

# STATEMENT OF WORK

Department of Conservation & Natural Resources  
Bureau of Forestry  
Division of Forest Fire Protection

MID-STATE AIR TANKER BASE  
Philipsburg, PA

## SECTION 1 SCOPE OF WORK:

GENERAL – To provide the Department with one (1) properly FAA certificated and inspected fixed wing aircraft equipped with sufficient tankage, necessary appliances, equipment, and properly FAA certificated and qualified pilots, for the prompt aerial delivery and cascading of water and fire retardants on wildfires, and to provide support for wildfire control personnel in the suppression of wildfire with the least possible loss of time. In addition, the aircraft may be utilized in related functions should conditions require such activities.

This contract requires the availability of the aircraft of the type described herein, twenty-four (24) hours a day during the thirty (30) day Guaranteed Period and for any additional service, before or after the guaranteed period that is requested by the Department and agreed to by Contractor. All flight operations will be conducted under visual flight rule (VFR) conditions in accordance with 14 CFR Part 91. All drops shall be completed after sunrise and before sunset.

Questions regarding the technical aspect of this bid should be directed to Jason Williams at 717-787-5077 or [japwilliam@pa.gov](mailto:japwilliam@pa.gov). Questions regarding the bidding or contracting procedures should be directed to Carol Durham at 717-783-3309 or [cdurham@pa.gov](mailto:cdurham@pa.gov).

## SECTION 2 DEFINITIONS:

As used throughout this Statement of Work, the following terms shall have the meaning as set forth below:

DEPARTMENT: Commonwealth of Pennsylvania, Department of Conservation and Natural Resources.

CONTRACTOR: Shall be interpreted to mean any person, firm or corporation having legal title or lease agreement for the operation of the described aircraft.

FIXED BASE OPERATOR (FOB) OR FIRM: Shall be interpreted to mean an operator or firm who is currently in the air tanker and/or fixed base aviation business, who has an office, has maintenance support facilities owned or contracted, owns air tanker aircraft, has employees, has qualified pilots and mechanic/A&P, and has tools, equipment and spare parts to support the

type of aircraft specified in this Contract. Operator or firm must conduct all commercial operations from a specified airport. Contractor must be FAA certificated under Part 137 of the Federal Aviation Regulations for Agricultural Aircraft Operations and continue to hold certification throughout the contract term. Pilots must meet all FAA requirements to conduct FAR Part 137 operations.

DIRECTOR, BUREAU OF FORESTRY: The authorized representative of the Secretary, Department of Conservation of Conservation and Natural Resources.

CHIEF, DIVISION OF FOREST FIRE PROTECTION: The authorized representative of the Director, Bureau of Forestry, and the Secretary, Department of Conservation and Natural Resources.

AIRCRAFT OPERATIONS & SAFETY SPECIALIST (AOSS): The authorized representative of the Chief, Division of Forest Fire Protection. Handles the aviation related activities and contracts for DCNR.

AIR TANKER BASE MANAGER (SEMG): The authorized representative of Chief, Division of forest Fire Protection.

DISTRICT FORESTER: The authorized representative of the Director, Bureau of Forestry, or Chief, Division of Forest Fire Protection.

FAA: Federal Aviation Administration.

DESIGNATED BASE: The base of operations from which the Contractor will operate.

FLIGHT RATE: The hourly rate of pay.

FLIGHT TIME: Flying time for which the flight rate will be paid.

GUARANTEED PERIOD: The guaranteed period shall consist of thirty (30) days, on a seven (7) day week basis, holidays included, for each air tanker and shall begin at ten (10) hours before sunset local Eastern time (UTC 5 (-4DT)) on the first day of the period and shall end at sunset local Eastern time on the last day of the period.

ALERT STATUS: The time aircraft and crew are in readiness for immediate take-off.

GUARANTEED PAYMENT FOR AVAILABILITY: The Department guarantees a daily payment for each day of availability for each air tanker under this contract.

BID SPECIFICAITONS: The bid specifications are included in and are a part of the contract.

### **SECTION 3 CONTRACT TERM:**

The Contract shall commence upon execution and receipt of Purchase Order and Notice to Proceed letter and shall terminate December 31, 2020.

Further, the parties may agree to renew this contract for up to four (4) additional consecutive annual one (1) year terms with the final termination date June 30, 2024, upon the same terms and conditions set forth in the contract. The Department, based on past contractor performance, may negotiate an increase in the unit price(s) by a rate not to exceed 5%.

The Department will reach out to the Contractor no later than August 31 prior to the termination date to begin renewal discussions.

Once the renewal terms are mutually decided, the Contract shall provide written notification of the intent to renew, including the requested price increase if desired, to the Department no later than September 30 prior to the termination date. The renewal notice should be sent to:

DCNR Bureau of Forestry – Department of Forest Fire Protection  
Attn: Jason Williams  
PO Box 8552  
Harrisburg, PA 17105-8552  
Or  
Emailed to: [japwilliam@pa.gov](mailto:japwilliam@pa.gov)  
Or  
Faxed to: 717-783-7960

The Department will require the ready availability of aircraft, pilot(s), appliances and equipment, during the guaranteed periods as set forth in the Contract. When requested by the Department, use before or after the guaranteed period is at the option of the Contractor. The Department reserves the right to alter the starting dates of the guaranteed periods by no more than fourteen (14) days for the four (4) renewal options. The total number of thirty days (30) within the guaranteed periods will not change.

Any commitment of the Department after December 31 of each year this Contract is continued in force by renewal is contingent upon available funds necessary for this expenditure.

#### **SECTION 4 SCHEDULE OF ITEMS:**

- 4.1 DESIGNATED BASE – The designated base of operation for this air tanker shall be Mid-State Regional Airport (KPSB), Philipsburg, Pennsylvania. Location: N40°52.67'/W78°5.66'elevation 1,866' MSL (consult the FAA Airport/Facility Directory for the most up-to-date information). In addition, a number of auxiliary aerodromes approved by the Contractor and the Aircraft Operations & Safety Specialist may be established and used as directed by the Department.

