

**Performance Work Statement  
For  
Test Support Services Contract  
28 February 2011**

U.S. Army Yuma Proving Ground  
Yuma, Arizona 85365-9124

**The pronoun and forms of the pronoun ‘you’ refers to the contractor. The pronoun and forms of the pronoun ‘we’ refers to the government.**

**‘Include’ and ‘including’ shall infer ‘include, but not limited to’ and ‘including, but not limited to’ respectively.**

## TABLE OF CONTENTS

<p><b>C.1 GENERAL.....3</b></p> <p>C.1.1 SCOPE OF WORK.....3</p> <p>C.1.2 HOURS OF OPERATION: .....5</p> <p>C.1.3 PERSONNEL AND QUALIFICATIONS....6</p> <p>C.1.4 VEHICLE CONTROL .....9</p> <p>C.1.5 CONTRACT MANAGEMENT .....10</p> <p>C.1.6 QUALITY MANAGEMENT .....12</p> <p>C.1.7 GOVERNMENT QA.....12</p> <p>C.1.8 PROCUREMENT .....13</p> <p>C.1.9 SECURITY .....14</p> <p>C.1.10 GOVERNMENT OBSERVATIONS.....18</p> <p>C.1.11 GOVERNMENT OPERATION INTERFACE 18</p> <p>C.1.12 FRAUD, WASTE, AND ABUSE.....18</p> <p>C.1.13 CONSERVATION OF UTILITIES .....18</p> <p>C.1.14 FIRE PROTECTION.....18</p> <p>C.1.15 ACCIDENT REPORTING .....18</p> <p>C.1.16 SAFETY, HAZMAT &amp; ENVIRONMENT 19</p> <p>C.1.17 RANGE SCHEDULING .....20</p> <p>C.1.18 FILES .....20</p> <p>C.1.19 DISCLOSURE OF INFORMATION.....20</p> <p>C.1.20 SMOKING.....20</p> <p>C.1.21 TRAINING .....20</p> <p>C.1.22 CONTINGENCIES .....22</p> <p>C.1.23 KR CHANGEOVER .....23</p> <p>C.1.24 COORDINATION WITH OTHER KRS ..23</p> <p>C.1.25 APPROVED SOFTWARE .....23</p> <p><b>C.2 DEFINITIONS .....24</b></p> <p>C.2.1 STANDARD DEFINITIONS .....24</p> <p>C.2.2 TECHNICAL DEFINITIONS .....26</p> <p>C.2.3 ACRONYMS AND ABBREVIATIONS...37</p> <p><b>C.3 GOVERNMENT FURNISHED.....42</b></p>	<p>C.3.1 PROPERTY ..... 42</p> <p>C.3.2 SERVICES..... 44</p> <p>C.3.3 UTILITIES..... 45</p> <p><b>C.4 CONTRACTOR FURNISHED..... 47</b></p> <p>C.4.1 PROPERTY ..... 47</p> <p>C.4.2 SERVICES..... 47</p> <p>C.4.3 MAINTENANCE AND REPAIR..... 50</p> <p>C.4.4 CUSTODIAL SERVICES ..... 50</p> <p><b>C.5 SPECIFIC TASKS ..... 51</b></p> <p>C.5.1 PROGRAM MANAGEMENT ...5251</p> <p>C.5.2 ASSIGNMENTS ..... 52</p> <p>C.5.3 ELECTRONIC INSTRUMENTATION OPS. 53</p> <p>C.5.4 OPTICAL &amp; GEODETIC INST. OPS.... 59</p> <p>C.5.5 METROLOGY AND SIMULATION OPS. 61</p> <p>C.5.6 COMPUTATION AND AUTOMATION . 70</p> <p>C.5.7 TEST OPERATIONS AND MAINTENANCE..71</p> <p>C.5.8 AMMUNITION MANAGEMENT OPERATIONS..... 88</p> <p>C.5.9 TECHNICAL &amp; ENGINEERING SPECIAL SERVICES..... 92</p> <p>C.5.10 RANGE COMMUNICATION OPERATIONS..... 92</p> <p>C.5.11 COMMUNICATIONS &amp; INFORMATION MANAGEMENT OPERATIONS. .... 95</p> <p>C.5.12 DATA MANAGEMENT AND TEST COORDINATION .....112</p> <p><b>C.6 Applicable Documents.....102</b></p> <p>C.6.1 PUBLICATIONS.....102</p> <p>C.6.2 LIST OF TECHNICAL EXHIBITS .....107</p>
--	---

## C.1 General

### C.1.1 Scope of Work

You shall provide personnel, management, and any other items and services not government furnished to perform the services defined in this work statement. Services shall be performed in support of U.S. Army Yuma Proving Ground (USAYPG), Yuma Test Center (YTC), Cold Region Test Center (CRTC), and Tropic Region Test Center (TRTC) and shall be performed at those locations or as otherwise directed for offsite accomplishment of the work. You shall perform to the standards and specifications in the contract.

C.1.1.1 The primary mission of the USAYPG is to support our Nation at War by providing the most flexible, responsive, innovative and diverse set of capabilities and services across the spectrum of natural environments. The current requirement is to procure specialized personnel and expertise to help support that mission. Testing can take place at any or all of the USAYPG's three subordinate test facilities referenced in paragraph C.1.1. Recognized as a premier Army asset, the USAYPG's capabilities continue to expand, thereby increasing the need for personnel to support the testing created by those capabilities. The functional areas for which augmented or full contract support is required are briefly defined below and further defined within the Performance Work Statement (PWS). The figures shown represent an estimated percentage for each functional area of the overall contract.

- **Electronic Instrumentation Operation** - The contractor will be required to operate and maintain various electronic instrumentation devices at both permanent and fixed sites, and on mobile equipment assigned to various test sites, gun positions, and other facilities throughout the USAYPG range areas. Specifically, support will be required for television/video instrumentation, telemetry instrumentation systems, range timing systems, instrumentation tracking radar systems, ballistics measurement systems, automotive instrumentation systems, moving target assets and peripheral equipment necessary to operate and maintain range instrumentation and associated equipment in a state of the art capacity.

- **Optical & Geodetic Instrumentation Operation** - The contractor will be required to provide technical imagery using standard, high speed and infrared cameras. The images will be captured in the performance of testing in Munitions & Weapons, Air Combat & Soldier Systems, Combat Automotive Systems and Combat Firing Systems. The contractor will also be required to provide USAYPG customers with precision coordinate locations (X/Y/Z) of test events such as projectile impact/explosion, and to provide precision alignment of weapons systems to ensure correct orientation with respect to the expected impact of the projectile.

- **Metrology & Simulation Operation** - The contractor will be required to provide operation and /or maintenance support for various types of climatic temperature chambers, dynamic shock and vibration equipment, and flash x-ray systems. Operation support is also required in the area of physical measurements of test ammunition,

center of gravity, field of view, and field of fire on test vehicles. Other support provided is the updating of a gun tube database, transportation of test munitions to and from the various test facilities, calibration and temperature recorder controllers and drop tests ranging from 3 feet to 40 feet.

- **Computation and Automation** - The contractor will be required to 1) operate a Real Time Data Center for the purpose of consolidating, formatting, quality checking, synchronizing, framing and otherwise processing data received in real-time from a variety of sources on the ranges 2) perform systematic data reduction of raw data collected from a variety of field instrumentation 3) provide computer software programming to include mathematical and statistical support 4) provide systems management of all equipment in support of real time data processing and data reduction 5) design, organize and develop databases for storage and retrieval of a wide range of test data 6) administer the Random Access Memory (RAM) test database system for the USAYPG Command to include the CRTC and TRTC 7) manage the Magnetic Media Library 8) operate and secure the YPG digital data network system as well as the Secret Internet Protocol Network (SIPRNET) 9) operate and maintain the USAYPG Business Systems Computer Operations 10) maintain all personal computers used to support the USAYPG test mission and 11) provide system administration database, GIS support, development, enhancements and configuration management of the Test Collaboration Server (TCS) environment.

- **Operations and Maintenance** - The contractor will be required to provide operation and maintenance support for artillery, aircraft, small arms, armored weapon systems and tactical vehicle systems which consists of calibration, repair, fabrication, welding, machining, cleaning, loading and unloading, modification, troubleshooting, gun position set-up and tear down, observation, measurement and recording of data. The contractor will be required to operate artillery weapons, fixed, towed, and self propelled, for the weapon systems and ammunitions. Maintenance performance may require utilizing specialized equipment, tools, and parts. Air Delivery tests performance and maintenance may be a combination of one or more functions (i.e. construct, inspect, repair, pack and unpack personnel and cargo parachutes, prepare and rig airdrops of equipment, ammunition and vehicles. The contractor will also be responsible for maintaining the fleet of USAYPG's test vehicles and equipment to include the GSA fleet, heavy equipment fleet, auxiliary power units, and target vehicle assets.

- **Range Management Operations** - The contractor will be required to perform the range scheduling function to develop the weekly and daily schedules in accordance with the priorities set by the USAYPG. The contractor will also be required to operate the Range Access Center to issue range passes for all personnel requiring access to any portion of YPG that is controlled by a security guard, police officer, electric gate or padlock entry.

- **Technical and Engineering Special Services** - The contractor will be required to perform test engineering and technical analysis services, special studies, and other technical tasks. These services may include the design, planning, coordination, execution, and reporting on test programs of military equipment.

- **Range Communication Operations** - The contractor will be required to perform range communication services. Services to be provided include 1) installing and maintaining cabling and fiber for network connectivity, 2) configuration management and maintenance for the radio and trunk sites, ground-to-air radios, and all emergency phone lines for both the administrative and test sites, and 3) configuration management for “as-built” drawings for all telephone nodes, fiber optic lines, and network connectivity for the USAYPG.
- **Information Management Operations** - The contractor will be required to 1) provide telecommunication services, 2) provide computer aided design (CAD) drawing support services, 3) provide configuration management support services on telecommunications systems, automated information systems, and their interfaces, 4) provide design and engineering services for telecommunications systems, subsystems, and components, 5) provide records management services in support of the USAYPG Records Management Officer, 6) provide print order services, 7) operate the USAYPG Publications Office, 8) provide visual information services, and 9) provide computer systems support for all business systems at the USAYPG.
- **Data Management and Test Coordination** - The contractor will be required to 1) provide clerical/data entry support, and 2) provide test reports writing and technical writing support services.

### **C.1.2 Hours of Operation:**

- **Normal.** The normal hours of operation are 0630 to 1700, with a half-hour for lunch normally scheduled 1130 to 1200, four days a week, Monday through Thursday, subject to change by direction of the Commander. Your personnel will be required to change their work hours to reflect the standard hours adopted by Yuma Proving Ground (YPG). When work is required outside YPG, hours will be adapted to reflect the remote sites.
- **Other.** Specific work hours are based on test mission requirements and are published in the weekly and daily test schedules, and/or directed by a responsible government agent. You shall provide support for scheduled requirements using the best labor mix or scheduling method i.e. part time, straight time, flex time, over time, shift work, and/or tours-of-duty utilizing various alternate-work-schedules.
- **Legal Holidays.** The following ten (10) legal holidays are recognized as paid time off for contract employees in accordance with the incorporated Area Wage Determinations (AWD) for each service area (Arizona, Alaska, etc). Changes to the below recognized holidays will be issued by the KO referencing the AWD revision number:
  - New Year's Day - 1st of January
  - Martin Luther King Jr's Birthday - 3rd Monday in January

- President's Day - 3rd Monday in February
- Memorial Day - last Monday in May
- Independence Day - 4th of July
- Labor Day - 1st Monday in September
- Columbus Day - 2nd Monday in October
- Veteran's Day - 11th of November
- Thanksgiving Day - 4th Thursday in November
- Christmas Day - 25th of December
- **\*\*Good Friday (for Alaska employees only)** - Friday preceding Easter Sunday

Holidays will be observed on the nearest scheduled workday. For personnel working YPG's normal operating hours (i.e. that of a Monday through Thursday), holidays falling on Friday or Saturday will be observed on the preceding Thursday and those falling on Sunday will be observed on the succeeding Monday. No additional holiday time will be granted for those employees working an alternate schedule (such as those employees whose normal work shift is Monday thru Friday; whereas Friday is the scheduled holiday, this is the only day granted as a holiday).

- **Call-Backs.** Qualified personnel shall be available or on-call 24 hours a day, 365 days a year to perform the on-call services described in section C.5.
- **Indirect Overtime.** The Contractor shall obtain written approval from the Contracting Officer Representative for all non-test related overtime IAW with the current YTC Overtime Policy.
- **Direct Overtime.** The Contractor shall obtain a written approval for all test related overtime IAW the current YTC Overtime Policy.
- **Administrative Time-Off.** At times additional time off may be granted to DA Civilian and/or Military employees as recognized by Executive Order/Presidential Proclamation (such as the day before Christmas or the day preceding New Year's Day), or by the YPG Commander for activities such as Organizational Day. This granting of administrative leave may not be entitled to contractor employees. Allowance of additional administrative leave for contractor employees (including subcontractors) will be at the discretion of the KO and will be issued in writing to the Program Manager.
- **Base Closures.** As directed by the Commander instances of base closure or stand-downs for purposes of National Security, Inclement Weather or other Natural Disasters may be necessary for the safety/security of base employees. You will be provided instructions by the KO on how to proceed during these events.

### **C.1.3 Personnel and Qualifications**

Your personnel shall remain employees of the contractor and will not be considered employees of the Government. You shall possess a flexible organization to provide a quick-reaction capability to meet last-minute mission changes and requirements. Personnel must be versatile and readily adaptive to range equipment reconfiguration, upgrading, and modernization. To keep pace with a continuously changing technical environment, they must be willing to train and be trained.

**C.1.3.1 CONFLICT OF INTEREST**

- You shall not employ off-duty Government personnel, nor a spouse or dependent child of Government personnel, if such employment would create a conflict of interest.
- In order to maintain YPG's reputation, you shall be an independent and impartial tester by informing us of all potential proprietary information conflicts. It is our intent that your staff not be involved in testing equipment that you or a parent company also produce.

**C.1.3.2 CONDUCT OF PERSONNEL.** 18 USC 1382 (1972) gives the installation commander the authority to bar individuals from the installation. The Contracting Officer (KO) may require the removal of any Contractor (KR) employee for reasons of misconduct security, or being under the influence of incapacitating agents.

**C.1.3.3 PROGRAM MANAGER.** You shall provide an onsite designated representative who shall be physically present during normal duty hours to conduct overall management coordination and furnish liaison with the Government. The designated representative shall be the point of contact with the Government and shall have the authority to act or make decisions for you on all matters pertaining to the contract. The designated or alternate representative shall be available during normal duty hours within 30 minutes after notification to meet on the installation with Government personnel designated by the KO to discuss problem areas. After normal hours, the designated or alternate representative shall be available on site within one hour.

**C.1.3.4 ALTERNATE.** You shall designate an alternate representative who shall be authorized to act on your behalf in the absence of the designated representative.

**C.1.3.5 RECALL ROSTER.** You shall provide name, address, and telephone number for both the designated and alternate representatives to the KO within 5 workdays following contract award. You shall verbally notify the KO of changes as they occur and provide written changes no later than 24 hours after effective date of the change.

**C.1.3.6 IDENTIFICATION BADGES.** You shall make and issue your personnel badges to be worn in a conspicuous place on exterior clothing (badge is not to be worn loose in situations where it poses a safety hazard i.e. when doing maintenance). The badge shall display the employee's picture, last name, first name, and job title. It shall also bear your company name and logo.

C.1.3.7 *WORKSPACE.* Contractor workspace (office, laboratory, and desk) shall contain a sign signifying the space is occupied by “contractor employee(s)” to ensure that Federal employee and the public know that they are not Federal employee.

C.1.3.8 *WORK ENVIRONMENT.* Contractor employees shall identify themselves by name and company affiliation when answering the telephone, presenting briefings, conducting or attending meetings/seminars or any other situations where their contractor status is not obvious.

C.1.3.9 *WORK CORRESPONDENCE.* All contractor correspondence (written, facsimile, and email display) shall include their company name and any other documents or reports produced by contractors are identified as contractor products or contractor participation is disclosed.

C.1.3.10 *UNIFORMS.* Your personnel are not required to wear uniforms; however, they shall be dressed appropriately for a professional workplace.

C.1.3.11 *PERSONAL APPEARANCE.* Your personnel shall practice high standards of personal hygiene and maintain a clean, neat appearance while on duty.

C.1.3.12 *QUALIFICATIONS.* Personnel performing work under the contract shall: Read, write, speak, and understand the English language, and be a US citizen (natural or naturalized). Possess training, certification(s), and experience commensurate with the work they will perform, and level of responsibility they will exercise.

C.1.3.12.1 You shall have as a minimum 5 years experience in 70% of the following functional areas and 2 years in all other areas:

- Electronic Instrumentation
- Optical Instrumentation
- Metrology and Simulation
- Computation and Automation
- Operations and Maintenance
- Munitions
- Range Management
- Technical and Engineering Services
- Range Communications
- Information Management

C.1.3.13 *CONTRACTOR PERSONNEL IDENTIFICATION.* At least 30 days prior to beginning performance, you shall submit to the KO a listing of all key personnel who will be working under the contract. The list shall include Employee's:

- Full name
- Social security number
- Citizenship and naturalization number, if applicable
- Work assignment
- Qualifications, including training, certification(s), and experience

C.1.3.14 ***SUBSTITUTION OF CONTRACTOR KEY PERSONNEL.*** You shall assign those key persons and subcontractors whose resumes and firms were submitted with your proposal and accepted by award of this contract. No substitutions shall be made except in accordance with this paragraph. All proposed substitutions must be submitted in writing to the KO 30 days (180 days if security clearance is to be obtained) in advance of the proposed substitutions with the following information. All requests for substitutions must provide a detailed explanation of the circumstances necessitating the proposed substitutions, a complete resume for the proposed substitute or subcontractor qualifications, and any other information requested by the KO necessary to either approve or disapprove the proposed substitution. All proposed substitutes must have qualifications that are equal to or higher than the qualifications of the person or subcontractor originally proposed and be qualified in accordance with your proposed qualification standards for key personnel that were accepted by award of this contract. The KO or an authorized representative thereof will evaluate such requests and promptly notify you of our approval or disapproval thereof. You shall include the substance of this clause in any subcontract which you award under this contract. Should you fail to provide a suitable substitute as determined by the KO, this contract may be terminated for default.

#### **C.1.4 Vehicle Control**

##### **C.1.4.1 *VEHICLE REGISTRATION***

C.1.4.1.1 ***STATE REGISTRATION.*** Motor vehicles entering YPG shall have a valid state license. Vehicles shall be registered prior to commencement of contract work. State license and registration shall be maintained current during the time the vehicle is in use on this installation.

C.1.4.1.2 ***INSTALLATION REGISTRATION.*** You and your personnel shall comply with any installation vehicle registration requirements that may be implemented during the life of the contract. Required forms may be obtained through the local Police Desk or on the YPG intranet.

##### **C.1.4.2 *VEHICLE OPERATION***

C.1.4.2.1 ***STATE CLASSES A, B, C & D DRIVER LICENSE.*** Your personnel operating motor vehicles on the installation shall have a valid state operator's license for the category of vehicle being operated, and shall comply with AR 190-5 (Motor Vehicle Traffic Supervision and the Installation Traffic and Mobilization Plan regarding motor vehicle use on the installation). A DoD Form 220, "Department of Defense Registered Vehicle" decal will be issued and affixed to the vehicle. The decal is an accountable item and will be issued and turned into the issuing agency when no longer needed, superseded, or upon expiration or termination of employment at YPG.

C.1.4.2.2 ***COMMERCIAL DRIVER LICENSE ENDORSEMENTS.*** Your employees hauling

ammunition or other hazardous materials shall have the appropriate Hazardous Materials endorsements to their commercial driver's license.

C.1.4.2.3 *MILITARY DRIVER LICENSE.* Your employees operating Government owned vehicles, including heavy equipment shall also have a valid Government operator's license for the category of vehicle or equipment being operated. AR 600-55 (The Army Driver and Operator Standardization Program) and YPG-SOP LO-120 (SOP for Training and Issue of a Military Driver License) governs the issuance of Government operator's licenses at YPG. STEYP-ADJ External SOP No. 8-10-93 (Procedures for Suspension of 346 for Government-Owned Motor Vehicle Accidents), and YPG SOP MT-EN-5001(SOP for Mobility Testing) also apply.

### **C.1.5 Contract Management.** You shall:

C.1.5.1 Continuously evaluate the adequacy and effectiveness of all areas of the operation. This will include appraisals of all company elements to assure the effective safeguarding, control and utilization of resources. The data resulting from the evaluation efforts shall be made available to us upon request. You shall place special emphasis on achieving and maintaining the proper mix of appropriately qualified managerial, professional, technical, craft, and support personnel to economically accomplish the contractual objectives. All proposed substitutes to key management personnel will be approved by the Contracting Officer and must have qualifications that are equal to or higher than the qualifications of the person or subcontractor to be replaced. You shall provide clearly defined policies and procedures for effective and responsive project management. You shall provide a management system that incorporates continuing quality and process improvement.

C.1.5.2 Manage your work force by tracking and analyzing hiring and termination trends, versus the number of personnel employed by category and organization. Your hiring, training, and cross-training plans (Reference C.1.121.6) shall be thus designed to quickly adapt to future needs and at a minimized cost.

C.1.5.3 Conduct a continuing cost reduction program that incorporates intensive appraisal of all elements influencing the cost of contract performance. You shall reduce expenditures to the minimum necessary for satisfactory performance in accordance with normally acceptable engineering or industrial practices and standards. A Cost Reduction Plan is due thirty (30) days after contract full performance.

C.1.5.4 Establish and maintain a financial tracking system that is compatible with the current Government financial system (Enterprise; Standard Operations and Maintenance Army Research (SOMARDS); ATEC Decision Support System (ADSS); Contractor Information Management System (CIMS) and will meet the reporting requirements of C.4.2. In the event should the Government's financial system change during the life of the contract, your system will be compatible. You shall provide Contracting Officer Designated Government personnel "read only" access to your database/spreadsheets for data review. A list of these designated Government

personnel will be provided to you thirty (30) days after contract full performance.

C.1.5.5 Establish a software description database for each distinct type of position required in the performance of the specific services. Each such position description shall properly describe the nature of the work and the duties of the incumbent. Each such position shall be kept current. Such position descriptions will become our property and may be released as part of any competitive solicitation of proposals. You will use job titles that are the same as those in the Department of Labor (DOL) publication titled "Service Contract Act Directory of Occupations." Rationale and justification will be provided for those positions that do not match those in the DOL listing. You shall provide Contracting Officer Designated Government personnel "read only" access to your database for data review. A list of these designated Government personnel will be provided to you thirty (30) days after contract full performance.

C.1.5.6 *Electronic Invoicing.* In accordance with DFARS 252.232-7003 - Electronic Submission of Payment Requests - you are required to submit your request for payment (invoicing) thru the Wide Area Workflow (WAWF) electronic invoicing application. Instructions for registering and submitting electronic invoices using WAWF can be found at <https://wawf.eb.mil>. Web-based training on the procedures to use WAWF can be found at <https://wawftraining.com>.

C.1.5.7 *Accounting for Contract Services.* The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where you will report ALL contractor manpower (including subcontractor manpower) required for performance of this contract. You are required to completely fill in all the information in the format using the following web address:  
<http://cmra.army.mil>.

The required information includes:

- Contracting Office, Contracting Officer, Contracting Officer's Technical Representative;
- Contract number, including task and delivery order number;
- Beginning and ending dates covered by reporting period;
- Contractor name, address, phone number, e-mail address, identity of contractor employee entering data;
- Estimated direct labor hours (including subcontractors);
- Estimated direct labor dollars paid this reporting period (including subcontractors);
- Total payments (including subcontractors);
- Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each subcontractor if different);
- 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);

- 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);
- Presence of deployment or contingency contract language, and,
- Number of contractor and subcontractor employees deployed in theater this reporting period (by country).

As part of your submission, you 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 30 September of each government fiscal year and must be reported by 31 October of each calendar year.

### **C.1.6 Quality Management**

You shall implement a program that identifies your methodology for performance of Quality Control and Quality Assurance functions. A Quality Management Plan shall be provided to the KO at least 10 workdays prior to full performance. The KO/Government will make final review and acceptance of the plan and any subsequent changes within 30 after submission. Changes to the plan shall be submitted to the KO not later than 10 workdays prior to effective date of change. We will make final review and acceptance of the plan within 3 workdays after receipt. Annual updates will be required at the onset of the contract award date.

- The basic tenant of the plan is that you are responsible for quality. All methods, procedures, and forms shall support this concept. The plan shall:
- Be structured to assure independence from any other parts of your organization.
- Have direct accountability to your top management.
- Address overall project management and administration.
- Be a comprehensive program to plan and deliver quality services.
- Cover all services described in the contract, prioritize services, and concentrate on the most important services.
- Describe a method of identifying deficiencies and address processes for corrective action.
- Establish an inspection system covering all services.
- Contain specific quality control techniques for contract services.
- Require documentation of all control inspections and corrective actions.
- Verify key-process integrity via random quality assurance audit.
- Describe methods of direct and indirect communications.

### **C.1.7 Government QA**

We will monitor your performance using the quality assurance procedures specified in *Technical Exhibit 2c (Quality Assurance Surveillance Plan (QASP))*.

**C.1.7.1 PERFORMANCE EVALUATION MEETINGS.** Your designated representative shall meet with the KO at least once weekly during the first quarter of the contract to discuss performance. Thereafter, the KO will schedule meetings as

determined necessary.

## **C.1.8 Procurement**

### **C.1.8.1 Procurement Plan**

A Procurement Plan shall be provided to the KO at least 10 work days prior to full performance. The KO will review for approval within 30 days after submission. It shall explain in detail how the services, parts, supplies, materials, and equipment will be invoiced back to the Government. The plan shall include procedures to ensure that maximum effort is made to control costs and promote competition while purchasing parts, supplies, materials, equipment, and subcontracted services. Develop and prepare a Small Business Plan, IAW with goals and requirements from the Contracting Office. These plans will be approved by the KO Office thirty (30) days after submission, and will be reviewed and updated annually. As a minimum, the plan shall:

### **C.1.8.2 Approval authorities are:**

- The KO for equipment purchases directly charged to the contract.
- The KO for all credit card purchases over \$2,500.00. The Quality Assurance Evaluators (QAE) (if no QAE then the Contracting Officer Representative (COR) for purchases against their respective recoupment accounts.
- The Test Officer (TO) or designated funds custodian for purchases against their respective direct accounts.
- A designated member of your management staff shall approve all overhead purchases. The KO for any subcontracting actions.
- Your funds custodian shall manage to budget. When funds drop to the 75% level, a report will be sent to the KO. The report will indicate if remaining funds will suffice for the rest of the fiscal year, or if shortfall condition exists. In the case of a shortage, the report will explain both the cause and required get-well funding.

