

## STATEMENT OF WORK FOR FLIGHT CREW TRAINING

MARCH 1, 2015

- I. BACKGROUND.** NASA operates a fleet of diverse aircraft in support of the Agency's missions. They include variants of commercial aircraft. For these commercial aircraft, NASA is seeking Commercial-off-the-Shelf (COTS) simulator training services at vendor facilities for NASA flight crew and maintainers to maintain their proficiency.
- II. SCOPE.** The contractor shall, upon Government requisition, provide personnel, facilities, and training materials to conduct Commercial-off-the-Shelf (COTS) academic and simulator training for the aircraft specified below. No changes in the scope of the services shall be undertaken without the explicit authorization of the NASA HQ Contracting Officer.

- Dassault Falcon 20
- Gulfstream G-II, G-III
- King Air 200
- Learjet Series 30
- Shorts 360

- I. AIRCRAFT TRAINING REQUIREMENTS.** For the aircraft types listed in Paragraph II, the contractor shall, upon request, provide the training courses described below. All courses shall comprise of both classroom and simulator training (left seat for pilot training).

▪ **Initial and Recurrent Pilot Qualification Training.**

The initial course shall train a pilot, previously unqualified to fly the aircraft, to a fully qualified level. Specific ground school academics training shall provide instruction in aircraft normal, abnormal, and emergency operations, flight planning, navigation (including Global Positioning System (GPS) navigation and approaches), weight and balance, engines, flight controls, anti-ice, electrical, landing gear hydraulics, fuel, oil, environmental, pressurization, and propellers when appropriate. The course shall include a flight review or instrument competency check in accordance with Federal Aviation Regulations (FAR (14 CFR)) Part 61 Section 58.

The recurrent course shall maintain a pilot at a high level of knowledge and proficiency in the designated aircraft. The simulator training shall include a variety of training scenarios. The selection of training scenarios shall be based on the needs of each trainee. GPS navigation and approaches shall also be included.

▪ **Initial and Recurrent Maintenance Training**

Initial maintenance training shall be sufficient to fully qualify maintenance personnel on all procedures for maintaining the aircraft. Simulator training shall focus on ground operations and emergency procedures for purposes of maintenance troubleshooting and

servicing. This training shall incorporate all applicable provisions of FAR 39, 43, and 65.

Recurrent training, incorporating ATA 104 Level III recommendations, is to update the maintainers of the service changes introduced by the aircraft manufacturer and to enhance the maintainers' technical knowledge through instructor-lead, scenario-based, troubleshooting and systems reviews. This training shall incorporate all applicable provisions of FAR 39, 43, and 65.

- **Initial and Recurrent Engine Run & Taxi (ERT) Training (for B-200 and G-II/III Aircraft)**

The initial training course, incorporating ATA 104 Level III recommendations, is to provide the maintenance technician the knowledge and skill necessary to start the engines and taxi the aircraft. This initial training shall include performance of safety tasks associated with engine starts, required interior/exterior pre-start checks, engine operation, limitations, proper ground communications and airport diagram usage, taxiing the airplane and engines during abnormal conditions/emergencies.

The recurrent training, incorporating ATA 104 Level III recommendations, is to refresh the maintainers' skills necessary to start the engines and taxi the airplane. The course shall include a debrief and testing at the end. Recommendations for additional training will be forwarded to the designated Contracting Officer's Representative.

- **Additional Simulator Training**

This training is to for simulator training (in 3-hour blocks) in conjunction with or independent of the Initial and Recurrent Pilot Qualification Training described above. The purpose of the additional simulator training is to provide extra training for the pilots to meet required training course standards or to improve pilot proficiency. Simulator training shall be based on single pilot, left seat.

**II. OTHER TRAINING REQUIREMENTS.** The contractor shall also, upon request, provide Reduced Vertical Separation Minima (RVSM) training based on the contractor's standard commercial courses. Types of RVSM training are Domestic and International Procedures training (initial or recurrent).

**III. DELIVERABLES.** Upon successful completion of the coursework required by each training syllabus, each student shall be provided a proficiency certificate with, at a minimum, the student's name, the aircraft in which certified, and that the individual is a NASA flight crew. An electronic copy shall also be provided to the COR within 2 weeks of training completion.

#### **IV. SPECIAL REQUIREMENTS.**

##### **A. TRAINING FACILITIES.**

- Training courses shall be available to NASA students at any of Contractor's training facilities that are capable of conducting the training described in this SOW.
- The contractor shall provide training facilities in a permanent building and shall provide an atmosphere and environment that is conducive to learning. Desired classroom facilities shall provide for rear projection audio-visual capability, television projections, comfortable desks or tables and chairs, environmental comfort control and dedicated quiet classroom area.

##### **B. TRAINING PROCEDURES.**

- At least eighty percent (80%) of training shall be accomplished by the use of instructors.
- Training materials shall consist of appropriate aircraft publications, which provide, at a minimum, detailed information on flight planning, normal and abnormal and emergency procedures, aircraft systems, checklists and academic outlines.
- Simulator training shall be accomplished utilizing FAA Part 142 Certified, Level C/D, full flight simulators with visual systems.
- Simulator cockpits shall be capable of interchangeability among various aircraft configurations (e.g. AC vs DC systems, tape gauges vs round gauges, Collins vs Sperry flight directors, etc.) to closely reflect the general configuration of the aircraft used by each trainee. Exact replicas of the aircraft actually operated by NASA are not required, i.e. standard commercial cockpit configurations are acceptable.
- Training shall conform to the contractor's commercial programs, courses, curricula, manuals, and practices.

##### **C. INSTRUCTOR QUALIFICATIONS.**

- At a minimum, instructors of each course shall be highly qualified in aviation/aircraft maintenance experience and have specific slight/maintenance experience in the training course offered.
- Simulator instructors shall be FAA FAR 61, 141, or 142 certificated flight instructors as appropriate and shall maintain currency as specified by the appropriate FARs.

**D. SCHEDULING OF TRAINING.**

- The contractor shall coordinate with NASA, the scheduling of specific dates for the occurrence of training activities. These dates shall be reserved with the contractor in advance, for scheduling purposes only; however, the Government is in no way obligated to issue task orders for the reserved dates. Training shall only be conducted for NASA students with a formal training authorization issued by the designated Contracting Officer's Representative (COR).
- NASA retains the right to cancel or postpone any scheduled training activity or participant with a minimum of five (5) business days prior to the scheduled commencement.
- The contractor shall notify NASA's designated Contracting Officer and COTR of any scheduled training facility closures 60 calendar days prior to the closure.

**SAMPLE TRAINING AUTHORIZATION LETTER**

National Aeronautics  
Space  
Administration



Headquarters  
Washington, DC 20546-0001

Date: \_\_\_\_\_

Reply to the attn. of: OJP

*[Contractor Name]*  
*[Attn: Contractor POC]*  
*[Address line 1]*  
*[Address line 2]*  
*[Address line 3]*

Subject: Contract No. NASW-XXXX / Training Authorization Against Task Order # \_\_\_\_

*The contractor shall implement the training requirement as indicated below:*

Item Number: *[CLIN XXXXX]*  
Description: *[Course Title]*  
Quantity:  
Unit Price:  
Total Order Price:  
Location: *[Training Facility Location]*  
Delivery Dates: *[Course Dates]*  
Attendees: *[NASA Center / Name of Trainee(s)]*

*Performance of the services required by this registration shall comply with the terms and conditions of the subject contract.*

[SIGNATURE]

[Name]

**Contracting Officer's Representative/NASA Headquarters**