Use missions.</p> <ul style="list-style-type: none">• DOI: Fleet Aircraft & Pilots are “carded” for specific missions.• USFS: Fleet Pilots and Aircraft are not “carded”:<ul style="list-style-type: none">○ Fleet Pilots are employed to fly.○ Fleet Pilots are approved to fly, because that is their job.○ If the USFS was concerned about the safety of a pilot, they would not let that person fly, and that pilot would be replaced.

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#24	DOI/USFS Contract Standards The DOI and USFS have separate standards for each flight service contract. <ul style="list-style-type: none">• The contract defines <i>all</i> of the terms and conditions that must be in place for the aircraft to perform flight services for the DOI/USFS.• Contracted flight services must meet <i>all</i> of the standards established in the awarded contract.• Vendors contractually commit to providing flight services in the specific manner detailed in the contract.• Upon contract award, the DOI/USFS then assures that the vendor has the ability to provide what they have claimed.• The Contracting Officer's appointed Technical Representative (COTR) inspects and verifies that the vendor has the capability to perform a service in a safe manner and meets the technical standards listed in the contract. Contracted aircraft receive approval cards (after inspection) that specify the types of missions they can perform under the contract. We will learn more about approval cards in Unit 4.

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#25	<p>DOI/USFS Cooperators</p> <p>The term "cooperator" applies to entities not under direct contract to DOI/USFS, nor a part of the DOI/USFS fleet of government owned aircraft. Cooperators may include:</p> <ul style="list-style-type: none">• Federal, State, County, and City agencies• U.S. Military, State National Guard Units, US Coast Guard• Canadian registered aircraft• Operators under contract to other commercial entities <p>Affiliate Cooperators: Department of the Interior (DOI) bureau personnel may be—for the mutual benefit of the Government and the cooperating party—non-revenue passengers/aircrew members aboard civil aircraft operating in accordance with 14 CFR 91, 121, or 135.</p> <p>14 CFR Part 91—General Operating and Flight Rules (https://www.gpo.gov/fdsys/granule/CFR-2012-title14-vol2/CFR-2012-title14-vol2-part91/content-detail.html)</p> <p>14 CFR Part 121—Air Carrier Certification (https://www.faa.gov/about/initiatives/atos/air_carrier/)</p> <p>14 CFR Part 135—Air Carrier and Operator Certification (https://www.faa.gov/about/initiatives/atos/135_certification/)</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#26	<p>DOI/USFS Cooperators—U.S. Military</p> <p>Regular U.S. Army, Air Force, Marine, Navy Aircraft and flight crewmembers shall not be inspected, or issued, DOI/USFS approval cards or Letters of Authorization (LOAs).</p> <p>Exception: Letters of Authorization, by the DOI OAS Regional Director, and the USFS Regional Aviation Officer, are issued for National Guard helicopters and aircrews, tasked for fire suppression activities. Often times, a joint letter is issued that includes both of these authorities.</p> <p>USFS 5712.34: <i>“An Army National Guard designation of Readiness Level 1 (RL 1) with a corresponding Commanders Task List that includes the specific mission, for example, fire suppression (water bucket/tank operations), shall be considered comparable to Forest Service standards required of contractor and agency pilots. Army National Guard aircraft must be flown and staffed with the standard pilot(s) and crew complement for the specified mission. Pilot(s) shall be RL-1 qualified.</i></p> <p><i>Approval may be for each individual, or for all pilots of the organization, and must specify the approved mission types. In either case, approval by the Branch Chief, Pilot Standardization and Quality Assurance, or RAO, must be in writing.”</i></p> <p>USFS 5712.34—Pilots Employed by Other Agencies, Military Services, or Cooperators (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700)</p>
#27	<p>DOI/USFS Cooperators—Canadian Aircraft</p> <p>Canadian Cooperators include aircraft of Canadian registry, and operated, or are under contract to the Canadian provinces that may deploy under the National Interagency Fire Center (NIFC)/Canadian Interagency Fire Fighting Center (CIFFC) agreement.</p> <p>Aircraft of Canadian registry can be included as Cooperators.</p> <p>Exception: This does <i>not</i> apply to Canadian registered aircraft under contract to the State of Alaska and approved by the AK Regional Office for cooperator status in Alaska.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#28	<p>USFS Cooperators—Operators Under Contract to Other Commercial Entities</p> <p><i>Example:</i> The USFS enters into a Memorandum of Understanding (MOU) with the State of Washington to “share” aviation resources to respond to wildfires. The State of Washington enters into contracts with aviation services providers. The State of Washington can ask the USFS to inspect those aircraft, pilots, and equipment, and issue them “Cooperator Letters of Authorization”.</p>
#29	<p>Cooperators—Process</p> <p>For all public service agencies/organizations whose mission aligns with the DOI/USFS, and who wish to perform flight services on a cooperative basis, a Letter of Authorization must be in place prior to flight.</p> <p>The LOA is issued either through the USFS, via the appropriate Regional Aviation Officer, or through the DOI, via the appropriate OAS Regional Director.</p> <p>Special Use activity flights require an onsite inspection of the aircraft, aircraft records and maintenance logs, and a flight evaluation of the pilot for the intended activity. A request must be routed to the DOI Bureau RAM/SAM, then to the DOI OAS Regional Director, or to the USFS Regional Aviation Officer—for DOI and USFS personnel to fly on an affiliate aircraft.</p> <p>DOI/USFS personnel are non-revenue passengers/aircrew members, or UAS Operations.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#30	<p>Cooperators—Requirements</p> <p>DOI: see Part 351/DM Chapters 1-5 DOI-Part 351/DM Chapters 1-5—Aviation Operations (https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/ALL_OAS_DM.pdf)</p> <p>USFS: see FSH 5710.35 FSH 5710.35—Cooperator Standards Policy (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsm?5700)</p> <p><i>“Cooperator agreements are required for all aviation services provided to the USFS by other agencies, partners, and cooperators. Agreements must specify approval processes, levels of operational standards, requirements, costs, and safety standards.</i></p> <p><i>All cooperator UASs shall meet USFS UAS aircraft and pilot standards.”</i></p> <ul style="list-style-type: none"> • At a minimum, all employees will meet training and currency requirements for the Aircrew Member position. • DOI and USFS employees must meet all <i>ALSE Handbook</i> requirements for PPE. Interagency Aviation Life Support Equipment (ALSE) Handbook (https://www.doi.gov/sites/doi.gov/files/uploads/interagency_alse_handbook_v2.8.pdf) • All flights with cooperators must have a current, approved Project Aviation Safety Plan (PASP) in place that addresses how cooperator requirements will be accomplished (if DOI/USFS has operational control). • The flight must meet USFS/DOI and Bureau-specific Flight Following requirements.

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#31	<p>DOI Cooperators—Memorandum of Understanding</p> <p>Memorandums of Understanding (MOU) are in place between dozens of public service organizations, and the DOI or USFS, to perform aviation missions.</p> <p>An MOU provides the framework and scope of an understanding between two or more entities. The MOU spells out the standardized elements that participating organizations expect and the approvals that are required prior to exercising the MOU.</p> <p>An MOU is similar to setting up an account at a retailer you often visit. The retailer keeps your information on file and has certain expectations of you, and you have certain expectations of the retailer.</p> <p>You are not obligated to visit the retailer on a regular basis, but if you do, you both understand that the relationship is mutually beneficial.</p> <p>Current Memorandums of Understanding (MOUs) signed by the Director of OAS can be viewed at the:</p> <p>OAS Memorandums of Understanding (MOU) Index (https://www.doi.gov/aviation/library/mou)</p> <p>Each MOU has a corresponding Information Bulletin (IB) that identifies and clarifies DOI Bureau responsibilities regarding the implementation and use of the MOU. The MOU establishes a framework under which the cooperator will provide aerial support to DOI authorized missions. The scope of the aviation support provided is also identified. MOUs are generally issued for at least 5 years and have specific procedures in place in the event that one of the parties decides to discontinue the agreement.</p> <p>Each MOU states: <i>“Contact Bureau Aviation Managers (unit, state, region, national as identified by your respective bureau) for specific DOI and Bureau requirements prior to use.”</i></p> <p><i>Note: The USFS typically enters into Letters of Agreement, regionally, via the Regional Forester, or the Regional Aviation Officer.</i></p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#32	Cooperators—Letters of Approval (LOAs) <ul style="list-style-type: none">• Letters of Approval are not posted on the DOI website. Copies of LOAs may be obtained through the DOI OAS Regional Offices.• DOI Bureau employees must contact their Bureau Aviation Managers (i.e. RAM/SAM/NAM) prior to using LOAs, just as is required for using MOUs.• Cooperator LOAs, for affiliates, are generally issued for a 30-day period.• Cooperator LOAs for Military and other Government Agency operations are generally issued for 12 months.

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#33	<p>DOI and USFS Approve Aviation Operations for Each Other</p> <p>The DOI and USFS accept each other’s approvals of aircraft, pilots, and equipment, as a regular business practice.</p> <p>The purpose of this MOU (agreement) is to provide a general framework for cooperation and coordination among the agencies, and to establish and document interagency fire helicopter standards covering the present and future determination of:</p> <ul style="list-style-type: none"> • Equipment that constitutes an aircraft eligible for approval as an interagency fire helicopter. • Eligibility of pilots for approval as interagency fire helicopter pilots. <p>Interagency aviation practical test standards also exist that assure inspectors are testing to the same standard—regardless of the agency from which the inspector originates, or the agency for which the aircraft/pilot will be contracted and can be found at the OAS Document Library, under the heading: “Technical Services Documents”:</p> <p>Interagency Airplane or Helicopter Pilot Practical Test Standards (https://www.doi.gov/aviation/library)</p> <p>Master cooperative wildland fire agreements also exist to facilitate aviation operations between fire management agencies.</p> <p>Other interagency guides/handbooks shared between the DOI and USFS are generally for interagency fire cooperation.</p> <p>Another component within the aviation branches of both agencies with shared standards includes:</p> <p>Interagency Aviation Training Guide (https://www.iat.gov/docs/IAT_Guide_2017_10.pdf)</p> <p>An Information Bulletin is posted on the DOI website with specific information regarding the DOI Law Enforcement Memorandum of Understanding with the DEA, DOD and National Guard Units:</p> <p>DOI Law Enforcement (LE) MOU Status (https://www.doi.gov/sites/doi.gov/files/migrated/aviation/library/upload/IB_2013-04.pdf)</p>

#34**Cooperators—Practical Military Approval**

The intent of using Military aircraft is to ensure DOI/USFS agency missions are accomplished, and to obey (in all instances) the government policy regarding non-competition with private enterprise.

The DOI OAS Regional Director, or the USFS Regional Aviation Officer, is responsible for making the final determination regarding the availability and use of commercial resources.

See:

[Public Law 103-411](#)

<https://www.gpo.gov/fdsys/pkg/STATUTE-108/pdf/STATUTE-108-Pg4236.pdf>

Cost factors alone are not justification for use of military aircraft in lieu of available commercial aircraft sources. If commercial sources are reasonably available, and capable of performing the mission, the commercial source shall be used.

Request for immediate transportation in a life-threatening, or operational emergency, may be made directly to a military installation.

1. Coordinate with the appropriate DOI OAS Regional Director, or USFS Regional Aviation Officer, to assist in searching for commercial resource availability.
2. Identify and locate military aircraft capable of meeting the identified needs.
3. Initiate a written request, for non-emergency use, to the appropriate DOI OAS Regional Director or USFS Regional Aviation Officer. Requests must demonstrate that the requirement is in the national interest and indicates action towards obtaining commercial resources.

Drug interdiction missions may not need individual approvals, but are covered in DOI MOUs at:

[OAS Memorandums of Understanding \(MOU\) Index](#)
(<https://www.doi.gov/aviation/library/mou>)

Military aircraft and flight crewmembers shall **not** be inspected—or issued Interagency Qualification Cards—they are issued “Letters of Approval”.

Military Use Handbook (NFES 2175), Chapter 70, specifies the standards for pilot training and qualification required for approving the use of military aircraft for emergency fire suppression:

[NIFC Military Use Handbook \(NFES 2175\)](#)
(<https://www.hsd.org/?abstract&did=748628>)

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#35	<p>Cooperators—State-to-State Standards</p> <p>States often share aviation resources to accomplish their objectives using state-to-state individual agreements, or via a collective agreement of the National Association of State Foresters, which details standards of shared resources between states. The Forest Service recognizes this standard for State cooperators.</p>
#36	<p>Cooperators Review—1 of 2</p> <p>Bayou Sauvage National Wildlife Refuge uses the Louisiana (LA) National Guard to move old Christmas trees to renew wetlands.</p> <p>Question: How is the LA National Guard approved to perform this activity?</p> <p>Answer: The LA National Guard considers this activity a training mission that enhances their overall mission. The City of New Orleans does not have to pay for the aviation component.</p> <p>Fish and Wildlife Service (FWS) employees are on-site to unhook the transported Christmas trees. This is not a cooperator mission. This type of mission is performed under a special permit, through the refuge, that details suggested areas where the trees are to be dropped.</p>
#37	<p>Cooperators Review—2 of 2</p> <p>Rocky Mountain National Park Service (Colorado) occasionally requests, from the USFS, an exclusive use helicopter, based in Broomfield, Colorado, to assist with “Search & Rescue” missions in the park.</p> <p>Question: How is the USFS approved to provide this resource?</p> <p>Answer: The MOU between the USFS and DOI that defines the characteristics of fire missions does not pertain to non-fire missions. It would seem that the National Park Service (NPS) would have to hire its own helicopter to perform Search & Rescue activities.</p> <p>In fact, there is not a mission type defined for “Search & Rescue”, and the characteristics of the interagency fire mission are quite similar to the Search & Rescue mission. Therefore, no special carding or equipment is required for USFS involvement/approval to perform Search & Rescue activities.</p> <p>We will learn more about this type of exception.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#38	<p>Airworthiness & Certificates</p> <p>An airworthiness certificate is an FAA document that grants authorization to operate an aircraft in flight.</p> <p>There are two different classifications of FAA airworthiness certificates:</p> <ul style="list-style-type: none"> • Standard Airworthiness Certificate • Special Airworthiness Certificate <p>Standard Airworthiness Certificates</p> <p>A Standard Airworthiness Certificate (FAA form 8100-2), displayed in the aircraft, is the FAA's official authorization allowing for the operation of type certificated aircraft in the following categories:</p> <ul style="list-style-type: none"> • Normal • Utility • Acrobatic • Commuter • Transport • Manned free balloons • Special classes <p>A Standard Airworthiness Certificate remains valid as long as the aircraft meets its approved type design, is in a condition for safe operation and maintenance, preventative maintenance, and alterations are performed in accordance with 14 CFR parts 21, 43, and 91:</p> <p>14 CFR Part 21—Certification Procedures for Products and Articles (https://www.ecfr.gov/cgi-bin/text-idx?SID=da23626c21aa97af26bbc2622a9f78d8&mc=true&node=pt14.1.21&rqn=div5)</p> <p>14 CFR Part 43—Maintenance, Preventive Maintenance, Rebuilding, and Alterations (http://www.faa-aircraft-certification.com/far-43.html)</p> <p>14 CFR Part 91—General Operating and Flight Rules (https://www.gpo.gov/fdsys/granule/CFR-2012-title14-vol2/CFR-2012-title14-vol2-part91/content-detail.html)</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#38	Airworthiness & Certificates—<i>cont'd.</i> See more regarding: FAA—Standard Airworthiness Certificate Definitions (https://www.faa.gov/aircraft/air_cert/airworthiness_certification/std_awcert/)