**C.1.8.3** Accounting and fund citations will be provided to you by the COR at the beginning of each fiscal year for the purposes of purchasing consumables for contract performance. Tracking will be required for all supply purchases for this account and you will be required to balance this account at the end of each invoice cycle

**C.1.8.4** For equipment submitted to the Electro-Optical Maintenance shop (see reference C.5.4.10) for maintenance and repair. Government Furnished Property (GFP) is referenced C.3.1. The following guidelines are applicable:

- Repair parts will be ordered In Accordance With (IAW) the approved procurement procedures.
- Repairs/modifications/upgrades beyond the capabilities of the shop will be sent to the manufacturer or returned to the owner.
- You shall assume the equipment maintenance support mission for much of the test equipment maintenance/support services you will be using. You are to use

in-house capability or subcontract for that support.

C.1.8.5 All purchasing and replacement of computers and IT equipment shall be accomplished IAW Computer, Hardware, Enterprise, Software and Solutions (CHESS) (formally known as ASCP) and approved Network Enterprise Center (NEC) process.

### **C.1.9 Security**

C.1.9.1 **SECURITY REQUIREMENTS.** Any of your personnel or representatives entering YPG shall abide by all security regulations and shall be subject to security checks. Visit requests are required for all individuals working under this contract.

C.1.9.1.1 **Search and Seizure.** Your personnel and property shall be subject to search and seizure upon entering, while on and upon leaving the confines of YPG.

C.1.9.1.2 **Facility Clearance.** On site facility clearance shall be governed by the approved DD254 of this contract; however, processing delay must remain minimal. Instructions for the safeguarding of classified information will be indicated on the DD Form 254 issued to you with this statement of work.

C.1.9.1.3 **Personnel Security Clearances.** You shall apply for security clearances for your personnel prior to start of full performance. You shall initiate security clearance action in accordance with DOD 5220-22.M (National Industrial Security Program Operating Manual (NISPOM)). Positions requiring clearances must be manned by personnel with the appropriate clearance throughout the duration of the contract. Personnel involved with Arms, Ammunition, and Explosives (AA&E) must comply with AR 190-11. Personnel who have not received security clearances will not:

- Be granted access to classified information.
- Be allowed to perform classified work.
- Be granted access to restricted areas, unless escorted by a person having proper clearance and authorization.
- Handle AA&E material, unless escorted by a person having proper clearance and authorization.

C.1.9.1.4 **Communications Security (COMSEC).** You may be required to become an Alternate COMSEC Custodian or a COMSEC Hand Receipt (HR) holder for cryptographic security equipment under the main YPG COMSEC Account. All applicable guidance, regulations, accountability, documentation, and training will be completed and retained as required.

C.5.9.3.1 **PASSES**

C.1.9.2.1 **Common Access Card.** All contractor employees who require access onto the installation, have need of computer access or when authorized to travel under terms of the contract shall comply with the requirements to obtain and maintain a Common

Access Card (CAC). Prior to possession of the CAC, applicant must have a favorable FBI fingerprint check and National Agency Check with Inquiries (NACI) submitted to the Office of Personnel and Management (OPM). Application for the CAC card is obtained by contacting the Contracting Officer Representative's (COR) Office for completion of this requirement. In order to acquire the CAC card the contractor employees shall present an identification card containing their name and a recent photograph. Proper identification with their social security number is also required. The application will be submitted in the Contractor Verification System (CVS) by the CORs office and processed for issuance.

C.1.9.2.2 *Range Passes.* Contractor employees working in the Kofa Firing Range (KFR), Cibola, and North Cibola ranges shall be issued passes. Visitors and contractor employees, who do not work on the ranges, may be required, on an occasional basis, to obtain a range pass. Employees shall apply for a temporary (1 Day) pass and must be escorted by a permanent pass issued employee. Contractor employees with issued passes shall not permit others to use their passes, nor shall they be used for personal identification outside YPG. Anyone found allowing this to happen could be subject to disciplinary action that may result in termination. You shall be held accountable for all passes issued to your personnel, and inventory them and maintain a record for inspection purposes. If a pass is lost, a report shall be filed immediately with Range Access Center, Police Services, Directorate of Emergency Services. All passes shall be returned to Range Access Center at the completion of the contract, when employees are terminated, or when date of expiration on pass has expired. Failure to comply with this requirement shall result in final payment being withheld until we/you account for all passes.

C.1.9.2.3 *Departing Employees.* You shall ensure all contractor employees return security photographic identification cards, permits, Common Access Cards (CAC), government driver's licenses/permits, Government property, all vehicle decals, keys, photo passes, range passes, sensor access (slide) cards and access to the Local Area Network (LAN) email has been canceled. An employee/installation clearance form will be developed by the contractor to certify that an employee has returned all required badges, permits and other accountable items. All out-processing contractor employee CAC cards must be returned to the Garrison Human Resources Office no later than the next business day after the employee has cleared the installation.

C.1.9.3 *Physical Security.* You shall develop and implement a physical security plan in accordance with guidance contained in AR 190-13 (The Army Physical Security Program), AR 190-51 (Security of Unclassified Army Property AR 25-2 (Information Assurance) and DOD 5100.76M (Physical Security of Sensitive Conventional AAE). The physical security plan shall include all government property and equipment furnished for the performance of the contract and describes how you will prevent unauthorized access, vandalism, pilferage, larceny, and arson. The physical security plan shall be submitted to the KO at the post-award conference or 30 calendar days prior to contract full performance, whichever comes first. KO will review for approval within 30 days after submission. We will make final review and acceptance of the physical security plan and any subsequent changes. Changes to the physical security plan shall be submitted to

the KO not later than 10 calendar days prior to effective date of change. We will not be responsible in any way for damage to your supplies, materials, equipment, and property or to your personnel's personal belongings that are damaged or destroyed by fire, theft, vandalism, accidental means, or natural disaster.

C.1.9.3.1 *Key Control.* You shall be responsible for keys we provide you. Keys shall not be duplicated except as authorized by United States Army Yuma Proving Ground's (USAYPG's) Keys/Locks Custodian, or used by unauthorized personnel. Procedures for safeguarding keys shall be included in the physical security plan.

C.1.9.3.2 You shall report any occurrence of duplicated, misplaced or lost key to the KO within 2 hours after discovery of occurrence, and submit a written report to the KO by close of business the next work day. The written report shall provide complete details relating to duplication, misplaced key, or loss.

C.1.9.3.3 In the event a key is duplicated, misplaced, or lost, all keys for that system will be replaced by USAYPG's Keys/Locks Custodian. You shall reimburse us for replacement of locks or re-keying required as a result of keys being duplicated, misplaced, or lost by you or your personnel. You shall also reimburse the Government for property lost or stolen as a result of unauthorized key duplication, misplaced key, or loss of key by you or your personnel.

C.1.9.3.4 *Lock Combinations.* You shall establish procedures ensuring lock combinations are not revealed to unauthorized persons and ensure the procedures are implemented.

C.1.9.4 *Information Security.* You shall provide the additional security requirements cited in *Section H* of this contract and in the DD 254 (Department of Defense Contract Security Classification Specification).

C.1.9.4.1 *Classified.* The security requirements for these services are classified up to the Top Secret level. Employees shall have the appropriate clearance, a need-to-know justification, and type of investigation prior to being permitted access to classified information. Requests shall be submitted IAW DOD 5220-22.M (National Industrial Security Program Operating Manual).

C.1.9.4.2 *Sensitive Compartmented Information (SCI).* On occasion security requirements for SCI may be requested. Employees shall have the appropriate clearance, a need-to-know justification, and type of investigation prior to being permitted access to SCI information. Requests shall be submitted IAW DoD 5220-22.M and controlled and safeguarded IAW AR 380-40, AR 380-5, and AR 380-381.

C.1.9.4.3 *Sensitive.* All personnel will have a National Agency Check/National Agency Check Investigation (NAC/NACI) per AR 380-67 (The Department of Army Personnel Security Program). You will initiate that action as quickly as possible. It is preferable that a favorable NAC be completed prior to the employee starting work, as they will not be permitted to work on the installation if the result comes back negative.

C.1.9.4.4 *Automation Security Requirements.* You shall comply with AR 25-2 (Information Assurance), applicable supplements thereto, and current applicable accreditation documentation for computer systems. Prior to your personnel being allowed to utilize an automated information system, they must have received favorably status via a National Agency Check/National Agency Check Investigation (NAC/NACI). Use of privately owned computers is prohibited at YPG without prior written consent of the Automated Information System (AIS) Information Assurance Manager (IAM).

C.1.9.5 *Security Inspections.* You shall be subject to announced and unannounced security inspections. Inspection reports shall be provided to you through the COR.

C.1.9.6 *Information Assurance (IA) Requirements.*

C.1.9.6.1 The contractor shall comply with DOD 5200-40, DOD 8510-1M, DOD 8500.1, DOD 8500.2, DOD 8570.1-M and AR 25-2 and applicable supplements thereto and current applicable accreditation documentation for computer systems. Current accreditation standards as stated in the DIACAP requirement in AR 25-2.

- IT I - Background Investigation or Special Background Investigation.
- IT II - National Agency Check or Agency Check with Inquiries.
- IT III - National Agency check, Entrance National Agency Check or National Agency Check with Inquiries.
- IT IV – Favorable review of the SP 85P and Supplemental Questionnaire will be completed. For intermittent or seasonal employees (Example unofficial volunteers or summer hire positions).

C.1.9.6.2 Contractor employees performing on this contract in positions designated ADP I, ADP II, and ADP III sensitive positions, per AR 380-67, paragraph 3-614, and Appendix K will have appropriate investigations as identified C.1.9.6.1: **NOTE: Per AR 25-2, Information Technology (IT) is also known as ADP.**

C.1.9.6.3 Per DoD 8570.1-M, Contractor employees performing on this contract in positions designated Information Assurance Management (IAM) and Information Assurance Technical (IAT) will be certified according to the level they are performing in as previously stated above C.1.9.6.1. Employees not having the appropriate training and certifications, as contingency of employment, will obtain all certifications within 6 months of initial employment. Uncertified IAT Level Is are not authorized to have unsupervised privileged access to IA systems.

C.1.9.6.4 Appropriate operating system certification and all commercial certification requirements for information assurance technical/management level positions as required by DoD 8570.01-M.

C.1.9.6.5 Employees who possess a security clearance granted by Defense Security System (DSS) shall not be reprocessed for applicable investigation identified above.

C.1.9.6.6 The Contractor shall prepare a listing of ADP sensitive positions containing the below listed information, a copy shall be maintained for records, and a copy forwarded to Intelligence & Security.

C.1.9.6.7 Documentation will be required to be submitted to the IA Office for all new and existing IT systems and/or equipment to be incorporated into the YPG accreditation.

C.1.9.6.8 Contractors will comply with all requirements stated in AR 25-2.

**C.1.10 Government Observations**

You shall provide access to government owned facilities you operate for observation or inspection by any government agency or individual authorized access by the KO. Our personnel will not interfere with your performance.

**C.1.11 Government Operation Interface**

Performance of work by your personnel under the terms of the contract shall not interfere with our regularly scheduled operational activities.

**C.1.12 Fraud, Waste, and Abuse**

Your personnel shall be encouraged to be alert to and report suspected situations of fraud, waste, and abuse.

**C.1.13 Conservation of Utilities**

Your personnel shall practice utilities conservation and shall operate under conditions which preclude waste of utilities. The contractor shall abide by the Army Regulation AR11-27 with the use of his assigned buildings. The contractor shall report monthly to the base Energy Manager the assigned building(s) energy condition elements as required by AR11-27.

**C.1.14 Fire Protection**

You shall comply with the local fire prevention and protection requirements of YPG R 420-1 and AR 520-90 (Fire Prevention and Protection).

**C.1.15 Accident Reporting**

C.1.15.1 You shall maintain an accurate record of accidents involving employee use of or damage or injury to Government Facilities, equipment, or personnel. All accidents shall be reported IAW Chapter 2, YPGR 385-1 (Yuma Proving Ground Safety and Occupational Health Program).

C.1.15.2 If we elect to conduct an investigation of the accident, you shall cooperate fully and assist our personnel until the investigation is completed.

C.1.15.3 A one (1) hour notification to the YTC's Commander and the COR's Office

for all Commanders Critical Incident Review (CCIR) is required.

**C.1.16 Safety, HAZMAT & Environment**

C.1.16.1 You shall develop and implement a safety plan that safeguards all government property to include workplace inspections. The plan shall provide for the safety and well-being of personnel (Collateral Duty Safety Officer's shall participate in workplace inspections and coordinate with management to correct deficiencies found during inspections, reference **Chapter 3, YPGR 385-1 Yuma Proving Ground Safety and Occupational Health Program**).

C.1.16.2 You shall establish a safety training program that:

- Meets applicable state and federal hazardous material regulations
- Meets applicable state and federal environmental regulations
- Has pre-established incident handling and reporting procedures

C.1.16.3 The plan shall incorporate the policies set forth in the C.6.1 M coded publications having titles containing the words protection, prevention, safety, and certification. It shall be submitted to the KO at least 10 workdays prior to commencing performance. Revisions shall be submitted at least three calendar days prior to implementation.

C.1.16.4 *General.* You shall comply with the Occupational Safety and Health Act (OSHA). Your personnel shall wear safety items required by OSHA during the performance of tasks requiring protective equipment or clothing.

C.1.16.5 *Range Safety.* The contractor will develop and maintain their own range safety SOPs in subordinate to YPG's Range Operations YP-YTPO-P-1000 SOP. In the event of a discrepancy, YPG's YP-YTPO-P-1000 SOP takes precedence.

C.1.16.6 *Experience Factor.* Your workman's compensation insurance experience factor shall not exceed 90%.

C.1.16.7 *Identification of Ozone Depleting Substances*

a. The following required class I Ozone Depleting Substances (ODS) have been identified and approved for use under performance of any resultant contract:

- None.
- (List any approved ODS requirements):

---



---



---

b. If during performance of the contract, an unapproved Class I ODS is discovered, the contractor is encouraged to notify the contracting officer immediately.

c. The ODS restrictions apply to subcontracts as well.

#### *C.1.16.7.1 Class I Ozone Depleting Substances*

a. Per Section 326 of Public Law 102-484, effective 1 Jun 93, specifications and standards cannot require the use of Class I ozone-depleting substances (ODS) without approval. There are some cases where a specification or standard allows the use of an ODS, but does not specifically require its use. A situation of this type does not require substitution under the law.

b. If this requirement allows, but does not require, the use of a Class 1 ODS, although it is not mandatory for the contractor to use a non-ODS substance, the contractor is encouraged to give preference to using the non-ODS choice.

### **C.1.17 Range Scheduling**

You shall participate in the YPG range scheduling process to the extent you support YPG's test mission. You shall be responsible for determining your support requirements prior to attending scheduling meetings.

### **C.1.18 Files**

You shall maintain complete and accurate files of documentation, records, and reports required by the contract. You shall not allow access to the files by any government agency, non-government agency, or individual unless specifically authorized by the KO. All files shall become our property at contract termination.

### **C.1.19 Disclosure of Information**

C.1.19.1 Neither you nor your personnel shall divulge or release data or information developed or obtained under the contract without the approval of the KO.

C.1.19.2 Disclosure without authorization may subject you or your employees to criminal liability under Title 18, Sections 793 and 798 of the United States Code (USC).

C.1.19.3 You shall direct to the KO all inquiries, comments, or complaints arising from matters observed, experienced, or learned as a result of, or in connection with the performance of the contract, the resolution of which may require the dissemination of official information.

C.1.19.4 Inquires you receive for Freedom of Information Act (FOIA) information shall be directed to the YPG Adjutant, KO, or COR for evaluation under the current Freedom of Information Act. We retain the authority to release or deny access to the information. You shall be responsible for search and submission of records under your control upon our request.

### **C.1.20 Smoking**

Smoking is prohibited in all government buildings and vehicles.

### **C.1.21 Training**

C.1.21.1 As the inactive areas are activated, we will provide as needed (determined by the KO) start-up training to the initial cadre of your employees as applicable to the execution of their duties. Your personnel hired during the duration of the contract will be trained by your existing staff.

C.1.21.2 We may periodically provide in-service training to your personnel on a space available basis. You shall submit to the KO or COR a written request for space for your personnel.

C.1.21.3 Your employees are eligible to enroll in local courses and to participate in Government and private training courses requiring temporary duty (travel) when it is a Government requirement as determined by the KO or designated representative. We will fund actual training cost, and travel IAW FAR (Federal Acquisition Regulation) 31.205-46 (Travel Costs). You shall be required to repay the Government for costs should the employee(s) fail to successfully complete the training (i.e. receive an incomplete or a grade of "D" or below).

C.1.21.4 To ensure that your employees retain suitable and adequate qualifications, key personnel will be afforded training as above for such things as seminars, workshops, or educational courses required by the Government and determined by the KO. You shall allow training of persons requiring such. It then becomes your responsibility for dissemination of that knowledge throughout your workforce. We expect your trained personnel, upon completion of training to cross-train others.

C.1.21.5 At times, your employees may require 'vendor specific' training. This type of training, on a case-by-case basis, requires pre-approval. The Government shall fund training for new equipment and additional capabilities not covered under existing training. Should an employee with specialized training leave YPG, you shall replace that individual with another individual with same qualifications. If you are unable to fill 'hard to find / specialty' positions with equitable qualifications and pay (for the vacated position), then you will coordinate with the Government.

### **C.1.21.6 *CONTRACTOR TRAINING PLAN***

You shall manage your training program for compliance with vocational needs as well as mandated Security, safety, and environmental requirements. You shall formulate and submit a comprehensive Training, Qualification, and Certification Plan for your employees. This plan shall include, as a minimum:

- A detailed description of how you will establish and ensure a fully qualified work force throughout the life of the contract.

- Specific milestones, frequencies, or intervals as to when any training, qualification, or certification will occur.
- Specific methods and procedures as to how the training, qualification, or certification will be accomplished to include Plans of Instruction (POIs).
- Specific areas in which the training, qualification, or certification will be accomplished.
- The extent or level to which the training, qualification, or certification will be accomplished.
- The anticipated number and position of those personnel that will require training, qualification, or certification.
- The number and position of those personnel that will conduct training, qualification, and certification.

C.1.21.7 You shall submit a Training, Qualification, and Certification Plan to the KO not later than ten (10) days prior to full performance conference, and upon revision, for acceptance or rejection by the Government. You shall not deviate from the approved plan without the written consent of the KO. Review of this plan will be, at a minimum annually, or when significant changes are needed.

C.1.21.8 You agree to indemnify and hold the United States harmless, whether in tort or in contract, for any and all loss or liability for injury to or death of your personnel in transit to or from or during the period of attendance at any training or school provided by the United States, whether such training or schooling is provided for under contract with or by the United States. This indemnification and hold-harmless agreement shall apply whether or not the training or school is provided for under contract between the parties to this agreement.

C.1.21.9 Travel - You shall provide representation at all mandatory conferences and workshops as deemed necessary by the KO. We will fund travel IAW FAR 31.205-46 (Travel Costs) and the Joint Federal Travel Regulations (JFTR). Follow current guidance and SOP for all OCONUS travel requirements.

C.1.21.10 Theatre Support - You may be tasked to provide on a voluntary temporary-duty (TDY) basis test engineering and related support services for testing, evaluating and analyzing DoD systems in Iraq/Afghanistan or other theatres of operations. These services may be provided as part of the ATEC Forward Operational Assessment (FOA) Team or other special assignments designed to evaluate DoD equipment deployed in war zones. Contractors will be working under the technical direction of FOA team leaders or others to provide support. See TE-7 for additional clarification/information. Following current guidance and SOP for all OCONUS travel, Theatre test engineering and related support as required by FOA.

C.1.21.11 Mandatory Training - During the course of the contract the government may mandate training for all personnel on the installation. This training may be computer based or instructor based training as requirements are passed down. Contractor personnel will be expected to participate with these training requirements

and report compliancy to the COR office.

### **C.1.22 Contingencies**

We must plan to meet mission requirements in event of mobilization, natural disaster, or labor disputes. We must be able to react to such events without undue delay. Sudden or unusual events could result in a great impact upon your performance and contract requirements. As an aid to properly plan for such events, you shall prepare a detailed contingency plan that is due thirty (30) days after contract full performance and will be reviewed on an annual basis. This plan will specifically cover the method or methods you will use in meeting contract requirements under the following circumstances:

- Natural Disasters such as flash floods and earthquakes.
- Labor disputes and strikes.
- Mobilization or a sudden build-up of forces.
- Acts or threats of terrorism.

### **C.1.23 KR Changeover**

We reserve the right to conduct site visits to all facilities operated by you in conjunction with the solicitation of offers for the successor contract. In the event, the successor contract is awarded to another KR, you may have up to a 90-day transition period upon written KO approval, to include training and access to files, to permit an orderly changeover to the successor. With regard to the successor's access to incumbent employees, a recruitment notice may be placed in each facility.

### **C.1.24 Coordination with Other KRs**

We may undertake or award other contracts for additional or other work. You shall fully cooperate with such other contractors and government employees and carefully fit your own work to such additional work. You shall not commit or permit any act, which will interfere with the performance of work by any other contractor or by a government employee.

### **C.1.25 Approved Software**

You shall utilize YPG's current Army approved desktop licenses and software (see paragraph C.2.2.122) for softcopy submissions. All other software that the contractor may need to put on our network needs to go through the net worthiness process. The regulations that pertain to certification of net worthiness are Army Policy Memo, dated 2 April 2003; AR 25-1, Army Knowledge Management and Information Technology; and AR 25-2, Information Assurance.

## **C.2 Definitions**

Definitions are contained in AR 310-25 (Dictionary of United States Army Terms). For the purpose of the contract, those specified below shall also apply.

### **C.2.1 Standard Definitions.**

**C.2.1.1 Acceptable Quality Level (AQL).** The maximum percent defective, maximum number of defects per hundred units, or number of defects in the lot that can be considered satisfactory on the average, or degree of deviation from perfect performance for such specific contract requirement before the Government will consider contract performance unacceptable. As long as the defective performance does not exceed the AQL, the service will not be rejected by the Government. An AQL does not imply that you may knowingly perform in an unsatisfactory manner. It implies that the Government recognizes that defective performance sometimes happens unintentionally.

**C.2.1.2 Contract Administrator/Administrative Contracting Officer.** The official Government representative delegated authority by the KO to administer a contract. This individual, normally working in an appropriate contracting or procurement career field, advises on all administrative contractual matters.

**C.2.1.3 Contract Discrepancy.** If it occurs, it will be a failure of your personnel to perform in accordance with contract requirements and specifications. A contract discrepancy may result from your failure to provide, or provide on time, the required contract products or services; or it may result because delivered products or services do not meet specific contract standards.

**C.2.1.4 Contract Discrepancy Report (CDR).** A report used to document unsatisfactory performance (DA5479-R). The CDR shall require you to explain, in writing, why performance is unsatisfactory; how performance shall be returned to satisfactory levels; and how recurrence of the problem shall be prevented in the future. Customer comments can be made through the automated Contractor Database, DA 5479-R or through the automated email system.

**C.2.1.5 Contracting Officer (KO).** A person duly appointed with the authority to enter into and administer contracts on behalf of the Government.

**C.2.1.6 Contracting Officer's Representative (COR).** An individual designated in writing by the KO to act as their authorized representative to perform specific contract administrative and technical functions as defined in their appointment letter. Provides liaison between you and the KO.

**C.2.1.7 Contractor (KR).** You, your subsidiaries and affiliates, joint ventures involving you, or any entity which you may have merged or any individual or entity that assisted or advised you in the preparation of a proposal under this solicitation.

**C.2.1.8 Customer Complaint Record.** Customer comments can be made by one (1) of three (3) ways: DA 5477-R; Contractor Database; or through the email system.

**C.2.1.9 Defect.** Any non-conformance of a unit of service with specified requirements.

C.2.1.10 **Government Furnished Property (GFP).** All equipment, goods, and land possessed by us and, subsequently delivered or otherwise made available to you.

C.2.1.11 **Lot.** A collection of service outputs from which a sample is to be drawn and inspected to determine conformance with the standard.

C.2.1.12 **Lot Size.** The number of service outputs in a lot.

C.2.1.13 **One Hundred Percent Inspection.** Performance monitoring in which every occurrence of a performed service is examined.

C.2.1.14 **Percent of Sample Found Defective.** The number of products or services found to be unacceptable by us, divided by the total number sampled. This number is used to help determine the acceptability of your performance.

C.2.1.15 **Performance Indicator.** A characteristic of an output of a work process that can be measured.

C.2.1.16 **Performance Requirements Summary (PRS).** Identifies the key service outputs of the contract that will be evaluated by us to assure contract performance standards are met by you. (Other services may also be inspected under the authority of the Inspection of Services Clause.)

C.2.1.17 **Property Administrator.** An individual appointed by the KO and delegated the specific authority to monitor Government-Furnished Property (GFP), except Real Property, furnished to you.

C.2.1.18 **Quality Assurance.** Those actions taken to assure that the quality of purchased goods and services received are acceptable in accordance with established standards and requirements of the contract.

C.2.1.19 **Quality Assurance Evaluator (QAE).** A person who monitors technical quality and provides liaison between you and the COR. Will be appointed in writing by the COR.

C.2.1.20 **Quality Assurance Surveillance Plan (QASP).** A written document used for quality assurance surveillance. The document contains specific methods to perform surveillance of the Quality Control process.

C.2.1.21 **Quality Control.** Those actions taken by you to control the production of goods or services so that they meet the requirements of the contract.

C.2.1.22 **Random Number Table.** A table of numbers arranged in random fashion; a table used to select random samples. NOTE: Random numbers may be selected by computer software.

