

## **CONTENTS OF AGREEMENT PACKET**

### **STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT ("CALL WHEN NEEDED")**

**NOTE: This packet of documents is to be used FOR PRE-SEASON AGREEMENTS for dozers, heavy equipment, fallers, ambulances, fire camp support (such as portable toilets, showers, kitchens, yurts, generators), buses/vehicles, and aircraft/aviation support.**

**These documents are NOT to be used for emergency contracts executed during fire season, hiring individual firefighters, or agreements between DNR and other firefighting agencies.**

1. Contractor's checklist prior to submitting agreement packet
2. Fire Suppression Resources Availability Agreement
3. Attachment A – Contractor Contact Information and Insurance Certificates
4. Attachment B – Availability and Standby Rates  
(DNR Standard Wage & Equipment Rate Guide)
5. Attachment C – Wage & Equipment Rates that differ from the Guide
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STATE OF WASHINGTON DEPARTMENT OF NATURAL RESOURCES  
FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT NO.

**CONTRACTOR'S CHECKLIST PRIOR TO SUBMITTING AGREEMENT PACKET**  
**THIS FORM IS NOT PART OF THE AGREEMENT**

**BEFORE DNR SIGNS THIS AGREEMENT, CONTRACTOR NEEDS TO –**

- Let DNR know which, if any, of the equipment is under a current FEDERAL resource availability “VIPR” contract. (If Contractor has a VIPR agreement, a separate agreement with DNR may not be needed.)
- Complete and sign agreement, initial bottom of pages where indicated.
- Complete Attachment A with contact information and attach certificates of insurance coverage.
- Review and Initial Attachment B –Availability and Standby Rates
- If needed, complete (with DNR) Attachment C – Wage & Equipment Rates that differ from the Guide.
- Obtain copy of DNR’s Standard Wage & Equipment Rate Guide.
- Complete Attachment D– Fixed Wing Air Attack Specifications

**BEFORE CONTRACTOR'S EQUIPMENT/OPERATOR ENGAGE IN FIREFIGHTING  
ACTIVITY AT AN INCIDENT -**

- Obtain DNR’s pay document forms and confirm your DNR point of contact and submittal address.

Return both copies of ***entire*** signed agreement packet ***with all applicable attachments*** to:

State of Washington  
Department of Natural Resources  
Attention: \_\_\_\_\_  
\_\_\_\_\_

**Please retain copies for your records.  
A completed signed agreement will be returned to you.**



## WILDFIRE

### FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT

**DNR Agreement No.** \_\_\_\_\_

This Agreement is entered into by the State of Washington, Department of Natural Resources, hereafter referred to as DNR, and \_\_\_\_\_ hereafter referred to as the Contractor.

**Purpose:** The purpose of this Agreement is to contract for equipment and services from the Contractor to be used for fire suppression activities when under the supervision of DNR –recognized wildland fire personnel.

The Contractor is responsible for all equipment, materials, supplies, transportation, lodging, and trained/certified personnel necessary to meet or exceed the Agreement requirements to perform the work in a safe manner and to a professional standard. By entering into this Agreement with DNR to provide wildfire suppression resources, Contractor certifies and agrees that its equipment and operators will meet or exceed DNR’s minimum specifications.

The Contractor understands this Agreement will be used only when needed as determined solely by DNR. DNR is not obligated to use the Contractor. DNR is obligated to compensate the Contractor only if the Contractor is dispatched to a wildfire incident by DNR and the Contractor otherwise complies with all of the material terms of this Agreement.

**Authority:** Under RCW 76.04.015 and RCW 76.04.181, DNR may enter into preemptive agreements with landowners and others who have firefighting capability that may be utilized in DNR wildland fire suppression efforts.

In consideration of the terms, conditions and covenants contained herein, or attached and incorporated herein by reference, the parties mutually agree as follows:

#### **1.01 The Contractor Shall:**

- (a) When requested by DNR, promptly provide the requested personnel and equipment for fire suppression operations or to be on standby for such operations.
- (b) Comply with the personnel and equipment requirements contained in this Agreement, including all Attachments which are incorporated herein by reference.
- (c) Require the Contractor’s personnel and equipment to be under the supervision of DNR-recognized wildland fire personnel when engaged or supporting in fire suppression

activities. Such personnel and equipment must remain under such supervision until DNR-recognized wildland fire personnel release them from the assigned wildfire incident (Incident).

- (d) Ensure the personnel and equipment furnished under this Agreement meet the standards specified in this Agreement to accomplish the fire suppression activities as assigned.
- (e) Ensure all personnel provided have training and qualifications for the work performed under this Agreement, evidenced by possession of a valid DNR safety and skills qualification document, or the equivalent as determined by DNR.
- (f) Ensure all personnel arrive at the Incident with the proper personal protective clothing and equipment (PPE) consistent with the criteria of WAC 296-305-07012 Personal protective clothing and equipment for wildland firefighting. The 2005 edition of NFPA 1977, Standard Protective Clothing and Equipment for Wildland Firefighting, shall serve as a guideline for determining performance characteristics of this clothing. Contractor shall be responsible for ensuring the PPE is operable, used, and maintained in good repair throughout the duration of any assignment. PPE shall include:
  - (1) Protective apparel
    - (A) Hardhat/helmet
    - (B) Upper torso shirt, Flame Resistant Aramid, and lower torso Flame Resistant Aramid (Nomex) Pants
    - (C) Gloves – Leather
    - (D) Goggles
  - (2) Boots – Leather lace-up of sturdy construction which shall extend upward a minimum of 8 inches above the top of the sole, which shall be slip resistant.
  - (3) Fire Shelter – Must meet or exceed the United States Forest Services’ Missoula Technology and Development Center (MTDC) design criteria and performance requirements for “new generation fire shelters.”
- (g) Be responsible for any fines or penalties imposed upon the Contractor or the Contractor’s employees or equipment.
- (h) Bring this Agreement, including Attachments and any amendments, to the Incident, and upon arrival at the Incident, present these documents to the Incident Timekeeper or other point of contact provided by DNR.

## **2.01 DNR Shall:**

- (a) Provide dispatch instructions to the Contractor when assigned to fire suppression operations or when placed on standby.
- (b) Release the Contractor’s personnel and equipment as soon as possible when no longer needed at a wildfire incident.
- (c) Provide safety training and certification to Contractor’s personnel, or accept other

certified training in lieu of DNR training, in DNR's sole discretion.

- 3.01 Period of Performance:** Subject to its other provisions, this Agreement shall be effective on the last signature date of this Agreement, and shall remain in full force and effect until \_\_\_\_\_ unless extended by mutual agreement or terminated by either party as provided herein.
- 4.01 Independent Capacity of Contractor:** The Contractor and its employees or agents performing under this Agreement are not employees or agents of the DNR. The Contractor will not represent itself nor claim to be an officer or employee of the DNR or of the state of Washington by reason hereof, nor will the Contractor make any claims of right, privilege or benefit which would accrue to such employee under Washington law.
- 5.01 Right of Inspection:** The Contractor shall provide right of access to its facilities, equipment and personnel to DNR, any of its employees, or to any other authorized agent or official of the state of Washington or the federal government at all reasonable times, in order to monitor and evaluate performance, compliance and/or quality assurance under this Agreement.
- 6.01 Compensation and Payment:** The Contractor shall be compensated for services provided under this Agreement in accordance with DNR's current Wage & Equipment Rate Guide for Wildfire Resources (Guide), which is incorporated herein by reference. Any equipment and services rates that vary from the Guide must be agreed upon by both parties in writing, using Attachment C to document rates that vary from the Guide.

DNR will pay Contractor upon acceptance of services provided and receipt of complete and accurate pay documents, at the DNR office indicated on the Checklist. In order to be paid, the Contractor will need to use the forms provided by DNR when the Contractor checks in at an Incident. Payments made by DNR shall be considered timely if DNR authorizes the release of payment within thirty (30) days after receipt of Contractor's pay documents deemed acceptable by DNR. Payment shall be sent to the address designated by the Contractor.