As the fire season in Pennsylvania progresses, the Contractor maybe required to relocate to, but not limited to, the following airport or airfields with minimal notification:

Bedford County Airport, Bedford, PA (HMZ)  
Hazleton Regional Airport, Hazleton, PA (HZL)

As much prior notification to relocate will be provided as possible, however flexibility in the Contractor's performance is expected. This relocation may be temporary or permanent depending on the need of the Department.

#### 4.2 GUARANTEED PERIOD

EXCLUSIVE USE PERIOD: FROM **March 28, 2020** THROUGH **April 26, 2020** (30 days).

It is possible the starting date may be one (1) to seven (7) days earlier or later than the estimated starting date given above. Five (5) days advance notice will be given to the contractor on the exact date on which to report and when to start of the contract guaranteed period.

Each air tanker, appliances, equipment, and pilot(s) shall be assembled on the Air Tanker Base no later than ten (10) hours before sunset Eastern local time two (2) days before the first day of the air tanker's Guaranteed Period for inspection and tests. A penalty of \$400.00 per day may be assessed for each day or portion thereof of this two (2) day period that the air tanker is not on base. Assessed penalties will be deducted from the Guaranteed Payment for Availability.

4.3 ADDITIONAL SERVICES – Additional Daily Availability may be requested by the Department and will be compensated for. Extensions are contingent upon Contractor approval.

4.4 AIRCRAFT – Contractor shall provide one (1) fixed-wing single or multi-engine land aircraft with a minimum of 1,250 total horsepower per engine, with a gross weight minimum speed of 140 KIAS. All aircrafts are required to meet the manufacture's limitations specified in the Pilot Operation Handbook (POH), Airplane Flight Manual, other documents required by the Federal Aviation Administration. The Department's Aircraft Operations & Safety Specialist shall inspect the Contractor's aircraft at the Contractor's base of operations thirty (30) days prior to the specified date the aircraft are to arrive on the Department's base. If the aircraft fails to meet the standards for safe, effective air tanker operations, and the defects or discrepancies are major, the contract may be cancelled, if the defects are minor, a period of not more than ten (10) day grace period are at the sole discretion of the Aircraft Operations & Safety Specialist. If the contract is cancelled, the operator will be considered to be in default of the contract and his surety bond will be forfeited to the Department. If the ten (10) day period to rectify the problems is granted, the operator will pay the travel and per diem expenses of the Department's Aircraft Operations & Safety Specialist to return to the Contractor's base for another aircraft inspection. If the aircraft does not meet the standards for safe, effective, air tanker operations at this inspection, the contract will be cancelled and the operator will be considered to be in default of the contract and their surety bond will be forfeited to the Department.

(A) PERFORMANCE: - Each air tanker shall be of such configuration as to be capable of transporting (aerial delivery) a payload of 800-gallons minimum, or greater, of water and/or fire retardant in tanks contained within, as part of the fuselage of the aircraft or other FAA approved installation. Aircraft shall have the performance capabilities of transporting and cascading an 800-gallons or greater payload from Mean Sea Level (MSL) to an elevation of 5,000 feet above MSL. Performance capabilities will be with

crew and fuel requirements to accomplish the assignment but at no time will fuel requirements be less than two (2) hours at cruise power. Payload for retardant chemicals is computed at nine (9) pounds per gallon at MSL on a standard day.

Multi-engine aircraft must have information in the FAA approved airplane flight manual or other manufacturer provided documentation (performance data) showing the aircraft to be able to clear the highest obstacle on the departure path during a takeoff with an engine failure after rotation. This Take Off & Landing Data will be reviewed with the Aircraft Operations & Safety Specialist prior to operations. During periods of extreme density altitude/temperature changes, the single-engine performance data will be recalculated by the Pilot in Command to ensure aircraft performance.

- (B) ENGINES – The total time on the aircraft engine(s) since new (TTSN) or major overhaul (SMOH) may not exceed the manufacturer’s required TBO (Time Before Overhaul) hours unless specifically extended by the FAA for the specific contractor under an approved progressive maintenance program. This program will be reviewed with the Aircraft Operations & Safety Specialist.

Each engine will have at least 100-hours usable time at start of the Guaranteed Period. Top overhauls will not be considered as an overhaul on any engine. Surplus engines shall be inspected for rust and corrosion, compliance with Airworthiness Directives (ADs) and/or Supplemental Type Certificates (STCs) and attested airworthy by an approved FAA repair station or the manufacturer prior to installation for use. Any engine damaged in a manner that results in ingestion of metal particles will have the oil cooler removed and replaced with a new or overhauled and certified unit, propeller dome removed and flushed, chip detector(s) cleaned/serviced (if installed), all appropriate filters and oil changed, and all accessories dependent on engine oil pressure for operation will be removed and flushed before being returned to service. Turbine/turboprop/piston engines showing signs of metal contamination will result in a grounding of the aircraft until a determination is made in accordance with manufacturer’s specifications by certified mechanic holding an inspection authorization or a representative of the engine manufacturer to certify the engine airworthy.

- (C) AIRCRAFT INSTRUMENTS

1. Adequate airworthy instrumentation in accordance with Federal Aviation Regulations to permit day and night VFR operations, and will consist of at least the following (ref: FAR 91.205):

Airspeed Indicator	Compass
Turn and bank	Directional gyro
Mag. Direction Ind.	Tachometer for each engine
Fuel qty. gauge	Oil pressure gauge for each engine
Oil temp, gauge for each engine (if app)	HOBBS hour meter

Temp. gauge for each engine (if app)	Clock
Manifold pres. gauge for each alt. engine	Altimeter
Artificial Horizon	Vertical Velocity Indicator
Landing gear indicator for aircraft w/retractable landing gear	
Vacuum Gauge if any vacuum instruments are installed	

2. Magnetic Compass with correction card (checked within thirty (30) days of start of the Guaranteed Period).
3. All required engine(s) and system instruments and fuel gauges will be operational in accordance with the FAA regulations.
4. Global Positioning System (GPS), either portable (handheld) or installed, that is capable of a user defined waypoint (Lat/Long).