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#39	<p>Special Airworthiness Certificates</p> <p>The FAA Special Airworthiness Certificate (FAA Form 8130-7) is an FAA authorization to operate an aircraft in the US airspace in one or more of the following categories:</p> <p>Primary: Aircraft flown for pleasure and personal use.</p> <p>Light Sport: Airplanes, Gliders, Powered parachutes, Weight-shift-control aircraft (commonly called trikes), and Lighter-than-air aircraft (balloons and airships)</p> <p>Experimental: Research and development, Exhibition, Air racing, Operating amateur-built aircraft, Operating kit-built aircraft, Operating light-sport aircraft, Unmanned Aircraft Systems (UAS).</p> <p>Restricted: Agricultural, Forest and Wildlife Conservation, Aerial Surveying, Patrolling (pipelines, power lines), Weather Control, Aerial Advertising, other operations specified by the Administrator.</p> <p>Limited: issued to operate surplus military aircraft that have been converted to civilian use under the following conditions:</p> <ul style="list-style-type: none"> • The aircraft has a limited type certificate. • The aircraft conforms to its type certificate. • The FAA has determined that the aircraft is safe to operate. • Operations may not include carrying passengers or cargo for hire. <p>Special Flight Permit: may be issued for an aircraft that may not currently meet applicable airworthiness requirements, but is capable of safe flight, for the following purposes:</p> <ul style="list-style-type: none"> • Flying aircraft to a point for repairs, alterations, maintenance, or storage (for example, ferrying an aircraft from point A to point B) • Other purposes that do not apply to DOI/USFS missions. <p>See more information at: FAA—Special Airworthiness Certificate Definitions (https://www.faa.gov/aircraft/air_cert/airworthiness_certification/spawcert/)</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#40	Type Certificates <p>The Type Certificate (TC) implies that aircraft manufactured according to the approved design can be issued an Airworthiness Certificate. To meet those requirements, the aircraft and each sub-assembly must also be approved.</p> <p>An "Airworthiness Certificate" is issued for each aircraft that is properly registered if it conforms to its type design. The Airworthiness Certificate is valid and the aircraft may be operated as long as it is maintained in accordance with the rules issued by the regulatory authority.</p>
#41	Supplemental Type Certificates (STC) <p>A Supplemental Type Certificate is issued when an applicant has received FAA approval to modify an aeronautical product from its original design.</p> <p>The STC:</p> <ul style="list-style-type: none">• Defines the product design change• States how the modification affects the existing type design• Lists serial numbers affected <p>The STC also identifies the certification basis, listing specific regulatory compliance for the design change. Information contained in the certification basis is helpful for those applicants proposing subsequent aircraft product modifications and evaluating certification basis compatibility with other potential STC modifications.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#42	<p>Operations of Restricted Category Aircraft</p> <p>Operation of aircraft certificated in the “<i>Restricted</i>” category shall be limited to the special purpose flight operations authorized by that certificate. All operations shall be in accordance with 14 CFR Part 91, Subpart D, and the aircraft operating limitations of the Restricted Certificate. For aircraft with multiple Airworthiness Certificates, the operating rules of the Certificate being used shall apply.</p> <p>14 CFR Part 91—General Operating and Flight Rules (https://www.gpo.gov/fdsys/granule/CFR-2012-title14-vol2/CFR-2012-title14-vol2-part91/content-detail.html)</p> <p>When former military aircraft are sold to the public, and enter the civilian world, they fall within the purview of the U.S. Federal Aviation Administration (FAA). The FAA has the authority to regulate these type aircraft in accordance with Federal Aviation Regulations (FARs) and, if the aircraft are eligible, to certificate them as “<i>Restricted</i>” category aircraft.</p> <p>All ITAR (International Traffic in Arms Regulations) items—such as military radios, electronics, and weapons—are removed prior to the sale. In order to obtain “<i>Restricted</i>” category certification of a former military aircraft, the individual or company who will become the “<i>Restricted</i>” category type certificate holder must prove—through a conformity procedure with the FAA—that the aircraft is in fact safe for the intended use or purpose. The certification basis for these aircraft must reference FAA approval documentation and the special purpose operation (or operations) for which it is being approved.</p> <p>The applicant must establish maintenance and other compliance programs (commonly the manufacturer’s or the accepted military program), and once the aircraft is certificated in the “<i>Restricted</i>” category, it will have a second data plate affixed next to the original military data plate, which will contain the name of the type certificate holder, aircraft model number, and a serial number. It is forbidden to change the name on the original model number. Once the aircraft is issued an Airworthiness Certificate (even a Special Airworthiness Certificate in “<i>Restricted</i>” category), the maintenance must be done in accordance with the requirements of 14 CFR Part 43.</p> <p>14 CFR Part 43—Maintenance, Preventive Maintenance, Rebuilding, and Alterations (http://www.faa-aircraft-certification.com/far-43.html)</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#42	<p>Operations of Restricted Category Aircraft—<i>cont’d.</i></p> <p>The guidelines for the certification and operation of “<i>Restricted</i>” category aircraft are established in the Code of Federal Regulations (CFR). The FAA has also produced various supplementary documents, such as FAA Order 8110.56B—Restricted Category Type Certification—to provide guidance on “<i>Restricted</i>” category certification of military surplus platforms.</p> <p>8110.56B—FAA Restricted Category Type Certification (https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/1031535)</p> <p>14 CFR Part 21.25 says, “<i>an applicant is entitled to a type certificate for an aircraft in the restricted category if it complies with the noise requirements of CFR part 36.</i>” Additionally, in the case of former military aircraft, “<i>is of a type that has been manufactured in accordance with the requirements of (and accepted for use by) an Armed Force of the United States—and has been later modified for a special purpose.</i>” These “<i>special purpose</i>” operations include agricultural, forest and wildlife conservation, aerial surveying, patrolling, weather control, aerial advertising, and “<i>any other operation specified by the FAA</i>”.</p> <p>14 CFR Part 21.25—FAA Issue of Type Certificate: Restricted Category Aircraft (https://www.gpo.gov/fdsys/granule/CFR-2002-title14-vol1/CFR-2002-title14-vol1-sec21-25)</p> <p>14 CFR Part 36—FAA Noise Standards: Aircraft Type and Airworthiness Certification (https://www.ecfr.gov/cgi-bin/text-idx?rgn=div5&node=14:1.0.1.3.19)</p> <p>The operating restrictions are laid out in 14 CFR Part 91.313. In summary, “<i>you can’t carry passengers or cargo for hire, and unless operating in accordance with the terms and conditions of a certificate of waiver or special operating limitations issued by the FAA.</i>” Additionally, “<i>you can’t operate a restricted category civil aircraft in the U.S. over densely populated areas, congested areas or airways, or near busy airports where passenger transport operations are being conducted.</i>” (This section does not apply to non-passenger carrying civil rotorcraft external load operations conducted under 14 CFR Part 133.</p>

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#42	<p>Operations of Restricted Category Aircraft—<i>cont'd.</i></p> <p>14 CFR Part 91.313—FAA Restricted Category Civil Aircraft: Operating Limitations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol2/CFR-2011-title14-vol2-sec91-313)</p> <p>14 CFR Part 133—FAA Rotorcraft External-Load Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part133)</p>
#43	<p>Operations of Uncertificated Aircraft</p> <p>Operations of uncertificated aircraft shall be limited to transportation of air crewmembers (e.g. firefighters) and property directly associated with the mission, as authorized by the most current Public Law pertaining to public use aircraft and with appropriate departmental guidance. This authorization does not include transportation of passengers.</p> <p>Uncertificated Aircraft: are former Military or Federal Excess Personal Property (FEPP) aircraft.</p> <p>DOI: Does not own any uncertificated aircraft</p> <p>USFS Uncertified Aircraft include:</p> <ul style="list-style-type: none"> • Four, C-23A Sherpas (used for smokejumping and hauling cargo) • Two, AH-1 Cobra helicopters

#44**Federal Excess Personal Property (FEPP) Aircraft—
Forest Service Role**

The purpose of the FEPP program is to permit the USFS to loan former military aircraft to State Foresters for support of the states' fire protection programs.

The DOI has no role in the FEPP aircraft program.

The USFS Regional Aviation Officers (RAOs) inspect the FEPP aircraft and they approve the State Operating procedures that outline the FEPP compliance requirements.

RAOs approve the states' aircraft operating plan. If aircraft do not meet the approved plan, the RAO can remove the non-compliant aircraft.

FEPP Aircraft are not inspected by approved DOI/USFS qualified maintenance inspectors or pilots. If the state chooses, they can ask to be a cooperator and receive a "Letter of Approval".

The primary use of FEPP Aircraft must be for fire protection purposes. Incidental use for other than fire or emergency purposes, of up to 10 percent, is allowed.

As of January 2018, the USFS had 200 FEPP former military aircraft on loan to states:

- 68% Flyable condition aircraft
- 50% Helicopters
- 30% Single-engine/fixed-wing: Cessna, Piper, Beechcraft
- 20% S-2 air-tankers, OV-10 Air Attack (tanker)

State Awardees for FEPP Aircraft Loans:

Alaska: 1, Arkansas: 8, California: 85, Florida: 13, Maine: 16, Montana: 10, North Carolina: 7, New Jersey: 16, Nevada: 2, Oregon: 2, South Carolina: 11, Tennessee: 2, Washington: 14

**Forest Service Aviation Management's role/responsibilities
as the cooperating agency:**

- Assist in the development of State cooperators' aviation safety programs, upon request.
- Provide aviation expertise or assistance, as requested.
- Assist in the management of State cooperators' aviation operations, upon request.
- Determine whether State cooperator meets comparable aviation standards for USFS use.
- Approve State cooperator's aircraft for USDA's Forest Service missions, as appropriate.

Est. Instruction Time: 30 min.	Unit 2—DOI and USFS Aviation Quality & Safety Standards
#44	<p>Federal Excess Personal Property (FEPP) Aircraft—Forest Service Role—<i>cont’d.</i></p> <p><i>Note:</i> A similar program exists called the “1033 Program” which transfers excess military aircraft to civilian law enforcement agencies. The program legally requires the Department of Defense to make various items of equipment (including aircraft) available to local law enforcement. The “FEPP Aircraft Program” and the “1033 Program” are similar programs (yet different), and are easily confused with one another.</p> <p>U.S. Defense Logistics Agency—1033 Program (http://www.dla.mil/DispositionServices/Offers/Reutilization/LawEnforcement/ProgramFAQs.aspx)</p> <p>U.S. Congressional Information—1033 Program (https://fas.org/sgp/crs/natsec/R43701.pdf)</p> <p>USDA—Federal Excess Personal Property (FEPP) Program (https://www.dm.usda.gov/pmd/docs/FEPP_Handbook.pdf)</p>
#45	<p>Quick Quiz</p> <p>Your state counterpart is planning a series of flights that will save Federal agencies time and money if you also participate. Here’s what you know:</p> <ul style="list-style-type: none"> • FEPP aircraft—are available • Restricted category aircraft—are available • Supplemental Type Certificates (STC)—have been issued for the aeronautical equipment that will be used <p>What does each mean? How will you seek approval?</p> <p>Does any of this affiliate information apply if my local county has a UAS/drone they share with us to help with (insert mission type here), on (insert your unit name here)?</p> <ul style="list-style-type: none"> • Yes!—All of this information applies to the situation.
	Review Unit Objectives

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
#46 & #47	<p>The Inspection Process—Unit Objectives</p> <p>After completing Unit #3, participants should be able to:</p> <ul style="list-style-type: none"> ❖ Define the various types of interagency aviation inspectors ❖ List major elements of a typical pilot, aircraft, maintenance, and equipment inspection <p>To accomplish the Unit #3 objectives, we will:</p> <ul style="list-style-type: none"> • Define the process of pilot, aircraft, maintenance, and equipment inspection • Explain the standards and differences between DOI & USFS inspection standards
#48	<p>Two Types of Inspectors</p> <p>Pilot Inspectors:</p> <ul style="list-style-type: none"> • Fixed-wing • Rotor-wing • Unmanned Aerial Systems (UAS/drones) <p>Maintenance Inspectors:</p> <ul style="list-style-type: none"> • Aircraft • Mechanic • Fuel Servicing Vehicle • SEAT Support Vehicle • Fuel Site • Avionics • Equipment • Unmanned Aircraft Systems (UAS/drones) <p>Some inspectors are approved to perform multiple types of inspections. Inspectors receive approvals via both internal standards and agency policy.</p>

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
#49	<p>Did You Know...?</p> <p>USFS has “HIPs” and “ASIs” in each USFS region:</p> <ul style="list-style-type: none"> • HIP—Helicopter Inspector Pilot • ASI—Aviation Safety Inspector <p>USFS: Does not “employ” fixed-wing Pilot Inspectors. Typically, USFS fixed-wing fleet pilots are “deputized” to perform fixed-wing Pilot inspections.</p> <p>DOI: Employs Inspectors at all three of the DOI OAS Regions—Alaska, Western U.S., and Eastern U.S. The DOI also has “deputized” Inspectors within the bureaus. The “DOI OAS Approved Inspectors List” can be found at the OAS Document Library, under the heading “Technical Services Documents”:</p> <p>DOI Approved Inspectors List (https://www.doi.gov/aviation/library)</p> <p>(Alternatively, perform an internet search on “DOI OAS Approved Inspectors List”.)</p>
#50 & #51	<p>Maintenance Inspection Process (<i>Approximate Times</i>)</p> <ul style="list-style-type: none"> • Contract Aircraft: 4 hours • Uncertificated Cooperator Aircraft: 5 hours • Certificated Cooperator Aircraft: 4 hours • Fleet Aircraft: 2 hours • Fuel Service Vehicle: .5 hours • SEAT Support Vehicle: .5 hours • Aircraft Records Review: 2 hours • Aircraft and/or Vendor Weak Point Inspections: 2 hours <p>Contract Compliance: is the primary reason that aircraft and pilots are inspected.</p>

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
#52	<p>Pilot Inspection Process</p> <p>In part, the Pilot Inspection Process is an assessment performed looking for the following pilot characteristics:</p> <ul style="list-style-type: none">• Cooperation, professionalism, and a positive attitude towards aviation safety.• Knowledge and commitment to performing appropriate risk assessment and risk management.• Values and engages in Crew Resource Management (CRM) with a sense of commitment.• Committed to checklist(s) usage. <p>Also reviewed are a pilot’s credentials:</p> <ul style="list-style-type: none">• Certificates (flight qualifications)• Flight Safety & Training Records• Pilot Logbook(s) <p>The inspector determines the pilot’s knowledge of:</p> <ul style="list-style-type: none">• Automated Flight Following (AFF)• GPS, Flight Hazard Maps• external racks, camera mounts, telemetry equipment, FM radios• ELT• ALSE, PPE• First Aid Kit• Helicopter performance and limitations• Emergency Procedures• SAFECOM Procedures• Inadvertent Instrument Meteorological Condition (IIMC) procedures• Passenger Briefings• Fire Traffic Areas

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
#52	<p>Pilot Inspection Process—<i>cont'd.</i></p> <p>The pilot's aircraft flight, conducted by the Inspector, includes:</p> <ul style="list-style-type: none"> • Checklist(s) used • Varied procedures—emergency, slope, confined area, etc.—to test pilot proficiency <p><i>Note: Only Special Use aircraft and pilots are flight evaluated. Pilot Inspections for Point-to-Point flight approvals only require an administrative records review (i.e. the vendor sends the pilot's records, the Inspector reviews them, and the Inspector issues a Non-Special Use card).</i></p>
#53	<p>Equipment Inspection Process</p> <p>The Equipment Inspection Process includes:</p> <ul style="list-style-type: none"> • A review of the contractual obligations defined, and assures that the obligations have been met. • Assuring applicable Department of Transportation (DOT) requirements are met. <p>The aircraft inspection process, and standards used by the DOI, can be viewed at:</p> <p>OAS-5400-205—OAS Aircraft, Equipment and Pilot Inspection Standards (https://www.doi.gov/sites/doi.gov/files/uploads/OAS-5400-205%20OAS%20Aircraft%2C%20Equipment%20and%20Pilot%20Inspection%20Standards.pdf)</p>

