



## SOLICITATION

(Ref. 48 CFR 1)

<b>Issuing Office:</b>  <b>USDA FOREST SERVICE</b> <b>R6 Fire &amp; Aviation Contracting Team</b> <b>Redmond Air Center</b> <b>1740 SE Ochoco Way</b> <b>Redmond, OR 97756</b>	This solicitation can be downloaded from the following Internet site: <b>www.fedbizopps.gov</b>
<b>Offers Are Solicited For:</b>  <b>R6 - Call-When-Needed Light Fixed Wing Services</b>	
<b>Solicitation No:</b> <b>AG-04H1-S-16-0001</b>	<b>Issued Date:</b> <b>January 28, 2016</b>

**IMPORTANT – NOTICE TO OFFEROR**

Information and instructions for submission of offers are contained in the attached Solicitation as indicated below:

- SF-1449, Solicitation for Commercial Items
- Section E, Instructions to Offeror - Commercial Items (FAR 52.212-1) (Tailored/Addenda)
- Section E, Offeror Representations and Certifications - Commercial Items (FAR 52.212-3)

Before submitting your offer, please recheck the following:

- Does your offer set forth full, accurate, and complete information as required by this solicitation including Exhibits and acknowledgement of any amendments that were issued?
- Have you rechecked your figures, including calculations on your worksheet?
- Have you completed the Offeror's Past Performance and Summary of Accidents? (See Section E)
- Have you completed the Pilot Agreement (See Exhibit 11 Section C)
- Have you received your Data Universal Numbering System (DUNS) Number
- Have you registered in the System for Award Management database at: [www.sam.gov](http://www.sam.gov) ?
- Have you completed, signed, and enclosed all required documents?

Offerors may call for information about this solicitation at (541) 410-5714 or [bmcgrane@fs.fed.us](mailto:bmcgrane@fs.fed.us) questions about the specifications in this solicitation.

**"The policy of the United States Department of Agriculture Forest Service prohibits discrimination on the basis of race, color, national origin, age, religion, sex, disability, family status, and/or political affiliation." Persons believing they have been discriminated against in any Forest Service related activity should write to: Chief, Forest Service, USDA, P. O. Box 96090, Washington, DC 20090-6090.**

Previous editions of this form are obsolete.

FS-6300-44 (11/79) Yellow Copy

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**SECTION A**

<b>SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS</b> <i>OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, &amp; 30</i>				1. REQUISITION NO.	PAGE <b>1 of 80</b>
2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NO.	5. SOLICITATION NO. <b>AG-04H1-S-16-0001</b>	6. SOLICITATION ISSUE DATE <b>January 28, 2016</b>	
7. FOR SOLICITATION INFORMATION CALL	a. NAME <b>Ben R. McGrane</b>		b. TELEPHONE NO. (No collect calls) <b>(541) 410-5714</b>	8. OFFER DUE DATE/LOCAL TIME <b>February 26,, 2016</b>	
9. ISSUED BY <b>USDA FOREST SERVICE</b> <b>R6 Fire &amp; Aviation Contracting</b> <b>1740 S.E. Ochoco Way</b> <b>Redmond, OR 97756</b>		CODE	10. THIS ACQUISITION <input type="checkbox"/> UNRESTRICTED <input checked="" type="checkbox"/> SET ASIDE: 100 % FOR <input checked="" type="checkbox"/> SMALL BUSINESS  <input type="checkbox"/> HUBZONE  <input type="checkbox"/> 8(A) NAICS: <b>481212</b> SIZE STD: <b>1500</b>	11. DELIVERY FOR FOB UNLESS BLOCK IS MARKED  <input type="checkbox"/> SEE SCHEDULE	12. DISCOUNT TERMS
15. DELIVER TO <b>USDA FOREST SERVICE</b> <b>R6 Fire &amp; Aviation Contracting</b> <b>1740 S.E. Ochoco Way</b> <b>Redmond, OR 97756</b>		CODE	16. ADMINISTERED BY <b>USDA FOREST SERVICE</b> <b>R6 Fire &amp; Aviation Contracting</b> <b>1740 S.E. Ochoco Way</b> <b>Redmond, OR 97756</b>		
17a. CONTRACTOR/ CODE	FACILITY CODE	18a. PAYMENT WILL BE MADE BY Designate Payment Office <b>USDA FOREST SERVICE</b> <b>ALBUQUERQUE SERVICE CENTER</b> <b>INCIDENT FINANCE</b> <b>101B SUN AVE - NE</b> <b>ALBUQUERQUE, NM 87109</b>			
TELEPHONE NO. FACSIMILE NO. DUNS NO.		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED <input type="checkbox"/> SEE ADDENDUM			
<input type="checkbox"/> 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER					
19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES		21. QUANTITY	22. UNIT	23. UNIT PRICE
	<b>REGION 6 – OREGON &amp; WASHINGTON</b> <b>CALL WHEN NEEDED (CWN)</b> <b>LIGHT FIXED WING SERVICES</b>  <i>SEE SECTION B FOR SCHEDULE OF ITEMS</i>				
25. ACCOUNTING AND APPROPRIATION DATA				26. TOTAL AWARD AMOUNT	
<input checked="" type="checkbox"/> 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA <input checked="" type="checkbox"/> ARE <input type="checkbox"/> ARE NOT ATTACHED. (See <a href="http://www.arnet.gov">www.arnet.gov</a> for FAR Clauses in full text)					
28. <input checked="" type="checkbox"/> CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN <u>1</u> COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.			29. <input type="checkbox"/> AWARD OF CONTRACT: REFERENCE _____ OFFER DATED _____. YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:		
30a. SIGNATURE OF OFFEROR/CONTRACTOR			31a. UNITED STATES OF AMERICA		
30b. NAME AND TITLE OF SIGNER		30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER <b>Ben R. McGrane</b>		31c. DATE SIGNED

**SECTION B  
SUPPLIES OR SERVICES**

**B-1 Schedule of Items**

This is a BPA for fully operated and maintained light fixed wing aircraft services on a Call-When-Needed (CWN) basis. Aircraft shall meet the requirements of this schedule and the specifications included herein.

Awards will not be made for aircraft not considered suitable for the Government's need, or at costs determined to be unreasonable. Materially unbalanced offers/quotes between the base year and option year may be rejected.

**AIRCRAFT AND STANDBY HOURLY RATES**

Item No.	Tail Number.	Make, Model, Year of Aircraft	Mission Codes <sup>/1</sup>	Flight Rate Per Hour- <u>With Pilot</u> 2016	Flight Rate Per Hour- <u>Without Pilot</u> 2016	Flight Rate Per Hour- <u>With Pilot</u> 2017	Flight Rate Per Hour- <u>Without Pilot</u> 2017	Flight Rate Per Hour- <u>With Pilot</u> 2018	Flight Rate Per Hour- <u>Without Pilot</u> 2018	Ordered Standby Rate 2016	Ordered Standby Rate 2017	Ordered Standby Rate 2018	Additional Pilot Rate
1.				\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.				\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.				\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.				\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
5.				\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____

Note: List additional aircraft on separate sheet using same format  
Quotes may reflect single or multiple mission codes

<sup>/1</sup> Mission Codes

A. Point-to Point	D. Resource Reconnaissance
B. Air Tactical	E. Other (i.e., Mountain Remote)
C. Fire Reconnaissance	

**SECTION B  
SUPPLIES OR SERVICES**

**Offered Aircraft  
(Contractor to Complete this Chart)**

Item No.	Empty Weight	HP	Fuel (1)	Fuel Type J = Jet A L= Low Lead	Maximum Certified Gross Weight	Equipment & Capacity Code (2)
1.						
2.						
3.						
4.						
5.						

- (1) Fuel consumption expressed in gallons per hour at 65% power, at 5,000 feet MSL, at ISA, as stated in Aircraft Flight Manual.
- (2) Use Key Below

**Equipment Capacity Codes**

A.	Single Engine – (# of seats: ____ ) Indicate on chart # of seats following the code. (i.e., <b>A 2</b> = single engine with 2 seats)
B.	Multi Engine – (# of seats: ____ ) Indicate on chart # of seats following the code (i.e., <b>B 4</b> = multi engine with 4 seats)
C.	Large Cargo Doors
D.	High Wing
E.	Low Wing
F.	Turbocharged
G.	Turboprop
H.	Jet
I.	Pressurized
J.	Non-Pressurized
K.	Oxygen
L.	Air Tactical Avionics Type 1
M.	Air Tactical Avionics Type 2
N.	Air Tactical Avionics Type 3
O.	Air Tactical Avionics Type 4
P.	Relief Pilot(s) Available
Q.	Infrared
R.	Automated Flight Following (AFF)
S.	Aerial Photography
T.	TCAS/TCAD
U.	Floats: 1. Amphibious 2. Straight
V.	Other

\*Note: In pressurized and non-pressurized aircraft, Pilots shall meet 14 CFR Part 135 Oxygen Requirements.



**SECTION B  
SUPPLIES OR SERVICES**

**B-6 CONTRACTOR FURNISHED SPECIAL REQUIREMENTS** (LFW, Version 2, Date: 11/12/15)

All items checked below are required and must comply with Section C, an Exhibit and/or Federal Regulations.

- Resource Recon Avionics, FM Option \_\_ or higher (See C-7 (a)(3))
- Fire Recon Avionics, FM Option \_\_ or higher (See C-7 (a)(4))
- Air Tactical Avionics, Type \_\_ or better (See C-7 (a)(5))
- Additional VHF-AM Radios: Total A/C Qty: \_\_ (See C-7 (b)(1)(i))
- VHF-FM Radio in lieu of the Aux FM requirement: Total A/C VHF-FM Qty: \_\_ (See C-7 (b)(1)(ii))
- Additional VHF-FM Radios: Total A/C Qty: \_\_ (See C-7 (b)(1)(ii))
- VHF-FM Programming Ports (See C-7 (b)(5)(xi))
- Non-Standard Radio, Type: \_\_\_\_\_ (See C-7 (b)(1)(iv))
- Satellite Communications System: Minutes/Month \_\_\_\_\_ (See C-7 (b)(1)(v))
- Drop Cord for SIC/observer (See C-7 (b)(2)(ii)(B))
- Drop Cord for aft Instructor position (See C-7 (b)(2)(ii)(B))
- Push-To-Talk (PTT) cord for SIC/observer (TELEX PT-300 with VOX or equivalent)
- Push-To-Talk (PTT) cord for aft Instructor (TELEX PT-300 with VOX or equivalent)
- Aft Audio Control System (See C-7 (b)(2)(ii)(C))
- Aeronautical GPS in lieu of a portable GPS (See C-7 (b)(3)(i)(A))
- GPS with Moving Map (See C-7 (b)(3)(i)(C))
- GPS Data connector (See C-7 (b)(5)(xii))
- External Portable Aviation GPS Antenna, GPS Model: \_\_\_\_\_ (See C-7 (b)(5)(xiii))
- Traffic Advisory System (TAS) (See C-7 (b)(4)(v))
- Autopilot (See C-7 (b)(5)(i))
- Radar Altimeter (See C-7 (b)(5)(ii))
- Multi-Function Display (MFD) (See C-7 (b)(5)(iii))
- Auxiliary Power Source (3 Pin) (See C-7 (b)(5)(v))
- USB charging port, Qty: \_\_ Users: \_\_\_\_\_ (See C-7 (b)(5)(xiv))
- Supplemental Antennas, Qty: \_\_ /Band: \_\_\_\_\_ (See C-7 (b)(5)(vi))
- Supplemental Radio Kit Provisions (See C-7 (b)(5)(vii))
- Supplemental Air Attack Kit Provisions (See C-7 (b)(5)(viii))
  
- TSO approved VOR/Localizer, Qty: \_\_
- TSO approved Glideslope, Qty: \_\_

**SECTION B  
SUPPLIES OR SERVICES**

- TSO approved DME, Qty: \_\_ {Not required if GPS is IFR with current database}
- TSO approved Three Light Marker Beacon System, Qty: \_\_
- Satellite Weather system with XM Aviator subscription or equivalent
- Provisions for IFR operation meeting 14 CFR 135.163 & 135.165

**B-7 Excise Taxes**

Excise taxes shall be included in your agreement price IAW FAR Clause 52.212-4(k) Taxes. The contract price includes all applicable Federal, State, and local taxes and duties.

**B-8 Performance Period**

It is contemplated that any Blanket Purchase Agreement (BPA) resulting from this solicitation will be in effect for a period of up to three years. The establishment of this BPA is anticipated by April 2016. The initial pricing will be in effect for 12 months after the award date. If continuance of this BPA is considered to be in the Government's best interest, future orders will be priced in accordance with the Contractor prices, initially proposed, which correspond to year's 2 and 3.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**C-1 Scope of Contract**

- A. The intent of this solicitation and any resultant Contract is to obtain services on a CWN basis of light fixed wing aircraft fully operated by qualified personnel and equipped to meet specifications for use in administration and protection of Public Lands in the Pacific Northwest Region, Region 6 of the Forest Service. Region 6 encompasses the states of Oregon and Washington.
- B. The aircraft furnished may be used for fire support, project, law enforcement, and administrative flights. If the Contractor agrees to perform law enforcement flights, such agreement shall be in writing.
- C. The Government has Interagency and cooperative agreements with Federal and State Agencies and private landholders. Aircraft may be dispatched under this contract for such use.

**C-2 General Certifications**

- A. Contractors shall hold a current Federal Aviation Administration (FAA) Air Carrier or Operating Certificate. Aircraft offered shall be listed by make, model, series, and registration number on the Operators 135 Certificate.
- B. Aircraft shall conform to its approved type design, be maintained and operated in accordance with the requirements of the 14 CFR 135 notwithstanding the aviation regulations of the States in which the aircraft may operate except those requirements specifically waived by the CO.

**C-3 Government Furnished Property**

If Government Furnished Property (GFP) is provided, the Contractor shall be required to sign a property receipt document. Upon Government request, GFP shall be returned to the Government in accordance with GFP (Short Form) FAR Clause 52.245-4 (APR 1984).

**C-4 Aircraft Requirements****A. Aircraft Performance Requirements**

- 1. Single engine aircraft shall have a power loading of not more than 13.5 pounds per horse power.
- 2. Multi engine aircraft shall be capable of at least 200 horse power; per engine; any engine developing less than 240 horse power shall be turbo/super charged. As dictated by Forest Service policy the Region 6 Regional Aviation Officer, by letter, may waive the horsepower requirements for aircraft with demonstrated suitable single engine performance for assignments within Region 6.
- 3. Each takeoff shall meet aircraft climb performance requirements of 14 CFR.

**B. Aircraft condition and equipment. The aircraft shall be in airworthy condition throughout the performance period. All equipment required for original certification shall be installed and operable or be deferrable by an FAA approved Minimum Equipment List (MEL).**

- 1. All aircraft furnished under this contract shall be operable, free of damage, and in good working order. Aircraft systems and components shall be free of leaks, except within limitations specified by the manufacturer.
- 2. The aircraft interior shall be clean and neat. There shall be no un-repaired tears, rips, cracks, or other damage to the interior. All interior materials shall meet FAA standards.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

3. The aircraft exterior finish, including the paint, shall be clean, neat, and in good condition (i.e., no severe fading or large areas of flaking or missing paint etc.) Military or other low visibility paint schemes are unacceptable. Any corrosion shall be within manufacturer or FAA acceptable limits.
4. All windows and windshields shall be clean and free of scratches, cracks, crazing, distortion, or repairs, which hinder visibility. Repairs such as safety wire lacing and stop drilling of cracks are not acceptable as permanent repairs. Prior to acceptance, all temporarily repaired windows and windshields shall have permanent repairs completed or shall be replaced.
5. Fire extinguishers, as required by 14 CFR 135.155, shall be hand-held bottle(s), with a minimum of 1.5 lbs capacity and 2-B:C rating. Fire Extinguishers shall be maintained in accordance with current NFPA 10 standards and mounted with a quick release attachment accessible to the flight crew while seated.
6. Each aircraft shall carry current copies of the following (*FAA approved electronic versions acceptable*):
  - a. Contract and all modifications.
  - b. DOT Exemption 9198 and the Interagency Aviation Transport of Hazardous Materials Handbook/Guide (NFES 1068) and the DOT Emergency Response Guide (if required)
  - c. Aeronautical charts covering area of operation
7. Flight Hour Meter. Each aircraft shall be equipped with a flight hour meter, which measures actual flight time from takeoff to landing in hours and tenths.
8. Cargo Restraint. The Contractor shall furnish tie downs, net(s), or cargo straps meeting requirements of 14 CFR to restrain cargo while in flight.
9. Safety Belts. The aircraft furnished under this contract shall have safety belts for all occupants and shoulder harnesses for front seat occupants meeting requirements of 14 CFR. The shoulder strap and lap belt shall fasten with a metal to metal single point quick release mechanism. Military style harnesses are acceptable. All occupants shall meet the above requirements during takeoffs and landings, when flying within 1,000 feet of the ground, and at other times as specified by the Pilot.

Lap belt and shoulder harness condition. The following are NOT acceptable:

- a. Webbing. Webbing that is frayed 5 percent or more, torn webbing, crushed webbing, swelled webbing that results in twice the thickness of original web, or if difficult to operate through hardware, creased webbing (no structural damage allowed), and sun deterioration if it results in severe fading, brittleness, discoloration, and stiffness.
- b. Hardware. Buckle or other hardware is inoperable, nylon bushing at shoulder harness-to-lap belt connection missing or damaged, fabricated bushings or tie wraps used as bushings, rust/corrosion if not minor in nature, wear beyond normal use.
- c. Stitches. Broken or missing stitches, severe fading or discoloring, inconsistent stitch pattern.
- d. TSO Tags (see 14 CFR 21.607). Missing or illegible tags are unacceptable unless inspection can confirm the suitability of installed equipment.
- e. Age. Belts/fabric over 10 years from date of manufacture require close inspection because of the elements they are exposed to, but do not have to be replaced if it can be determined they are in serviceable condition and not life limited.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

10. **First Aid Kit (Aeronautical).** First aid kit shall be in a dust-proof and moisture-proof container. The kit shall be readily accessible to the Pilot and passengers. At a minimum, the contents shall include the following items:

Item Description	Quantity
Adhesive bandage strips (minimum 3 inches long)	8
Antiseptic or alcohol wipes (packets)	10
Bandage compresses, (minimum 4 inches)	4
Triangular bandage compresses, minimum 40 inch (sling)	2
Roller bandage, minimum 4 inch x 5 yards (gauze)	2
Adhesive tape, minimum 1 inch x 5 yards (standard roll)	1
Bandage scissors	1
Body Fluids Barrier Kit:	1
2-pair of non-latex surgical gloves	
1-face shield	
1-mouth-to-mouth barrier	
1-protective gown	
2-antiseptic towelettes	
1-biohazard disposal bag	

**Notes:** Splints are recommended if space permits.

Kits may be commercially available types which are FAA approved for the appropriate number of crew and passengers carried.

11. **Survival Kit.** Aircraft shall have sufficient equipment to sustain personnel for a 24-hour period. As a minimum, the survival kit shall include the following:

Item Description	
Knife (Includes a multi-tool with a knife)	Signal Mirror
Aviation-type Signal Flares (6-each)	Matches (2-small boxes in waterproof containers)
Space Blanket (1-per occupant)	Water (1-quart per occupant – not required when operating over areas with adequate drinking water)
Food (2-days emergency rations per occupant)	Candles
Collapsible Water Bag	Whistle
Magnesium Fire Starter	Nylon Rope or Parachute Cord (50 feet)

*Suggested additional survival kit items (appropriate to the geographic area.)*

Item Description	
Container w/carrying Handle or Straps	Individual First Aid Kit
Large Plastic Bags	Signal Panels
Flashlight with Spare Batteries	Hand Saw or Wire Saw
Collapsible Shovel	Sleeping Bag (1-per two occupants)
Survival Manual	Snowshoes
Insect Repellent	Axe or Hatchet
Insect Head net (1-per occupant)	Gill Net/Assorted Fishing Tackle
Personal ELT	Sunscreen

**Note:** A hand-held 760 channel VHF transceiver radio or satellite phone is recommended. It should be located on a crewmember rather than placed in the aircraft survival kit.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**C-5 Aircraft Maintenance**

- A. All aircraft shall be maintained to 14 CFR Part 43, 91, and 135 standards. The Contractor shall provide or arrange for sufficient maintenance capability to keep the aircraft in airworthy condition.
- B. The Contractor shall identify the maintenance facilities and/or maintenance personnel used to fulfill the requirements of this contract.
- C. Aircraft operated with components and accessories on approved Time Between Overhaul (TBO) extension programs are acceptable, provided the Contractor who provides the aircraft is the holder of the approved extension authorization (not the owner if the aircraft is leased), and shall operate in accordance with the extension.
- D. Compliance with applicable mandatory manufacturer's bulletins, alert service bulletins, safety of flight bulletins, FAA Airworthiness Directives (AD), and the correction of maintenance deficiencies shall be accomplished prior to delivery and continue during contract performance.
- E. All maintenance shall be accomplished in accordance with the standards established by 14 CFR Part 135; Advisory Circular (AC) 43.13, and the manufacturer's instructions and in accordance with those procedures established in the Contractor's maintenance program approved under 14 CFR Part 135 Operations Specifications.
- F. A copy of the current maintenance record required by 14 CFR 91.417 shall be kept at the Home Base or maintenance facility.
- G. A test flight shall be performed at the Contractor's expense following overhaul, repair, and replacement of any engine (installations of reciprocating engines that are new, rebuilt, or overhauled shall accumulate 3-hours of operation, including 2 hours in flight, prior to Government use), power train, or control equipment, and following any adjustment of the flight control systems before the aircraft resumes service under this contract. The result of any test flight shall be logged in the aircraft flight records by the Pilot. Results of test flights shall be reported to the U.S. Forest Service Aircraft Maintenance Inspector (AMI) before the aircraft is returned to contract availability.
- H. When any non-scheduled maintenance or repairs are performed due to mechanical or equipment deficiencies, an AMI and the Contracting Officer (CO) shall be notified for "return to contract available" status, before the aircraft performs under the contract.
- I. The Interagency Airplane Data Record Card or Point-to-Point Aircraft Data Card shall be posted inside the aircraft.
- J. The aircraft's required weight and balance data shall be determined by actual weighing of the aircraft every 36 calendar months for multi engine aircraft. Mission Use Only single engine aircraft shall be weighed within the previous 5 years, with an updated Equipment List of installed equipment.
- K. All weighing of aircraft shall be performed on scales that have been certified. The certifying agency may be any accredited weights and measures laboratory. Certification of scales shall be within the preceding 12 calendar months from the date of weigh.

**C-6 Aircraft and Equipment Security**

- A. The security of Contractor provided aircraft and equipment is the responsibility of the Contractor.
- B. Aircraft shall be electrically and/or mechanically disabled by two independent security systems whenever the aircraft is unattended. Deactivating security systems shall be incorporated into preflight checklists to prevent accidental damage to the aircraft or interfere with safety of flight.

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

- C. Examples of Unacceptable disabling systems are:
1. Locked door/windows; and/or
  2. Fenced parking areas.

**C-7 AVIONICS**

**(a) MINIMUM REQUIREMENTS**

All avionics used to meet this agreement shall comply with the requirements of paragraph (b) *AVIONICS SPECIFICATIONS* and paragraph (c) *AVIONICS INSTALLATION AND MAINTENANCE STANDARDS*. The following are the minimum avionics which shall be installed. Additional avionics may be required in section B of this agreement.

(1) Point to Point Aircraft

- (i) Point to Point flights shall meet the requirements of 14 CFR 135. No additional avionics are required.

(2) Back Country Aircraft

- (i) Aircraft operating to or from airfields or airstrips designated as Category 4 and are not otherwise conducting special use missions shall meet the requirements of paragraph (a)(3) excluding (a)(3)(ii).