(D) MISCELLANEOUS

1. The following equipment shall have been installed and operational in each air tanker:
  - a. Approved shoulder harness.
  - b. Parking brakes.
  - c. Red or white anti-collision beacon light system.
  - d. One (1) electric landing light.
  - e. Position lights.
  - f. Provisions for helmet and microphone by all crew members which permits all crew members to monitor any or all radio communications. Helmet exceptions must be approved by the Aircraft Operations & Safety Specialist.
  - g. A fully functioning Technical Standard Order (TSO) C91a or C126 (406 MHz) Emergency Locator Transmitter (ELT). This is contrary to the requirements of Part 91.207(f)(6).
  - h. Paint scheme shall be high visibility paint on wing tips and tail surfaces.
  - i. Alternating landing lights and/or strobes while working over fires.
2. Each aircraft shall have a current annual inspection performed prior to the date set for inspection by the Department. The aircraft must have within the preceding 100-hours, received an annual or hundred-hour inspection by a certified mechanic or repair station. The aircraft will continue to be inspected each 100-hours thereafter (unless an annual inspection is due in less time) during the life of the contract Guaranteed Period unless the aircraft is on an FAA approved progressive maintenance program (FAR 91.409(d)). Exceeding an inspection interval will be done only in accordance with intervals outlined in the program (during this exceedance, no DNCR personnel will be carried as passengers and/or crew unless they are deemed mission critical).
3. Contractor shall have available at his designated base one copy of the FAA approved maintenance manual for each make and model of aircraft used.

4. Aircraft maintenance records will comply with the Federal Aviation Regulations with engine(s), propeller(s), and airplane flight time properly entered after each flight. The contractor shall ensure that all maintenance performed on the aircraft is recorded in the affected aircraft logs (i.e. airframe, engine or propeller) in accordance with 14 CFR 91 (ref: 14 CFR 43.0, 43.11 and 91.417).
5. Each aircraft shall be weighed and have a certified Weight & Balance sheet. Empty and gross weights shall be entered in the maintenance records and in Weight & Balance documents. Each aircraft must carry a chart (in addition to loading charts found in the AFM) that will assist the pilot in determining the appropriate retardant/suppressant load capability for the environmental conditions present within authorized maximum weight limits for that specific aircraft. The chart will not supersede any FAA approved or recognized manuals or charts. The chart must be in the aircraft and accessible to the pilot during loading operations.
6. All paint must be in good condition and must not have been applied over dirty or greasy surfaces. All cables, fuel lines, hydraulic lines, oil lines, and wiring must be airworthy and will be inspected for condition and correct application and installation. Brake linings, brake lines and tires must be in an airworthy condition at all times.
7. All maintenance performed will be entered in the approved aircraft maintenance records/logs prior to the next flight.
8. All aircraft will make a low clearing pass over the drop area prior to the actual drop of water or retardant material to alert crews on the ground.
9. The Contractor shall be in violation of Section 4.2 above and/or Section 9 below if:
  - a. Any of the above requirements are not met.
  - b. It is known that the aircraft has been abused or used for acrobatics.
  - c. Aircraft maintenance records/logs are not currently posted.
  - d. Equipment is not airworthy or beyond expiration of a required inspection.
10. The security of aircraft, fuel supplies, associated vehicle/ground support units (AGE), parts and equipment used under this agreement is the sole responsibility of the Contractor.

(E) RETARDANT TANK SPECIFICATIONS

1. Tanks must be center-mounted, either within or as part of the fuselage. No wing-mounted, "nurse" or auxiliary, or feeder tanks will be accepted. Agricultural aircraft adapted to the air tanker role must have tank release openings modified for the firefighting configuration.

2. Loading range must be well within the Center of Gravity (CG) limits of the operating limitations. Tank openings to be of such configuration that a single drop of entire load or multiple drops of the load necessary to assure clean dumping without gurgling, dragging, or possible collapsing of the tanks. Tanks shall be provided with bottom loading 3-inch Cam-lock fittings, with 3-inch feed line, located at the low point of the tank, as far rear on the fuselage as practical and permitting loading from either side if possible. In addition, the tanks shall be constructed so as to allow "top loading" whenever necessary. The liquid dumping discharge gate controls shall be located within the pilot compartment in such a position that their operation will not distract from the necessary pilot duties during the "dropping runs." Multi-engine and 800 plus gallon aircraft must have at least two (2) drops per load capability.
3. All tank doors shall be operated hydraulically or pneumatically and shall be closeable in flight.
4. All tanks must have a positive emergency method for door opening independent of the normal operating system, and within easy reach of the pilot.
5. All mechanisms for operating the tank doors must be installed in accordance with the Federal Aviation Regulations.
6. Door opening mechanism must have a demonstrated history of reliable operation.
7. Tanks will be filled with water and tested for leaks when the airplane is taxied and flown. Excessive leaking will not be permitted.
8. All tank doors must open and be capable of releasing the full content of the tank/hopper in less than 6 (six) seconds by using the normal dump handle in a single, one-step operation.

4.5 AIRCREW QUALIFICATIONS – Qualifications of pilots shall be as follows:

(A) PILOT QUALIFICATION RECORD CARD: A current USDAFS or USDOJ-AM Interagency Pilot Qualification Card issued by a USDA/USDOJ pilot inspector with a **Level I Endorsement**.

(B) GENERAL

1. Possess FAA Commercial (with airplane instrument rating) or ATP certificate.
2. Valid FAA medical certificate (second class minimum) throughout the contract guaranteed period issued under the provisions of 14 CFR Part 67.
3. Class and type ratings required by the FAA to fly the assigned aircraft.



4. Be current to operate the assigned aircraft as Pilot-In-Command as outlined in 14 CFR Part 61.57(c).
5. Be well versed in all applicable parts of the FARs, safety and directives relative to air tanker and forest fire operations.
6. Attend a controlled familiarization and flight training session along with a course in the fundamentals of fire behavior.
7. Qualify to the satisfaction of the Department Aircraft Operations & Safety Specialist.