- C.2.1.23 **Random Sample.** A sampling method whereby each service output in a lot has an equal chance of being selected.
- C.2.1.24 **Random Sampling.** A method for looking at a few individual items in a lot to measure the quality of that lot against a standard.
- C.2.1.25 **Sample.** A sample consists of one or more service outputs drawn from a lot in accordance with random sampling procedures to be evaluated by our personnel.
- C.2.1.26 **Sampling Guide.** The part of the surveillance plan that has the information needed to perform a random sample.
- C.2.1.27 **Sampling Plan.** A plan that indicates the Acceptable Quality Level (AQL), the number of units from each lot that are to be inspected (sample size), and the criteria for determining the acceptability of the lot (acceptance and rejection numbers).
- C.2.1.28 **Sample Size.** A number of outputs in the sample; a group of one or more tasks drawn from the specified performance.
- C.2.1.29 **Specification.** A description of the technical requirements for a material, product or service.
- C.2.1.30 **Standard.** An acknowledged measure of comparison. Standards are usually based on quality or timeliness. A standard may be an expression of time, size, or number, or a written description of required quality.

## **C.2.2 Technical Definitions.**

- C.2.2.1 **Accounting Management.** The process of identifying individual and group access to various network resources to ensure proper access capabilities (bandwidth and security) or to properly charge the various individuals and departments. Note the contract does not contain charge accounting tasks.
- C.2.2.2 **Account Process Code (APC).** A designated four-character alphanumeric code that identifies a particular cost account, which will be used in accounting for expenditures under this contract.
- C.2.2.3 **Accreditation.** A formal declaration by a designated authority (Directorate of Law Enforcement at YPG) that the AIS is approved to operate in a particular security mode using a prescribed set of safeguards.
- C.2.2.4 **Accreditation Documentation.** Documentation used by the designated accreditation authority to accredit the AIS.
- C.2.2.5 **Acquisition Strategy.** The steps for project execution from project initiation through post-production or post-installation support. We anticipate this

strategy will usually be limited to those who have purchasing and installation responsibilities.

**C.2.2.6 Advisory Document.** A document which you may use for information and guidance but is not binding for compliance.

**C.2.2.7 Alternate Work Schedule.** Tours of duty differing from the Normal YPG Operations Hours of 6:30 a.m. to 5:00 p.m. Mondays through Thursdays.

**C.2.2.8 Audiovisual (AV) Production.** An organized and unified presentation developed according to a plan or script, containing visual imagery, sound, or both, and used to convey information.

**C.2.2.9 Authorized Parts listing (APL).** Repair parts stocked IAW authorized parts listings published in Technical Manuals for standard military vehicles.

**C.2.2.10 Automated Information Systems (AIS).** Any assembly of computer hardware, software, or firmware configured to collect, create, communicate, compute, disseminate, process, store, or control data or information in an electronic form. AIS include stand-alone computers, small computers, word processors, multi-user computers, terminals, and networks.

**C.2.2.11 Breakdown.** The failure of equipment or a component that requires correction to restore it to operating condition.

**C.2.2.12 Calendar Day.** The time from midnight to midnight.

**C.2.2.13 Computer Network Access.** The process of connecting computer systems to a computer network.

**C.2.2.14 Configuration Management.** A discipline applying technical and administrative direction and surveillance to (1) identify and document the functional and physical characteristics of a configuration item, (2) control changes to those characteristics, and (3) record and report change processing and implementation status.

**C.2.2.15 Conservation.** The protection, improvement, and use of natural resources according to standards that will protect the public and still support the military mission.

**C.2.2.16 Cross-Training.** Vocational training provided to your personnel by your personnel. The training is designed to equip the employee with the capability of either performing in more than one technical area, or to operate a new piece of equipment. If needed for fulfillment of an immediate surge requirement, the training may be fast paced with both the instructor's and student's time dedicated solely to training. Since that action would require our prior approval, we expect most instances of cross training to be accomplished through the slower paced OJT method.

C.2.2.17 **Customer Premise Equipment (CPE).** Communications equipment such as PBS switches, origination/termination adapters, multiplexers, modems, codecs, routers, telephone hand set, personal computer, and etceteras.

C.2.2.18 **Database Administrator.** An individual responsible for the design and management of the database and for the evaluation, selection and implementation of the database management system.

C.2.2.19 **Department of the Army Circular (DA Cir).** An official Army publication that usually contains information of a general but temporary nature.

C.2.2.20 **Department of the Army Pamphlet (DA Pam).** An official Army publication that provides guidance and assistance with performance of procedures required by Army Regulations (ARs) or other statutory documents.

C.2.2.21 **Detailed Estimate.** The estimated cost of a project, based on the itemized cost of equipment, material, and labor cost derived from established standards or historical data.

C.2.2.22 **Design.** A plan, sketch, drawing, and/or detailed description of how an item is to be developed and completed.

C.2.2.23 **Direct Labor Cost.** (See below)

C.2.2.23.1 **Specific Direct Labor Costs.** Costs which can be directly associated to the conduct of a specific test. These costs are billed directly to the appropriate customer using established labor rates.

C.2.2.23.2 **Allocated Direct Labor Costs.** Costs that are incurred in supporting a variety of tests, and which are allocated, or billed, to specific tests as services are provided using an established rate.

C.2.2.24 **Emergency Work.** Work that requires immediate action to: prevent loss or damage to Government property, restore essential services that had been disrupted by a breakdown of utilities, or eliminate hazards that threaten the life or well being of personnel.

C.2.2.25 **Equipment.** Items used to perform maintenance and service tasks.

C.2.2.26 **Expendable.** Items that are consumed in use or lose their identity when installed in or incorporated into another item. Expendables are dropped from stock record accounts when issued or used, and include such items as certain repair parts, fuel, and cleaning materials.

C.2.2.27 **Fair Wear and Tear (FWT).** The loss or impairment of the appearance, effectiveness, work, or utility of an item that has occurred solely because of the normal and customary use of the item for its intended purpose.

- C.2.2.28 **Fire Prevention.** Actions to eliminate construction deficiencies, personal habits and attitudes, equipment failures, and other situations to reduce the possibility of fire breaking out.
- C.2.2.29 **Fire Protection.** Action, including all aspects of engineering, prevention, suppression, and related rescue operations, designed to protect from exposure to, or loss of life and property from fire.
- C.2.2.30 **Firing Range.** A group of firing points where weapons firing is conducted.
- C.2.2.31 **Fiscal Year.** A period of 12 months beginning 1 October and ending 30 September of the following calendar year.
- C.2.2.32 **Fleet Support Package (FSP).** Repair parts stocked for test fleet vehicles.
- C.2.2.33 **Government-Furnished Equipment (GFE).** Non-expendable items furnished by us for your use during contract performance.
- C.2.2.34 **Government-Furnished Facilities (GFF).** Facilities furnished by us for your use during contract performance.
- C.2.2.35 **Government-Furnished Materials (GFM).** Expendable items furnished by us for your use during contract performance.
- C.2.2.36 **Hand-Receipt Item.** An item of Government property that must be accounted for IAW AR 710-2.
- C.2.2.37 **Hardcopy Transfer.** Information distributed by manual methods. Involves the use of paper as the data storage device.
- C.2.2.38 **Hull Down.** A place in which an armored vehicle can be positioned in such a manner that the muzzle of its gun/launcher is the lowest part of the vehicle exposed to the battlefield.
- C.2.2.39 **Improved Grounds.** Grounds on which intensive development and maintenance measures are performed.
- C.2.2.40 **Indirect Labor Cost.** Costs which are incurred in the general support of all tests, but which cannot be directly associated to any one specific test or group of tests. These costs are funded using Direct Test Support funds.
- C.2.2.41 **Information Mission Area (IMA).** The resource requirements and associated information management activities employed in the development, use, integration, and management of information. The IMA include all resources and activities employed in the acquisition, development, collection, processing, integration,

transmission, dissemination, distribution, use, retention, retrieval, maintenance, access, disposal, and management of information. Information resources include doctrine, policy, data, equipment, and applications and related personnel, services, facilities, and organizations.

**C.2.2.42 Information Requirement.** The expression of need for data or information to carry out specified and authorized function or management purposes that require the establishment or maintenance of forms or formats, or reporting or record keeping systems, whether manual or automated.

**C.2.2.43 Information System (IS).** An organized assembly of resources and procedures designed to provide information needs to execute or accomplish a specific task or function. Information system equipment consists of components (for example: hardware, software, firmware, products, or other items) used to create, record, produce, store, retrieve, process, transmit, disseminate, present, or display data or information.

**C.2.2.44 In Kind.** Refers to items that are issued in the form of actual supplies, equipment, or materials instead of a monetary allowance.

**C.2.2.45 Inside Plant.** Refers to the hardware that connects to the internal side of the main distribution frame in a central office (the equipment that makes the actual connection enabling one party to communicate with another). The term also applies to CPE and associated wiring. For purposes of this contract, the CPE items customer's telephone and customer's computer are excluded.

**C.2.2.46 Inside Plant Cabling.** Cabling within a customer's premises that is used for internal communications or to connect CPE to the network interface or outside plant. For purposes of this contract, any carrier line at the customer's location that connects to a carrier's products and services is excluded.

**C.2.2.47 Installed Equipment.** Items and furnishings that are required to make the facility usable and that are affixed as a permanent part of the structure.

**C.2.2.48 Installation Closure.** The cancellation of all nonessential work and dismissal or delayed reporting of nonessential personnel. An installation closure may be caused by a catastrophic event; a natural disaster such as incapacitating storms, Federal holidays, or training days.

**C.2.2.49 Integrated Facilities Mini/Micro (IFS-M).** The worldwide Standard Army Management Information System (STAMIS) database management system, developed by the Center for Public Works (CPW), for real property management, work estimates, job cost accounting, service orders, and contract administration.

**C.2.2.50 Intermediate (Direct Support) Equipment Maintenance.** Maintenance tasks, services, and inspections performed IAW AR 750-1 and applicable (-30 level) equipment TMs or other technical publications.

**C.2.2.51 Intermediate (General Support) Equipment Maintenance.**

Maintenance tasks services and inspections performed IAW AR 750-1 and applicable (-30 level) equipment TMs or other technical publications.

**C.2.2.52 In-Service Training.** A form of vocational training provided by the Government and given to the Contractor's onboard staff. Although the student's labor is charged to contract overhead, the cost of the trainer is not.

**C.2.2.53 Like Inventory.** Inventory equivalent to, or, better than, that originally provided, adjusted for changes in technology or industry standards.

**C.2.2.54 Mandatory Document.** A directive, obliging you to perform the effort strictly in accordance with the method, specified in the directive to meet the stated results of the directive. These mandates may be challenged; however, changes shall only take place upon receipt of a written waiver signed by the COR and the KO.

**C.2.2.55 Material.** Items that lose their identity when incorporated into another item or that is consumed in use. Items referred to as material in the contract include assemblies, components, parts, raw and processed bulk items, and other supplies that may be consumed in normal use in performance of the contract.

**C.2.2.56 Mission Essential Part (MEP).** Repair parts stocked to meet mission needs, but otherwise not authorized. This usually consists of items having a demonstrated or an anticipated short life in desert environments.

**C.2.2.57 Mobilization.** The process of assembling and placing the manpower and materiel resources of the nation's military in a state of readiness for war.

**C.2.2.58 Moving Target.** A person or vehicle target that moves.

**C.2.2.59 Moving Tank Target Carrier (MTTC).** A carrier on which targets are affixed that simulate a moving person or vehicle. Carriers are normally powered by gasoline engines or a cabling system powered by a modified vehicle.

**C.2.2.60 Network Configuration.** The process of identifying, tracking and modifying the setup of devices on the network.

**C.2.2.61 Network Management.** The process of controlling a computer network to maximize its efficiency and productivity. Network management is divided into five categories: fault management, accounting management, network configuration, security management, and performance management.

**C.2.2.62 Non-Expendable Property.** Property that is not consumed in use and retains its original identity during use. Examples are machines, power tools, vehicles, hand tools, and furniture.

**C.2.2.63 Normal Tour of Duty.** An employee's regular work schedule. Under the

Alternate Work Schedule concept, it is pre-scheduled as 80 hours every two weeks. Typical tours are (10 ea. 8 hour days), (8 ea. 10 hour days), and (8 ea. 9 hour days plus an 8 hour day). Work performed beyond the normal tour of duty is considered overtime.

C.2.2.64 **On Order.** A term that refers to supplies for which a formal MILSTRIP request has been submitted and accepted into the Army supply system, or for which the KO has made a formal commitment. The term "on order" shall not include requests for supplies that have not yet been accepted or acted upon by us.

C.2.2.65 **On the Job Training (OJT).** An informal method of vocational training provided to contractor personnel by contractor personnel. In practice, an inexperienced person learns from experienced personnel while working on the job. Generally, all time is charged to direct, as the primary focus is on production.

C.2.2.66 **Operations Plan.** Supplemental documentation for a specific test program, providing detailed guidance not readily available in test plans, Technical Manuals, Test Operating Procedures, Schedule Requests, etc. This document provides mission profiles, special test requirements or precautions, special operational procedures and details, and other pertinent information.

C.2.2.67 **Operator Equipment Maintenance.** Basic maintenance tasks, services and inspections performed by the equipment operator IAW AR 750-1 and applicable (-10 level) TMs or other equipment technical publications.

C.2.2.68 **Organizational and Shop Equipment.** Government-furnished tools and test equipment that must be signed for.

C.2.2.69 **Organizational Equipment Maintenance.** Unit maintenance tasks, services and inspections beyond the capability of the equipment operator, performed IAW AR 750-1 and applicable (-20 level) TMs or other equipment technical publications.

C.2.2.70 **Outside Plant.** That part of the plant extending from the line side of the main distribution frame to the line side of the station or PBS protector or connecting block, or to the line side of the main distribution frame in another dial central office building. Includes pole lines, conduit systems, duct work, terminal cabinets, repeaters, and rural distribution systems.

C.2.2.71 **Outside Plant Cable.** Any cable used outside of a building and forming the toll and local distribution cable networks. As opposed to inside plant cable.

C.2.2.72 **Participating Organization.** Any private entity other than the KR participating in the performance of requirements of this contract under any subcontract, teaming arrangement, or other agreement or arrangement. Organizations merely cooperating (e.g., providing information) to enable the KR or a Participating Organization to perform shall not be deemed to be "participating" hereunder.

C.2.2.73 **Proprietary Information.** All information so designated herein or marked

with a legend to that effect and either entitled to protection as such in accordance with recognized legal principles or under a clause in a relevant government contract. Examples include technical data, software, or software documentation delivered under a government contract with other than unlimited rights, trade secrets, and sensitive financial information. Proprietary information may appear in cost or pricing data or may involve classified information. Test data, test results, product performance, and product characteristics of an item under test, which become known to you or one of your Participating Organizations by virtue of performance of this contract are refutably presumed to be proprietary information and shall be treated as such by you and/or your Participating Organization unless known to be otherwise.

**C.2.2.74 Performance Management.** The process of measuring the performance of various computer network components. This also includes taking measures to optimize the network for maximum system performance (periodically measuring the use of network resources).

**C.2.2.75 Policing Grounds.** The pickup and disposal of debris, trash, litter, ammunition casings, and other waste material from improved and unimproved grounds.

**C.2.2.76 Preventive Maintenance.** The systematic care, servicing, and inspection of: equipment, utility plants and systems, buildings and structures, and grounds. This will detect faults, make corrections, prevent costly damages, and preserve components. Examples of preventive maintenance tasks are renewal of disposable filters, painting, caulking, and greasing.

**C.2.2.77 Primary Targets.** Those specific targets identified with a scenario that is to be activated as part of the training exercises.

**C.2.2.78 Publications.** Items of information that are printed or reproduced, whether mechanically or electronically, for distribution or dissemination usually to a predetermined audience. Generally, they are directives, books, pamphlets, posters, forms, manuals, brochures, magazines, and newspapers produced in any media by or for the Army.

**C.2.2.79 Quality Assurance Evaluator (QAE).** A person who monitors technical quality and provides liaison between you and the COR. Will be appointed in writing by the COR.

**C.2.2.80 Range Control, Operations Section.** The control center for the YPG ranges complex. All range directions, especially safety, are initiated through this section.

**C.2.2.81 Range Officer (RO).** One of our employees who supervises and enforces installation range safety and coordinates and schedules range use, maintenance, modification, and installation of ranges and training facilities IAW applicable regulations and policies.

C.2.2.82 **Range Safety Officer (RSO).** A qualified person who represents the officer in charge (OIC) of firing. The RSO is responsible to the OIC for ensuring that the safety precautions during firing operations are adequate. The RSO also makes the final determination (before firing begins) if settings placed on indirect-fire weapons and ammunition are within prescribed safety limits.

C.2.2.83 **Range/training Area Complex.** The area of the YPG Military Installation containing weapons-firing ranges and unit-training areas.

C.2.2.84 **Real Property.** All facilities, installed equipment, grounds and improvements to grounds, and non-building facilities such as roads, signs, flagpoles, and fencing.

C.2.2.85 **Real-Property Facility.** A separate and individual building, structure, utility system, or other real-property improvements.

C.2.2.86 **Rebuild.** (Depot level Maintenance) Maintenance tasks services and inspections performed IAW AR 750-1 and applicable (-40 level) equipment TMs or other technical publications.

C.2.2.87 **Red Lined Drawings.** Copies of drawings, on, which the designer indicates changes in red, or some other, appropriate color.

C.2.2.88 **Repair.** The restoration of a failed or failing item, component, or part of a facility to a condition in which it can be used for its intended purpose and meets acceptable functional and cosmetic standards. Repair does not include upgrading to increase value.

C.2.2.89 **Replace.** The substitution of a new or functional item for one that is lost, depleted, or worn out.

C.2.2.90 **Restricted Area.** Specific areas that may not be entered by unauthorized personnel, such as firing areas, impact areas, and dud areas.

C.2.2.91 **Road Block.** A permanent or temporary barrier to vehicular and pedestrian traffic. Those personnel are forbidden to pass without approval from Range Control. A roadblock may be a sentinel, wire barrier, gate, sign, or other device or blockage.

C.2.2.92 **Safety Fan.** The safety limits for a range. These are designed to be greater than the maximum range of the weapon system in use.

C.2.2.93 **Safety Radius.** The minimum distance from a weapon system considered safe for personnel. It is also the minimum distance operators must keep from the system if a misfire, dud or other explosion hazard occurs, or if any other potential hazard occurs that cannot be cleared from the weapon.

- C.2.2.94 **Security Management.** The processes of controlling (granting, limiting, restricting or denying) access to a computer network and resources thereon. This could include setting up and managing access lists in routers, creating and maintaining password access to critical network resources, identifying the points of entry used by intruders and closing them.
- C.2.2.95 **Scheduled Maintenance.** Work on equipment and facilities routinely done to prevent breakdown or deterioration.
- C.2.2.96 **Schedule Request.** Provides agencies with support requirements for a particular test or work effort.
- C.2.2.97 **Serviceable.** Fit for intended use.
- C.2.2.98 **Site Support Package (SSP).** Repair parts stocked to support specific vehicles (e.g. ABRAMS tanks).
- C.2.2.99 **Softcopy Transfer.** Information distributed in an approved software format.
- C.2.2.100 **Surfaces and Appurtenances.** Roads, ramps, slabs, road drainage ditches, culverts, inlets, bridges, traffic signs, guardrails, and pavement markings.
- C.2.2.101 **System.** A group of interacting, interrelated, or interdependent elements forming a collective entity. A system includes all of the mechanical and electrical equipment; supporting structures; pneumatic, electrical, and mechanical types of materials; and all auxiliary equipment required to provide a specific function and output requirements.
- C.2.2.102 **System Administrator.** The systems person in charge of a computer.
- C.2.2.103 **System Analysis.** Study of the design, specification, feasibility, cost, and implementation of a computer system for an application.
- C.2.2.104 **System Management.** Activity aiming to minimize the use of excessive, redundant resources to address the overlapping requirements of performing balancing, computer network management, reducing outages, system maintenance costs, diagnosis and repair, and migration to new hardware and software system versions.
- C.2.2.105 **System Support Package.** Customer furnished spare parts, equipment publication, supplies, special tools, and miscellaneous support equipment established to support a specific end item. The term SSP is inclusive of PM's collections of spare parts established with customer funds to ensure that the minimum delays occur during testing due to normal supply system shortages of necessary replacement parts.
- C.2.2.106 **Technical Data Package (TDP).** That set of information that provides a technical description of an item that is adequate for the intended use of that data (item).

This description defines the required design configuration and assures adequacy of item performance. It consists of all applicable technical data such as plans, drawings, and associated lists, specifications, purchase descriptions, standards, models, performance requirements, quality assurance provisions, and packaging data.

C.2.2.107 **Teleconferencing.** Two-way electronic voice and video communications between two or more locations; may be fully interactive voice or two-way voice and one-way video; includes full-motion video, compressed video and sometimes freeze (still) frame video.

C.2.2.108 **Tenant/Other Organizations.** Those activities or elements housed on YPG, but not assigned to the installation HQ.

C.2.2.109 **Test.** To verify serviceability, and detect impending failure by measuring the mechanical or electrical characteristics of any item, and comparing those characteristics with applicable standards.

C.2.2.110 **Test, Measurement and Diagnostic Equipment (TMDE).** Any system or device used to evaluate the operational condition of an end item or subsystem thereof or to identify and/or isolate any actual or potential malfunction. TMDE includes diagnostic and prognostic equipment, semiautomatic and automatic test equipment (with issued software), and calibration test or measurement equipment.

C.2.2.111 **Test Parts.** Parts specifically manufactured for test, as opposed to interchangeable repair parts.

C.2.2.112 **Test Support Package (TSP).** A collection of repair parts, special tools, etc. provided by the customer to support a specific test system, including RAM testing "Systems Support Packages (SSPs).

C.2.2.113 **Training Area.** A parcel of real estate, upon which a using unit conducts training exercises and maneuvers.

C.2.2.114 **Training Range.** Ranges dedicated to training.

C.2.2.115 **Unimproved Grounds.** Grounds that do not require routine maintenance. These include ranges, maneuver areas, timberlands, wildlife conservation areas, grazing lands, lakes, ponds, and other areas requiring limited or no maintenance.

C.2.2.116 **Unserviceable.** A term used to describe an item that cannot be used for its intended purpose because it is obsolete, worn, damaged, or otherwise unsuitable.

C.2.2.117 **Using Unit.** Any military unit, or other Government agency using a facility, range, or item.

C.2.2.118 **Visual Information (VI).** The use of one or more visual media with or without sound, to communicate information. (VI includes still photography, motion

picture photography, video or audio recording, graphic arts, visual aids, models, display, visual presentation services, and the processes that support them. Note that not all of these elements are covered by this PWS.)

**C.2.2.119 Vocational Training.** Instruction received by onboard staff while on the contract payroll. Not to be confused with college or other self help training, which an employee may pursue during non-work hours. Includes on-the-job, classroom, and apprenticeship training. It is designed to increase vocational effectiveness of employees.

**C.2.2.120 Warning Device.** A device used to signal hazards or danger such as, a warning flag, siren, road barrier, buzzer, or red or yellow light.

**C.2.2.121 YPG Activities.** YPG organization elements, tenants, transient government and military elements, residents (BOQ, barracks, etc.), test customers, and supporting contractors.

**C.2.2.122 YPG Approved Software.** Software approved for use by YPG activities as prescribed by YPGR 25-1 and consists of:

- MS Windows Operating System – MS Office Suite
- MS Word
- MS Excel
- MS Power Point
- MS Access
- MS Schedule
- MS Mail
- AutoCAD

For the contract, newer versions may be used if files can be successfully converted, downloaded, and then uploaded by the Authorized Version. All other software that the contractor may need to put on our network needs to go through the net worthiness process. The regulations that pertain to certification of net worthiness are Army Policy Memo, dated 2 April 2003; AR 25-1, Army Knowledge Management and Information Technology; and AR 25-2, Information Assurance.

