



**DEPARTMENT OF THE NAVY**  
NAVAL AIR WARFARE CENTER WEAPONS DIVISION  
1 ADMINISTRATION CIRCLE 575 I AVENUE SUITE 1  
CHINA LAKE, CA 93555-6100 POINT MUGU, CA 93042-5049

IN REPLY REFER TO:  
LSJ\_13\_23241

LIMITED SOURCE JUSTIFICATION (FAR 8.4- GSA/FSS)

1. Contracting Activity.

Naval Air Warfare Center Weapons Division (NAWC-WD) - China Lake, CA

2. Nature and/or Description of Action Being Approved.

This limited source justification and approval authorizes the procurement of McNeal Schwendler Corporation (MSC) 2975 Redhill Avenue, Costa Mesa CA 92626, Master key + Software Licensing Fees and Support to be used by the F/A-18 Structural-Mechanical Engineering RDT&E Analysis Laboratory, FRCSW, NAS North Island, for the Finite Element Analysis of Repairs, Modifications and Maintenance Actions for the F/A-18 Structures and Mechanical Systems Engineering.

3. Description of the Supplies or Services Required to Meet the Agency's Needs (including the estimated value).

The Mission of the NAVAIR North Island (NI) RDT&E Structural-Mechanical RDT&E Analysis Laboratory is to ensure the airframe and component structural and mechanical integrity and full fatigue life are maintained over the life span of the Weapons Platform. All structural-mechanical repairs, modifications, and maintenance actions are dependent on the use of this Finite Element Modeling and Analysis and the retrievable historical archive file database. The repairs and modifications are iteratively designed, modeled and analyzed until the airframe or components structural integrity is assured for static strength and fatigue life. The MSC Masterkey + Token software program(s) is the core application suite that we use to fulfill our mission in support of the F/A-18 Weapons System. Each finite element model created by the OEM or Naval Engineering corresponds to specific area of the aircraft and addresses a specific structural item or component. Once created, future problems in these critical areas will build on the previous work, and thus adds to our extensive database of structural load models and their solutions files. Period of performance is 01 April 2013 to 31 March 2014. Place of performance is NAVAIR NI, Naval Aviation Depot, FST, San Diego, CA 92135. The estimated dollar value for this procurement is \$392,211.24. The type of funding is [REDACTED]

4. Identification of the Justification Rationale (see FAR 8.405-6(b)) and, if applicable, a Demonstration of the Proposed Contractor's Unique Qualifications to Provide the Required Supply or Service:

(3) The item is peculiar to one manufacturer.

Supporting Information:

This MSC Computer Aided Engineering application software and its related services are the principle Finite Element Analysis (FEA) applications that are used by the OEM and Naval Air Engineering to design, analyze and modify the F/A-18AD&EF&G Structure. The Navy is driven to use this software to make use of the Government owned FEA data developed with MSC Advanced

Analysis Programs by the OEM. The Navy is now driven to use this software because of the extensive archival model and answer files now stored on our RDT&E F/A-18 Structures Lab Terabyte DataStor Storage devices and the newly created OEM FEA model data coming from the ongoing in-production next generation F/A-18EF&G. This advanced and resource intensive application software requires high power IT hardware to process, that is uniquely defined, procured and maintained by the F/A-18 Structures Engineering Group. Though there are other suites of robust FEA application software programs, the conversion of existing models would be wholly insurmountable, prohibitively expensive to the Government, and would immediately create a near work shutdown situation that our Fleet cannot tolerate. In addition the new design models of the next generation F/A-18EF&G could not be captured, manipulated and analyzed by the F/A-18 Engineering Group

5. Determination by the Ordering Activity Contracting Officer that the Order Represents the Best Value Consistent with FAR 8.404(d):

The Contracting Officer hereby determines that this purchase order represents the best value and results in the lowest overall cost alternative to meet the Navy's needs. NAVAIR will seek additional discounts from the schedule holder if the price of the order exceeds the maximum order threshold, in accordance with FAR 8.404-1(d).

6. A description of the market research conducted among schedule holders and the results or a statement of the reason market research was not conducted.

In accordance with FAR Parts 5.202(a) and FAR 16.505(b)(2) this acquisition was not synopsised. ImmixTechnology has a sole source letter showing that they are the only authorized redistributor of McNeal Schwendler Corporation's license renewals. There are no other schedule holders of these licenses and renewals.

7. Any Other Facts Supporting The Justification.

This limited justification and approval is conducted under the authority of FAR 8.405-6(a)(3), the item is peculiar to one manufacturer and no other supplies or services will satisfy agency requirements.

8. A Statement of the Actions, if any, the Agency May Take to Remove or Overcome any Barriers that Preclude the Agency from Meeting the Requirements of FAR 8.405-1 and FAR 8.405-2 before any Subsequent Acquisition for the Supplies or Services is Made:

The F/A-18 Structures FST or any Contracting Authority is not in a position to remove barriers that are imposed by the initial Weapons System Acquisition. This process is severely competed and once a Weapons System is selected and approved, we are driven to maintain this Weapons Platform by what Naval Engineering and OEM used and continue to use to design, modify and analyze that aircraft structure.