(C) PILOT-IN-COMMAND

1. Pilots-In-Command (PICs) shall have the following flight experience:

	MINIMUM FLIGHT HOURS
Total (including the following)	1,500
In each class to be flown	100
During preceding 12 months	100*
Cross Country	200
Night flying experience	100
Typical terrain and landing	200
In class to be flown under this Contract	
in preceding 60 days (PIC or SIC)	10
Related type flying (PIC or SIC)	50

**\*Note:** Fifty (50) hours if PIC has satisfactorily completed a factory school and checkout in make and model.

2. Pilots-In-Command shall have at least two (2) years of experience (PIC or SIC), with at least twenty-five (25) drops on-going fires. They shall be capable of good judgment in making drops on fires under diverse flight conditions. They shall show consistent proficiency in making accurate drops. They shall possess the ability to size-up fires and attack them effectively and safely without direction from ground control or lead plane pilot. They shall possess a basic knowledge of fire behavior.

(D) COPILOT (SIC)/FIRST OFFICER - Must be properly qualified if aircraft type certificate requires a second-in-command in accordance with FAA requirements. Copilot or First Officer (FO) is the same crew position.

(E) CONTROLLED SUBSTANCE USE - Any pilot observed or suspected by the Department using or in possession of any non-prescription, controlled substance such as, but not limited to, marijuana, hashish, cocaine, heroin, and/or amphetamines shall be immediately dismissed from the contract. Such findings will be reported to the

appropriate law enforcement agency and the FAA for action. The Contractor will be immediately found in violation of the terms of this Statement of Work and subject to forfeiture of monies.

- (F) ALCOHOL CONSUMPTION – A pilot may not consume alcohol or a non-prescription medication containing alcohol within twelve (12) hours of scheduled takeoff time. Any pilot observed by the Department consuming alcohol or exhibiting symptoms of alcohol intoxication or impairment, or any other intoxication, or impairment, will be grounded for twenty-four (24) hours. A second occurrence will result in dismissal from the contract.

#### 4.6 RADIO/ELECTRONIC FACILITIES

- (A) EQUIPMENT - As a condition of aircraft approval prior to being placed under contract to the Department, air tankers shall have satisfactory electronic communications and navigational facilities as described below. All Contractor-furnished communications and electronic navigational equipment shall be of types currently approved by the FCC and the FAA. The following basic facilities are required for all fixed wing air tankers.
1. VHF COMMUNICATIONS – Air tankers shall be equipped by the Contractor with operating VHF communications system consisting of equipment currently approved by the FCC and FAA. The radio will be a programmable type that permits the programming of frequencies via the front panel without the aid of a computer. The radio should have a minimum of 200 programmable channels. Two (2) of these channels shall be set up for operation of 121.5 MHz and 122.75 MHz. Other channels will include the tower and ground control frequency most often used in the Contractor’s area of operation while under contract to the Department. The frequencies of the Department will be programmed into the radio at the beginning of the contract.
  2. ELECTRONIC NAVIGATION EQUIPMENT - Each air tanker operating for the Department shall be equipped by the Contractor with a complete and fully operating GPS navigation system with up-to-date navigation database throughout the contract Guaranteed Period (IFR certification not required).
  3. HEADSET-MICROPHONE EQUIPMENT - Each operating crewmember shall be equipped with an aviation rated flight helmet/headset microphone assembly.
    - a. At the pilot and copilot position (if required), each crew member shall have protective headgear headset/boom-microphone compatible with the audio system, plugged into a single headset jack and single mike jack shall be used to access all transmitters, receivers and interphone circuits in the aircraft.
    - b. Aircrew helmets and microphone equipment shall be compatible with the system in the aircraft (matched impedances, noise canceling boom-microphone, etc.).

c. The aircrew helmet shall be similar to Gentex™ Corporation's models: HGU-33, SPH-4, SPH-5, or BY5C8-1.

4. FM RADIO-CONTRACTOR AIRCRAFT – Contract aircraft must have VHF/FM capability. VHF/FM radio units must be installed in accordance with FAA requirements. The VHF/FM radio unit must be capable of being programmed with DCNR's operating radio frequencies and tones upon arrival. The FM radio unit must be similar or equivalent to the Bendix King Radio Model KFM985. Additionally, the aircraft will have one (1) weatherproof external broadband antenna covering the band 150-174 MHz with associated coaxial cable and BNC connectors.

5. AUTOMATED FLIGHT FOLLOWING EQUIPMENT- One Automated Flight Following (AFF) unit compatible with the government's AFF tracking network (AFF.gov) must be installed. Not all available AFF hardware is compatible with AFF nor meets AFF's requirements. The contractor must ensure that the AFF aircraft hardware offered is compatible with AFF. Login information to view AFF must be provided to the Bureau.

(B) INSPECTION - The Department's Radio Engineer will inspect all radio installations for compatibility with DCNR's radio system and to ensure it is capable of being programmed to DCNR radio frequencies.

(C) SERVICE AND MAINTENANCE - It is the responsibility of the Contractor to maintain in good working order all radio facilities he is required to furnish. Failure to do so could result in the air tanker being deemed unavailable as defined in Section 9.

## **SECTION 5 SUBSTITUTION OF AIR TANKER OR PILOT:**

During the guaranteed period the Contractor may furnish substitute air tankers and/or pilot(s) on a temporary or permanent basis. Any aircraft substituted must be of the same or greater performance capabilities for speed and retardant load capacity as the aircraft specified in this Contract. Any pilot so furnished shall meet the qualification requirements of this Contract. Substitution of either air tanker or pilots will be approved in writing by the Aircraft Operations and Safety Specialist, or their representative prior to use. The privilege to substitute aircraft and pilots may be used by the Contractor to avoid liquidated damages or unavailability penalties described under Section 22.

## **SECTION 6 RATES OF PAY:**

The rates include all operating expenses of the aircraft, appliances, equipment, insurance, properly qualified pilots, and ferry time from the Contractor's business location to the designated base and return. Rates are to be based on a guarantee of 900 minutes (15 hours) of flight time for the air tanker. All flying time including, but not limited to, ferry flights and aerial delivery flights, shall be considered part of the 900 minutes of flight time. If at the end of the Guaranteed Period 900 minutes of flight time were not required, the difference between the time flown and the guaranteed 900 minutes for the air tanker shall be paid at the aerial delivery and cascading rate. The 900 minutes of

guaranteed flight are based on the Contractor completing the thirty (30) day Guaranteed Period for each air tanker. If the Contractor does not complete the thirty (30) day Guaranteed Period, then the hours of guaranteed flight time shall be paid at ½ for each day completed.