**C.2.3 Acronyms and Abbreviations**

- AA ..... Associate Degree
- AA&E..... Arms, Ammunition and Explosives
- ACO ..... Administrative Contracting Officer
- ADEQ..... Arizona Department of Environmental Quality
- ADP ..... Automated Data Processing
- ADPE ..... Automated Data Processing Equipment
- AFARS ..... U.S. Army Supplement to the Federal Acquisition Regulation
- AIS ..... Automated Information System
- AOAP ..... Army Oil Analysis Program
- APL ..... Authorized Parts Listing

AQL..... Acceptable Quality Level  
AR..... Army Regulation  
ARDS..... Advanced Range Data System  
ARIMS..... Army Information Management System  
ASL..... Authorized Stockage List  
ATEC..... Army Test and Evaluation Command  
BII/OVE..... Basic Issue Items/On Vehicle Equipment  
BOM..... Bill of Materials  
C&RS..... Calibration and Repair Support  
CAD..... Computer Aided Design, Computer Aided Drawing  
CCI..... Command Control Interface  
CCIR..... Commanders Critical Incident Review  
CCTV..... Closed Circuit Television  
CDL..... Commercial Drivers License  
CDMA..... Code Division Multiple Access  
CDR..... Contract Discrepancy Report  
CECOM..... U.S. Army Communications-Electronics Command  
CFP..... Contractor Furnished Property  
CIMS..... Cost Information Management System  
CLA..... Contractor Labor Authorization  
COE..... Corps of Engineers  
COMPUSEC..... Computer Security  
COMSEC..... Communications Security  
COR..... Contracting Officer's Representative  
COTS..... Commercial-Off-The-Shelf  
COW..... Cell (Tower) on Wheels  
CPE..... Customer Premise Equipment  
CPU..... Central Processing Unit  
CPW..... U.S. Army Center for Public Works  
DA..... Department of the Army  
DBMS..... Database Management System  
DCAA..... Defense Contract Audit Agency  
DLE..... Directorate of Law Enforcement  
DMS..... Defense Messaging System  
DOD..... Department of Defense  
DOL..... Department of Labor  
DRM..... Directorate of Resource Management  
DSS..... Defense Security System  
DTC..... Developmental Test Command  
EIA/TIA..... Elect. Industry Association/Telecom. Industry Association  
FAR..... Federal Acquisition Regulation  
FOIA..... Freedom of Information Act  
FSC..... Federal Service Code  
GFE..... Government Furnished Equipment  
GFP..... Government Furnished Property  
GIS..... Graphical Information System  
GOV..... Government Owned Vehicles

GP	Gun Position
GPO	Government Printing Office
GPS	Global Positioning System
GSA	General Services Administration
GSM	Global System for Mobile
IAM	Information Assurance Management
IASO	Information Assurance System Officer
IAVA	Information Assurance Vulnerability Assessment
IAW	In Accordance With
IFS-M	Integrated Facilities Mini/Micro
IMA	Information Mission Area
IMD	Information Management Division
IPTs	Internal Posting Tickets
IRSP	Instrumentation Radar Support Program
IS	Information System
ISCE	Information System Cost Estimate
IT	Information Technology
ITOP	International Test Operating Procedure
JAOAP	Joint Army Oil Analysis Program
JFTR	Joint Federal Travel Regulations
JONO	Job Order Number
KFR	Kofa Firing Range
KO	Contracting Officer
KR	Contractor
LIMS	Laboratory Information Management System
MEP	Mission Essential Part
MSDS	Material Safety Data Sheet
NAC	National Agency Check
NEC	Network Enterprise Center
NICP	National Inventory Control Point
NSN	National Stock Number
ODIN	Observer Data Input Nexus
OP	Observation Point
OSHA	Occupational Safety Health Act
PA	Property Administration
PATS	Precision Automated Tracking Systems
PC	Personal (micro) Computer
PD	Purchase Description
PM	Project Manager
PMCS	Preventative Maintenance Check & Service
POC	Point of Contact
POI	Plan of Instruction
POL	Petroleum Oils & Lubricants
POV	Privately Owned Vehicle
PRS	Performance Requirement Summary
PWS	Performance Work Statement
QA	Quality Assurance

QAE.....	Quality Assurance Evaluator
QAP.....	Quality Assurance Plan
QASP .....	Quality Assurance Surveillance Plan
QCP .....	Quality Control Plan
RAC.....	Range Access Center
RAM .....	Reliability, Availability, Maintainability
RDTE .....	Research, Development, Test, & Evaluation
RFNG .....	Radio Frequency Navigational Grid
RFP .....	Request for Proposal
RFS.....	Requests for Service
RHA.....	Records Holding Area
RM.....	Resource Management
RMO .....	Records Management Officer
ROC .....	Range Operation Center
ROI.....	Recording Observation Instruments
ROP .....	Reorder Point
SF.....	Standard Form
SOI.....	Standing (Standard) Operating Instruction
SOP.....	Standing (Standard) Operating Procedure
SR .....	Schedule Request
SSP .....	Site Support Package
STAMIS.....	Standard Army Management Information System
SUBJONO .....	Sub Job Order Number
TACC .....	Tactical Air Control Center
TACCS.....	Tactical Army Combat Computer System
TAMMS .....	The Army Maintenance Management System
TAT .....	Turn Around Time
TB.....	Technical Bulletin
TCO.....	Telecommunications Officer
TDP .....	Technical Data Package
TIRs.....	Test Incident Reports
TO .....	Test Officer
TM.....	Technical Manual
TMDE .....	Test, Measurement, and Diagnostic Equipment
TMO .....	Targets Management Office
TO .....	Test Officer
TOP.....	Test Operation Procedures
TQM .....	Total Quality Management
TSO.....	Telecommunications Service Orders
TSP .....	Test Support Package
TSR.....	Telecommunications Service Request
TWIG.....	Test Working Integration Group
UAV .....	Unmanned Aerial Vehicle
UMTS.....	Universal Mobile Telephony System
USAYPG .....	United States Army Yuma Proving Ground
USC.....	United States Code
VTS .....	Vehicle Tracking System

UXO ..... Unexploded Ordinance  
VECP ..... Value Engineering Change Proposal  
VI..... Visual Information  
VTC ..... Video Teleconference Center  
YPG..... U.S. Army Yuma Proving Ground  
YPGR ..... U.S. Army Yuma Proving Ground Regulation  
YTC ..... Yuma Test Center

DRAFT

### **C.3 Government Furnished Property**

C.3.1 *Property.* We will provide a complete listing of Government Furnished Property (GFP) to the successful offer or upon contract award.

Pursuant to the property clauses in this contract you will perform a joint Government/ Contractor inspection of all GFP. This inspection is intended to establish a mutual agreement as to the condition of GFP provided to the Contractor for use in performance under this contract. In addition, you will be required to conduct an automated annual inspection for all GFE/GFP. The annual inspection will be reviewed and completed by first day of the fiscal year, 01October.

As soon as the GFP is no longer required it will be promptly turned in, in accordance with the approved Property Control Plan.

You shall develop a Property Control Plan IAW DoD Manual 4161.2-M, FAR part 45 and FAR 52.245. The Property Control Plan shall be submitted thirty (30) days after full contract performance and shall detail KR activities concerning Government furnished property (GFP) control in the following areas: Property Management; Acquisition; Receiving; Identification; Records; Movement; Storage; Physical Inventories; Reports; Consumption; Utilization; Maintenance; Subcontractor Control; Disposition; and Contract Close-out as pertinent.

You shall not use property provided by us for any purpose other than in the performance of the contract. Exception being, the allowable personal and/or non job related provisions as set forth in YPG's current Government Communications Resource Policies.

You shall establish a program to assess cases of property damage/loss to determine if they were caused by employee negligence. If employee negligence is determined, you shall take appropriate corrective action.

As required by the Office of the Under Secretary of Defense mandate, dated 29 July 2003, you shall establish a policy for Unique Identification (UID) of tangible Items, new equipment, major modifications, and procurements of equipment and spares. A tracking system for all government furnished equipment will be established by the contractor. The UID code will be assigned and entered into the UID Registry to all current and any future equipment furnished to contractor.

C.3.1.1 *Facilities.* We will provide the facilities listed in Technical Exhibit 4 Government Furnished Facilities (GFF) for performance at YPG. If additional facilities are required and suitable facilities are unavailable to meet mission requirements, the contractor will submit a written request for approval to lease facilities to the KO. The KO will determine the appropriateness of the request and if approved the additional space will be an allowable cost to the contract.

C.3.1.2 **Contractor Facilities Responsibilities.** The contractor is responsible and accountable for assigned facilities and will take adequate precautions to prevent fire hazards, odors, chemical spills and safe guard GFF. Routine building maintenance and daily housekeeping are the responsibility of the contractor. The occupants of buildings are responsible for the submission of service/work requests and will follow the applicable YTC Facilities Policy to have maintenance performed. If the work requires a priority, the requestor should state that in the request and the COR must concur. The COR will verify the need for the priority so that any delays to the requestor caused by the service/work request are not attributed to the requestor.

C.3.1.3 **Equipment.** We will provide equipment listed in the Government Furnished Property listing available for review when requested. Due to the magnitude of equipment listed, we will provide this list for your review when requested.

C.3.1.4 **Additional or Replacement Equipment.** We will consider equipment changes. You shall participate in and or initiate actions related to modernization of equipment for new or revised requirements as they are identified. You shall submit requests in writing for additional or replacement equipment through the COR and functional area chief to the KO. Upon approval you shall submit appropriate requisition forms and, if necessary, specifications through the QAE/COR using fund citations provided for that purpose. When the Contractor acquires property for use under subject contract which will be billed to the Government, the Contractor, within five (5) days of receipt, shall provide the COR with evidence of receipt before submitting its request for payment for the property. This is necessary to enable the Government to maintain current and accurate property accountability.

C.3.1.5 **Repair Parts.** You shall maintain the equipment IAW original manufacture manuals. Repair and replacement parts procured IAW your approved procurement plan are cost reimbursable to include taxes and shipping charges. You shall maintain a historical database listing the serial number of each Government Furnished Equipment (GFE) item. The cost of Parts purchased will be posted against that repaired item. The following guides will be utilized for the procurement of repair parts:

- Any single part of module in excess of \$1,000 must have prior approval from the COR and the KO.
- All off site repair requests(s) will be signed by the QAE or the COR, and will follow the procurement process when applicable.
- The individual repair is no more than 20% of the total acquisition cost, and the accumulated repairs made on the item do not exceed 50% of the acquisition cost. Waivers can be granted by the QAE for items that exceed these guidelines. Waivers granted will be a on a case-by-case basis.
- We reserve the right to determine when GFE is not economically repairable.

C.3.1.6 **Bench Stocks, Shop Stocks, & Truck Stocks.** You shall maintain complete records of requests, receipts, issues, on-hand quantities, and turn-ins IAW applicable regulations. Records pertaining to MILSTRIP items shall be IAW DA standard procedures.

C.3.1.7 *Tools.* Where approved, we shall provide specialized tools and you shall maintain the tool crib inventories. Tools shall be signed in and out IAW current guidance.

C.3.1.8 *Toolkits.* We will furnish you a limited number of tool kits on an “as is” basis. Repair or replacement will not be an allowable cost.

C.3.1.9 *Petroleum, Oils, and Lubricants (POL).* We will provide POL for government furnished vehicles used in the official performance of services under the contract. POL points are located in the Mobility Test Area and Kofa Firing Front Area, and are open 24 hours per day.

C.3.1.10 *Keys.* We will provide you with a marked set of keys and ciphers to facilities and equipment you will use in the performance of this work statement. We will provide duplication of keys. Requires your request and KO approval.

C.3.1.11 *Forms.* We will provide government forms listed in Section C.6 of this work statement. A supply of forms will be provided on contract start date. We will replenish stock levels as required through your request to the YPG Publications Office. However, as forms become available through the “DoD Forms Program” home page, electronic forms shall be used. Currently available formats IAW YPG's Standard Software. Our intent is to become paperless. When that objective is reached, all documents will be in softcopy format.

C.3.1.12 *Publications.* For publications listed as mandatory in Section C.6 of this work statement, we will provide hardcopy publications or Internet site addresses. You shall be responsible for ensuring the most recent mandatory publications are on hand. You shall also be responsible for ensuring advisory publications you utilize are on hand. We will provide updated publications through the YPG Publications Office only for publications not available in softcopy format. For publications electronically available, you shall download the updates yourself.

C.3.1.13 *Government Owned (GSA) Vehicles (GOV).* GOVS may be issued to you for the performance of work under the contract, based on workload and availability. Issue documentation consists of trip tickets. Technical Exhibit 5 (Government Owned Vehicle List) shows the type and quantity of GOVs we may issue. We reserve the right to modify this list at any time.

C.3.1.14 *Reference Library.* We will provide (on contract start date as additional GFE) all on-hand reference manuals, instruction books, handbooks, and technical manuals. Accountability of documentation shall be maintained in the same manner as other Government furnished property.

## **C.3.2 Services.**

C.3.2.1 *Facilities Maintenance and Repair.* We will provide preventive

maintenance and repair of government owned facilities. Unless otherwise required, maintenance will be provided in accordance with government prescribed maintenance schedules. You shall notify the COR in writing when facility repairs or maintenance is required. You may verbally notify the COR when emergency facility repairs or maintenance is required. Your verbal notifications shall be followed by written notification within one workday.

**C.3.2.2** *Test, Measurement, and Diagnostic Equipment (TMDE).* You shall appoint a calibration coordinator who shall submit GFE TMDE, for calibration and repair support, and perform other Unit Coordinator responsibilities in accordance with TMDE Support Center-Yuma External Standing Operating Procedure (no number). TMDE is recognized as a unique commodity of equipment that requires centralized acquisition and support considerations (AR 750-43). Contractor personnel shall not bring their personal TMDE to YPG. TMDE will be GFE'd to the Contractor for performance of their assigned work duties.

**C.3.2.3** *Electro-Optical Maintenance.* Electro-mechanical/Optical Maintenance services provided under the Test Support Services Contract may be used for maintenance and repair of Non-TMDE with the COR's approval.

### **C.3.3 Utilities.**

We will provide and maintain the air conditioning, electricity, water, and sewer services currently available in the facilities to be provided.

**C.3.3.1** *Bottled Water.* We will provide bottled water to facilities lacking potable water sources. Coordinate bottled water requirements with the COR.

**C.3.3.2** *Communications.*

**C.3.3.2.1** *Telephone Service.* Exclusively for the conduct of official business, we will provide Class A telephone communication service. You shall be responsible for charges for long distance telephone calls made or accepted by your personnel, which are not for the purpose of conducting official government business. Telephone service will be subject to the standard monitoring requirements of the government telephone network. Coordinate your telephone service requirements with the COR.

**C.3.3.2.2** *Network Access.* We will provide network access for all computer systems required for the conduct of official business in the performance of the contract. Coordinate network access requirements with the COR.

**C.3.3.3** *Custodial Services.* We will provide custodial services for the office buildings as shown in Technical Exhibit 4 (PWS Functional Area Status/Government Furnished Facilities List).

**C.3.3.4** *Refuse Collection.* We will provide refuse collection for the buildings as shown in Technical Exhibit 4 (PWS Functional Area Status/Government Furnished

Facilities List).

C.3.3.5 *Distribution Services.* We will provide pick-up and delivery distribution in accordance with government distribution schedule for official communications received at the central distribution points listed below. You shall pick up incoming communications and deliver outgoing communications to a distribution point. The distribution points are:

- B5, Room TTC (Communications Center)
- B2100
- B2105, Room 69

C.3.3.6 *Mail.* We will provide mail service to you for official communications and correspondence generated in the performance of this work statement. You shall deliver outgoing to, and pick up incoming mail from your official distribution point(s).

C.3.3.7 *Copying, Printing, and Reproduction.* We will provide the following shared use copy machines for limited copying of official reports, documents, and correspondence. Copiers are also provided as GFE.

- B5, Room TTC (Communications Center)
- B2100
- B2105, Room 69
- 2105 N

C.3.3.8 *Insect and Rodent Control.* We will provide insect and rodent control service for government furnished facilities. Coordinate with the COR when these services are required.

C.3.3.9 *Fire Protection.* We will provide fire protection services of the YPG Fire Department. The emergency telephone number is 911.

C.3.3.10 *Police Protection.* We will provide the security and police protection services of the YPG Directorate of Law Enforcement. The emergency telephone number is 911.

## **C.4 Contractor Furnished**

You shall furnish all property and services not specifically identified in Section C.3 as government furnished, but which are necessary to perform the requirements of the contract. Contractor furnished property and services shall be compatible with existing government systems.

### **C.4.1 Property**

C.4.1.1 *Supplies.* You shall provide all expendable supplies and materials, other than official forms and publications, required to perform services under the contract.

C.4.1.2 *Hand Tools.* You shall provide, at no cost to the Government, common hand tools.

### **C.4.2 Services**

C.4.2.1 *Records* - You shall perform the following record management actions:

C.4.2.1.1 *Maintain A Clear Audit Trail* - You shall maintain accurate and current, records of contract performance relative to the requirements set forth in the specifications and solicitation. They will be made available for review and/or inspection upon request from a COR or the KO.

C.4.2.1.2 *Contract Data* - You shall release to us a copy of all requested documents such as maintenance logs, procedures, schematics, diagrams, and intellectual works i.e. software, unique hardware applications, etc. that you generated during the life of the contract.

C.4.2.1.3 *Adapt to Change* - Modify procedures, processes, and process control software to maintain parity with what we do.

C.4.2.2 *Reports* - You shall provide in hard copy/make available on-line the following reports:

C.4.2.3 *Significant Events* - You shall report events having negative test mission impact, as well as accidents/incidents resulting in injury to personnel and/or damage to equipment.

C.4.2.3.1 *QDR'S*: Verbal reporting to the COR is desired as soon as possible, but not later than 2 hours from the detection of a problem. If immediate notification is not an option, it shall take place within the first hour of normal business. Reports will include the five Ws (What happened, Where did it happen, When did it happen, Who the POC is, and What mitigating/corrective action is being taken). The initial focus will be on timeliness; therefore, a report will not be delayed if the answer to one of the Ws is missing. A finalized printable Quality Deficiency Report will be made available to the

COR within 72 hours. If posted on-line, the COR will be made aware of the new posting via an automated e-mail notification.

C.4.2.3.2 Accidents/Safety: (Reference C.1.15) You shall comply with the reporting requirements of AR 385-40. Written reports for accident classes “A” through “D” shall be sent to YPG’s safety office, with a copy furnished to the KO and to the COR. Immediate verbal notification (as required for class “A” and “B” accidents) will also be made to the same points of contact. For accidents beneath the formal reporting criteria (*nonfatal injuries provided they do not result in a day or more time loss, or are accompanied by property damage exceeding \$1,999.99*) you will use your own form and send a written report to the COR.

C.4.2.3.3 Contract Surveillance, Invoice Certification & Budget Development:

C.4.2.3.3.1 Upon request/as needed basis:

- Lot Selection Data – Copies of procurement logs, property logs, and workload logs shall be made available to the requesting COR.
- Special Runs – An inquiry by a specific subject matter shall be provided when a COR or the KO requests it.
- SOPs - You shall make available to the CORs the files containing online standard operating procedures (SOPs) for the Government’s review/approval status.

C.4.2.3.3.2 On a weekly updated basis (*by COB each Tuesday except when holiday falls on Monday then reports are due Wednesday*):

- Direct Charges – Individual detailed labor data shall be made available to the Test Officers, CORs, and the Budget Officer.
- Indirect Charges – Individual detail labor data shall be made available to the CORs and the Budget Officer.
- Weekly Performance Reports – Labor data (direct, indirect, maintenance, etc.), and other cost (procurement & sub-contract costs), shall be made available in cost center, account code, and overall summary formats to the CORs and the Budget Officer.
- Internal Posting Tickets (IPTs) – Labor and material cost data shall be uploaded to Accounting Office database system by cost center, Job Order Number (JONO), Sub Job Order Number (SUBJONO) with detailed cost using the YPG Cost Information Management System (CIMS) by 2:00 p.m. each Tuesday. Uploaded data will not duplicate costs put on individual lines of contract via a Contract Labor Authorization (CLA) or WAO. IPTs for hours with no costs will be reflected in the summary format provided for this action.

C.4.2.3.3.3 On a BI-weekly updated basis:

- Manpower Report – A level of effort report titled “BI-Weekly Manning” shall be made available to the CORs in a table format. Each functional area’s manning as it appears at the end of the two-week cycle will be reported. The report is to distinguish between personnel assigned to an area, cross-utilized from/to an

area, and those in an inactive status. The attached notes will describe the reasons for changes, the inactive category each inactive employee is being carried in, and give a heads-up on projected changes.

- Cost Accounting Reports – You shall provide roll-up and detail reports in a format which substantiates the BI-weekly invoice.

C.4.2.3.3.4 On a Monthly updated basis:

- Training Report – You shall make available to the CORs reports utilizing the data contained in the training (X-files) database. Reports shall contain the ability to query by data field, and time period.
- Government Furnished Equipment – You shall make available to the KO and the CORs reports using the data contained in the MMIS database. The reports will have the capability to query by equipment type, model, tag/serial number, and time period. They will provide totaled labor hours and parts.
- Government Furnished Property – You shall provide the KO, COR, and the Property Administrator reports providing GFE and Government Furnished vehicle status.

C.4.2.3.3.5 On a three month updated basis (at the end of each quarter):

- A report on “value added” training shall be provided to the COR.
- A report on Technical Infusion actions shall be provided to the COR.
- A report on Sustainment actions shall be provided to the COR.

C.4.2.3.3.6 On a Six Month updated basis - Provide the COR and KO with a report organized in the format of the “BI-Weekly Manning” report, but covering staffing as it exists at the close of business on 1 October and on 1 April, or the first working day following those dates.

C.4.2.3.3.7 On yearly updated basis (By 1 June of each year):

- Facilities Plan – Provide the COR a 5 year facilities plan. It is to be a prioritized list of facilities needing repair/upgrade. Sketches and justifying narratives will be provided for the more complex items on the list.
- Equipment Plan – Provide the COR with a 5 year equipment plan. It is to be a prioritized list of equipment, and/or upgrades you determine to be needed to maintain/enhance mission performance. Each item on the list is to be followed by a short justification.

C.4.2.3.3.8 On yearly updated basis (By 31 Oct of each year) - you shall provide the prior 12 month fiscal (1 Oct thru 30 Sep of each fiscal cycle) data elements as required by the Contractor Manpower Reporting System (additional information and guidance can be found on the CMR website <https://contractormanpower.army.pentagon.mil>). The required information includes:

- Contracting Office, Contracting Officer, Contracting Officer’s Technical Representative;
- Contract number, including task and delivery order number;
- Beginning and ending dates covered by reporting period;

- Contractor name, address, phone number, e-mail address, identity of contractor employee entering data;
- Estimated direct labor hours (including sub-contractor);
- Estimated direct labor dollars paid this reporting period (including sub-contractor);
- Total payments (including sub-contractor);
- Predominant Federal Service Code (FSC) reflecting services provided by contractor (and separate predominant FSC for each sub-contractor if different);
- 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);
- Locations where contractor and sub-contractors 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);
- Presence of deployment or contingency contract language, and,
- Number of contractor and sub-contractor employees deployed in theater this 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.

#### **C.4.3 Maintenance and Repair**

For GFE provided for your use in the performance of the contract, you shall:

C.4.3.1 *Perform operator maintenance of government owned vehicles. (Fuel, oil, air tires, wash)*

C.4.3.2 Perform field, operator, or unit maintenance and repair GFE. You shall perform preventive and scheduled maintenance services on government furnished equipment (commercially available) in accordance with OEM (original equipment manufacturer) manuals or best industry practices. In situations where adequate manufacturer's manuals are not available, you shall establish acceptable maintenance schedules and coordinate those schedules with the QAE/COR. Any revised maintenance schedules on GFP/GFE (i.e. administrative storage, maintain before use, etc.) shall be approved by the QAE/COR. Maintenance of government tactical equipment shall be IAW DA-PAM 738-750, the Army Maintenance Management System (TAMMS). At times, due to test mission or economic concerns, the government (QAE/COR) may instruct you in writing to reduce maintenance intervals (issue a waiver). Upon receipt off a waiver you shall maintain the equipment IAW the lower standard until the waiver is rescinded.

#### **C.4.4 Custodial Services**

For facilities and work areas provided for use in the performance of the contract, you shall take out the trash and clean floors when required outside the normal Section C.3.3.2.2 schedule.

## **C.5 Specific Tasks**

You shall furnish all personnel, equipment, tools, materials, vehicles, supervision, and other items and services necessary to provide the following services at YPG, except as otherwise directed for offsite accomplishment of the work, in accordance with this work statement and those mandatory directives as listed in Section C.6.

### **C.5.1 Program Management**

YPG is a U.S. Army test range, a member of the DoD Major Range and Test Facility Base. Its mission is the testing of military weapon systems such as munitions of all calibers, artillery weapons, tanks, tactical vehicles, aircraft armament systems, smart munitions fired, launched, or emplaced, and other military equipment assigned by higher headquarters. The purpose of the work is to test, military weapons and equipment by designing/planning experimental operations, conduct test, collect data, analyze and report findings/observations on performance of the weapons and equipment. You shall be responsible for the operations, planning, cost estimating and/or development of future capabilities for active functional areas as described in this Performance Work Statement that are elements of the total mission capability of YPG.

C.5.1.1 Organization. The delineation or breakdown of tasks defined in paragraph C.5. is not intended to require or imply any organizational structure on your part.

C.5.1.2 Staffing Skill Levels and Experience.

- *Skill Levels.* All employees in professional positions such as Engineers, Mathematicians, Computer Scientists, shall meet the qualification standards for those positions established by the Office of Personnel Management.
- *Experience.* Your technical staff (the non-administrative employees) responsible for management and execution of the tasks (defined in C.5) should be an appropriate mix of senior, junior and entry level employees.
  - Senior level employees shall have 6 or more years experience in work areas closely related to the duties of the position to which assigned.
  - Junior level employees shall have 3 or more years experience in work areas closely related to the duties of the position to which assigned. Entry/Trainee employees are those who do not meet the requirements for Junior or Senior levels.
  - Entry/Trainee level employees shall receive training from the more experienced employees.
- *Technical Qualifications.* You shall staff each technical area with appropriate skills in level and number to assure that the staff has sufficient expertise in the state of the art to develop new approaches and methodology, to suggest improved approaches taking advantage of the state of the art, to develop and justify (technically and economically) proposals for new processes and new equipment, to maximize the effectiveness and efficiency of the processes and

equipment in use, to train subordinate and associated personnel, and to technically represent the command at meetings and symposia concerning the specific technology.

C.5.1.3 *Staffing.* During the life of the contract, you are to manage your staff to attain a level of service that both meet the requirements and at an acceptable cost.

C.5.1.4 *Cost Ratio.* You shall manage your workforce to maintain a direct cost reimbursement rate as designated by guidance provided from the COR's Office. Target goals may range between 70-90 percent (see definition of Direct and Indirect charges).

### C.5.2 Assignments

You shall be assigned specific tasks in execution of this contract. You shall perform the everyday tasks required to execute the testing mission as assigned through the daily and weekly scheduling process. You shall also perform, as required, maintenance, calibration, repair, housekeeping, and other tasks required for you to maintain your ability to perform the assigned tasks. You shall perform specifically designated tasks, which may be a continuous service or may demand a defined product, in response to work orders prepared by us.

C.5.2.1 *Weekly and Daily Work Schedules.* Daily task assignments are made through the YPG Scheduling process in accordance with applicable SOP. You shall participate in the scheduling process by communicating with Test Officers and others in reference to your capabilities and availability, and monitoring the development of the work schedule. You shall participate in the scheduling meetings and you shall execute the daily tasks assigned by publication of the weekly and daily schedules.

C.5.2.2 *Work Authorization Orders.* From time to time, we will issue to you a Work Authorization Order (WAO). A WAO would be used for two (2) basic categories of work: (1) development/modification of YPG's hardware and software systems or studies, or (2) augmentation of an existing civilian workforce. You may be asked to perform a particular task or produce a particular product other than the day to day mission operations (specific tasking). It may be continuous in nature (e.g. providing a person with particular skills to perform a continuing requirement) or a one-time specific purpose (e.g. designing and building an item of instrumentation, or fabrication of items or products, or develop databases, or developing a specified computer program, or modify existing software requirements, or doing a study). You may be required to develop cost estimates, schedules, and formal plans with milestones for approval by us before proceeding with execution of a WAO. Each WAO will specify the product required, a process if applicable, milestones, and any related administrative requirements.

C.5.2.3 *Facilities.* Technical Exhibit 4 lists the facilities that are assigned to this mission.

C.5.2.4 *Equipment.* Per Technical Exhibit 3, a GFE listing will be furnished to you via electronic media when requested.