**Deductions:** The DNR shall make no deductions from the stated amount of compensation for income tax, social security taxes, medical insurance, industrial insurance, license fees, or any other taxes, insurance or expenses. Contractor is solely responsible for all such deductions.

- 7.01 Licensing, Accreditation and Registration:** The Contractor shall comply with all applicable local, state and federal laws, licensing, accreditation and registration requirements or standards necessary for the performance of this Agreement.
- 8.01 Subcontracting:** The Contractor shall not enter into subcontracts for any of the work contemplated under this Agreement without obtaining prior written approval of DNR. In no event shall the existence of the subcontract operate to release or reduce the liability of the Contractor to DNR for any breach in the performance of the Contractor's duties. This clause does not include contracts of employment between the Contractor and personnel assigned to work under this Agreement.

Additionally, the Contractor is responsible for ensuring that all terms, conditions, assurances

and certifications set forth in this Agreement and all documents attached and incorporated by reference are carried forward to any subcontracts.

**9.01 Insurance Requirements:** The Contractor shall, at its own expense, obtain insurance coverage which shall be maintained in full force and effect during the term of the Agreement. The Contractor shall furnish to DNR a certificate(s) of insurance executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth below, at the time of Contractor's execution of this Agreement. Contractor shall submit renewal certificates as appropriate during the term of this Agreement. At no time whatsoever shall the Contractor engage in work under this Agreement without the required insurance coverage in full force and effect.

Additionally, the Contractor is responsible for ensuring that any sub-Contractors provide adequate insurance coverage for the activities arising out of subcontracts.

#### Liability Insurance

- 1) Commercial General Liability Insurance (CGL): Contractor shall maintain commercial general liability (CGL) insurance, including contractual liability, in an adequate amount to protect against legal liability arising out of this Agreement, and, if necessary, commercial umbrella insurance, with a limit of not less than \$1,000,000 per each occurrence. If CGL insurance contains aggregate limits, the General Aggregate limit shall be at least twice the "each occurrence" limit. CGL insurance shall have products-completed operations aggregate limit of at least two times the "each occurrence" limit. CGL insurance shall be written on ISO occurrence from CG 00 01 (or a substitute form providing equivalent coverage). All insurance shall cover liability assumed under an insured contract (including the tort liability of another assumed in a business contract), and contain separation of insureds (cross liability) condition.
- 2) Business Auto Policy: As applicable, the Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit not less than \$1,000,000 per accident. Such insurance shall cover liability arising out of "Any Auto." Business auto coverage shall be written on ISO form CA 00 01, 1990 or later edition, or substitute liability form providing equivalent coverage.

Employers Liability ("Stop Gap") Insurance: In addition, the Contractor shall buy employers liability insurance and, if necessary, commercial umbrella liability insurance with limits not less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.

#### Additional Provisions

The above insurance policy(ies) shall include the following provisions:

1. *Additional Insured.* The state of Washington, Department of Natural Resources, its elected and appointed officials, agents and employees shall be named as an additional insured on all general liability, excess, umbrella and property insurance policies. All insurance provided in compliance with this Agreement shall be primary as to any other insurance or self-insurance programs afforded to or maintained by the State.

2. *Cancellation.* The State of Washington, Department of Natural Resources, shall be provided written notice before cancellation or non-renewal of any insurance referred to required herein, in accord with the following specifications –

Insurers subject to 48.18 RCW (Admitted and Regulated by the Insurance Commissioner): The insurer shall give the state 45 days advance notice of cancellation or non-renewal. If cancellation is due to non-payment of premium, the state shall be given 10 days advance notice of cancellation.

Insurers subject to 48.15 RCW (Surplus lines): The state shall be given 20 days advance notice of cancellation. If cancellation is due to non-payment of premium, the state shall be given 10 days advance notice of cancellation.

3. *Identification.* Policy must reference this DNR Fire Suppression Resource Availability Agreement.
4. *Insurance Carrier Rating.* All insurance and bonds should be issued by companies admitted to do business within the state of Washington and have a rating of A-, Class VII or better in the most recently published edition of Best's Reports. Any exception shall be reviewed and approved by Department of Natural Resources' Risk Manager, or the Risk Manager for the State of Washington, before the Agreement is accepted or work may begin. If an insurer is not admitted, all insurance policies and procedures for issuing the insurance policies must comply with Chapter 48.15 RCW and 284-15 WAC
5. *Excess Coverage.* By requiring insurance herein, the DNR does not represent that coverage and limits will be adequate to protect Contractor, and such coverage and limits shall not limit Contractor's liability under the indemnities and reimbursements granted to the state in this contract.

#### Workers' Compensation Coverage

The Contractor will at all times comply with all applicable workers' compensation, occupational disease, and occupational health and safety laws, statutes, and regulations to the full extent applicable. The state will not be held responsible in any way for claims filed by the Contractor or their employees for services performed under the terms of this Agreement.

**10.01 Non-Discrimination:** During the performance of this Agreement, the Contractor shall comply with all federal and state non-discrimination laws, regulations, and policies. In the event of the Contractor's non-compliance or refusal to comply with any non-discrimination law, regulation or policy, this Agreement may be rescinded, canceled or terminated in whole or in part, and the Contractor may be declared ineligible for further contracts with the DNR.

**11.01 Indemnity:** To the fullest extent permitted by law, Contractor shall indemnify, defend, and hold harmless the State of Washington, agencies of the State and all officials, agents and employees of the State, from and against all claims for injuries or death arising out of or resulting from the negligence of Contractor or the negligence of Contractor's agents and employees in the performance of this Agreement. "Claim," as used in this contract, means any financial loss, claim, suit, action, damage, or expense, including but not limited to attorney's fees, attributable to bodily injury, sickness, disease, or death, or injury to or destruction of tangible property including loss of use resulting therefrom.

Contractor's obligations to indemnify, defend, and hold harmless includes any claim by Contractor's agents, employees, representatives, or any subcontractor of Contractor or its

employees.

Contractor's obligation to indemnify, defend, and hold harmless the State shall not extend to claims that arise from the sole negligence of the State. Contractor waives its immunity under Title 51 RCW to the extent it is required to indemnify, defend and hold harmless the State and its agencies, officials, agents or employees.

**12.01 Retention of Records:** The Contractor shall maintain books, records, documents and other materials, which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement. At no additional cost, these materials shall be available at all reasonable times for inspection, review, or audit by personnel duly authorized by the DNR, and state or federal officials so authorized by law, rule, regulation, or contract. The Contractor will retain these materials for six (6) years following the date of final payment or termination, whichever occurs later. If any litigation, claim, or audit is started before the expiration of the six (6) year period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved.

**13.01 Termination of Agreement for Cause:** In the event DNR determines the Contractor has failed to comply with the conditions of this Agreement in a timely manner, DNR has the right to terminate this Agreement. Before terminating the Agreement, DNR shall notify the Contractor in writing of the need to take corrective action. If corrective action is not taken within 10 calendar days, the Agreement may be terminated. DNR shall promptly notify the Contractor in writing of the termination and the reasons for termination, together with the effective date of termination.

In the event of termination, the Contractor shall be liable for damages as authorized by law. The rights and remedies of DNR provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.

DNR reserves the right to suspend all or part of this Agreement, without further payments, or prohibit the Contractor from incurring additional obligations of funds during an investigation of the alleged compliance breach, or a decision by DNR to terminate the Agreement.

**14.01 Termination for Funding Reasons:** DNR may unilaterally terminate this Agreement in the event that funding from federal, state or other sources becomes no longer available to DNR, or is not allocated for the purpose of meeting DNR's obligation hereunder. Such action shall be effective when DNR sends written notification of termination.

