JOFOC Number: 14-01
Purchase Request Number: 4200486805

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION (JOFOC)
(In accordance with Federal Acquisition Regulation (FAR) 6.3 – Other than Full and Open Competition)

1. **This document is a justification for other than full and open competition prepared by NASA's Dryden Flight Research Center (NASA DFRC):**

2. **The nature and/or description of the action being approved:**

   This added work requirement is to continue work that was performed under Contract NND11AS04C to investigate the combined efficacy of separation assurance and sense and avoid technologies and concepts. That work exposed limitations in the current understanding of failure rates and conditions for separation assurance. The objective of this requirement is to collect real track data from Visual Flight Rule (VFR) aircraft that have not filed flight plans and/or have discrete transponder codes over the widest possible time and geographic extent. The expertise required to conduct this new work was gained as part of Task 1 of the original contract.

3. **Description of the supplies or services required, including an estimated value:**

   Modeling of Visual Flight Rule Traffic Model
   Estimated Value: $211,604

4. **Statutory authority permitting other than full and open competition:**

   The statutory authority for this action is 10 U.S.C. 2304 (c) (1), Only One Responsible Source.

5. **A demonstration that the proposed contractor's unique qualifications or the nature of the acquisition requires use of the authority cited:**

   Honeywell developed a statistical model of non-transponder equipped aircraft under the current contract Statement of Work. This action would extend that effort to generation of actual track data (rather than traffic density models) of real aircraft that flew across the entire geographic extent of the continental United States.

6. **Description of the efforts made to ensure that offers are solicited from as many potential sources as practicable, including whether a notice was or will be publicized as required by Federal Acquisition Regulation (FAR) 5.202:**

   A notice of proposed contract action was posted on Federal Business Opportunities on September 13, 2013.

7. **A determination by the contracting officer that the anticipated cost to the Government will be fair and reasonable:**

   The Contracting Officer determined the price fair and reasonable by applying price analysis techniques using data other than certified cost and pricing data provided by the contractor.

8. Description of the market research conducted, and the results, or a statement of the reasons market research was not conducted:

More than a dozen proposals were received for the original NRA solicitation, and only Honeywell's met the criteria for award, including demonstration of an understanding of the goal of the research and clearly articulating how the traffic modeling effort of Task 1 would be carried out. Based on that review of the ability of contractors to perform the modeling, along with the expertise they have developed during the two years of the existing contract, it has been determined that no other contractor could accomplish the work to meet the Project's FY14 milestone deadlines.

9. Other facts supporting the use of other than full and open competition:

The Contracting Officer Representative for this contract has had extensive discussions with government, industry and academic institutions over the last two years at major Unmanned Aircraft System-related forums including Radio Technical Commission for Aeronautics's SC-203 and SC-228, the Association of Unmanned Vehicle Systems International conferences, and the Department of Defense Sense-And-Avoid (SAA) Science and Research Panel. During those discussions it has been repeatedly recognized that to ensure UAS SAA systems are capable of safely interoperating with non-cooperative aircraft it is necessary to model the discrete tracks such aircraft fly over a wide temporal and geographic extent. Despite this recognition, no organization proposed creating such models because of the lack of available raw data to meet the temporal and geographic requirement and the difficulty of appropriately tracking and fusing the uncorrelated radar returns and assigning them altitudes based on airspace procedures. Honeywell developed this capability, using innovative optimization techniques that matched airport departure and arrival rates with the relative proportion of local and itinerant VFR aircraft, and NASA has located a source of raw VFR aircraft data that is not generally available to non-government entities. The combination of these two capabilities makes the NASA-Honeywell partnership uniquely qualified to carry out the proposed work.

The Government has expended two years of effort and $1.1M to fund this project; the same amount of funds (which is 5 times the proposed cost of this action) and the amount of time would be duplicated if another source was selected to perform this task.

10. Sources, if any, that expressed an interest, in writing, in the acquisition:

This block will be completed after the synopsis posting response period has ended.

11. The actions the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

No actions are currently available by the agency to remove or overcome barriers to competition for this requirement (at this time) based on the rationale provided above.

11. The actions the Agency may take to remove or overcome any barriers to competition before any subsequent acquisition for the supplies or services required:

There are no actions currently available by the agency to remove or overcome barriers to competition for this requirement based on the rationale provided above.

TECHNICAL DIRECTORATE: I certify that the facts presented in this justification are accurate and complete.

_____ 10/21/13__
Signature Date

CONTRACTING OFFICER: I certify that this justification is accurate and complete to the best of my knowledge and belief.

Lisa A. Jackson 10/30/13
Signature Date