### **C.5.3 Electronic Instrumentation Operations.**

#### **C.5.3.1 Telemetry**

**C.5.3.1.1 Scope.** You shall develop, operate and maintain all of YTC's telemetry systems to include central fixed sites, remote fixed sites, and mobile equipment on YPG ranges or other ranges as mission tests require and in accordance with the oversight process of the COR/QAE authorities. Tasks under the function may require: installation of transducers/sensors, data capturing equipment, transmitters, antennas, signal conditioners, recorders, electrical protection, etc. on aircraft, Unmanned Aerial Vehicle (UAVs), air delivery systems, munitions, and other test platforms; reception and reduction of the received signals; procurement and/or development of software and hardware, equipment and structures as required to accomplish tasks; development of those portions of instrumentation plans or IDAPs that relate to telemetry methods in coordination with YPG Test Officers, Project Leads, manufacturers of items under test, manufacturers of instrumentation equipment, and other units at YPG to or from which you will send or receive data; and modification or adjustment of the equipment to meet specific requirements established for specific tests. You shall provide data, in the form and format dictated by test plan or other directive, for specific test programs. Output shall be presented in engineering units, in graphical or tabular form, on electronic media, or as retransmitted signal to other sites, i.e. real time data processing. Data may be the direct product from telemetry (data bus, analog, digital) or it may be reformatted, correlated, and retransmitted to form part of a larger body of data.

**C.5.3.1.2 Work Products.** Operation and maintenance of the telemetry systems by fully qualified personnel to meet requirements specified in published documentation and the direction given by the Test Officer for the specific test activity.

#### **C.5.3.2 Range Timing**

**C.5.3.2.1 Scope.** You shall operate and/or maintain the YPG range time systems to include permanent fixed sites and portable/mobile equipment on YPG ranges and other ranges. Tasks under this function require the operation and maintenance of RF transmitters, antennas, time code generators, timing receivers, GPS receivers, monitors, and other equipment; assembling new range time receivers using commercial off the shelf receiver modules and other electronic components to meet specific applications; installation on aircraft, ground vehicles, and other test platforms or facilities; monitoring timing signal quality, accuracy, and synchronization to USNO; modification or adjustment of the equipment to meet specific requirements established for specific tests. You shall provide, build, and repair range time receivers in various configurations to meet specific test needs. You shall participate in the development or procurement of new equipment for replacement of old equipment or for new or revised requirements as they are identified.

**C.5.3.2.2 Work Products.** Highly accurate and synchronized time throughout YPG for use by all test programs that require time coded signals for the purpose of time tagging data, operating instrumentation requiring timing signals, and to facilities which require timing to support the mission.

### **C.5.3.3 Instrumentation Tracking Radar**

**C.5.3.3.1 Scope.** You shall operate and/or maintain the YPG radar systems to include permanent fixed sites and mobile equipment on YPG ranges or other ranges. You shall participate in the development or procurement of new equipment for replacement of old equipment or for new or revised requirements as they are identified. Operations include the setup, operating the radar, and acquiring data in support of test programs. Maintenance includes preventative maintenance and minor repair of the radar and associated equipment, vans or trailers. Repair of instrumentation radar is primarily accomplished through the Instrumentation Radar Support Program (IRSP) for replacement parts and services; you shall order and return repairable parts directly with the IRSP support contractor. As directed by the government, you shall participate in the IRSP Range Manager meetings conducted on a semi-annual basis. You shall support specific test missions by modifying, adjusting, and selecting appropriate radar equipment. Data may be the direct product from the radar or it may be reformatted, correlated, and re-transmitted to form a part of a larger body of data.

**C.5.3.3.2 Work Products.** Operation and maintenance of the radar systems by fully qualified personnel to meet requirements specified in published documentation and test specific requirements given by the Test Officer for the required test results.

### **C.5.3.4 Ballistics Instrumentation**

**C.5.3.4.1 Scope.** You shall operate and maintain YPG ballistics measurement instrumentation systems to include permanent fixed sites and mobile equipment on YPG ranges or other ranges. Tasks under the function may require installation of transducers and other data capturing equipment, signal conditioners, transient data recorders, velocimeters, transmitters, antennas, etc. on multiple test platforms; and collection and reduction of pressure measurement and velocity determination signals; development of those portions of instrumentation plans that relate to ballistics measurement methods in coordination with YTC Electronics Division. You shall provide data in the form and format dictated by test plan or other directive for specific test programs. Data may be the direct product from ballistics measurement instrumentation or it may be reformatted, correlated, and retransmitted to form part of a larger body of data. Data shall be output in engineering units and presented as graphs, tables, plots, spreadsheets, etc. Data shall be delivered on electronic media, or as a retransmitted signal to other sites via data network.

**C.5.3.4.2 Work Products.** Operation and maintenance of ballistics measurement instrumentation systems by fully qualified personnel to meet requirements specified in published documentation and the direction given by the Test Officer for the specific test

activity.

### C.5.3.5 **Automotive Instrumentation**

C.5.3.5.1 **Scope.** You shall operate and maintain the YPG automotive instrumentation systems and equipment on YPG ranges or other ranges. This includes permanent fixed sites, such as the Large Multipurpose Environmental Chamber (LMPEC) that houses a Chassis Dynamometer, and mobile/portable equipment to include dynamometers and associated trailers and instrumentation vans. Tasks under this function require installation and calibration of various analog and digital sensors, data acquisition instrumentation such as data loggers, transmission systems, signal conditioners, bus monitors, analog/digital tape, solid state recording devices, real-time GPS tracking and recording systems, and other equipment on wheel and track tactical/combat ground vehicles, and other test platforms; Reception and data reduction of the received signals or stored test data. Procurement and/or development of software as required to accomplish these tasks. Development of those portions of instrumentation plans that relate to instrumentation methods in coordination with: YPG Test Officers; manufacturers of items under test; manufacturers of instrumentation equipment; or other units at YPG with which you will send or receive data. Modification or adjustment of the equipment to meet specific requirements established for specific tests. Operation and maintenance of the dynamometer vehicles and trailers. The maintenance of these vehicles shall meet the requirements contained in the OEM's specifications. You shall provide analog and digital data in the form and format dictated by the test plan or other directive for specific test programs. The majority of data will be produced in the form of engineering units with outputs in graphical, tabular form or on electronic media, or as a re-transmitted signal to other sites.

C.5.3.5.2 **Work Products.** Operation and maintenance of automotive instrumentation systems by fully qualified personnel to meet requirements specified in published documentation and the direction given by the Test Officer for the specific test activity.

### C.5.3.6 **Threat Systems & Target Simulation**

C.5.3.6.1 **Scope.** You shall operate and maintain YPG stationary and moving target to include foreign, surrogate/hybrid, and domestic threat target vehicles on YPG ranges and other ranges. Tasks under this function require participation in and support of the Central Asset Pool of the Targets Management Office (TMO) foreign vehicle parts supply and inventory system to include control and reporting of foreign parts and equipment, completion of parts transactions, and cooperation with the central supply warehouse and parts database administrator (one radio frequency navigational grid (RFNG) system is the property of the TMO); operation and maintenance of moving target equipment, remote control instrumentation, and signature simulation equipment to include maintaining a supply of spares, repair of the equipment, periodic inspections, reporting of any unsolvable problems, preventive maintenance, and authorized modifications or upgrades; and production of signature baseline data, target scoring data, or other data produced by these systems as required by Test Officers. You shall

participate in and support the efforts to solve moving target test support shortfalls and you shall participate in the development of target and remote control system upgrade and modernization initiatives. This work shall be performed in accordance with technical manuals, directives, SOPs, and safety and environmental requirements.

**C.5.3.6.2 Work Products.** Targets in the number and configuration specified in the test request for the specified duration to meet the functional requirement specified by the requestor.

### **C.5.3.7 Calibration (TMDE Program)**

**C.5.3.7.1 Scope.** You shall be responsible for management and modernization of the YPG Calibration and Repair Support Program (C&RS). You shall operate and maintain the YPG Test Measurement Diagnostic Equipment (TMDE) support center. The support center (Calibration Lab) shall provide standardization, calibration and repair support for all TMDE submitted by customers in accordance with guidelines established in referenced documentation. All calibration shall bear evidence of traceability to the National Institute of Standards and Technology (NIST). You will also be called on to verify the validity of test data through verification of processes and equipment. Work will be performed in accordance with AR 750-43 (Army TMDE Program); Army Technical Bulletin (TB) 43-180 (Technical Data Catalog), Army TB 750-25 (Maintenance of Supplies and Equipment Army TMDE Calibration and Repair Support Program); Yuma Proving Ground Regulation 750-8 (Maintenance of Supplies and Equipment TMDE Program); and the calibration lab External Standard Operating Procedure. You shall provide all services, reports, documentation and data in the format and timeframe prescribed in the above referenced guidelines.

**C.5.3.7.2 Work Products.** A calibration lab to standardize, calibrate and repair in accordance with guidelines established in referenced documentation all TMDE submitted by customers.

### **C.5.3.8 Lasers**

**C.5.3.8.1 Scope.** You shall operate and maintain the YPG laser Precision Automated Tracking Systems (PATs) which are located at permanent fixed sites on YPG Cibola Range. You shall operate the laser unit for pre-mission start-up/calibrations; and tracking test vehicles. You shall maintain and repair the laser units, sub-systems, and associated equipment to the component level to maintain performance parameters as defined in published manuals and specifications. You shall acquire, log, and transmit real-time data; and produce data in the form of engineering units with outputs in graphical, tabular form or on electronic media, or as a re-transmitted signal to other sites. You shall recommend modifications or software changes. You shall perform maintenance, adjustments, and calibration as required to maintain optimal tracking accuracy and consistency of all units.

**C.5.3.8.2 Work Products.** Operation and maintenance of laser radar by fully qualified personnel to meet requirements specified in published documentation and the

direction given by the Test Officer for the specific test activity.

#### C.5.3.9 **Vehicle Tracking System (VTS)**

C.5.3.9.1 **Scope.** You shall operate and maintain the Vehicle Tracking Systems, GPS/INS-ARDS (Advanced Range Data System). This includes operation and maintenance of reference stations; installation of units on vehicles (ground or air) to provide track and property management of the various system components.

C.5.3.9.2 **Work Products.** Tracking data to the Test Officer in the format and media specified by the Test Plan or retransmitted to a communications node for inclusion in a data stream.

#### C.5.3.10 **Wireless Telephony Communications**

C.5.3.10.1 **Scope.** The contractor shall staff and be responsible for the planning, design, development, implementation, installation, networking, programming, operational maintenance and management of the YPG wireless telephony communications as they relate to the test and evaluation mission supported by the YPG Test Centers. Representative systems include the Global System for Mobile (GSM) communications, Universal Mobile Telephony System (UMTS), and Code Division Multiple Access (CDMA) 2000. Test and evaluation Wireless Telephony activities include simulation and modeling, resource management, facility management, environmental management, configuration management, command and control, mission planning, and test configuration.

C.5.3.10.2 **Work Products.** A fully functional, reliable Wireless Telephony Systems will be operated and maintained to meet test requirements.

#### C.5.3.11 **Field Technician Support**

C.5.3.11.1 **Scope.** You shall provide personnel on an as required basis to manually operate various threat environments/components. These threats are ever evolving and based on what is being employed in theaters of conflict. Environments/components may be complex electrical systems, static displays, and/or ethnic costuming. Additional taskings may be, to act as an escorts and/or access control for training or conferences.

C.5.3.11.2 **Work Products.** Support provided will be specified in the test request for the specified duration to meet the functional requirement specified by the requestor.

### **C.5.4 Optical and Geodetic Instrumentation Operations.**

#### C.5.4.1 **Optical Tracking**

C.5.4.1.1 **Scope.** You shall move, set-up, conduct field maintenance, operate and tear down **all** Optical Tracking Systems and other data gathering equipment to track fast

moving objects that are shot or dropped during tests on YPG ranges or other designated ranges. You shall coordinate site preparation for tracking mount requirements. **Any non functioning part of the tracking system is required to be reported to optical maintenance personnel.** You shall provide raw field data, annotated and coded, on various media to data reduction personnel and/or Test Officers. You shall have the capability to archive test data. You shall provide output that may be the direct product from the optical tracking systems or it may be reformatted, correlated, and retransmitted to form part of a larger body of data. You shall maintain the appropriate documentation for all pre/post test support and operator maintenance for both scheduled and unscheduled.

**C.5.4.1.2 Work Products.** Operation of Optical Tracking Systems by fully qualified personnel to meet requirements specified in published documentation and the direction given by the Test Officer for the specific test activity.

#### **C.5.4.2 Optical Tracking Maintenance**

**C.5.4.2.1 Scope.** You shall provide maintenance and repair of various optical tracking systems on YPG ranges and other designated ranges. Tasks under this function require preventive maintenance checks and services; repair and/or replace parts; modifications to equipment (after Government approval) to the extent required in technical manuals; and operational field maintenance. You shall provide all services, reports, documentation, and data in the format and timeframe prescribed.

**C.5.4.2.2 Work Products.** Serviceable optical tracking systems and equipment achieved by qualified personnel performing maintenance IAW applicable manuals and procedures.

#### **C.5.4.3 Surveying**

**C.5.4.3.1 Scope.** When required you shall provide general surveying services on YPG ranges and other ranges.. Work shall be based on the YPG Local Plane Coordinate System and transformed to other coordinate systems as required.

**C.5.4.3.2 Work Products.** Tabular survey data to Test Officers as required for specific test programs.

#### **C.5.4.4 Geographic Information System**

**C.5.4.4.1 Scope.** The contractor shall assist in the planning, design, development, implementation, and spatial data management of the YPG Geographic Information Systems (GIS) as it relates to the mission supported by YPG. Creating and/or updating spatial data and provide analysis for test range operations. You shall provide hard/soft copy maps, graphics or tabular data outputs from GIS data and make approved modifications to existing GIS data. When directed, you shall develop and implement training programs in GIS technologies, methods, and procedures for the YPG community When directed, you shall determine accuracy and validation of current GIS

data. If and when require, the Government can prioritize workload.

C.5.4.4.2 **Work Products.** A fully functional, reliable geographical information system, to adequately meet the requirements specified by users.

#### C.5.4.5 **Range Optical Measurements**

C.5.4.5.1 **Scope.** You shall operate various geodetic instrumentation, equipment, and applications on YPG and other ranges. You shall observe, align, acquire, and record test data You shall use standard or government approved surveying equipment to emplace instrumentation and items under test where exact location and orientation information is required.

C.5.4.5.2 **Work Products.** Spatial locations of artillery round impacts in the form and format dictated by the test plan or other directive for specific test programs.

#### C.5.4.6 **TV Instrumentation**

**Scope.** You shall operate various camera systems to include standard video high resolution, high definition, and infrared cameras to record scientific data of test related items and to document and measure test events at various test sites and gun positions on YPG ranges on the ground and from aircraft. You shall install cameras, controllers, transmitters, and other equipment on test vehicles and aircraft including integration or adaptation of the video equipment into the optical sights and electrical power supplies of the vehicle. You shall install receivers and relays as required to transmit video from source to ultimate terminal. You shall operate and maintain central permanent receiving and processing sites as required. You shall maintain capability for classified encrypted video. You shall acquire, process, and reduce the data in the form and format required for the specific test program. You shall install and maintain security and safety camera systems in support of YPG testing. You shall perform operator maintenance on GFE'd/government equipment. You shall identify and report all equipment failures within 1 business day. You shall maintain the appropriate documentation for all pre/post test support and operator maintenance for both scheduled and unscheduled actions.

C.5.4.6.1 **Work Products.** Quality imagery on videotape and digital media of scientific data and/or test related items where applicable as dictated by the test plan or other directive for specific test programs. Quality imagery in real-time where applicable.

#### C.5.4.7 **Photo-Optical Imaging (OI)**

C.5.4.7.1 **Scope.** You shall provide electronic imagery and data that captures various phenomena related to weapons system testing in support of the YPG test mission on YPG or other designated ranges. You shall setup and operate high-speed digital and photographic cameras and systems, at fixed test locations and on dynamic test. You shall recommend, select, and employ the appropriate combination of optical instrumentation devices/systems to support mission requirements. You shall maintain the capability of providing imaging format standards that will reflect current digital

technology and will change to accommodate advances in imaging technology. You shall provide a comprehensive, timely, and accurate data product to the test customer. You shall maintain the capability to acquire, handle, and process classified information IAW applicable ARs and SOPs. You shall maintain the appropriate documentation for pre/post test support and maintenance requirements.

**C.5.4.7.2 Work Products.** High quality electronic or film image data, in the quantity and format as dictated by the test plan or other directive for specific test requirements.

#### **C.5.4.8 Data Reduction**

**C.5.4.8.1 Scope.** You shall read video imagery and extract metric and time data to produce time history and motion data or other data as required. Tasks under this function require obtaining the image data, normally from field instrumentation personnel, cataloging and storing the data; and providing the required output, format, and quantity of image data. You shall extract data from recorded imagery by making direct observations of events and objects in the image. Digitize Doppler Radar data for processing and analysis. Process and analyze Optical (tracking and fixed) measurements using QD filtering techniques. Calculate and apply calibration corrections from a wide variety of instruments. Process various optical data for position, velocity, acceleration, altitude, and attitude data. Utilize post-processing software in the reduction of Overhead measurements, miss distance, and store separation calculations. Perform Quick look processing of Real-Time data and report anomalies to allow for on the spot correction in order to provide Time and Space Position Information (TSPI). Perform Image processing and analysis for various measurements as requested by Test Officer. Participate in the design/re-design of new and existing software. Shall provide input for software enhancements and user interface design. Participate in identifying and investigating anomalies in field instrumentation. Assist in pre-test instrumentation planning and placement. Participate in the development of cost estimates. This shall include the evaluation and analysis of the results of the data processing and production of the requested data in support YPG customers. Provide support in the recording of telemetry during real time testing as required by the customers. You shall maintain the appropriate documentation for pre/post test support and maintenance requirements. You shall maintain the capability for processing classified encrypted data.

**C.5.4.8.2 Work Products.** Various data extracted from technical imagery and presented in the form and format required by the Test Officer for specific test programs.

#### **C.5.4.9 Data Conversion**

**C.5.4.9.1 Scope.** You shall perform image conversion, manipulation and editing of all types of images gathered in support of the YPG test mission. . Any data that is subject to conversion may include resultant test data from any test instrumentation used to support the YPG test mission. You shall assist in test planning and technological development efforts to assure satisfactory imagery for data extraction. You shall report

the quality level and adequacy of imagery received.

**C.5.4.9.2 Work Products.** Quality imagery achieved by performing editing and conversions on all types of image formats to satisfy the requirements of the Test Officer for the specific test activity.

#### **C.5.4.10 Electro-Optical Maintenance**

**C.5.4.10.1 Scope.** You shall maintain and repair various electronic, mechanical, and optical equipment used in obtaining test data on YPG ranges and other ranges. You shall fabricate prototype equipment and instrumentation and perform low rate production of instrumentation in support of test projects. You shall perform all required corrective inspections, corrective servicing, and modification to the extent required in applicable technical manuals. When the uniqueness or level of sophistication for instrumentation/equipment is beyond current capabilities, you shall at the discretion of the Government, return the equipment to the manufacturer or a certified repair facility for required maintenance. For each piece of equipment under these special circumstances, an additional control system will be implemented and signed for by the hand receipt holder. You shall maintain the appropriate documentation for all maintenance requirements.

**C.5.4.10.2 Work Products.** Serviceable electronic, mechanical, and optical equipment achieved by performing scheduled services and repairs performed IAW applicable manuals.

#### **C.5.4.11.1 Meteorology**

**C.5.4.11.2 Scope.** You shall operate and maintain meteorological equipment to include permanent fixed sites and mobile equipment on YPG ranges and other ranges. Tasks under this function require collecting and distributing upper air data; operating a mesometeorological system and direct fire meteorological systems to provide near real time data; providing meteorological services, such as forecasting, weather warnings and watches; maintaining climatological data bases and making archived data updates; publishing and distributing data; providing consultation services and coordination with Test Officers and other customers using the meteorological service; maintaining and repairing all meteorological equipment, computers, and instruments; and calibrating instruments as required by TMDE schedule and manufacturers' recommendations.

**C.5.4.11.3 Work Products.** Meteorological services such as data, forecasting, and consultation adequate to meet requirements specified by the users.

### **C.5.5 Metrology and Simulation Operations.**

#### **C.5.5.1 Weapons Firing Chamber**

**C.5.5.1.1 Scope.** You shall operate the Weapons Firing Chambers to support tests

of full-sized vehicles and equipment, artillery, direct fire systems, and ground and air military combat support components. Tests may include weapon firing from within the chamber. Operations shall be IAW applicable International Test Operating Procedure (ITOP) and MIL-STD-810G. Tasks under this function require calibrating equipment; positioning test items properly in the chambers; instrumenting test items; simulating extreme temperature and humidity levels inside the chambers; conditioning test items; pre- and post-test inspections of the test items; operating high speed data acquisition systems; providing on-site data reduction; modifying computer hardware and software, as required; and producing data in the form of engineering units with outputs in graphical, tabular form or on electronic media.

**C.5.5.1.2 Work Products.** Operation of the Weapons Firing Chamber by fully qualified personnel to meet the requirements specified by the Test Officer for the specific test activity.

### **C.5.5.2 Climatic Testing/Controlled and Natural Environments**

**C.5.5.2.1 Scope.** You shall operate the Climatic Test Facility to simulate tests such as salt-fog, extreme temperature/extreme humidity, altitude, thermal-shock, thermal stability, water immersion, mud, icing, and solar radiation to support tests of various munitions, weapons, and military equipment. You shall also operate the desert storage natural exposure facility to simulate long-term storage effects, such as thermal and solar response on various munitions, weapons, and military equipment. Tasks under this function require equipment set-up and calibration, instrumentation and orientation of test items, pre-test and post-test inspections, and operation of automated equipment and computers. You shall provide the Metrology and Simulation Report Quality Team (RQT) test information including but not limited to, test set-up documentation, visual assessments of damage, and photographs. Data output may be required in written format and/or on electronic media such as video, CD/DVD, etc. The Metrology and Simulation RQT will format the information and have the report reviewed by senior engineers within the Division before routing the information to the appropriate Test Officer.

**C.5.5.2.2 Work Products.** The Climatic and Desert Storage test facilities will be operated by fully qualified personnel to meet the requirements specified by the Test Officer for the specific test activity.

### **C.5.5.3 Rain and Dust Facility**

**C.5.5.3.1 Scope.** You shall operate the Rain and Dust facility to simulate conditions of precipitation or blowing dust. Operations shall be IAW MIL-STD-810G. Tasks under this function require conditioning of the chamber as required by specific test plans; operating the facility at ambient or hot temperatures; calibrating equipment; pre- and post-test inspections of the test items; and producing test set-up documentation, photos, and compiled field test data, such as damage code lists, video tapes, etceteras. You shall provide data in the form and format outlined in the test plan or other directive.

C.5.5.3.2 **Work Products.** Operation of the Rain and Dust Test facility and the Desert Storage facility by fully qualified personnel to meet the requirements specified by the Test Officer for the specific test activity.

#### C.5.5.4 **Hazard Classification and Insensitive Munitions (IM) Testing/Deflagration**

C.5.5.4.1 **Scope.** You shall perform hazard classification testing IAW MIL-STD-810G (Test Method Standard for Environmental Engineering Considerations and Laboratory Tests), and TB700-2 Department of Defense Explosives Hazard Classification Procedures and MIL-STD 2105C (Hazard Assessment Tests for Non-Nuclear Munitions); and conduct Insensitive Munitions (IM) Testing in accordance with MIL-STD 2105C, STANAG 4240 (Liquid Fuel/External fire, Munitions Test Procedures), STANAG 4396 (Sympathetic Reaction, Munitions Test Procedure), STANAG 4382 (Slow Heating, Munitions Test Procedure), and STANAG 4526 (Shape Charge Jet, Munitions Test Procedure). Primary applications are the setup and preparation of each required test, acquisition of thermal data, high speed/real time video data, blast overpressure data, and meteorological data. This may require the pre-test disassembly, modification, fabrication and instrumentation of ammunition test items, vehicle or weapon system with thermocouple wire/probes. This will be performed with the assistance of an Unexploded Ordinance (UXO) technician.

C.5.5.4.2 **Work Products.** Hazard and safety testing conducted by fully qualified personnel to meet the requirements specified by the Test Plan or the specific test activity.

#### C.5.5.5 **Vibration and Shock**

C.5.5.5.1 **Scope.** You shall operate all instrumentation and equipment at the Vibration Test Facilities IAW MIL-STD-810G, ITOP and other DOD or commercial industry test specifications for transportation and tactical vibration environments of ammunition stores, high explosives, and materiel or general equipment. Tasks under this function require operating electrodynamic and electrohydraulic shakers and digital vibration controllers; pre-conditioning test items to extreme temperatures; calibrating equipment; pre- and post-test inspections of the test item; instrumenting test items; producing field shock and vibration data, such as gunfire effects on vehicle structure, effects from explosives, shock response spectrum analysis, and schedules for rocket and gunfire on aircraft; operating high speed data acquisition systems; producing real time vibration measurements; developing portions of instrumentation plans that relate to vibration and shock in coordination with YPG Test Officers, manufacturers of items under test, manufacturers of instrumentation equipment, and other units at YPG; modifying or making adjustments to equipment to meet specific requirements established for specific tests; and producing data in the form of engineering units with outputs in graphical, tabular form or on electronic media. You shall provide data in the form and format outlined in the test plan or other directive.

C.5.5.5.2 **Work Products.** Operation of the Vibration Test facilities by fully

qualified personnel to meet the requirements specified by the Test Officer for the specific test activity.

#### C.5.5.6 **Rough Handling**

C.5.5.6.1 **Scope.** You shall operate YPG Rough Handling facilities. Tasks under this function require operating the Loose Cargo facility to simulate transporting unsecured munitions and equipment, packaged or unpackaged, in tactical wheeled vehicles; and operating the Jolt and Jumble facility to simulate jolt by a series of impacts in a controlled direction on unsecured munitions and equipment and jumble by random impacts imparted by free-fall inside a rotating wood-lined box. Each simulation shall be conducted IAW ITOP 4-2-602, or MIL-STD-810G. Tasks under this function require calibrating equipment; pre- and post-test inspections of test items; and producing test set-up documentation, photos, and compiled field test data, such as damage code lists, video tapes, etceteras. You shall provide data in the form and format as outlined in the test plan or other directive.

C.5.5.6.2 **Work Products Operation** of the Rough Handling facilities by fully qualified personnel to meet the requirements specified by the Test Plan for the specific test activity.