(3) Resource Reconnaissance Aircraft (All aircraft which are not used for fire operations or covered by paragraphs (a)(1) or (a)(2))

- (i) One VHF-AM Radio (COM)  
(ii) One Global Positioning System (GPS)  
(iii) An Emergency Locator Transmitter (ELT)  
(iv) An Automated Flight Following system (AFF) {Not required for aircraft only used for Law Enforcement}  
(v) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.  
(vi) One of the following options for FM communications
- (A) Option 1  
(1) One Supplemental VHF-FM Antenna
- (B) Option 2  
(1) An Intercom System (ICS)  
(2) An Audio Control system  
(3) One Auxiliary FM system (AUX FM)
- (C) Option 3  
(1) Provisions for a Supplementary Radio Kit
- (D) Option 4  
(1) An Intercom System (ICS)  
(2) An Audio Control system  
(3) One VHF-FM Radio (FM)

(4) Fire Reconnaissance Aircraft

- (i) Two VHF-AM Radios (COM 1 and COM 2)

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- (ii) One Global Positioning System (GPS)
  - (iii) An Emergency Locator Transmitter (ELT)
  - (iv) An Automated Flight Following system (AFF)
  - (v) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.
  - (vi) One of the following options for FM communications
    - (A) Option 1
      - (1) Two Supplemental VHF-FM Antennas
    - (B) Option 2
      - (1) Provisions for a Supplementary Radio Kit
    - (C) Option 3
      - (1) An Intercom System (ICS)
      - (2) An Audio Control system
      - (3) One VHF-FM Radio (FM)
- (5) Air Tactical Aircraft
- (i) Type 1
    - (A) Two VHF-AM Radios (COM 1 & COM 2)
    - (B) Two VHF-FM Radios (FM 1 & FM 2)
    - (C) One Auxiliary FM system (AUX FM)
    - (D) An Intercom System (ICS)
    - (E) Separate Audio Control systems for the PIC and SIC/observer
    - (F) Audio jacks with ICS and radio transmit capability in the rear seat connected to the SIC/observer Audio Control system. An Aft Audio Control system for this position is acceptable.
    - (G) One Global Positioning System (GPS)
    - (H) An Emergency Locator Transmitter (ELT)
    - (I) An Automated Flight Following system (AFF)
    - (J) One Transponder
    - (K) One Altimeter and Automatic Pressure Altitude Reporting system
    - (L) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.
  - (ii) Type 2
    - (A) Two VHF-AM Radios (COM 1 & COM 2)
    - (B) One VHF-FM Radio (FM)
    - (C) One Auxiliary FM system (AUX FM)
    - (D) An Intercom System (ICS)
    - (E) Separate Audio Control systems for the PIC and SIC/observer
    - (F) Audio jacks with ICS and radio transmit capability in the rear seat connected to the SIC/observer Audio Control system. An Aft Audio Control system for this position is acceptable.
    - (G) One Global Positioning System (GPS)
    - (H) An Emergency Locator Transmitter (ELT)
    - (I) An Automated Flight Following system (AFF)
    - (J) One Transponder
    - (K) One Altimeter and Automatic Pressure Altitude Reporting system

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(L) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.

(iii) Type 3

- (A) Two VHF-AM Radios (COM 1 & COM 2)
- (B) One VHF-FM Radio (FM)
- (C) An Intercom System (ICS)
- (D) An Audio Control system
- (E) One Global Positioning System (GPS)
- (F) An Emergency Locator Transmitter (ELT)
- (G) An Automated Flight Following system (AFF)
- (H) One Transponder
- (I) One Altimeter and Automatic Pressure Altitude Reporting system
- (J) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.

(iv) Type 4

- (A) Two VHF-AM Radios (COM 1 & COM 2)
- (B) An Audio Control system
- (C) One Global Positioning System (GPS)
- (D) An Emergency Locator Transmitter (ELT)
- (E) An Automated Flight Following system (AFF)
- (F) One Transponder
- (G) One Altimeter and Automatic Pressure Altitude Reporting system
- (H) Provisions for a Supplemental Air Attack Kit
- (I) Equipment and lighting for night VFR operations in accordance with 14 CFR 135.159 and 14 CFR 135.161.

Note 1: Air Tactical aircraft equipped with an approved TAS shall be identified "w/TAS" on the aircraft approval card.

Note 2: If a Supplemental Radio Kit is provided with the aircraft, "with radio kit" shall be identified on the aircraft approval card.

Note 3: Supplemental Air Attack Kit installations shall not elevate the aircraft's capability beyond the type for which it would otherwise be approved.

Note 4: ADS-B OUT will be required for Air Tactical Aircraft beginning January 1st 2020.

**(b) AVIONICS SPECIFICATIONS**

All avionics used to meet this agreement shall comply with the following requirements and paragraph (c) *AVIONICS INSTALLATION AND MAINTENANCE STANDARDS*.

(1) Communications systems

Transmitters shall not open squelch on, or interfere with, other AM or FM transceivers on the aircraft which are monitoring different frequencies. Transmit interlock functions shall not be used with communication transceivers.

(i) VHF-AM Radios

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VHF-AM radios shall be TSO approved aeronautical transceivers, permanently installed, and operate in the frequency band of 118.000 to 136.975 MHz with a minimum of 760 channels in no greater than 25 KHz increments. Transmitters shall have a minimum of 5 Watts carrier output power.

(ii) VHF-FM Radios

All aircraft approved for fire operations shall use P25 Digital VHF-FM transceivers meeting the specifications of FS/OAS A-19. FM radios used in all aircraft shall be agency approved. FS/OAS A-19 and a list of currently approved FM radios can be found on the following website: <http://www.nifc.gov/NIICD/documents.html> . The following requirements shall be met.

(A) VHF-FM radios shall be aeronautical transceivers, permanently installed in a location that is convenient to the PIC and SIC/observer, and operate in the frequency band of 138 to 174 MHz. All usable frequencies shall be programmable in flight. Narrowband and digital operation shall be selectable by channel for both MAIN and GUARD operation. Carrier output power shall be 6-10 Watts nominal.

(B) Transceivers shall have a GUARD capability constantly monitoring 168.625 MHz and have a tone of 110.9 on all GUARD transmissions. Simultaneous monitoring of MAIN and GUARD is required. Scanning of GUARD is not acceptable. Aircraft not approved for Air Tactical operation only require one FM GUARD receiver.

(C) Transceivers shall have the capability of encoding CTCSS sub audible tones on all channels. A minimum of 32 tones meeting the current TIA/EIA-603A standards shall be selectable.

(D) Transceivers shall have the capability to display both receiver and transmitter frequencies. Activation indicators for transmit and receive shall be provided for both MAIN and GUARD operation.

(E) The radio shall use an external broadband antenna covering the frequency band of 138 to 174 MHz (Comant CI-177-1 or equivalent).

(iii) Auxiliary FM systems (AUX FM)

An interface to properly operate a portable FM radio through the aircraft audio control systems shall be provided using an MS3112E12-10S type bulkhead mounted connector with contact assignments as specified by FS/AMD A-17 available at the following website: <http://www.nifc.gov/NIICD/documents.html> . Sidetone for the portable radio shall be provided (AEM AA34 or equivalent). The following applies to all AUX FM installations.

(A) An external broadband antenna covering the frequency band of 138 to 174 MHz (Comant CI-177-1 or equivalent) shall be installed with the associated coax terminated in a bulkhead mounted BNC connector adjacent to the above 10 pin connector.

(B) A portable radio mount (Field Support Services AUX-EPH-RB or equivalent) shall be installed providing the crew unrestricted operation of the radio controls when connected with an 18 inch adapter cable.

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(C) A VHF-FM radio meeting the requirements of paragraph 2.A.2) may be installed, in addition to the radios already required, in lieu of the AUX FM system.

(iv) Non-Standard Radios

Non-standard radios shall be aeronautical transceivers interfaced to the aircraft audio control systems and a compatible antenna via an approved installation. The radio shall be compatible with the requesting unit.

(v) Satellite Communications System (SatCom)

(A) SatCom systems shall be FAA approved, powered by the aircraft electrical system via a dedicated circuit breaker, interfaced to the aircraft audio system as a communication transceiver, permit direct dial operation, and be operational in all phases of flight.

(B) All manufacturer required displays and controls shall be easily visible and selectable by the PIC and SIC/Observer.

(C) The contractor shall maintain a subscription providing uninterrupted service during the contract period and a minimum amount of minutes per month as identified in Section B. The Government will reimburse the contractor for actual costs incurred when using more than the required amount of minutes specified.

(2) Audio Systems

(i) Intercom systems (ICS)

ICS shall integrate with the aircraft audio control systems and mix with selected receiver audio. An ICS volume control and a "hot mic" capability shall be provided for the PIC and SIC/observer. Passenger volume adjustments shall not affect the PIC. Hot mic may be voice activated (VOX) or controlled via an activation switch. The PIC shall have an isolation capability.

(ii) Audio Control systems

(A) General

Controls for transmitter selection and independent receiver selection of all required radios shall be provided for each required audio control system. Each system shall have the capability to simultaneously select and utilize a different transceiver (and PA if required). Sidetone shall be provided for the user as well as for cross monitoring by all installed systems. Receiver audio shall be automatically selected when the corresponding transmitter is selected. Receiver audio shall be provided to each position which requires ICS. Aft audio control systems are not required to provide NAV audio.

All required passenger positions shall utilize the SIC/observer's audio control system unless an aft audio control system is installed. Drop cords may be used provided MS3112E10-6S type 6-pin connectors are installed adjacent to the required passenger headset jacks and wired for compatibility with an appropriate drop cord (Alpine Aerotech AAL280 series or equivalent).

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Audio controls shall be labeled as COM-1, FM-1, AUX, PA etc... as appropriate or as COM-1, COM-2, COM-3, etc... with the corresponding transceiver labeled to match. Audio shall be free of distortion, noise, or crosstalk. The system shall be designed for use with 600 ohm earphones and carbon equivalent, noise cancelling, boom type microphones. All required positions shall have JJ-033 and JJ-034 type microphone and headphone jacks separated by no more than 4 inches. Cockpit speakers shall be sufficiently amplified for use in flight.

Crew positions shall have radio Push-To-Talk (PTT) switches on their respective flight controls. A PTT switch shall be provided to allow the SIC/observer to transmit without touching the flight controls.

**(B) Drop Cord Requirements**

- (1) Coil cord with sufficient length to provide unrestricted movement according to mission requirements (Minimum 3 feet retracted)
- (2) 6-Pin MS3476L10-6P type connector on the coil cord
- (3) JJ-033 and JJ-034 type headset jacks at the housing
- (4) Large clip
- (5) Volume control
- (6) ICS switch with momentary and lock positions
- (7) Radio PTT switch (only for positions which require radio transmit)

**(C) Aft Audio Control systems**

The audio controller shall be installed in a location that provides the operator directly behind the SIC/observer unobstructed access to the controls while seated. Aft passengers shall utilize the aft audio control system(s).

**(D) Required Audio Control systems**

The following audio control systems are required based on mission type

**(1) Type I and Type II Air Tactical airplanes**

- (a) Two separate audio control systems (which may be combined in a single unit) for the PIC and SIC/observer
- (b) The instructor position (directly behind the SIC/observer) shall have radio transmit capability. This position shall follow the SIC/observer system or have an aft audio control system.

**(2) Type III and Type IV Air Tactical airplanes**

A single audio control system for the PIC and SIC/observer

**(3) Reconnaissance airplanes (when required)**

A single audio control system for the PIC and SIC/observer

**(3) Navigation systems**

**(i) Global Positioning Systems (GPS)**

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(A) Aeronautical GPS

Each required GPS shall be TSO approved, permanently installed where both the PIC and SIC/observer can clearly view the display, use an approved external aircraft antenna, and be powered by the aircraft electrical system. The GPS shall utilize the WGS-84 datum, reference coordinates in the DM (degrees/minutes/decimal minutes) format and have the ability to manually enter waypoints in flight. The GPS navigation database shall be updated annually covering the geographic areas where the aircraft will operate.

(B) Portable Aviation GPS

Portable aviation GPS units (Garmin GPSMAP, aera, or equivalent) are acceptable when an Aeronautical GPS is not specified. They shall be securely mounted via an approved installation using the aircraft electrical system and a remote antenna. The GPS shall present information from an overhead perspective. The PIC shall have clear view of the display and unrestricted access to the controls. The SIC/observer shall also have a clear view of the display in Air Tactical aircraft. The GPS shall meet the above datum, coordinate, and database requirements for an aeronautical GPS. Portable GPS units are not acceptable for aircraft performing IFR or NVG operations.

(C) GPS with Moving Map

The GPS providing data to the moving map shall meet all of the above GPS requirements. The moving map's display shall be 3 inches wide, 1.5 inches high, and show the aircraft's present position relative to user selected waypoints and geographical features. The map may be integrated with the GPS.

(4) Surveillance systems

(i) Emergency Locator Transmitters (ELT)

Emergency locator transmitters shall be automatic-fixed, installed in a conspicuous or marked location, and meet the requirements detailed in 14 CFR 91.207 (excluding section f). ELT antennas shall be mounted externally to the aircraft unless installed in a location approved by the aircraft manufacturer. TSO C91a or newer ELTs are required. TSO C126 and newer ELTs require documentation of current registration from the national authority for which the aircraft is registered.

(ii) Automated Flight Following systems (AFF)

Automated flight following systems shall be compatible with the government's tracking program (AFF.gov), utilize satellite communications, and use aircraft power via a dedicated circuit breaker. AFF shall be functional in all phases of flight and in all geographic areas where the aircraft will operate. The following additional requirements shall be met.

(A) A subscription service shall be maintained through the equipment provider allowing position reporting via the Government AFF Program. The reporting interval shall be every two minutes while in flight.

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(B) AFF equipment shall be registered with AFF.gov providing all requested information. Changes to equipment and registration information shall be reported to AFF.gov ensuring the program is current prior to aircraft use. For assistance, the Fire Applications Help Desk (FAHD) may be reached at (866) 224-7677 or (360) 326-6002.

(C) An AFF operational test shall be performed prior to the annual compliance inspection. This test shall ensure that the system meets all requirements and is displayed in the AFF viewer with the correct information. A user name and password are required. Registration and additional information are available at <https://www.aff.gov>.

(D) If AFF becomes unreliable the aircraft may, at the discretion of the Government, remain available for service utilizing radio/voice systems for flight following. The system shall be returned to full operational capability within 5 calendar days after the system is discovered to be unreliable.

(E) This clause incorporates the *Specific Section Supplement* available at <https://www.aff.gov/contractspecs.asp> as if it was presented as full text herein.

(F) For questions about current compatibility requirements contact the AFF Program Manager listed under contacts at <https://www.aff.gov>

(iii) Transponders

Transponder systems shall meet the requirements of 14 CFR 91.215(a). Part 135 aircraft shall meet the "Mode S" requirements of 14 CFR 135.143(c). Transponder systems shall be tested and inspected every 24 calendar months as specified by 14 CFR 91.413.

(iv) Altimeter and Automatic Pressure Altitude Reporting systems

Altimeter, static pressure, and automatic pressure altitude reporting systems shall be installed and maintained in accordance with the IFR requirements of 14 CFR Part 91. These systems shall be tested and inspected every 24 calendar months as specified by 14 CFR 91.411.

(v) Traffic Advisory Systems (TAS)

Traffic advisory systems shall be TSO approved, use active interrogation, graphically display traffic relative to the aircraft's horizontal position, and provide alert audio to the PICs audio control system. The display shall be within view of the PIC and SIC/observer. The system shall provide coverage in all directions above and below the aircraft with a maximum range of at least 10 nautical miles. The display shall allow range selection of 2 miles or less.

(vi) Automatic Dependent Surveillance – Broadcast (ADS-B)

(A) ADS-B OUT systems must be approved to TSO-C154c or TSO-C166b. Aircraft operating outside of the United States must be equipped with systems approved to TSO-C166b.

(B) ADS-B IN systems must be TSO approved, use diversity antennas on top and bottom of the aircraft, receive both UAT and 1090ES, and be interfaced to a

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multifunction display (MFD) capable of displaying TIS-B traffic and FIS-B weather.

(5) General Systems

(i) Autopilots

Autopilots shall be capable of operating the aircraft controls to maintain flight and maneuver it about the three axes.

(ii) RADAR Altimeters

RADAR altimeters shall be approved, operate from zero to a minimum of 2000 feet AGL and provide the operator an adjustable cursor which enables an altitude low (decision height) annunciation. The altitude low annunciation shall be clearly identified, and in the PIC's primary field of view.

(iii) Multi Function Displays (MFD)

MFDs shall be installed within view of the PIC and display GPS navigation information on a color moving map. TAS and weather datalink information shall be displayed on the MFD when these systems are required.

(iv) Cockpit Voice Recorder (CVR)

Cockpit voice recorders shall meet all applicable regulations for standard and transport category aircraft.

(v) Auxiliary Power Source (3 Pin)

An MS3112E12-3S type connector shall be installed and mounted in a location convenient to the SIC/observer and protected by a 10 Amp circuit breaker. Pin A shall be +28 VDC in 28 Volt aircraft. Pin B shall be airframe ground. Pin C shall be +14 VDC in 14 Volt aircraft. Pins A and C shall never be simultaneously wired to the connector. Refer to FS/OAS A-16.

(vi) Supplemental Antennas

Supplemental antennas shall be aeronautical broadband antennas and operate in the correct frequency band for the specified use. An approved coax, with sufficient length to connect to a unit installed between the PIC and SIC/observer plus 4 feet (minimum), shall be installed and terminated with a male BNC. The following antennas or equivalents shall be used.

- (A) Low Band (32-50 MHz): Dayton-Granger 720061
- (B) VHF-FM (138-174 MHz): Comant CI-177-1
- (C) UHF 400-500 (406-512 MHz): Comant CI-275
- (D) UHF 700-800 (721-898 MHz): Comant CI-285

(vii) Supplemental Radio Kit Provisions

Space and mounting provisions between the PIC and SIC/observer shall be provided for the installation of a radio kit. The location shall allow for connection to the aircraft systems without interfering with flight controls or occupants. JJ-033 and JJ-034 audio

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jacks shall be installed next to the PIC and SIC/observer and interfaced to the PICs audio control system with PTT capability. The jack pair shall not be separated by more than 4 inches. An auxiliary power source shall be installed (paragraph (b)(5)(v)). A supplemental VHF-FM antenna shall be installed (paragraph (b)(5)(vi)).

(viii) Supplemental Air Attack Kit Provisions

Provisions for a supplemental radio kit (paragraph (b)(5)(vii)) shall be provided, and a second supplemental VHF-FM antenna shall be installed.

(ix) Supplemental Radio Kits

Supplemental radio kits provided with the aircraft shall be securely installed between the PIC and SIC/observer, meet FAA flammability requirements, and be interfaced to the aircraft via the provisions of paragraph (b)(5)(vii). The radio kit shall provide the capability for the aircraft to meet the equipment requirements of a Resource Reconnaissance Aircraft. See paragraph (a)(3).

(x) Supplemental Air Attack Kits

Supplemental air attack kits provided with the aircraft shall be securely installed between the PIC and SIC/observer, meet FAA flammability requirements, and be interfaced to the aircraft via the provisions of paragraph (b)(5)(viii). The air attack kit shall provide the capability for the aircraft to meet the equipment requirements of a Type II Air Tactical Aircraft. See paragraph (a)(5)(ii).

(xi) VHF-FM Programming Ports

DB-9 type D-subminiature connectors shall be installed in a location convenient to the SIC/observer. These shall be wired for RS232 serial communication between all required VHF-FM radios and a laptop computer. Individual connectors or an FM select switch may be used. Pin 2 shall be data transmitted from the FM. Pin 3 shall be data received by the FM. Pin 5 shall be signal ground. Compatible radio front panel connectors may be used to meet this requirement if serial adapter cables are provided with the aircraft. For example TDFM 136A radios s/n FDA1200 and higher.

(xii) GPS Data Connectors

DB-9 type D-subminiature connectors shall be installed in a location convenient to the SIC/observer. These shall be wired to receive RS232 serial data from the GPS to a laptop computer. Pin 2 shall be data transmitted from the GPS. Pin 5 shall be signal ground.

(xiii) External Portable Aviation GPS Antennas

Antennas shall be TSO approved and compatible with the portable aviation GPS of the requesting unit.

(xiv) USB Charging Ports

USB charging ports must be TSO approved, capable of providing at least 2 amps of power to each port simultaneously with an output voltage of 5 VDC and installed in a location convenient to the specified users.

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**(c) AVIONICS INSTALLATION AND MAINTENANCE STANDARDS**

All avionics used to meet this agreement shall comply with the manufacturer's specifications and installation instructions, federal regulations, and the following requirements.

- (1) Strict adherence to the guidelines in FAA AC 43.13-1B Chapter 11 "Aircraft Electrical Systems" and Chapter 12 "Aircraft Avionics Systems" as well as FAA AC 43.13-2B Chapter 1 "Structural Data", Chapter 2 "Communication, Navigation and Emergency Locator Transmitter System Installations" and Chapter 3 "Antenna Installation" is required.
- (2) All antennas shall be FAA approved, have a Voltage Standing Wave Ratio (VSWR) less than 3.0 to 1 and be properly matched and polarized to their associated avionics system.
- (3) Labeling and marking of all avionics controls and equipment shall be understandable, legible, and permanent. Electronic label marking is acceptable.
- (4) Avionics installations shall not interfere with passenger safety, space or comfort. Avionics equipment shall not be mounted under seats designed for energy attenuation. In all instances, the designated areas for collapse shall be protected.
- (5) All avionics equipment shall be included on the aircraft's equipment list by model, nomenclature, and location.
- (6) Avionics systems shall meet the performance specifications of FS/OAS A-24 *Avionics Operational Test Standards*. For a copy of all FS/OAS documents visit <http://www.nifc.gov/NIICD/documents.html>.

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**C-10 Operations**

A. General

1. Public use status notwithstanding, the Contractor shall operate in accordance with their approved FAA Operations Specifications and all portions of 14 CFR 39, 43, 61, 91, 135 (including those portions applicable to civil aircraft) and each certification required under this Contract unless otherwise authorized by the CO.
2. A Government Representative, Aviation Manager or Flight Manager may inspect the Pilot's Interagency Airplane Pilot Qualification Card for currency before any flight. The Flight Manager has mission control and can delay, terminate, or cancel a flight at any time.
3. Vendors that hold similar contracts with other government agencies (State and/or Federal) may be required to carry a cooperator letter when USFS Personnel are on board the aircraft

B. Pilot Authority and Responsibilities

1. The Pilot-In-Command (PIC) is responsible for the safety of the aircraft, loading and unloading of occupants and cargo. The Pilot shall comply with the directions of the Government, except when in

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the Pilot's judgment compliance will be a violation of applicable federal or state regulations or contract provisions. The Pilot has final authority to determine whether the flight can be accomplished safely and shall refuse any flight or landing which is considered hazardous or unsafe.

2. The Pilot is responsible for computing the weight and balance for all flights and for assuring that the gross weight and center of gravity do not exceed the aircraft's limitations.
3. A takeoff performance briefing shall be conducted daily and will contain the following elements based on the forecasted worst case environmental conditions:
  - a. Takeoff distance required vs. runway available.
  - b. Climb performance to include single engine if operating a multi-engine aircraft.
  - c. A subsequent takeoff performance briefing will be conducted if during the day a takeoff is performed from an airport with a higher density altitude than originally planned.

Under no circumstances will a takeoff be attempted if existing environment conditions at takeoff cannot be accurately addressed in the Aircraft Flight Manual (AFM) or Pilots Operating Handbook (POH).