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
#54	<p>UAS Inspection Process</p> <p>There is not a similar inspection process for UAS pilots, UAS, or UAS equipment.</p> <p>Each UAS pilot is responsible for determining airworthiness per:</p> <ul style="list-style-type: none"> • UAS pilot training • UAS manufacturer airworthiness requirements <p>The DOI process regarding UAS inspection is found within the DOI policy document OPM-11, located on the DOI OPM Index page:</p> <p>DOI OPM-11—DOI Use of Unmanned aircraft Systems (UAS) (https://www.doi.gov/aviation/library/opm)</p> <p>The USFS does not currently have a formal national policy regarding UAS, however, USFS has written into their policy that they have adopted and are currently following DOI OPM-11.</p>
#55	<p>Dealing with Issues that Arise After Passing Inspections</p> <p>What happens if the aircraft, pilot, mechanic, or equipment experience an issue after passing inspection? (e.g. the aircraft experiences “unscheduled maintenance”)</p> <p>The answer depends on the <i>agency</i> through which the aircraft, pilot, or equipment has been contracted.</p> <p>DOI—All flight service contracts state: <i>“The Contractor must immediately notify the COR and COTR of any change to any engine, power train, flight control, or major airframe component, or of any major repair following an incident or accident, and must describe the circumstances involved.”</i></p> <p><i>“The Contractor must, at their own expense, perform a functional maintenance check flight following installation, overhaul, major repair, or replacement of any engine, power train, rotor system, flight control system, or when requested by the Contracting Officer (CO). This must be accomplished before the aircraft resumes service under the contract.”</i></p> <p>USFS—FSH 5709.16/Section 17.2 states: <i>“Do not return aircraft having mechanical or equipment deficiencies to “Contract Availability” until the aircraft has been approved by an authorized aircraft inspector.”</i></p> <p>FSH 5709.16/Section 17.2—Flight Operations Handbook (https://www.fs.fed.us/cgi-bin/Directives/get_dirs/fsh?5709.16)</p>

Est. Instruction Time: 30 min.	Unit 3—The Inspection Process
	Review Unit Objectives <ul style="list-style-type: none">• Define the various types of interagency aviation inspectors.• List major elements of a typical pilot, aircraft, maintenance, and equipment inspection.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#56 & #57	Interagency Flight Profiles & Approvals—Unit Objectives After completing Unit #4, participants should be able to: <ul style="list-style-type: none">❖ Define the characteristics of various Special Use activities conducted by the DOI/USFS❖ List the major components of a typical aircraft inspection, pilot inspection, equipment inspection❖ Define the requirements of a Dispatcher, Aircraft Manager, and Aviation Manager—to assure aircraft, pilots, and equipment meet defined performance standards To accomplish the Unit #4 objectives, we will: <ul style="list-style-type: none">• Define and explain the various types of Special Use Missions conducted by the DOI/USFS.• Compare and contrast the Specials Use Missions with the parameters that define them.• Identify the Special Use Missions that are unique to the DOI and unique to the USFS.

Est. Instruction
Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#58

Interagency Approval Cards

Special Use missions require verification of one or more (as applicable) of the Interagency Approval Cards listed below:

- Airplane (Fixed-wing) Pilot Card
- Helicopter Pilot Card
- Mechanic Qualification Card
- UAS Fleet Pilot Card
- Fixed-wing Aircraft Data Card
- Helicopter Aircraft Data Card
- UAS Aircraft Data Card
- Vendor Remote Pilot Qualification Card
- Fuel Servicing Vehicle
- SEAT Support Vehicle Card

The applicable card(s) shall be examined to verify that the pilot, and/or aircraft, and/or vehicle—are qualified and current to perform the Special Use mission defined.

(“Authorized Missions” are listed on these cards with Inspector approval signature, expiration date, and agency approval(s) for each specific type of mission.)

We will look at each type of Special Use mission, as defined in:

[DOI OPM-29—Special Use Activities for Manned Aircraft](https://www.doi.gov/sites/doi.gov/files/uploads/opm-29.pdf)
(<https://www.doi.gov/sites/doi.gov/files/uploads/opm-29.pdf>)

Est. Instruction Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#59

Interagency Airplane (Fixed-wing) Pilot Card—DOI & USFS

The Airplane (Fixed-wing) Pilot authorization card can be stored either electronically (i.e. on a phone or tablet), or printed and folded twice.

The card may be in possession of the pilot, in either electronic or printed form, and the pilot must be able to present the Airplane Pilot Qualification Card for verification prior to a Special Use flight.

USDA INTERAGENCY USDI AIRPLANE PILOT QUALIFICATION CARD		VI. Make & Model	PIC SIC	VFR	IFR	Auto Pilot	Wheels	Amphib	Float	Skis	
I. Pilot Name:											
II. Company:		Approved	VIII. Authorized Missions				Date Expire	Inspector Info Only			
III. Expiration Date:			Aerial Mapping					USFS	DOI	MMG	
OAS-30A (8-17)			Air Attack (ATGS)								
IV. CARD STATUS			Air tanker <input type="checkbox"/> IA								
<input type="checkbox"/> Interagency <input type="checkbox"/> DOI Only <input type="checkbox"/> USFS Only			Category IV Airstrip								
<input type="checkbox"/> Initial <input type="checkbox"/> Renewal <input type="checkbox"/> Re-issue <input type="checkbox"/> Added Authorization			External Load								
V. Inspector Comments:			Glacier Landings								
VI. Issued By: (Print Name) (Office)			Infrared Operations								
(Signature) (Issue Date)			Low Level (Below 500' AGL)								
			Mountainous Terrain								
			NVG Operations								
			Off Airport Wheels								
			Point to Point								
			Reconnaissance								
			SEAT <input type="checkbox"/> Level I <input type="checkbox"/> Level II								
			<input type="checkbox"/> Smokejumper <input type="checkbox"/> Paracargo								
			Water Scooper								

The Interagency Airplane (Fixed-wing) Pilot Card includes a number of sections of information that are important to understand and verify (—in addition to the Authorized Missions for which the definitions will later be described):

1. **Pilot Name:** must match the pilot’s certificated name.
2. **Company:** must match the company name on the contract or Aircraft Rental Agreement (ARA).
3. **Expiration Date:** must be in accordance/agreement with the procurement document—not to exceed 26 months.

Est. Instruction
Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#59

Interagency Airplane (Fixed-wing) Pilot Card—DOI & USFS —*cont'd.*

4. **Card Status:** Check all appropriate boxes:
 - Interagency**—checked when a sign-off has been completed in accordance with an interagency standard. The Inspector will indicate in the Inspector Comments the sign-off to which this applies—i.e. Interagency Air Tactical Group Supervisor (ATGS).
 - DOI, only**—checked when a sign-off is limited to DOI only. The Inspector will indicate in the remarks what sign-off this applies to—e.g. External Load, DOI only.
 - USFS, only**—checked when a sign-off is limited to USFS only. The Inspector will indicate in the remarks what sign-off this applies to—e.g. Cat IV Airstrip, USFS only.
 - Initial**—checked if this is the first time this pilot has been carded, or if it is the first time this pilot is included on this specific contract.
 - Renewal**—checked when this is a renewal of a pilot with previously demonstrated/evaluated skills.
 - Re-Issue**—checked if this is a re-issue of a previous card, with no changes.
 - Added Authorization**—checked if this Pilot's card has additional qualifications.
5. **Inspector Comments:** Self-explanatory.
6. **Issued By:** Signature must be actual or digital.
7. **Make & Model:** Use the FAA four-digit, aircraft type, identification number.
 - PIC or SIC**—indicate “Pilot” or “Second” In Command for the make and model indicated.
 - VFR**—initialed if VFR operations are approved. Strike through the block if *not* approved.
 - IFR**—initialed if IFR operations are approved. Strike through the block if *not* approved.
 - Autopilot**—initialed if IFR with an autopilot, in lieu of a SIC, is approved. Strike through the block if *not* approved.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#59	<p>Interagency Airplane (Fixed-wing) Pilot Card—DOI & USFS—<i>cont'd.</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Wheels, Amphib, Floats, and Skis—initialed all approved blocks. Strike through blocks <i>not</i> approved. <p>8. Authorized Missions: Check all appropriate boxes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Approved By— Inspectors use first and last initials. Inspectors initial where appropriate and transfer all existing and unexpired authorizations using the issuing inspector’s initials. <input type="checkbox"/> Date Expire—Month and year (i.e. 04-14 for April 2014), or NA to indicate that an Authorized Mission type has already been evaluated and passed and there is no expiration date for that type of mission. <p>Inspector Info Only—for each approved Authorized Mission type, the inspector indicates that the evaluation was completed by the USFS or DOI Inspector, and the Make and Model (MM) aircraft in which the evaluation was completed. This is <i>not</i> an indication of the Make and Model for which the Pilot is approved. If an approved Authorized Mission type is limited to a specific Make and Model of aircraft, the Inspector notes this limitation in the Inspector Comments.</p>

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#60

Interagency Helicopter Pilot Card

The Helicopter Pilot Qualification Card is formatted similarly, and utilized in the same manner, as the Airplane Pilot Qualification Card (defined earlier).

 USDA INTERAGENCY USDI HELICOPTER PILOT QUALIFICATION CARD 	VII. Make, Model & Series		PIC SIC	VFR	IFR	IFR w/AP
	I. Pilot Name:					
II. Company:	Approved	VIII. Authorized Missions	Date Expire	Flight Evaluation Completed Inspector Info Only		
III. Expiration Date:				USFS	DOI	MM
IV. CARD STATUS <input type="checkbox"/> Interagency <input type="checkbox"/> DOI Only <input type="checkbox"/> USFS Only <input type="checkbox"/> Initial <input type="checkbox"/> Renewal <input type="checkbox"/> Re-issue <input type="checkbox"/> Added Authorization						
V. Inspector Comments:						
VI. Issued By:						
(Print Name) _____ (Office) _____						
(Signature) _____ (Issue Date) _____						
OAS-308 (1-18) 5700-3A						

#61

UAS Fleet Pilot Card—DOI and USFS

 U.S. DEPARTMENT OF THE INTERIOR UAS PILOT QUALIFICATION	
NAME _____	
BUREAU/AGENCY _____	
EXP. DATE _____	
ISSUED BY _____	DATE _____
OAS-38U (12/12)	
MAKE/MODEL	EXP. DATE
_____	/
_____	/
_____	/
_____	/
_____	/
_____	/
_____	/

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#64	<p>Aerial Application (Airplane and Helicopter)—DOI or USFS</p> <p>Agricultural operations as defined in OPM-29 (see Policy section/D,1,b).</p> <p>DOI OPM-29—Special Use Activities for Manned Aircraft (https://www.doi.gov/sites/doi.gov/files/uploads/opm-29.pdf)</p> <p>Subsets include:</p> <ul style="list-style-type: none"> • Precision Spray (Helicopter): an operation where individual plants are treated with chemical herbicides from a single spray nozzle suspended on a longline. • 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. • Traditional Aerial Application with booms and spreaders (Fleet Airplane and Helicopter). <p>Aerial Application Operations:</p> <ul style="list-style-type: none"> • Contractors conducting aerial application for DOI are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137. <p>14 CFR 137—FAA Agricultural Aircraft Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137)</p> <ul style="list-style-type: none"> • When conducted in a fleet aircraft, an Agricultural Aircraft Operator Certificate is not required. • Aerial application is <i>not</i> applicable to application of water and/or retardant on fires. • An initial and 36-month-recurrent flight evaluation is required for fleet pilots. • An initial-only flight evaluation is required for contractors conducting Herbicide Application by Projectile (Helicopter).

