

PERFORMANCE WORK STATEMENT (PWS)
TECHNICAL SENSORS SUPPORT
APACHE ATTACK HELICOPTER PROJECT MANAGER'S OFFICE

1.0 MISSION OBJECTIVE: The Apache Attack Helicopter (AAH) Project Manager's Office (PMO) has centralized management responsibilities for the Acquisition, Engineering, and Support of all aspects associated with life cycle management responsibilities of the AAH program. The Sensors' Product Manager (PM) is chartered with responsibility for the development, production, fielding, and sustainment of both the legacy Target Acquisition/Designation System (TADS) and legacy Pilot Night Vision System (PNVS) as well as the Modernized TADS/PNVS (M-TADS/PNVS) and the Fire Control Radar (FCR). These sensors are provided as Government Furnished Equipment (GFE) in support of the Apache program. The Sensors PMO requires support services for effective and efficient management of these requirements. Further, this PWS shall provide the AAH PMO with technical support to Foreign Military Sales (FMS) activities and shall not usurp the established Program Executive Office (PEO) assignments relating to US Army equipment.

2.0 PERFORMANCE REQUIREMENTS: The requirements of this PWS are to provide the Apache Attack Helicopter (AAH) PMO with technical engineering support services for the development, production, fielding, and sustainment of sensors mission area. In order to provide general engineering, systems engineering, and technical support to the Sensors Product Manager, the contractor shall perform the following tasks:

2.1 General Technical Support. The contractor shall provide technical input and recommendations to the Sensors PMO for all products support source selection evaluation teams, alpha contracting teams, and Integrated Product Teams (IPT), and provide additional general technical input and recommendations for the areas identified in this PWS.

2.1.1 The contractor shall perform review and analyses of cost, schedule, and performance trade-off analyses, and risk assessments of alternative technologies, technical approaches, technical program strategies, equipment and systems integration approaches, and systems architecture designs. Provide recommendations in the planning and development of technical program in support of the Sensors' and all sub-systems. Provide technical input and recommendations in preparation of draft statements of work, contract data requirements lists, inspection and acceptance criteria, justifications for non-competitive procurement, statements of urgency, and proposal preparation instructions for aircraft and sub-system production requirements. (Reference SOW 2.0, G2, G3, and G5 through G8; SOW 3.19, SE3, SE4, and SE7; SOW 3.22, SW1 through SW13)

2.1.2 The contractor shall provide technical input and recommendations for the formulation of draft requirement documents. Provide review, analysis and recommendations for design/performance specifications, A-kit and B-kit interface control documents, horizontal technology insertion (HTI) white papers, prime item development specifications, airworthiness qualification plans, airworthiness substantiation reports, technical program plans, technical program strategy reports, market survey/analysis, concept formulations, and trade-off analyses. (Reference SOW 2.0, G5, G7, G14, and G18; SOW 3.19, SE3; SOW 3.2, AW1; SOW 3.3 EAVS1)

2.1.3 The contractor shall provide technical input and recommendations to evaluate recommended system requirements, technical/test requirements, acceptance criteria and measuring as related to the suite of Apache Sensors. The contractor shall provide technical input and recommendations for integration of the latest technological advances and provide and maintain direct and continuing technical liaison with other Government entities. The contractor shall provide input, advice, and recommendations for should cost and other proposal evaluation/contracting efforts and technical input and recommendations for the planning, management and execution of aircraft enhancement programs. (Reference SOW 2.0, G6, G7, G8, G10, G13, G16; SOW 3.19, SE3)

2.2 Systems Engineering: The contractor shall provide technical engineering input and recommendations for Apache Sensors operational support systems and major items. Effort shall include:

2.2.1 The contractor shall provide technical input and recommendations to monitor product deliveries and fluctuations in production performance indicators and/or conduct assessments of performance relative to cost, schedule, technical requirements, and productivity. The contractor shall provide supplementary programmatic, operation, logistics, and technical input and recommendations by identifying requirements and performing analysis necessary to effectively transition from production to sustainment. (Reference SOW 3.8, IO1b, IO3)

2.2.2 The contractor shall provide technical input and recommendations with respect to understanding and evolving advances in Forward Looking Infrared (FLIR), scanning techniques, optical-mechanical approaches, electronics, lasers, and countermeasures. (Reference SOW 3.9, IR1, IR2, and IR3; SOW 3.10 ISP1 through ISP4; SOW 3.14 OL1; and SOW 3.19, SE7)