**15.01 Termination for Convenience:** Except as otherwise provided in this Agreement, DNR may, by giving five calendar days written notice to the Contractor, beginning on the second day after the mailing, terminate this Agreement in whole or in part. If this Agreement is so terminated, DNR shall be liable only for payment in accordance with the terms of this Agreement for services rendered prior to the effective date of termination.

**16.01 Conflict of Interest:** DNR may, in its sole discretion, by written notice to the Contractor, terminate this Agreement if it is found after due notice and examination by DNR, that there is a violation of the State Ethics Law, Chapter 42.52 RCW or any similar statute involving the Contractor in the procurement of, or performance under, this Agreement.

In the event this Agreement is terminated as provided above, the DNR shall be entitled to

pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Agreement by the Contractor. The rights and remedies of the DNR provided for in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law.

**17.01 Disputes:** Except as otherwise provided in this Agreement, when a dispute arises between the parties and it cannot be resolved by direct negotiation, either party may request a dispute hearing with the delegate authorized to act on behalf of the Commissioner of Public Lands (Agent).

1. The request for a dispute hearing must:
  - Be in writing;
  - State the disputed issue(s);
  - State the relative positions of the parties;
  - State the Contractor's name, address, and Agreement number; and
  - Be mailed to the Agent and the other party's (respondent's) Agreement manager within 3 working calendar days after the parties agree that they cannot resolve the dispute.
2. The respondent shall send a written answer to the requester's statement to both the Agent and the requester within 5 working calendar days.
3. The Agent shall review the written statements and reply in writing to both parties within 10 working days. The Agent may extend this period if necessary by notifying the parties.
4. The parties agree that this dispute process shall precede any action in a judicial or quasi-judicial tribunal.

Nothing in this Agreement shall be construed to limit the parties' choice of a mutually acceptable alternate dispute resolution method in addition to the dispute resolution procedure outlined above.

**18.01 Jurisdiction/Venue/Attorneys' Fees:**

This Agreement shall be construed and interpreted under the laws of the state of Washington and the venue of any action brought under this Agreement shall be in the Superior Court of Thurston County. The Contractor, by execution of this Agreement, acknowledges the jurisdiction of the courts of the state of Washington in this matter. In the event of litigation or other action brought to enforce the terms of this Agreement, each party agrees to bear its own attorneys' fees and costs.

**19.01 Severability:** If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement which can be given effect without the invalid provision, and to this end the provisions of this Agreement are declared to be severable.

**20.01 Waiver:** A failure by the DNR to exercise its rights shall not constitute a waiver of any rights under this Agreement unless stated to be such in writing and signed by an authorized representative of the DNR and attached to the original Agreement.

**21.01 Assignability:** This Agreement, and any claim arising under this Agreement, cannot be assigned or delegated by the Contractor either in whole or in part.

**22.01 Entire Agreement:** This document and Attachments hereto incorporated by reference contain all covenants, stipulations, and provisions agreed by both parties. No agent or representative of either party has authority to make, and the parties shall not be bound by or be liable for, any statement, representation, promise, or agreement not set forth herein, except for extension of the completion date. No changes, amendments, or modifications of the terms hereof shall be valid unless reduced to writing and signed by the parties as an amendment to this Agreement.

**23.01 Agreement Managers:**

The Agreement Manager for the Contractor is:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

The Agreement Manager for DNR is:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

**IN WITNESS WHEREOF, the parties have executed this Agreement.**

CONTRACTOR:

Dated: \_\_\_\_\_, 20 \_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

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

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

FTIN: \_\_\_\_\_

UBI Number: \_\_\_\_\_

STATE OF WASHINGTON

DEPARTMENT OF NATURAL RESOURCES

Dated: \_\_\_\_\_, 20 \_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

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

Mailing Address: \_\_\_\_\_

\_\_\_\_\_

Email: \_\_\_\_\_

Telephone: \_\_\_\_\_

**ATTACHMENT A**  
**FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT**

**Contractor Contact Information and Insurance Certificates**

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

Address: \_\_\_\_\_

\_\_\_\_\_  
City State Zip

**Many incidents occur at night or on weekends. It is essential that we have a primary and alternate contact as well as a 24-hour phone number.**

Primary Contact Person: \_\_\_\_\_

Telephone: Day \_\_\_\_\_ Night \_\_\_\_\_

Cell Phone Number \_\_\_\_\_ Fax \_\_\_\_\_

Email Address: \_\_\_\_\_

Alternate Contact Person: \_\_\_\_\_

Telephone: Day \_\_\_\_\_ Night \_\_\_\_\_

Cell Phone Number \_\_\_\_\_ Fax \_\_\_\_\_

Email Address: \_\_\_\_\_

Attach certificates confirming insurance coverage in effect at the time of Contractor's execution of this Agreement. Insurance coverage required in this Agreement must be maintained in full force and effect during the term of the Agreement. Renewal certificates are to be submitted to DNR as appropriate during the term of this Agreement. **At no time whatsoever shall the Contractor engage in work under this Agreement without the required insurance coverage in full force and effect.**

**Please check the boxes below indicating these forms are attached.**

- Commercial General Liability
- Business Auto Policy
- Employer's Liability ("Stop Gap") Insurance
- Aircraft Insurance

**ATTACHMENT B**  
**FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT**  
**AVAILABILITY AND STANDBY RATES**

DNR's Wage and Equipment Rate Guide for Wildfire Resources (Guide) will be used to determine compensation to Contractor for services provided under this Agreement. DNR will not issue payment of amounts exceeding those of the Guide unless both parties agree in writing using Attachment C to document rates that vary from the Guide. The complete current Guide is available at: [http://file.dnr.wa.gov/publications/rp\\_fire\\_wage\\_equipment\\_rates.pdf](http://file.dnr.wa.gov/publications/rp_fire_wage_equipment_rates.pdf)

1. DNR is not obligated to use the services of Contractor at an incident unless the Contractor has been dispatched to that incident through DNR.
2. When the Contractor is dispatched to an incident, the Contractor's representative (usually the operator), must check-in upon arrival with the incident time keeper, or with a contact provided by DNR \_\_\_\_\_ Region dispatch.
3. Daily Rate payment will be made on a basis of calendar days (0001-2400 hours, military clock) and in accordance with DNR's current Wage & Equipment Rate Guide for Wildfire Resources (Guide). Payment is based on the hours under hire per calendar day, not per assigned incident.

**APPLICABLE TO EQUIPMENT AND OPERATORS:**

1. Daily Shift Rate includes operator, equipment and transportation.
  - a. Daily Rate Single Shift (SS) – equipment is staffed with one operator.
  - b. Daily Rate Double Shift (DS) – equipment is staffed with two operators.  
The DS rate will apply any calendar day the DS was ordered and under hire, including travel.
2. For fractional days at the beginning and ending of assignment to the incident, payment will be based on 50 percent of the Daily Rate for periods less than eight (8) hours under hire.
3. On certain incident dispatches, DNR may request the Contractor to provide equipment and an operator for a double shift. Daily double shift for the purpose of this Agreement is defined as the ability of the Contractor to provide an operator to insure the equipment can be in use by DNR for a period of at least twenty-four hours and at least two operators are scheduled so that any one operator will not exceed 16 hours worked in that twenty-four hour period.
4. On any incident, Contractor and all operators must comply with the 2:1 work/rest ratio. The 2:1 work/rest ratio requires personnel to receive one (1) hour of rest or sleep away from the incident, for every two (2) hours worked in a 24-hour period on the incident. For example, if an equipment operator works a 16-hour shift, the operator must be given 8 hours of rest or sleep.

5. **Stand-by** is defined as a time when the Cooperator's equipment and operator are not assigned to an incident but are being compensated by the DNR for the availability for dispatch to an incident. The operator, dozer and transport must be available for immediate dispatch or have the ability to be en-route to an incident in no more than 30 minutes. At the time DNR contacts the Cooperator for stand-by, they must indicate their availability to commit to a minimum of five (5) hours of stand-by time. If the Cooperator meets the standby requirements, they may be placed on stand-by and will be compensated for a minimum of five (5) hours of stand-by at the rate as agreed between the Cooperator and DNR through this Fire Suppression Resources Availability Agreement.