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#64	<p>Aerial Application (Airplane and Helicopter)—DOI or USFS—<i>cont'd.</i></p> <ul style="list-style-type: none"> • An initial and 36-month-recurrent flight evaluation is required for contractors conducting Precision Spray. • Personal protective equipment (PPE) in accordance with the <i>Aviation Life Support Equipment (ALSE) Handbook</i> for low-level flight is required. <p><i>Note: End-product procured services are not defined as Special Use and none of the above apply.</i></p>
#65	<p>Aerial Sketch Mapping (Airplane)—USFS Only</p> <p>Aerial sketch mapping missions are typically only for forest health reasons. Two types of mapping are recognized—paper maps, or digital aerial sketch mapping systems (DASM). Contour or Grid sketch mapping can be utilized to accomplish either type of recognized mapping.</p> <p>Contour sketch mapping: is generally used over mountainous terrain where the pilot positions the aircraft so the sketch mapper can capture the forest change events. Contour flying involves flying up drainages, slightly to the left of the drainage, following each drainage to the end or to the tree line.</p> <p>Grid sketch mapping: is used when flying over flat or gently rolling terrain, and requires the use of GPS to fly latitude/longitude lines.</p> <p>Grid mapping is accomplished by a crew of three: a pilot, and two mappers—one on each side of the aircraft.</p> <p>Grid lines are typically three miles apart so the sketch mappers view the terrain for 1½ miles on each line. The pilot generally provides the navigation by flying GPS routes—true north/south, east/west lines—freeing sketch mappers to concentrate on his/her mapping duties (USFS).</p>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#66	<p>Category 3 & 4 Airstrips (Airplane)—USFS Only</p> <p><i>Note: USFS decides the category—not the state, county, or landowner. DOI and USFS pilots may be carded.</i></p> <p>Category 3: These are airfields with limited or no services. They may be unpaved, unlighted, and seasonally maintained. Category 3 airstrips may be located on one of the following: Federal, State, County, Municipal, or Private lands. Approval must be obtained from the appropriate USFS dispatch office before utilizing a Category 3 airstrip.</p> <p>Category 4: These are mountain locations/remote airstrips and are restricted by the USFS to daytime, VFR flight only.</p> <p>Pilot requirements for utilizing Category 4 airstrips include:</p> <ul style="list-style-type: none"> • Minimum of 200 hours pilot experience in typical terrain and density altitudes, and have demonstrated take-offs and landings into mountain locations/remote airstrips. • Pass an initial mountain/remote airstrip flight check performed by a USFS Inspector Pilot. • Currency: Pilots must have completed a minimum of five take-offs and landings, at two different USFS classified Category 4 airstrips, in the preceding 12-months. • Pilots are restricted from operating at Category 4 airstrips, which they have not landed at within the preceding 12 months.
#67	<p>External Load (Airplane)</p> <p>This includes animal tracking antennas, snowshoes, rifle scabbards, canoes, ATVs, antlers, external frame backpacks, etc.</p> <ul style="list-style-type: none"> • Any flight operation requiring external carriage of a load outside of, or extending from, the fuselage. • Conducted in accordance with FAA authorization. <p>External Load Operations:</p> <ul style="list-style-type: none"> • A one-time, initial-only flight evaluation is required. • No PPE is required for the external load in and of itself.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#68	<p>Skiplane Operations (Airplane)—DOI</p> <p>This is <i>not</i> “Glacier Landings—Skis”. Skiplane Operations is not a specific Special Use, but a configuration for which the FAA does <i>not</i> have oversight. This configuration is listed at the top of the Pilot Card.</p> <p>Skiplane (<i>not</i> Glacier Landings—Skis) Operations:</p> <ul style="list-style-type: none"> • Pilots must have documented training or experience in skiplane operations. • 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. • An initial flight evaluation is required for contract pilots. The initial flight evaluation may be waived, at the Pilot Inspector’s discretion, for pilots with documented skiplane experience. • No PPE is required for skiplane operations in and of itself.
#69	<p>Glacier Landings—Skis (Airplane)—DOI</p> <p>Glacier Landings with Skis is different from regular skiplane operations—which is listed in the configuration section at the top of the card.</p> <p>DOI “<i>cards</i>” Pilots specifically for Glacier Landings with Skis because the additional complexity of slope, crevasses, and elevation add a greater degree of risk.</p> <p>Glacier Landings with Skis Operations:</p> <ul style="list-style-type: none"> • Pilot must have 200 hours as PIC in skiplanes. • Prerequisites—Mountainous Terrain (Airplane). When pioneering sites, Low-Level (Airplane). • Currency—pilot must have three glacier-type skiplane take-offs and landings in the previous 90 days to carry passengers. • An initial, and 36-month-recurrent flight evaluation, is required. • No PPE is required for high altitude glacier landings in and of itself.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#70	<p>Off-Airport—Wheels (Airplane)—DOI</p> <p>In the future, look for a web accessible DOI Airport Directory: which serves two purposes:</p> <ul style="list-style-type: none"> • Qualifies airports that can be defined as point-to-point • Conversely, defines airports that have restrictions <p>An Off-Airport Operations-Wheels is a mission that includes take-off or landing anywhere that is:</p> <ul style="list-style-type: none"> • Not listed in a FAA Chart Supplement (formerly AFD), • An airport that is “not maintained” in accordance with a FAA Chart Supplement, • Not authorized in the DOI Airport Directory (currently under development), or • Not denoted as an airport on a <i>Lower 48</i> FAA Sectional Chart. <p>Off Airport—Wheels Operations:</p> <ul style="list-style-type: none"> • Pilot must have documented training or experience in off-airport operations. • Regional/State Aviation Manager may authorize continued use, in the current manner, of active landing areas that will now be considered off-airport sites (per this new definition) until the new DOI Airport Directory is published. This grandfather clause will remain in effect until the DOI Airport Directory is published. • Prerequisites—Low-Level (Airplane), Mountainous Terrain (Airplane) when operating in mountainous terrain, and (Fleet Pilot Only) Emergency Maneuver Training. • Currency—Pilot must have three take-offs and landings, off-airport, in an airplane on wheels in the preceding 90 days to carry passengers. • An initial and 36-month-recurrent flight evaluation is required for contract pilots • An initial and 24-month-recurrent flight evaluation is required for fleet pilots. • PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#71	<p>Low-Level—Below 500 Feet AGL (Above Ground Level) (Airplane & Helicopter)</p> <p><i>Note: During mission planning, if there is any uncertainty that the mission can be accomplished, without the need for the flight to be conducted below 500 feet AGL, that mission should be designated as a Low-Level category flight.</i></p> <p>USFS allows the following fixed-wing flight operations below 500 feet AGL:</p> <ul style="list-style-type: none"> • Lead Plane • Para-cargo drops • Aerial Supervision Modules • Aerial Application of non-fire related chemicals and materials • Dispersion of retardant and/or water during fire suppression operations <p>Low-Level flight Operations and Pilot Requirements Include:</p> <ul style="list-style-type: none"> • An operation other than take-off or landing where flight is conducted less than 500 feet above the surface (AGL). • 200 hours PIC Low-Level in category; or 10 hours in category of Low-Level flight instruction. • An initial and 36-month-recurrent flight evaluation is required for airplanes. • A one-time, initial-only, flight evaluation is required for helicopters. • PPE is required in accordance with the <i>ALSE Handbook</i>.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#72	<p>Reconnaissance—Above 500 Feet AGL (Above Ground Level)—DOI only (Airplane & Helicopter)</p> <p><i>Note: Reconnaissance is not a standalone type of mission; it is always combined with another type of mission (e.g. Low-Level Reconnaissance must have Low-Level sign-off).</i></p> <p>Reconnaissance Special Use flights may include but are not limited to: aerial observation, reconnaissance, surveillance, photo flights, survey, tracking, or patrol flights.</p> <p>Reconnaissance—Above 500 Feet AGL Operations:</p> <ul style="list-style-type: none"> • Prerequisites: Mountainous Terrain (endorsement, in category) when conducted in mountainous terrain. • An initial-only flight evaluation is required of Pilots. • Airplane—No PPE is required for Reconnaissance conducted entirely above 500 feet AGL. PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level and over water Reconnaissance. • Helicopter—PPE is required in accordance with the <i>ALSE Handbook</i>.
#73	<p>USFS Fire Reconnaissance—USFS only (Airplane and Helicopter)</p> <p><i>Note: Reconnaissance missions are flown above 500 feet AGL.</i></p> <p>DOI: Fire Detection (reconnaissance), only—find it and move on.</p> <p>USFS: Fire Detection (reconnaissance) mixed with Air-Attack—find it and assume the role of the Incident Commander until relieved.</p>

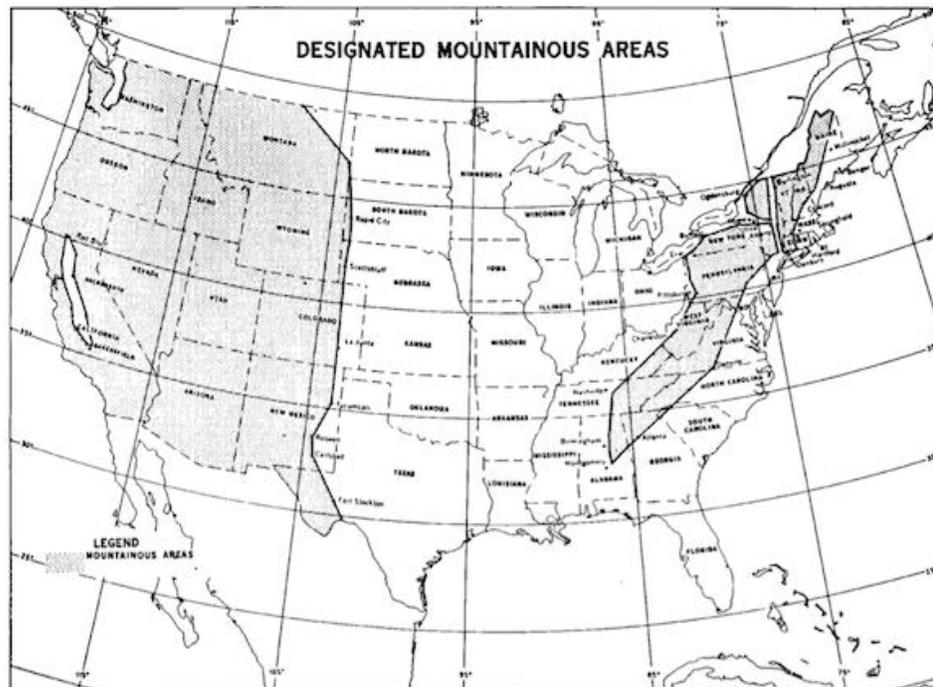
Est. Instruction
Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#74

Mountainous Terrain—USFS & DOI (Airplane and Helicopter)

Mountainous Terrain Operations:



Doc. No. 13284, Amdt. 95-255, 40 FR 2578, Jan. 14, 1975]

- A Mountainous Terrain endorsement is required for operations conducted within 1000 feet of terrain (horizontal or vertical) in the areas designated by the FAA as mountainous in accordance with 14 CFR 95 Subpart B, except take-off, landing, and as noted here.

[14 CFR 95/Subpart B—FAA IFR Altitudes Over Designated Mountainous Areas](https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol2/CFR-2011-title14-vol2-part95)

[https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol2/CFR-2011-title14-vol2-part95\)](https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol2/CFR-2011-title14-vol2-part95)

- A Mountainous Terrain endorsement is not required for contract pilots conducting Point-to-Point flights in accordance with 14 CFR 135.

[14 CFR 135—FAA Operator Requirements: Commuter & On-demand Operations & Rules Governing Persons On Board Such Aircraft](https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part135)

[https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part135\)](https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part135)

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#74	<p>Mountainous Terrain—USFS & DOI—<i>cont'd.</i> (Airplane and Helicopter)</p> <ul style="list-style-type: none"> • Effective 2017, Pilots applying for an initial DOI Pilot Qualification 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. • A one-time, initial-only, flight evaluation is required. • No PPE is required for mountainous terrain in and of itself.
#75	<p>Night Vision Goggle (NVG) Operations—USFS & DOI (Airplane and Helicopter)</p> <p>Night flight in an aircraft aided by light-enhancing goggles.</p> <p>Night Vision Goggle Operations:</p> <ul style="list-style-type: none"> • An initial and 12-month-recurrent flight evaluation is required. • PPE not required for NVG operations in and of itself.
#76	<p>Point-to-Point Missions (Airplane and Helicopter)</p> <p>Any mission that is not Special Use is Point-to-Point.</p> <p>Point-to-Point Missions Operations:</p> <ul style="list-style-type: none"> • A records review is conducted in conjunction with the vendor pilot, company, and the approved DOI/USFS Pilot Inspector. • No flight evaluations are required/performed.
#77	FIRE MISSIONS

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#78	<p>Lead Plane—USFS (Airplane)</p> <p>The Lead Plane mission directly supervises firefighting aircraft—usually airtankers, dropping fire retardant. Lead Planes are utilized to increase safety and efficiency over an incident. The Lead Plane mission consists of Low-Level runs in order to assess:</p> <ul style="list-style-type: none">• Terrain• Entry and exit routes• Visibility• Turbulence• Location of ground firefighters <p>Ideally, Lead Plane missions are completed ahead of arriving airtankers, so the airtankers can drop their loads in an efficient and timely manner, reducing exposure to the Low-Level environment. The Lead Plane mission can also assume the functions of an Air Tactical Group Supervisor in their absence.</p> <ul style="list-style-type: none">• Lead Plane missions are typically performed below 500 feet AGL, thus the Pilot must be also approved for Low-Level missions.• The Pilot is generally the only person aboard the Lead Plane aircraft—flying and communicating with other firefighting participants.• The only potential Lead Plane passenger(s) would be trainees.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#79	<p>Air Attack—Air Tactical Group Supervisor (ATGS) (Airplane & Helicopter)</p> <p>Air Attack is an operation in which an ATGS (Air Tactical Group Supervisor), or Helicopter Coordinator (HLCO), manages airspace and incident air traffic resources from an aircraft flying missions over an incident. The ATGS is an airborne firefighter who coordinates, assigns, and evaluates the use of aerial resources in support of incident objectives. The ATGS is the link between ground personnel and incident aircraft. The ATGS rides along with the ATGS qualified Pilot—also known as Air Attack.</p> <ul style="list-style-type: none">• Air Attack pilots and aircraft may be vendor provided, however, the Air Tactical Group Supervisor must be a Government employee because he/she will be assigning missions to contracted aerial resources.• Air Attack missions are typically performed well above 500 feet AGL thus, does not require approval for Low-Level missions. <p>Air Attack Operations:</p> <ul style="list-style-type: none">• Best practices are documented in the Interagency Aerial Supervision Guide (PMS 505/NFES 002544), which may be adopted as policy by the operating bureau. PMS 505/NFES 002544—NWCG Interagency Aerial Supervision Guide (https://www.nwcg.gov/sites/default/files/publications/pms_505.pdf)• An initial and a 60-month-recurrent flight evaluation is required for airplane based Air Attack Pilots.• Specific PPE is required:<ul style="list-style-type: none">○ Airplane: Leather shoes or boots, and full-length cotton or Nomex pants, or a flight suit.○ Helicopter: in accordance with the <i>ALSE Handbook</i>.

Est. Instruction
Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#80

Aerial Supervision Module (ASM) (Airplane)

The Aerial Supervision Module mission is flown in either a fleet or a contract aircraft and includes:

- A Pilot (either Government employee, or Contractor), known as an Air Tactical Pilot (ATP), as the PIC (pilot-in-command)
- The Air Tactical Group Supervisor (ATGS), is also aboard to perform the Air Attack mission
- ASM missions do *not* include passengers, however, there may be a trainee aboard the aircraft
- ASM missions may be performed below 500 feet AGL

Aerial Supervision Module Operations:

- Best practices are documented in the Interagency Aerial Supervision Guide (PMS 505, NFES 002544), which may be adopted as policy by the operating bureau.

[PMS 505/NFES 002544—NWCG Interagency Aerial Supervision Guide](#)

<https://www.nwcg.gov/sites/default/files/publications/pms505.pdf>

- An initial and 12-month-recurrent flight evaluation is required of pilots with the Air Attack endorsement.
- PPE is required in accordance with the *ALSE Handbook* for Low-Level flight.

[NIFC—Lead Plane Pilots, Identifiers & Qualifications Status \(2016\)](#)

https://www.nifc.gov/nicc/logistics/aviation/Lead_Planes.pdf

Pilot Call Signs (examples):

- **USFS:** Bravo Region-Plane #—Example: **4-2**
- **BLM:** Bravo-Plane—Example: **B-3**
- **State of Alaska:** Alpha-Plane—Example: **A-2**
- **Cal Fire:** Charlie-Plane—Example: **C-2**