**SECTION 7 GUARANTEED PAYMENT FOR AVAILABILITY DURING THE GUARANTEED PERIOD:**

- 7.1 The Department will guarantee a minimum payment for 900 minutes within the thirty (30) days (Guaranteed Period), for the availability of each aircraft and services listed in Section 4.
- 7.2 Availability payments will be invoiced for payment at the end of each seven (7) day period.

**SECTION 8 READINESS TO PERFORM FLIGHT DURING THE GUARANTEED PERIOD:**

- 8.1 During the Guaranteed Period and any period of additional service, air tankers shall be stationed and remain at their designated bases of operation, serviced and ready for takeoff. Stand-by may be requested at other approved auxiliary operational sites.
- 8.2 During said periods the air tanker pilots will remain in alert status unless released by the Air Tanker Base Manager.
  - (A) At any time during said periods the Air Tanker Base Manager may order air tankers on alert and the Contractor shall within ¾ hour (45 minutes) after such notice, have their air tanker(s) manned and ready for immediate takeoff. The air tanker(s) and crews will remain in alert status until relieved by the Air Tanker Base Manager.
  - (B) Immediate takeoff shall mean that no more than fifteen (15) minutes shall lapse between the time the flight order is given and the time the air tanker(s) is/are airborne.
  - (C) The times in (A) and (B) above are the maximum times that can be taken by the Contractor without being subject to penalties described under Section 22.
  - (D) During the Guaranteed Period, when conditions are favorable, the availability requirements may be modified by the Chief, Division of Forest Fire Protection, Aircraft Operations & Safety Specialist, or their authorized representative to allow the Contractor's personnel time off base. Such breaks may be authorized verbally for periods of less than a full day. Approval for breaks for a full day or more (twenty-four (24) hours or greater from the approved departure time) will be in writing.
- 8.3 At the discretion of the Air Tanker Base Manager, the aircraft may be preloaded.

**SECTION 9. UNAVAILABILITY OF AIR TANKERS AND PERSONNEL:**

As used throughout this Contract, "unavailability" or unavailable shall mean:

- (A) Any day or portion thereof that the Contractor's aircraft and/or crews are not in condition to perform ordered flight; or
- (B) Failure to comply with availability and readiness requirements; or
- (C) Pilots are prohibited from flying as specified in Sections 16.1, 16.3, or 19.1 (F) of this Contract. A Contractor's aircraft will not be considered unavailable when the pilot is not permitted to fly because of limitation of flight hours as described in Section 19 (B, D, & E) and 19.2.

**SECTION 10 LOADING CAPACITY:**

The aircraft shall be loaded to their maximum capacity consistent with safety requirements under varying climatic, elevation and flying conditions and TOLD. Smaller loads may be approved by the Air Tanker Base Manager under certain conditions. Spot checks will be made to determine that the minimum requirements set forth in this Contract are being met.

**SECTION 11 TEST FLIGHTS:**

As a readiness requirement, the Aircraft Operations & Safety Specialist, or the Air Tanker Base Manager may order flight and water drops to test the condition of the air tanker, retardant tanks/hopper, gate security, release mechanism, radio communications, and to maintain proficiency of the flight crew. Ordered flights for this purpose are not to exceed a total of three (3) hours per air tanker two (2) days prior and during the Guaranteed Period and are a part of the availability requirements, and no additional payment will be made therefore.

**SECTION 12 FLIGHT TIME:**

- 12.1 Measurement of Flight Time. Flight Time will be measured when the aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing at an airport.

For purposes of this contract: "*...moves under its own power for the purposes of flight...*" is defined as the time at which the aircraft begins taxiing to the runway with the intent to takeoff. Start times are the time at which the aircraft leaves the pit or begins taxiing from the ramp on any ordered flight.

For purposes of this contract: "*...when the aircraft comes to rest after landing...*" is defined as the time at which the aircraft comes to a stop for the purpose of parking and shutting down the engine. Taxi time and time spent hot loading or hot refueling is considered flight time. Engine cool down time after the airplane comes to a stop for the purpose of parking is NOT flight time.

- 12.2 All flights going to and coming from the fire will be made with dispatch, traveling the most direct routes consistent with safety, weather conditions, air tanker performance capabilities and airspace constraints. Known distances flown and known speed of the air tanker(s) will

be used as a basis to determine that the flight time is reasonable. No payments will be made for unreasonable time.

- 12.3 The Aircraft Operations & Safety Specialist will determine what constitutes an unreasonable time using standard methods of flight planning (i.e. sectionals, DUATS, AOPA, SkyVector, ForeFlight, etc.).

### **SECTION 13 UTILIZATION OF AIR TANKERS:**

13.1 During the Guaranteed Period, and any additional periods of service, the air tankers furnished by the Contractor will be dispatched by the schedule arranged by the Air Tanker Base Manager, and thereafter used to the maximum extent feasible for delivery of water or retardant on fires occurring within the zone of their designated base. A zone is defined as the area surrounding an operating base from which the air tanker can be dispatched to arrive at a fire in less time than from another base. When air attack aircraft in addition to those under contract at a designated base are required to suppress fires, the following priorities will be used to the extent feasible:

- (A) Use Contract aircraft from other bases.
- (B) Use additional air tankers from designated base Contractor which have been approved for use.
- (C) Use aircraft owned or under contract to any agency cooperating with the Department in fire suppression.
- (D) Use any other aircraft available where aircraft and pilots are pre-qualified by the USDAFS, USDOJ, or other state/federal suppression agencies.

13.2 The Chief, Division of Forest Fire Protection may order the Contractor to operate temporarily from other bases or locations when deemed necessary. However, those other bases or locations must meet with the approval of the Contractor and the Aircraft Operations & Safety Specialist. All terms and conditions of this Contract will apply to the operations at such temporary bases or locations.