4. No equipment such as radios, survival gear, fire tools, etc., shall be located in or on the aircraft in such a manner as to potentially cause damage, injury, or obstruct the operation of equipment or personnel.
5. Pilots will use an approved 14 CFR 135 cockpit checklist for all flight operations.
6. Single Engine Aircraft shall not operate in known instrument meteorological conditions (IMC).
7. Cell Phone Use. Cell phone use is prohibited within 50 feet of the aircraft during fueling operations.
8. Smoking is prohibited within 50-feet of fuel servicing vehicle, fueling equipment, or aircraft.
9. Aircraft Engine(s):
  - a. Prior to passenger or cargo loading/unloading, all engines shall be shut down, and all propellers shall have ceased rotation.
  - b. Aircrafts shall not be refueled while engines are running, propellers turning, or with passengers on board.
  - c. The Pilot shall not leave the cockpit of an aircraft unattended while the engine(s) are running.
10. Night Flying/Operations. Only multi-engine aircraft or turbine powered single-engine aircraft are approved for transporting passengers and/or cargo at night. Pilots flying night missions shall not land at an airport unless it meets Federal Aviation Administration (FAA) airport lighting standards.
  - a. Notwithstanding the FAA definition of night in 14 CFR Part 1, Sec 1.1; for ordered flight missions that are performed under the contract, night shall mean: 30 minutes after official sunset to 30-minutes before official sunrise, based on local time of appropriate sunrise/sunset tables nearest to the planned destination.
  - b. Single engine aircraft flights at night are authorized only for ferry and cargo carrying missions at the Contractor's option and in accordance with 14 CFR 91.
11. The Pilot shall not permit any passenger in the aircraft or any cargo to be loaded unless authorized by the CO or COR

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12. Passenger Briefing

Before each takeoff, the PIC shall ensure that all passengers have been briefed in accordance with the briefing items contained in 14 CFR 135 including (as applicable): **(Note: Pilots shall refer to Five Steps to a Safe Flight card (FS 5700-16/AMD-103))**

- a. Use of seat belts and/or shoulder harness
- b. Ingress/Egress procedures
- c. Emergency Locator Transmitter (ELT)
- d. Oxygen system
- e. No smoking within 50-feet of the aircraft
- f. First Aid Kit
- g. Survival Kit
- h. Personal Protective Equipment
- i. Location and use of Fire Extinguisher
- j. Takeoff and climb performance (C-10.B.3)
- k. Emergency Fuel and Electrical shut off procedures

13. Flight Plans

Pilots shall file, open, and operate on a FAA, ICAO, or a USDA-FS approved flight plan for all flights. Contractor flight plans are not acceptable. Flight plans shall be filed prior to takeoff when possible.

14. Flight Following

Pilots are responsible for flight following with the FAA, ICAO, or in accordance with USDA-FS approved flight following procedures including Automated Flight Following (AFF).

15. Manifesting

Prior to any takeoff, the PIC shall provide the appropriate USDA-FS dispatch office/coordination center with current passenger and cargo information.

16. Transportation of Hazardous Material (HazMat)

- a. Aircraft may be required to carry hazardous materials in accordance with 49 CFR. Such transportation shall be in accordance with DOT Special Permit and the Interagency Aviation Transport of Hazardous Materials Handbook/Guide (NFES 1068). A copy of the current permit and handbook/guide and emergency response guide shall be aboard each aircraft operating under the provisions of this special permit.
- b. It is the Contractor's responsibility to ensure that Contractor employees who may perform a function subject to this special permit receive training on the requirements and conditions of this handbook/guide. Documentation of this training shall be retained by the company in the employee's records and made available to the Government as required. Though applicable FAR's pertaining to hazmat training must adhered to, another recommended training course

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that covers agency policy is A-110 which is available online at the IAT (Interagency Aviation Training) website [www.iat.gov](http://www.iat.gov)

- c. The Pilot shall ensure personnel are briefed of specific actions required in the event of an emergency. The Pilot shall be given initial written notification of the type, quantity, and the location of hazardous materials placed aboard the aircraft before the start of any project. Thereafter, verbal notification before each flight is acceptable. For operations where the type and quantity of the materials do not change, repeated notification is not required.
- d. It is the responsibility of the Contractor to ensure that Contractor employees have received training in the handling of hazardous materials in accordance with 49 CFR 172.

**C-11 Personnel**

Pilot Experience Requirements. The PIC shall hold a currently valid FAA commercial or higher Pilot certificate with current instrument rating. In addition, the Pilot shall also have logged flight time as PIC in fixed-wing aircraft of at least the following minimum amounts:

A. Flight Hours Experience

All airplanes	Flying hours
Total time	1500
Pilot-in-command total	1200
Pilot-in-command, as follows:	
Category and class to be flown	200
Fixed wing – preceding 12-months	100
Cross Country	500
Operations in low level mountainous terrain*	200
Night	100
Instrument – in flight	50
Instrument – actual/simulated	75
Make & Model to be flown	25
Make & Model - preceding 60 days	10

\*Low level mountainous terrain is flight at 2500 feet AGL and below in terrain identified as mountainous in 14 CFR 95.11 and depicted in the Aeronautical Information Manual (AIM) Figure 5-6-2.

- B. Each PIC shall, at the discretion of the CO, pass a Government evaluation ride (not to exceed 2-hours) in make and class.
- C. Mountain/Remote Airstrips: Pilots flying missions to Category 4 mountain/remote airstrips shall have successfully passed an evaluation ride given by a qualified Forest Service Pilot Inspector into a minimum of two typical mountain/remote airstrips and shall have a mountain/remote airstrip endorsement on their Interagency Airplane Pilot Qualification Card. Prior to dispatching a Pilot into a mountain/remote airstrip the designated Company Check Pilot or Contractor will brief the Pilot on the hazards associated with the airstrip and verify that the Pilot meets initial, recurrent and 12-month specific mountain/remote airstrip requirements. Individual National Forests may have specific requirements for a particular airstrip. The appropriate dispatch office should be contacted to obtain current airstrip information. Before dispatching an aircraft into a Category 4 airstrip, a Pilot shall meet special requirements and the mission shall be coordinated with the local Forest.

Category 4 mountain/remote airstrips are restricted by the Forest Service to day VFR flight only. Use authorization shall be obtained from the appropriate dispatch office. Pilots shall have an endorsement on their Interagency Airplane Pilot Qualification Card

The Contractor shall provide the CO a list of Category 4 mountain/remote airstrips for which each Pilot is authorized.

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- D. The PIC shall be capable of performing basic programming functions and operations of Contractor installed aircraft avionics. This includes the ability to enter and utilize newly assigned frequencies and tones by selected channel positions. The PIC shall be able to instruct the Agency observer in how to perform basic programming and operation of VHF-AM and VHF-FM radios, and GPS.
- E. All Pilots shall possess a current Class I or Class II FAA medical certificate.
- F. All Pilots shall possess and carry a current Interagency Airplane Pilot Qualification Card or Point-to-Point Only Pilot Qualification Card, in accordance with the Schedule of Items.
- G. All Pilots shall speak English fluently.
- H. Two Pilots may be required on aircraft engaged in IFR missions. Pilots in addition to the PIC shall meet the following requirements:
  - 1. Hold current FAA commercial pilot certificate.
  - 2. Have current FAA instrument rating.
  - 3. Have valid FAA multi-engine rating.
  - 4. Current 14 CFR Part 135 equipment check.

**C-12 Personnel - Conduct and Pilot Approvals**

- A. Performance of Contract services may involve work and/or residence on Federal property. Contractor employees are expected to follow the rules of conduct established by the manager of such facilities that apply to all Government or non-Government personnel working or residing on such facilities. The Contractor may be required to replace employees who are found to be in noncompliance with Government facility rules of conduct.
- B. Personnel, who perform ineffectively, refuse to cooperate in the fulfillment of the Contract objectives, are unable or unwilling to adapt to field living conditions, or whose general performance is unsatisfactory or otherwise disruptive may be required to be replaced at the Contractor's expense.
- C. The CO shall notify the Contractor of specifics of the unsatisfactory conduct and/or performance by the Contractor's personnel. The determination of unacceptability is at the sole discretion of the CO. When directed by the CO, the Contractor shall replace unacceptable personnel.
- D. Pilot Approvals, Qualifications and Records Check
  - (1) Interagency Pilot Inspectors will verify that Contractor pilots meet the experience and qualification requirements under this contract.
  - (2) PIC's shall pass a flight evaluation within a 36 month period. The government retains the right to have a flight evaluation conducted at any time. The evaluation will be conducted in accordance with the Interagency Helicopter Practical Test Standards ([http://www.nifc.gov/aviation/av\\_documents/av\\_helicopters/IHPPTS.pdf](http://www.nifc.gov/aviation/av_documents/av_helicopters/IHPPTS.pdf)) and per the contract specifications. The flight check will be in an aircraft supplied by the Contractor at no expense to the Government. The satisfactory completion of the evaluation flight will not substitute for any of the total flight hour requirements listed in this clause.
  - (3) Pilots shall complete appropriate portions of the Helicopter Pilot Qualifications and Approval Record (Form FS-5700-20a) prior to helicopter pilot inspector evaluation. FS-5700-20a can be found at [http://www.nifc.gov/aviation/av\\_helicopters.html](http://www.nifc.gov/aviation/av_helicopters.html) (Helicopter Pilot Qualifications and Approval Record). When approved, each pilot will be issued an Interagency Helicopter Pilot Qualification Card documenting: Company, make, model and series of aircraft approved to operate and the missions each pilot is approved to perform. Pilot cards are contractor specific and are non-transferable. The Regional Helicopter Inspector Pilot, with the concurrence of the National Helicopter Standardization Pilot and the National Helicopter Program Manager, will be

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the final authority in determining the number of aircraft and/or vendors for which the pilot will be carded. Generally the maximum number of aircraft that a pilot can be carded for will be three (3).

(4) Homeland Security Presidential Directive (HSPD) 12 background investigations are no longer required by contract. Flight crew member record checks are required in accordance with 49 USC 44703 and 49 CRF 1544.230, regardless of the type of operation being conducted (parts 91,121,125,133,135,137 or public aircraft operations). The contractor will request, receive, and evaluate performance and safety related information (as specified by the law and regulation) before allowing any pilot to begin service as a flight crew member under this contract. Records of compliance will be available for review by the contracting officer or designated government representative

**C-13 Suspension and Revocation of Personnel**

- A. The CO may suspend a Contractor pilot who fails to follow safe operating practices, does ineffective work, or exhibits conduct detrimental to the purpose for which contracted, or is under suspension or revocation by another government agency.
- B. Upon involvement in an Aircraft Accident or NTSB Reportable Incident (see 49 CFR Part 830), a Pilot operating under this contract shall be suspended from performing Pilot duties under this contract and any other activity authorized under the Interagency Pilot Qualification Card(s) issued to the Pilot pending the investigation outcome.
- C. Upon involvement in an Incident with Potential as defined under mishaps, a Pilot operating under this contract may be suspended from performing Pilot duties under this contract and any other activity authorized under the Interagency Pilot Qualification Card(s) issued to the Pilot pending the incident investigation outcome.
- D. When a Pilot is suspended, and when requested, the Interagency Pilot Qualification Card(s) shall be surrendered to the CO. Suspension will continue until:
  - 1. The investigation findings and decision indicate no further suspension is required and the Interagency Pilot Qualification Card(s) is returned to the Pilot.

**OR**

  - 2. Revocation action to cancel the interagency pilot-authorization(s) is taken by the issuing agency in accordance with agency procedures.

**C-14 Substitution or Replacement of Personnel, Aircraft, and Equipment**

- A. The Contractor may substitute or replace aircraft or equipment equal to or greater than contract awarded performance after receipt of written approval by the CO.
- B. Request for substitution shall be made at least 10 (ten) days prior to the proposed exchange, except for unforeseen conditions.
- C. When Pilots are exchanged or replaced, training and familiarization costs, including any required flight time up to 3 (three) hours, shall be accomplished at the Contractor's expense. The CO will determine the necessary amount of flight time up to 3 hours. This is not intended to affect cross-shifting of Pilots that are familiar with the operating area or to affect approved relief Pilots.

**C-15 Relief Pilot**

The Contractor may furnish a relief crew to meet the days off requirement in accordance with the 'Flight Hour and Duty Limitations' clause. Payment will be made in accordance with the 'Transportation of Relief Pilot' clause. Approval to furnish relief crews and costs for transporting relief crews will be approved in advance by the CO. Approval will be noted on the payment invoice in the remarks section.

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**C-16 Flight Hour and Duty Limitations**

All flight time, regardless of how or where performed, except personal pleasure flying, will be reported by each flight crewmember and used to administer flight hour and duty time limitations. Commercial flight time to and from the Assigned Work Location as a flight crewmember (commuting) will be reported and counted toward limitations if it is flown on a duty day. Flight time includes, but is not limited to: military flight time; charter; flight instruction; 14 CFR 61.56 flight review; flight examinations by FAA designees; any flight time for which a flight crewmember is compensated; or any other flight time of a commercial nature whether compensated or not.

- A. Duty shall include flight time, ground duty of any kind, and standby or alert status at any location. This restriction does not include "on-call" status outside of any required rest or off-duty periods.
- B. Flight time shall not exceed a total of 8-hours per day.
- C. Assigned duty of any kind shall not exceed 14-hours in any 24-hour period. Within any 24-hour period, Pilots shall have a minimum of 10-consecutive hours off duty immediately prior to the beginning of any duty-day. Local travel up to a maximum of 30-minutes each way between the work site and place of lodging will not be considered duty time. When one-way travel exceeds 30 minutes, the total travel time shall be considered as part of the duty day.
- D. Flight crewmembers accumulating 36 hours of flight time in any 6 consecutive days or less are required to have the following day off. Maximum cumulative flight hours shall not exceed 42 hours in any 6 consecutive days.
- E. Within any 24-hour period, flight crewmembers shall have a minimum of 10 consecutive uninterrupted hours off duty immediately prior to the beginning of any duty day.
- F. During any 14 consecutive day period, flight crewmembers shall be off-duty for two 24-hour periods from the time of last duty. The 24-hour off-duty periods need not be consecutive.
- G. Local travel up to a maximum of 30 minutes each way between the work site and place of lodging will not be considered duty time. When one-way travel exceeds 30 minutes, the total travel time shall be considered as part of the duty day.
- H. During times of prolonged heavy fire activity, the Government may issue a notice reducing the Pilot duty day/flight time and/or increasing off-duty days on a geographical or agency-wide basis.
- I. Two-Pilot crews flying point-to-point (airport to airport, etc.) shall be limited to 10 flight hours flight time in any duty day. (An aircraft that departs "Airport A," flies reconnaissance on a fire, and then flies to "Airport B," is not point-to-point).
- J. Pilots may be relieved from duty for fatigue or other causes created by unusually strenuous or severe duty before reaching duty limitations.
- K. The pilot must have a valid A&P certificate when he acts as the mechanic and mechanic duties in excess of 2-hours will apply as flight hours on a one-to-one basis toward flight hour limitations.
- L. Relief, additional, or substitute Pilots reporting for duty under this Contract shall furnish a record of all duty and all flight hours during the previous 14 days.

**C-17 Accident Prevention and Safety**

- A. The Contractor shall furnish the COR with a copy of all reports required to be submitted to the FAA in accordance with 14 CFR that relate to pilot and maintenance personnel performance, aircraft airworthiness or operations. The Contractor will submit an FAA Form 8010-4, Malfunction or Defect Report, or file electronically in the FAA's Service Difficulty Reporting (SDR) system any maintenance

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deficiency identified in 14 CFR Part 21.3(c), 135.415, 135.417 or as requested by the government for what it considers a significant discrepancy.

- B. Following the occurrence of a mishap, the CO or designated representative will evaluate whether noncompliance or violation of provisions of the contract, the FAA applicable to the Contractor's operations, company policy, procedures, practices, programs, and/or negligence on the part of the company officers or employees may have caused or contributed to the mishap.
- C. The Contractor shall develop, maintain and utilize programs necessary to assure safety of ground and flight operations. The development and maintenance of these programs are a material part of the performance of the contract. When the CO, in conjunction with the agency Aviation Safety Manager determines the safety programs do not adequately promote the safety of operations, the Government may terminate the contract for cause as provided in the "Contract Terms and Conditions" when factors indicate a lack of compliance. Examples of such termination causal factors are (1) personnel activities, (2) maintenance, (3) safety and risk management, and (4) compliance with regulations.
- D. The Contractor shall fully cooperate with the CO in the fulfillment of this clause. The CO may suspend performance of this contract work, during the evaluation period used to determine cause as stated above. Upon request of the government, the contractor will provide copies of CVR, FDR, OLMS, etc. data following a mishap or at the discretion of the government.
- E. Contractors Stand-Down or Deactivation
- (1) The Contractor shall immediately notify the Contracting Officer by telephone, followed up with a written notification (email or letter) to the Contracting Officer, when the Contractor implements a stand-down or when the Contractor de-activates any or all of the aircraft/fleet that is operating in compliance with this contract. The Contractor's verbal and written notifications shall include all of the tail number(s) for all the effected aircraft, the rationale for the stand-down/deactivation, and the estimated duration of the stand-down or the deactivation.
- (2) The Contractor shall also notify the Contracting Officer by telephone, followed up with a written notification (email or letter) to the Contracting Officer of the planned reactivation date for each of the effected aircraft. The Contractor's verbal and written notifications shall include the tail number(s) of all of the reactivated aircraft, the rationale/corrective action plan (if applicable), and the date(s) of the reactivation(s).
- (3) Once a Contracting Officer has been officially notified of a Contractor implemented stand-down and/or deactivation, the Contracting Officer shall notify the appropriate Government officials accordingly.

**C-18 Mishaps**

A. Reporting

(1) While operating under this contract the contractor must immediately, and by the most expeditious means available, notify the NTSB AND the appropriate agency Aviation Safety Manager (ASM) when an "Aircraft Accident" or NTSB reportable "Incident" occurs.

(2) The toll free 24-hour Interagency Aircraft Accident Reporting Hot Line number is: 1-888-4MISHAP (1-888-464-7427)

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**B. Forms Submission**

(1) Following an "Aircraft Accident" or when requested by the NTSB following notification of a reportable "Incident," the Contractor must provide the agency Air Safety Investigator with information necessary to complete a NTSB Form 6120.1/2 "Pilot/Operator Aircraft Accident Report".

(2) The Contractor must also submit a "SAFECOM" within 2 days of an accident. SAFECOM is the agency confidential aviation safety reporting system for accident prevention. It is a tool used to encourage the reporting of any condition, hazard, mishap, observance, act, maintenance problem, or circumstance that has the potential to cause an aviation or aviation-related mishap. Data obtained from the system is monitored to identify emerging hazards, share critical safety information, document and track safety issues and identify training needs. It is also used for reporting positive safety actions and mishap prevention measures.

The SAFECOM system is not intended for initiating punitive or disciplinary actions and is not to be used for claims or contract evaluation /determination purposes. The goal of the SAFECOM system is to create a reporting culture that encourages open and honest reporting that improves the safety of aviation operations. SAFECOMs should be utilized in tailgate safety sessions, after action reviews, and briefings only after they have been properly managed through the system.

Submitting a SAFECOM is not a substitute for "on-the-spot" correction(s) to a safety concern. It is imperative that safety issues be addressed at the local level as well as being documented in a SAFECOM. SAFECOM managers at all levels may have additional corrective actions and input.

SAFECOM managers at all levels are responsible for protecting personal data and sanitizing SAFECOMs prior to any distribution and/or posting to the public. The SAFECOM system contains Personal Identifiable Information (PII) which is subject to the Privacy Act of 1974, 5 U.S.C. § 552a that must be protected and safeguarded. In the event of an accident, NTSB law 49 CFR 831.11 & 831.13 which respectively, specify certain criteria for participation in NTSB investigations and limitations on the dissemination of investigation information applies.

In order for SAFECOM's to be effective as an accident prevention tool, they should be reported as soon as possible to the agency with operational control of the aircraft at the time of the event. SAFECOMs can be submitted online at [www.safecom.gov](http://www.safecom.gov) or via phone at 888-464-7427. Hard copies of the OAS-34/FS-5700-14 form can be faxed to OAS at 208-433-5007; USFS at 208-387-5735 or submitted through the Unit/Forest Aviation Officer.

**C. Wreckage Preservation**

1. The Contractor shall not permit removal or alteration of the aircraft, aircraft equipment, or records following an "Aircraft Mishap" which results in any damage to the aircraft or injury to personnel until authorized to do so by the CO. Exceptions are when threat-to-life or property exists; the aircraft is blocking an airport runway, etc. The CO shall be immediately notified when such actions take place.
2. The NTSB's release of the wreckage does not constitute a release by the CO, who shall maintain control of the wreckage and related equipment until all investigations are complete.

**D. Investigation**

The Contractor shall maintain an accurate record of all aircraft accidents, incidents, aviation hazards and injuries to Contractor or Government personnel arising in the course of performance under this Contract. Further, the Contractor fully agrees to cooperate with the USFS during an investigation and make available personnel, personnel records, aircraft records, and any equipment, damaged or undamaged, deemed necessary by the USFS following a mishap, the Contractor shall ensure that personnel (Pilot, mechanics, etc) associated with the aircraft. will remain in the vicinity of the mishap until released by the CO.

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**E. Related Costs**

The NTSB or USDA-FS shall determine their individual agency investigation cost responsibility. The Contractor will be fully responsible for any cost associated with the reassembly, approval for return-to-Contract availability, and return transportation of any items disassembled by the USFS.

**F. Search, Rescue, and Salvage**

The cost of search, rescue and salvage operations made necessary due to causes other than negligent acts of a Government employee shall be the responsibility of the Contractor.

**C-19 PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The minimum PPE for flights shall consist of non-synthetic (natural fiber) materials or Nomex, shoes or boots that fully cover the feet, and long pants that overlap the shoes when in the seated position. Long sleeve shirts are recommended. During the course of work under this contract, the Contractor's personnel may be required to wear additional or supplemental personal protective equipment when such equipment is mandated by the local user unit's policy.

**C-20 INSPECTION AND ACCEPTANCE**

In accordance with Federal Acquisition Regulation Clause 52.212-4 (a), the following is added:

**A. Pre-Use Inspection of Equipment and Personnel**

1. After award of the Contract and any renewal, an inspection of the Contractor's equipment and personnel will be made. Inspections will be performed during normal Government working hours at a location mutually agreed to by the Contractor and CO.
2. The aircraft and Pilot(s) will be made available for inspection as scheduled by the CO.
3. At the scheduled inspection, the Contractor shall provide a complete listing of all FAA ADs and Manufacturer's Mandatory Service Bulletins (MSBs) applicable to the make, model, and series of aircraft being offered. Documentation of compliance to each AD and MSB will include date and method of compliance, date of recurring compliance, and an authorized signature and certificate number will be recorded. The list shall be similar to that shown in AC 43-9, as amended.
4. All components or items installed in the offered aircraft that are subject to specified time basis or schedule (time/calendar life) for inspection, overhaul, or replacement shall be listed and made available to the Government at time of inspection. The list shall include component name, serial number, service life or inspection/overhaul time, total time since major inspection, overhaul, or replacement and hours/cycles calendar time remaining before required inspection, overhaul, or replacement. The list shall be similar to that shown in AC 43-9, as amended.
5. The Contractor may be required to furnish a copy of the procedures manual and revisions as required by 14 CFR 135 (as applicable).
6. The items described below shall be made available at the pre-use or renewal inspection:
  - a. Certificates/Contract
    - (1) Copy of 14 CFR 135 Operations Specifications (as applicable).
    - (2) Complete copy of awarded Contract, including modifications with each aircraft.
  - b. Pilot(s)

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- (1) Completed Airplane Pilot Qualifications and Approval Record Form (FS-5700-20) and Pilot log books.
  - (2) FAA Pilot certificates.
  - (3) Current FAA Pilot medical certificate.
  - (4) Pilot 14 CFR 135 Airman Competency/Proficiency Check (FAA Form 8410-3). Category aircraft requiring two pilots, competency proficiency checks per 14 CFR 61.
  - (5) The Contractor shall ensure that each Pilot reviews the Contract and receives a briefing from a Forest Service Pilot Inspector and signs the USDA Forest Service Aviation Operations Briefing: Fire Pre-Season Operations Guide for Fixed-Wing Pilots and Aircraft. Current signed briefings shall be in receipt of the CO prior to operating under the Contract and annually thereafter. Signed briefings will be maintained with the pilot approval records.
  - (6) Each Pilot shall be reevaluated every five years and/or at the discretion of the CO.
- c. Equipment
- (1) Appropriate equipment installed, or available to be installed, on the aircraft for the flight evaluation.
  - (2) Aircraft maintenance records.
  - (3) A&P Mechanic available.
  - (4) Additional Equipment as offered.