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#81	<p data-bbox="462 243 992 279">Airtanker & Initial Attack (Airplane)</p> <p data-bbox="462 296 1349 438">A business practice established years ago exists between DOI and USFS regarding Airtankers. Generally, USFS contracts for Large Airtankers and Helitankers; DOI contracts for SEATs (Small Engine Air Tankers).</p> <p data-bbox="462 457 1370 600">Large Airtankers are limited to multi-engine airplanes—they are <i>not</i> Single Engine Airtankers (SEATs), Scoopers, or Helicopters. Initial Attack (IA) endorsement means the Airtanker Pilot(s) can operate without Aerial Supervision.</p> <p data-bbox="462 636 1019 672">Airtanker & Initial Attack Operations:</p> <ul data-bbox="509 688 1390 1262" style="list-style-type: none"><li data-bbox="509 688 1390 762">• Contractors are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137. <a data-bbox="557 779 1317 888" href="https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137">14 CFR 137—FAA Agricultural Aircraft Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137)<li data-bbox="509 926 1390 1171">• Refer to the appropriate current procurement document for pilot privileges, limitations, and qualifications:<ul data-bbox="570 1014 1344 1171" style="list-style-type: none"><li data-bbox="570 1014 1344 1087">○ An initial and 12-month-recurrent flight evaluation is required for Level II SEAT pilots.<li data-bbox="570 1104 1344 1171">○ An initial and 36-month-recurrent flight evaluation is required for all other pilots.<li data-bbox="509 1188 1390 1262">• PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#82	<p>Single-Engine Airtanker—SEAT Level 1, Level 2 (Airplane)</p> <p><i>Note: Single-Engine Amphibious Water Scooping Aircraft are considered SEATs.</i></p> <p>Level I SEAT Pilot (Journeyman): is permitted to fly missions in the fire traffic area (FTA):</p> <ul style="list-style-type: none"> • Without aerial supervision, and • To operate in a multiple, tactical aircraft environment <p>Level II SEAT Pilot (Entry Level): is permitted to fly missions in the fire traffic area (FTA):</p> <ul style="list-style-type: none"> • Without aerial supervision, with the SEAT plus one other aircraft, or • With aerial supervision, concurrently, with multiple aircraft <p>SEAT Level I and Level II Operations:</p> <ul style="list-style-type: none"> • Inspectors conduct check rides while standing on the ground watching the pilot perform maneuvers in the air. • Contractors are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137. 14 CFR 137—FAA Agricultural Aircraft Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137) • Single-Engine Pilots are carded as SEAT Pilots with a Scooper endorsement. • Refer to the appropriate current procurement document for pilot privileges, limitations, and qualifications. • An initial and 12-month-recurrent flight evaluation is required for Level II SEAT pilots. • An initial and 36-month-recurrent flight evaluation is required for all other pilots. • PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#83	<p>Water Scooper—Multi-Engine & Single-Engine (Airplane)</p> <p>Water Scooper aircraft skim the surface of a water source (e.g. lakes, rivers, reservoirs, or ocean) and scoop water through fixed or retractable probes into the airplane’s internal tanks. The water is later dropped, typically as a suppressant, on wildland fires.</p> <p>Water Scooper Operations:</p> <ul style="list-style-type: none">• Contractors are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137. 14 CFR 137—FAA Agricultural Aircraft Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137)• Refer to the appropriate current procurement document for pilot privileges, limitations, and qualifications.• PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight. <p>Single-engine Water Scooper pilots are carded as Level 1 and Level 2 SEAT Pilots, with a Scooper Pilot endorsement added.</p> <p>Multi-engine Scooper Pilots (endorsements) are always approved for Initial Attack.</p>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#84	<p>Smokejumper & Paracargo (Airplane)</p> <p>Smokejumper and Paracargo missions are operations in which personnel and/or cargo are deployed, via parachute, from an airplane in flight.</p> <p>Smokejumper & Paracargo Operations:</p> <ul style="list-style-type: none"> • Best practices are documented in the Interagency Smokejumper Pilot Operation Guide, which may be adopted as policy by the operating bureau. <p>Interagency Smokejumper Operations Guide (ISMOG—Feb 2018) (https://www.fs.fed.us/sites/default/files/media_wysiwyg/ismog_fss_final_26feb2018signed.pdf)</p> <ul style="list-style-type: none"> • An initial and 12-month-recurrent flight evaluation is required of pilots with Smokejumper and/or Paracargo endorsements. • PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight. <p><i>Note: a Smokejumper pilot may be carded for Paracargo missions only—but this is rare. Typically, a Smokejumper pilot will be carded for both Paracargo and Smokejumper missions.</i></p>
#85	<p>Infrared Operations—USFS Only (Airplane)</p> <p>Infrared (IR)-equipped, fixed-wing aircraft conduct nighttime survey flights above 3,000 feet AGL over wildfire incidents.</p> <p>Infrared Missions:</p> <ul style="list-style-type: none"> • Accurately assess and map the fire’s perimeter • Locate the areas of the fire containing the most heat • The information collected is processed by interpreters on the ground, and then provided to Incident Commanders via high bandwidth uplink to an Internet cloud location • Infrared information is especially useful for fires located in rugged and remote areas, and densely forested areas.
#86	Helicopter-Specific Missions—DOI & USFS

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#87	<p>Aerial Capture, Eradication & Tagging of Animals (ACETA)—DOI only (Helicopter)</p> <p>ACETA helicopter activities include:</p> <ul style="list-style-type: none"> • Darting: to immobilize/sedate animals by discharging a chemical tranquilizer dart from a specialized dart gun fired from the aircraft. • Eradication: to euthanize animals by discharging a firearm from the aircraft. • Herding: to haze and subsequently encourage movement of an animal or group of animals on the ground, from one location to another. • Marking: to mark animals with paint or dye utilizing a specialized paintball gun fired from the aircraft. • Net gunning: to capture animals by deploying a capture net over the animal utilizing a specialized hand-held net gun fired from the aircraft. • Trapping: to capture animals by herding them into a pen, net, trap, or set of corrals. <p>ACETA Helicopter Operations:</p> <ul style="list-style-type: none"> • Refer to the applicable contract, ACETA Handbook, and/or any bureau specific policy. <p>DOI Aerial Capture, Eradication & Tagging of Animals (ACETA) Handbook (https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/ACETA_Handbook_1997.pdf)</p> <ul style="list-style-type: none"> • An initial and 36-month-recurrent flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>. <p>* USFS does ACETA by end-product contract.</p>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#88	<p>Animal Classification—DOI (Helicopter)</p> <p><i>Note: General animal survey/census/inventory operations are not conducted under Animal Classification, but are conducted as Low-Level and Reconnaissance missions.</i></p> <ul style="list-style-type: none"> • Animal Classification is an operation conducted to acquire detailed animal census information. • Identification of specific characteristics of the animals may require maneuvering the helicopter much lower to ground than required for an inventory survey in which animals are simply counted from higher altitudes. • Special maneuvering of the helicopter may be required 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. <p>Animal Classification Helicopter Operations:</p> <ul style="list-style-type: none"> • An initial-flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>.
#89	<p>Aerial Ignition—Plastic Sphere Dispenser (PSD) or Helitorch (Helicopter Only)</p> <p>Aerial Ignition devices used for a prescribed fire, or for burn operations on wildland fires:</p> <ul style="list-style-type: none"> • PSD: drops require a pilot, a burn boss, and an equipment operator • Helitorch: operated by a pilot, only <p>Aerial Ignition Helicopter Operations:</p> <ul style="list-style-type: none"> • Best practices are documented in the Interagency Aerial Ignition Guide (PMS 501), which may be adopted as policy by the operating bureau <p>PMS 501—NWCG Standards for Aerial Ignition (https://www.nwcg.gov/sites/default/files/publications/pms501.pdf)</p> <ul style="list-style-type: none"> • A one-time, initial-only flight evaluation is required • PPE is required in accordance with the <i>ALSE Handbook</i>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#90	<p>Water/Retardant—Bucket or Snorkel (Helicopter)</p> <p>Water and/or Retardant missions use externally suspended buckets or fixed tanks to collect water or retardant that is dropped as a suppressant on wildland fire incidents.</p> <p>Water/Retardant Helicopter Operations:</p> <ul style="list-style-type: none">• Contractors are required to have an Agricultural Aircraft Operator Certificate prescribed by 14 CFR 137. 14 CFR 137—FAA Agricultural Aircraft Operations (https://www.gpo.gov/fdsys/granule/CFR-2011-title14-vol3/CFR-2011-title14-vol3-part137)• Refer to the appropriate current procurement document for pilot privileges, limitations, and qualifications.• An initial and 36-month-recurrent flight evaluation is required for all other pilots.• PPE is required in accordance with the <i>ALSE Handbook</i> for Low-Level flight.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#91	<p>External Load (Helicopter)</p> <p>External Loads Operations may be classified as:</p> <p>Class A—External Load: approval is not required, as these loads are permanently attached to the exterior of the helicopter and do not extend below the landing gear (e.g. external cargo rack, or bin)</p> <p>Class B—Jettisonable External Load: approval is required; this type of jettisonable external load is carried above or below the skids, and a cargo hook or a winch lifts the load free of land and/or water.</p> <p>Subsets of Class B External Load (Helicopter) include:</p> <ul style="list-style-type: none"> • Belly Hook/Sling: utilized for operations within 50 feet or less AGL. • 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. • Longline: utilized for operations greater than 50 feet AGL—also known as Vertical Reference. <p>Class C—Jettisonable External Load: approval is required; this type of jettisonable external load includes a portion of the load that remains in contact with the land or water.</p> <p>Class D—Human External Load: approval is required; a human external load 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 (an FAA-approved personnel lifting device is required).</p> <p>Subsets of Class D External Load (Helicopter) include:</p> <ul style="list-style-type: none"> • Hoist Operations: an operation where an aircraft mounted winch is utilized to load or unload a helicopter while in hover mode. • Rappel: an operation in which personnel use ropes and friction devices to exit a helicopter while hovering. • Rope Assisted Delivery System (RADS) or Fast-Roping: an operation in which personnel use ropes to exit a helicopter while hovering.

Est. Instruction
Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#91

External Load (Helicopter)—*cont'd.*

- **Short Haul:** an operation in which one or more persons are transported, beneath a helicopter, from one location to another as an external load.

External Loads Helicopter Operations:

- Contractors conducting external load operations for DOI are required to have a Rotorcraft External Load Operator Certificate prescribed by 14 CFR Chapter 51 Part 133.
[14 CFR Part 133/Chapter 51—FAA External Load Operations](http://fsims.faa.gov/wdocs/8900.1/v03%20tech%20admin/chapter%2051/03_051_004.htm)
(http://fsims.faa.gov/wdocs/8900.1/v03%20tech%20admin/chapter%2051/03_051_004.htm)
- When conducted in a fleet aircraft, a Rotorcraft External Load Operator Certificate is not required.
- Hoist Operations follow specific DOI/Bureau or cooperator policy.
- Rappel and Cargo Letdown best practices are documented in the *Interagency Helicopter Rappel Guide*, which may be adopted as policy by the operating bureau.
[NWCG Interagency Helicopter Rappel Guide](https://www.nwcg.gov/sites/default/files/publications/pms511.pdf)
(<https://www.nwcg.gov/sites/default/files/publications/pms511.pdf>)
- Short Haul references the *DOI Helicopter Short-Haul Handbook* or the *DOI Law Enforcement Short-Haul Policy*, as applicable.
[DOI Helicopter Short-Haul Handbook](https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/Short_Haul_Handbook_2010.pdf)
(https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/Short_Haul_Handbook_2010.pdf)
[DOI Law Enforcement Short-Haul Policy](https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/LE_Short_Haul_Policy_2011.pdf)
(https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/LE_Short_Haul_Policy_2011.pdf)

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#91	<p>External Load (Helicopter)—<i>cont'd.</i></p> <ul style="list-style-type: none"> • A one-time, initial-only flight evaluation is required for Belly Hook/Sling. • An initial and 36-month-recurrent flight evaluation is required for Cargo Letdown, Hoist (no people), and Longline. • An initial and 12-month-recurrent flight evaluation is required for any external load operation when a live person is the load. • PPE is required in accordance with the <i>ALSE Handbook</i>.
#92	<p>Float Operations—Fixed or Hulled, only—DOI & USFS (Helicopter)</p> <p>Only fixed- or hull-mounted floats are allowed for DOI and USFS Special Use helicopter missions. Pop-out (auto-inflatable) floats are not allowed for helicopter float operations.</p> <p>Helicopter Float Operations:</p> <ul style="list-style-type: none"> • A one-time, initial-only flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>.
#93	<p>Helitack/Passenger (PAX) Transport (Helicopter)</p> <p>Helitack crewmembers are firefighters that are trained in operations with the helicopter. This training includes loading and unloading people and cargo, preparing and attaching external loads, and operating around helicopters.</p> <p>Helitack approval exists within the USFS to assure large, Type 1 helicopters—that have seating for passengers—are not used in helitack operations for transporting people. Type 1 helicopters are only to be utilized to transport water or external cargo for fire suppression missions.</p> <p><i>Note: The DOI does not generally contract for Type 1 helicopters with seating.</i></p>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#94	<p>Offshore Platform Landings—DOI (Helicopter)</p> <p><i>Note: Offshore Platform Landings, by contract pilots, are not Special Use.</i></p> <p>Offshore Platform Landings are take-offs or landings on an elevated heliport structure surrounded by water.</p> <p>Offshore Helicopter Platform Landings Operations:</p> <ul style="list-style-type: none"> • 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. • Pilots conducting offshore platform landings must have 10 take-offs and 10 landings to platforms or vessels, drill-ships, semi-submersible drilling platforms, or barges. • For contract pilots, a one-time, initial-only flight evaluation is required. • For fleet pilots, an initial and 36-month recurrent flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>.
#95	<p>Snow Operations in Deep Snow—DOI (Helicopter)</p> <p>These are flights that require landing in snow that is deep enough to require use of special pilot techniques.</p> <p>Deep Snow Helicopter Operations:</p> <p>Reference the:</p> <p>PMS 510/NFES 001885—NWCG Interagency Helicopter Operations Guide (IHOG) (https://www.dnr.wa.gov/publications/rp_fire_aviation_helicopter_operations_guide.pdf)</p> <ul style="list-style-type: none"> • A one-time, initial-only flight evaluation is required. • PPE is not required for snow operations in and of itself.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#96	<p>Single-skid, Toe-in and Hover Exit/entry Procedures (STEP)—DOI only (Helicopter)</p> <p>STEP is a helicopter 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).</p> <p>STEP Helicopter Operations:</p> <ul style="list-style-type: none"> • Refer to DOI OPM-40. DOI OPM-40—Single-Skid, Toe-In, and Hover Exit/Entry Procedures (STEP) Operations (https://www.doi.gov/sites/doi.gov/files/uploads/opm-40.pdf) • An initial and 36-month-recurrent flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>.
#97	<p>Vessel Landings—DOI (Helicopter)</p> <p>Vessel Landings are take-off and landing operations on vessels, drillships, semi-submersible drilling platforms, barges, or other landing areas subject to pitch-and-roll of the sea.</p> <p>Helicopter Landings on a Vessel:</p> <ul style="list-style-type: none"> • 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. • Pilots conducting Vessel Landings must have 10 offshore take-offs and 10 offshore landings to vessels, drillships, semi-submersible drilling platforms, barges, or other landing areas subject to pitch-and-roll of the sea—this does <i>not</i> include fixed facilities not affected by the movement of the sea. • An initial and 36-month-recurrent flight evaluation is required. • PPE is required in accordance with the <i>ALSE Handbook</i>.

Est. Instruction
Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#98

Unmanned Aircraft Systems (UAS)

Pilot Requirements

The FAA retains the sole authority to approve UAS operations within the National Air Space (NAS) in Class A, B, C, D, E and G airspace.

DOI employees are not authorized to manipulate the controls of DOI UAS unless they possess a Current DOI Remote Pilot card or are attending an approved DOI UAS training course.