However, should the Cooperator's equipment and operator be dispatched to a fire during the time that they are on standby, the Cooperator will be paid for the actual hours of standby and the applicable shift rate (Daily or Double). The 5 hour minimum standby rate will not be paid.

If the Cooperator agrees to be placed on stand-by, but cannot commit to more than five (5) hours, the Cooperator is required to notify DNR a minimum of two (2) hours prior to going off stand-by. If the Cooperator cannot complete a minimum of five (5) hours of stand-by for any reason (mechanical breakdown, other commitments, etc...) then the Cooperator will be paid for actual time that the equipment was available for stand-by.

**EXAMPLES:**

Actual rates will be determined based upon DNR's Guide. Dollar values shown below are provided for illustrative purposes only.

**Example #1:** Contractor is hired on August 5<sup>th</sup> at 2000 hours and works continuously until 1200 on August 6<sup>th</sup>. Payment would be as follows: \$500 for the SS on the 5<sup>th</sup> (2000-2400 hours is less than 8 hours under hire so payment is ½ of the SS rate) and \$1000.00 for the SS on the 6<sup>th</sup>. Total amount due is \$1500.00.

**Example #2:** Contractor is hired on August 10<sup>th</sup> at 1600 hours and works until 0300 hours on August 11<sup>th</sup>. At 2100 hours on the 10<sup>th</sup> DNR notifies Contractor to work a double shift with an additional operator to arrive at 0600 August 11<sup>th</sup> and work until 1800 hours. Payment would be as follows: \$1000 for the SS on the 10<sup>th</sup> (1600-2400) and \$1500 for the DS on the 11<sup>th</sup> (0001-0300 and 0600-1800) for a total amount due of \$2500.00. All hours on the 11<sup>th</sup> are considered DS because notification for DS was given on 10<sup>th</sup> that a second operator would be needed for the 11<sup>th</sup>.

**Example 3:** Contractor is dispatched to Incident A at 1330 hours. They remain at Incident A until 1645 hours at which time they are reassigned to Incident B and work until 2300 hours the same day. Payment will be made at the Daily Rate Single Shift for the hours under hire for both Incidents A and B. Total amount due is \$1,000.00 for the SS.

Cooperator Initial \_\_\_\_\_ Date \_\_\_\_\_

DNR Initial \_\_\_\_\_ Date \_\_\_\_\_

\_\_\_\_\_ ATTACHMENT C  
 FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT  
 WAGE & EQUIPMENT RATES THAT DIFFER FROM THE GUIDE

**NOTE: DNR WILL NOT ISSUE PAYMENT OF AMOUNTS EXCEEDING THOSE OF THE  
 WAGE AND EQUIPMENT RATE GUIDE UNLESS BOTH PARTIES AGREE IN  
 WRITING USING THIS ATTACHMENT TO DOCUMENT RATES THAT VARY FROM  
 THE GUIDE.**

Equipment	Description	Qty	Location	Fed Reg Number	USFS Carded?	Seating capacity	Daily availability rate	Rate/ferry flight hour, including pilot	Rate/flight hour, including pilot	Other charges
<i>EXAMPLE Fixed Wing</i>	<i>Cessna 205</i>	<i>1</i>	<i>Olympia, WA</i>	<i>N112112</i>	<i>yes</i>	<i>3</i>	<i>\$1000</i>	<i>\$100</i>	<i>\$150</i>	

Additional Information: \_\_\_\_\_

Cooperator Initial \_\_\_\_\_ Date \_\_\_\_\_

DNR Initial \_\_\_\_\_ Date \_\_\_\_\_

**ATTACHMENT D**  
**FIRE SUPPRESSION RESOURCES AVAILABILITY AGREEMENT**  
**FIXED WING AIR ATTACK SPECIFICATIONS**

**1. Certification:**

- A. The Cooperator shall be a certificated air carrier/commercial operator under Federal Aviation Regulations 14 CFR Parts 121, 125 or 135 as appropriate. The Cooperator shall obtain all necessary licenses and permits, plus comply with all applicable federal, state and local laws.
- B. Aircraft shall be “Federally Carded” according to USFS (USDA/AMD (DOI) requirements, rules, and regulations.

**2. Aircraft Insurance**

Cooperator shall buy and maintain insurance covering aviation liability arising from ownership, maintenance, or use of aircraft, including liability assumed under an insurance contract. This insurance must include liability coverage with limits not less than \$1,000,000 per seat for bodily injury and property damage, and \$5,000,000 general aggregate limit. This coverage shall contain a separation of insureds condition.

**3. Fixed Wing**

**Primary Preference:** Fixed wing shall either be USDI/USDA Federally Carded.

**Secondary Preference:** A cooperator letter meeting all the specifications listed in the 2010 NASF Cooperators Aviation Standards for Interagency Fire

[http://www.fs.fed.us/fire/aviation/av\\_library/COOP%20NASF%20Standards.pdf](http://www.fs.fed.us/fire/aviation/av_library/COOP%20NASF%20Standards.pdf).

Issuance of this letter will be at the discretion of the Department of Natural Resources in coordination with the Federal Region Aviation Officer or equivalent staff.

**4. Operations**

The Cooperator shall operate in accordance with approved FAA Operations Specifications, and all portions of 14 CFR Part 91 (including those portions applicable to civil aircraft), and Part 135 (135.1 notwithstanding), unless otherwise authorized by the Government.

**5. Pilot Authority and Responsibilities**

- A. The pilot is responsible for safety of the aircraft, its occupants, and cargo. The pilot shall refuse any flight or landing which the pilot considers hazardous or unsafe.
- B. The pilot shall not permit any passenger to ride in the aircraft or any cargo to be loaded therein unless authorized by the DNR.
- C. Pilots are 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 limitations. The pilot shall be responsible for the proper loading and securing of all cargo, either internal or external, and computation of the load calculations prior to all flights.

- D. Pilots are responsible for filing a flight plan (VFR or IFR) for all flights performed under this agreement. If filing a flight plan with a Flight Service facility is not feasible, an alternative method may be used provided the agency has a written flight-following procedure. All flight plans will be closed in an appropriate manner.
- E. Pilots are responsible to assure, prior to flight, that each occupant is familiar with and utilizes the installed safety equipment.

**6. Day and Night Aircraft Use**

Single-engine aircraft shall be limited to flight during daylight hours and under VFR conditions only. Daylight hours are defined as 30 minutes before official sunrise to 30 minutes after official sunset. Multi engine aircraft may be used for night and IFR operations providing the operator's certificate specifies such operation.

**7. Pilot Requirements**

- A. Pilots shall have an FAA commercial pilot certificate with appropriate category and class rating and type, if required. Pilots shall hold an ATP rating for those 14 CFR Part 135 operations requiring ATP-rated pilots.
- B. Pilots shall show evidence of satisfactorily passing FAA check (FAA Form 8410-3) for make and model offered for this agreement within the previous 12-month period.
- C. Pilots must possess a current FAA Class I or Class II medical certificate.
- D. Pilot flying hours shall be verified from a certified pilot log. Further verification of flying hours may be required at the discretion of the DNR.
- E. Proof of current USDA/USDI certification in mountain flying, air attack and point to point. The Cooperator shall submit a photocopy to DNR showing the front and back of the card before implementing the Agreement.

**8. Aircraft Requirements**

- A. Aircraft Performance Requirements.
  - Single engine airplanes shall have a power loading of not more than 13.5 pounds per horse power.
  - Multi engine airplanes shall have a power loading of not more than 13.5 pounds per horse power.
  - Each takeoff shall meet aircraft climb performance requirements of 14 CFR.
- B. The aircraft must possess a Standard Airworthiness Certificate and be operated and maintained in accordance with the terms of the certificate. The installation of any equipment specified must be FAA approved.
- C. All aircraft certificated in the standard category shall be equipped in accordance with 14 CFR Parts 91 and 135.
- D. Seating for pilot plus three passengers, passenger seating removable for cargo hauling.
- E. Minimum restrictions of outward visibility of the ground in level flight for the front seat

observer and middle seat observer stations.