**C-21 Pre-Use Inspection Expenses**

- A. All operating expenses incidental to the inspection shall be borne by the Contractor.
- B. Pilot evaluation flights may require up to 2-hours of flight time for each Pilot as deemed necessary by the CO. All evaluation flights shall be performed in a carded aircraft of like make and model furnished for the contract.
- C. The Contractor shall ensure that a set of fully operational dual flight controls are installed in the aircraft during all pilot evaluation flights.
- D. The Contractor will not be charged for the costs incurred by the Government on the initial pre-use inspection.

**C-22 Re-inspection Expenses**

When re-inspection is necessary because Contractor equipment and/or personnel did not satisfy the initial inspection, or when inspecting substitute personnel and/or equipment subsequent to the initial pre-use inspection, the Contractor may be charged the actual costs incurred by the government in performing the re-inspection. Re-inspections will be performed at a time and location mutually agreed to by the Contractor and CO.

**C-23 Inspections During Use**

- A. At any time during the Contract period, the CO may require inspections/tests as deemed necessary to determine that the Contractor's equipment and/or personnel currently meet specifications. Government costs incurred during these inspections will not be charged to the Contractor.

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- B. Should the inspections/tests reveal deficiencies that require corrective action and subsequent re-inspection, the actual costs incurred by the Government may be charged to the Contractor.
- C. When the aircraft becomes unavailable due to mechanical breakdown, the Government reserves the right to inspect the aircraft after the Contractor's mechanic has approved the aircraft for return to service. For items covered under 14 CFR 135.415, the Contractor shall furnish the CO with a completed copy of FAA Form 8010-4, Malfunction or Defect Report.

**C-24 Contract Period and Renewal Option**

The contract period shall extend for one calendar year from the date of award. However, at the option of the Government, the Contract may be renewed for additional one (1) year periods, not to exceed two (2) renewal periods, provided the CO serves notice of intent to renew at least 60-days prior to Contract expiration. The renewal will be with the same terms and conditions, subject to the rates offered in the option years. The fuel portion of the flight rate will be subject to the provisions of Section D, Economic Price Adjustment Contract Flight Rates.

**C-25 Authorized Ordering Activities**

The geographic area coordination center or forest dispatch office(s) is authorized to place orders under the Contract. Contractors shall not accept orders from any other source.

**C-26 Ordering Procedures**

- A. Orders for service will be placed with the Contractor as needed. Orders will be filled based on performance, cost and urgency. Orders to the Contractor shall be issued in writing and may include the following type of information:
  1. Order number
  2. Ordered aircraft by Contract Item and/or N-Number
  3. Date of flight
  4. Estimated time of departure
  5. The ordered duty hours, if applicable
  6. Flight point of origin
  7. Flight destination
  8. Passenger/cargo manifest
  9. Flight description
  10. Flight-following arrangements and agency radio frequencies
  11. Known flight hazards
  12. PPE requirements
- B. The Government does not guarantee the placement of any orders for service under the Contract and the Contractor is not obligated to accept any orders. However, once the Contractor accepts an order, the Contractor is obligated to perform in accordance with the terms and conditions stated herein.

**C-27 Point of Hire**

Point of Hire shall be the Contractor's Home Base as specified in Section B or the location of aircraft at time of hire.

**C-28 Assigned Work Location(s)**

The Assigned Work Location will be determined at the time the order for services is placed.

**C-29 Ordered Standby**

- A. Standby shall apply when aircraft and Pilots are ordered by the government and shall be paid at the rate specified in the Schedule of Items.

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- B. The beginning of the standby period will be set by the Government Representative and may be adjusted from day-to-day.
- C. Ordered standby will not exceed the Pilot's duty day.
- D. Ordered Standby will be recorded in hours and minutes.
- E. Ordered Standby will not be paid:
  - 1. During actual flight hours;
  - 2. Anytime aircraft and/or Pilot(s) are unavailable; or
  - 3. When required to remain overnight at locations other than Home Base, before 0900 or after 1800 local time, unless specifically ordered.

**C-30 Payment for Flight**

Flight Time Measurement

- A. Payment for flight time will be made only when flight is properly ordered by designated personnel. Payment will be made based upon the applicable rate specified in the Schedule of Items.  
  
Unless otherwise agreed upon, ordered flights will originate and/or terminate at the Contractor's Home Base specified in the Schedule of Items.
- B. Flight time will be measured in hours and tenths and will be made by a flight hour meter (Hobbs) that runs only when aircraft is in flight. In the event that the flight hour meter malfunctions during flight, the elapsed time method using clock time will be used.
- C. Flight (ferry) time of aircraft to and from the Contractor's Home Base or alternate location will be paid at the flight rate specified in the Schedule of Items.

**C-31 Payment for Cancelled, Delayed or Short Duration Flight.**

- A. If the Government cancels an ordered flight less than 24-hours prior to the scheduled departure time, the Government shall pay a sum equal to 1-hour flight time unless the flight is reordered and flown during the date initially requested.
- B. If a flight is delayed by the Government, Ordered Standby will be paid.
- C. No payment will be made under this clause when the delay or cancellation is the result of weather.
- D. Flight(s) of less than one hour duration during a day shall be paid at a sum equal to the actual flight hours or a minimum of one hour flight time, whichever is greater.

**C-32 Transportation of Relief Pilot(s) and Additional Pilot Costs**

- A. Reasonable cost(s) of transporting a relief Pilot to and from the Assigned Work Location will be paid by the Government. Supporting itemized paid receipts and other documents used to verify incurred costs; i.e., itineraries supporting round trips, names of travelers, etc., will be provided to the CO, upon request.
- B. Additional Pilot Rate is applicable whenever an Additional Pilot is **ordered** by the Government and will be paid in addition to the flight hour rate and applicable standby rate.

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**C-33 Payment for Substitute or Replacement Aircraft**

Substitute aircraft shall be furnished at the same rate(s) as the aircraft being replaced.

**C-34 Additional Aircraft after Contract Award**

After Contract award, aircraft with equal performance may be added at the same rate as aircraft originally awarded. All other aircraft may be added at the CO's option.

**C-35 Food and Drink**

During days of high incident activity when the Government deems it necessary to provide food and drink refreshments to flight crews for sustained operations, the Government will furnish such items at Government expense.

**C-36 Miscellaneous Costs to the Contractor**

- (a) Miscellaneous, unforeseen costs incurred by the Contractor while performing under the terms of the Contract may be reimbursed at actual cost when approved by the CO. Examples of such items are airport landing fees, airport use costs (tie-downs). A paid receipt shall support any cost in excess of \$75.00.
- (b) Claims for reimbursement shall be documented on the Flight Use Report and supported by receipt(s) and/or document(s) when required. Payment will not be made unless required receipt(s) and/or document(s) are attached to the Flight Use Report as incurred.

**C-37 Payment for Overnight Allowance**

- A. The Contractor shall receive an overnight allowance for each Pilot for each night that the Government requests the Pilot to stay at a location other than the Home Base. The Government will pay the Contractor an amount equal to the current standard maximum rate that is allowed (or high rate, if applicable) as established by the Federal Travel Regulations (FTR). Rates are available at: <http://www.gsa.gov/portal/category/21287>
- B. Overnight allowance will not be paid when the aircraft is assigned to its Home Base.
- C. If partial overnight allowance is provided by the Government, the Contractor will be reimbursed at current FTR rates for the portion that is Contractor provided.
- D. The appropriate rate for meals and incidental expenses will be paid unless the Government makes three meals available to the Contractor.
- E. The Contractor's lodging will be paid only when lodging is not furnished by the Government. If the Contractor elects to not utilize Government provided lodging, there is no reimbursement for lodging or transportation costs incurred by the Contractor. When the FTR rate changes, the change in overnight allowance to the Contractor will become effective on the effective date of the FTR change.
- F. The Contractor may claim overnight expenses using either of the two following methods:
  - 1. Payment of the Standard or High Rate, (if applicable) lodging and M&IE rate excluding lodging tax does not require lodging receipts to be submitted with the Flight Use Report, or Contractor provided invoice.
  - 2. If lodging rates are not available at the FTR rate, the flight use report shall be documented accordingly. Documentation and supporting itemized paid receipts will be provided to the CO, upon request

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- G. The Flight Use Report shall clearly show the **county or city** where the overnight occurred. High rate claims for subsistence that do not include this information will be reduced to the standard rate.
- H. In the event that FTR rate(s) are not available, the Government shall be notified and the Flight Use Report documented accordingly.

**C-38 PAYMENT PROCEDURES**

- A. All flight time, ordered standby, and other authorized daily expenses shall be recorded on the electronic Flight Use Report/FS6500-122. The Flight Use Report will be electronically packaged and submitted through the Aviation Business System (ABS) for payment processing. Payments will still be made semi-monthly for services approved. The Flight Use Reports will be “packaged/bundled” every two weeks and sent to the vendor electronically for approval for submission through the ABS system and electronically forwarded to the Albuquerque Service Center (ASC) for payment. The Flight Use Reports processed during the first half of the month will be processed for payment about the 15<sup>th</sup> and those accumulated during the last half of the month will be processed about the 1<sup>st</sup> of the following month.
- B. The Flight Use Report, when electronically signed by an authorized Government Representative, may serve as the Contractor’s payment invoice.

**C-39 DEFINITIONS**

As used throughout this contract, the following terms shall have the meaning set forth below:

Additional Personnel. Additional personnel specifically ordered by the CO where it is to the Government's advantage to have additional availability of the aircraft (not to be confused with a relief Pilot furnished by Contractor to replace primary Pilot).

Air Tactical. Special mission flights above 500 feet AGL involving the aerial airspace management and use of aviation resources.

Aircraft Accident. An occurrence associated with the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage.

Aircraft Incident with Potential. An incident that narrowly misses being an accident by NTSB definition and circumstances involve some aircraft damage, property damage, or minor injury to crew or passengers. Classification of Incidents with Potential is determined by the Branch Chief, Aviation Safety Management Systems.

Aircraft Make and Model. A specific make and basic model of aircraft, including modification; e.g., a Cessna 206

Aircraft Make, Model, and Series. A specific make, model, and series of aircraft including modification (e.g., a Cessna 310 is not the same make, model, and series as a Cessna 337).

Airspace Conflict. A near mid-air collision, intrusion, or violation of airspace rules.

Alert Status. A status subject to flight and duty limitations, in which the Contractor has 1 hour to return to standby if ordered by the CO to do so.

Assigned Work Location. A location other than the Home Base, established to permit operation from vicinity of a project area.

Aviation Hazard. Any condition, act, or set of circumstances that exposes an individual to unnecessary risk or harm during aviation operations.

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Call-When-Needed. A term used to identify the furnishing of services on an “as needed basis” or “intermittent use” in government procurement contracts. There is no guarantee the Government will place any orders and the Contractor is not obligated to accept any orders. However, once the Contractor accepts an order, the Contractor is obligated to perform in accordance with the terms and conditions stated herein.

Cargo. Any item that is not an occupant or part of the aircraft carried by the aircraft.

Civil Twilight. Begins in the morning, and ends in the evening when the center of the sun is geometrically 6° below the horizon.

Clock time. Commences when an aircraft starts its take-off roll and ends when the aircraft has finished taxiing to parking.

Contractor. An operator being paid by the Government for services.

Crew Member. A person assigned to perform duties in an aircraft during flight time.

Cruising Speed, Service Ceiling, and Cruising Range. Shall be the same as applied by the CAB and FAA, United States Department of Transportation and the aircraft manufacturer.

Empty Weight. The last weight and moment entry on the aircraft weight and balance record. Empty weight is determined using weight and balance data which was determined by actual weighing of the aircraft within 36-calendar months preceding the starting date of the contract for multi-engine aircraft, or within 5 years preceding the start date of the contract for single engine aircraft, or any renewal period, and following any major repair or major alteration or change to the equipment list which affects the center of gravity of the aircraft.

Equipped Weight. Equipped weight equals the Empty Weight (as listed in the Weight and Balance Data) **plus** the weight of lubricants and onboard equipment required by contract (i.e., survival kit).

The aircraft contracted equipped weight is determined using weight and balance data which was determined by actual weighing of the aircraft within 36-calendar months preceding the starting date of the contract, or renewal period, and following any major repair or major alteration or change to the equipment list which affects the center of gravity of the aircraft.

Fatal Injury. Any injury, which results in death within 30-days of the accident.

Federal Aviation Regulations. Rules and regulations contained in Title 14 of the Code of Federal Regulations.

Ferry Flight. Movement of the aircraft under its own power from point-to-point without passenger(s) or cargo.

Fire Reconnaissance. Special mission flights above 500 feet AGL involving the detection of fires.

Flight Crew Member. . A pilot, flight engineer, or flight navigator assigned to duty in an aircraft during flight time

Flight Manager. Designated Government Representative for all passengers on a flight.

Fully Operational. Aircraft, Pilot(s), other personnel, repairs, operating supplies, service facilities, and incidentals necessary for the safe operation of the aircraft both on the ground and in the air.

Fully Rated Capacity. The number of passenger seats or pounds of cargo load authorized in the applicable Type Certificate Data Sheet.

Gross Weight. The loaded weight of an aircraft. Gross weight includes the total weight of the aircraft, the weight of the fuel and oil, and the weight of the entire load it is carrying.

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Ground Mishap, Aircraft. An aircraft mishap in which there is no intent to fly; however, the power plants and/or rotors are in operation and damage incurred requiring replacement or repair of rotors, propellers, wheels, tires, wing tips, flaps, etc., or an injury is incurred requiring first aid or medical attention.

Hazard. Any condition, act or set of circumstances that exposes an individual to unnecessary risk or harm during aviation operations.

Incident. An occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.

Instrument Flight Rules (IFR). As defined in 14 CFR 91.

Internal Cargo Compartments. An area within the aircraft specifically designed to carry cargo.

Law Enforcement. Those duties carried out by agency personnel together with personnel from cooperating agencies, to enforce various Federal laws applicable to trespass (those activities relating to timber, grazing, fire, occupancy and others). Other activities can include those that are illegal under the antiquities acts and the manufacturing, production, and trafficking of substances in violation of the Controlled Substances Act (16 U.S.C. 559b-f)) and other illegal activities occurring on agency jurisdictional lands. Specific law enforcement activities can include surveillance (visual, infrared, or photographic), transportation of law enforcement personnel and persons in custody and transportation of property (both internally and externally).

Life-Threatening. A situation or occurrence of a serious nature, developing suddenly and unexpectedly and demanding immediate action to prevent loss of life.

Maintenance Deficiency. An equipment defect or failure which affects or could affect the safety of operations, or that causes an interruption to the services being performed.

Maximum Certificated Gross Weight: Maximum certificated gross weight is the absolute maximum allowable weight (crew, passengers, fuel, oil, fluids, cargo, and special equipment) as established by the manufacturer and approved by the Federal Aviation Administration.

Medical Attention. An injury, less than serious, for which a physician prescribes medical treatment and makes a charge for this service.

Mission Flight. The use of an aircraft that in-itself constitutes discharge of official Forest Service responsibilities. Mission flights may be either routine or emergency, and may include such activities as lead plane, smokejumper/Para cargo, aerial photography, mobilization/demobilization of emergency support resources, reconnaissance, survey, and project support. Mission flights do not include official travel to make speeches, attend conferences or meetings, or make routine site visits.

Mishap, Aviation. Mishaps include aircraft accidents, incidents-with-potential, aircraft incidents, and aircraft maintenance deficiencies.

Mountain Flying. Conducting flight operations that require special techniques including take offs and landings at locations with 5,000 feet above sea level or greater pressure altitudes, at temperature ranges above 75 degrees F, and or limited and unimproved airstrips.

Night Operations. For ordered flight missions that are performed under the contract, night shall mean: 30 minutes after official sunset to 30 minutes before official sunrise, based on local time of appropriate sunrise/sunset tables nearest to the planned destination.

Occupant: Any crew or passenger that is aboard an aircraft.

Operating Agency. An executive agency or any entity thereof using agency aircraft, which it does not own.

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Operational Control. The condition existing when an entity exercises authority over initiating, conducting or terminating a flight.

Operator. Any person who causes or authorizes the operation of an aircraft, such as the owner, lessee, or bailee of an aircraft.

Passenger. Any person aboard an aircraft who does not perform the function of a flight crewmember or crewmember.

Passenger Seating Capacity. Number of passenger seats excluding Pilot(s).

Pilot-In-Command (PIC). The Pilot responsible for the operation and safety of the aircraft during the time defined as flight time.

Point-to-Point Operations (PTP): 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 flight route to another FAA-designated airport, seaplane base, or permanent helibase. The flight is conducted for the transportation of persons or cargo for administrative purposes only. A Point-to-Point flight is conducted higher than 500 feet above ground level (AGL), except for takeoff and landing. Any flight deviations for the purpose of conducting mission-related tasks shall require the flight be reclassified as a Mission Flight. These types of flights are typically referred to as administrative use of aircraft flights, which require the aircraft and pilot to be approved for Point-to-Point flight.

Precautionary Landing. A landing necessitated by apparent impending failure of engines, systems, or components, which makes continued flight inadvisable.

Resource Reconnaissance. Special mission flights above 500 feet AGL involving observation and fact-finding reconnaissance, i.e. wildlife monitoring, snow surveys, search and rescue, timber and range surveys, insect and disease surveys, law enforcement, and aerial photography.

SAFECOM. Used to report any condition, observance, act, maintenance problem, or circumstance, which has potential to cause an aviation related mishap. The purpose of the SAFECOM form is not intended to be punitive in nature. It will be used to disseminate safety information to aviation managers, and also to aid in accident prevention by trend monitoring and tracking. See [www.safecom.gov](http://www.safecom.gov)

Serious Injury. Any injury which: (1) requires hospitalization for more than 48-hours, commencing within 7-days from the date the injury was received; (2) results in a fracture of any bone (except simple fractures of fingers, toes or nose); (3) causes severe hemorrhages, nerve, muscle or tendon damage; (4) involves any internal organ; or; (5) involves second or third-degree burns, or any burns affecting more than 5% of the body surface.

Special Mission Aircraft. Aircraft approved for other than point to point only missions. Transportation is limited to personnel required to carry out the special mission of the aircraft.

Special Missions. Aviation resource mission in direct support of incidents, i.e., air tactical, fire reconnaissance, resource reconnaissance, all-risk, and other missions requiring special training and/or equipment.

Substantial Damage. Any damage or failure which adversely affects the structural strength, performance or flight characteristics of the aircraft, and which would normally require major repair or replacement of the affected component. The following are not considered substantial damage: Engine failure or damage limited to an engine if only one engine on a multi-engine aircraft fails or is damaged; bent fairings or cowlings; Dented and/or small puncture holes in the skin of the aircraft; Damage that occurs to rotor or propeller blades during ground operations; and damage to landing gear, wheels, tires, flaps, engine accessories, brakes, or wing tips

Useful Load. The weight of the pilot, copilot, passengers, baggage, useable fuel and drainable oil. It is the basic empty weight subtracted from the maximum allowable gross weight.

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Visual Flight Rules (VFR). As defined in 14 CFR Part 91.

**C-40 Abbreviations**

A&P	Airframe & Powerplant (Mechanic)
AC	Advisory Circular
ACCO	Air Carrier/Commercial Operator
AD	Airworthiness Directive
AFF	Automated Flight Following
AMI	Aviation Maintenance Inspector
ASP	Aviation Safety Plan
ATC	Air Traffic Control
CAB	Civil Aeronautics Board
CG	Center of Gravity
CO	Contracting Officer
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
COTR	Contracting Officer's Technical Representative
CWN	Call-when-Needed (Contract)
DOI	Department of the Interior
DOT	Department of Transportation
ELT	Emergency Locator Transmitter
EPA	Environmental Protection Agency
ETA	Estimated Time of Arrival
FAA	Federal Aviation Administration
FAO	Forest Aviation Officer
FAR	Federal Acquisition Regulations
FHP	Forest Health Protection
FPMR	Federal Property Management Regulations
FS	Forest Service
FSS	Flight Service Station
GACC	Geographic Area Coordination Center
GPM	Gallons-Per-Minute
GPS	Global Positioning System
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
IMC	Instrument Meteorological Conditions
ISA	International Standard Atmosphere
M&IE	Meals and Incidental Expenses
MEL	Minimum Equipment List
MSL	Mean Sea Level
NTSB	National Transportation Safety Board
NOTAM	Notice to Airmen
OAS	Office of Aircraft Services
PA	Public Address System
PASP	Project Aviation Safety Plan
PIC	Pilot-in-Command
PPE	Personal Protective Equipment
PTT	Push-To-Talk
RAO	Regional Aviation Officer
RASM	Regional Aviation Safety Manager
RON	Remain-Over-Night
SIC	Second-in-Command/Co-Pilot
STC	Supplemental Type Certificate
TBO	Time Between Overhaul
TCAS	Traffic Collision Avoidance System
TFR	Temporary Flight Restriction

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USDA-FS	United States Department of Agriculture-Forest Service
VFR	Visual Flight Rules
VNE	Velocity Never Exceed
V <sub>SO</sub>	Stall Speed in a landing configuration
VSWR	Voltage Standing Wave Ratio

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**Exhibit 01**

**WAGE DETERMINATION INFORMATION**

REGISTER OF WAGE DETERMINATIONS UNDER THE SERVICE CONTRACT ACT		U.S. DEPARTMENT OF LABOR EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor		WAGE AND HOUR DIVISION WASHINGTON, D.C. 20210
Daniel W. Simms		Wage Determination No: 1995-0222
Director		Revision No: 40
Division of Wage Determinations		Date Of Revision: 12/29/2015

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.15 for calendar year 2016 applies to all contracts subject to the Service Contract Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).  
Nationwide: Applicable in the continental U.S. Alaska, Puerto Rico, Hawaii and Virgin Islands.

**\*\*Fringe Benefits Required Follow the Occupational Listing\*\***

Employed on U.S. Government contracts for aerial photographer, aerial seeding, aerial spraying, transportation of personnel and cargo, fire reconnaissance, administrative flying, fire detection, air taxi mail service, and other flying services.

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
31010 - Airplane Pilot		28.36
(not set) - First Officer (Co-Pilot)		25.82
(not set) - Aerial Photographer		14.17

EXCEPT SCHEDULED AIRLINE TRANSPORTATION AND LARGE MULTI-ENGINE AIRCRAFT SUCH AS THE B-727, DC-8, AND THE DC-9.

ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.27 per hour or \$170.80 per week or \$740.13 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor, 3 weeks after 5 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A

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contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

VACATION (Hawaii): 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 10 years, and 4 weeks after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HEALTH & WELFARE (Hawaii): \$1.69 per hour, or \$67.60 per week, or \$292.93 per month hour for all employees on whose behalf the contractor provides health care benefits pursuant to the Hawaii prepaid Health Care Act. For those employees who are not receiving health care benefits mandated by the Hawaii prepaid Health Care Act, the new health and welfare benefit rate will be \$4.27 per hour.

HAZARDOUS PAY DIFFERENTIAL: An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

**\*\* UNIFORM ALLOWANCE \*\***

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67

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cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition (Revision 1), dated September 2014, unless otherwise indicated.

REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE  
Standard Form 1444 (SF-1444)

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined (See 29 CFR 4.6(b)(2)(i)). Such conforming procedure shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be retroactive to the commencement date of the contract (See 29 CFR 4.6(b)(2)(iv)(C)(vi)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, U.S. Department of Labor, for review (See 29 CFR 4.6(b)(2)(ii)).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the

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contractor.

6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

**\*\* OCCUPATIONS NOT INCLUDED IN THE SCA DIRECTORY OF OCCUPATIONS \*\***

Aerial Photographer

The aerial photographer must be skilled in reading flight maps, capable of assisting the pilot to adhere to flight lines, be able to level and operate a cartographic camera and its auxiliary equipment mounted in the aircraft so that the photographs that are taken will have the required forward lap and side lap for use in photogrammetric mapping equipment, and possess a working knowledge of aerial films and camera filters to insure proper exposure of the films.

First Officer (Co-Pilot)

Is second in command of commercial airplane and its crew while transporting passengers, mail, or other cargo on scheduled or nonscheduled flights. Assists or relieves an airline captain in operating the controls of an airplane; monitoring flight and engine instruments; and maintaining air-to-ground communications.

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**EXHIBIT 02**

**PERFORMANCE BY GOVERNMENT-FURNISHED PILOT**

**A. General**

1. The following provisions shall apply to the performance of work under the contract, on an intermittent and short term basis, when the utilization of a qualified Government Pilot is authorized by the Contractor. All other provisions not expressly changed herein continue to apply.
2. Qualified Government Pilots may operate Contractor aircraft on a case by case basis, upon written approval of the Regional Aviation Officer (RAO) and the CO.
3. Government Pilot operations will be in compliance with the USDA Forest Service Manual (FSM) 5700 and Title 14, Part 91 of the CFR, including those portions that apply to civil aircraft except as noted in the agency manuals.
4. Appropriate records to establish the qualifications and experience of the Government Pilot will be furnished to the Contractor upon request.
5. The Contractor may conduct check rides and/or training of Government Pilots for familiarization in the Contractor's aircrafts. The cost of check rides and flight training, if required, will be borne by the Government.
6. Approval of a Government Pilot to perform work under the contract rests solely with the Contractor.
7. The Loss, Damage, or Destruction clause, is applicable to this contract when the Contractor authorizes performance by a Government Pilot.
8. The payment provisions of the contract remain unchanged.
9. Shall not function as Contractor's scheduled relief Pilot.

**B. Loss, Damage, or Destruction**

1. The Contractor shall indemnify and hold the Government harmless from any and all losses or damage to the aircraft furnished under this contract except as provided in (d) below. For the purpose of fulfilling his obligation under this clause, the Contractor shall procure and maintain during the term of this contract, and any extension thereof, hull insurance acceptable to the CO. The Contractor's insurance coverage shall apply to Pilots furnished by the Government to operate the aircraft. The parties named insured under the policies shall be the Contractor and the United States of America. The Contractor may request a list of Government Pilots by name and qualification who are potential Pilots.
2. Prior to the commencement of work hereunder, the Contractor shall furnish the CO a copy of the insurance policy or policies or a certificate of insurance issued by the underwriter(s) showing that the coverage required by this clause has been obtained.
3. Each policy or certificate evidencing the insurance shall contain an endorsement that provides that the insurance company will notify the CO 30 days prior to the effective date of any cancellation or termination of any policy or certificate or any modification of a policy or certificate that adversely affects the interest of the Government in such insurance. The notice shall be sent by registered mail and shall identify this contract, the name and address of the Contracting Office, the policy, and the insured.
4. If the aircraft is damaged or destroyed while in the custody and control of the Government, the Government will reimburse the Contractor for the deductible (if any) stipulated in the insurance coverage as follows:

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- a. In-Motion Accidents - Up to 5 percent of the current insured value of the aircraft stated in the policy.
  - b. Not In-Motion Accidents - Up to \$250.00 per accident. Such reimbursement shall not be made, however, for loss or damage to the aircraft resulting from (1) normal wear and tear, (2) negligence or fault in maintenance of the aircraft by the Contractor, or (3) defect in construction of the aircraft or a component thereof.
5. If damage to the aircraft is established to be the fault of the Government, rental payments to the Contractor during the repair period will be made as set forth elsewhere in the contract. The Government may, at its option, make necessary repairs or return the aircraft to the Contractor for repair. In the event the aircraft is lost, destroyed, or damaged so extensively as to be beyond repair, no rental payment will be made to the Contractor thereafter.
6. Any failure to agree as to the responsibility of the Contractor under this clause shall, after a final finding and determination by the CO, be considered a dispute within the meaning of the "Disputes" clause of this contract.

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**Exhibit 03**

**RESTRAINT SYSTEMS CONDITION INSPECTION GUIDELINES**

- A. Federal Aviation Regulations require that occupant restraints systems are to be replaced in aircraft manufactured after July 1, 1951; such systems shall conform to standards established by the FAA. These standards are contained in Technical Standard Order TSO-C22. Restraint system eligible for installation in aircraft may be identified by the marking TSO-C22, TSO-C114 on the webbing, or by a military designation number since military systems comply with the strength requirements of the TSO. Aircraft manufacturer installed restraint systems with part numbers are acceptable. Each system shall be equipped with an approved metal-to-metal latching device.
- B. Federal Aviation Regulations provide minimum inspection guidance, other than to state, that mildew and fraying may render the restraint system un-airworthy and that suspected webbing should be tested for tensile strength. The tensile strength requirement for a single person system is 525 pounds (most systems are rated at 1,500 pounds).
- C. Unacceptable Condition Criteria:

Webbing	Hardware	Stitching	TSO Tags
Frayed (5%)	Inoperable	Broken	Missing
Torn	Damaged	Excessive Wear	Illegible
Crushed	Corroded	Missing	
Swollen	Excessive Wear		
Creased			
Deteriorated			

- D. References:
  - 14 CFR Part 91.205
  - 14 CFR Part 21.607
  - AC 21-34
  - TSO-C22
  - TSO-C114

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**Exhibit 04**

**FS 6500-122**

1. INVOICE NUMBER <b>1676864</b>		2. DATE OF FLIGHT / /		3. CONTRACT NUMBER - ITEM NO.			4. A/C REGISTRATION #		5. VENDOR NAME											
6. LEG NUMBER	7. USER UNIT	8. USER CODE	9. PROJECT, FIRE, FLIGHT, OR RESOURCE ORDER NAME OR NUMBER	10. FAA IDENTIFIER		11. MISSION CODE	12. PAY CODE	13. PILOT NAME(S)	14. PASSENGERS AND OTHER CREWMEMBERS	15. CARGO TYPE P, S, C, OR L	16. CARGO LBS.	17. RETARDANT F, W, S, OR L	18. RETARDANT GALLONS	19. METER TYPE		20. TIME OR METER READING		21. ELAPSED TIME - HOURS AND HUNDRETHS	22. RATE	23. LEG TOTAL
				FROM	TO									START	STOP					
1.																				
2.																				
3.																				
4.																				
5.																				
6.																				
7.																				
8.																				
9.																				
10.																				

24. ACCOUNTING SUMMARY						25. REMARKS	
NFC FUND CODE	UNIT	MANAGEMENT CODE	FY	BUDGET OBJECT	AMOUNT		
				2541			
				2541			
				2541			
				2541			
				2541			

26. OVERNIGHT CHARGES	USER UNIT	MISSION CODE	PAY CODE	LOCATION	NO. OF PEOPLE
27. SERVICE TRUCK CHARGES			ST	MILES	
28. OTHER CHARGES +			CH	DESCRIBE	
29. OTHER CREDITS -			CR	DESCRIBE	
30. SUBTOTAL					
31. EXCISE TAX			TX	(PAX OR CARGO OVER 6,000 LBS CERTIFICATED WEIGHT)	
32. TOTAL OF ALL CHARGES					

33. NAME OF GOVERNMENT OFFICIAL (PLEASE PRINT)	
PHONE NUMBER	

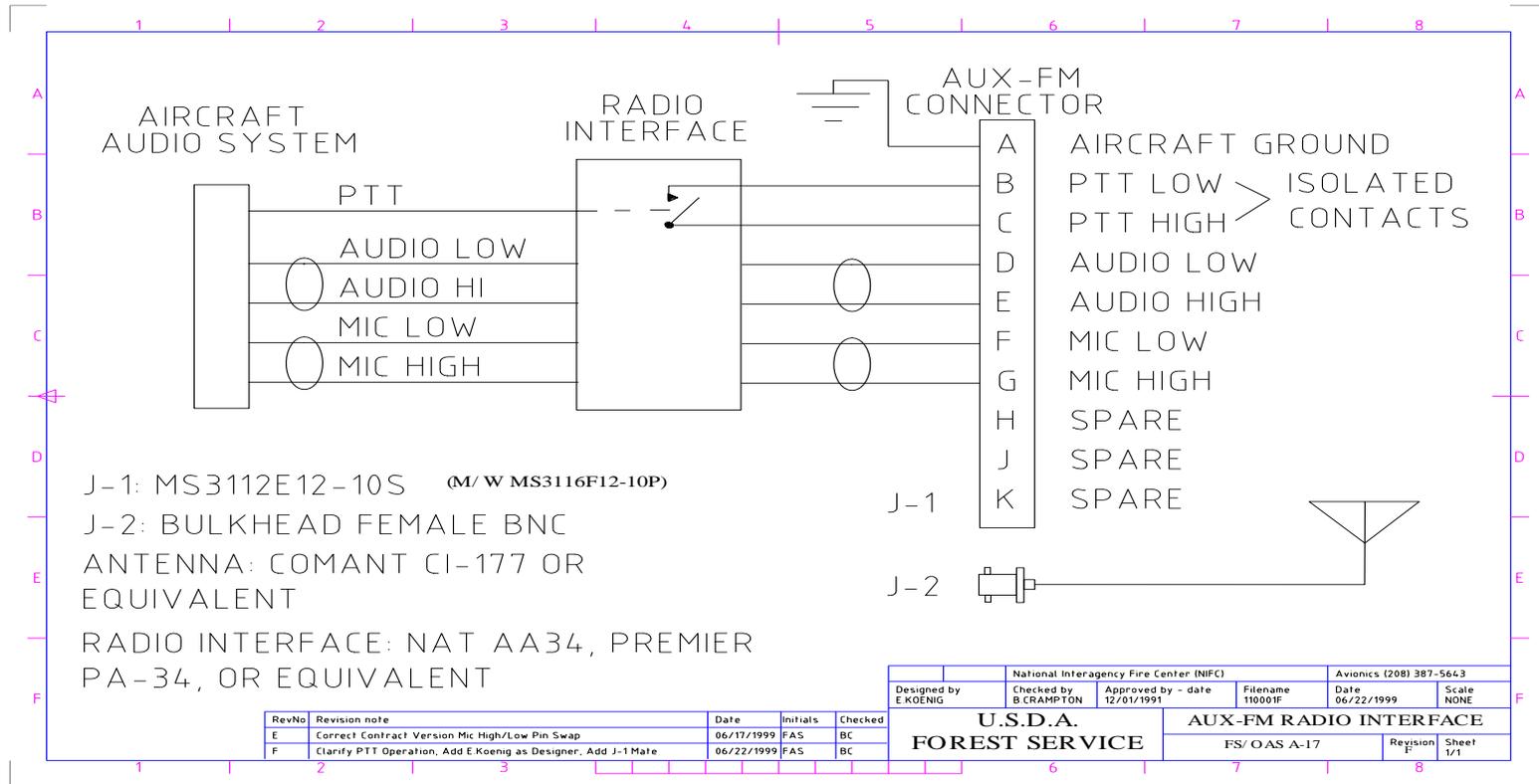
34. I CERTIFY THAT THE SERVICES LISTED ABOVE HAVE BEEN RECEIVED—SIGNATURE AND TITLE OF FOREST SERVICE OFFICIAL	35. I CERTIFY THAT THE SERVICES LISTED ABOVE HAVE BEEN PROVIDED—SIGNATURE AND TITLE OF VENDOR AGENT
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USDA-FOREST SERVICE FLIGHT REPORT FS-6500-122 (08/85) PREVIOUS EDITION OF THIS FORM IS OBSOLETE

**SECTION C  
DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**Exhibit 5**

**AUX-FM RADIO INTERFACE  
FS/OAS A-17**



SECTION C  
DESCRIPTION/SPECIFICATIONS/EXHIBITS

Exhibit 06

**Avionics Operational Test Standards**  
**FS/AMD A-24**  
**Revision E**  
August 18, 2011

The following operational test standards apply to all contractually required/offered avionics equipment under US Forest Service contract and Department of the Interior Aviation Management Directorate interagency fire contracts.

Abbreviations and Selected Definitions are in Section 9.

<b>1. Installations, Maintenance and Other Items</b>	
<b><i>Visual Inspection</i></b>	
<u>Inspect for obvious damage, inoperative displays, missing or incorrect parts, proper labeling, and documentation</u>	
<b><i>Antennas, Mounting, and Installation</i></b>	
<u>Forward/Reverse ratio of 3.0:1 or better, broadband aircraft type antennas, rigidity, doubling plates, proper bonding, proper RF cables, security, proper wire size</u>	
<b><i>Magnetic Direction Indicator (Compass)</i></b>	
<u>Installed, placarded, calibrated with engines operating stating that radios were on or off, calibration readings of not more than 30<sup>o</sup> increments (normal category airplanes) or 45<sup>o</sup> increments (all others), (system required on standard category A/C per 14 CFR 91.205; if installed, installed and placarded per 14 CFR Parts 23, 25, 27, or 29)</u>	
<b><i>Accessory Power Source</i></b>	
<u>Connector</u>	<u>MS3112E12-3S installed, proper location, permanently mounted, polarity, voltage at correct pins</u>
<u>Circuit Breaker</u>	<u>Correct amperage value, operation</u>
<b><i>Remote Cargo Hook Connector: Helicopter</i></b>	
<u>Connector</u>	<u>MS3101A24-11S installed, polarity, switched voltage, within 12" of cargo hook, securing lanyard or fixed to aircraft structure</u>
<u>Wiring</u>	<u>Per <a href="#">FS/AMD A-16</a> for intended application</u>
<u>Circuit Breaker</u>	<u>50 ampere, operation</u>
<b><i>Cargo Bell and Light System: Smokejumper</i></b>	
<u>Cargo Bell</u>	<u>Location, activation, sound level</u>

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

<u>Light System</u>	<u>Location, activation, indicators</u>
<b>2. Communications Systems</b>	
<b><i>Emergency Locator Transmitter (ELT)</i></b>	
<u>Type</u>	<u>TSO-C91a or TSO-C126C</u>
<u>Mounting</u>	<u>Per TSO and manufacturer's instructions</u>
<u>Antenna</u>	<u>External to the fuselage, proper mounting, correct location, portable antenna available for automatic portable types</u>
<u>G Switch</u>	<u>Subject TSO-C91a ELTs to a quick jerking motion (if easily removable), test N/A for TSO-C126 ELTs</u>
<u>Battery Date</u>	<u>Date not expired, matching dates on ELT and in aircraft records</u>
<u>Operation</u>	<u>Manually operates, PRF acceptable, (only check TSO-C126 units when directly connected to a test set)</u>
<u>Remote</u>	<u>Location visible and accessible to PIC, functionality, indicator</u>
<u>Logbook</u>	<u>Annual 14 CFR 91.207(d) test completed, battery expiration date on ELT matches date in maintenance record</u>
<b><i>VHF-AM Transceiver</i></b>	
<u>Type</u>	<u>TSO'd, selectable frequencies in 25 kHz increments, 760 channel minimum, operation from 118.000 to 136.975 MHz, 720 channel acceptable only if contractually permitted</u>
<u>Operation</u>	<u>To and from service monitor</u>
<u>Receiver</u>	<u>Squelch opens at acceptable level, clarity</u>
<u>Transmitter</u>	<u>Modulation from 15% to 85%, 5 watts nominal output minimum, frequency within 20 PPM (+2.46 kHz @ 122.925 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Display</u>	<u>All segments visible in direct sunlight</u>
<b><i>P25 Digital Aeronautical VHF-FM Transceiver</i></b>	
<u>Type</u>	<u>Listed on <a href="#">Approved Radios</a> list and meets <a href="#">FS/AMD A-19</a></u>
<u>Power Output</u>	<u>10 watts nominal output, multiband transceivers 6 to 10 watts nominal output</u>

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<u>Antenna</u>	<u><a href="#">Cobham</a> (Comant) CI 177-1 or equivalent, installation and mounting</u>
<u>CTCSS Tones</u>	<u>All current TIA-603 standard tone encode &amp; decode tone capability, TX tone level of 300 to 600 Hz in narrowband, frequency within 1.5 Hz of selected tone, proper operation</u>
<u>NAC and TGID</u>	<u>Operator selectable</u>
<u>Main Receiver</u>	<u>Squelch opens @ 1 to 2 uV with direct connection at 138, 156, and 173.975 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Main Transmitter</u>	<u>Narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+421 Hz @ 168.3500 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Guard Receiver</u>	<u>Squelch opens @ 1 to 2 uV with direct connection at 168.6250 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Guard Transmitter</u>	<u>Quickly selectable, operates on 168.6250 MHz, TX CTCSS tone of 110.9 Hz, narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+422 Hz @ 168.6250 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Mounting</u>	<u>Meets AC 43.13-2B, controls equally convenient to PIC and SIC/observer</u>
<u>Software</u>	<u>Current operating software per <a href="#">NIICD Hotsheet</a></u>
<b><i>Analog Aeronautical VHF-FM Transceiver: Forest Health Protection Only (non fire)</i></b>	
<u>Type</u>	<u>Technisonic TFM-138 (serial number 1540 &amp; up), TFM-138B/C/D, or TFM-500, Northern Airborne Technology NTX138-070</u>
<u>Power Output</u>	<u>10 watts nominal output</u>
<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<u>Antenna</u>	<u><a href="#">Cobham</a> (Comant) CI 177-1 or equivalent, installation and mounting</u>

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

<u>CTCSS Tones</u>	<u>All current TIA-603 standard tone encode &amp; decode tone capability, TX tone level of 300 to 600 Hz in narrowband, frequency within 1.5 Hz of selected tone, proper operation</u>
<u>Main Receiver</u>	<u>Squelch opens @ 1 to 2 uV with direct connection at 138, 156, and 173.975 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Main Transmitter</u>	<u>Narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+421 Hz @ 168.3500 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Guard Receiver</u>	<u>Squelch opens @ 1 to 2 uV with direct connection at 168.6250 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Guard Transmitter</u>	<u>Quickly selectable, operates on 168.6250 MHz, TX CTCSS tone of 110.9 Hz, narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+422 Hz @ 168.6250 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Mounting</u>	<u>Meets AC 43.13-2B, controls equally convenient to PIC and SIC/observer</u>
<b><u>AUX-FM Provisions</u></b>	
<u>Operation</u>	<u>RX &amp; TX functions through aircraft audio system(s), sidetone present, TX deviation output matches portable's stand alone output, installed per <a href="#">FS/AMD A-17</a></u>
<u>Controls</u>	<u>TX and RX selectors on all required audio controls</u>
<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<u>Antenna</u>	<u><a href="#">Cobham</a> (Comant) CI 177-1 or equivalent, installation and mounting</u>
<u>Mounting Facilities</u>	<u>Meeting AC 43.13-2B (<a href="#">Field Support Services</a> AUX-EPH-RB or equivalent), within 18" of AUX-FM connectors, controls convenient to SIC/observer</u>
<u>Connectors</u>	<u>MS3112E12-10S, female BNC, both bulkhead mounted, both adjacent to each other</u>
<b><u>VHF-FM Programming Port</u></b>	
<u>Operation</u>	<u>Location, ability to program each radio</u>
<u>Adapters</u>	<u>Available for installed radio type, serial or USB connector</u>

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**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

<b><i>VHF-FM Aeronautical Antenna: Light Fixed Wing</i></b>	
<u>RF Cable</u>	<u>Location, cable length, male BNC connector</u>
<u>Antenna</u>	<u><a href="#">Cobham</a> (Comant) CI 177-1 or equivalent, installation and mounting</u>
<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<b><i>P25 Digital VHF-FM Mobile Radio</i></b>	
<u>Type</u>	Listed on <a href="#">Approved Radios</a> list
<u>Operational Check</u>	<u>Proper RX and TX operation</u>
<u>Power Output</u>	<u>30 watts minimum nominal output</u>
<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<u>Antenna</u>	<u><a href="#">Antenna Specialists ASPR-7490</a>; <a href="#">Maxrad MWB-5803</a>; or equivalent, installation and mounting</u>
<u>CTCSS Tones</u>	<u>All current TIA-603 standard tone encode &amp; decode tone capability, TX tone level of 300 to 600 Hz in narrowband, frequency within 1.5 Hz of selected tone, proper operation</u>
<u>NAC and TGID</u>	<u>Operator selectable via radio controls</u>
<u>Receiver</u>	<u>Squelch opens @ 0.25 to 0.5 uV with direct connection at 138, 156, and 173.975 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Transmitter</u>	<u>Narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+421 Hz @ 168.3500 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Field Programmability</u>	<u>Contractor demonstration without the use of a computer to program the radio</u>
<u>Software</u>	<u>Current operating software per <a href="#">NIICD Hotsheet</a></u>
<b><i>P25 Digital VHF-FM Portable Radio</i></b>	
<u>Type</u>	Listed on <a href="#">Approved Radios</a> list
<u>Operational Check</u>	<u>Proper RX and TX operation</u>
<u>Power Output</u>	<u>1 watt but no more than 10 watts nominal output</u>

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<u>VSWR</u>	<u>Forward/reverse ratio of 3.0:1 or better at 138, 156, and 173.975 MHz</u>
<u>Battery</u>	<u>Alkaline: At least one clamshell; Rechargeable: Two fully charged battery packs at beginning of each shift</u>
<u>CTCSS Tones</u>	<u>All current TIA-603 standard tone encode &amp; decode tone capability, TX tone level of 300 to 600 Hz in narrowband, frequency within 1.5 Hz of selected tone, proper operation</u>
<u>NAC and TGID</u>	<u>Operator selectable via radio controls</u>
<u>Receiver</u>	<u>Squelch opens @ 0.25 to 0.5 uV with direct connection at 138, 156, and 173.975 MHz, audio output of at least 100 mV with narrowband input (1.5 to 2.5 kHz modulation), less than 10% distortion</u>
<u>Transmitter</u>	<u>Narrowband deviation from 1.5 to 2.5 kHz, narrowband frequency within 2.5 PPM (+421 Hz @ 168.3500 MHz) (per <a href="#">NTIA Manual</a> Chapter 5)</u>
<u>Field Programmability</u>	<u>Contractor demonstration without the use of a computer to program the radio</u>
<u>Software</u>	<u>Current operating software per <a href="#">NIICD Hotsheet</a></u>
<b><i>Automated Flight Following</i></b>	
<u>Operation</u>	<u>Accurate &amp; current position data displayed on <a href="#">Webtracker</a>, required data in Webtracker database, uses satellites</u>
<u>Installation</u>	<u>Per manufacture's manual and AC 43.13-2B, operates using aircraft power, dedicated circuit breaker</u>
<u>Antenna</u>	<u>Antenna external to unit, antenna with clear path to satellites</u>
<b><i>Public Address System: External</i></b>	
<u>Operation</u>	<u>Acceptable operation, ability to understand voice 100 feet below aircraft while aircraft is in flight, uses headset/helmet mic</u>
<u>Controls</u>	<u>PA TX selector on all required audio controls</u>

