Performance Work Statement

MISSION SPECIALIST AND OBSERVER SEAT SPECIFICATION

FEDERAL AVIATION ADMINISTRATION AVIATION SYSTEM STANDARDS (AVN)

HAWKER BEECHCRAFT 300 SUPER KING AIR AIRCRAFT

September 10R1, 2009

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1.0 Seat Application and Configuration

Aviation System Standards (AVN) is refreshing the FAA Flight Inspection fleet of eighteen (18) Hawker Beechcraft 300 Super King Air aircraft. The aircraft configuration is Pilot, Co-Pilot, Mission Specialist, Mission Observer and Lavatory seat. Seats must comply with all associated FAR requirements to include FAR Part 23 and FAR Part 135 Operating Requirements. Seats will be installed per AVN STC under separate contract.

This requirement is for the delivery of two identical left side forward facing seats which will be required for each aircraft at the Mission Specialist and Mission Observer locations only. The two identical left side forward facing seats shall meet the functional and operational seat requirements (described below) as a prototype. All Drawings, Technical Data, Parts Lists and Operational Manuals must represent the final configuration of the prototype and follow delivery of the prototype. The FAA may purchase an additional 34 Seat frame(s) (frame only - no upholstery) of the same configuration (prototype) by contract delivery order.

1.1 Functional Seat Requirements

1.1.1 Certified to TSO-C39b.

1.1.2 Designed to FAR Part 23 and FAR Part 135 requirements for installation in the Hawker Beechcraft 300 Super King Air aircraft.

1.1.3 Manufactured only with materials demonstrated to meet requirements of FAR 23.853 and 25.853.

1.1.4 Each aircraft will have two identical forward facing left side seats. One seat each for the Mission Specialist and Mission Observer.

1.1.5 Seat shall fit the existing 300 Super King Air seat track spacing of 13.625" without modifications or adapters.

1.1.6 Maximum total seat width (including armrest(s), etc.) should not exceed 20" wide in the takeoff and landing position. Wider widths will be analyzed for adequate aisle width.

1.1.7 Seat shall be capable of translating laterally a minimum of 4.75" to the right from its stowed take-off and landing position and lock in any position. In addition, seat shall be capable of being adjusted a minimum of 7.75" travel forward and aft.

1.1.8 Seat shall be capable of being rotated a minimum of 90° (left and right from forward facing) to include rotation at any translated position, and shall be capable of being locked at any of these positions.

1.1.9 Inboard arm rest should be retractable to facilitate ingress and egress from the seat. Retraction shall be sufficient to meet the aisle width requirements of 23.815b.

1.1.10 Seat headrest should be stowable, so that an observer will have an unobstructed view from behind the seat.

1.1.11 Seat's left side should be designed to efficiently fit within the 300 Super King Air Interior Side Panel contour when fully stowed to the left most position.

1.1.12 Left armrest will preferably be fixed. If not fixed, the left armrest, whether deployed or stowed, must remain within the 300 Super King Air Interior Side Panel contour when the seat is fully stowed to the left most position.

1.2 Operational Requirements

1.2.1 A five (5) point restraint system shall be provided for the Mission Specialist and Observer Seat meeting all FAR requirements including but not limited to FAR 23.562, 23.785 and Part 135 Operational requirements. The restraint system should be capable of remaining latched without adjustment when the seat is translated inboard or outboard.

1.2.2 Seat should recline for comfort on long flights.

1.2.3 Seat width shall be a minimum of 17.5". Design should be as wide as possible to better accommodate a ninety-fifth (95th) percentile male on long flights while meeting FAR 23.815b aisle width requirements. The inboard arm rest should retract flush with seat level to better accommodate wider persons and allow easy rotation of the feet into the aisle when necessary.

1.2.4 Contractor shall upholster seats using high-grade foam (Skandia DAX Firehard Foam, or equivalent) potentially using a multiple density design as proposed by the Vendor to improve seating quality and ensure longevity. Seat contact surfaces shall be covered with "New Zealand Sheepskin" from Douglas Interior Products (www.DIPI.com) or sheepskin of equal or better grade as determined by AVN. Seat non-contact surfaces shall be covered with "Muirhead Fine Scottish Leather™" from Douglas Interior Products (www.DIPI.com) or material of equal or better grade.

1.3 Aesthetic Requirements

1.3.1 All materials used on the seats shall be durable, easy to maintain, and shall meet FAR 23.853 and 25.853 for flammability. Seat plating shall be Satin Nickel or equivalent.

1.4 Drawings, Technical Data, Parts Lists and Operational Manuals

1.4.1. The Contractor shall provide all manuals/publications for all basic and revised systems, subsystems and support equipment applicable to the seat frames. The contractor shall provide copies of applicable specifications, exhibits, source data, and drawings to support manuals/publications. Drawings shall be provided on electronic media as available and be compatible with the FAA computer aided engineering graphics (CAEG) system.

1.4.2. Printing of all text and illustrations shall be clear, sharp, and reproducible. Manuals/publications shall reflect the final configuration of the delivered item including all revisions and changes.

Technical Manuals	1 each electronic copy
Operations Manual	1 each electronic copy

1.4.3. The contractor shall identify and provide a recommended parts lists of items identified as spare parts and parts peculiar for the seat frames. The spare parts list and spare parts peculiar shall contain, but not be limited to the following information:

Source
Part Number
Item Name
Cage Code
Cost per unit
Long lead-time identification

1.4.4. The contractor shall provide a justified listing of all common and special tools, support, and test equipment, and devices and connectors required for operation, maintenance and testing of the seat frames. The contractor shall make every effort to minimize the requirements for special tools and/or test equipment.