### **SECTION 14 MEALS, LODGING, TRANSPORTATION:**

The Contractor shall make their own business arrangements for housing/billeting, subsistence, transportation and other expenses of respective employees at the designated base(s), as well as at all of the approved auxiliary operational sites.

The prospective Contractor shall be responsible for the aforementioned at, but not limited to, planning all of the necessary support of their pilot and aircraft at any other auxiliary locations used. This contract will require the Contractor to act in a tactical environment and be able to relocate with minimal notice. Prior planning will be a necessity.

## **SECTION 15 AIRPORT USE, COSTS, FUEL:**

- 15.1 The Contractor shall make their own business arrangements for use of the airport at their designated base as well as at all approved auxiliary operational sites. The Contractor shall pay for all costs incidental to their operations at these bases, including but not limited to aircraft parts, hanger fees, landing fees, oil, ground servicing equipment and fuel. All business arrangements are strictly between the vendor and contractor.
- 15.2 If a Fixed Base Operator (FBO) is not functional or have business hours at the during the Contractor's operational period, then the Contractor will have to acquire their own aircraft parts, oil, ground servicing equipment and fuel.

**Section 15 and all subsections thereof shall be effective for any other airports or airfields the Contractor may be required to operate from during the Guaranteed Period.**

## **SECTION 16 ABORTED MISSION:**

- 16.1 No payment will be made for flights when the load of retardant mixture is accidentally or carelessly dropped on non-target areas. In addition, the cost to the Department of the lost load of retardant may be charged to the Contractor and deducted from payment due.
- 16.2 This provision is not intended to cover drops made with the consent of a lead-plane pilot, incident commander (IC), dispatcher, or when in the actual fire area and because of an emergency the pilot is forced to drop sooner than expected, or misses the target in a legitimate try, or due to emergency situation with the aircraft is required to jettison the load to maintain control or flight of the aircraft.
- 16.3 The pilot or air tanker or both will be grounded after any aborted mission until the cause has been determined and corrected to the satisfaction of the Aircraft Operations & Safety Specialist.

## **SECTION 17 ACCURACY OF DROP ON TARGET AREAS:**

- 17.1 To be effective for control of wildfire, the water or retardant must be accurately dropped on the target areas from low levels. Normally, the ideal range for a drop is between 60 to 100-feet above ground cover. Retardant drops which miss the target area are of no value to the Department. It is recognized at times drops will be ordered on targets which are difficult to hit. Therefore, specific accuracy requirements are not included in this Contract. However, since satisfactory performance cannot be achieved without reasonably accurate dropping of retardant, the Department may terminate the contract if performance in this respect is consistently unsatisfactory regardless of whether due to pilot error, limitations of the air tanker or a combination of both. Suggested drop altitudes must not jeopardize safety.
- 17.2 The pilot is solely responsible for obstacle and terrain clearances and for the avoidance of Controlled-Flight-Into-Terrain (CFIT). Therefore, the PIC must ensure aircraft performance is within limitations prior to every operational period due to climatic variations affecting TOLD.

## **SECTION 18 REPAIR AND MAINTENANCE REQUIREMENTS AND AUTHORIZATIONS:**

- 18.1 The Contractor shall provide sufficient ground crews, FAA certified Airframe & Powerplant (A&P) mechanic(s), and repair facilities to maintain their equipment in a satisfactory airworthy condition throughout the period of the contract. There will be no waiver of this requirement during the life of the contract, and if periodic inspections indicate leniency in this respect, it will be sufficient grounds for termination of the contract under Section 22.3.
- 18.2 DAILY LINE CHECK AND AIR TANKER INSPECTION - Before each day of operation a line check and inspection shall be made on each air tanker and its condition. The aircraft's status shall be recorded on a form approved for this daily safety inspection. This form is to be presented to the Air Tanker Base Manager and becomes part of their records as to the availability status of the aircraft. Should this line check and inspection reveal any discrepancy or malfunction that could develop into or render the aircraft unairworthy, a "grounding period" of reasonable duration will be authorized. This authorized period may be extended should minimum fire danger conditions permit.
- 18.3 AUTHORIZED MAINTENANCE - Authorized periods of reasonable duration, necessary in the interest of safety and to handle maintenance or repairs that are not the fault of the Contractor and cannot be handled at other times may be granted. This "grounding period" period must be approved by the Aircraft Operations & Safety Specialist or other representative of the Chief, Division of Forest Fire Protection.

Maintenance authorization will be granted before 10:00 LPT time and after 19:00 LPT when fire danger is low.

- 18.4 The Department will determine what constitutes a reasonable duration.

## **SECTION 19 LIGHT AND DUTY LIMITATIONS FOR ALL FLIGHT CREWMEMBERS:**

- 19.1 Flight and Duty Limitations for All Flight Crewmembers -

These requirements apply to all Bureau of Forestry aviation missions:

All flight crewmembers are limited to the following tours of duty, and all work-related time must count toward these limitations:

- (A) Duty includes 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 must not exceed a total of 8 hours per duty day.
- (C) Assigned duty of any kind must not exceed 14 hours in any 24-hour period.



- (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 must 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 the next 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) TIME OUT INCIDENT. This permits one (1) hour time out for near miss situations.
- (H) PILOT PERFORMANCE. The Department may also ground any pilot, either temporarily or permanently, who flies recklessly, continues to make ineffective drops, or otherwise conducts themselves in a manner detrimental to the purpose for which they are contracted. The pilot is responsible for obstacle clearance and safe flight.
- (I) DAY/NIGHT FLIGHT LIMITATIONS. All operations shall be limited to flight during the official daylight hours. Daylight hours are defined as thirty (30) minutes prior to official sunrise until thirty (30) minutes following official sunset, and under visual flight rule (VFR) conditions. Daylight hours may be further limited at the discretion of the pilot, AOSS, or Air Tanker Base Manger because of low visibility conditions caused by smoke and/or shadows.

19.2 REST PERIODS - Time spent fueling or checking the aircraft, aircraft maintenance, loading or unloading, checking weather or such related work will not be considered part of a rest period.