2.2.3 The contractor shall perform design implementation and facilitate coordination of engineering activities on Sensors' systems and major items. The contractor shall evaluate modification to Sensors' systems, training devices, and materiel to validate achievement of required specifications. The contractor shall provide technical input and recommendations in the planning and assumption of engineering services. The contractor shall recommend technical management methods and procedures. The contractor shall provide technical input and recommendations for Systems Engineering Management Teams, IPTs, Apache Readiness Improvement Program (ARIP), Integrated Logistics Support Management Teams (ILSMT) and Joint Technical Coordinating Groups. The contractor shall prepare engineering portions of Systems Master Plans, Development Plans, Acquisition Plans, Material Readiness Plans, and Reviews and Analysis. (Reference SOW 3.19, SE1, SE2)

2.2.4 The contractor shall provide technical interpretation and recommendation for proposed implementation instructions of technical program policies and procedures. The contractor shall provide technical review, analysis and recommendations for resolutions to complex problems/issues in the execution of Sensors' related contractual actions. (Reference SOW 3.19, SE2)

2.2.5 The contractor shall provide technical input and recommendations in the use of modeling and simulation and provide advice and recommendations to aggressively reduce software risk, integration risk, human factors risk, test and evaluation duration and cost, system integration, and training. (Reference SOW 3.19; SE2, SE3, and SE7; SOW 3.27, WSC1; SOW 3.21, SS1 through SS7)

2.2.6 The contractor shall plan, facilitate coordination, recommend, and/or provide technical liaison to Sensors' system design and engineering actions. The contractor shall participate in concept definition of aircraft systems/subsystems, and related equipment relative to technical support aspects. The contractor shall perform independent review of Material Changes made by the prime contractor or subcontractors. Reviews shall include an analysis of the cost effectiveness of the proposed improved features and ranking of these proposals with other proposals in order of priority of funding and application. The contractor shall perform analysis and recommendations to the Sensors' Product Manager. (Reference SOW 3.19, SE3)

2.2.7 The contractor shall provide technical engineering input and recommendations to the integrated logistics support (ILS) engineering activities such as operating and cost analyses, various working groups, input and recommendations for making level of repair determinations, maintainability demonstrations, and fielding plans. The contractor shall perform technical review and analysis of training and technical manuals. The contractor shall analyze documentation of predictions, analyses, and diagnostics and provide advice and recommendations as related to reliability, maintainability, and testability activities. (Reference SOW 3.19, SE4 and SE6)

2.2.8 The contractor shall provide technical and operational input and recommendations to tactical units by monitoring daily operational readiness of aircraft and provide technical advice and recommendations to enhance mission readiness. (Reference SOW 3.19, SE4, SE5, and SE6)

2.2.9 The contractor shall provide technical engineering input and recommendations to the integrated logistics support engineering activities such as new equipment training, depot maintenance, logistics support analysis, and technical publications. The contractor shall review, evaluate, and propose necessary action to resolve Category I & II Deficiency Report (DR) problems and other reported field problems that may have Sensors' design implications. The contractor shall develop and recommend field and depot maintenance/overhaul inspection criteria, limits, repair procedures, quality standards, hazardous materials replacements, and commercial replacements for military specifications/standards in technical manuals (TMs) and Depot Maintenance Work Requirements (DMWRs). (Reference SOW3.19, SE4, SE5, SE6)

2.2.10 The contractor shall provide input, advice and recommendations for the development of integration and test plans, test procedures, tooling, and test equipment. (Reference SOW 3.19, SE7)

2.2.11 The contractor shall provide technical analysis and recommendations for Sensors products, oversight reviews and material release to Aviation Applied Technologies Directorate (AATD), Aviation and Missile Command (AMCOM), Communications Electronics Command (CECOM), Program Executive Office (PEO), Army Materiel Command (AMC), Department of Army (DA), and/or Department of Defense (DOD). Provide technical input and recommendations for milestone reviews and working group meetings. (Reference SOW 3.19, SE7)

2.2.12 The contractor shall review, evaluate and/or prepare test plans and reports. Prepare project test costs. The contractor shall provide technical input and recommendations to facilitate coordination of tests. The contractor shall collect and analyze test data and report results and conclusions and provide analysis and recommendations. (Reference SOW 3.19, SE7; SOW 3.24, TE1 through TE5)