**SECTION C  
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<b>Public Address System: Internal</b>	
<u>Operation</u>	<u>Acceptable operation, ability to hear clearly throughout cabin/PAX area, Smokejumper A/C amplifier with 25 watts output with less than 10% distortion for conveying intelligible messages to all occupants from all positions with jump door open, uses headset/helmet mic, (system required on A/C with +19 PAX seats per 14 CFR 135.150 &amp; Smokejumper A/C)</u>
<u>Controls</u>	<u>PA TX selector on all required audio controls</u>
<b>Siren</b>	
<u>Operation</u>	<u>Provides Yelp and Wail tones, uses External PA speakers</u>
<u>Controls</u>	<u>Manual activation for PIC &amp; SIC/observer</u>
<b>3. Navigation Systems</b>	
<b>Panel Mounted GPS</b>	
<u>Type</u>	<u>TSO'd, panel mounted</u>
<u>Installation</u>	<u>Convenient to both PIC and SIC/observer</u>
<u>Operation</u>	<u>Correct present position or lock on, database age does not exceed contract limit, WGS-84 datum, degrees/decimal degrees display</u>
<u>Moving Map (when required)</u>	<u>Display area 1.5" high x 3.0" wide minimum, aircraft position relative to waypoints, displays geographical features</u>
<b>Portable/Handheld GPS</b>	
<u>Type</u>	<u>Aviation portable, not a drive along the road type</u>
<u>Installation</u>	<u>Convenient to both PIC and SIC/observer, installation meets AC 43.13-2B, uses aircraft power for operation, approved installation</u>
<u>Antenna</u>	<u>Antenna remoted from unit with clear path to satellite signals</u>
<u>Operation</u>	<u>Correct present position or lock on, database does not exceed contract limit, WGS-84 datum, degrees/decimal degrees display</u>
<u>Moving Map (when required)</u>	<u>Display area 1.5" high x 3.0" wide minimum, aircraft position relative to waypoints, displays geographical features</u>
<b>GPS Data Connector</b>	
	<u>DB-9F connector, correct pins active, proper location</u>

**SECTION C  
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<b>Additional GPS Antenna</b>	
<u>Freeflight Systems 16248-20 antenna, female type N connector &amp; location</u>	
<b>Altitude Encoder and Pitot Static Systems</b>	
<u>Meets 14 CFR 91 Part 91 IFR requirements, 14 CFR 91.411 &amp; 14 CFR Part 43 Appendixes E and F logbook entry not expired (24 calendar month maximum)</u>	
<b>Transponder with Altitude Reporting Capability</b>	
<u>Type</u>	<u>TSO-C74b (Mode A), TSO-C74c (Mode A with altitude reporting capability), or TSO-C112 (Mode S)</u>
<u>Installation</u>	<u>Meets 14 CFR 91.215(a), 91.215(b), and 91.413</u>
<u>Records</u>	<u>Required 14 CFR 91.413 &amp; 14 CFR Part 43 Appendix F logbook entry not expired (24 calendar month maximum)</u>
<b>VOR</b>	
<u>Panel mounted, flag pull, to/from operation, audio, all display segments visible in direct sunlight, maximum bearing error of +4<sup>0</sup> (2/5<sup>ths</sup> deflection per side (usually 2 out of 5 dots)) or meeting the manufacturer's specifications (whichever is more stringent), maximum variation between dual system of +4<sup>0</sup> (2/5<sup>ths</sup> deflection per side (usually 2 out of 5 dots)) or meeting the manufacturer's specifications (whichever is more stringent), IFR aircraft require aircraft log/record entry for IFR 30 day check per 14 CFR 91.171</u>	
<b>Localizer</b>	
<u>Maximum error of +0.5<sup>0</sup> (1/5<sup>th</sup> deflection per side (usually 1 out of 5 dots)) or meeting the manufacturer's specifications (whichever is more stringent), flag pull, interfaced to #1 VOR system</u>	
<b>Glideslope</b>	
<u>Maximum error of +0.05<sup>0</sup> (1/10<sup>th</sup> deflection per side (usually 1/2 out of 5 dots)) or meeting the manufacturer's specifications (whichever is more stringent), flag pull, interfaced to #1 VOR system</u>	
<b>Marker Beacon</b>	
<u>All indicators operate properly, acceptable sensitivity, acceptable audio level (service monitor required)</u>	
<b>DME</b>	
<u>Proper heading to station, proper distance to station, all display segments visible in direct sunlight, independent from GPS system</u>	
<b>ADF</b>	
<u>Points to station, 360<sup>0</sup> operation, acceptable audio, all display segments visible in direct sunlight</u>	
<b>4. Weather Systems</b>	
<b>Thunderstorm Detection Equipment</b>	
<u>Acceptable operation, Weather Radar is an approved alternative, (system required on aircraft with +10 PAX seats except helicopters in day VFR per 14 CFR 135.173), (not required in Hawaii &amp; Alaska)</u>	

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<b>Weather Radar</b>	
<u>Acceptable operation, (system required on aircraft with +10 PAX seats per 14 CFR 135.175), (not required in Hawaii &amp; Alaska)</u>	
<b>5. Collision Avoidance Systems</b>	
<b>Ground Proximity Warning System (GPWS)</b>	
<u>GPWS requirements expired on 3/29/2005. See Terrain Awareness and Warning System (TAWS)</u>	
<b>Radar Altimeter</b>	
<u>Indicator near glare shield or low altitude light installed, range of 0' to 2,000' minimum</u>	
<b>Terrain Awareness and Warning System (TAWS)</b>	
<u>Acceptable audio, Flight Manual documentation, disabled on Smokejumper and paracargo operations, (system required on turbine powered airplanes with +6 PAX seats per 14 CFR 91.223 and 135.154)</u>	
<b>Traffic Advisory System (TAS)</b>	
<u>Type</u>	<u>TSO'd active system, on and operating per 14 CFR 91.221 (system required on turbine airplanes with +10 PAX seats per 14 CFR 135.180)</u>
<u>Installation</u>	<u>Manufacturers display or MFD, convenient to PIC and SIC, acceptable audio level, Airtanker MFD display area 2.75" high x 3.0" wide minimum, Flight Manual documentation</u>
<u>Range</u>	<u>Operator selectable from 2 NM (or less) to at least 10 NM</u>
<u>Operation</u>	<u>360 target acquisition, minimal airframe shadowing, on MEL (when applicable) with inoperable status NTE 15 days</u>
<b>Traffic Collision and Alert Device (TCAD)</b>	
<u>See Traffic Advisory System (TAS)</u>	
<b>Traffic Collision and Alert System (TCAS)</b>	
<u>See Traffic Advisory System (TAS)</u>	
<b>6. Recorder Systems</b>	
<b>Cockpit Voice Recorder</b>	
<u>Proper area mic location, headset mic(s) operation, radio RX operation; locator beacon battery date current, (system required on multiengine turbine powered A/C with +6 PAX seats requiring two pilots by TC or operating rule per 14 CFR 91.609 and 135.151)</u>	
<b>Flight Data Recorder</b>	
<u>Locator beacon battery date current, (system required on multiengine turbine powered A/C with +10 PAX seats if manufactured/registered after 10/11/1991 per 14 CFR 91.609 &amp; 135.152 and with +20 PAX seats if operated after 10/11/1991 per 14 CFR 135.152)</u>	

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<b>7. Audio Systems</b>	
<b>Audio Control System: General Requirements Applicable to All</b>	
<u>Location</u>	<u>Convenient to required operator(s), not a safety hazard</u>
<u>Labeling</u>	<u>Legible, permanent, understandable (i.e. COM 1, COM 2, FM 1, AUX, etc or COM 1, COM 2, COM 3, COM 4, etc with radios marked accordingly)</u>
<u>Specifications</u>	
Hum, Noise, and Crosstalk	40 dB below specified audio output
Specified Audio Output	100 mW with an input of 250 mV, both at 600 ohms
Distortion	Less than 10%
<b>Audio Control System: Helicopter: <a href="#">See applicable drawings</a></b>	
<u>Required Controls</u>	<u>Individual TX selection, individual RX selection switches, separate RX and ICS audio level controls</u>
<u>Operation</u>	
TX Selection	Automatically selects proper radio and companion receiver; each required transceiver, PA, and ICS (N/A w/hot mic) system has individual TX selection
RX Selection	Selects proper radio receiver (on/off switch), each required receiver has individual RX selector independent of the transmitter selector
PTT Switch	Proper operation, separate radio TX and ICS TX switches at all required positions
ICS and Radio RX Volume	Proper operation, audio level
Sidetone	Present for each transceiver, acceptable audio level
Crosstalk	Proper operation at all required positions
<u>Rappel/Shorthaul</u>	<u>Hot Mic at Spotters position, Spotter cord proper length, proper ICS and TX capability at specified positions, additional Audio Control System (FS light helicopters may use SICs, DOI required to use SICs)</u>

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<b>Audio Control System: Light Fixed Wing</b>	
<u>Required Controls</u>	<u>Individual TX selection, individual RX selection switches (Air Tactical)</u>
<u>Operation</u>	
TX Selection	Automatically selects proper radio and companion receiver; each required transceiver, PA, and ICS (N/A w/hot mic) system has individual TX selection; ATGS Instructor TX operation uses SIC/observer audio control or has a separate system (Air Tactical)
RX Selection	Selects proper radio receiver (on/off switch)
PTT Switch	Proper operation, non-pilot switch not on flight control
ICS and Radio RX Volume	Proper operation, audio level
Sidetone	Present for each transceiver, acceptable audio level
Crosstalk	Proper operation at all required positions
<b>Audio Control System: Airtanker</b>	
<u>Required Controls</u>	<u>PIC and SIC systems interchangeable, individual TX selection, individual RX selection switches, pilot inspector monitors SIC or has a separate system (no TX or NAV required)</u>
<u>Operation</u>	
TX Selection	Automatically selects proper radio and companion receiver; each required transceiver, PA, and ICS (N/A w/hot mic) system has individual TX selection
RX Selection	Selects proper radio receiver (on/off switch)
PTT Switch	Proper operation
ICS and Radio RX Volume	Proper operation, audio level
Sidetone	Present for each transceiver, acceptable audio level
Crosstalk	Proper operation at all required positions

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<b>Audio Control System: Smokejumper</b>	
<u>Required Controls</u>	<u>Individual TX selection, individual RX selection controls, separate RX master and ICS audio level controls</u>
<u>Operation</u>	
TX Selection	Automatically selects proper radio and companion receiver; each required transceiver, PA, and ICS (N/A w/hot mic) system has individual TX selection; spotter with TX indicator
RX Selection	Selects proper radio receiver (on/off switch for PIC & SIC, adjustable volume controls for spotter/mission coordinator)
PTT Switch	Proper operation
ICS and Radio RX Volume	Proper operation, audio level sufficient for intelligible reception to helmeted spotter with jump door open while in flight
Sidetone	Present for each transceiver, acceptable audio level
Crosstalk	Proper operation at all required positions
<b>8. Intercommunications System (ICS)</b>	
<b>Available at Required Positions</b>	Per contractually required locations
<b>Operation</b>	Proper audio & mic operation at each required position, Smokejumper isolation with Call button and PIC LED
<b>Hot Mic/VOX</b>	Presence per contract requirements, proper operation
<b>PTT and Volume Controls</b>	Presence per contract requirements, proper operation, Airtanker ICS PTT not required if normal conversation can be maintained while in flight
<b>Specifications</b>	
<u>Hum, Noise, and Crosstalk</u>	<u>40 dB below specified audio output</u>
<u>Specified Audio Output</u>	<u>100 mW with an input of 250 mV, both at 600 ohms</u>
<u>Distortion</u>	<u>Less than 10%</u>
<b>9. Abbreviations &amp; Selected Definitions</b>	
AC	Advisory Circular

**SECTION C**  
**DESCRIPTION/SPECIFICATIONS/EXHIBITS**

A/C	Aircraft
ADF	Automatic Direction Finder
AFF	Automated Flight Following
AM	Amplitude Modulation
AMD	Aviation Management Directorate
ATGS	Air Tactical Group Supervisor
AUX-FM	Auxiliary Frequency Modulated portable radio
BNC	Bayonet Neill Concelman, a quick disconnect RF connector
CFR	Code of Federal Regulations
CTCSS	Continuous Tone Controlled Squelch System
CVR	Cockpit Voice Recorder
dB	Decibel
DME	Distance Measuring Equipment
DOI	Department of the Interior
ELT	Emergency Locator Transmitter
FDR	Flight Data Recorder
FM	Frequency Modulation
FS	Forest Service
GPS	Global Positioning System
GPWS	Ground Proximity Warning System, see TAWS
GS	Glideslope, see ILS
Hz	Hertz (1 hertz)
ICS	Intercommunication System

**SECTION C**  
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IFR	Instrument Flight Rules
ILS	Instrument Landing System, see GS and LOC
kHz	Kilohertz (1,000 hertz)
LED	Light Emitting Diode
LOC	Localizer, see ILS
MB	Marker Beacon
MEL	Minimum Equipment List
MFD	Multifunction Display
Mic or mic	Microphone
MHz	Megahertz (1,000,000 hertz)
Multiband Transceiver	A transceiver capable of operating in more than one frequency band (i.e. 136 to 174 MHz and 403 to 512 MHz) as opposed to a standard VHF-FM transceiver which can only operate in the 136 to 174 MHz frequency band.
mW	Milliwatts (0.001 watts)
mV	Millivolts (0.001 volts)
NAC	Network Access Code, see P25
NAV	Navigation Systems
NM	Nautical Mile
NTIA Manual	National Telecommunications & Information Administration, <a href="#">Manual of Regulations and Procedures for Federal Radio Frequency Management</a>
NTE	Not To Exceed
P25	<a href="#">Project 25 Digital</a> , open architecture digital communications system
PA	Public Address

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PAX	Passenger or passengers
PIC	Pilot in Command
PPM	Parts Per Million
PRF	Pulse Repetition Frequency
PTT	Push to Talk
RF	Radio Frequency
Rx or RX	Receive or reception
SIC	Second in Command, copilot
TAS	Traffic Advisory System
TAWS	Terrain Awareness and Warning System
TC	Type Certificate
TCAD	Traffic Collision and Alert Device, see TAS
TCAS	Traffic Collision and Alert System, see TAS
TGID	Talkgroup, a sub code of a NAC
TSO	Technical Standard Order
Tx or TX	Transmit or transmission
USB	Universal Serial Bus
uV	Microvolt (0.000001 volts)
VHF	Very High Frequency
VOR	VHF Omnidirectional Range
VOX	Voice Activated
VSWR	Voltage Standing Wave Ratio

**Exhibit 07**

**SECTION C  
DESCRIPTION/SPECIFICATIONS/EXHIBITS**

**Resource Reconnaissance and Fire Reconnaissance Matrix Reference**

Equipment	Resource Recon Any column is acceptable		Fire Recon Any column is acceptable		
ELT (91.207 excluding f)					
Night VFR Lighting					
760 channel VHF-AM			2 each	2 each	2 each
GPS (Panel-mounted or Handheld)					
Automated Flight Following (AFF) (see note 1)					
VHF-FM (see note 2)					
Intercom					
Audio Panel					
#1 AUX-FM Provisions					
#2 AUX-FM Provisions					
VHF-FM Antenna					2 each
Space for Portable Reconnaissance VHF-FM Radio Kit					
Accessory Power Source Connector					

This matrix shows minimum required avionics items on standard contracts. Contract amendments could change any requirement. Contract use, intent, and aircraft limitations are the determining factors on what is and is not required. Any aircraft with higher capability may substitute for a lesser capable aircraft. For example, a Fire Reconnaissance aircraft can substitute for a Resource Reconnaissance aircraft.

Column note: The third column for both types of aircraft categories shows one method of meeting the intent of the VHF-FM radio requirement for communications with a dispatch center. The portable reconnaissance radio kit need not be as sophisticated as an Air Attack kit. A Resource Reconnaissance radio kit may utilize a portable radio while a Fire Reconnaissance radio kit may contain either two portable radios or an aeronautical VHF-FM radio.

**Note 1:** AFF is required on all Forest Service special mission aircraft. AFF is required within the Department of the Interior on a Bureau by Bureau basis.

**Note 2:** VHF-FM – All VHF-FM aeronautical radios must be multimode (P25) digital for fire operations.

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**Exhibit 08**

January 3, 2007

**Air Tactical Matrix Reference**

Equipment	Type I Either column is acceptable	Type II Either column is acceptable	Type III	Type IV	This matrix
ELT (91.207 excluding f)					
Night VFR Lighting					
#1 760 channel VHF-AM					
#2 760/ channel VHF-AM					
Transponder (91.411 & 413)					
GPS (Panel-mounted or Handheld)					
#1 VHF-FM (see note 1)					
#2 VHF-FM (see note 1)					
#3 VHF-FM (see note 1)					
AUX-FM Provisions					
Automated Flight Following (AFF) (see note 2)					
Intercom					
#1 Audio Panel					
#2 Audio Panel for Copilot/ATGS					
Audio Jacks for ATGS Instructor with radio PTT or #3 Audio Panel					
#1 VHF-FM Antenna					
#2 VHF-FM Antenna					
Auxiliary Power Source					
Space for Air Attack Kit					

shows minimum required avionics items on standard contracts. Contract amendments could change modify requirement. Contract use, intent, and aircraft limitations are the determining factors on what is and is not required. AFF requirements are determined by regional policy. Any aircraft with higher capability may substitute for a lesser capable aircraft. For example, a Type I Air Tactical aircraft can substitute for a Type III Air Tactical or Fire Reconnaissance aircraft.

**Note 2:** VHF-FM – All VHF-FM aeronautical radios must be multimode (P25) digital.

**Note 1:** AFF is required on all Forest Service special mission aircraft. AFF is required within the Department of the Interior on a Bureau by Bureau basis.

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Exhibit 09

**Safety Communiqué Form**

AMD-34 / FS 5700-14

		<b>REPORTED BY: (optional)</b>	
		Name: E-Mail: Phone: Cell Phone: Pager: Organization: Organization Other: Date Submitted: mm/dd/yyyy	
<b>EVENT</b>			
Date: mm/dd/yyyy	Local Time: hhmm	Injuries: Y/N	Damage: Y/N
State:	Location: (Airport, City, Lat/Long or Fire Name)		
<b>Operational Control:</b>			
Agency:			
Region:			
Unit:			
<b>MISSION (* see look-up tables)</b>			
Type: *	Other:		
Procurement: *	Other:		
Persons Onboard:	Special Use: Y/N	Hazardous Materials: Y/N	
Departure Point:	Destination		
<b>AIRCRAFT (* see look-up tables)</b>			
Type: *	Tail #	Manufacturer: *	Model:
Owner/Operator:		Pilot:	
<b>NARRATIVE: (A brief explanation of the event)</b>			
<b>CORRECTIVE ACTION: (What was done to correct the problem)</b>			

**SECTION C  
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**Exhibit 10**

**ADDITIONAL ASSISTANCE**

*Additional assistance may be obtained by contacting any of these offices*

**REGIONAL FIXED WING PROGRAM MANAGER**

Attn.: Mary Verry  
1740 SE Ochoco Way  
Redmond, OR 97756  
Phone: (541)408-8415

**REGIONAL AVIATION OFFICER**

Attn.: Aaron Schoolcraft  
PO Box 3623  
Portland, OR 97208  
Phone: (503) 808-2359

**REGIONAL AVIATION SAFETY**

Attn.: Gary Boyd  
1740 SE Ochoco Way  
Redmond, OR 97755  
Phone: (541) 504-7263

**REGIONAL AVIATION GROUP**

Attn: Kim Reed  
1740 SE Ochoco Way  
Redmond, OR 97756  
Phone: (541) 504-7252

**REGIONAL AVIATION CONTRACTING OFFICER**

Attn.: Ben McGrane  
1740 SE Ochoco Way  
Redmond, OR 97755  
Phone: (541) 504-7273

**REGIONAL AVIATION MAINTENANCE DIVISION MANAGER**

Attn: Jim Reed  
1740 SE Ochoco Way  
Redmond OR 97756  
Phone: (541) 504-7254

**AVIATION SAFETY INSPECTOR**

Attn: Mike Cook  
1740 SE Ochoco Way  
Redmond OR 97756  
Phone: (541) 504-7267  
Cell: (541) 408-2247

SECTION C  
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Exhibit 11

*PILOT AGREEMENT  
2016 Season*

I, the undersigned, have been provided a copy of Solicitation No. AG-04H1-S-13-0003 outlining the terms and conditions of the solicitation. I have read and understand the requirements of the solicitation, specifically Section C, Description/Specifications/Work Statement General Specifications and Exhibit 06 (Operations and Safety Procedures) and Exhibit 07 (Air Tactical Pilot). (As Applicable) While exercising the privileges granted on Form 5700-20/5700-20A, Pilot Qualification, I agree to abide by the terms of an awarded contract resulting from solicitation AG-04H1-S-13-0003

Printed Name: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_  
*(Signature)*

Title: \_\_\_\_\_

Company: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note:** This form must be returned to the USFS inspector for the pilot carding process to be complete.

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**Exhibit 12  
PERFORMANCE REPORT**

USDA Forest Service Region 6 Fire and Aviation Contracting 1740 SE Ochoco Way Redmond, OR 97756 Phone 541-410-5714 Fax 971-216-4099		<b>EVALUATION REPORT ON</b> <b>CONTRACTOR PERFORMANCE</b> ""CPARS Compatible Format"" <b>SOURCE SELECTION INFORMATION</b> NOT FOR PUBLIC RELEASE (see FAR 3.104 & 42.1503)	
<b>AGENCY / USER</b>		<b>CONTRACT NO.</b>	
<b>ADDRESS</b>		<b>CONTRACTOR</b>	
<b>CITY / STATE/ ZIP</b>		<b>PERIOD OF PERFORMANCE</b>	FROM: _____ TO: _____
<b>CONTRACT COR</b>		<b>LOCATION OF PERFORMANCE</b>	
<b>PROGRAM TITLE</b>	<b>AIRCRAFT FLIGHT SERVICES:</b> <input type="checkbox"/> AIRPLANE <input type="checkbox"/> HELICOPTER <input type="checkbox"/> AIR TANKER <input type="checkbox"/> OTHER – specify		
	<b>AIRCRAFT TYPE</b>		
<b>CONTRACT EFFORT DESCRIPTION</b> <i>(check all that apply)</i>	<input type="checkbox"/> EXCLUSIVE USE <input type="checkbox"/> CALL WHEN NEEDED		
	<input type="checkbox"/> FIRE MANAGEMENT <input type="checkbox"/> RESOURCE <input type="checkbox"/> MAINTENANCE		
	<input type="checkbox"/> OTHER MISSION – specify: _____		
<b>INSTRUCTIONS:</b> 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, <b>'double click' the box.</b> 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). <b>SEE PAGE 3 FOR EVALUATION RATINGS DEFINITIONS</b>			
<b>1. Quality of Service. 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.</b>			
<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			
<b>COMMENTS:</b>			

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**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.**

N/A     Exceptional     Very Good     Satisfactory     Marginal     Unsatisfactory

COMMENTS: 

Empty comment box for item 2.

**3. Cost Control. How well does the contractor control operating costs? (only applicable for cost reimbursable type contracts)**

N/A     Exceptional     Very Good     Satisfactory     Marginal     Unsatisfactory

COMMENTS: 

Empty comment box for item 3.

**4. Business Relations. Contractor was cooperative and customer oriented, provided sufficient field support, satisfactorily addressed any issues or concerns, and identified corrective action as necessary.**

N/A     Exceptional     Very Good     Satisfactory     Marginal     Unsatisfactory

COMMENTS: 

Empty comment box for item 4.