## **SECTION 20 PAYMENT:**

- 20.1 Payments will be made for the services provided as promptly as possible upon receipt of the Air Drop Report Invoice approved by the authorized representative of the Department. Payments for availability will be invoiced and paid separately. Flight time will be paid for each individual mission. Final payment will be made as promptly as possible after determining the Contractor has satisfied the requirements and based on the guarantee of 900 minutes of flying service as described in this Statement of Work.
- 20.2 If additional work is directed by the Department of Conservation and Natural Resources which is not included herein and no contract amendment has been executed by the parties for said work, or if the term of this contract has expired; payment will not be due hereunder until after the contract amendment for additional work has been fully executed by all of the parties, or an extension of time granted.

## **SECTION 21 COMPLIANCE WITH FEDERAL AND STATE REGULATIONS:**

All air tankers used by the Contractor under the terms and conditions of this contract, shall be operated in full and complete conformance with the requirements of the Federal Aviation Administration (including authorized deviations, and the Pennsylvania Department of Transportation, Bureau of Aviation if applicable). This includes required aircraft and pilot certifications and licensing requirements.

## **SECTION 22 FAILURE TO PERFORM:**

22.1 One-tenth (1/10) of the daily availability rate in effect will be deducted for each hour or portion thereof that aircraft or personnel are unavailable between the ten (10) hours before sunset LPT. Deductions shall be made at the end of each seven (7) day period when availability payments are invoiced for payment. The maximum daily availability to be deducted in any one (1) day shall be an amount equivalent to the daily availability rate in effect. The Contractor shall not be liable for a reduction in daily availability payments if the failure to meet the terms of the contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Commonwealth in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, acts of terrorism and unusually severe weather; but, in every case, the failure to perform must be beyond the control and without the fault or negligence of the Contractor.

22.2 Failure of the Contractor to have air tankers available in readiness to perform flight as set forth in Section 8, may cause serious damage to the Commonwealth. In addition to the above availability deductions, fixed and agreed liquidated damages set forth below may be assessed for each hour or portion thereof that aircraft or personnel are unavailable.

Liquidated damages may be assessed for unavailability occurring during the fourteen (14) hours Duty Day between official daylight hours [thirty (30) minutes prior to official sunrise and thirty (30) minutes following official sunset]. The maximum liquidated damage to be assessed each calendar day is an amount equivalent to eight (8) hours at the above rate for the air tanker contracted.

22.3 Failure to meet the availability requirements, as set forth in Section 8, shall give the Department the right to terminate this Contract if such unavailability continues for a period of three (3) consecutive calendar days, or for a total of five (5) or more calendar days during the Guaranteed Period. Should it become necessary to terminate the Contract as above provided, the Contractor shall be liable for any excess costs incurred by the Department in procuring similar services elsewhere.

## **SECTION 23 PERFORMANCE BOND:**

The Contractor must furnish the Department with a performance security in the amount of twenty percent (20%) of the **Total Bid**. Performance security must be in the form of a specific performance

bond, an irrevocable letter of credit, a certificate of deposit, a certified check, or a bank cashier's check drawn to the order of the "Commonwealth of Pennsylvania." The purchase order will not be issued until the performance security is furnished.

If the contractor is a corporation, the bond must be signed by the corporation president or vice-president (designate which one) and the corporation secretary or treasurer (designate which one). If the Contractor is not a corporation, the owner must sign the bond. The bonding company must be licensed to conduct business in Pennsylvania.

If the Contractor does not satisfactorily comply with the terms of the contract, the Commonwealth will retain all or a portion of the security pending the specific circumstances of the default.

Original performance security should be mailed to the Procurement Contact located at:

<b>FedEX, UPS, DHL, or other carriers:</b> DCNR Bureau of Administrative Services Attn: Carol Durham 400 Market Street, 7 <sup>th</sup> Floor Harrisburg, PA 17101	<b>United States Postal Service (USPS):</b> DCNR Bureau of Administrative Services Attn: Carol Durham PO Box 8769 Harrisburg, PA 17105-8769
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The purchase order will not be issued until the performance security is furnished.

**SECTION 24 INSURANCE:**

The contractor shall purchase and maintain, at its expense, the following types of insurance(s) issued by companies acceptable to the Commonwealth.

- (A) Workman's Compensation Insurance – for all of the Contractor's employees and those of any subcontractor, engaged in work at the site of the project as required by law.
- (B) Public Liability and Property Damage Insurance – to protect the Commonwealth, the Contractor, and any and all subcontractors from claims for damages for personal injury (including bodily injury), sickness or disease, accidental death and damage to property including the loss of use resulting from any property damage, which may arise from the activities performed under the Contract, or the failure to perform under the Contract, whether such performance or non-performance be by the Contractor, by any subcontractor, or by anyone directly or indirectly employed by either. The minimum amounts of coverage shall be \$250,000 per person and \$1,000,000 per occurrence for bodily injury, including death, and \$250,000 per person and \$1,000,000 per occurrence for property damage. Such policies shall be occurrence rather than claims-made policies and shall not contain any endorsements or any other form designated to limit and restrict any action by the Commonwealth, as an additional insured, against the insurance coverage in regard to work performed for the Commonwealth.
- (C) Aircraft Liability - \$1,000,000 single limit for each occurrence for bodily injury and property damage.

- (D) Airport Liability - \$1,000,000 single limit for each occurrence for bodily injury and property damage combined.
- (E) Environmental Impairment Liability Insurance - covering environmental impairment caused by negligence in an amount of \$500,000 per occurrence. This specific type of insurance may be substituted by any riders to any of the aforementioned insurance, provided it services the same benefit and purpose. These provisions must cover the Commonwealth, as well, for any liability.
- (F) If any work under this contract is subcontracted or otherwise performed by anyone other than the contractor or performed with equipment subcontracted or leased by the contractor, the contractor must provide liability insurance as specified under its own policy(s) in order to provide coverage for any persons and/or equipment so subcontracted or leased or the contractor must provide evidence that the specified liability insurance for any persons and/or equipment so subcontracted or leased is provided for under a policy(s) maintained by the subcontractor or lessor.