2.2.13 The contractor shall provide technical input and recommendations in the areas of advance systems concepts, technology integration, scientific information missions and system engineering support/materials consistent with R&D/technology plans and programs. The contractor shall update and maintain the Sensors' system engineering information assets, technical reports/presentations, and technology base program assets. The contractor shall review, analyze, and provide studies regarding new and revised engineering information for technical/maintenance publications. The contractor shall review operating limitations, emergency procedures, and performance data established by the airworthiness qualification process and evaluate and review DA Forms 2028, which require a system engineering determination. (Reference SOW 3.19, SE7, SE8)

2.2.14 The contractor shall provide technical input and recommendations in technology transfer and technology base programs. The contractor shall prepare documentation for Sensors' system development and engineering support as required for documentation and conference support. The contractor shall provide technical advice and engineering input concerning accident investigation report recommendations, aircraft grounding actions, Safety-of-Flight messages, and Aviation Safety Actions, Safety of Use, and Maintenance Information messages. The contractor shall provide technical input and recommendations for the development and implementation of plans, studies, briefings, letters of agreement, and MOUs related to co-production and Foreign Sales of Sensors' systems, subsystems, and selected major components. The contractor shall provide technical input and recommendations in conducting market research and evaluations of Non-Developmental and commercial off-the-shelf items. (Reference SOW 3.19, SE9, SE10, SE11, SE13, SE 14)

2.2.15 The contractor shall perform specialty technical area evaluations and recommend approval/disapproval of requests for deviations, waivers, and changes. (Reference SOW 3.19, SE11; SOW 3.23, TD2)

2.2.16 The contractor shall provide technical input and recommendations for review, analysis and recommendations for airworthiness qualification programs, in flight releases, airworthiness reviews, safety-of-flight reviews and preliminary and critical design reviews. (Reference SOW 3.19, SE11; SOW 3.2, AW1 through AW2; SOW 3.23 TD2)

2.2.17 The contractor shall provide technical engineering input and recommendations for operational support systems and major items. The contractor shall provide technical input and recommendations during the transition of systems.

2.3 The contractor shall provide technical input and recommendations at meetings, reviews and working groups consisting of preparation of briefings (content and visuals), development of agenda, preparation/update of schedules, and preparation, publication and distribution of presentation and briefing materials. Presentation Material shall be submitted in accordance with (IAW) DI-ADMN-81373, Contract Data Requirements List (CDRL) A004. Reports, Record of Meeting/Minutes shall be submitted IAW DI-ADMN-81505, CDRL A006. (Reference SOW 2.0 G17)

2.4 The contractor shall submit a Status Report for this effort IAW DI-MGMT-80368A, CDRL A001. The contractor shall submit a Contractor's Progress, Status, and Management Report for this effort IAW DI-MGMT-80227, CDRL A003.

3.0 TRAVEL:

3.1 Travel to Government sites and contractor facilities in CONUS and OCONUS shall be required in performance of this PWS. Prior to any official travel, the contractor shall obtain written approval from the designated COR.

3.2 For planning and estimating purposes, it is estimated that the following number of round trips will be required:

3.2.1 Travel within the CONUS is estimated as: From Huntsville, AL: One (1) four (4) day trip to Akron, OH, one (1) fourteen (14) day trip to APG, MD, four (4) five (5) day trips to Cherry Point, NC, two (2) three (3) day trips to Ft. Hood, TX, two (2) four (4) day trips to Ft. Riley, KS, ten (10) three (3) day trips to Ft. Rucker, AL, five (5) three (3) day trips to Ft. Worth, TX, one (1) three (3) day trip to Ft. Campbell KY, two (2) three (3) day trips to Jackson, MS, four (4) three (3) day trips to Melbourne, FL, ten (10) four (4) day trips to Mesa, AZ, two (2) four (4) day trips to Nashville, TN, forty two (42) four (4) day trips to Orlando, FL, one (1) seven (7) day to Owego, NY, two (2) four (4) day trips to San Diego, CA, two (2) four (4) day trips to Santa Clara, CA, one (1) seven day trip to Yuma, AZ, one (1) one hundred-twenty (120) day trip to Yuma, AZ, one (1) two hundred (200) day trip to Yuma, AZ. Travel for OCONUS: From Huntsville two (2), five (5) day trips to Heilbronn, Germany, four (4) five (5) day trips to Tel Aviv, Israel, three (3) five day trips to Edinburg, UK, two (2) fourteen (14) day trips to West Freugh, UK, one (1) five (5) day trip to London, UK..

