Note: All key personnel must have a minimum of **8 years** experience performing research and development of high power RF signals across the frequency spectrum at a high precision satellite calibration facility.

Senior Systems Engineer (Key Personnel)
Primary Duties
This senior professional position primarily requires the application of knowledge of systems engineering sciences of satellite calibration. The primary duties of this position will be to perform system requirements definition and development, system integration and test, system architecture development, remote satellite and airborne calibration technology efforts, RF analysis efforts, calibration of equipment and processes, and fiber optics and laser communication. Concept development utilizing state-of-the-art technology and the generation of advanced processes will be required. This position also requires the ability to resolve technically challenging problems. Considerable travel, both CONUS and OCONUS, will be required.

Education/Qualifications
The Senior Systems Engineer should at a minimum, possess a B.S. in Engineering, or the equivalent, as identified in the OPM Qualification Standards for General Schedule, with a minimum of 12 years experience in RF engineering as it applies to satellite calibration. This requirement should include experience in:
(a) satellite calibration;
(b) in-depth knowledge of RF amplifiers, high-power RF Systems (120 dBm and greater), large transmit antennas (> 55 feet) and feed assemblies. The Senior Engineer shall also possess demonstrable experience in RF pulse generation by high power, large transmit antennas.

Clearances
In accordance with DD Form 254, candidates must be available with favorably-adjudicated investigations and final DoD-granted personnel security clearances for performance of the Task Order. The number and type of clearances required are described in the DD-254.

Ground Test System Coordinator (Key Personnel)

Primary Duties
The Ground Test System Coordinator position primarily requires the application of knowledge of engineering and business management techniques to effectively design, implement, and operate state-of-the-art ground test systems involving satellite calibration technologies. The Ground Test System Coordinator should be a point-of-contact for program sponsors and other Government officials on program planning, satellite calibration, future systems and operational effectiveness, and should possess demonstrable experience in this function. Considerable travel, both CONUS and OCONUS, will be required.

Education/Qualifications
The Ground Test System Coordinator should, at a minimum, possess (a) a B.S. in Engineering,

Engineering Management or a related field; (b) fifteen (15) years of demonstrable experience in the management of technical projects; and (c) a minimum twelve (12) years demonstrable experience in satellite and airborne calibration; and (d) a minimum of twelve (12) years experience with large transmit antennas (55 foot and greater) and high power RF generation and transmission (120 dBm and greater)

Senior Software Engineer (Key Personnel)
Primary Duties
The primary duties of this professional position will be (a) to apply specialized skills in simulation technologies, distributed systems, software engineering, software architectures to analyze, design, and develop pulse generating algorithms; and (b) to coordinate and control the use of large-scale software-based systems for RF command and control systems for satellite and airborne calibration.

Education/Qualifications
The Senior Software Engineer should at a minimum, possess:
(a) a Bachelor's degree, of a technical background, in Engineering, Computer Science, Physics, and/or Math;
(b) a minimum of 7 years experience is required (10 years desired) in Software Engineering;
(c) a minimum of 5 years experience using Object Oriented Design;
(d) demonstrable experience in systems architecture and infrastructure design and development of centralized and distributed systems;
(e) demonstrable experience in resolving engineering problems and developing systems for use in satellite and airborne calibration;
(f) demonstrable experience in developing RF command and control systems for large apertures (this is not satellite command and control);
(g) demonstrable experience in UNIX-based systems, 'C' family of programming language, Matlab, JAVA including JEE (Java Enterprise Edition) and Java Web Application servers; and
(h) demonstrable experience in providing systems engineering applications in the areas of digital pulse generation (picosecond accuracy), time scaling and ensembling, and calibration of strategic timing distribution systems.

Junior Software Engineer
Primary Duties
The primary duties of this professional position will involve performance of software engineering and software architecture duties for analysis, development, and design of custom algorithms. In addition, this position will bear responsibility for implementation of large-scale software-based systems for satellite and airborne calibration.

Education/Qualifications
The Junior Software Engineer should, at a minimum, possess:
(a) a Bachelor's degree in
Engineering, Computer Science, Physics, and/or Math,
(b) a Minimum of 5 years of experience in software engineering;

(c) demonstrable working knowledge using Object Oriented Design; and
(d) demonstrable experience in UNIX based systems, 'C' family of programming language, and JAVA including JEE (Java Enterprise Edition) and Java Web Application servers. Demonstrable experience with precise RF pulse generating algorithms for large transmit antennas is also required.

Hardware Engineer
Primary Duties
The primary duties of the Hardware Engineer will be (a) in application of the principles, theories, and concepts associated with work required by the SOW, particularly as it relates to design, development and /or modification, and testing of advanced concept and prototype satellite and airborne calibration systems, post launch calibration systems, and precise (2 nanosecond) timing systems; and (b) in:

(i) specifying, developing and documenting developmental test programs;
(ii) (ii) conducting systems level environmental and reliability test;
(iii) (iii) documenting acceptance tests in formal plans and procedures; and
(iv) (iv) planning and conducting tests and demonstrations in conjunction with an integrating Awardee. The candidate shall possess demonstrable experience in working with both Digital Pulse Generators that provide picoseconds accuracy, and Acquisition Signal Processors that provide real-time pulse-to-pulse measurements of the as-transmitted pulses.

Education/Qualifications
The Hardware Engineer should at a minimum, possess (a) a Bachelor's degree in one of the technical areas of Engineering, Physical Sciences, or Mathematics; and (b) demonstrable experience in application of the principles, theories, and concepts associated with work required by the SOW, particularly as it relates to advanced concept and prototype satellite and airborne calibration systems, post launch calibration systems as well as design, development, and/or modification, and testing of calibration systems for satellite, aviation, and communication systems. The Government desires that the Hardware Engineer possess at least four years of demonstrable, directly-applicable experience in analyzing, solving, and accomplishing the complex work required by the SOW, including work with high-power, large aperture antennas.

Terrestrial Systems Specialist
Primary Duties
The primary duties for the Terrestrial Systems Specialist will be application of the principles, theories and concepts' associated with the work required by the SOW as it related to:
(a) to analysis, design, and documentation of advanced concept and prototype satellite and airborne calibration systems, and
(b) analyzing, researching, designing, developing, testing and evaluating complex digital hardware and software development programs, particularly as these developments relate to specific satellite calibration equipment.

Education/Qualifications
The Terrestrial Systems Specialist should, at a minimum, possess:

(a) a Bachelor's degree in one of the technical areas of Engineering, Physical Sciences, or Mathematics;
(b) demonstrable experience in application of the principles, theories, and concepts' associated with the work required by the SOW, particularly as it relates to advanced concept and prototype spacecraft and airborne calibration systems, and post-launch calibration systems;
(c) demonstrable experience, knowledge, and familiarity with analyzing, researching, designing, developing, testing and evaluating complex digital hardware and software development programs, particularly as these developments relate to specific satellite calibration equipment.

The Government desires that this individual possess:
(a) at least eight years of demonstrable, directly-applicable experience in analyzing, solving, and accomplishing the work required under this SOW; and
(b) demonstrable engineering experience related to electrical analysis, design, integration, and test of digital processors, Application Specific Integrated Circuits (ASICs), field programmable gate arrays (FPGA), and their related development systems, as well as demonstrated capability with various state of-the-art processors that are used to generate highly precise (picoseconds accuracy) pulses for satellite calibration and provide pulse-to-pulse measurements of those pulses.