DOI UAS Remote Pilots requirements:

- Attend the A-450 Basic Remote Pilot training or approved equivalent.
- Must possess a current FAA Remote Pilot certificate.
- Must pass an initial evaluation administered by an OAS UAS Pilot Inspector or OAS-designated UAS Pilot Inspector.
- Remote Pilots and crewmembers are required to maintain currency as Aircrew Members per DOI-OPM-04. A UAS crewmember is defined as any personnel directly involved in the setup, launch, recovery, or manipulating the controls of the UAS.
- DOI Supervisors of Remote Pilots and crewmembers shall be current in the training requirements outlined in:

[DOI OPM-04—Aviation User Training Program \(https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf\)](https://www.doi.gov/sites/doi.gov/files/uploads/opm-04.pdf)

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#99	<p>UAS Pilot Currency Requirements</p> <ul style="list-style-type: none"> • 3 take-offs (launch) and 3 landings (recovery) within the past 90 days • Required to fly the aircraft for which they are carded at least once every 12 months • Must attend Small UAS Refresher Training (IAT, A-452R) every 24 months
#100	<p>DOI Remote Pilot Flight Currency & Refresher Training</p> <p>DOI Remote Pilots must demonstrate three take-offs (launch) and landings (recovery) with the UAS they are approved to operate within the preceding 90 days. If currency is lost prior to a mission, the Remote Pilot must regain currency by performing the flight maneuvers and emergency procedures for the specific make and model in one of the following ways:</p> <ul style="list-style-type: none"> • In the simulator • During a proficiency flight • Conduct their mission flight under the observation of a current UAS pilot <p>DOI Remote pilots are required to fly each of the aircraft for which they are carded at least once every 12 months. Remote Pilots failing to meet this requirement shall fly under the supervision of a carded and current Remote Pilot and perform the flight maneuvers and emergency procedures for that aircraft.</p> <p>DOI Remote Pilots must complete UAS Refresher Training (IAT, A-452R) or approved equivalent every 24 months following the issuance of their pilot card.</p> <p>IAT/A-452R—Small Unmanned Aircraft System (sUAS) Refresher Training (https://www.iat.gov/training/searchcourse_overview.asp?cid=1042)</p>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#101	<p>UAS Visual Observers (VO)</p> <p>Visual Observers must:</p> <ul style="list-style-type: none">• Have a clear view of the area of operation• Be in communication with the Remote Pilot—either within speaking distance, or with a portable radio/cell phone equipped for immediate communication• Keep the Remote Pilot advised of any possible hazards such as power lines, birds, other aircraft, terrain, and hazardous weather conditions <p>Visual Observers may not act as a Remote Pilot unless they possess a valid FAA Remote Pilot certificate and a current OAS-30U Remote Pilot Qualification Card.</p> <p>Visual Observers Training: certain certificates of authorization/waiver (COA's) require that observers must have completed sufficient training to communicate to the pilot any instructions required to remain clear of conflicting traffic. Refer to COA as applicable.</p>
#102	<p>DOI OAS Website—Approved UAS</p> <p>All UAS operated under DOI operational control, including cooperator/affiliate aircraft, must have a current OAS-36U—DOI UAS Data Card or Letter of Authorization issued by OAS.</p> <p>A list of the currently approved UAS is posted on the OAS website:</p> <p>DOI Unmanned Aircraft Systems (UAS) (https://www.doi.gov/aviation/uas)</p>

Est. Instruction Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#103

Mechanic Qualification Card

Mechanic Inspection Process includes:

- Review of company policies and procedures and contract details
- Review of FAA Certificates and types
- Review of special training
- Review of past performance
- Review of maintaining helicopters under field conditions
- Certification for type and model of helicopter(s)
- Certification of type and model of engine(s) insert after “Pilot Inspection Process”

	USDA-INTERAGENCY-USDI	
MECHANIC QUALIFICATION		
NAME _____		
COMPANY _____		
CONTRACT NO. _____		
CARD EXPIRATION DATE _____		
ISSUED BY _____		UNIT _____
DATE _____		OAS-38 (12/12)

QUALIFICATIONS	
AIRCRAFT	INSPECTOR INITIALS
ENGINE	

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#103	Mechanic Qualification Card—<i>cont'd.</i> USFS: <ul style="list-style-type: none">• Requires Mechanic Card on all helicopter contracts• Mechanic Card not required for any fixed-wing aircraft. DOI: <ul style="list-style-type: none">• Requires Mechanic Card on some helicopter contracts• Mechanic Card not required for any fixed-wing aircraft. Elements on the Mechanic Qualification Card are all self-explanatory and include: Name, Company, Contract No., Card Expiration Date, Issued By, Unit, Date, Qualifications, Aircraft, Engine, Inspector Initials

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#104

Fixed-wing Airplane Data Card

OAS-36A V.1.6 10/22/2013  AIRPLANE DATA CARD OFFICE OF AVIATION SERVICES	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="5">AIRCRAFT DATA CARD EXPIRES:</th> </tr> <tr> <td colspan="5">OAS-68 CONTROL NO.:</td> </tr> <tr> <th>CONTRACT #</th> <th>ITEM #</th> <th>TYPE</th> <th>Expire</th> <th>Base</th> </tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table>	AIRCRAFT DATA CARD EXPIRES:					OAS-68 CONTROL NO.:					CONTRACT #	ITEM #	TYPE	Expire	Base																				
AIRCRAFT DATA CARD EXPIRES:																																				
OAS-68 CONTROL NO.:																																				
CONTRACT #	ITEM #	TYPE	Expire	Base																																
OPERATOR: _____ ADDRESS: _____ PHONE NO. _____ FAX _____ P.O.C. _____ PHONE: _____ COMPANY EMAIL: _____	MAKE, MODEL AND SERIES: _____ REGISTRATION NO. N _____ MFG. SERIAL NO. _____ HOBBS / TACH READING _____ / _____ TYPE AIRWORTHINESS CERTIFICATE: _____ OAS CONTACT: _____ PH: _____ FAX _____																																			
AUTHORIZED USES:																																				
<input type="checkbox"/> PASSENGER No. Pax: _____ (9P) <input type="checkbox"/> CARGO <input type="checkbox"/> SINGLE PILOT IFR (W / AUTOPILOT) <input type="checkbox"/> LOW-LEVEL (6) <input type="checkbox"/> FIRE SURVEILLANCE / RECON (USFS ONLY) <input type="checkbox"/> PARA CARGO (2P)	<input type="checkbox"/> SMOKE JUMPER (3D) <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____																																			
Inspected By: /S/ _____ Print Name: _____ Region/Area: _____ Date: _____ Approved By: /S/ _____ Print Name: _____ Region/Area: _____ Date: _____																																				
I. AIRCRAFT INFORMATION: TOTAL AIRFRAME TIME _____ ENG. MAKE & MODEL _____ ENGINE HOURS: #1 - TSN: _____ TSO: _____ HSI: _____ #2 - TSN: _____ TSO: _____ HSI: _____ L/H PROP TSO _____ OIH DATE _____ GOV TSO _____ R/H PROP TSO _____ OIH DATE _____ GOV TSO _____ INSP DATE: _____ / _____ TYPE: _____ TIME LAST 100 HR/PHASE _____ REGISTRATION EXPIRE DATE: _____ WEIGHING CONFIGURATION _____ DATE LAST WEIGHING: _____ EQUIP LIST: _____ MAXIMUM GROSS WEIGHT _____ EQUIPPED WEIGHT _____ USEFUL LOAD _____ FLIGHT MANUAL REV. No. _____ DATE: _____ COMPONENT TIME LIFE & INSPECTION LIST _____ AIRFRAME AD's _____ ENGINE AD's _____ PROPELLER AD's _____ MANDATORY SERVICE BULLETINS _____ Fail Pass EQUIPMENT LABELING _____ MANUFACTURER'S INSPECTIONS FOR AGING AIRCRAFT _____	II. MANDATORY EQUIPMENT: SHOULDER HARNESS (FRONT) <input type="checkbox"/> Fail <input type="checkbox"/> Pass SEAT BELTS (ALL) <input type="checkbox"/> <input type="checkbox"/> VHF COMM. RADIO #1 VHF-AM <input type="checkbox"/> #2 VHF-AM <input type="checkbox"/> FIRE EXT. (MIN. 2 B/C) <input type="checkbox"/> ELT <input type="checkbox"/> BATT DUE: _____ NOAA DUE: _____ LIGHTING - NIGHT OPERATIONS <input type="checkbox"/> AVIONICS INSTALL/MAINT. STDS <input type="checkbox"/> NAV CHARTS/SUPPLEMENTS <input type="checkbox"/> III. MAINTENANCE ITEMS: MAINTENANCE RECORDS <input type="checkbox"/> 14 CFR 135 CERTIFICATE <input type="checkbox"/> DO85 AIRCRAFT LISTING <input type="checkbox"/> WEIGHT & BALANCE SCHEDULE <input type="checkbox"/> Req IV. LOW LEVEL / UNPREPARED LANDING AREA: <input type="checkbox"/> FIRST AID KIT <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> SURVIVAL KIT <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> INTERPHONE-PILOT/OBS/1 AFT PAX <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> OVERSIZE TIRES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> NOSE FORK / TAIL WHEEL <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> WHITE STROBE LIGHT <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> PAX INERTIA REELS (IF APPLICABLE) <input type="checkbox"/> <input type="checkbox"/>																																			

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#104

Fixed-wing Airplane Data Card—cont'd.

OAS-36A		REGISTRATION NO.	N	OAS-68 CONTROL NO.:					
Req	V. MISCELLANEOUS EQUIPMENT:			Fail	Pass	Req	VI. AVIONICS	Fail	Pass
<input type="checkbox"/>	CABIN HEATER			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF NAV (1 OR 2 ?)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	DEICE/ANTI-ICE			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ADF NAV (1 OR 2 ?)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	HAZ. MAT BOOK W/EXEMP & ERG.			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DME NAV (1 OR 2 ?)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	DOUBLE-STRAP SHOULDER HARNESS			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GLIDESLOPE (1 OR 2 ?)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	SHOOTING DOOR			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MARKER BEACON	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	FLOATS: STRAIGHT <input type="checkbox"/> AMPHIBIOUS <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HEADSETS ANR HEADSETS <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	SKIS: STRAIGHT <input type="checkbox"/> WHEEL SKIS <input type="checkbox"/>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MICROPHONES	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	AUX FUEL TANK			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUDIO CONTROL SYSTEM(S) # SYSTEMS	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	EXT. OVERWATER KIT (PART 135.167)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	INTERPHONE - NO. POSITIONS	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	LIFE VEST -- EACH OCCUPANT	Expire Date: <input type="text"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HOT MIC/VOX <input type="checkbox"/> VOX <input type="checkbox"/> PTT w/LOCK <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	COLD WEATHER EQUIPMENT			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ATTITUDE INDICATOR	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	AIRCRAFT SECURITY (DUAL LOCKING)			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HORIZONTAL SITUATION INDICATOR	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	AIRCRAFT SECURITY ON CHECK LIST			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUTOPILOT: NO. AXIS <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	PULSE LIGHTS			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TRANSPONDER (91.413) C/W: <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	CARGO NETS & TIE DOWN EQUIPMENT			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ALT ENCODER (91.411) C/W: <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	FAT / OAT			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PITOT/STATIC (91.411) C/W: <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	IFR KNOWN ICING			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	#1 GPS TYPE: <input type="text"/> DATA EXP <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	LIFE RAFT WITH CANOPY TSO C-70 TYPE 2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	#2 GPS TYPE: <input type="text"/> DATA EXP <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	INERTIAL REELS FRONT SEATS			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RADAR ALTIMETER	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	STROBES WING TIP AND TAIL			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WEATHER RADAR (STAB / NON-STAB)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	VII. OTHER EQUIPMENT (SPECIFY):			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RADIO TRANSMIT PTT - NO. POSITIONS	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VOLUME CONTROL - NO. POSITIONS	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	INTERNAL P.A.	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TRANSMITTER SIDETONE	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CROSS MONITOR AUDIO	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM RADIO TYPE: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM GUARD (168.625 / 110.9)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM RADIO TYPE: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM GUARD (PROGRAMMABLE)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM RADIO TYPE: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	VHF-FM GUARD (PROGRAMMABLE)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AFT TRAINING POSITION	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FM PROGRAMING PORT(S)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FM ANTENNA / COAX / BNC No.# <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GPS DATA PORT	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SATELLITE TELEPHONE	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AFF TYPE: <input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TCAD/TCAS TIS not acceptable	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AUX FM WITH ANTENNA (10 PIN)	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3 PIN AUX POWER W / 10 AMP CB	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RADIO TRANSMIT AFT POSITION	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MFD COUPLED TO TCAD / TCAS	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	JJ-033 AND JJ-034 JACKS	<input type="checkbox"/>	<input type="checkbox"/>
REMARKS: (AND/OR SEE OAS-68 FOR DEFICIENCIES)									
<input type="checkbox"/>	1			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	3			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	4			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	5			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	6			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#105

Fixed-wing Airplane Data Record—USFS

FS-5700-21, Part 2, (Rev. 12/2011)
OMB 0596-0015

USDA - Forest Service AIRPLANE DATA RECORD (Reference FSH 5709.16) <small>v3.0</small>		1. Contract/Rental Agreement No. 2. Item No. 3. Designated Base 4. Region/Area	
SECTION I - Operator & Aircraft Information (Fill in Blanks)			
1. Operator		2. Address (Street, City, State & ZIP Code)	
3. Phone No.	4. Make and Model	5. FAA Registration No.	6. Manufacturer's Serial No.
7. Gross Weight	8. No. of Passenger Seats	9. Hobbs/Tach Reading	10. Hobbs/Tach Reading at Last 100 Hour Insp.
FOR EMPTY WEIGHT SEE CURRENT WEIGHT AND BALANCE DATA			
11. Authorized Uses (Initial appropriate boxes) (Line Through Unapproved Uses)		Expires (Fill in the Blank) _____ (Month/Year)	
a. <input type="checkbox"/> Passenger	b. <input type="checkbox"/> Cargo	f. <input type="checkbox"/> Backcountry Airstrip	g. <input type="checkbox"/> Approved MEL (D95) (MMEL Rev No. 0)
c. <input type="checkbox"/> Resource Reconnaissance	d. <input type="checkbox"/> Fire Reconnaissance	h. <input type="checkbox"/> Equipped w/Autopilot (Single Pilot IFR) (A15)	i. <input type="checkbox"/> Other _____
e. <input type="checkbox"/> Air Attack (Type _____)		j. <input type="checkbox"/> Other _____	
12. Approved By (Signature)	13. Title Aircraft Inspector	14. Region	15. Date

2018

electronically signed: ← Card with electronic signature invalid without date stamp

Light fixed-wing aircraft are used for a myriad of purposes ranging from forest health surveys to highly demanding Air Attack missions. Light fixed-wing aircraft missions fall into two basic categories:

- **Reconnaissance missions:** include resource reconnaissance (bug surveys, snow surveys, etc.) and fire reconnaissance (looking for smoke).

Reconnaissance aircraft have minimal avionics requirements beyond standard Part 135.
- **Air Attack missions:** are demanding and require an Air Tactical Group Supervisor (ATGS) to coordinate all fixed and rotary wing aircraft over an incident/fire.

MELs and MMELs:

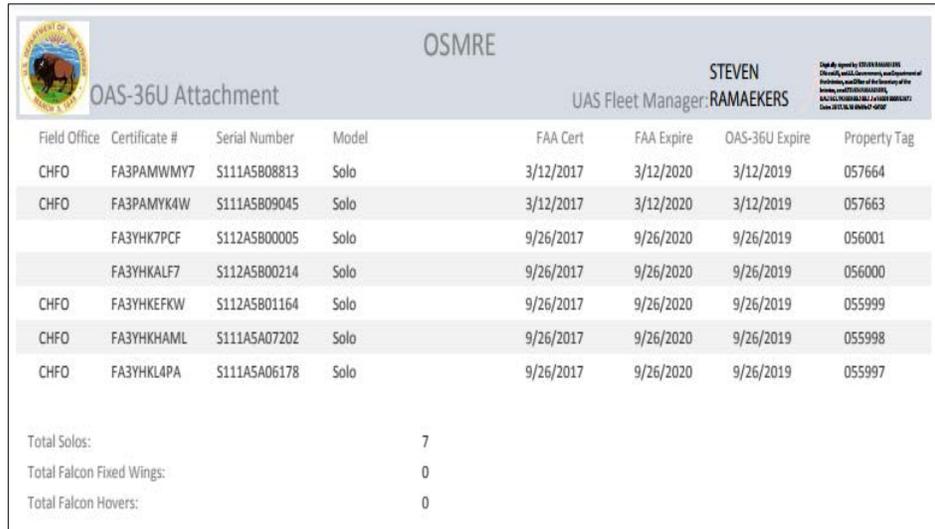
- Non-Part 135 MELs (Parts 91, 133 & 137) must be approved by a Letter of Authorization (LOA).
- Each aircraft model with a U.S. Type certificate has an MMEL, except for single-engine piston airplane that has a generic “Single-Engine Airplane” MMEL. Many aircraft will have an MMEL version for commercial air carrier operators and another for Part 91 operators.