#### C.5.5.7 **Drop Test**

C.5.5.7.1 **Scope.** You shall operate all YPG drop test facilities. Operations shall be IAW ITOP 4-2-602, ITOP 4-2-601, or MIL-STD-810G. Tasks include operating the 40 foot drop test facility used to simulate accidental dropping during loading or unloading of munitions on a ship from a vertical height of 40 feet; operating the Site 3 drop test facility used to simulate a hovering helicopter dropping munitions, equipment being dropped from a sling; or dropping stacked munitions while unloading a truck and operating drop tests at other sites. You shall rig the test items to provide various drop orientations; condition the test items to ambient, hot or cold temperatures during rough handling drop tests; calibrate the equipment; conduct pre- and post-test inspections of the test items; and provide test set-up documentation, photos, and compiled field test data, such as damage code lists, video tapes, etceteras. You shall provide data in the form of a written field report, photo's, video and format outlined in the test plan or other directive.

C.5.5.7.2 **Work Products.** Operation and maintenance of the Drop facilities by fully qualified personnel to meet the requirements specified by the Test Officer for the specific test activity.

#### C.5.5.8 **A/C Maintenance & Electrical**

C.5.5.8.1 **Scope.** You shall perform A/C & electrical Maintenance on test equipment. This shall be IAW applicable technical manuals and specifications. Tasks under this function require installing and troubleshooting electrical apparatus, devices, and wiring. Such as the installation/repair of air-conditioning units on fixed and mobile

platforms, modifying complex cascade refrigeration systems; calibration of temperature recorder/controllers, fabricating, repairing installing instrumentation and equipment; maintaining stock of mechanical and electronic components required for instrumentation repair, repair of damaged or failed components and all corrective/preventative maintenance. Electrical Support of firing programs will be tasked by the YPG weekly range schedule. This support will be provided IAW the electrical setup and layout checklists. You shall provide all services, reports, documentation and data in the format and timeframe prescribed.

C.5.5.8.2 **Work Products.** Serviceable test equipment achieved by performing scheduled services and repairs as required IAW applicable technical manuals, MIL Standards and Test Plans.

#### C.5.5.9 **Nondestructive Inspections (NDI)**

C.5.5.9.1 **Scope.** You shall perform mass property tests and nondestructive inspections on a variety of ordnance materiel. Tasks under this function require inspections such as, magnetic particle, liquid dye penetrate, bore scope inspection of gun tubes, ultrasonic, infrared, and eddy current; mass properties inspection and evaluation of cannon tubes, breeches, gears, and components using electronic and manual star gages, pullover gages, digital comparators, coordinate machines, precision measuring instruments to determine strength of materials, hardness of materials and metallurgical properties; record keeping of tube cards to maintain the current status of cannon tubes and breeches to determine gun tube wear and life conditions; and production of data in the form of engineering units with outputs in graphical, tabular form or on electronic media. **Pre fire and post fire nondestructive evaluation will be conducted on acceptance weapon platforms to include navigation runs and fire control systems verification.**

C.5.5.9.2 **Work Products.** Inspections of test items by fully qualified personnel using acceptable procedures that result in inspection reports providing the Test Officer with required information regarding specific test items. Tube and breach history data cards will be generated, permanently assigned, and entered into a database for each weapon platform after the acceptance process.

#### C.5.5.10 **Mass Properties (Measurements)**

C.5.5.10.1 **Scope.** You shall operate high precision measuring machines and equipment to determine weights and balances of projectiles and a variety of other ordnance materiel. Tasks under this function include set-up of equipment and test items; instrumenting test items; determining proper positions and sequences; determining measurements, such as center of gravity and moments of inertia; and producing data in the form of engineering units with outputs in graphical, tabular form or on electronic media. You shall conduct all maintenance of copper crusher gages; report pressures recorded via returned copper crusher gages and ensure an adequate stock of copper crusher gages for supporting test programs.

C.5.5.10.2 **Work Products.** Operation and maintenance of high precision measuring machines and equipment by fully qualified personnel to meet the requirements specified by published manuals and the direction given by the Test Officer for the specific test activity.

#### C.5.5.11 **Radiography (Static/Flash/Tire X-Ray)**

C.5.5.11.1 **Scope.** You shall operate Static, Flash, and Tire X-Ray equipment. Static X-Ray will be performed on a wide variety of munitions and other materiel at Bldg. 3493, Tire X-ray will be performed on a wide variety of tires at Bldg. 2310 while Flash X-Ray will be performed at various test sites on YPG ranges to inspect ammunition in flight. Static operations may include x-ray of fuzes, artillery projectiles, mortar cartridges, rockets or mine systems of either metallic and nonmetallic composition or other equipment/parts. Tasks under this function may require set-up of equipment; use of variety of industrial and medical radiographic film, digital imaging plates and screens; installing manipulator fixtures, converter screens and lenses; making adjustments to field of view to meet resolution requirements; making adjustments to triggering to meet capture point requirements; operating computers to control data acquisition; operating robotic equipment; making real time adjustments to exposure parameters; recording real time inspection images on video tape; operating film processing equipment; dark room maintenance; analysis of radiographic film; a determination of the safety of munitions by verifying warhead configuration of proper alignment of safe and are mechanisms; performing an overall internal integrity check of welds or castings for the presence of flaws such as cracks, porosity, shrinkage, slugs cold laps, discontinuities, or incomplete penetration of weld metal. You shall provide data in the form and format dictated by the test plan or other directive for specific test programs.

C.5.5.11.2 **Work Products.** The operation and maintenance of Static/Flash/Tire X-Ray equipment by fully qualified personnel to meet the requirements specified by published manuals and the direction given by the Test Officer for the specific activity.

#### C.5.5.12 **Ballistics Pressure Transducer**

C.5.5.12.1 **Scope.** You shall procure materials and fabricate YPG patented piezoelectric pressure transducer. Tasks under this function require you to periodically provide transducer inventories, production reports, and maintain a minimum inventory of pressure transducers.

C.5.5.12.2 **Work Products.** Ballistics pressure transducer fabrication by fully qualified personnel to meet the requirements specified by published manuals and specific weapons.

### C.5.6 **Computation and Automation**

#### C.5.6.1 **Real-Time Mission Support Systems**

**C.5.6.1.1 Scope.** You shall operate, maintain, test, and verify operational performance capabilities of the Real Time Mission Control Centers and mobile mission assets consisting consolidating, formatting, quality checking, synchronizing, framing, and otherwise processing data received in a real time format from a variety of range sources such as but not limited to standardized data object models, meteorological equipment, optical equipment (fixed and tracking), onboard video, telemetry streams, survey data, vehicle tracking systems, and GPS data. Output items will consist of but not limited to real time archived Consolidated Data Files (CDF), pointing/control data, reports, streaming media, and a variety of local and web-based graphics and other displays to reformat, analyze, and report the data. Tasks may include, but not limited to pre-mission coordination meetings with Test Officers, Customers and support personnel; initialization, calibration, and operation of all mission essential equipment; performance of mission control functions including monitoring, instrumenting, vectoring of test aircraft for precise positioning and giving voice instructions to pilots in terms of speed, altitude, and direction, verification of communication with test aircraft, ground support locations, and data links to range instrumentation for real time system operation; calibration of range instrumentation into Real-Time computer programs, verify and configure real time video displays for Test Officer and test team availability; and performing post data compilation. You shall provide and maintain current written and electronic documentation of procedures for using real time processing techniques and demonstrate proficiency. During test missions various real time displays shall be made available to the Test Officers and the test team. Quick-look data reports shall be provided to the Test Officer post-mission, as required. Archived data will be forwarded for data processing. When requested, videos will be recorded to show the data displayed during real time processing (i.e., instrumentation, onboard recorders, etc.). Outputs will be in the formats and on the media provided by the Test Officer.

**C.5.6.1.2 Work Products.** A fully functional, reliable Real Time Mission Control Center and Mobile Mission Control, capable of providing required products to test customers in a timeframe acceptable to the Test Customer. Systems shall be operated by fully qualified personnel to meet the requirements specified by the Test Customer for the specific test activity.

## **C.5.6.2 Data Processing and Analysis**

**C.5.6.2.1 Scope.** You shall perform systematic data reduction of raw data collected from a variety of field instrumentation by converting raw test data into formats suitable for computer processing and engineering. Data processing analysis support shall include, but not be limited to: receiving data from external sources extraction of data from imagery data files, identifying and investigating field instrumentation anomalies, developing cost estimates, and assist in pre-test instrumentation requirements. You shall attend instrumentation, data collection and processing meetings where test program requirements are defined and assist in the development of pre- and post test accuracy statements. You shall participate in the design of new mathematical/statistical procedures to improve data quality, estimate new parameters, use new measurements or combine several types of measurements to optimize quality

of the data products. You shall provide input into data handling and data processing procedures required to transform measurements into useable results. You shall produce written reports of instrumentation anomalies observed while performing data reduction. You shall provide post flight data reduction and processing techniques for specialized and mission specific test items that demand special procedures outside the realm of day-to-day data processing requirements. You shall provide data and analysis reports, graphs, plots, data files, and/or documentation to the Test Officer in the format and timeframe required.

**C.5.6.2.2 Work Products.** A Data Processing and Analysis Center operated by fully qualified personnel to meet the requirements specified by the Test Officers for specific test activities.

### **C.5.6.3 Computer Software Programming**

**C.5.6.3.1 Scope.** You shall provide computer software programming to include, but not limited to mathematical and statistical support, design and develop web-based and local graphical displays and user interfaces. Develop and maintain databases as required. Tasks under this function require developing a variety of complex computer programs using a variety of languages and coding conventions to acquire and process test data, design and develop web-based and local graphical displays and user interfaces, modify and update computer programs to correct software problems caused by system software and hardware updates, system change requests, and new test requirements. You shall develop software and documentation IAW directives, regulations, policies, and local SOPs. You shall develop mathematical methods and algorithms applicable to mission. These mathematical methods and algorithms address, but are not limited to field instrumentation such as tracking instrumentation (i.e. radar, IVTS, GPS), telemetry, and other electronic and optical range instrumentation systems. You shall incorporate ballistics and statistical theories and procedures. You shall provide documented and hands-on training in the use of new or modified software. You shall evaluate commercial off the shelf software packages to determine the viability of use to meet the requirements of the mission and ensure that existing policies and procedures are addressed for these COTS packages. You shall develop capabilities by using associated tool kits and APIs provided for the COTS/GOTS products that support the test mission.

**C.5.6.3.2 Work Products.** Computer software, mathematical algorithms/procedures, and all documentation that are valid and verified to support the requirements specified by end users.

### **C.5.6.4 Systems Configuration & Maintenance**

**C.5.6.4.1 Scope.** You shall provide systems administration, maintenance configuration management and quality improvements of all equipment in support of real time data processing and data analysis environment. Tasks under this function shall include but not limited to remedial, preventative maintenance, current and future planning of electronic data processing systems and major subsystems associated with a

highly sophisticated and complex scientific data systems, perform development work, design, modification, fabrication and testing to meet requirements for specialized test projects, conduct and coordinate assigned systems engineering activities to include engineering change orders, operating system updates and configuration changes, assist in developing specifications for new real time and data processing and analysis computer systems or modifications and improvements to existing systems; interfacing networks, analyzing operation and determining the cause of failure of microprocessor controlled circuits using logic analyzers and maintenance test programs; creating and maintaining documentation for system interfaces including schematics, cabling, and equipment layout; maintaining all operating systems; order computer related supplies, equipment, maintenance service, etc; and serving as system administrator for various computer systems. Maintenance includes repair, servicing, calibration, updating, configuration control, troubleshooting, patching, etc. of all hardware and computer operating systems, including mobile assets. You shall maintain adequate spare parts and equipment to maintain an operational real time data processing and analysis environment based on a Government approved equipment list.

**C.5.6.4.2 Work Products.** Maintain a functional, reliable, computational facility that is adequate to meet the requirements specified by the system users.

#### **C.5.6.5 RAM Test Database Development and Maintenance**

**C.5.6.5.1 Scope.** You shall design, organize, and develop databases appropriate for storage and retrieval of a wide range of test data (Test Incident Reports (TIR's), mission, service, tools, daily summaries, firing) to satisfy mission requirements as provided by the Test Officer. You shall create and maintain databases used for storage of software and test data in accordance with DA PAM 73-1 and other applicable Army documents. You shall provide instruction for installation of the software and support the Observer Data Input Nexus II (ODIN II) software on PC's and laptop computers, including configuring the database server access tables and databases for use by ODIN II and providing training and documentation to users. You shall develop and generate various standard output reports for the end user. You shall provide a wide range of reports to Test Officers and their customers, such as, TIRs; scoring documents; and various reliability, availability, and maintainability reports.

**C.5.6.5.2 Work Products.** Fully functional databases for storage and retrieval of test data. The databases must meet the requirements of specific test programs and Army regulations and guidance.

#### **C.5.6.6 RAM Test Database System Administration**

**C.5.6.6.1 Scope.** You shall administer the RAM test database system for the YPG command including subordinate activities such as Cold Regions Test Center (CRTC) and Tropic Region Test Center (TRTC). You shall manage the local database network interface including installation, modification, troubleshooting, etc. You shall coordinate with the Developmental Test Command (DTC), Aberdeen Test Center (ATC) and other agencies responsible for management of the centrally controlled software. You shall

create, install, and maintain electronic distribution/mailing procedures for test data from the databases. Test data emailing is accomplished through current YPG/APG procedures. You shall provide training and support for the methods of report generation and querying the databases utilizing a web based, CAC enabled access, COGNOS software. You shall train users and prepare users manuals as required. You shall manage the system interface with the YPG digital data network, e-mail, and Internet.

**C.5.6.6.2 Work Products.** You shall provide an up-to-date, user-friendly, fully functional, reliable, automated system that enables Test Officers and other users to communicate with computer systems and databases at other locations, such as the VISION Digital Library (VDL) System.

#### **C.5.6.7 Test Media Library**

**C.5.6.7.1 Scope.** You shall manage the Magnetic Media Library and be responsible for the inventory, accountability and tracking of all magnetic and digital media, (i.e., analog/digital tapes, 4/8 mm data tapes, VHS and U-Matic video tapes, CD's, DVD's, and film) in an environmentally controlled and secure repository. You shall operate magnetic media cleaning and degaussing equipment for the YPG community. You shall use a personal computer to interact with and maintain the magnetic media information databases. You shall maintain a database of all commercial off the shelf (COTS) system software media, requisite documentation and licenses, requisite ADP hardware, databases, system software, application software, system backups and test data archives according to applicable SOPs, regulations and other directives. You shall provide all services, reports, documentation and data in the format and timeframe required by the system administrators and IASO.

**C.5.6.7.2 Work Products.** A well-organized Media Library, which provides adequate accountability and ease of media retrieval as, required by users.

#### **C.5.6.8 Business Computing**

**C.5.6.8.1 Scope.** You shall operate and maintain the Business Systems Computer Operations (BCO). You shall operate and monitor job executions and report to the appropriate office when errors and failures are observed. You shall provide assistance to YPG computer users by operating the business help desk, providing output from various computer programs, receiving and executing customer job requests, I/O control, and performing other administrative and technical services.

**C.5.6.8.2 Work Products.** A fully functional, reliable, Business Computer Operations Center adequate to meet requirements specified by system users.

#### **C.5.6.9 Software and Hardware Maintenance**

**C.5.6.9.1 Scope.** You shall maintain all personal computers used to support the YPG test mission. This shall be in accordance with AR 25-2 (Information Assurance)

and Information Management SOPs. You shall establish an IT and Communications trouble desk for YPG customers to submit work requests. This includes installation or removal of Army approved software and upgrades; addition or deletion of software drivers; additions, installations, diagnostics for system hardware; having performed all necessary diagnostic and repair actions to ensure that all software and configurations are proper usage of the system. You shall ensure IA compliance IAW current government approved configuration of systems. You shall ensure no software is installed on systems without IA approval.

**C.5.6.9.2 Work Products.** Computer systems are returned to the customer as a reliable and operational system, as identified on WOs, to meet IA guidance. All system unique software and hardware will be provided by the customer(s) when the WO is initiated. Response times for all WOs will meet the designated criteria to meet mission support criticality.

#### **C.5.6.10 Test Collaboration Server (TCS)**

**C.5.6.10.1 Scope.** You shall provide system administration, database, GIS support, development, enhancements, and configuration management of the TCS environment. You shall also be assigned to provide help-desk support to include project development, coordination of specialized map products and training to Test Officers as required. You shall manage government furnished servers to include the Test Collaboration Server and media servers to provide video locally and in a distributed mode to external YPG customers. Services shall include software engineering support of all TCS-based tools to include the Computed Aerial Release Point (CARP), GeoJerc, Range Safety Fan and other tools created to operate under the TCS environment. Projects will be assigned to you by the QAE/COR. Support shall include a level of expertise with the TCS product to ensure its maintenance and support of test support tools and applications using government furnished equipment and commercial hardware, software, and networks. You shall support both classified and unclassified test support operations via TCS. You shall assist in the accreditation, architecture, and information assurance requirements as set forth by DoD. Prepare required documentation to ensure future developments and enhancements of TCS. Advise Technical Services Division of operational and security issues.

**C.5.6.10.2 Work Products.** Completed projects coordinated with specific Test Officers. Hard and soft copy data results available via TCS (analog, digital, and video).

### **C.5.7 Test Operations and Maintenance**

#### **C.5.7.1 Artillery Testing (Gunners)**

**C.5.7.1.1 Scope.** You shall operate artillery weapons, fixed, towed, and self propelled, as required to perform production acceptance and related test operations for the weapon systems and associated ammunition. To achieve this you shall perform the tasks generally defined by the Technical Manuals at the Operator and Unit maintenance

levels for weapons and ammunition. This includes transport and setup of the weapons to and from the gun positions and setup of the various non-instrumentation items at the positions. The work shall be performed under the general direction of a Test Officer and in accordance with YPG and higher level SOPs and safety requirements.

**C.5.7.1.2 Work Products.** Operation and maintenance of the weapon systems by fully qualified personnel to meet the requirements specified by published manuals and/or the direction given by the Test Officer for the specific test activity.

#### **C.5.7.2 Aircraft Weapons**

**C.5.7.2.1 Scope.** You shall install, align, repair, load, unload, modify, troubleshoot, functionally test, and perform other operations on aircraft weapon systems, unmanned air vehicles/systems, laser systems, target acquisition systems, and other aircraft and related systems as assigned. You shall perform related services in support of aviation tests such as range and target set-up and tear-down. You shall observe, measure, and record data as required. You shall perform property control functions for related equipment, parts, and tools.

**C.5.7.2.2 Work Products.** Operation and maintenance of the weapon systems and unmanned air vehicles/systems by fully qualified, senior personnel to meet the requirements specified by the published manuals and the direction given by the Test Officer for the specific test activity. Operator evaluation of equipment and procedures.

#### **C.5.7.3 Weapons and Communication Systems Operations**

**C.5.7.3.1 Scope.** You shall install, align, repair, clean, load, unload, modify, troubleshoot, functionally test, operate, fire, account for, and store armament systems. You shall perform other operations from armored and wheeled vehicle armament to include communications systems and all other related systems. You shall also conduct the testing and test verification of hand held, crew served, or shoulder fired soldier weapons systems to include anti-armor, anti-vehicle, anti-material and anti-personnel types of weapons. You shall perform related services in support of armored vehicle tests such as range and target set up and teardown. You shall observe, measure, and record data as required. You shall perform property functions for related for related parts and tools. You shall establish and maintain in-house capability to train, test, and certify mechanics/operators to meet U.S. Army, and YPG requirements. You shall document and report test and safety incidents (performance, failures, human factor issues, etc.) as directed by us.

**C.5.7.3.2 Work Products.** Operation and maintenance of the weapon systems by fully qualified, senior personnel to meet the requirements specified by the published manuals and the direction given by the Test Officer for the specific test activity. Operator evaluation of equipment and procedures.

#### **C.5.7.4 Air Delivery**

**C.5.7.4.1 Scope.** You shall construct, maintain, inspect, repair, pack, and unpack personnel, cargo and precision guided parachutes. You shall maintain airdrop equipment. You shall conduct parachute and rigging test operations as requested by a Certified Government Aviation and Air Delivery Test Officer. You shall plan, build, rig, drop, and tear down equipment test for airdrop including vehicles, supplies, equipment, and ammunition. You shall manage and maintain the YPG Drop Zones (DZ) and perform the DZ Safety Officer (DZSO) function. You shall manage the airdrop supply and property control functions for related parts, tools, expendables and equipment, including storage, inventory control, replenishment, accountability, issue, etc. Operations with USAF aircraft shall be coordinated with the assigned USAF liaison. You shall provide Oxygen Safety and O2 mechanic support and maintain all assigned oxygen mask, consoles, and all related oxygen and life support equipment. You shall coordinate and schedule Joint Airborne and Air Transportability Training otherwise known as JAAT scheduling. You shall coordinate and schedule operations and drops, acting as a liaison for Test Officers and the Airborne Test Force Chief Warrant Officer. You shall maintain and manage the Non-standard and test portion of High Altitude Low Open (HALO) parachute systems and sub-components. You shall train and execute airborne operations for test purposes, both HALO, High Altitude High Open (HAHO) and static line operations. You shall fly on all manner of aircraft, both domestic and foreign to dispatch all manner of test items while in flight. You shall maintain and manage the parachute test and fabrication shop and report maintenance hours to the Chief Warrant Officer or designated GS representative in a weekly spread sheet. You shall maintain proper accountability and custody of consumables and hand receipt items. You shall maintain accountability of munitions IAW applicable SOPs and other guidance. You shall conduct test requirement duties as deemed necessary by Government representatives as long as the duties have been deemed safe by the Aviation and Air Delivery Division Hazard Analysis Work Group (HAWG). You shall ensure your work is performed in a clean environment.

**C.5.7.4.2 Work Products.** Parachutes, parachute rigging and controls, load rigging, and packaging in accordance with manuals, adequate to meet requirements specified by the Test Officer for the specific test activity. DZSO and Jumpmaster duties as specified by the Test Officer.

#### **C.5.7.5 Test Vehicle Operations**

**C.5.7.5.1 Scope.** You shall operate and perform operator level maintenance on vehicular and other equipment-undergoing test. The vehicular equipment includes the complete spectrum of transportation vehicles, materials handling equipment, and heavy equipment used by the armed services of the United States and other nations. Other equipment includes a variety of military equipment such as tents, field kitchens, field generators, entrenching tools, etc. You shall operate recovery vehicles to recover equipment from range areas. You shall observe, measure, and record data such as tachographs, vehicle payloads and gross weights, POL consumption, etc. You shall maintain operator's logs of each operation as required for specific tests. You shall establish and maintain in-house capability to train, test, and certify or license operators

to meet Arizona State, Federal, U.S. Army, and YPG requirements. You shall document test incidents (performance, failures, human factor issues, etc.) as directed by us.

**C.5.7.5.2 Work Products.** Operation and maintenance of test vehicles and equipment by fully qualified personnel to meet the requirements specified by the published manuals and the direction given by the Test Officer for the specific test activity. Driver logs and records as required by general written procedures or as specified by Test Officer for the specific test activity.

**C.5.7.5.3 Special Staffing Requirements.** All persons whose duties include the operation of test vehicles must possess and maintain a Commercial Driver's License issued by the State of Arizona with hazardous materials endorsement as required for vehicles carrying ammunition or other hazardous material.

#### **C.5.7.6 Fleet Vehicle Maintenance**

**C.5.7.6.1 Scope.** You shall perform maintenance and repairs on the fleet of YPG vehicles and equipment, Commercial vehicles, Tactical vehicles and non tactical vehicles and equipment, GSA passenger vehicles and trucks, material handling equipment (MHE), passenger buses, construction and earth moving equipment, ground power, generators, auxiliary power units, fuel trucks / fuel dispensing equipment, and other assigned equipment.

You shall perform scheduled and unscheduled maintenance in accordance with (IAW) with the priorities established at USAYPG. You shall perform the maintenance and repair on all equipment in accordance with the applicable technical manuals or manufacture maintenance/repair manuals. Maintenance repairs shall be performed in accordance with the current rates in the maintenance allocation and commercial flat rate charts. Maintenance performed on all equipment shall meet the Army Maintenance Standard as prescribed in AR 750-1, paragraph 3-2.

You shall perform operator, organizational and direct support level repairs to bring equipment to a TM 10/20 standard. This includes applying any Modification Work Order (MWO), Safety of Use (SOU) and Maintenance Advisory Messages (MAM). All contractor applied MWO will be input by contract personnel into MMIS (Modification Management Information System) in accordance with AR 750-10 Chapter 5. The government may direct less than TM 10/20/30 standard as necessary.

In addition to maintaining the equipment in TM -10/-20/-30 standard as required above, the Contractor shall meet the following requirements:

Ensure compliance with, to include reporting and documenting all Maintenance Advisory Messages, Safety of-Use Messages (SOUM), and Ground Precautionary Messages, Modification Work Orders (MWOs). All current messages can be obtained by accessing the Army Electronic Products Support home page at [//aeps.ria.army.mil/](http://aeps.ria.army.mil/). The contractor shall coordinate and ensure sufficient personnel have individual password access to AEPS.

Prior to any repair, the Contractor shall identify and abide by the Maintenance Expenditure Limit (MEL) for each item IAW AR 750-1. In cases where expected repair costs exceed the MEL, the Contractor shall request disposition from the Equipment Manager or authorized representative.

You shall maintain records and status of all equipment under warranty. Maximum use shall be made of warranties to execute repairs. The Contractor shall not execute repairs to equipment under warranty prior to contacting the manufacturer or warranty control office. Cognizant Government approval is required for Contractor execution of repairs on equipment under warranty. Warranty actions and records shall be maintained and documented as required by AR 750-1, paragraph 4-37.

You shall operate the automated information system, (currently SAMS-1E, Dossier) IAW End User Manuals. All operators shall be trained and certified to operate or use the automated systems. You shall implement the scheduled maintenance program IAW DA Pam 750-8 and automated information system End User Manual (EUM).

You shall open, update, and close work orders accurately through the automated information system, (currently SAMS-1E, Dossier) as directed by the government.

You shall provide all shop productivity reports to include overall productivity, by shop section, and by individual, weekly and monthly to the maintenance quality assurance branch from the automated information system, (currently SAMS-1E, Dossier). The reports shall be generated from the automated information system, (currently SAMS-1E, Dossier). You shall provide a weekly open work report to the government (QA/PC Branch) for reviewing open work orders for more than 30 days, and ensure all discrepancies or faults found by the government shall be corrected in the following week. You shall order all required repair parts and update supply status in the automated information system, (currently SAMS-1E, Dossier). You shall provide the expenditure of supply (parts costs) and maintenance costs (Labor costs) to the government if the reports are required by the government in a timely manner- on the same day requested by the government.

