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IN REPLY REFER TO:
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JUSTIFICATION AND APPROVAL
FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

1. Contracting Activity.

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

2. Description of the Action Being Approved.

This justification and approval authorizes and approves on a sole source basis a three year hybrid Cost Plus Fixed Fee (CPFF)/ Firm Fixed Price (FFP) Indefinite Delivery Indefinite Quantity (IDIQ) contract with Toyon Research Corporation. This contract will provide for antennas, feed assemblies, radomes, ancillary hardware, and incidental engineering in support of the Joint Electronic Attack and Compatibility Office (JEACO) Electronic Warfare (EW) and Electronic Attack (EA) mission at the Naval Air Warfare Center Weapons Division (NAWCWD).

U.S. Pacific Command has a requirement for persistent, survivable stand-in jamming to augment existing EA aircraft in the Pacific theater. The desired solution is a small, low-cost, stealthy unmanned aircraft with a combat radius greater than 500 miles, endurance of 24 hours, and a jammer effective against modern coherent threat systems. The aircraft will penetrate an enemy theater undetected, and loiter for 24 hours to protect military aircraft as they transit through hostile territory. The rapid pace of technological growth and the advancement of radar and missile systems will pose significant threats to high value military aircraft in future conflicts. Enemy threat systems are being developed with ever-increasing capabilities and lethal radius, and many are being proliferated to countries that pose a risk to US interests. The need for more and better airborne electronic attack to provide jamming protection for military aircraft is growing rapidly. JEACO EW/EA products include: AN/ALQ-231(V)1 Intrepid Tiger EA System (IT II), Collaborative Online Reconnaissance Provider/Operationally Responsive Attack link (CORPORAL), Joint Electronic Warfare Effects Laboratory (JEWEL), Electronic Attack Payloads (EAP), and Small Survivable Jammer (SSJ).

3. Description of Supplies/Services.

The contract will include various antennas and ancillary parts which are integrated into communication jamming pods and EW laboratories, spares, and the incidental engineering required to fabricate, modify and or maintain the Antenna and Feed Assemblies. The estimated value of the Toyon contract is \$11,485,745 and will be funded with FY-11 through FY-14 (b)(2)High funds. Systems Engineering shall make up approximately 12.32% of the contractual effort, with hardware and spares making up the rest.

See Appendix A for Estimated Dollar Value

4. Statutory Authority Permitting Other Than Full and Open Competition.

10 U.S.C. 2304(c)(1), Only one responsible source and no other supplies or services will satisfy agency requirements.

5. Rationale Justifying Use of Cited Statutory Authority.

In accordance with 6.302-1(b)(1)(i), only Toyon possesses the unique capability and expertise that can satisfy the minimum needs of the government.

Intrepid Tiger 1 was originally fielded in 2005 and became functionally obsolete in 2007. (b)(2)High
 (b)(2)High) was provided for refurbishment and technology upgrade of the Intrepid Tiger electronic warfare pods currently in use in Operation Iraqi Freedom (OIF) by USMC F/A-18 and AV-8B squadron. High OPEMPO and harsh operating environment necessitates the refurbishment and tech refresh of all Intrepid Tiger electronic warfare contingency pods. Threat changes and adaptation require redesigned pod capability to improve performance to keep the capability combat effective. Via a Naval Air Systems Command Contract, Argon ST was tasked to perform significant systems engineering design efforts needed to ensure the ability to provide the technology upgrades required to keep the IT Pod combat effective and to develop Intrepid Tiger II Engineering Development Models (EDMs) 1 and 2. In order to identify the components required to meet the Government requirements, Argon performed internet searches, conducted communication with industry, and chaired an integrated meeting between Government and commercial representatives. Argon ultimately determined that Toyon was the only source who had the capability to provide the required antenna/feed assemblies for the Intrepid Tiger EDM fabrication. As a result, Toyon became the sole designer, developer, and manufacturer of the Bands 1 and 2 IT II Axial Antennas and Feed Assemblies in support of the ALQ-231(V)1 Intrepid Tiger Electronic Attack System (IT II). The CORPORAL pod is a technical demonstration effort which maximized the reutilization of IT II components and software.