- F. Payload of 780 pounds with fuel for 225 nautical miles plus VFR reserve at 8,000 ft. ISA plus 20 degrees C.
- G. Positive single engine rate of climb when equipped for the contract and carrying a pilot weighing 200 lbs., one observer weighing 220 lbs., fuel for four hours plus a 30 minute reserve at 5,000 ft. pressure altitude at ISA plus 33 degrees C.
- J. A first aid kit shall be furnished by the Cooperator and mounted in the aircraft on all flights. The first aid kit shall be carried in the cabin and accessible to pilot and passengers.
- K. The fire extinguisher(s) as required by 14 CFR 135 shall be a hand-held bottle, minimum 1.5 pound capacity, containing Class B and C extinguishing agents, and mounted accessible to the flight crew.
- L. All windows and windshields shall be clean and free of scratches, cracks, crazing, distortion, or repairs which hinder visibility. Temporary repairs, such as safety wire lacing and stop-drilling of cracks, are not acceptable. All repairs shall be approved by the manufacturer or FAA.
- M. The aircraft interior shall be clean and neat. Tears, rips or other damage to the upholstery or headliner is not acceptable. The exterior finish, including the paint, shall be clean, neat and in good condition.
- N. Shoulder harness and lap belt for front seat occupants and both occupants in tandem seat airplanes will be required. Shoulder strap and lap belt will fasten with metal to metal, single-point, quick release mechanism. The installed shoulder harness shall not interfere with the pilots operation of the aircraft controls. Airplanes with a factory-installed, military-type shoulder harness meet this requirement. Factory-installed restraint equipment in Cessna 208, Caravan serial number 1 through 110, are acceptable for point- to-point use only.

## 9. Aircraft Equipment

Aircraft shall be equipped as required under FAR Part 135 for VFR, IFR, night flights, and flights in Class B Airspace.

In addition each aircraft shall have:

- A. One time recorder, similar to Hobbs Model M-969, reading in hours and tenths, and activated by an air switch or equivalent system.
- B. Recorder shall be observable by pilot and observer in flight.
- C. One strobe light mounted on top of the aircraft, plus a second mounted on the belly; or one white strobe light mounted on each wingtip and on the tail.

- D. Shoulder harness for each front seat (including pilot).
- E. Manuals and other documents referenced under FAR Part 91, subparts 91.27 and 91.31.
- F. All radio/electronics items including: wiring, antennas, connectors/adapters and hardware, specified herein.

## 10. Certifications and Operations

- A. Aircraft shall be certificated in the normal or transport category.
- B. Operators shall be certificated under the Federal Aviation Regulations Part 135.
- C. Operations specifications shall authorize small airplane multi-engine and, IFR, VFR, day, night, passenger and cargo.
- D. Airplanes shall be operated in accordance with the Federal Aviation Regulations, Part 135, FAA Exemption 392 and 392A, the certificate holder's operation manual, and all provisions of this contract, except that: For IFR air attack and reconnaissance flights, departures and approaches may be made at airports not having approved weather reporting facilities, provided an approved alternate airport is available and listed in the flight plan. IFR approaches may be made without an automatic pilot or a second-in-command, provide that flight be reference to instruments does not exceed 15 minutes for each approach and/or departure.

## 11. Contractor Furnished Avionics Systems

The following required avionics systems shall be furnished, installed, and maintained by the Contractor in accordance with the manufacturer's specifications and the installation and maintenance standards.

- A. Aircraft Avionics. The use of VHF-FM mobile (vehicle type) radios in aircraft is prohibited.
- B. Resource and Fire Reconnaissance Aircraft shall meet all of the following:
  - 1. An ELT.
  - 2. An aeronautical VHF-AM radio transceiver.  
Instruments and lighting for 14 CFR Part 135 night VFR operations (135.159 & 135.161).
  - 3. A GPS Unit.
  - 4. An Automated Flight Following (AFF) system.  
*and either*
  - 5. One (minimum) VHF-FM Aeronautical Antenna.  
*or the following three (3) items.*
    - a. An Audio Control System.
    - b. An aeronautical VHF-FM radio transceiver.
    - c. An Intercommunications System.

6. Additional Fire Reconnaissance Requirements.

- a. Fire Reconnaissance aircraft shall have a dedicated guard receiver. This may be accomplished with the aircraft having two VHF-FM Aeronautical Antennas. The government would then furnish two (2) portable radios.

*or*

One (1) Contractor furnished aeronautical VHF-FM radio transceiver.

- b. The Relm B/K KFM-985 VHF-FM radio may be used in lieu of a handheld radio with VHF-FM Aeronautical Antennas on Resource Reconnaissance/Fire Reconnaissance aircraft only. The KFM-985 shall meet Aeronautical VHF-FM radio transceiver specifications with the exception that five (5) watt nominal transmitter power output is acceptable.

C. Air Tactical Aircraft. Air Tactical aircraft shall meet all the following (as required by Type):

All Air Tactical Types:

- a. ELT.
- b. Two aeronautical VHF-AM radio transceivers.
- c. Instruments and lighting for 14 CFR Part 135 night VFR operations (135.159 & 135.161).
- d. A Transponder, Altitude Encoder and Static Systems.
- e. An Automated Flight Following (AFF) system.

**Note:** Regardless of available aircraft equipment or capabilities, Supplemental Air Attack Kit installations in any Type shall not elevate the aircraft's capability beyond that Type for which the aircraft would normally be carded, if the supplemental radio kit were removed.

**Note:** If an approved TCAS/TCAD is furnished, the aircraft shall be identified as a "Type I with TCAS/TCAD" or a "Type II with TCAS/TCAD".

Type I:

- f. A panel mounted GPS.
- g. Separate audio control systems for the Pilot and Co-Pilot/ATGS.
- h. A set of audio/mic jacks with PTT capability in the rear seat for an ATGS instructor connected to the Co-Pilot/ATGS's audio control system. A separate audio control system for the instructor is acceptable.
- i. Two permanently installed aeronautical VHF-FM radio transceivers. e..  
An Intercommunication system

*and either*

- f. Provisions for an Auxiliary VHF-FM Portable Radio.

*or*

- g. A third aeronautical VHF-FM radio transceiver.

Type II:

- j. A panel mounted GPS.
  - k. Separate audio control systems for the Pilot and Co-Pilot/ATGS.
  - l. A set of audio/mic jacks with PTT capability in the rear seat for an ATGS instructor connected to the Co-Pilot/ATGS's audio control system. A separate audio control system for the instructor is acceptable.
  - m. One permanently installed aeronautical VHF-FM radio transceiver.
  - n. An Intercommunication system
- and either***
- o. Provisions for an Auxiliary VHF-FM Portable Radio.
- or***
- p. A second aeronautical VHF-FM radio transceiver.

Type III:

- q. A GPS unit.
- r. An Audio Control System.
- s. A permanently installed aeronautical VHF-FM radio transceiver.
- t. An Intercommunications System.

Type IV:

- u. A GPS unit.
- v. An Audio Control System.
- w. Two VHF-FM aeronautical antennas.
- x. An Accessory Power Source.
- y. The floor space between the Pilot and Co-Pilot/observer seats shall be free of all obstructions for Supplemental Air Attack kit installation.

**Note:** If the Contractor provides an approved Supplemental Air Attack Kit, the aircraft shall be identified as a "Type IV with radio kit".

D. Specifications

All required avionics systems shall be furnished, installed, and maintained by the Contractor in accordance with the manufacturer's specifications and the installation and maintenance standards of this section.