You shall provide reports, from the automated information system (currently SAMS-1E, Dossier), as it relates to the performance requirements or tasks that are used to evaluate your performance to the Maintenance Quality Assurance Branch weekly. The performance requirement or tasks shall be changed periodically to evaluate performance in other tasks that are being evaluated. You shall provide the reports including to predefined reports that are already built into the system as well as Ad Hoc reports

You shall complete and submit maintenance Quality Deficiency Report (QDR) by using Standard Form (SF) 368 and Supply Discrepancy Report (SDR), by using SF 364, and furnish the copies to COR.

The Contractor shall operate, maintain, and keep up-to-date a technical library and Government Publications account on-site. This shall include maintaining access to

current DOD and Army websites, such as WEBLOG, Federal Logistics Record (FEDLOG), Logistics Support Activity (LOGSA), AEPS, Defense Logistics Agency (DLA) Logistics Toolbox, etc. The contractor shall coordinate and ensure sufficient personnel have individual password access. The Contractor shall establish a publications account with the United States Army Publishing Agency to obtain technical materials. Updates to publications shall be posted and distributed. The library, accessible to the Government and Contractor, shall contain technical data, Government publications, and other reference material associated with execution of the mission. This library shall include, but not be limited to, TMs, Electronic Technical Manuals (ETMs), ARs, DA PAMs, Technical Bulletins (TBs), Field Manuals (FMs), Modification Work Orders (MWOs), SOUMs, LOs, SOPs. The library shall contain all Contractor developed plans and work procedures to conduct operations and maintain equipment.

You shall perform the equipment de-processing, in/out-processing IAW technical manuals and DA Pam 750-8.

You shall maintain the maintenance facilities, equipment, and tools in the safety standard IAW local SOPs, established guidelines, regulations, and OSHA regulatory requirements.

You shall maintain tool rooms IAW DA PAM 710-2-1.

You shall keep all TMDE items calibrated on time and maintained TMDE program IAW AR 750-1, AR 750-43, TB 750-25, TB 43-180 and the local SOP.

You shall conduct the initial, in process, and final inspections, and other inspections on components, equipment, and vehicles requested by the customers or the government IAW technical manuals or manufacture maintenance or supply manuals.

You shall set a proper report procedure for damages or missing components, items, or vehicles to a proper government agency for the repairs, and ensure the owning agency provides a missing or damage statement to the shop office prior to repairing, fixing or ordering the repair part.

You shall maintain all maintenance, historical and operational records on all equipment and provide reports IAW DA Pam 750-8, AR 750-1 and AR 25-400-2. You shall ensure that the data in the automated information system, SAMS-1E, is accurate and up to date. You shall ensure that you operate the automated information system, SAMS-1E, utilizing procedures outlined in the appropriate End User Manual (EUM).

Quality Assurance Inspections will be conducted via four methods;

- Random Sampling
- 100% Inspection
- Planned Inspections
- Periodic Inspections

The Contractor will be required to report weekly/monthly reject rate and rework hours for reconciliation with QAR. If deficiencies are found during an inspection the Contractor will, at no additional expense to the US Government, be responsible for all rework hours stemming from maintenance and repair rejects that are found to be caused by negligent or inferior workmanship (i.e., loose components, missing parts/hardware, mounted improperly, incomplete services etc.). The Contractor shall emphasize deficiency prevention over deficiency detection and shall meet all existing technical and regulatory guidance for maintaining material within the construct of the Yuma Proving ground (YPG) mission. The Technical Inspections, Surveillances and Audits specified are primarily but not limited to assessing material reparability, level of repair required, appropriateness of repair, markings/labeling, documentations, safety, security and environmental. The Government reserves the right to inspect, survey or audit all equipment and (or) services required by this PWS at any stage of production and by varying methods. The Contractor shall be prepared to present all final products and material to designated Government QAR for inspection/surveillance/audit.

**C.5.7.6.2 Work Products.** Fleet vehicle maintenance work products shall meet Department Army (DA) standards and achieve DA goal of each required maintenance commodity in accordance with (IAW) applicable manuals, but not limited to AR 385-1, AR 700-142, AR 702-1, AR 702-7, AR 702-7-1, AR 710-1, AR 710-2, AR 750-1, DA Pam 700-142, DA Pam 710-2-1, DA PAM 710-2-2, DA PAM 750-8, TB 43 series, TB 750 series, Standard Operations Procedures (SOP), automated system End User Manuals (EUMs), and policies.

#### **C.5.7.7 Test Vehicle Maintenance**

**C.5.7.7.1 Scope.** You shall perform General Support and Depot level maintenance on military ground equipment undergoing tests, including trucks, materials handling equipment, heavy equipment, tracked armored vehicles and tanks, and other equipment such as field kitchens, tents, and generators. You shall perform scheduled and unscheduled maintenance in accordance with the priorities established by USAYPG. You shall perform the maintenance on all equipment in accordance with applicable repair / technical manuals, DOD and other manufacture directives and information. Maintenance repairs shall be performed in accordance with the current rates in the Maintenance allocation chart. Maintenance performed on all equipment shall meet the Army Maintenance Standard as prescribed in AR 750-1, paragraph 3-2. Total Logistics Response Time (TLRT). This is the period of time that elapses between the time an item of equipment or component becomes unserviceable and the time that the item or component is returned to serviceability status after receiving requested maintenance services. TLRT shall be determined by utilizing the policy outlined in AR 750-1, Para 3-3, 3-7 and figure 3-1. TLRT shall be minimized at all times to enhance readiness while reducing Customer Wait Time (CWT). Turnaround Time (TAT) This is the period of time that elapses between the time that you accept the work order followed by completion of the work and the time at close out. Maintenance turnaround time (TAT) shall be maintained at a minimum of 90% IAW AR 750-1, Para 3-3, figures 3-2 and 3-4. You shall provide a Total Logistics Response Time-Maintenance (LRT-M) Status Report, see figure 3-1 AR 750-1, Monthly, Quarterly and Annually to the Maintenance Quality

Assurance Branch.

You shall provide a shop productivity report by name weekly and monthly to the Maintenance Quality Assurance Branch. The productivity report shall include each mechanics total time reported on the work orders, each mechanics time reported on time sheet, total labor cost of work orders, total cost on time sheet, the difference between the costs, clean up times reported and clean up time costs. The expenditure report shall include total expenditures and credits. You shall maintain all Maintenance, Historical and Operational records on all equipment IAW DA PAM 750-8 and AR 25-400-2. You shall ensure that mechanics and technicians maintain an 80% efficiency rate. You shall maintain the class IX repair parts supply and class III petroleum supply procedures in support of maintenance operations IAW DA PAM 710-2-1, 710-2-2, AR 710-2, AR 735-5 and AR 725-50. You shall provide weekly and monthly expenditure reports to the Maintenance Quality Control Branch. You shall establish and maintain in-house capability to train, test, and certify mechanics to meet U.S. Army, and YPG requirements. You shall document and report test and safety incidents (performance, failures, human factor issues, etc.) as directed by us.

**C.5.7.7.2 Work Products.** Serviceable vehicles and equipment achieved by performing scheduled services and repairs performed in accordance with applicable manuals. Maintenance data and maintenance related analysis as specified by the Test Officer for the specific item and operation.

#### **C.5.7.8 Artillery Weapons Maintenance**

**C.5.7.8.1 Scope.** You shall troubleshoot, repair, service, maintain, and overhaul large weapons including towed, self propelled, and turret artillery, mortars, rocket launchers, and other related weapons. Work shall be done in maintenance facilities and at test sites (gun positions) as required. Work shall be done on experimental, standard, and modified weapons, both of the United States and other countries. You shall perform scheduled and unscheduled maintenance in accordance with the priorities established by USAYPG. You shall perform the maintenance on all equipment in accordance with applicable repair / technical manuals, DOD and other manufacture directives and information. Maintenance repairs shall be performed in accordance with the current rates in the Maintenance allocation chart. Maintenance performed on all equipment shall meet the Army Maintenance Standard as prescribed in AR 750-1, paragraph 3-2. Total Logistics Response Time (TLRT), this is the period of time that elapses between the time an item of equipment or component becomes unserviceable and the time that the item or component is returned to serviceability status after receiving requested maintenance services. TLRT shall be determined by utilizing the policy outlined in AR 750-1, Para 3-3, 3-7 and figure 3-1. TLRT shall be minimized at all times to enhance readiness while reducing Customer Wait Time (CWT). Turnaround Time (TAT) This is the period of time that elapses between the time that you accept the work order followed by completion of the work and the time at close out. Maintenance turnaround time (TAT) shall be maintained at a minimum of 90% IAW AR 750-1, Para 3-3, figures 3-2 and 3-4. You shall provide a Total Logistics Response Time-Maintenance (LRT-M) Status Report, see figure 3-1 AR 750-1, Monthly, Quarterly and Annually to the Maintenance Quality Assurance Branch. You shall provide a shop productivity report by

name weekly and monthly to the Maintenance Quality Assurance Branch. The productivity report shall include each mechanics total time reported on the work orders, each mechanics time reported on time sheet, total labor cost of work orders, total cost on time sheet, the difference between costs, clean up times reported and clean up time costs. The expenditure report shall include total expenditures and credits. You shall maintain all Maintenance, Historical and Operational records on all equipment IAW DA PAM 750-8 and AR 25-400-2. You shall ensure that mechanics and technicians maintain an 80% efficiency rate. You shall maintain the class IX repair parts supply and class III petroleum supply procedures in support of maintenance operations IAW DA PAM 710-2-1, 710-2-2, AR 710-2, AR 735-5 and AR 725-50. You shall maintain configuration control of the weapons inventory, maintain a tube life database, and maintenance and configuration records of all assigned weapons. You shall establish and maintain in-house capability to train, test, and certify mechanics to meet U.S. Army, and YPG requirements. You shall document and report test and safety incidents (performance, failures, human factor issues, etc.) as directed by us.

**C.5.7.8.2 Work Products.** Serviceable weapon systems achieved by performing scheduled services and repairs performed in accordance with applicable manuals. Maintenance data and maintenance related analysis as specified by the Test Officer for the specific item and operation.

#### **C.5.7.9 Small Arms Maintenance [40mm and smaller]**

**C.5.7.9.1 Scope.** You shall troubleshoot, maintain, repair, service, align, modify, rebuild small arms weapons including automatic rifles, automatic pistols, revolvers, shotguns, carbines, machine guns, recoilless rifles, rocket launchers and other similar weapons. Weapons may be of United States manufacture or foreign. You shall maintain and secure the inventory of small arms weapons. You shall maintain configuration control and maintenance and use history records of all assigned weapons. You shall analyze weapon performance problems at test sites on the range. All work will be done in accordance with appropriate Technical Manuals.

**C.5.7.9.2 Work Products.** Serviceable small arms achieved by performing scheduled services and repairs performed in accordance with applicable manuals. Maintenance data and maintenance related analysis as specified by the Test Officer for the specific item and operation.

#### **C.5.7.10 Direct Fire Weapons Maintenance**

**C.5.7.10.1 Scope.** You shall troubleshoot, service, repair, align, modify, and rebuild vehicle mounted direct fire weapons including the mechanical, hydraulic, electronic, and optical components associated with the weapon system. You shall perform scheduled and unscheduled maintenance in accordance with the priorities established by USAYPG. You shall perform the maintenance on all equipment in accordance with applicable repair / technical manuals, DOD and other manufacture directives and information. Maintenance repairs shall be performed in accordance with the current rates in the Maintenance allocation chart. Maintenance performed on all equipment

shall meet the Army Maintenance Standard as prescribed in AR 750-1, paragraph 3-2. Total Logistics Response Time (TLRT), this is the period of time that elapses between the time an item of equipment or component becomes unserviceable and the time that the item or component is returned to serviceability status after receiving requested maintenance services. TLRT shall be determined by utilizing the policy outlined in AR 750-1, Para 3-3, 3-7 and figure 3-1. TLRT shall be minimized at all times to enhance readiness while reducing Customer Wait Time (CWT). Turnaround Time (TAT) This is the period of time that elapses between the time that you accept the work order followed by completion of the work and the time at close out. Maintenance turnaround time (TAT) shall be maintained at a minimum of 90% IAW AR 750-1, Para 3-3, figures 3-2 and 3-4. You shall provide a Total Logistics Response Time-Maintenance (LRT-M) Status Report, see figure 3-1 AR 750-1, Monthly, Quarterly and Annually to the Maintenance Quality Assurance Branch.

You shall provide a shop productivity report by name weekly and monthly to the Maintenance Quality Assurance Branch. The productivity report shall include each mechanics total time reported on the work orders, each mechanics time reported on time sheet, total labor cost of work orders, total cost on time sheet, the difference between the costs, clean up times reported and clean up time costs. The expenditure report shall include total expenditures and credits. You shall maintain all Maintenance, Historical and Operational records on all equipment IAW DA PAM 750-8 and AR 25-400-2. You shall ensure that mechanics and technicians maintain an 80% efficiency rate. You shall maintain the class IX repair parts supply and class III petroleum supply procedures in support of maintenance operations IAW DA PAM 710-2-1, 710-2-2, AR 710-2, AR 735-5 and AR 725-50. You shall provide weekly and monthly expenditure reports to the Maintenance Quality Control Branch. You shall establish and maintain in-house capability to train, test, and certify mechanics to meet U.S. Army, and YPG requirements. You shall document and report test and safety incidents (performance, failures, human factor issues, etc.) as directed by us.

You shall maintain configuration control and maintenance and use history records of all assigned weapons. You shall analyze weapon performance problems at test sites on the range.

**C.5.7.10.2 Work Products.** Serviceable weapon systems achieved by performing scheduled services and repairs performed in accordance with applicable manuals. Maintenance data and maintenance related analysis as specified by the Test Officer for the specific item and operation.

#### **C.5.7.11 Welding & Machining**

**C.5.7.11.1 Scope.** You shall perform welding and machining to support maintenance operations and for the fabrication of a variety of metal items such as small parts, instrumentation fixtures, structural steel items for large fixtures or targets, etc. Welding shall include Tungsten Inert Gas, Shielded Metal Arc, Flux Covered Arc, and Oxy-Acetylene methods. Machining shall include the operation of precision equipment such as lathes, mills, surface grinders, shapers, drill presses, etc. You shall establish and maintain in-house capability to train, test, and certify or license welders and machinists

to meet Arizona State, Federal, U.S. Army, and YPG requirements. You shall document and report test and safety incidents (performance, failures, human factor issues, etc.) as directed by us.

**C.5.7.11.2 Work Products.** Metal fabrications; machined, welded, assembled, to meet the functional requirements specified by the requestor.

#### **C.5.7.12 General Support Services**

**C.5.7.12.1 Scope.** You shall perform a variety of fabrication and general maintenance functions for the purpose of supporting test and training operations. These functions may include but are not limited to general design / plan and fabrication of test and training related items; including structural, electrical, plumbing, interior/exterior painting. Fabrications will consist of using wood, cloth, brick, masonry, concrete and other materials. These functions shall be performed in the shop space provided and outdoors at gun positions, test sites, and other locations thru out YPG.

**C.5.7.12.2 Work Products.** Fabrication of target and mockup items assembled to meet the functional and visible characteristics required and specified by the requestor. This statement of work specifically excludes any structures or systems deemed to be Real Property.

#### **C.5.7.13 Technical Acquisition (Supply)**

**C.5.7.13.1 Scope.** You shall perform the supply function for the acquisition, storage, maintenance, accountability, inventory control, and record keeping required for repair parts, raw materials, expendables, POL, tools and equipment required for the maintenance function. The supply function shall be performed in accordance with Army logistics procedures. You shall utilize the Federal Logistics Database to identify suitable substitutes and verify current prices. You shall perform the technical research to identify items by National Stock Number (NSN). You shall establish stocking levels and prepare the documentation to update the database.

**C.5.7.13.2 Work Products.** Parts, tools, supplies, and materials required to assure maintenance activities are supplied adequately to achieve maintenance objectives.

#### **C.5.7.14 Maintenance Operation Support**

**C.5.7.14.1** You shall perform a variety of maintenance operations support for the purpose of supporting the administration, equipment accountability and property control functions, facilities upgrades/repairs, logistics management and purchasing systems for the Maintenance Divisions' activities. These functions may include one or more functions but are not limited based on the requirement established by the Test Officer or the Maintenance Division Chief. You shall coordinate facility upgrades or repairs with the Public Works Dept work order desk as required for those activities that primarily support the Maintenance Division (i.e., Welding, Supply, Quality Control, Test Vehicle Maintenance, Armor Systems, etc.). You shall act as Collateral Duty Safety Officer

(CDSO) when requested by the Maintenance Division Chief for safety training and coordinating the scheduling of personnel assigned to the Maintenance Division (both government and contractor support personnel). As CDSO you shall address safety concerns on the day-to-day operations of the Division.

C.5.7.14.2 Provide weekly reports on activities supporting those duties defined above and communicate progress on facility issues to the Maintenance Division leaders as required. Maintain inventory listings for specific test commodities as required by Test Officers for major components of supply (i.e., M1 Parts Supply, Stryker Program support).

## C.5.8 **Ammunition Management Operations.**

### C.5.8.1 **Ammunition Logistics and Supply**

C.5.8.1.1 **Scope.** You shall perform overall management and control of the ammunition logistics and operations including direction of the subordinate operations, review and approval of ammunition operations SOPs, functional support of the U.S. Army on-site Quality Assurance Specialist Ammunition Surveillance (QASAS), maintenance of ammunition accountability, management of ammunition and explosives storage, coordination of facility and process reviews by DOD and other authorities such as the Department of Defense Explosives Safety Board, and other activities required to execute the ammunition support function. You shall document the function with reports, plans, inventories, computer databases, etc. as required.

C.5.8.1.2 **Work Products.** Effective management of the ammunition function that results in satisfactory scores in evaluations of ammunition management by Army, DOD, higher headquarters, and other authoritative and regulatory bodies. Effective management of the ammunition operations that results in the maintenance of appropriate inventories and the delivery of the ammunition to test sites in the condition and at the time specified by the test schedule.

### C.5.8.2 **Ammunition Assembly Plant Operations**

C.5.8.2.1 **Scope.** You shall operate the two ammunition assembly plants and perform the ammunition assembly operations as required to support the test mission. Specific tasks include assembling and disassembling live and inert ammunition, labeling and marking ammunition in text and standard color codes, unpackaging and repackaging ammunition, perform inert loading of ammunition, preparing ammunition for shipment or storage, performing issue and turn-in operations. Specific tasks are executed in accordance with direction from Test Officers in the form of Ammunition Requests and published weekly and daily schedules.

C.5.8.2.2 **Work Products.** Ammunition complete rounds and components assembled, packaged, and identified in accordance with requirements specified by requester and by regulatory and SOP mandates.

### C.5.8.3 **Conditioning Chamber Operations**

C.5.8.3.1 **Scope.** You shall perform ammunition-receiving operations that include receiving ammunition from inbound freight, verifying inventory, performing receiving inspection, and moving the ammunition to the designation storage location or point of use. You shall perform the ammunition storage operations, which include inventories, redistribution, storage inspections, and housekeeping of storage facilities. You shall perform ammunition-shipping operations, which include inspections, inventories, marking and labeling, packaging, loading trucks, airplanes, or other conveyances, blocking and bracing. You shall transport ammunition to and from test sites, loading plants, storage facilities, and other locations as directed. You shall pack and unpack ammunition as required for the transport. You shall operate temperature-conditioning chambers for ammunition at test sites, and you shall load ammunition into the chambers and monitor the chambers during the period. You shall assist in the handling of ammunition at test sites as directed by a Test Officer.

C.5.8.3.2 **Work Products.** Ammunition storage, receipt, and shipping in compliance with Federal, DOD, Army, and other law and regulatory requirements.

### C.5.8.4 **Ammunition Recovery**

C.5.8.4.1 **Scope.** You shall perform ammunition recovery and explosive ordnance disposal operations that include observation of ammunition firing and activation operations, locating and detecting ordnance items on the surface and under the surface of the range areas, deliberate activation of ordnance items for purposes of test, removal of ordnance items from range areas, disposal of ordnance items by destruction or demilitarization. You shall operate general-purpose EOD equipment such as field x-ray machines. You shall operate, maintain, and modify as required specialized robotic equipment and other equipment such as high-pressure water-jet cutting equipment. You shall operate, maintain and modify the Cryofracture facility and specialized equipment as required such as the 750 ton press and remote operating feed system. You shall recover, collect, and dispose of hazardous materials such as depleted uranium (DU). You shall inspect various collections of scrap such as scrap collected on the range areas being cleaned and collections of waste packaging in salvage collection points and certify such collections as free of explosive materials. You shall perform special purpose explosive operations as required.

C.5.8.4.2 **Work Products.** Impact fields certified to be clear of expended munitions. Analysis of failed munitions as a result of examination, recovery, and disassembly procedures.

C.5.8.4.3 **Special Staffing Requirement.** At least 50% of the personnel assigned to the Ammunition Recovery function shall be graduates of a U.S. Department of Defense Explosive Ordnance Disposal course of instruction, or equivalent.

## C.5.9 **Technical & Engineering Special Services.**

### C.5.9.1 **Operations Test Engineers & Test Technicians**

C.5.9.1.1 **Scope.** You shall perform test engineering, test engineering technician and technical analysis services, special studies, or other technical tasks. Tasks may be of a continuing or long term nature such as performance of the function of Test Engineering, test engineering Technician or technical Analysis Services. These services may include the design, planning, coordination, execution, test facility planning and reporting on test programs of military equipment. Be a technical task that concludes upon the delivery of a technical product such as an instrumentation plan, a computer program, provide technical briefings after Government approval, a specific study for recommendation, or hardware and/or software specifications.

C.5.9.1.2 **Work Products.** A usable product as required by specifications and requirements.

### C.5.9.2 **Developmental Staff Engineers**

C.5.9.2.1 **Scope.** You shall perform engineering tasks such as feasibility studies, design and development projects, special analytical studies, data analysis, and other technical tasks. Tasks may be of a continuing or long term nature such as the design/development/ manufacture of new test hardware/equipment/capabilities. Additionally, tasks may of a technical nature i.e., an instrumentation plan, a computer program, a specific study for recommendation, analysis of a system under test, or a hardware and/or software specifications. Typical engineering disciplines include mechanical, electrical, electronic, civil, and software engineering.

C.5.9.2.2 **Work Products.** A complete, concise, and usable product as required by the requestor in the format requested.

### C.5.9.3.2 **NACCITEC Test Support**

C.5.9.3.3 **Scope.**

## C.5.10 **Range Management Operations.**

### C.5.10.1 **Range Scheduling**

C.5.10.1.1 **Scope.** You shall perform the range scheduling function to develop the weekly and daily schedules in accordance with priorities set by us. The Range Schedule establishes the assignments of the subtasks of each test activity, based on the requirements established by Test Officers and others submitted on Schedule Requests and schedule meetings, by allocating time and space on the ranges (in consultation with the Range Safety function), available equipment, and available personnel resources.

C.5.10.1.2 **Work Products.** Daily, weekly, and long range work schedules and resource allocation, which most efficiently utilizes available resources and in accordance with priorities established by the responsible government agent.

C.5.10.2 **Range Control** Does not include Range Safety and Airspace Management.

C.5.10.2.1 **Scope.** You shall perform the function of Range Control as defined in SOP YP-YTRO-P-1000, Range Operations and other Range Control locally produced procedures. You shall provide sufficient staffing to assure fast response to all range users during all active range periods.

C.5.10.2.2 **Work Products.** Continuous control of movement, conflict resolution of activities, coordination of emergency services during periods of active range utilization.

C.5.10.3 **Range Access Center (Pass and Identification)**

C.5.10.3.1 **Scope.** You shall provide a fully operational Range Access Center (RAC) to issue range passes for all personnel requiring access to any portion of YPG that is controlled by YPG Security Guard, Police Officer, electric gate or padlock entry. Range passes will be issued to individuals who are Military, Civilian, and Contractors, that are employees of YPG and visiting personnel. Range passes have several categories: photographic, non-photographic, foreign visitors, and one-day passes. Records and databases will be maintained for all visitor requests for passes and the passes issued. A hardcopy of each visitor request will be maintained for the duration of the requests. Prior to issuing range passes, all personnel are required to view the Range Safety Video and annotation of this viewing will be maintained in the Range Access Center. The video will be required as a minimum on an annual basis. The RAC will be fully operational Monday-Thursday 0600-1700, Friday 0700-1200. Guidance for issuing range passes are IAW security requirements, YPG's policy, SOPs and ARs. At times, you may be required to issue bulk visitor passes during non-duty hours with prior arrangements being made to accommodate these rare occasions.

C.5.10.3.2 **Work products.** Range Access Center services adequate to meet requirements specified by the users.

## **C.5.11 Communications & Information Management Operations.**

C.5.11.1 **Telephone Services**

C.5.11.1.1 **Scope.** You shall provide telecommunications services, including:

- analog and digital telephone (including features)
- switched data
- computer network access
- point-to-point
- E911 System

- remote alarm circuits
- foreign exchange
- key systems
- voice mail
- radio network circuits
- automated operator
- PBX systems
- public address systems
- telephone directory
- telephone billing
- VoIP voice systems

From time to time services will be added or upgraded, based upon customer requirements and Government investments.

C.5.11.1.1.1 Install, test, operate, troubleshoot, program, maintain, modify and repair SL-100 digital switching equipment (main and remote switch modules) in accordance with Northern Telecom Practices. Work to be performed for this function includes, but not limited to: analyze system performance; identify problems; system restoral, recovery, data protection; periodic system testing, evaluation, and repairs; activity operational logs; schedule work to minimize service interruptions; maintain spare parts list; coordinate/implement system changes, upgrades and revisions after Government concurrence; and maintain office release records and system inventory.

C.5.11.1.1.2 Install, test, troubleshoot, maintain, modify, repair and operate emergency power systems located at main switch and nodes.

C.5.11.1.1.3 Receive customer requests, assign assets, determine the most effective actions, schedule and track the actions to completion. Obtain approvals from the Directorate of Network Enterprise Center (NEC) prior to scheduling and connecting subscribers to the YPG computer network.