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**5. Management. Contractor and on-site representatives were professional, well qualified, and committed to customer satisfaction and safety of operations. Contractor provided necessary support for key personnel and if applicable, took necessary action to correct or replace any personnel.**

N/A       Exceptional       Very Good       Satisfactory       Marginal       Unsatisfactory

COMMENTS: 

--	--

**6. Small Business. How does the contractor support small business? (only applicable for contracts awarded to large businesses)**

N/A       Exceptional       Very Good       Satisfactory       Marginal       Unsatisfactory

COMMENTS: 

--	--

**7. Other – Safety. Contractor and on-site representatives attitude and efforts, as well as actual application, towards aircraft safety and general safety of operations?**

N/A       Exceptional       Very Good       Satisfactory       Marginal       Unsatisfactory

COMMENTS: 

--	--

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8. Customer Satisfaction. Identify to what level you were satisfied with the services provided under this contract. If given the opportunity, would you hire this contractor again to accomplish a similar project?  yes  No  
 N/A  Exceptional  Very Good  Satisfactory  Marginal  Unsatisfactory

COMMENTS: 

[Empty comment box for item 8]

9. Other Areas:  
 N/A  Exceptional  Very Good  Satisfactory  Marginal  Unsatisfactory

10. Other Areas:  
 N/A  Exceptional  Very Good  Satisfactory  Marginal  Unsatisfactory

11. Other Areas:  
 N/A  Exceptional  Very Good  Satisfactory  Marginal  Unsatisfactory

12. Other Areas:  
 N/A  Exceptional  Very Good  Satisfactory  Marginal  Unsatisfactory

Additional comments to support your response to any item above or other items (will not be posted on CPARS website)

[Empty comment box for additional comments]

Name, Title of Individual Completing this Form ( include agency, phone and electronic address )

Signature

SECTION D  
CONTRACT CLAUSES

CONTRACT CLAUSES

**D-1 Contract Terms and Conditions -Commercial Items (FAR 52.212-4) (Feb 2012)**

(a) *Inspection/Acceptance.* The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its post-acceptance rights—

- (1) Within a reasonable time after the defect was discovered or should have been discovered; and
- (2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) *Assignment.* The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act ([31 U.S.C. 3727](#)). However, when a third party makes payment (e.g., use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) *Changes.* Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) *Disputes.* This contract is subject to the Contract Disputes Act of 1978, as amended ([41 U.S.C. 601-613](#)). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR [52.233-1](#), Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) *Definitions.* The clause at FAR [52.202-1](#), Definitions, is incorporated herein by reference.

(f) *Excusable delays.* The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice.

(1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include—

(i) Name and address of the Contractor;

(ii) Invoice date and number;

**SECTION D  
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- (iii) Contract number, contract line item number and, if applicable, the order number;
  - (iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;
  - (v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;
  - (vi) Terms of any discount for prompt payment offered;
  - (vii) Name and address of official to whom payment is to be sent;
  - (viii) Name, title, and phone number of person to notify in event of defective invoice; and
  - (ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.
  - (x) Electronic funds transfer (EFT) banking information.
- (A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.
- (B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (e.g., [52.232-33](#), Payment by Electronic Funds Transfer—Central Contractor Registration, or [52.232-34](#), Payment by Electronic Funds Transfer—Other Than Central Contractor Registration), or applicable agency procedures.
- (C) EFT banking information is not required if the Government waived the requirement to pay by EFT.
- (2) Invoices will be handled in accordance with the Prompt Payment Act ([31 U.S.C. 3903](#)) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR Part 1315.
- (h) *Patent indemnity.* The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.
- (i) Payment.—
- (1) *Items accepted.* Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.
- (2) *Prompt payment.* The Government will make payment in accordance with the Prompt Payment Act ([31 U.S.C. 3903](#)) and prompt payment regulations at 5 CFR Part 1315.
- (3) *Electronic Funds Transfer (EFT).* If the Government makes payment by EFT, see [52.212-5\(b\)](#) for the appropriate EFT clause.
- (4) *Discount.* In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

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(5) *Overpayments.* If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall—

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—

(A) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) *Interest.*

(i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) *Final decisions.* The Contracting Officer will issue a final decision as required by [33.211](#) if—

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see [32.607-2](#)).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

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(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on—

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in [32.608-2](#) of the Federal Acquisition Regulation in effect on the date of this contract.

(j) *Risk of loss.* Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) *Taxes.* The contract price includes all applicable Federal, State, and local taxes and duties.

(l) *Termination for the Government's convenience.* The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) *Termination for cause.* The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) *Title.* Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) *Warranty.* The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) *Limitation of liability.* Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

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(q) *Other compliances.* The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) *Compliance with laws unique to Government contracts.* The Contractor agrees to comply with [31 U.S.C. 1352](#) relating to limitations on the use of appropriated funds to influence certain Federal contracts; [18 U.S.C. 431](#) relating to officials not to benefit; [40 U.S.C. 3701](#), *et seq.*, Contract Work Hours and Safety Standards Act; [41 U.S.C. 51-58](#), Anti-Kickback Act of 1986; [41 U.S.C. 265](#) and [10 U.S.C. 2409](#) relating to whistleblower protections; [49 U.S.C. 40118](#), Fly American; and [41 U.S.C. 423](#) relating to procurement integrity.

(s) *Order of precedence.* Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

(1) The schedule of supplies/services.

(2) The Assignments, Disputes, Payments, Invoice, Other Compliances, and Compliance with Laws Unique to Government Contracts paragraphs of this clause.

(3) The clause at [52.212-5](#).

(4) Addenda to this solicitation or contract, including any license agreements for computer software.

(5) Solicitation provisions if this is a solicitation.

(6) Other paragraphs of this clause.

(7) The [Standard Form 1449](#).

(8) Other documents, exhibits, and attachments.

(9) The specification.

(t) Central Contractor Registration (CCR).

(1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the CCR database to ensure it is current, accurate and complete. Updating information in the CCR does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR [Subpart 42.12](#), the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the CCR database; (B) comply with the requirements of [Subpart 42.12](#); and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer.

The Contractor must provide with the notification sufficient documentation to support the legally changed name.

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(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the CCR record to reflect an assignee for the purpose of assignment of claims (see [Subpart 32.8](#), Assignment of Claims). Assignees shall be separately registered in the CCR database. Information provided to the Contractor's CCR record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via CCR accessed through <https://www.acquisition.gov> or by calling 1-888-227-2423 or 269-961-5757.

**D-2 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS—COMMERCIAL ITEMS (FAR 52.212-5)(JAN 2016)**

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) [52.222-50](#), Combating Trafficking in Persons (Feb 2009) ([22 U.S.C. 7104\(g\)](#)).

\_\_\_ Alternate I (Aug 2007) of [52.222-50](#) ([22 U.S.C. 7104\(g\)](#)).

(2) [52.233-3](#), Protest After Award (AUG 1996) ([31 U.S.C. 3553](#)).

(3) [52.233-4](#), Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

\_\_X\_ (1) [52.203-6](#), Restrictions on Subcontractor Sales to the Government (Sept 2006), with Alternate I (Oct 1995) ([41 U.S.C. 253g](#) and [10 U.S.C. 2402](#)).

\_\_X\_ (2) [52.203-13](#), Contractor Code of Business Ethics and Conduct (Apr 2010) (Pub. L. 110-252, Title VI, Chapter 1 ([41 U.S.C. 251 note](#))).

\_\_\_ (3) [52.203-15](#), Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (June 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

\_\_\_ (4) [52.204-10](#), Reporting Executive Compensation and First-Tier Subcontract Awards (Aug 2012) (Pub. L. 109-282) ([31 U.S.C. 6101 note](#)).

\_\_\_ (5) [52.204-11](#), American Recovery and Reinvestment Act—Reporting Requirements (Jul 2010) (Pub. L. 111-5).

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\_\_\_ (6) [52.209-6](#), Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (Dec 2010) (31 U.S.C. 6101 note).

\_\_\_ (7) [52.209-9](#), Updates of Publicly Available Information Regarding Responsibility Matters (Feb 2012) (41 U.S.C. 2313).

\_\_\_ (8) [52.209-10](#), Prohibition on Contracting with Inverted Domestic Corporations (May 2012) (section 738 of Division C of Pub. L. 112-74, section 740 of Division C of Pub. L. 111-117, section 743 of Division D of Pub. L. 111-8, and section 745 of Division D of Pub. L. 110-161).

\_\_\_ (9) [52.219-3](#), Notice of HUBZone Set-Aside or Sole-Source Award (Nov 2011) ([15 U.S.C. 657a](#)).

\_\_\_ (10) [52.219-4](#), Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011) (if the offeror elects to waive the preference, it shall so indicate in its offer) ([15 U.S.C. 657a](#)).

\_\_\_ (11) [Reserved]

\_\_X\_ (12)(i) [52.219-6](#), Notice of Total Small Business Set-Aside (Nov 2011) ([15 U.S.C. 644](#)).

\_\_\_ (ii) Alternate I (Nov 2011).

\_\_\_ (iii) Alternate II (Nov 2011).

\_\_\_ (13)(i) [52.219-7](#), Notice of Partial Small Business Set-Aside (June 2003) ([15 U.S.C. 644](#)).

\_\_\_ (ii) Alternate I (Oct 1995) of [52.219-7](#).

\_\_\_ (iii) Alternate II (Mar 2004) of [52.219-7](#).

\_\_\_ (14) [52.219-8](#), Utilization of Small Business Concerns (Jan 2011) ([15 U.S.C. 637\(d\)\(2\)](#) and (3)).

\_\_\_ (15)(i) [52.219-9](#), Small Business Subcontracting Plan (Jan 2011) ([15 U.S.C. 637\(d\)\(4\)](#)).

\_\_\_ (ii) Alternate I (Oct 2001) of [52.219-9](#).

\_\_\_ (iii) Alternate II (Oct 2001) of [52.219-9](#).

\_\_\_ (iv) Alternate III (Jul 2010) of [52.219-9](#).

\_\_\_ (16) [52.219-13](#), Notice of Set-Aside of Orders (Nov 2011)([15 U.S.C. 644\(r\)](#)).

\_\_X\_ (17) [52.219-14](#), Limitations on Subcontracting (Nov 2011) ([15 U.S.C. 637\(a\)\(14\)](#)).

\_\_\_ (18) [52.219-16](#), Liquidated Damages—Subcon-tracting Plan (Jan 1999) ([15 U.S.C. 637\(d\)\(4\)\(F\)\(i\)](#)).

\_\_\_ (19)(i) [52.219-23](#), Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) ([10 U.S.C. 2323](#)) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

\_\_\_ (ii) Alternate I (June 2003) of [52.219-23](#).

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\_\_\_ (20) [52.219-25](#), Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (Dec 2010) (Pub. L. 103-355, section 7102, and [10 U.S.C. 2323](#)).

\_\_\_ (21) [52.219-26](#), Small Disadvantaged Business Participation Program— Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and [10 U.S.C. 2323](#)).

\_\_\_ (22) [52.219-27](#), Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (Nov 2011) ([15 U.S.C. 657 f](#)).

\_\_x\_ (23) [52.219-28](#), Post Award Small Business Program Representation (Apr 2012) ([15 U.S.C. 632\(a\)\(2\)](#)).

\_\_\_ (24) [52.219-29](#), Notice of Set-Aside for Economically Disadvantaged Women-Owned Small Business (EDWOSB) Concerns (Apr 2012) ([15 U.S.C. 637\(m\)](#)).

\_\_\_ (25) [52.219-30](#), Notice of Set-Aside for Women-Owned Small Business (WOSB) Concerns Eligible Under the WOSB Program (Apr 2012) ([15 U.S.C. 637\(m\)](#)).

\_\_x (26) [52.222-3](#), Convict Labor (June 2003) (E.O. 11755).

\_\_x (27) [52.222-19](#), Child Labor—Cooperation with Authorities and Remedies (Mar 2012) (E.O. 13126).

\_\_x\_ (28) [52.222-21](#), Prohibition of Segregated Facilities (Feb 1999).

\_\_x\_ (29) [52.222-26](#), Equal Opportunity (Mar 2007) (E.O. 11246).

\_\_x\_ (30) [52.222-35](#), Equal Opportunity for Veterans (Sep 2010)([38 U.S.C. 4212](#)).

\_\_x\_ (31) [52.222-36](#), Affirmative Action for Workers with Disabilities (Oct 2010) ([29 U.S.C. 793](#)).

\_\_x\_ (32) [52.222-37](#), Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212).

\_\_x\_ (33) [52.222-40](#), Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496).

\_\_x\_ (34) [52.222-54](#), Employment Eligibility Verification (JUL 2012). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in [22.1803](#).)

\_\_\_ (35)(i) [52.223-9](#), Estimate of Percentage of Recovered Material Content for EPA–Designated Items (May 2008) ([42 U.S.C. 6962\(c\)\(3\)\(A\)\(ii\)](#)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

\_\_\_ (ii) Alternate I (May 2008) of [52.223-9](#) ([42 U.S.C. 6962\(i\)\(2\)\(C\)](#)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

\_\_\_ (36) [52.223-15](#), Energy Efficiency in Energy-Consuming Products (DEC 2007) ([42 U.S.C. 8259b](#)).

\_\_\_ (37)(i) [52.223-16](#), IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).

\_\_\_ (ii) Alternate I (DEC 2007) of [52.223-16](#).

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- \_\_\_ (38) [52.223-18](#), Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011) (E.O. 13513).
- \_\_\_ (39) [52.225-1](#), Buy American Act—Supplies (Feb 2009) ([41 U.S.C. 10a-10d](#)).
- \_\_\_ (40)(i) [52.225-3](#), Buy American Act—Free Trade Agreements—Israeli Trade Act (Nov 2012) ([41 U.S.C. chapter 83](#), [19 U.S.C. 3301](#) note, [19 U.S.C. 2112](#) note, [19 U.S.C. 3805](#) note, [19 U.S.C. 4001](#) note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43).
- \_\_\_ (ii) Alternate I (Mar 2012) of [52.225-3](#).
- \_\_\_ (iii) Alternate II (Mar 2012) of [52.225-3](#).
- \_\_\_ (iv) Alternate III (Nov 2012) of [52.225-3](#).
- \_\_\_ (41) [52.225-5](#), Trade Agreements (Nov 2012) ([19 U.S.C. 2501](#), *et seq.*, [19 U.S.C. 3301](#) note).
- \_\_\_ (42) [52.225-13](#), Restrictions on Certain Foreign Purchases (June 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).
- \_\_\_ (43) [52.226-4](#), Notice of Disaster or Emergency Area Set-Aside (Nov 2007) ([42 U.S.C. 5150](#)).
- \_\_\_ (44) [52.226-5](#), Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) ([42 U.S.C. 5150](#)).
- \_\_\_ (45) [52.232-29](#), Terms for Financing of Purchases of Commercial Items (Feb 2002) ([41 U.S.C. 255\(f\)](#), [10 U.S.C. 2307\(f\)](#)).
- \_\_\_ (46) [52.232-30](#), Installment Payments for Commercial Items (Oct 1995) ([41 U.S.C. 255\(f\)](#), [10 U.S.C. 2307\(f\)](#)).
- \_x\_ (47) [52.232-33](#), Payment by Electronic Funds Transfer—Central Contractor Registration (Oct 2003) ([31 U.S.C. 3332](#)).
- \_\_\_ (48) [52.232-34](#), Payment by Electronic Funds Transfer—Other than Central Contractor Registration (May 1999) ([31 U.S.C. 3332](#)).
- \_\_\_ (49) [52.232-36](#), Payment by Third Party (Feb 2010) ([31 U.S.C. 3332](#)).
- \_\_\_ (50) [52.239-1](#), Privacy or Security Safeguards (Aug 1996) ([5 U.S.C. 552a](#)).
- \_\_\_ (51)(i) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) ([46 U.S.C. Appx. 1241\(b\)](#) and [10 U.S.C. 2631](#)).
- \_\_\_ (ii) Alternate I (Apr 2003) of [52.247-64](#).
- (c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:
- \_x\_ (1) [52.222-41](#), Service Contract Act of 1965 (Nov 2007) ([41 U.S.C. 351](#), *et seq.*).

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  x\_ (2) [52.222-42](#), Statement of Equivalent Rates for Federal Hires (May 1989) ([29 U.S.C. 206](#) and [41 U.S.C. 351](#), *et seq.*).

  x\_ (3) [52.222-43](#), Fair Labor Standards Act and Service Contract Act—Price Adjustment (Multiple Year and Option Contracts) (Sep 2009) ([29 U.S.C. 206](#) and [41 U.S.C. 351](#), *et seq.*).

   (4) [52.222-44](#), Fair Labor Standards Act and Service Contract Act—Price Adjustment (Sep 2009) ([29 U.S.C. 206](#) and [41 U.S.C. 351](#), *et seq.*).

   (5) [52.222-51](#), Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Nov 2007) ([41 351](#), *et seq.*).

   (6) [52.222-53](#), Exemption from Application of the Service Contract Act to Contracts for Certain Services—Requirements (Feb 2009) ([41 U.S.C. 351](#), *et seq.*).

   (7) [52.222-17](#), Nondisplacement of Qualified Workers (JAN 2013) (E.O.13495).

   (8) [52.226-6](#), Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247).

   (9) [52.237-11](#), Accepting and Dispensing of \$1 Coin (Sept 2008) ([31 U.S.C. 5112\(p\)\(1\)](#)).

(d) *Comptroller General Examination of Record.* The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at [52.215-2](#), Audit and Records—Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR [Subpart 4.7](#), Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause—

(i) [52.203-13](#), Contractor Code of Business Ethics and Conduct (Apr 2010) (Pub. L. 110-252, Title VI, Chapter 1 ([41 U.S.C. 251 note](#))).

(ii) [52.219-8](#), Utilization of Small Business Concerns (Dec 2010) ([15 U.S.C. 637\(d\)\(2\)](#) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds \$650,000 (\$1.5 million for construction of any public facility), the subcontractor must include [52.219-8](#) in lower tier subcontracts that offer subcontracting opportunities.

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- (iii) [52.222-17](#), Nondisplacement of Qualified Workers (JAN 2013) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause [52.222-17](#).
- (iv) [52.222-26](#), Equal Opportunity (Mar 2007) (E.O. 11246).
- (v) [52.222-35](#), Equal Opportunity for Veterans (Sep 2010) ([38 U.S.C. 4212](#)).
- (vi) [52.222-36](#), Affirmative Action for Workers with Disabilities (Oct 2010) ([29 U.S.C. 793](#)).
- (vii) [52.222-40](#), Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause [52.222-40](#).
- (viii) [52.222-41](#), Service Contract Act of 1965 (Nov 2007) ([41 U.S.C. 351](#), *et seq.*).
- (ix) [52.222-50](#), Combating Trafficking in Persons (Feb 2009) ([22 U.S.C. 7104\(g\)](#)).
- \_\_\_Alternate I (Aug 2007) of [52.222-50](#) ([22 U.S.C. 7104\(g\)](#)).
- (x) [52.222-51](#), Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (Nov 2007) ([41 U.S.C. 351](#), *et seq.*).
- (xi) [52.222-53](#), Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (Feb 2009) ([41 U.S.C. 351](#), *et seq.*).
- (xii) [52.222-54](#), Employment Eligibility Verification (JUL 2012).
- (xiii) [52.226-6](#), Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause [52.226-6](#).
- (xiv) [52.247-64](#), Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) ([46 U.S.C. Appx. 1241\(b\)](#) and [10 U.S.C. 2631](#)). Flow down required in accordance with paragraph (d) of FAR clause [52.247-64](#).

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

### **D-3 Economic Price Adjustment Contract Flight Rates**

#### **FUEL PORTION OF FLIGHT RATE**

- (1) During the entire agreement period of performance, flight rates will be adjusted to reflect increases and decreases to the prices of aviation fuel.
- (2) For adjustment purposes, the baseline price of AV Gas fuel is established at **\$5.53** and the baseline price for Jet A fuel is established at **\$4.85 per gallon**. The unit prices are the average price for aviation fuel based upon the National Fuel Survey. .
- (3) The adjustment to the fuel portion of the flight rate shall be the average difference multiplied by the fuel consumption rates in located in the solicitation/agreement for the applicable aircraft type.
- (4) An initial adjustment to the flight rate shall be made on February 16th of each agreement period, regardless of the variation in price to re-establish the baseline. Subsequent adjustments shall be made

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on May 16, and July 16 of each contract period provided the variations in the average unit price, as stated above, is \$.10 higher or lower than the unit price established when the last adjustment was made.

**D-4 Property and Personal Damage**

- A. The Contractor shall use every precaution necessary to prevent damage to public and private property.
- B. The Contractor shall be responsible for all damage to property and to persons, including third parties that occur as a result of his or his agent's or employee's fault or negligence. The term "third parties" is construed to include employees of the Government.
- C. The Contractor shall procure and maintain during the term of this contract, and any extension thereof, aircraft and General Public Liability Insurance in accordance with 14 CFR 205. The parties named insured under the policy or policies shall be the **CONTRACTOR and THE UNITED STATES OF AMERICA.**
- D. The Contractor may be otherwise insured by a combination of primary and excess policies. Such policies shall have combined coverage equal to or greater than the combined minimums required.
- E. Policies containing exclusions for chemical damage or damage incidental to the use of equipment and supplies furnished under this contract, or growing out of direct performance of the contract, will not be acceptable. The chemical damage coverage may be limited to chemicals dispensed while performing firefighting activities.
- F. Prior to the commencement of work, the Contractor shall provide the CO with one copy of the insurance policy, or confirmation from the insurance company, certifying that the coverage described in this clause has been obtained.

**D-5 OPTION TO EXTEND SERVICES (FAR 52.217-8) (NOV 1999)**

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the Contractor within 10 Days.

**D-6 Option to Extend the Term of the Contract (FAR 52.217-9) (MAR 2000)**

- A. The Government may extend the term of the Contract by written notice to the Contractor within 60 days; provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
- B. If the Government exercises this option, the extended contract will be considered to include this option clause.

The total duration of this contract, including the exercise of any options under this clause, shall not exceed one (1) base year and two (2) renewal option periods. **The Base year will be effective 4/1/16 – 3/30/17.**

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**D-7 Statement of Equivalent Rates for Federal Hires (FAR 52.222-42) (MAY 1989)**

In compliance with the Service Contract Act of 1965, an amended, and the regulations of the Secretary of Labor (29 CFR Par 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

This statement is for information only: It is not a wage determination.

Employee	Class	Wage
Aircraft Pilot	GS-11	\$28.36

**D-8 ASSURANCE REGARDING FELONY CONVICTION OR TAX DELINQUENT STATUS FOR CORPORATE APPLICANTS (452.209 -71)(ALTERNATE 1) (FEB 2012)**

(a) This award is subject to the provisions contained in the Consolidated Appropriations Act, 2012 (P.L. No. 112-74), Division E, Sections 433 and 434 regarding corporate felony convictions and corporate federal tax delinquencies. Accordingly, by accepting this award the contractor acknowledges that it –

(1) does not have a tax delinquency, meaning that it is not subject to any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, and

(2) has not been convicted (or had an officer or agent acting on its behalf convicted) of a felony criminal violation under any Federal law within 24 months preceding the award, unless a suspending and debarment official of the United States Department of Agriculture has considered suspension or debarment of the awardee, or such officer or agent, based on these convictions and/or tax delinquencies and determined that suspension or debarment is not necessary to protect the interests of the Government.

(b) If the awardee fails to comply with these provisions, the Forest Service may terminate this contract for default and may recover any funds the awardee has received in violation of sections 433 or 434.

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**E-1 INSTRUCTIONS TO OFFERORS—COMMERCIAL ITEMS (FAR 52.212-1) (FEB 2012) (Tailored)**

As part of the above referenced FAR Provision, it is important to note that significant to (j) Data Universal Numbering System (DUNS) Number and (k) Central Contractor Registration, the requirement for information is relevant to this solicitation. (See [www.arnet.gov](http://www.arnet.gov) for full text reference.)

