



**DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND,  
SOUTHEAST REGION  
Jacksonville, FL 32212**

**JUSTIFICATION AND APPROVAL FOR  
OTHER THAN FULL AND OPEN COMPETITION  
SOLICITATION N69450-11-R-799175**

**PROPRIETARY PRODUCT – BRAND NAME DESCRIPTION FOR DET-TRONICS  
OPTICAL FLAME DETECTION SYSTEM AS A COMPONENT FOR THE HANGAR 511  
FIRE PROTECTION UPGRADES, IR DETECTOR REPLACEMENT, NAS  
JACKSONVILLE, FL**

1. **Contracting Activity:** This action is being taken by the Commanding Officer, Naval Facilities Engineering Command Southeast (NAVFAC SE). NAVFAC SE is a component of the Naval Facilities Engineering Command.
2. **Description of the Action Being Approved:** The optical flame detector and control panel are individual components of a single building system (hangar fire detection system). The hangar Infrared (IR) detection system replacement project is being bid competitively on the FPMACC (Fire Protection Multiple Award Construction Contract). The purpose of the project is to replace the existing detectors with the new Det-tronics detectors. The current detectors are not functioning properly in the hangar environment at bldg 511. The current aircraft have newer radar systems that are not compatible with the current IR detection system. Exception to full and open competition is requested under authority of 41 USC 253(c)(1) and Federal Acquisition Regulation (FAR) Part 6.302-1(c) for this specific item only; Det-tronics Corporation's Triple IR flame detectors and control panel, Models X3301 Detector and EQP Control System. The estimated total value for the proprietary electronics is [REDACTED], which represents [REDACTED] of the total cost of the system replacement project [REDACTED]. The Government intends to identify this component through specific language in the specifications and on the drawings which will be included as a part of the bid package for the IR detector replacement project. This J&A authorizes and approves the government requirement for a name brand component.
3. **Description of Supplies\Services:** The triple IR detector is an optical detector which is used to scan the hangar floor for the purpose of detecting a fuel fire. The control panel is used to process signals from the detector and initiate output actions such as activating the foam fire suppression system. There are 39 of these optical detectors and one control panel required in this construction project. These components are produced by the Detector Electronics Corporation (Det-tronics). This optical flame detection system is necessary in all new aircraft hangar construction projects throughout the Navy and Marine Corps, and its use will continue until another manufacturer can develop a product which meets the government's requirements. The current detectors installed in the hangar are randomly set off by the

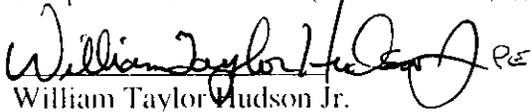
aircrafts' radar emissions. Only the Det-tronics IR detectors are immune to this type of radar. This new system will mirror the current systems used in other new hangar projects. No options or additional products will be requested by the Government solely from this manufacturer, however, the services of a technical representative from Det-tronics may be required during installation and testing.

4. Statutory Authority Permitting Other Than Full And Open Competition: The statutory authority permitting other than full and open competition is 10 U.S.C. Section 2304 (c)(1), as implemented by the Federal Acquisition Regulation (FAR) 6.302-1(c), Only One Responsible Source and No Other Supplies or Services Will Satisfy Agency Requirements - Application for Brand name Description.
5. Rationale Justifying Use of Cited Statutory Authority: Until recently, the Government had identified two different manufacturers producing optical detectors that met Government performance requirements for IR detection using triple IR technology to reduce false alarms and accidental discharge of the foam fire suppression system in aircraft hangars. NAVFAC Criteria related to the design and installation of hangar AFFF fire suppression systems (UFC 4-211-01N *Aircraft Maintenance Hangars: Type I, Type II AND Type III*) requires the use of this optical flame detection process. But in the past two years, the currently installed detectors have produced an unacceptable number of false activations and discharge of foam fire suppression systems, disrupting flight operations and damaging government property. These failures have been attributed to electromagnetic interference from aircraft operating in close proximity to the hangar area. The DOD Unified Facilities Criteria specifically requires that these triple IR optical detectors be immune to such interference. After further operational use of the product and a continuing number of unacceptable incidents of false activation, the Government reinvestigated the current detectors with full scale testing using an operation aircraft. The Government found that the improved detector is still not immune to electromagnetic interference from aircraft and has definitively proven that the detector is susceptible to aircraft radar emissions. The Government testing and continued operational experience with both products has confirmed that only one product by Det-tronics will work as intended and meet the Government's performance requirements. The problem is so prolific with currently installed IR Detector that efforts are underway to have this product removed from service, even though some of these optical detectors are less than three years old. Although the Government has gone to great lengths to develop a simple system using off-the-shelf components to the greatest extent possible, the optical detector and associated control panel are the only remaining component of this system for which there is now only one qualified manufacturer.
6. A Description of Efforts Made to Identify Other Sources: The Government has been in communication with a second company which was developing an improved version of their optical detector. The Government has tested both the old and new versions of the product and found that they still are not immune to aircraft radar emissions. Until this detector can be made immune to aircraft emissions, the requirement for a sole source, name brand, will be necessary.