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
#105	Fixed-wing Airplane Data Record—USFS—<i>cont’d.</i> MELs and MMELs—<i>cont’d.</i>: <ul style="list-style-type: none">• For Part 135 air carriers, the operator will use the MMEL to develop a company MEL. For Part 91 operators (includes Part 133 & 137) the LOA authorizes them to “use the MMEL as an MEL.”• The FAA periodically revises MMELs. Revisions are classified as mandatory or non-mandatory.

Est. Instruction Time: 60 min. **Unit 4—Interagency Flight Profiles and Approvals**

#106 & #107

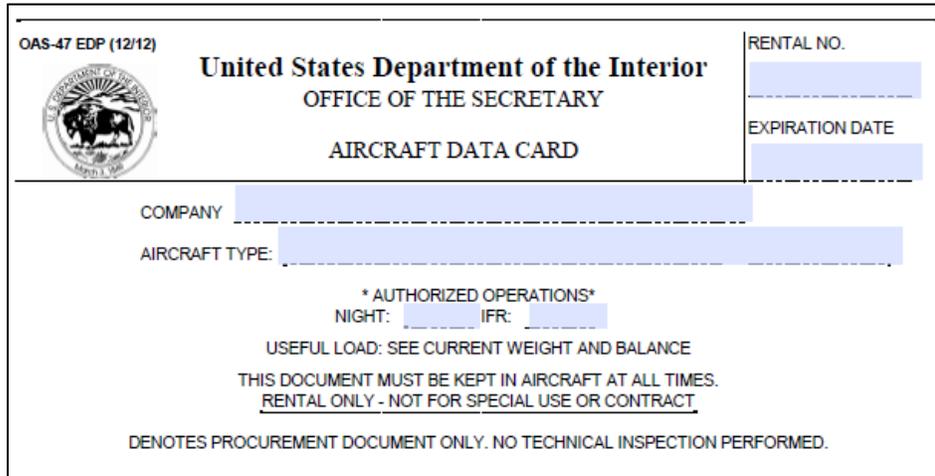
OAS-36U—UAS Aircraft Data Card—*cont'd.*



Field Office	Certificate #	Serial Number	Model	FAA Cert	FAA Expire	OAS-36U Expire	Property Tag
CHFO	FA3PAMWMY7	S111ASB08813	Solo	3/12/2017	3/12/2020	3/12/2019	057664
CHFO	FA3PAMYK4W	S111ASB09045	Solo	3/12/2017	3/12/2020	3/12/2019	057663
	FA3YHK7PCF	S112ASB00005	Solo	9/26/2017	9/26/2020	9/26/2019	056001
	FA3YHKALF7	S112ASB00214	Solo	9/26/2017	9/26/2020	9/26/2019	056000
CHFO	FA3YHKEFKW	S112ASB01164	Solo	9/26/2017	9/26/2020	9/26/2019	055999
CHFO	FA3YHKHAML	S111ASA07202	Solo	9/26/2017	9/26/2020	9/26/2019	055998
CHFO	FA3YHKLAPA	S111ASA06178	Solo	9/26/2017	9/26/2020	9/26/2019	055997
Total Solos:			7				
Total Falcon Fixed Wings:			0				
Total Falcon Hovers:			0				

#108

Fixed-wing Aircraft (Rental) Data Card—No Special Use—DOI



OAS-47 EDP (12/12)

United States Department of the Interior
OFFICE OF THE SECRETARY

AIRCRAFT DATA CARD

RENTAL NO. _____

EXPIRATION DATE _____

COMPANY _____

AIRCRAFT TYPE: _____

* AUTHORIZED OPERATIONS*
NIGHT: _____ IFR: _____

USEFUL LOAD: SEE CURRENT WEIGHT AND BALANCE

THIS DOCUMENT MUST BE KEPT IN AIRCRAFT AT ALL TIMES.
RENTAL ONLY - NOT FOR SPECIAL USE OR CONTRACT

DENOTES PROCUREMENT DOCUMENT ONLY. NO TECHNICAL INSPECTION PERFORMED.

- An approved DOI/USFS Inspector issues this type of approval card to vendors, upon a successful records/certifications review of a vendor aircraft.
- There is no on-site inspection of the vendor.
- This card does *not* authorize the vendor to perform Special Use missions.

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#109

Helicopter Data Card—DOI

“Interagency Fire” Stamp, if applicable, will appear in the top, left corner of the Helicopter Data Card.

Review the Standards at:

[Interagency Helicopter Fire Standards](#)

(https://www.doi.gov/sites/doi.gov/files/uploads/doi_oas_usfs_interagency_fire_helicopter_standards_mou.pdf)

OAS-36B V 1.6 10/22/2013   HELICOPTER DATA CARD OFFICE OF AVIATION SERVICES		AIRCRAFT DATA CARD EXPIRES: _____ OAS-68 CONTROL NO: _____ <table border="1"> <thead> <tr> <th>CONTRACT #</th> <th>ITEM #</th> <th>TYPE</th> <th>Expire</th> <th>Base</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>LghtHel_C</td> <td></td> <td></td> </tr> </tbody> </table>		CONTRACT #	ITEM #	TYPE	Expire	Base			LghtHel_C																						
CONTRACT #	ITEM #	TYPE	Expire	Base																													
		LghtHel_C																															
		LghtHel_C																															
		LghtHel_C																															
		LghtHel_C																															
		LghtHel_C																															
OPERATOR: _____ ADDRESS _____ PHONE NO. _____ FAX _____ P.O.C: _____ PHONE: _____ COMPANY EMAIL: _____		MAKE, MODEL AND SERIES _____ REGISTRATION NO. N _____ MFG. SERIAL NO. _____ HOBBS READING _____ TYPE AIRWORTHINESS CERTIFICATE: _____ OAS CONTACT PH: _____ FAX: _____																															
AUTHORIZED USES:																																	
<input type="checkbox"/> PASSENGER & CARGO (9P) <input checked="" type="checkbox"/> # PAX SEATS _____ <input type="checkbox"/> CARGO ONLY (9C) <input type="checkbox"/> EXT. LOAD (SLING) (1A) <input type="checkbox"/> SHORT HAUL (1H) <input type="checkbox"/> RAPPPELLING (4R)		<input type="checkbox"/> FIRE SUPPRESSION - IA (2A) <input type="checkbox"/> FIRE SUPPRESSION - LOCAL (3A) <input type="checkbox"/> AERIAL IGNITION (8) _____ <input type="checkbox"/> WATER BUCKET (3W) <input type="checkbox"/> HELI-TANKER (FIXED TANK) (3R) <input type="checkbox"/> CARGO LETDOWN																															
		<input type="checkbox"/> EXTENDED OVERWATER (5X) <input type="checkbox"/> SNOW OPS (4) <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____ <input type="checkbox"/> OTHER _____																															
Inspected By: /S/ _____ Approved By: /S/ _____		Print Name: _____ Region/Area _____ Date: _____ Print Name: _____ Region/Area _____ Date: _____																															

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#109

Helicopter Data Card—DOI—cont'd.

N-Number		N		OAS Control #		
VI. SPECIAL USE EQUIPMENT						
Req		Fail	Pass	Req	Fail	Pass
<input type="checkbox"/>	CARGO HOOK INSPECTION DATE:					
<input type="checkbox"/>	REMOTE HOOK INSPECTION DATE:					
<input type="checkbox"/>	SHOOTING DOOR					
<input type="checkbox"/>	CONVEX MIRROR (IF APPLIC.)					
<input type="checkbox"/>	HIGH VISIBILITY MARKINGS MAIN ROTOR BLADES					
<input type="checkbox"/>	EXTENDED HEIGHT GEAR					
<input type="checkbox"/>	PERSONNEL STEPS PER CONTRACT					
<input type="checkbox"/>	WATER BUCKET TYPE					
<input type="checkbox"/>	2nd BUCKET TYPE					
<input type="checkbox"/>	WATER BUCKET LEVEL/WT MARKINGS or CHART					
<input type="checkbox"/>	BUCKET SWITCH ON COLL& PROPERLY LABELED					
<input type="checkbox"/>	EXTERNAL LOAD INDICATOR (LOAD CELL)					
<input type="checkbox"/>	NINE PIN CONNECTOR w/ 50 AMP C/B					
<input type="checkbox"/>	ACCESSORY POWER 3-PIN w/ 5 AMP C/B					
<input type="checkbox"/>	LONG LINE					
<input type="checkbox"/>	RAPPEL FIXTURE WITH ACCESSORIES:					
<input type="checkbox"/>	INSPECTION DATE:					
<input type="checkbox"/>	CARGO LETDOWN FIXTURE					
<input type="checkbox"/>	SHORTHAIL ANCHOR ICA:					
<input type="checkbox"/>	FIXED RETARDANT TANK -					
<input type="checkbox"/>	TYPE:					
<input type="checkbox"/>	DUAL CONTROLS FOR PILOT EVALUATION					
<input type="checkbox"/>	WIRE STRIKE PROTECTION					
<input type="checkbox"/>	LOCKING FUEL CAP(S)					
<input type="checkbox"/>	RANGE EXTENDER/AUX FUEL TANK					
<input type="checkbox"/>	MAIN ROTOR BRAKE					
<input type="checkbox"/>	PARTICLE SEPI/FILTER/FMS:					
<input type="checkbox"/>	EQUIPMENT FOR SNOW OPERATIONS					
<input type="checkbox"/>	FIRST AID KIT (Per Contract)					
<input type="checkbox"/>	SURVIVAL KIT (Per Contract)					
<input type="checkbox"/>	EXTENDED OVERWATER KIT (PART 135.167)					
<input type="checkbox"/>	FLOTATION GEAR:					
<input type="checkbox"/>	LIFE VEST - EACH OCCUPANT (PER CONTRACT)					
<input type="checkbox"/>	LEFT HAND DRIVE AUTHORITY					
<input type="checkbox"/>	LEFT HAND BUBBLE DOOR W/INSTRUMENTS					
<input type="checkbox"/>	PULSE LIGHTS					
<input type="checkbox"/>	133 CERT NO.					
<input type="checkbox"/>	EXPIRE DATE:					
<input type="checkbox"/>	137 CERT NO:					
<input type="checkbox"/>	APPROVED FUEL SERVICE VEHICLE (See AMD-39)					
<input type="checkbox"/>	PARCEL AREA CARGO RESTRAINT SYSTEM					
REMARKS: (AND/OR SEE OAS-68 FOR DEFICIENCIES)						
VII. INTERAGENCY FIRE AVIONICS						
	INTERCOM - PILOT AND OBSERVER					
	U-92 A/U JACKS ALL POSITIONS					
	ICS & XMIT w/PTT FOR PILOT & OBSERVER					
	INTEGRATED AUDIO SYSTEM					
	AUDIO PANELS - TYPE:					
	HOT MIC/VOX					
	PAX MONITOR OBSERVER'S RECEIVE AUDIO					
	VOLUME CONTROL - ALL POSITIONS					
	CROSS MONITOR AUDIO					
	TRANSMITTER SIDETONE					
	INTERCOM w/PTT					
	TRANSMIT w/PTT					
	GPS TYPE:					
	GPS TYPE:					
	VHF COMM. RADIO					
	#1 VHF-FM RADIO TYPE					
	VHF-FM GUARD FREQ					
	#2 VHF-FM RADIO TYPE					
	VHF-FM GUARD FREQ					
	VHF-FM PROGRAMING PORT(S)					
	AUX-FM PROVISIONS					
	TRANSPONDER Due DATE:					
	PITOT STATIC/ ALT/ ENC Due DATE:					
	AUTOMATED FLIGHT FOLLOWING (AFF)					
AVIONICS APPROVED BY:						
	SIGNATURE					
	PRINT					
	DATE					
VIII. OTHER AVIONICS / CONTRACT ITEMS						
	VHF NAV					
	ADF					
	DME					
	RADAR ALT.					
	P.A. / SIREN: (Through the audio panel)					
	SATELLITE PHONE					
	TSO'd					
	TCAS					
	TAS					
	TCAD (TIS NOT ACCEPTABLE)					
	VHF-FM PORTABLE RADIO FOR PILOT CALL-BACK					
	CELL PHONE w/CHARGER					
	PINGER / SONAR BEACON : BATTERY DATE:					
	CARGO BASKETS					
	SQUIRREL CHEEKS					
	CARGO EXTENDER / BAGGAGE COMPARTMENT					

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#110

Helicopter Data Record—USFS

“Interagency Fire” Stamp, if applicable, will appear in the top, left corner of the Helicopter Data Card.

Review the Standards at:

[Interagency Helicopter Fire Standards](#)

(https://www.doi.gov/sites/doi.gov/files/uploads/doi_oas_usfs_interagency_fire_helicopter_standards_mou.pdf)

USDA - Forest Service		1. Contract/Rental Agreement No.			
HELICOPTER DATA RECORD (Reference FSH 5709.16)		2. Item No.			
		3. Designated Base			
		4. Region/Area			
FS-5700-21a, Part 2 (12/2011) OMB 0596-0015					
SECTION I - Operator & Aircraft Information (Fill in Blanks)					
1. Operator		2. Address (Street, City, State & ZIP Code)			
3. Phone No.	4. Make and Model	5. FAA Registration No.	6. Manufacturer's Serial No.	7. Hobbs Reading	
8. Max Gross Weight (Internal)	9. Max Gross Weight (Ext.)	10. No. of Passengers	11. Type Fuel Jet A	12. Fuel Flow (Cruise) G.P.H	
FOR CURRENT EQUIPPED WEIGHT CHECK WEIGHT & BALANCE DATA IN AIRCRAFT FLIGHT MANUAL					
13. Authorized Uses (Initial appropriate boxes) (Line Through Unapproved Uses)		Expires (Fill in the Blank) _____ (Month/Year)			
a. <input type="checkbox"/> Passenger & Cargo	n. <input checked="" type="checkbox"/> Fire Suppression - Interagency	o. <input type="checkbox"/> Approved for Left Seat Ops		p. <input type="checkbox"/> Approved MEL MREL Rev No 0 (D95)	
b. <input type="checkbox"/> Low Level Reconnaissance	i. <input type="checkbox"/> Fire Suppression - Local	q. <input type="checkbox"/> Other _____		r. <input type="checkbox"/> Other _____	
c. <input type="checkbox"/> Cargo Only (Restricted Category)	j. <input type="checkbox"/> Water/Retardant Bucket	s. <input type="checkbox"/> Other _____		t. <input type="checkbox"/> Other _____	
d. <input type="checkbox"/> External Load (Sling)	k. <input type="checkbox"/> Fixed Tank Tank No. (0)	u. <input type="checkbox"/> Other _____			
e. <input type="checkbox"/> Rappelling	l. <input type="checkbox"/> Longline/Remote Hook				
f. <input type="checkbox"/> Aerial Ignition	m. <input type="checkbox"/> Rapid Refuel <input type="checkbox"/> CCR <input type="checkbox"/> Splash				
g. <input type="checkbox"/> Manager May Ride (Type 1 ONLY)	n. <input type="checkbox"/> Air Attack Type (0)				
14. Approved By (Signature)	15. Title Aircraft Inspector	16. Region	17. Date		
electronically signed:		← Card with electronic signature invalid without date stamp			4.0

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#111

Fuel Service Vehicle (FSV) Data Card

OAS-39B, V 1.6 11/7/2013 FUEL SERVICE VEHICLE (FSV) Office of Aviation Services		FUEL SERVICE VEHICLE EXPIRES: OAS-68 CONTROL NO: _____ CONTRACT # ITEM # TYPE Expire Base				
OPERATOR _____ ADDRESS _____ PHONE _____ FAX _____ P.O.C. _____		TYPE VEHICLE _____ Ex-Use Fuel Consumption _____ Ex-Use Hours Required _____ LICENSE NUMBER: _____ STATE: _____ UNIT No: _____				
APPROVED BY: (Signature) _____ DATE: _____ (Print Name) _____ REGION/AREA: _____						
Initial Appropriate Box		N/A Pass				N/A Pass
Fuel Type				Spill Prevention Control & Countermeasure (SPCC) Plan		
Gross Vehicle Weight				Gas Engine Protection (if applicable)		
Vehicle Condition				Spill Containment Kit (5 Gallons Min)		
Tank Condition				Fire Ext. Min. 20BC (2 each) #1= _____ BC. #2= _____		
Ex-Use Minimum Capacity				*VHF-FM Radio Type _____		
Tank Capacity Gal.	U.S. GAL			* Four-Wheel Drive		
Fuel Tank(s) Sump Drain(s)				* Air Conditioning		
Marked with TYPE FUEL - 3-inch letters				* Second Spare Tire/Wheel Assembly		
NO SMOKING Signs - 3-inch letters				*Secondary Spill Containment		
Vehicle Bonding Cables				* Rapid Refueling Equipment per Contract		
Aviation Fuel Hoses - Condition				* Storage for Buckets/Remote Hooks/Longlines/etc. per Contract		
Fuel Nozzle Screen (100 mesh) or Equivalent				* Locking Provisions per Contract		
Fuel Nozzle Dust Cap or Equivalent				* Dead Man Control		
Fuel Nozzle Bonding Cables				Other: _____		
Fuel Quantity Meter				Other: _____		
Fuel Filtering System				Other: _____		
Date Filter Changed/Placarded:				Other: _____		
Fuel Filter Drain				Other: _____		
Differential Pressure Gauge (if required)				Other: _____		
Spare Filter & Gasket/Seals				Other: _____		
Filter-Manufacturer's Manual/Instructions				* = if required		
Remarks: _____						

Est. Instruction Time: **60** min.