1. Accessory Power Source. A power connector (MS3112E12-3S) protected by a 10 amp circuit breaker directly connected to the avionics or aircraft power buss. The connector shall be permanently mounted in a location convenient to the Co-Pilot/observer. Pin A shall be +24 VDC in 24 volt aircraft, Pin B shall be aircraft ground, and Pin C shall be +12 VDC in 12 VDC aircraft. NEVER apply power to both Pins A and C simultaneously. See FS/AMD-A16 available at: <http://www.fs.fed.us/fire/niicd/documents.html>
2. Communications Systems
  - a. Emergency Locator Transmitter (ELT). One automatic-portable/automatic-fixed or automatic-fixed ELT utilizing an external antenna and meeting the same requirements as those detailed for airplanes in 14 CFR 91.207 (excluding

section f.), shall be installed per the manufacturer's installation manual, in a conspicuous or marked location. ELTs certified under TSO-91 are not acceptable.

NOTE: After January 31, 2009, only ELTs transmitting on 406 MHz (TSO-C126 type) will be detected by satellites. The FAA recommends that any new ELT be a TSO-C126 type with a GPS/FMS interface and be registered with the National Oceanic and Atmospheric Administration (NOAA).

b. Aeronautical VHF-AM radio transceiver. A panel mounted aeronautical VHF- AM radio transceiver (VHF-1), operating in the frequency band of 118.000 to 136.975 MHz, with a minimum of 760 channels in no greater than 25 kHz increments, and a minimum of 5 watts carrier output power. In aircraft requiring two VHF-AM radios, the second radio may be a 720 channel transceiver.

c. Aeronautical VHF-FM radio transceiver (FM-1). For a list of currently acceptable VHF-FM radios, visit <http://www.fs.fed.us/fire/niicd/documents.html>

(1) The transceiver shall operate from 150 to 174 MHz, permit the operator to program any usable frequency within that band while in flight, provide operator selection of both wide-band (25 kHz bandwidth/5 kHz modulation) and narrow- band (12.5 kHz bandwidth/2.5 kHz modulation) operation by channel for MAIN and AIR GUARD operation. Transceivers shall be set to operate in the narrowband mode (typically indicated with a lower case "n") unless local requirements dictate otherwise.

(2) Carrier output power shall be 10 watts nominal. The transceiver shall be capable of displaying receiver and transmitter operating frequency. Transceivers shall provide both receiver and transmitter activation indicators for MAIN and AIR GUARD. Simultaneous monitoring of both MAIN and AIR GUARD (168.6250 MHz) is required. Scanning of AIR GUARD is not acceptable. AIR GUARD communications may only be used for: Emergencies; initial call; recall; and redirection.

(3) A CTCSS sub-audible tone encoder with a minimum of 32 standards selectable tones, meeting the current TIA/EIA-603 standard, shall interface with the above transceiver. The encoder shall encode a 110.9 Hz tone on all AIR GUARD transmissions.

(4) The transceiver's operational controls shall be mounted in a location that is convenient to both Pilot and Co-Pilot/observer.

(5) Aircraft having two or more aeronautical VHF-FM radio transceivers need only have an AIR GUARD receiver in the first transceiver (FM-1).

**NOTE: All aeronautical VHF-FM transceivers will convert to multimode (P25) digital on January 1, 2010. Only P25 aeronautical compliant transceivers will be acceptable after this date.**

(6) Multimode (P25) digital aeronautical VHF-FM transceivers shall meet FS/AMD A-19. For a copy of FS/AMD A-19, visit

<http://www.fs.fed.us/fire/niicd/documents.html>

d. Provisions for auxiliary VHF-FM (AUX-FM) portable radio:

- (1) The Contractor shall provide the necessary interface for installing and properly operating an auxiliary VHF-FM portable radio through the aircraft's audio control system(s). The interface shall consist of the appropriate wiring from the audio control system, terminate in an MS3112E12-10S type connector and utilizing the contact assignments as specified by drawing FS/AMD-17 ; AUXFM RADIO INTERFACE, at the following website: [www.fs.fed.us/fire/niicd/documents.html](http://www.fs.fed.us/fire/niicd/documents.html)
- (2) One weatherproof, external, broadband antenna (Comant type CI-177 or equal) covering the 150-174 MHz band, with associated RG-58A/U (or equivalent) coaxial cable and connector, terminated in a bulkhead-mounted, female BNC connector adjacent to the above 10-pin connector.
- (3) Mounting facilities, in accordance with the specifications of FAA Advisory Circular AC 43.13-2A, for secure installation of the auxiliary VHF-FM portable radio in the cockpit shall be provided (Field Support Services ([www.helifire.com](http://www.helifire.com)) AUX-EPH-RB or equivalent). The location of the mounting facilities shall be such that, when connected with an 18-inch adapter cable, allows the Co- Pilot/observer full and unrestricted movement of the radio's controls.
- (4) Positive-polarity microphone excitation voltage shall be provided to the AUX- FM system from the aircraft DC power system through a suitable resistor network. A blocking capacitor shall be provided to prevent the portable radio microphone excitation voltage from entering the system. Sidetone for the AUX- FM shall also be provided (NAT AA34, Premier PA-34, or equivalent).
- (5) If the AUX-FM specifications are intended for UHF or Low Band use, the appropriate antenna shall be used and the audio control(s) shall be labeled accordingly.

e. Automated Flight Following (AFF)

- (1) One Automated Flight Following (AFF) system compatible with the government's AFF tracking network (Webtracker) is required. Not all available AFF systems are compatible with Webtracker nor meet Webtracker's requirements. The Contractor shall ensure that the AFF system offered is compatible with Webtracker. To view Webtracker's current compatibility requirements refer to <https://www.aff.gov>.
- (2) The AFF system shall be powered by the aircraft's electrical system, installed per the manufacturer's installation manual, and operational in all phases of flight. AFF equipment shall utilize as a minimum: Satellite communications, an internally or externally mounted antenna, provide data to the Government's Webtracker software, use aircraft power via a dedicated circuit breaker for power protection, and be mounted so as to not endanger any occupant from AFF equipment during periods of turbulence. Antennas should be placed in order to allow the best view of the overhead sky as possible. Externally mounted antennas are recommended to improve system

performance. Any AFF manufacturer

required pilot display(s) or control(s) shall be visible/selectable by the Pilot(s). Remote equipment having visual indicators should be mounted in such a manner as to allow visual indicators to be easily visible.

(3) AFF communications shall be fully operational in the lower 48 states. Contractors accepting dispatches to the State of Alaska, Southern Canada, or Western Canada shall have an AFF system capable of being tracked in these locations at all times. Not all manufacturers' AFF equipment communication links will operate effectively in all geographic areas.

(4) The Contractor shall maintain a subscription service through the AFF equipment provider allowing AFF position reporting for satellite tracking via Webtracker. The position-reporting interval shall be every two minutes while the aircraft is in flight. The Contractor shall register their AFF equipment with the Boise Help Desk providing: Complete tail number, manufacturer and serial number of the AFF transceiver; aircraft make and model; and Contractor contact information. If the Contractor relocates previously registered AFF equipment into another aircraft, then the Contractor shall contact the Boise Help Desk making the appropriate changes prior to aircraft use. In all cases, the Contractor shall ensure that the correct aircraft information is indicated within Webtracker. The Contractor shall contact the Boise Help Desk of system changes, scheduled maintenance, and planned service outages.

(5) Registration contact information, a web accessible feedback form, and additional information is available at: <https://www.aff.gov>. The Boise Help Desk can be reached at (800) 253-5559 or (208) 387-5290.

(6) Prior to the aircraft's annual Contract inspection, the Contractor shall ensure compliance with all AFF systems requirements. The Contractor shall additionally perform an operational check of the system. As a minimum, the operational check shall consist of confirming the aircraft being tested is displayed in Webtracker (indicating it is currently transmitting data to Webtracker) and that all information displayed in Webtracker is current. A username and password is required to access Webtracker. Log on to the AFF website at <https://www.aff.gov> to request a username and password, or contact the Boise help desk.