Prior to commencement of the work under the Contract and at each insurance renewal date during the term of the Contract, the Contractor shall provide the Commonwealth with current certificates of insurance. These certificates or policies shall name "The Commonwealth of PA-DCNR" as an additional insured and shall contain a provision that the coverage's afforded under the policies will not be cancelled or changed until at least thirty (30) days written notice has been given to the Commonwealth. These certificates shall include the location and a brief description of the work to be performed under the contract.

The Commonwealth shall be under no obligation to obtain such certificates from the Contractor(s). Failure by the Commonwealth to obtain the certificates shall not be deemed a waiver of the Contractor's obligation to obtain and furnish certificates. The Commonwealth shall have the right to inspect the original insurance policies.

A copy of the insurance certificates can be mailed to the Procurement Contact as directed in Section 23 Performance Bond *or* they can be emailed to the Procurement Contact at: [cdurham@pa.gov](mailto:cdurham@pa.gov).

## **SECTION 25 MISCELLANEOUS:**

- 25.1 It is understood that the pilot is the "Pilot-In-Command" and is free to refuse any flight which he/she deems hazardous or unsafe.
- 25.2 Judgment of effectiveness of wildfire suppression procedures will be the responsibility of Department personnel.
- 25.3 Though pilot substitution is permissible, it is desirable for the pilot to remain with the aircraft until the termination of the Guaranteed Period.
- 25.4 Ground travel on the job will be provided if no other means of travel is available, when the air tanker is dispatched from other than the designated base.

- 25.5 For purposes of the interest payments required under Act 266 of 1982, if additional work is directed by the Department of Conservation and Natural Resources which is not included herein and no contract amendment has been executed by the parties for said work, or if the term of this contract has expired; payment will not be due hereunder until after the contract amendment for additional work has been fully executed by all of the parties, or an extension of time granted.
- 25.6 Contractor and the Commonwealth recognize that in actual economic practice, overcharges by Contractor's suppliers resulting from violations of state or federal antitrust laws are in fact borne by the Commonwealth. As part of the consideration for the award of this contract, and intending to be legally bound, vendor assigns to the Commonwealth all right, title and interest in and to any claims vendor now has or may hereafter acquire under state or federal antitrust laws relating to the goods or services which are the subject of this contract.
- 25.7 Any commitment of the Department while this contract is in force is contingent upon the availability of funds. If federal funds are involved in future year changes, the commitment is contingent upon federal funds being available to the Commonwealth for the contract purposes.
- 25.8 Federal Requirements. The following GENERAL CONDITIONS are an integral part of the CONTRACT:
- (A) All applicable contract provisions specified by the federal government in Attachment "O" of OMB, Circular A-102, Section 14, entitled "Contract Provisions" are an integral part of this CONTRACT.
  - (B) All applicable provisions of the Code of Federal Regulations in effect on the date of the execution of the CONTRACT are a part of this CONTRACT.
  - (C) If the principal of this CONTRACT is to create, develop, or improve products, processes or methods; or to explore fields which directly concern public health, safety, or welfare; or if the CONTRACT is in a field of science or technology in which there has been little significant experience outside of work funded by federal assistance, matters regarding rights to inventions, and materials generated under the CONTRACT are subject to regulations issued by the federal grantor agency and the DEPARTMENT.

## **SECTION 26 CONTRACT REQUIREMENTS:**

The contractor shall comply with completion of the Pennsylvania Bureau of Forestry Pilot Application & Approval Form, Pennsylvania Bureau of Forestry Aircraft Description & Approval Form. OAS 64a Interagency Airplane Pilot Evaluation Application, FS-5700-21 Airplane Data Record or OMB 0596-0015 are also acceptable pilot and aircraft approval forms or equivalent. In addition, the Contractor must furnish a copy of their FAR Part 133 Operating Certificate. Failure to submit the completed Forms with the bid may result in the bid being rejected as non-responsive.

## **SECTION 27 BID AWARD:**

The bidder must complete and return the following:

- (A) The electronic Invitation for Bid to be found at [www.pasupplierportal.state.pa.us](http://www.pasupplierportal.state.pa.us).
- (B) A properly executed DCNR, Bureau of Forestry Pilot Application & Approval Form for each pilot or equivalent.
- (C) A properly executed DCNR, Bureau of Forestry Aircraft Description & Approval Form, or OAS 64a Interagency Airplane Pilot Evaluation Application Form for each aircraft or equivalent.
- (D) A properly executed FS-5700-21 Airplane Data Record, or OMB 0596-0015 or equivalent.

The unit price shall include all materials, labor, superintendence, tools, equipment, and any other items necessary for completion of the project.

Bid will be awarded based on the lowest **total sum**. The unit price shall include all materials, labor, superintendence, tools, equipment, and any other items necessary for completion of the project.

The contract quantities herein are estimated only and may increase or decrease depending on the needs of the Department. The Contractor shall be paid at the unit price for actual work performed.

Please note that the Department will only accept out to two (2) decimal points when entering your pricing.

## **SECTION 28 CONTRACTOR REFERENCES:**

After the bid opening, and prior to awarding of the contract, the Department has the right to request references (names, address and telephone number) of similar work performed in the previous two (2) years as proof of qualifications to perform the work involved in this contract.

References are an optional tool available to the Department to help determine bidder capabilities. If any of these references are requested and the bidder cannot supply the necessary documentation and proof of compliance, the Department reserves the right to reject the bidder. The decision to both request references or reject bidders based on inadequate reference will be made solely at the discretion of the Department.

## **SECTION 29 RECEIPT AND OPENING OF BIDS:**

Bids must be submitted via the PA Supplier Portal, to be found at [www.pasupplierportal.state.pa.us](http://www.pasupplierportal.state.pa.us). Faxed bids and mailed bids **will not** be accepted.

No responsibility will be attached to any employee of the Department for the premature opening of, or the failure to open, a bid not properly addressed and identified, or for any reason whatsoever.

**SECTION 30 BID RESULTS:**

Bidder can obtain bid results by accessing [www.emarketplace.state.pa.us/bidtabs.aspx](http://www.emarketplace.state.pa.us/bidtabs.aspx). The bid will be posted the morning following the bid opening. The results are the apparent bidders and all bids are under review until final award of the purchase order.