(a) **Submission of quotes. Your quote must consist of the following:**

- (1) Standard Form 1449, Solicitation/Contract/Order for Commercial Items, with blocks 17, and 30 completed by you.
- (2) Section B - Schedule of Items, Requirements and Prices with your proposed prices inserted in the appropriate spaces.
- (3) Section E, Offeror Representations and Certifications – Commercial Items (FAR 52.212-3), completed by you or electronically in accordance with the clause.
- (4) Acknowledgment of Solicitation Amendments (if any).
- (5) Include and submit information identified in E-2. The Offeror's past experience should be verified by the vendor; verify that points of contact, telephone, and facsimile numbers are valid.
- (6) Other Written Information. As instructed by **E.2 Evaluation--Commercial Items, Questionnaire's E-2.1, E-2.2, E-2.3, and E-2.4 to be completed and returned.**

*Quoters may elect not to use the questionnaires included in the solicitation. However, the information requested in the questionnaires shall accompany your offer and be in a similar format. Failure to include the questionnaire information may result in your offer being given no further consideration.*

(7) **No facsimile (FAX) quotes will be accepted**

- (8) Please contact the Contracting Officer by telephone or by email if you do not understand any part of these instructions.

(b) **Contract Award. We intend to evaluate offers and award a contract without discussions with Offerors.** Therefore, your initial offer should contain your best terms from a price and technical standpoint. However, we reserve the right to conduct discussions if later determined by the Contracting Officer to be necessary. We may reject any or all offers if such action is in the public interest, accept other than the lowest priced offer; and waive informalities and minor irregularities in offers received.

(c) Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order within the technical specifications: (i) Typed provisions of these specification/exhibits; (ii) FS supplements and/or exhibits incorporated by reference; (iii) 14 CFR incorporated by reference; (iv) aircraft manufacturer's specifications; (v) other documents incorporated by reference.

(d) Contractor must register with System for Award Management at [www.sam.gov](http://www.sam.gov)

(e) A Pre-Proposal Conference is NOT anticipated at this time. However, you are encouraged to send your inquiries/comments to **Ben McGrane (541) 410-5714** E-Mail: [bmcgrane@fs.fed.us](mailto:bmcgrane@fs.fed.us) .

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### E-2 EVALUATION-COMMERCIAL ITEMS (FAR 52.212.2) (JAN 1999) (TAILORED)

The Government intends to award multiple contracts resulting from this solicitation to those responsible Offerors whose offer conforming to the solicitation represents the best value to us on the basis of:

- (a) **Elements of the Offer.** We will determine the merits of each offer on the basis of (1) the Proposed Aircraft and (2) its proposed price-
- (1) Proposed Aircraft. We will evaluate the identified aircraft of each acceptable offer to determine to what extent the aircraft that you propose for use will meet or exceed the stated performance requirements of the aircraft requirements listed in Section B and identified on the form. Minimum (mandatory) aircraft requirements will be evaluated on a pass/fail basis.
  - (2) Price. We will evaluate the proposed price of each acceptable offer for reasonableness in accordance with the Federal Acquisition Regulations (FAR) and paragraph (c), below.
- (b) **Capability of the Offeror.** We will evaluate your capability on the basis of (1) your organizational experience and (2) your past performance.
- (1) **Organizational Experience.** Experience is the opportunity to learn by doing. Your experience is relevant when you have been confronted with the kinds of challenges that will confront you under the contract contemplated by this RFP. We will assess your relevant experience on the basis of its breadth, and its depth.
  - (2) **Organizational Past Performance.** Past performance is a measure of the degree to which you have satisfied your customers in the past, and complied with Federal, state, and local laws and regulations.
- Our assessment of your past performance will be subjective, and based mainly on your reputation with your customers and others. We will contact some of your customers to ask whether or not they believe:
- (i) that you were capable, efficient, and effective;
  - (ii) that your performance conformed to the terms and conditions of your contract;
  - (iii) that you were reasonable and cooperative during performance; and
  - iv) that you were committed to customer satisfaction. When assessing your past performance we may contact other sources of information, including, but not limited to: Federal, state, and local government agencies, better business bureaus, published media, and electronic databases.
- (3) Evaluation of **Safety Plans** will be based on information provided for the following:

Offerors will be evaluated on the basis of your submission that describes accident history and aviation safety management system. Submit your response to E-2.2 Synopsis of Aviation Safety Program and the requested materials together as one package in your response to the Technical requirements of this solicitation.

(c) **Options.** The Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirement. The Government may determine that an offer is unacceptable if the option prices are significantly unbalanced. Evaluation of options shall not obligate the Government to exercise the option(s).

#### (d) Award Process

(1) The Government anticipates making multiple awards resulting from this solicitation to responsible quoters whose quote conforming to the solicitation will be most advantageous to the Government, price and other factors considered. The following factors shall be used to evaluate offers:

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Technical factors and past performance, when combined, are of approximately equal importance, *when compared to price.*

The Government will award an agreement for each item to the Offeror(s) whose proposal represents the best value when considering price, experience, organizational past performance, and equipment.

- (2) Notice of Award. A written notice of award or acceptance of an offer mailed or otherwise furnished to the successful Offeror within the time for acceptance specified in the offer, shall result in a binding contract without further action by either party. Before the offeror's specified expiration time, the Government may accept an offer (or part of an offer), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award from the Offeror.

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**E - 2.1 – ORGANIZATIONAL EXPERIENCE Reproduce this sheet if necessary.**

**OFFEROR NAME** \_\_\_\_\_

1) COMPANY: The proposal should include information on how the project is to be organized, staffed and managed. Information should be provided which will demonstrate the offeror’s understanding, management and coordination of any subcontractor efforts.

*(Add information here, if additional space is needed add it as an appropriately labeled attachment)*

2) Identify proposed individual who will be responsible for the successful completion of this project, if Offeror is awarded a contract. Provide background experience of this individual in air attack, wildland firefighting, and Part 135 operations.

*(Add information here, if additional space is needed add it as an appropriately labeled attachment)*

3) Identify the present or proposed facilities, base of operations, and location of support staff, which will be used in the performance of the contract.

*(Add information here, if additional space is needed add it as an appropriately labeled attachment)*

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**E - 2.2 SAFETY PLAN -**

**SAFETY PROGRAM**

The Contractor must provide a written submittal in response to the Safety Management System (SMS). The Contractor must submit the information requested below:

- Components identified in **Section E 2.3 - SAFETY MANAGEMENT SYSTEM (SMS) COMPONENTS QUESTIONNAIRE AND ACCIDENT HISTORY**
  - (a) **Safety Management System Components:** The Contractor's submittal should consist of implemented practices for their specific company. For purposes of this submittal, the contractor must provide written evidence and describe how the specific processes or requirements are implemented within their organization. This submittal will be incorporated and made part of the contract. Contractors are required to provide specific responses to the criteria provided in exhibit 31 and provide evidence such as copies of completed audits, risk assessments, training records, organization chart, etc. **DO NOT SUBMIT YOUR ENTIRE OPERATIONS MANUAL AS A MEANS OF SATISFYING ALL OF THE CRITERIA.**

The International Standard for Business Aircraft Operations (IS-BAO) and the Federal Aviation Administration (FAA) in AC120.92A can provide the explanations and examples of the requested standards.

(b) **Summary of Flight Hours and Accidents:**

The Contractor is required to submit their total number of flight hours for the previous five years along with any NTSB reportable accidents as defined within 49 CFR 830.2. Flight hours and accidents are for all aircraft (rotor wing and fixed wing) operating under the contractors operating certificates.

- 1) If your company has had an accident in the last 5 years provide an accident prevention action plan or evidence of actions taken to prevent future accidents.
- 2) If you had an accident that was reported to the NTSB and it was downgraded to an incident, you must provide evidence from the NTSB.

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**SECTION E 2.3 - SAFETY MANAGEMENT SYSTEM (SMS) COMPONENTS QUESTIONNAIRE & ACCIDENT HISTORY**

The FS aviation program views Safety Management Systems (SMS) as a critical element for contract evaluation. A complete response is highly encouraged.

**(a) Safety Management System Components**

The FS aviation program uses Safety Management Systems (SMS) agency-wide approach to aviation operations that includes safety management policy, safety risk management, safety assurance and safety promotion. Provide evidence of your SMS program as described below.

**Note:** Under the column heading OFFEROR ACTION REQUIRED on the form, the documentation provided must describe the policy or process used to meet the standard with completed evidence. Blank forms are not acceptable as evidence. For example, for audit evidence under Safety Assurance, a certificate of an SMS audit serves as evidence; or a copy of a “self-validated” SMS audit will suffice. If no action is stated, simply mark the column with a Y, N or N/A where applicable.

The International Standard for Business Aircraft Operations (IS-BAO) and the Federal Aviation Administration (FAA) in AC120.92A can provide the explanations and examples of the requested standards below.

<b>SAFETY MANAGEMENT SYSTEM COMPONENTS</b>		<b>Y</b>	<b>N</b>	<b>N A</b>	<b>OFFEROR ACTION REQUIRED</b>
	<b>Standard</b>				
<b>1</b>	<b>Safety Policy and Objectives</b>				
1a	Are key safety personnel appointed? Is there an identified trained Aviation Safety Manager?				Describe and provide evidence.
1b	Does the company have an organizational structure (organizational chart) that clearly defines duties, authorities and accountabilities?				Describe and provide evidence.
1c	Where the company has more than one operating base, has the management structure addressed the management responsibilities at each location?				Describe and provide evidence.
1d	Operations Manual				Describe
	• Does the Operations Manual contain a flight operations and aircraft maintenance policy?				Provide evidence.
	• Does the Operations Manual contain an operational control system and SOP's?				Describe and provide evidence.
	• Is the Operations Manual approved by management (CEO)?				Provide evidence.
	• Is the Operations Manual amended or revised as necessary to ensure that the information contained in it is kept up to date?				Describe and provide evidence.
	• Have the employees been trained on the Operations Manual?				Provide evidence.
	• Does the Operations Manual reflect the type operation that is being contracted for?				Describe and provide evidence.

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<b>SAFETY MANAGEMENT SYSTEM COMPONENTS</b>		<b>Y</b>	<b>N</b>	<b>N A</b>	<b>OFFEROR ACTION REQUIRED</b>
	<b>Standard</b>				
1e	Emergency Response Plan				
	<ul style="list-style-type: none"> <li>• Do you have an internal emergency response plan?</li> <li>• Is the Accident / Emergency Plan available to all employees?</li> </ul>				Describe
	<ul style="list-style-type: none"> <li>• Are personnel who have a role in the emergency response plan trained in their role, and is the plan exercised periodically in order to test its integrity?</li> </ul>				Provide evidence.
<b>2</b>	<b>Safety Risk Management</b>				
2a	Does the company have a Risk Management Policy?				Provide evidence.
2b	Has the company developed and maintained a Risk Management Process to: Identify Hazards Risk Analysis (Exposure) Risk Assessment (Severity and likelihood) Decision Making (Mitigations) Validation of Control (Controls effective)				Describe and provide evidence. No blank forms.
2c	Does the company have an Operational Risk Management (ORM) Worksheet				Describe and provide evidence.
2d	Is there a process to elevate the risk decision outcome? i.e. Chief Pilot? CEO?				Describe and provide evidence.
<b>3</b>	<b>Safety Assurance</b>				
3a	Have operations (internal or external) audits been conducted in this past field season?				Describe and provide evidence of this audit.
3b	Is there an Action Plan (AP) developed from the audits?				Provide your latest plan.
3c	Does the company have a Quality Assurance Program?				Describe and provide evidence.
3d	Has the company developed and maintained a means of: monitoring and measuring safety performance, identifying and managing organizational changes that may affect safety, ensuring continual improvement?				What action has your company taken and/or plans to facilitate change? Describe and provide evidence.
3e	Does the company have a training program that ensures personnel are trained and competent to perform their assigned duties?				Do you have a process that can train your pilots and mechanics, both initially and annually, on the requirements of this contract? Describe and provide evidence.

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<b>SAFETY MANAGEMENT SYSTEM COMPONENTS</b>		<b>Y</b>	<b>N</b>	<b>N A</b>	<b>OFFEROR ACTION REQUIRED</b>
	<b>Standard</b>				
3f	Does the company have a separate training program for: pilots, maintenance personnel, fuelers / truck drivers?				Describe and provide evidence.
<b>4</b>	<b>Safety Promotion</b>				
4a	Has the company developed and maintained a formal means of safety communication (like SAFECOM)				Briefly describe technology your company has acquired to facilitate communication with deployed pilots. Describe and provide evidence
4b	Are there lessons-learned developed from incidents/accidents? Are they shared with the company personnel?				Provide evidence.
4c	Is a Safety Award system in place?				Describe

**(b) Accident History for the previous 5 years: Include all aircraft that have operated under your Operating Certificates (fixed wing and rotor wing).** Complete the blocks that apply to your company accident history.

(1) Total number of flight hours for the previous 5 years: \_\_\_\_\_

(2) Number of aircraft accidents reported to NTSB in the previous 5 years: \_\_\_\_\_

If your company has had an accident in the last 5 years provide an accident prevention action plan or evidence of actions taken to prevent future accidents.

If you had an accident that was reported to the NTSB and it was downgraded to an incident, you must provide evidence from the NTSB.

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**E – 2.4 ORGANIZATIONAL PAST PERFORMANCE – *List most recent, relevant past performance***

<b>Firm Name/Business Address:</b>			<b>Date Prepared:</b>	
<b>Project Descriptions and Locations</b>	<b>Client Name, Point of Contact, and Phone Number</b>	<b>Cost of Work</b>	<b>Completion Date</b>	
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

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**E-3 52.212-3 Offeror Representations and Certifications—Commercial Items. (Dec 2014)**

The Offeror shall complete only paragraph (b) of this provision if the Offeror has completed the annual representations and certification electronically via the System for Award Management (SAM) website accessed through <http://www.acquisition.gov>. If the Offeror has not completed the annual representations and certifications electronically, the Offeror shall complete only paragraphs (c) through (p) of this provision.

(a) *Definitions.* As used in this provision—

“Economically disadvantaged women-owned small business (EDWOSB) concern” means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127. It automatically qualifies as a women-owned small business eligible under the WOSB Program.

“Forced or indentured child labor” means all work or service—

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

“Highest-level owner” means the entity that owns or controls an immediate owner of the offeror, or that owns or controls one or more entities that control an immediate owner of the offeror. No entity owns or exercises control of the highest level owner.

“Immediate owner” means an entity, other than the offeror, that has direct control of the offeror. Indicators of control include, but are not limited to, one or more of the following: ownership or interlocking management, identity of interests among family members, shared facilities and equipment, and the common use of employees.

“Inverted domestic corporation”, means a foreign incorporated entity that meets the definition of an inverted domestic corporation under [6 U.S.C. 395\(b\)](#), applied in accordance with the rules and definitions of [6 U.S.C. 395\(c\)](#).

“Manufactured end product” means any end product in Federal Supply Classes (FSC) 1000-9999, except—

(1) FSC 5510, Lumber and Related Basic Wood Materials;

(2) Federal Supply Group (FSG) 87, Agricultural Supplies;

(3) FSG 88, Live Animals;

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- (4) FSG 89, Food and Related Consumables;
- (5) FSC 9410, Crude Grades of Plant Materials;
- (6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;
- (7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;
- (8) FSC 9610, Ores;
- (9) FSC 9620, Minerals, Natural and Synthetic; and
- (10) FSC 9630, Additive Metal Materials.

“Place of manufacture” means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

“Restricted business operations” means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate—

- (1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;
- (2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;
- (3) Consist of providing goods or services to marginalized populations of Sudan;
- (4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;
- (5) Consist of providing goods or services that are used only to promote health or education; or
- (6) Have been voluntarily suspended.

“Sensitive technology”—

- (1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically—

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- (i) To restrict the free flow of unbiased information in Iran; or
  - (ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and
- (2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act ([50 U.S.C. 1702\(b\)\(3\)](#)).

“Service-disabled veteran-owned small business concern”—

(1) Means a small business concern—

- (i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and
- (ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in [38 U.S.C. 101\(2\)](#), with a disability that is service-connected, as defined in [38 U.S.C. 101\(16\)](#).

“Small business concern” means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

“Small disadvantaged business concern”, consistent with 13 CFR 124.1002, means a small business concern under the size standard applicable to the acquisition, that—

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by—

- (i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States; and
- (ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13.CFR 124.106) by individuals, who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

“Subsidiary” means an entity in which more than 50 percent of the entity is owned—

- (1) Directly by a parent corporation; or
- (2) Through another subsidiary of a parent corporation.

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“Veteran-owned small business concern” means a small business concern—

- (1) Not less than 51 percent of which is owned by one or more veterans (as defined at [38 U.S.C. 101\(2\)](#)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and
- (2) The management and daily business operations of which are controlled by one or more veterans.

“Women-owned business concern” means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

“Women-owned small business concern” means a small business concern—

- (1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (2) Whose management and daily business operations are controlled by one or more women.

“Women-owned small business (WOSB) concern eligible under the WOSB Program” (in accordance with 13 CFR part 127), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States.

(b)

(1) *Annual Representations and Certifications.* Any changes provided by the offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications posted on the SAM website.

(2) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through <http://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications—Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR [4.1201](#)), except for paragraphs \_\_\_\_\_.

*[Offeror to identify the applicable paragraphs at (c) through (p) of this provision that the offeror has completed for the purposes of this solicitation only, if any.]*

*These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.*

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*Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted electronically on SAM.]*

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) *Small business concern.* The offeror represents as part of its offer that it  is,  is not a small business concern.

(2) *Veteran-owned small business concern.* [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents as part of its offer that it  is,  is not a veteran-owned small business concern.

(3) *Service-disabled veteran-owned small business concern.* [Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision.] The offeror represents as part of its offer that it  is,  is not a service-disabled veteran-owned small business concern.

(4) *Small disadvantaged business concern.* [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents, that it  is,  is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) *Women-owned small business concern.* [Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.] The offeror represents that it  is,  is not a women-owned small business concern.

(6) *WOSB concern eligible under the WOSB Program.* [Complete only if the offeror represented itself as a women-owned small business concern in paragraph (c)(5) of this provision.] The offeror represents that—

(i) It  is,  is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It  is,  is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(6)(i) of this provision is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture. [The offeror shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: \_\_\_\_\_.] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(7) *Economically disadvantaged women-owned small business (EDWOSB) concern.* [Complete only if the offeror represented itself as a WOSB concern eligible under the WOSB Program in (c)(6) of this provision.] The offeror represents that—

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(i) It  is,  is not an EDWOSB concern, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It  is,  is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(7)(i) of this provision is accurate for each EDWOSB concern participating in the joint venture. [*The offeror shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: \_\_\_\_\_.*] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

**Note:** Complete paragraphs (c)(8) and (c)(9) only if this solicitation is expected to exceed the simplified acquisition threshold.

(8) *Women-owned business concern (other than small business concern).* [*Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents that it  is a women-owned business concern.

(9) *Tie bid priority for labor surplus area concerns.* If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price: \_\_\_\_\_

(10) *HUBZone small business concern.* [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents, as part of its offer, that—

(i) It  is,  is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR Part 126; and

(ii) It  is,  is not a HUBZone joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(10)(i) of this provision is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [*The offeror shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: \_\_\_\_\_.*] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

(d) Representations required to implement provisions of Executive Order 11246—

(1) Previous contracts and compliance. The offeror represents that—

(i) It  has,  has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

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(ii) It  has,  has not filed all required compliance reports.

(2) *Affirmative Action Compliance.* The offeror represents that—

(i) It  has developed and has on file,  has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 cfr parts 60-1 and 60-2), or

(ii) It  has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions* (31 U.S.C. 1352). (Applies only if the contract is expected to exceed \$150,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) *Buy American Certificate.* (Applies only if the clause at Federal Acquisition Regulation (FAR) [52.225-1](#), Buy American—Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products, *i.e.*, an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of “domestic end product.” The terms “commercially available off-the-shelf (COTS) item” “component,” “domestic end product,” “end product,” “foreign end product,” and “United States” are defined in the clause of this solicitation entitled “Buy American—Supplies.”

(2) Foreign End Products:

<b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>				1. CONTRACT ID CODE	PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO. <b>1</b>		3. EFFECTIVE DATE <b>2/19/16</b>	4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY <b>USDA Forest Service Pacific Northwest Region 333 SW First Avenue, PO Box 3623 Portland, OR 97208-3623</b>			7. ADMINISTERED BY (If other than Item 6) <b>USDA Forest Service Acquisition Management Regional Aviation Group 1740 S.E. Ochoco Way Redmond, OR 97756</b>			
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State, and ZIP Code)				(X)	9A. AMENDMENT OF SOLICITATION NO. <b>AG-04H1-S-16-0001</b>	
				<input checked="" type="checkbox"/>	9B. DATED (SEE ITEM 11) <b>1/28/16</b>	
				<input type="checkbox"/>	10A. MODIFICATION OF CONTRACT/ORDER NO.	
CODE					10B. DATED (SEE ITEM 13)	
FACILITY CODE				11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS N/A		
12. ACCOUNTING AND APPROPRIATION DATA:						
13. This Item Applies only to Modifications of Contracts/Orders, it Modifies the Contract/Order No. as described in Item 14						
(X)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.					
<input type="checkbox"/>						
<input type="checkbox"/>	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).					
<input type="checkbox"/>	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:					
<input type="checkbox"/>	D. OTHER (Specify type of modification and authority)					
<b>E. IMPORTANT:</b> Contractor <input checked="" type="checkbox"/> is <input type="checkbox"/> is not required to sign this document and return <b>1</b> copies to the issuing office						
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)						
<b>The purpose of this modification is:</b>						
See attached summary.						
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.						
15A. NAME AND TITLE OF SIGNER (Type or print)				16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
				<b>Ben McGrane</b>		
15B. CONTRACTOR/OFFEROR		15C. DATE SIGNED	16B. UNITED STATES OF AMERICA		16C. DATE SIGNED	
					<b>February 19, 2016</b>	
(Signature of person authorized to sign)				(Signature of Contracting Officer)		
NSN 7540-01-152-8070 Previous edition unusable		30-105		STANDARD FORM 30 (REV. 10-83) Prescribed by GSA FAR (48 CFR) 53.243		

Amendment 01 makes the following changes:

1. Adds:

C-7(a) on page 13

Note 4: ADS-B OUT will be required for Air Tactical Aircraft beginning January 1st 2020.

2. Adds:

C-7(b)(1) on page 13:

Transmitters shall not open squelch on, or interfere with, other AM or FM transceivers on the aircraft which are monitoring different frequencies. Transmit interlock functions shall not be used with communication transceivers.

3. Replaces:

C-7(b)(1)(i)

With:

(i) VHF-AM Radios

VHF-AM radios shall be TSO approved aeronautical transceivers, permanently installed, and operate in the frequency band of 118.000 to 136.975 MHz with a minimum of 760 channels in no greater than 25 KHz increments. Transmitters shall have a minimum of 5 Watts carrier output power.

4. Replaces:

C-7(b)(2)(ii)(C)

With:

The audio controller shall be installed in a location that provides the operator directly behind the SIC/observer unobstructed access to the controls while seated. Aft passengers shall utilize the aft audio control system(s).

5. Replaces:

C-7(b)(3)(i)(A)

With:

(A) Aeronautical GPS

Each required GPS shall be TSO approved, permanently installed where both the PIC and SIC/observer can clearly view the display, use an approved external aircraft antenna, and be powered by the aircraft electrical system. The GPS shall utilize the WGS-84 datum, reference coordinates in the DM (degrees/minutes/decimal minutes) format and have the ability to manually enter waypoints in flight. The GPS navigation database shall be updated annually covering the geographic areas where the aircraft will operate.

6. Adds:

C-7(b)(4)(vi)

(vi) Automatic Dependent Surveillance – Broadcast (ADS-B)

(A) ADS-B OUT systems must be approved to TSO-C154c or TSO-C166b. Aircraft operating outside of the United States must be equipped with systems approved to TSO-C166b.

(B) ADS-B IN systems must be TSO approved, use diversity antennas on top and bottom of the aircraft, receive both UAT and 1090ES, and be interfaced to a multifunction display (MFD) capable of displaying TIS-B traffic and FIS-B weather.