7. A Determination by the Contracting Officer that Anticipated Prices are Fair and Reasonable: The Contracting Officer has determined the anticipated cost to the Government of the supplies/services covered by this J&A will be fair and reasonable. The fair and reasonableness of the cost/price is based on an analysis of the contractor's pricing. The Government obtained pricing from Det-tronics in order to gauge market pricing. The analysis was conducted by experienced engineers within this technical field.
8. Market Survey: For the reasons set forth in Paragraph 6, the Government is awaiting an improved IR Detector from the current provider, or even a third manufacturer, to produce an optical flame detection system that can meet the Government's requirements before removing the brand name requirement from future specifications.
9. Any Other Supporting Data: Product data and manufacturer's literature can be found on the Det-tronics website.
10. A Listing of Sources Expressing Interest: No other sources were contacted beyond the efforts described in paragraphs 5, 6 & 8 because the Government recognized that it will take a year or more for any other manufacturers to prototype an optical detector that is immune to electromagnet interference and gain approval from an NRTL.
11. A Statement on Actions to Remove/Overcome Competition Barriers in the Future: It will take a few years of continued Navy/Marine Corps hangar construction before a sufficient demand is created for these components which will attract additional manufacturers of triple IR optical detection systems to consider developing components which satisfy the technical and performance requirements, allowing full and open competition.
12. Total Estimated Dollar Value: The total estimated dollar value for this proprietary item is [REDACTED]. The total estimated dollar value for the replacement project is [REDACTED].
13. Reference to the Approved Acquisition Plan: Under DFARS 207.103 (c)(ii), an Acquisition Plan is not required specifically for this name brand component. Refer to solicitation N69450-11-R-799175 for details regarding the overall construction project for which this component is needed.

CERTIFICATIONS AND APPROVAL

**TECHNICAL/REQUIREMENTS CERTIFICATION** - I certify that the facts and representations under my cognizance which are included in this justification and its supporting Acquisition Plan (if applicable) and which a basis for this justification are complete and accurate. (FAR 6.303-1(b)).



William Taylor Hudson Jr.  
Fire Protection Engineering Technical Discipline Coordinator  
NAVFAC SE  
(904) 542-6667

2-15-11  
Date

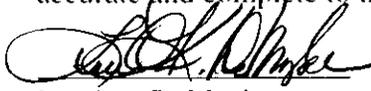
**LEGAL SUFFICIENCY REVIEW** - I have determined this Justification is legally sufficient.



William C. Waller  
Legal Counsel  
NAVFAC SE  
(904) 542-6650

16 Feb 2011  
Date

**CONTRACTING OFFICER CERTIFICATION** - I certify that this Justification is accurate and complete to the best of my knowledge and belief.

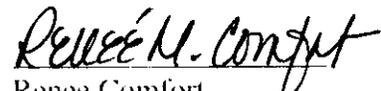


LouAnn DeMoske  
Supervisory Contract Specialist  
NAVFAC SE  
(904) 542-6200

2-16-2011  
Date

**APPROVING OFFICIAL (NFAS 6.304)**

Upon the basis of the above justification, I hereby approve, the solicitation of the proposed procurement(s) described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304 (c)(1).



Renee Comfort  
Chief Of Contracts Acquisition  
NAVFAC SE  
(904) 542-6911

2/18/2011  
Date