(7) This clause incorporates Specification Section Supplement available at: <https://www.aff.gov/contract.asp> with the same force and effect as if they were presented as full text herein.

- f. VHF-FM Aeronautical Antenna. A broadband aeronautical antenna (Comant CI- 177 or equivalent) operating from 150 to 174 MHz with coaxial cable (RG-58 A/U or better) terminated on a male BNC connector. The antenna cable in the cabin shall have the ability to connect to a unit mounted between the Pilot and Co-Pilot/observer's seats plus 4 feet (minimum). Antenna VSWR shall be better than 2.5 to 1.
- g. Supplemental Air Attack Kits. See the appropriate Specification sections in this contract for specification requirements. Any supplemental Air Attack kit shall consist of all the following (as a minimum):

- (1) One aeronautical VHF-FM radio transceiver.
- (2) One Auxiliary VHF-FM (AUX-FM) portable radio interface. Provisions under the AUX-FM specifications for a VHF-FM antenna are not applicable.
- (3) Separate audio control systems for the Pilot and Co-Pilot/ATGS. The first control position shall be for the aircraft's audio control system followed by the supplemental Air Attack kit's transceivers (i.e. A/C, FM1, FM2, AUX, etc.).
- (4) A remote set of audio/mic (JJ-034/JJ-033) jacks with PTT capability and a volume adjustment in the rear of the kit for an ATGS instructor connected to the Co-Pilot/ATGS's audio control system. A separate audio control system for the instructor is acceptable.
- (5) An intercommunication system supporting for all required positions.
- (6) A power cord terminated with an MS3116F12-3P connector wired to mate with an Accessory Power Source connector. The supplemental Air Attack kit shall be able to operate on both +12 VDC and +24 VDC, although not simultaneously.
- (7) Audio (PJ-055) and Mic (PJ-068) type plugs for connection to an aircraft's audio system. The mic plug shall be capable of PTT operation.
- (8) The Pilot and Co-Pilot/ATGS's mic jacks (JJ-033) shall have PTT capability.
- (9) Bulkhead mounted female BNC connectors on the side of the kit for the VHF- FM aeronautical radio antenna connection(s).
- (10) Newly constructed supplemental radio kits shall meet applicable portions of 14 CFR 23.853 and 23.855 for interior and cargo compartment flame survivability.
- (11) A means of securing the supplemental radio kit, while in flight, meeting FAA Advisory Circular AC 43.13-2A.

- h. UHF aeronautical transceiver (UHF) operating in the frequency range of 406 to 512 MHz, which provides selection of either narrow-band (12.5 kHz) or wide band (25.0 kHz) channel spacing operation on each channel. The transceiver shall meet applicable specifications provided in FS/AMD A-24; AVIONICS OPERATIONAL TEST STANDARDS. For a copy of FS/AMD A-24, visit <http://www.fs.fed.us/fire/niicd/documents.html>
- i. VHF Low Band aeronautical transceiver (LB) operating in the frequency range of 32 to 50 MHz, with channel spacing of 20 kHz. The transceiver shall meet applicable specifications provided in FS/AMD A-24; AVIONICS OPERATIONAL TEST STANDARDS. For a copy of FS/AMD A-24, visit <http://www.fs.fed.us/fire/niicd/documents.html>
- j. UHF Aeronautical Antenna. A broadband aeronautical antenna (Comant CI-275 or equivalent) operating from 406 to 512 MHz with coaxial cable (RG-58 A/U or better) terminated on a male BNC connector. The antenna cable in the cabin shall have the ability to connect to a unit mounted between the Pilot and Co-Pilot/observer's seats plus 4 feet (minimum). Antenna VSWR shall be better than 2.5 to 1.

- k. Low Band Aeronautical Antenna. A broadband aeronautical antenna (Dayton-Granger 720061 or equivalent) operating from 32 to 50 MHz with coaxial cable (RG- 58 A/U or better) terminated on a male BNC connector. The antenna cable in the cabin shall have the ability to connect to a unit mounted between the Pilot and Co- Pilot/observer's seats plus 4 feet (minimum). Antenna VSWR shall be better than 2.5 to 1.

## 12. Navigation systems

- a. Global Positioning System (GPS). One panel-mounted GPS shall be permanently installed in the aircraft. The GPS shall: utilize WGS-84 datum; reference latitude and longitude coordinates in the DM (degrees/minutes/decimal minutes) mode; utilize an approved, fixed, external aircraft antenna; and be powered by the aircraft electrical system. The GPS unit shall have the ability for manual entry of waypoints in flight. The GPS shall have a data base (VFR and in route units not over one (1) year old and IFR approach units not over 28 days old) covering the continental United States and Alaska. Handheld and/or marine type equipment is not acceptable.
- b. Transponder and Altitude Encoder. An ATC transponder and altitude reporting system meeting the requirements of 14 CFR 91.215(a) and (b) and tested and inspected per 14 CFR 91.413.
- c. Static Systems. Although the aircraft to be provided may not be certified for IFR flight, the aircraft's static pressure system, altimeter instrument system, and automatic pressure altitude reporting system shall be maintained in accordance with the IFR requirements of 14 CFR 91.411 and inspected and tested every 24 calendar months as specified by 14 CFR Part 43, appendices E and F.
- d. GPS Data Connector. A GPS data connector shall be installed for the purpose of external data retrieval by a GIS laptop computer. The connector shall be a DB-9F type D sub-connector and shall be wired for RS-232C serial format for laptop computers (pin 2-transmit data, pin 3-receive data if applicable, and pin 5-ground) and shall be mounted in a location convenient to the observer.

## 13. Audio control system(s)

- a. General. The audio control system shall provide the specified operator(s) with controls for selection of receiver audio outputs and transmitter microphone/PTT audio inputs.
- b. Transmitter selection and operation. Transmitter selection controls shall be provided to the specified operator(s) for microphone/PTT inputs. Whenever a transmitter is selected, the companion receiver audio shall automatically be selected for the corresponding earphone. Transmitter sidetone audio shall be provided for the operator as well as for cross-monitoring via the corresponding receiver selection switch on other audio control systems (if required). Multiple audio control systems shall be configured so that the operators may each simultaneously select and utilize a different transmitter (or PA system when installed) via their respective microphone/PTT.
- c. Receiver selection and operation. Reconnaissance aircraft shall have a receiver audio selector(s) for all required receivers. Air Tactical aircraft shall have separate receiver selection

controls providing the required operator's audio from one or any combination of all required receivers. Any passenger positions, if required, shall monitor the receiver(s) as selected by the Pilot (single system) or Co-Pilot/observer's (multiple systems) audio control panel. The instructor, if required, shall monitor the receiver's as selected by the Co-Pilot/observer's audio control panel unless the instructor's position has/requires a separate audio control panel. Performance specifications for receiver audio to all earphone connectors are specified in, FS/AMD A- 24; AVIONICS OPERATIONAL TEST STANDARDS. See <http://www.fs.fed.us/fire/niicd/documents.html>

- d. Radios and Systems. As a minimum, the audio control system(s) shall provide for selection of all installed radios and PA systems. The instructor's audio control, if required, does not have to receive NAV inputs.
- e. Earphones and microphones. The audio system shall be designed for operation with 600-ohm earphones and carbon- equivalent, noise-canceling boom-type microphones. All earphone jacks in the aircraft shall be JJ-034 type and all microphone jacks shall be JJ-033 type. Jack pairs shall not be separated by more than 4 inches.
- f. Push-to-talk (PTT) operation.
  - (1) Separate transceiver PTT switches shall be provided for each required operator (i.e. Pilot, Co-Pilot/observer, and instructor). PTT switches for non-Pilots shall not be located on the flight controls.
  - (2) Desired item (not required): For Type I, II, and III Air Tactical aircraft, it is desired that, in addition to the above PTT switches, the ATGS/Co-Pilot position have PTT switches located on a coiled 3 foot handheld cord with large clip (Comm Innovations CIX016VG0K3-6P or equivalent) mounted adjacent to the ATGS/Co- Pilot earphone/microphone jacks. The coiled cord shall use a 6 pin MS3116A10-6P type connector with pin assignments of: Pin A-Audio Lo, pin B-Mic Hi, pin C-Mic Lo, pin D-Audio Hi, pin E-Transceiver PTT, pin F-ICS PTT In lieu of the above 3 foot cord, the Contractor may provide a remote controller with individual transceiver PTT & ICS PTT on a coiled cord.
  - (3) Aircraft requiring a supplemental radio kit shall have a JJ-033 type jack, located in the cockpit by the Pilot or Co-Pilot/observer, capable of remotely operating PTT on installed aircraft transceivers via the transmitter selector on the Pilot's audio control panel. The JJ-033 type jack shall not be separated by more than 4 inches from a JJ- 034 jack operating through the same audio control panel.