Unit 4—Interagency Flight Profiles and Approvals

#111

Fuel Service Vehicle (FSV) Data Card—*cont'd.*

	INTERAGENCY DATA CARD FUEL SERVICE VEHICLE	
CONTRACTOR	_____	
ADDRESS	_____	
TYPE VEHICLE	_____	
LICENSE NO.	UNIT #	_____
\	FUEL TYPE	Jet A
ARA #	-ARA-	EXP. DATE _____
CONTRACT #		EXP. DATE _____
CONTRACT #	Any USFS	EXP. DATE _____
APPROVED BY	_____	
DATE:	REGION/AREA	_____

Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#112

SEAT Support Vehicle (SSV) Data Card—DOI

<p>OAS-39D, V1.6 11/7/2013</p> <p style="text-align: center;">SSV SEAT SUPPORT VEHICLE</p> <p style="text-align: center;">Office of Aviation Services</p>	<p>SERVICE VEHICLE EXPIRES: _____</p> <p>OAS 68 CONTROL NO: _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>CONTRACT #</th> <th>ITEM #</th> <th>TYPE</th> <th>Expire</th> <th>Base</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	CONTRACT #	ITEM #	TYPE	Expire	Base																																																																																																			
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<p>OPERATOR _____</p> <p>ADDRESS _____</p> <p>PHONE _____ FAX _____</p> <p>P.O.C. _____</p>	<p>MAKE/TYPE VEHICLE _____</p> <p>FUEL CAPACITY _____ U.S. GAL</p> <p>WATER CAPACITY _____ U.S. GAL</p> <p>OAS CONTACT PH: _____ FAX: _____</p>																																																																																																								
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<p>FUEL SERVICING SYSTEM LIC: _____ ST: _____ UNIT#: _____</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Initial Appropriate Box</th> <th colspan="2">LIC</th> <th colspan="2">ST</th> <th colspan="2">UNIT#</th> </tr> <tr> <th>N/A</th> <th>Pass</th> <th>N/A</th> <th>Pass</th> <th>N/A</th> <th>Pass</th> </tr> </thead> <tbody> <tr> <td>Fuel Type</td> <td></td> <td></td> <td colspan="4">Gas Engine Protection (if applicable)</td> </tr> <tr> <td>Gross Vehicle Weight</td> <td></td> <td></td> <td colspan="4">Differential Pressure Gauge (if required)</td> </tr> <tr> <td>Vehicle Condition</td> <td></td> <td></td> <td colspan="4">Fuel Filtering System (Type) _____</td> </tr> <tr> <td>Tank Condition/Mounting</td> <td></td> <td></td> <td colspan="4">Fuel Filter Drain</td> </tr> <tr> <td>Tank Capacity (6hrs Min.) _____ U.S. GAL</td> <td></td> <td></td> <td colspan="4">Date Filter Changed/Placarded: _____</td> </tr> <tr> <td>Fuel Tank(s) Sump Drain(s)</td> <td></td> <td></td> <td colspan="4">Fire Ext. Min. 20BC (2 each) #1= _____ BC. #2= _____</td> </tr> <tr> <td>Marked with TYPE FUEL - 3-inch letters</td> <td></td> <td></td> <td colspan="4">First Aid Kit</td> </tr> <tr> <td>NO SMOKING Signs - 3-inch letters</td> <td></td> <td></td> <td colspan="4">Spill Prevention Control & Countermeasure (SPCC) Plan</td> </tr> <tr> <td>Vehicle Bonding Cables</td> <td></td> <td></td> <td colspan="4">Spill Containment Kit (5 Gallons Min)</td> </tr> <tr> <td>Aviation Fuel Hoses - Condition _____</td> <td></td> <td></td> <td colspan="4">Filter-Manufacturer's Manual/Instructions</td> </tr> <tr> <td>Fuel Nozzle Screen (100 mesh) or Finer</td> <td></td> <td></td> <td colspan="4">Spare Filter & Gasket/Seals</td> </tr> <tr> <td>Fuel Nozzle Dust Cap or Equivalent</td> <td></td> <td></td> <td colspan="4">*Dead Man Control (Single Point Pressure Fueling only)</td> </tr> <tr> <td>Fuel Quantity Meter</td> <td></td> <td></td> <td colspan="4">*VHF-FM Radio Type</td> </tr> </tbody> </table> <p style="text-align: right; font-size: small;">*If Required</p>		Initial Appropriate Box	LIC		ST		UNIT#		N/A	Pass	N/A	Pass	N/A	Pass	Fuel Type			Gas Engine Protection (if applicable)				Gross Vehicle Weight			Differential Pressure Gauge (if required)				Vehicle Condition			Fuel Filtering System (Type) _____				Tank Condition/Mounting			Fuel Filter Drain				Tank Capacity (6hrs Min.) _____ U.S. GAL			Date Filter Changed/Placarded: _____				Fuel Tank(s) Sump Drain(s)			Fire Ext. Min. 20BC (2 each) #1= _____ BC. #2= _____				Marked with TYPE FUEL - 3-inch letters			First Aid Kit				NO SMOKING Signs - 3-inch letters			Spill Prevention Control & Countermeasure (SPCC) Plan				Vehicle Bonding Cables			Spill Containment Kit (5 Gallons Min)				Aviation Fuel Hoses - Condition _____			Filter-Manufacturer's Manual/Instructions				Fuel Nozzle Screen (100 mesh) or Finer			Spare Filter & Gasket/Seals				Fuel Nozzle Dust Cap or Equivalent			*Dead Man Control (Single Point Pressure Fueling only)				Fuel Quantity Meter			*VHF-FM Radio Type			
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Est. Instruction Time: 60 min.

Unit 4—Interagency Flight Profiles and Approvals

#113

Contractor Performance Assessment Reporting System (CPARS)

AQD-136A (10/14)

<input type="checkbox"/> U.S. FOREST SERVICE INCIDENT SUPPORT BRANCH 3833 S. DEVELOPMENT AVE BOISE, IDAHO 83705-5354 Phone 208-387-5665 Fax 208-387-5384	<input type="checkbox"/> U.S. DEPARTMENT OF INTERIOR IBC ACQUISITION SERVICES 300 E MALLARD DR. SUITE 200 BOISE, ID 83706 Phone 208-433-5026 Fax 208-433-5030	EVALUATION REPORT ON CONTRACTOR PERFORMANCE *****CPARS Compatible Format***** SOURCE SELECTION INFORMATION NOT FOR PUBLIC RELEASE (see FAR 3.104 & 42.1503)	
AGENCY / USER		CONTRACT NO.	
ADDRESS		CONTRACTOR	
CITY / STATE/ ZIP		PERIOD OF PERFORMANCE	FROM _____ TO _____
CONTRACT COR		LOCATION OF PERFORMANCE	
PROGRAM TITLE	AIRCRAFT FLIGHT SERVICES: <input type="checkbox"/> AIRPLANE <input type="checkbox"/> HELICOPTER <input type="checkbox"/> AIR TANKER <input type="checkbox"/> OTHER – specify ↓		
	AIRCRAFT TYPE _____		
CONTRACT EFFORT DESCRIPTION <i>(check all that apply)</i>	<input type="checkbox"/> EXCLUSIVE USE <input type="checkbox"/> CALL WHEN NEEDED <input type="checkbox"/> ON CALL		
	<input type="checkbox"/> FIRE MANAGEMENT <input type="checkbox"/> RESOURCE <input type="checkbox"/> MAINTENANCE		
	<input type="checkbox"/> OTHER MISSION – specify: _____		
INSTRUCTIONS: This form can be completed on the computer or printed and completed by hand. Use the mouse to navigate. To check or uncheck a box, 'double click' the box. If further direction is required on how to complete this evaluation or where to submit it, please contact your Contracting Officer. Comment boxes are formatted to automatically wrap the entered text. Check the box that best describes the level in which the Contractor supported the area described. Comments are essential and must substantiate your rating selection. N/A = not applicable. If additional space is required, use page 2 of the form or attach additional page(s). SEE PAGE 4 FOR EVALUATION RATINGS DEFINITIONS			
1. Quality. Contractor was professional and conformed to contract requirements. Was capable, efficient and effective in supporting the programs of this contract. Provided well maintained equipment and highly qualified personnel.			
<input type="checkbox"/> N/A <input type="checkbox"/> Exceptional <input type="checkbox"/> Very Good <input type="checkbox"/> Satisfactory <input type="checkbox"/> Marginal <input type="checkbox"/> Unsatisfactory			
COMMENTS:			
2. Schedule. Contractor was prepared and available to begin work on contract start date and provided daily coverage during the contract period with little to no disruption or unavailability. Contractor kept COR informed of crew exchanges, maintenance issues, etc.			
<input type="checkbox"/> N/A <input type="checkbox"/> Exceptional <input type="checkbox"/> Very Good <input type="checkbox"/> Satisfactory <input type="checkbox"/> Marginal <input type="checkbox"/> Unsatisfactory			
COMMENTS:			

The CPARS form (AQD-136A) is completed, after the aviation mission has concluded. This form is used to evaluate a contractor’s performance with regard to services rendered on a specific contract number. Information provided on the CPARS evaluation form is used by AQD to sort and select aviation services providers for future contract services.

Exceptional—this rating should be used when:

- No weaknesses were identified in the services provided
- Multiple significant events benefitted the government—outside of the contract requirements

Marginal or Unsatisfactory—use these ratings, as appropriate:

- Support these ratings by referencing the management tool that notified the Contractor of the contractual deficiencies

Find the DOI/USFS version of the CPARS form (AQD-136A) at:

[AQD-136A—Evaluation Report on Contractor Performance \(CPARS Form\)](https://www.doi.gov/aviation/aqd/contracts)
<https://www.doi.gov/aviation/aqd/contracts>

Est. Instruction Time: 60 min.	Unit 4—Interagency Flight Profiles and Approvals
	Review Unit Objectives

Est. Instruction Time: 15 min.	Unit 5—Review—Carding & Approval Scenarios
#114	Carding & Approval Knowledge Scenarios
#115	Carding & Approval Knowledge Review Your “empty cup” is now full of interagency aviation policy and practice information—now, we will test that knowledge. Some of these scenarios will be tough, so use the information in your student workbook to help you develop your answer.

Est. Instruction
Time: 15 min.

Unit 5—Review—Carding & Approval Scenarios

#116 & #117

Scenario #1

The County fire department is responsible for wildfires on your DOI/USFS Unit. They have a UAS/drone they use to scout and map the fire, both on Federal and on County land that they manage. The County has used drones in this way for years—and this is an emergency.

Who has operational control?

> If the county has operational control, the appropriate Federal land management agency plays an advisory role.

> If DOI/USFS has operational control, then the aircraft and pilot have to be approved and a Project Aviation Safety Plan (PASP) has to be in place.

Do the UAS pilot and the aircraft require approvals?

>The UAS pilot and aircraft, only need to be carded, if the DOI/USFS has operational control.

Can you use the recorded data to benefit the agency?

>If DOI/USFS requests the mission to gather data then DOI/USFS assumes operational control.

>If the DOI/USFS is offered the recorded data, then there is no assumption of possessing operational control.

>If the DOI/USFS requests the recorded data, after the mission is completed, then DOI/USFS assumes operational control.

Is an MOU required? Is an LOA required?

>Determine if a MOU is in place, and its requirements.

>If operational control is possessed by the DOI/USFS, and the pilot does not possess an UAS Approval Card, an LOA is required.

Est. Instruction Time: 15 min.	Unit 5—Review—Carding & Approval Scenarios
#118	<p>Scenario #2</p> <p>In a Life or Death Emergency, do I need approvals to use:</p> <ul style="list-style-type: none"> • National Guard • County Sheriff • State Police • Any other resource <p>Answer: You can call the National Guard, the County Sheriff, the State Police, or anyone—as long as you follow the four principles of ORM (Operational Risk Management):</p> <ol style="list-style-type: none"> 1. Develop a plan. 2. Do not take unnecessary risk(s). 3. Take risk when the potential benefit outweighs the potential costs. 4. Assure that your plan is approved at the appropriate level.
#119	<p>Scenario #3</p> <p>The “Friends of the National Parks” is contracting a pilot and aircraft to fly an animal survey:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Can a National Park Service (NPS) employee participate? >The NPS employee can participate as long as the aircraft is approved by DOI OAS, for the mission, as an affiliate cooperator. <input type="checkbox"/> Can a USFS employee participate? >Yes, if the mission is 500 feet AGL, or in a multi-engine aircraft. The approval comes through the Regional Aviation Officer (RAO).
#120	<p>Summary—References</p> <ul style="list-style-type: none"> ❖ See A-208—Appendix A.1: Resources and References

Est. Instruction Time: 15 min.	Unit 5—Review—Carding & Approval Scenarios
#121 & #122	Review Course Objectives Participants of this course should now be able to: <ul style="list-style-type: none">❖ Discern the role of the FAA and DOI/USFS to assure aviation safety compliance.❖ Understand why the US Department of the Interior (DOI) and the USDA’s Forest Service (USFS) inspect aircraft, pilots, mechanics, and equipment.❖ Define the standards used to assure aircraft, pilots, mechanics, and equipment are high quality and safe.❖ Define the various types of interagency aviation inspectors.❖ Define the characteristics of various Special Use activities conducted by the DOI/USFS.❖ List major components of a typical aircraft, pilot, mechanic, and equipment inspection.
#123	Questions & Course Evaluation <ul style="list-style-type: none">• Do you have any questions regarding the details covered in the A-208 Aircraft & Pilot Approval training course?• Please complete the Training Course Evaluation Forms (OAS-111)• Participants in this course will receive course credit via: Interagency Aviation Training (https://www.iat.gov)