3.3 Trip reports are required for only that travel made without a Government representative. Trip reports shall be submitted IAW DI-ADMN-81505, CDRL A006.

4.0 SECURITY: The contractor shall provide security to a level necessary to meet the requirements of the tasks requested. The contractor's work shall not be above a classification of SECRET. Contract personnel shall retain a SECRET level clearance for the duration of the task order. The contractor shall comply with all applicable security classification guides.

5.0 GOVERNMENT FURNISHED PROPERTY: In order to accomplish the efforts described in this PWS, the contractor will require access to the data and Government files related to the Apache Program. Onsite location of the contractor is considered to be the most cost effective for the Government, therefore, shall be performed onsite. Contractor personnel located onsite will be provided with Government furnished office furniture and computers, similar to that provided Government employees. The contractor shall be provided system access for data via SPIRNET.

6.0 DELIVERABLES: Data provided shall be delivered as follows:

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| 6.1 | DI-MGMT-80368A | Status Report | CDRL A001 |
| 6.2 | DI-MGMT-80227 | Contractor's Progress Status, | CDRL A003 |

		and Management Report	
6.3	DI-ADMN-81373	Presentation Material	CDRL A004
6.4	DI-ADMN-81505	Report, Record of Meeting/Minutes	CDRL A006

7.0 ACCOUNTING FOR CONTRACTOR SUPPORT: The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the contractor will report ALL contractor manpower (including subcontractor manpower) required for performance of this task order. The contractor is required to completely fill in all the information in the format using the following web address: <https://contractormanpower.army.pentagon.mil>. The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Technical Representative; (2) Contract number, including task and delivery order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor name, address, phone number, e-mail address, identity of contractor employee entering data; (5) Estimated direct labor hours (including subcontractors); (6) Estimated direct labor dollars paid for the reporting period (including subcontractors); (7) Total payments (including subcontractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC code for each subcontractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the contractor with its UIC for the purposes of reporting this information); (11) Locations where contractor and subcontractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided on website) (12) Presence of deployment or contingency contractor language; and (13) Number of contractor and subcontractor employees deployed in theater for the reporting period (by country). As part of its submission, the contractor will also provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period will be the period of performance not to exceed 12 months ending September 30 of each government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the web site. The specific formats for the XML direct transfer may be downloaded from the web site.

8.0 PERFORMANCE OBJECTIVES/METRICS: *The performance objectives, metrics, and incentives discussed below have been established for utilization under EXPRESS task orders and are set forth at Appendix A, Performance Requirements Summary Matrix. Utilization of different objectives/metrics will require the development of a separate task order Quality Assurance Surveillance Plan.*

8.1 This performance-based service task order incorporates the following performance objectives: (1) Delivery of high quality technical performance; (2) Adherence to TO schedule, milestone, and delivery requirements; and (3) Efficient and effective control of labor resources. It is the contractor's responsibility to employ the necessary resources to ensure accomplishment of these objectives. The Government's assessment of the contractor's performance in achieving these objectives will utilize the standards, acceptable quality levels, surveillance methods, and

performance incentives described in the Performance Requirements Summary matrix set forth in Appendix A. The performance incentives will be implemented via the Government's past performance assessment conducted in accordance with Part 42 of the Federal Acquisition Regulation (FAR), as applicable, and the "Task Order Performance" criteria of the annual award term evaluation, Basic BPA provision 45.

8.2. The performance objectives, standards, and acceptable quality levels shall be applied on a TO basis with performance incentives to be implemented on an annual basis. The Government will conduct informal interim counseling sessions with the contractor's Program/TO Manager to identify any active TO performance that is not meeting the acceptable quality levels. These sessions will be conducted at least on a quarterly basis in order to provide the contractor a fair opportunity to improve its performance level.

8.3 The Control of Labor Resources criteria will be reflected under the "Cost" category of the performance assessment. Although the criteria of Business Relations and Management of Key Personnel are not specifically included in the Performance Requirements Summary Matrix, the overall performance assessment will continue to include these criteria.

8.4. The contractor will be notified, in writing, of the Government's determination of its performance level for each performance objective including all instances where the contractor failed to meet the acceptable quality level.