#### 14. **Intercommunication system (ICS)**

Ability for all required positions to communicate using JJ-033 and JJ-34 type jacks for headsets. Hot mic controlled via an activation switch or voice activation (VOX) shall be provided. ICS audio shall mix with, but not mute, selected receiver audio. An ICS audio level control shall be provided. ICS sidetone audio shall be provided for the earphones corresponding with the microphone in use. The Pilot shall have an ICS isolation capability. Performance specifications for the ICS system are specified in FS/AMD A-24; AVIONICS OPERATIONAL TEST STANDARDS. For a copy of FS/AMD A-24, visit <http://www.fs.fed.us/fire/niicd/documents.html>

## 15. Installation and Maintenance Standards

All avionics systems shall be installed and maintained in accordance with FAA approved data and manufacturer's recommendations and specifications. Recommendations in FAA Advisory Circular 43.13-2A, Chapters 1, 2, and 3 shall be strictly adhered to. These include, but are not limited to the following:

- A. Wires and cables shall be selected for proper size and environment subject to. They will be marked with a combination of letters and numbers which identify the wire or cable characteristics, and any other information required to relate the wire or cable to the wiring diagram. Mark at each end and at 30 to 38 cm intervals along the wire or cable. Short wires or cables under 18 cm shall be marked in the middle. Install marked sleeving on coaxial cable and wire bundles. Wires and cables shall be routed, tied, laced, clamped, and protected.
  - 1. Minimum radius of any cable, bundle of cables, or coaxial cable, shall be 3 inches or 10 times the diameter of the cable or bundle of cables, whichever is greater
- B. Interference protection such as bonding, shielding, and filtering is required and shall comply with provisions listed in Appendix 7 ARINC Report No. 413A, which can be purchased from the avionics documents section of:  
Aeronautical Radio, Inc. 2551 Riva Road  
Annapolis, MD 21401  
(301) 266-4117
- C. Antennas shall be located for optimum isolation to minimize EMI and RFI, blocked reception (ideally a minimum five feet separation), and to avoid interference with pilot and instrument static sources.
- D. Antennas shall be installed on a ground plane adequate for the bandwidth of the antenna and shall be properly secured and electrically bonded. Communications antennas shall be vertically polarized. Antenna VSWR shall not exceed 2.5 to 1.
- E. Avionics equipment shall be mounted so that it has proper cooling and air circulation to prevent temperatures in excess of 140 degrees F, is protected from external damage, and readily accessible for maintenance.

## 16. Primary Avionics Power

Power to all avionics systems shall be enabled/disabled by a toggle type master switch mounted on instrument/radio panel, and identified as "Radio Master" or "Avionics Master". The circuit design should conform to applicable FAA or airframe manufacturer fail-safe requirements so that in the event of a failure, the system will default to the "on condition".

## 17. Aircraft Maintenance

A. Aircraft shall be maintained in accordance with Federal Aviation Regulations Part 135. Contractor shall comply with mandatory manufacturer's service bulletins and FAA ADs. Contractor shall correct all maintenance discrepancies prior to the start of the contract performance period. Thereafter, contractor shall correct all maintenance discrepancies, as they become known.

- B. Contractor shall immediately notify the contracting office, or designated representative of any engine, propeller, major airframe or engine component change, and the reason for the change.
- C. Engine time between overhauls shall not exceed the manufacturer's recommendation at any time during the contract term.
- D. Aircraft operated with components and accessories on approved TBO extension programs are acceptable provided these extensions are approved by the manufacturer or the FAA and the aircraft will be operated in accordance with that extension.
- E. Aircraft is subject to inspection before being returned to service.
- F. The pilot(s) shall not function as mechanic(s) while off duty during this contract, regardless of certificates possessed.
- G. The pilot may function as mechanic during regular duty hours, provided the pilot holds an FAA Mechanic's Certificate with airframe and power plant rating, or works under the supervision of a person holding such certificates. Any time spent performing maintenance will be counted as regular duty time in computing flight and duty time limitations as follows:
  - 1. During unavailability, mechanic duties *performed by the pilot* in excess of two hours will apply as flight time on a one-to-one basis toward flight hour limitations.
  - 2. A mechanic, other than the pilot, shall perform 50 hour, 100 hour, or progressive inspections.

**18. Pilot Flight and Duty Limitations**

- A. All pilots will be limited to the following tours of duty and flight hours. All revenue producing flying time, whether under this agreement or not, will count toward the limitations.
  - 1. Flight time shall not exceed a total of 8 hours per day.
  - 2. Flight time shall not exceed a total of 42 hours in any 6 (six) consecutive days.
  - 3. Pilot accumulating 36 or more hours of flying in any 6 (six) consecutive days shall be off duty the next day. After any one full day off, pilots begin a new six consecutive day duty period for the purposes of this clause, providing the requirements of paragraph #6 of this clause are not exceeded.
  - 4. 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.
  - 5. Duty includes flight time, ground duty of any kind, and standby or alert status at any location.

6. During any 14 consecutive days, pilots shall be off duty for two (2) full calendar days except as noted below. Days off duty need not be consecutive.

7. During times of prolonged heavy fire activity, DNR may issue a notice reducing the pilot duty day and/or increasing days off on a geographical or Agency-wide basis.

B. Flights point-to-point (airport to airport, heliport to heliport, etc.) with a pilot and co-pilot shall be limited to 10 (ten) hours per day. (A helicopter that departs airport A, flies reconnaissance on a fire, then flies to airport B, is not point-to-point).

C. Pilots flying missions covered in the above paragraph, who are also flying other missions, shall also be limited to the flight hour limitations in Section 10, PILOT FLIGHT DUTY AND LIMITATIONS.

D. When the available flight hours within the limitations of paragraphs A, or B, above, are reduced due to non-agreement flying, the payment will be reduced as provided in the agreement.

E. Pilots may be relieved from duty for fatigue or other causes created by unusually strenuous or severe duty before reaching duty limitations.

F. Relief or substitute pilots reporting for duty under any agreement or contract may be required to furnish a record of all duty and revenue producing flight time during the previous 14 days.

**19. Responsibility of Cooperator:**

A. Obtain all required licenses and permits.

B. Comply with any applicable federal, state, municipal and Indian tribal laws, codes, regulations and ordinances. Provide competent superintendence at the site with authority to act for the Cooperator at all times and shall so notify the DNR.

C. Take precautions necessary to protect property and persons including third parties against injury or damage and be responsible for any such injury or damage that occurs as a result of their fault or negligence.

D. Assure that all employees engaged in the performance of this agreement are thoroughly familiar with its requirements.

20. References to FAA regulations or requirements shall be interpreted to mean "FAA or equivalent Transport Canada (Air)" regulations or requirements for companies operating out of Canada.

*Cooperator Initial* \_\_\_\_ *Date* \_\_\_\_\_

*DNR Initial* \_\_\_\_ *Date* \_\_\_\_\_