Argon was under contract to build the first 5 pods which were all engineering development models, and all antennas (as well as other hardware) for 5 pods were purchased by them. When NAWCWD received the funding to build 10 more pods, the decision was made to have pods 1 and 2 built by Argon and transition the integration of pods 3, 4, 5 and all subsequent pods to the government to be performed in-house. The decision to establish a new direct contract with Toyon was based on cost saving measures (avoidance of pass through costs/fees) as well as the efficiency/effectiveness gained by establishing the acquisition environment to provide long term development and support for Electronic Attack/Electronic Warfare JEACO products, initially the IT II Pods, then CORPORAL PODS, perhaps Small Survivable Jammer Pods, etc. Existing acquisition environment was considered critical to establishing a NAWCWD capability and presence supporting the aforementioned products.

To date, 5 IT II EDMs and 3 CORPORAL pods have been developed, integrated and qualified using Toyon components. The Government has completed a significant portion of the IT II environmental, laboratory, electromagnetic interference and electromagnetic compatibility qualification testing, required for the Quick Reaction Assessment (QRA) flight tests scheduled in Feb 2011. The Government has also completed extensive CORPORAL qualification testing required for the technical demonstrations scheduled in Jan and Apr 2011. Failure to utilize Toyon components would negate all existing testing results and require both

programs to commence retest. Retest is estimated to be in excess of \$980,000 with a schedule slip of six months. Failure to utilize Toyon components would also result in the inability to meet the IT II Early Operational Capability (EOC) of Nov 2011. Failure to meet EOC impacts operational readiness, mission effectiveness and the ability to provide the electronic warfare capability needed to ensure the protection of coalition ground forces. In summary, failure to meet EOC impacts the ability to provide greater threat coverage by increasing the frequency range, increasing effective radiated power, adding a threat receiver, a Global Positioning System (GPS) receiver for location awareness and the ability to respond to changing mission requirements mid flight.

Toyon is the only firm that possesses the requisite knowledge of the platforms and weapon systems to perform the incidental engineering efforts described in the Statement of Work (SOW) associated with this proposed procurement. The Toyon manufactured antennas and feed assemblies will need to be periodically updated to correct operational deficiencies and increase effectiveness in order to meet the fleet's mission requirements. Improvements to the antennas will be required to improve jamming capabilities to counter the rapidly changing world threats. Technologies are rapidly expanding and proliferating world-wide at an increasing pace. Threat countries may obtain modern, sophisticated equipment which could render the current systems to be ineffective unless a change to the system is engineered. Adapting the system to the fleet's changing operational requirements is a critical necessity.

Toyon, to the exclusion of other contractors, has the unique combination of experience and knowledge needed to execute the required mission of on-going EW and EA program upgrades.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

The JEACO Systems Engineers continue to monitor the availability of commercial technological upgrades/capabilities/products by participating in communications among industry and other government electronic warfare specialists, by conducting exhaustive searches on the Internet, and participating in joint symposiums with government and commercial representatives. As of the date of signing this document, no other sources have been located that produce an existing antenna system which seamlessly integrate into the communications jamming pod (IT II and CORPORAL) and EW laboratories.

7. Determination of Fair and Reasonable Cost.

In accordance with FAR 15.402, the Contracting Officer shall ensure that all supplies and services provided under this contract are procured at a fair and reasonable price. The Contractor will submit a formal price proposal with certified cost or pricing data and sufficient information to support the accuracy and reliability of the estimate. Toyon's proposal will be reviewed by experienced technical analyst and contract specialists with the aid of necessary field pricing support. The Contracting Officer will utilize cost and price analysis as the basis for negotiating a fair and reasonable price.

8. Actions to Remove Barriers to Future Competition.

For the reasons set forth in paragraph 5, NAVAIR has no plan at this time to compete future contracts for the types of supplies/services covered by this document. If another potential source emerges, NAVAIR will assess whether competition for future requirements is feasible. A synopsis was posted on Federal Business Opportunities (FBO) on 13 January 2011 to solicit any responses for vendors who believed they could fulfill the requirement to submit a written response by 28 January 2011. No responses were received. The RFP will be posted to FBO for 30 days as required by the FAR.

Appendix A

Estimated Dollar Value In Thousands

	FY11	FY12	FY13	FY14	FY15	FY16	FY17	Total
					0	0	0	
	(b)(2)High				0	0	0	(b)(2)High
					0	0	0	
Total	(b)(2)High				0	0	0	\$ 11486 k