APPENDIX A

PERFORMANCE REQUIREMENTS SUMMARY MATRIX

PERFORMANCE OBJECTIVE	PERFORMANCE STANDARD	ACCEPTABLE QUALITY LEVEL (AQL)	METHOD OF SURVEILLANCE	PERFORMANCE INCENTIVE
High Quality Technical Performance	<p>TO requirements met with little rework/re-performance required and with few minor and no significant problems encountered</p> <p><i>Performance meets all technical and functional requirements, and is highly responsive to changes in technical direction and/or the</i></p>	<p>Contractor delivery of products and/or services meets all TO requirements. Performance occurs with no required re-performance/rework at least 80% of time. Problems that are encountered are minor and resolved in a</p>	<p>Routine Inspection of Deliverable Products/Services</p>	<p>Assignment of performance rating for QUALITY criteria:</p> <p><u>EXCEPTIONAL</u> <i>Performance and deliverables meet all and exceed many TO requirements. Performance delivered with no required re-performance/rework at least 95% of time; problems that are encountered are minor and resolved in a highly effective manner.</i></p>

<p><i>technical support environment</i></p> <p><i>Assessments, evaluations, analyses, recommendations, and related input are thorough, reliable, highly relevant to TO requirements, and consist of substantial depth and breadth of subject matter</i></p> <p><i>Deliverable reports contain all required data and meet all applicable CDRL requirements</i></p>	<p>satisfactory manner.</p>		<p><u>VERY GOOD</u> <i>Performance and deliverables meet all and exceed some TO requirements. Performance delivered with no required re-performance/rework at least 90% of time; problems that are encountered are minor and resolved in an effective manner.</i></p> <p><u>SATISFACTORY</u> <i>Performance and deliverables meet all TO requirements. Performance delivered with no re-performance/rework at least 80% of time; problems that are encountered are minor and resolved in a satisfactory manner.</i></p> <p><u>MARGINAL</u> <i>Some TO requirements not met and/or performance delivered with re-performance/rework required more than 20% of time. Problems encountered were resolved in a less than satisfactory manner.</i></p> <p><u>UNSATISFACTORY</u> <i>Many TO requirements not met. Numerous re-performances/rework required. Substantial problems were encountered and inadequate corrective actions employed.</i></p>
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<p>Adherence to Schedule</p>	<p>TO milestones, periods of performance, and/or data submission dates are met or exceeded</p>	<p>Contractor meets TO delivery requirements at least 80% of the time (excluding gov't caused delays)</p>	<p>Routine Inspection of Deliverable Products/Services</p>	<p>Assignment of performance rating for SCHEDULE criteria:</p> <p><u>EXCEPTIONAL</u> <i>TO milestones/ performance dates met or exceeded at least 100% of time (excluding government caused delays)</i></p> <p><u>VERY GOOD</u> <i>TO milestones/ performance dates met or exceeded at least 90% of time (excluding government caused delays)</i></p> <p><u>SATISFACTORY</u> <i>TO milestones/ performance dates met or exceeded at least 80% of time (excluding government caused delays)</i></p> <p><u>MARGINAL</u> <i>TO milestones/ performance dates met less than 80% of time (excluding government caused delays)</i></p> <p><u>UNSATISFACTORY</u> <i>TO schedule/performance dates met less than 70% of time</i></p>
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<p>Control of Labor Resources</p>	<p>Contract labor mix is controlled in efficient and effective manner</p>	<p>Actual TO labor resource mix is maintained within 20% of originally awarded TO resource mix</p>	<p>Routine Inspection of TO Performance, Performance/Cost Reports, Payment Invoices</p>	<p>Assignment of performance rating for COST CONTROL criteria:</p> <p><u>EXCEPTIONAL</u> <i>Actual TO resource mix maintained within 10% of originally awarded TO resource mix</i></p> <p><u>VERY GOOD</u> <i>Actual TO resource mix maintained within 15% of originally awarded TO resource mix</i></p> <p><u>SATISFACTORY</u> <i>Actual TO resource mix maintained within 20% of originally awarded TO resource mix</i></p> <p><u>MARGINAL</u> <i>Actual TO resource mix maintained within 25% of originally awarded TO resource mix</i></p> <p><u>UNSATISFACTORY</u> <i>Actual TO resource mix exceeds 25% of originally awarded TO resource mix</i></p>
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