C.5.11.1.1.4 After coordination with the Telephone Control Officer (TCO), coordinate with Government and commercial service providers, as required, to effect services.

C.5.11.1.1.5 Install, test, remove, maintain, modify, troubleshoot, and repair voice and non-voice communications systems, equipment and distribution facilities, and prepare as-built drawings.

C.5.11.1.1.6 Install, test, remove, maintain, modify, troubleshoot, and repair all facilities required for direct connection from the customer premise equipment to the nearest computer network hub, data service unit, channel service unit, or routing device as determined by the network administrator.

C.5.11.1.1.7 All new cable and wire installations, repairs, and corrections for cable, wire, termination and patching devices utilized will meet the YPG standard.

Requirements developed in coordination with the NEC and the customer requirements. All new installations will be tested end to end to meet specifications required for the type of devices and material installed.

C.5.11.1.1.8 Maintain central office records of all facilities, services and assets including:

- Outside plant distribution cable pair usage records
- Multiplex equipment channel assignments
- Subscribers names, locations and billing information
- Dial numbers in service
- Dial numbers out of service for less than six months
- Assigned Line Equipment numbers
- Telephone calls made during the preceding year

C.5.11.1.1.9 Prepare monthly telephone invoices for payment and annotate any unusual charges for the TCO. Verification, approval and distribution of invoices will be coordinated by the Government TCO.

C.5.11.1.1.10 Prepare and distribute monthly listing of Direct Distance Dialing (FTS) calls to the appropriate offices.

C.5.11.1.1.11 Update and prepare the installation's on-line telephone directory and printing and distribution as requested and approved the Government TCO .

C.5.11.1.2 Work Products:

C.5.11.1.2.1 *Telephone Services.* Work requests for telephone services, data services, and telephone and data trouble calls satisfactorily completed within the following timeframes:

- Safety critical trouble call work requests completed within 3 ½ clock hours from receipt.
- Other trouble call work requests completed within 8 ½ duty hours from receipt.
- Telephone service work requests completed within 14 ½ duty hours from receipt.
- Data circuit service work requests completed within 19 ½ duty hours from NEC approval.

C.5.11.1.2.2 *Customer Premise Equipment and Inside Plant Cable installation.* Equipment and cable installed IAW plans, standards, and practices, and within milestones.

C.5.11.1.2.3 *Monthly Billings.* Upon receipt, invoices(s) will be processed and forwarded to the appropriate office within 2 work days.

C.5.11.1.2.4 *Central Office Records.* Records are accurate, complete, and updated within 5 days of any changes.

### C.5.11.2 **Computer Aided Design (CAD) Drawing Support**

C.5.11.2.1.1 **Scope.** You shall provide CAD drawing support services for your operations, Information Management Division, Systems Development Branch, and other YPG activities. Work will be assigned through a service order process. To provide this support you shall receive, schedule, and complete customer requests for support. Prepare CAD drawings from sketches and red lined drawings. Provide personnel with a working knowledge of the latest version fielded for AutoCAD. Plot a variety of AutoCAD drawings (A-E size) on a variety of media (bond, vellum, etc.). Operate and maintain plotters and maintain ancillary supplies. Maintain drawing library of electronic and hardcopy plots. Obtain and produce copies of master drawings and maps from PWD and other sources.

#### C.5.11.2.2 **Work Products.**

C.5.11.2.2.1 *Preparation of CAD drawings from sketches and redlined drawings.* Drawings are defect free. A defect will be any line, word, or number (complete value with units) requiring correction, or untimeliness.

C.5.11.2.2.2 *Plotter Maintenance.* The plotter is operational and adequate supplies are on-hand to maintain operations at historic usage level.

C.5.11.2.2.3 *Obtaining and Producing Copies of Master Drawings and Maps.* Meets stated customer requirements.

C.5.11.2.2.4 *Maintain Drawings.* Drawings indexed and retrievable within 10 minutes.

C.5.11.2.2.5 *Plotting Drawings from Various Government and Contractor sources.* Meets stated customer requirements.

### C.5.11.3 **Configuration Management Support**

C.5.11.3.1 **Scope.** You shall provide configuration management support services on telecommunications systems, automated information systems, and their interfaces at YPG. Systems covered may include, but limited to land mobile radio, microwave systems, computer networks, video transmission systems, inside and outside fiber and copper distribution systems, console equipment, uninterruptible power supplies, backup power systems, channel banks, and PBX systems

C.5.11.3.1.1 Tasks you shall perform in supporting this activity include but not limited to prepare configuration management policy guidance as required. Coordinate with YPG activities, other government agencies, DoD, and activity offices to ensure compatibility and interfacing of configured systems. Attend planning and design meetings to determine problem areas and recommend solutions.

#### C.5.11.3.1.2 Document systems, including:

- Perform site surveys of facilities.
- Update information based on as-built drawings, specifications, and other documentation.
- Prepare AutoCAD and Visio drawings of facilities. Drawings and database information shall include floor plan, rack locations, equipment locations in rack and connectivity of equipment.
- Prepare hardcopy drawings and reports and maintain at a central repository with applicable copies at facilities. Drawings may be facility specific.

#### C.5.11.3.1.3 Maintain the electronic drawing and database reporting computer system and generate reports, drawings and listings. The repository shall:

- Be available to Government approved users by password access and be accessible during working hours.
- Contain master drawings, databases and provide an audit trail of original design, changes (red lines) and as-built drawings.
- Include information as described in the YPG Configuration Management Guide.

#### C.5.11.3.1.4 Develop, maintain, and track engineering change proposals, including:

- Review drawings, specifications, and acquisition documentation prepared by telecommunications specialists for conformity to standards and updates master database and drawing repository for redlines and as-built drawings.
- Ensure all documentation complies with YPG Communication Systems configuration.
- Review proposed equipment performance and specifications to identify adherence to standards and compatibility.

#### C.5.11.3.1.5 Perform project tracking for assigned projects, including:

- Maintain a project tracking system for the coordination, tracking and reporting of projects.
- Coordinate and prepare status reports, milestones and actions to be taken to team members and participate in project review meetings.

C.5.11.3.2 **Work Products.** An accurate, baselined and functional configuration for each designated facility. All engineering changes are complete, accurate and timely as required. An approved Configuration Management Database that will available for government and contractor use over the YPG Intranet.

### C.5.11.4 **Telecommunications Engineering Support**

C.5.11.4.1 **Scope.** You shall provide design and engineering services for telecommunications systems, subsystems, and components to meet YPG requirements. Assigned telecommunications systems may include:

- Land mobile radio units and consoles
- Digital and analog microwave systems
- Video transmission systems

- Inside plant, outside plant, and premises fiber and copper distribution systems
- PBX systems
- Intercom systems
- Single and multi-line telephone systems
- Public address systems
- Switched voice and digital services
- Shelters, towers, and similar structures
- Paging Systems

You may also be assigned to provide these services to procure telecommunications type equipment for non-telecommunications applications (e.g., shelters used for gun position command and control centers and test instrumentation shelters). Projects will be assigned to you by the COR. (Typically, customers will generate requirements or requests for engineering assistance by memorandum through the COR.) Requests will range from simple cost estimates (for budgetary purposes) for single telecommunications units (e.g., telephone units, land mobile radio units, etc.), to complete technical data package preparation.

C.5.11.4.1.1 To provide these services you shall perform the following tasks as needed: collect, analyze, evaluate, and document project requirements. Sources of requirements include:

- Meetings
- Onsite surveys
- Existing services and assets
- Operations and maintenance support activities, including Information Management Division (IMD) and network management personnel
- Correspondence
- Government policy and standards
- Industry standards and practices.

C.5.11.4.1.2 Develop draft solutions (preliminary plans), including cost estimate and acquisition strategy. Solutions shall be coordinated with appropriate customers, operational customers, IMD, and network activities. You shall submit solutions to the COR for approval and forwarding to customer.

C.5.11.4.1.3 Prepare and maintain an audit trail for all Technical Data Packages adequate for successful project completion. All technical data packages shall be submitted to the customer through the QAE/COR. Packages include:

- Plans
- Drawings
- Specifications
- Statements of Work
- Cut-sheets (including cable pairs, fiber counts, terminal counts, cross connects)
- Detailed installation information
- Bills of Material (BOM)

C.5.11.4.1.4 Prepare required procurement documentation, obtain funding information, required approvals and submit to the customer through the QAE/COR,

*Note: Customers will be responsible for acquiring items identified on BOMs.*

C.5.11.4.1.5 Provide support for Military Construction-Army (MCA) Projects. Activities include:

- Develop Statement of Work (SOW) and incorporate into Paragraph 15 of Corps of Engineers (COE) Request for Proposal (RFP).
- Develop Information System Cost Estimate (ISCE) and input into Sections 13 and 17 of DD Form 1391 IAW AR 415-15 (Army Military Construction Program), the NEC Handbook for MCA Projects, and ER 1110-3-110 (Information Systems Design In Support of Military Construction).
- Coordinate requirements, SOW, and ISCE with customers, operations and maintenance support activities, NEC, Public Works Directorate (PWD), and COE.
- Review COE plans and provide changes and recommendations in writing through the QAE/COR.
- Perform site inspections on COE project. Prepare written report noting deficiencies and corrective action and submit to PWD and COE through the QAE/COR.

C.5.11.4.1.6 Provide project management and coordination oversight for projects you design and specify. Activities include:

- Consolidate, inventory and arrange for issue BOM items ordered by customers
- Coordinating utility locations, utility and construction service orders, excavation permits, environmental impact documentation, etc. IAW digging permit guidelines
- Notify customer when all BOM items have been received and are ready for installation
- Issuing equipment and supplies to operations personnel for installation
- Insure as-built drawings are prepared and submitted to Configuration Management with-in 30 days of completed installation

C.5.11.4.1.7 Participate on joint government and agency projects. Examples of these projects include the U.S. Border Patrol checkpoint.

C.5.11.4.1.8 Support the Telecommunications Coordinator for all leased based communications requirements IAW DA Pam 25-5 (Preparing and Processing) for Long-Haul Information Transfer Services. Activities include:

- Collecting and analyzing requirements, and developing solutions to meet customer needs.
- Obtaining cost estimates from service providers.
- Preparing written estimates of all costs associated with satisfying the customer's requirement and provides to customer for concurrence and funding information.
- Preparing Request for Service (RFS) IAW DA Pam 25-5. Use of the Telecommunications Service Request Editor (TSRE) IAW the TSRE Manual may be required.

- Review all actions associated with leased services (Telecommunications Service Requests (TSR), Telecommunications Service Orders (TSO) and Status of Acquisition Messages (SAM))
- Prepare and submit Completion Reports

C.5.11.4.1.9 Provide telecommunications advisory and consultation services to YPG activities. Activities under this task include:

- Participating as a team member with operations and network personnel to evaluate new technology and integration of materiel into existing systems.
- Providing inputs to and comments on planned telecommunications projects and investment programs.
- Researching and evaluating new equipment and technology from commercial sources.
- Providing consultation to users on new systems.
- Providing coordination and consultation on installation techniques to operational installation teams.
- Assisting team members with ongoing communications projects.

#### C.5.11.4.2 **Work Products.**

C.5.11.4.2.1 *Technical Data Packages, Including MCA Projects.* Complete, accurate, and timely with respect to the requirements.

C.5.11.4.2.2 *Project Management and Coordination.* Completely coordinated and on-schedule.

C.5.11.4.2.3 *Leased Based Communications Requirements.* Complete, accurate, and timely with respect to the requirements.

#### C.5.11.5 **Records Management.**

C.5.11.5.1 **Scope.** You shall provide the following records management services in support of the YPG Records Management Officer (RMO) who will be a government employee. Provide written and verbal guidance to YPG activities on the proper preparation of Army correspondence IAW AR 25-50. Monitor and report YPG compliance with the Army Records Information Management System (ARIMS), AR 25-400-2, governing the maintenance and disposition of information. Advise the customer and RMO, in writing, on any necessary corrective actions. When required, may provide assistance for records management process for YPG activities. Provide written and oral guidance to YPG activities on ARIMS requirements. Operate the YPG Records Holding Area (RHA) IAW AR 25-400-2. Destroy or transfer records IAW AR 25-400-2 to National Records Centers and other government and private agencies as needed and approved. Provide guidance to YPG activities on the preparation of correspondence and the provisions of ARIMS. Advise the RMO on YPG record management policy when required. When required submit approvals to the RMO for action.

C.5.11.5.2 **Work Products.** Provide customer assistance and comply with DA and YPG policy.

#### C.5.11.6 **Printing**

C.5.11.6.1 **Scope.** You shall provide the following print order services, receive, log, ship, track, and maintain all print orders from all YPG activities. Review print orders and copy for compliance with AR 25-30 (statutory) requirements, and to ensure accuracy and completeness. Requisition printing services IAW current regulations and guidance for print order requirements from one of the following sources: Government Printing Office (GPO), Defense Printing Service (DPS), Quick printing turn-around Guidelines. Expedite quick turn-around (time valued) print jobs. You shall make provisions for receiving quick-turnaround jobs expected on weekends and holidays. Inspect completed print jobs upon receipt from the printer to insure compliance with the print request. If problems exist, you will notify the requester and, if necessary, contact the printer and arrange for corrections. If problems cannot be resolved, contact the COR for resolution. Prepare printing reports for YPG Submissions to Higher Headquarters IAW printing report guidelines.

C.5.11.6.2 **Work Products.** Printing Requests Completed. Requests submitted to appropriate printing activity, no unreported gross printer errors, and print jobs submitted to requestor by required dates.

#### C.5.11.7 **Forms and Publications.**

C.5.11.7.1 **Scope.** You shall operate the YPG Publications Office. To provide this service you shall order, stock, and issue forms and publications required for installation operations (AR 710-2 or AR 725-50 stock procedures may be used). Pending required government investments, you shall maintain database(s) of officially approved electronic forms and publications. Order and issue new and revised publications to YPG activities which have a standing requirement IAW (Pubs Ordering Guidelines), or as instructed by the Records Manager. Maintain the Post Publication Library, containing a copy of each current DA, YPG, ATEC, DTC and applicable DOD and U.S. Government (e.g.: standard forms) publications. Loan Post Publication Library materials to YPG activities as required. Maintain accountability for all controlled or accountable forms and publications.

#### C.5.11.7.2 **Work Products.**

C.5.11.7.2.1 *Stocked Publications.* Publications in-stock or on-order in quantities consistent with historic demand. Orders for publications submitted within one week of reaching reorder-point. DA guidelines for controlled and accountable forms are followed.

C.5.11.7.2.2 *Publications Library and Database.* The publication library contains the current version of publications. The current version of publications having official

electronic versions is in the database.

#### C.5.11.8 **Visual Information (VI) Services (Multi-Media)**

C.5.11.8.1 **Scope.** You shall provide Visual Information (VI) services that include, but not limited to Graphics Services, Presentation Services, and Customer Services in support of all YPG activities.

C.5.11.8.1.1 Maintain and submit DA digital photos IAW regulations, SOPs and guidance official DA Photos.

C.5.11.8.1.2 Graphics Services. The Contractor shall perform graphic services including, but not limited to design, printing and mounting services for illustrations, charts, graphics, diagrams, posters, displays, exhibits, brochures, flyers, interior signs, temporary exterior signs, and web pages.

C.5.11.8.1.3 Presentation Services. The Contractor provides all presentation support services significant ceremonies and events on/off installation; equipment operation to include, but not limited to, setting up project systems, computer systems, and facilitation of slide shows. Maintain digital archive of all artwork materials.

C.5.11.8.1.4 Photography Services. The Contractor shall provide photography services to include, but not limited to official portraits for promotions, officer records, special duty assignments, official passport, VISAs, citizenship, immigration, and product photographs. Maintain digital archive of all photographs.

C.5.11.8.1.5 Audiovisual (AV) Video Production Services consists of coordinating, set up of coordinating, set up and operate video camera equipment with audio recording capability for video productions, obtain approvals, and produce marketing and command videos, provide quality video camera support utilization in video productions, marketing, command briefings, public release productions, and a video archive library. Support may include video editing support as required from the customer(s).

C.5.11.8.1.6 Video Teleconferencing Services. VI shall perform secure and non-secure video teleconferencing (VTC) services including, but not limited to, scheduling and operation of of conferences utilizing as well as VTC's not utilizing the DISN Services. All work will in conjunction with current checklists for operations.

C.5.11.8.1.7 Consultation Services. You shall provide consultation services and make recommendations directly to customers during all stages of planning, preparation, and production products.

C.5.11.8.1.8 Self Help Services. You shall manage the self help service program to include, but not limited to: graphics and technical expertise, technical consultation, equipment loans and a self-help workstation (computer, scanner, printing capabilities).

C.5.11.8.1.9 **Provide General Conference Support. This support includes: name tags,**

AV equipment set-up and operation, check-in assistance and conference registration, coordinating special transportation services, coordinating food services and special events, collecting conference fees, and assistance with presentation materials.

#### C.5.11.8.2 **Work Products.**

C.5.11.8.2.1 *Teleconferencing Requirements.* Work order requirements of all productions, presentations, and presentation materials (slides, view graphs, brochures, pamphlets, flyers, etc) are met.

C.5.11.8.2.2 *Production and Presentation Requirements.* Work order requirements of all productions, presentations, and presentation materials (slides, view graphs, brochures, pamphlets, flyers, etc.) are met.

C.5.11.8.2.3 *Production and Presentation Quality.* The quality of all productions, presentations, and presentation does not negatively impact viewer's impression of YPG.

#### C.5.11.9 **Business Systems Support**

C.5.11.9.1 **Scope.** You shall provide computer systems support for all business systems and applications for YPG financial environment as directed by the Government. Work will be assigned to you by a work order process. Emergency support will be coordinated through the appropriate channels. Create, modify, and maintain procedures to create update or maintain data sets, or print reports meeting user requirements. You shall correct all errors generated during report production within 24 hours of customer request. Create, modify, and maintain mainframe and PC programs and databases meeting user requirements in a variety of languages as required. Collect, analyze, evaluate, and document program requirements and provide information system analysis and design to meet or assist in defining customer programming and database requirements. Submit system change requests in accordance with YPG established Systems Configuration Management guidance. Provide copies of developed program documentation, including source code and operating instructions, to the QAE/COR within one week of completion. Within 24 working hours after problem awareness, notify Government POC, diagnose, provide solutions for all system abnormal program terminations and error messages, user input/output discrepancies, and system interface errors. Perform system maintenance functions, i.e., database compressions, indexing, etc. Train users on business systems specific operations, applications, procedures, and processes.

C.5.11.9.2 **Work Products.** Business operations support to meet requirements specified by users and customers.

#### C.5.11.10 **Network and Automation Applications**

C.5.11.10.1 **Scope.** You shall operate and maintain a secure/non-secured YPG digital data network system, and wireless network (upon approval from the YPG Commander). A facility that provides interactive network processing services and support, to include

administration, account activation, word processing, electronic mail (e-mail) routing, electronic timekeeping, utilizing various routers, bridges and networked personal computer (PC) servers. You shall perform authorized network management to include scanning, auditing, reporting and validating of unauthorized activities. All unauthorized or suspicious activities will be reported to the NEC Office for resolution. You shall monitor network support systems, provide assistance to YPG users by operating a help desk for them to call in work requests, and then provide first level assistance to customers experiencing difficulties involving these systems. You shall maximize the network's efficiency and productivity by performing fault management, accounting management, network configuration, security management, and performance management. You shall assist in planning network improvements. You shall serve as point of contact for network support/expansion efforts including installation of cabling and additional servers, bridges and routers. You shall operate, install, and maintain network firewall, servers, routers, bridges, switches, hubs, transceivers, repeaters, adapters, network interface cards, and related equipment. You shall update network software on bridges and routers. You shall maintain router tables to control and enhance traffic flow on the network. You shall install, administer, and maintain common network software applications and ancillary resources, including Email, and Intranet/Internet home and subsidiary pages (secured/unsecured). You shall obtain approvals in accordance with (IAW) AR 25-2 prior to connecting subscribers to the YPG computer network. You shall provide network monitoring including: reconfiguring the network as necessary to provide continuous service, maintaining configuration control of the network specific software and hardware, providing diagrams of network configurations, accreditations, maintaining Firewall software and security measures, maintaining and monitoring Internet address and name database for DNS (Domain Name Server) services to commercial and government installations. Remote computer system administration may be required in order to support developmental or production software designed for use at YPG. Contractor System Administrator (SA) personnel will be required to be certified IAW AR regulations at a minimum, Information Assurance Technical (IAT) I. Employee(s) must also obtain a CAC card from YPG. All computer systems, either contractor or Government owned will be required to be accredited IAW all applicable DoD regulations and requirements. Only DoD approved software will be utilized on these systems. All system upgrades and IA patches will be IAW IA's requirements and guidance. All remote access will be pre-coordinated with the IA Office and any remote access required, will be on based on an individual requirement(s). All remote access will be accomplished via the use of an authorized secured network connection.

**C.5.11.10.2 Work Products.** A fully functional, reliable and user-friendly network service to meet the requirements specified by users. The network services are to be available on a 24/7 basis. On-site support is required during normal working hours and continual monitoring for after hours. Response time for a network malfunction is 2 hours on-site to address the problem and 4 hours for repair. If the problem cannot be corrected within the 4 hour window, must have an alternative plan in place upon approval from YPG's NEC. As such, maintenance shall be scheduled outside of the envelope, and the help desk shall be manned within the envelope.

## C.5.11.11 Range Communication

C.5.11.11.1 **Scope.** You shall perform range communications services. These services shall be scheduled by scheduling meetings. All work shall be performed in accordance with industry standards and practices. Services performed shall include:

C.5.11.11.1.1 Installing, troubleshooting, and repairing aerial and underground communications lines and auxiliary equipment.

C.5.11.11.1.2 Installing, troubleshooting, maintaining, repairing, and modifying metallic and fiber optic cable systems.

C.5.11.11.1.3 Preparing, installing fiber and metallic distribution equipment, and terminating cables to distribution equipment (not limited to distribution frames, patch panels, cabinets, enclosures, pedestals, etc).

C.5.11.11.1.4 Operating, installing, testing, troubleshooting, programming, maintaining, and repairing lightwave systems, microwave systems, carrier systems, video transport systems, digital cross-connect systems, multiplexers, channel banks, network management system, attendant consoles, power systems and related apparatus.

C.5.11.11.1.5 Operating network management system, support YPG's spectrum and frequency management, and maintaining related databases in accordance with daily schedule requirements.

C.5.11.11.1.6 Operating, installing, troubleshooting, maintain, and repairing microwave and fiber based video transport, multiplexing, trunking and switching systems and ancillary equipment.

C.5.11.11.1.7 Installing, removing, troubleshooting, maintaining, and repairing radio equipment, systems and ancillary equipment. Equipment supported includes:

- Trunked and conventional land mobile systems, subsystems, and equipment.
- Air-ground radio systems and subsystems.
- Audio switch, crosspatch, and console equipment.
- Mobile and portable radio units.

C.5.11.11.1.8 Installing, removing, maintaining and repairing voice intercom units.

C.5.11.11.1.9 Preparing requisition and acquisition documentation for repair and replacement parts through the QAE/COR to the YPG supply system.

C.5.11.11.1.10 Performing operator maintenance on TMDE IAW equipment manuals, and submitting TMDE for calibration and repair support IAW calibration schedules.

C.5.11.11.1.11 Configuring and deploying communication systems and ancillary

equipment to meet the daily test schedule IAW the test missions' communications requirements.

C.5.11.11.1.12 Locating underground communications lines, cables, and ancillary equipment in support of granting YPGR 385-1, Section 5-9 digging permits and construction activities.

C.5.11.11.1.13 Install, test, troubleshoot, maintain, modify, repair and operate emergency power systems located at multi range communications sites.

#### C.5.11.11.2 **Work Products.**

C.5.11.11.2.1 *TEST SUPPORT (RANGE COMMUNICATIONS)*. Provide communications resources to test projects, as detailed by work orders, without delays to scheduled test projects or test project setups.

C.5.11.11.2.2 *FIXED SYSTEMS*. Maintain fixed systems so that there are no disruptions of range communication services.

C.5.11.11.2.3 *EQUIPMENT INSTALLED (DE-INSTALLED)*. Timely installation / de-installation of equipment IAW engineering practices, plans and standards, manufacturer's installation instructions, and other customer requirements.

#### C.5.11.12.0 Spectrum Management

C.5.11.12.1 **Scope.** Provide support and maintenance for YPG's Signal Acquisition Network System (SANS). The SANS consists of total of nine (9) manned, unmanned and mobile sites. This support will include assistance to YPG's Government Spectrum Management Officer (SMO) to maintain a fully operational frequency capability. You will be required to follow all applicable regulations, SOPs, guidance, and directives for frequency management compliance. Support to include, but not limited to, scheduling, configurations, monitoring site(s) data, investigations, and reports. A weekly report is required for all incidents, investigations, and frequency usage.

C.5.11.12.2 **Work Products.** Fully functional and operational frequency management facilities.

### **C.5.12 Data Management and Test Coordination.**

#### C.5.12.1 **Data Entry**

C.5.12.1.1 **Scope.** The tasking is to provide support of a clerical/administrative/data entry nature as specified in detailed desk procedures. Typical tasks may include, routing customers and/or calls to the proper point of contact, entering data in work flow logs, maintaining test data folders, formatting a technician's input into a standard reporting format, scanning and touching up reproductions of test documents and

photos, maintaining test asset location logs, and other highly repetitive projects. Operation of generalized office equipment, scheduling duties, specialized assignments i.e., Building Fire Warden, security container POC, etc.

**C.5.12.1.2 Work Products.** Those specified in the desk procedures are to be provided in paper and soft-copy. Electronic formats for soft-copy are to be MS Office, and Lotus Notes. Software used during data manipulation will require use of scan, publisher, and drawing related programs.

#### **C.5.12.2 Data Acquisition**

**C.5.12.2.1 Scope.** You shall observe test operations, test conditions, and test maintenance, and other related parameters, and record the observations in the forms, media, and formats specified by Test Officers. You shall prepare Test Incident Reports in accordance with DA PAM 73-1, Test Incident and Related Reporting. You shall establish and maintain a system of review for accuracy and quality assurance of the collected data. You shall coordinate the data collection, input, formatting and management with the Automated Data Collection System (ADACS) or whatever automated data collection and distribution system is in place.

**C.5.12.2.2 Work Products.** Test historical records of incidents, maintenance, parts, specific times and time periods, test item configuration, and other data as specified by the Test Officer. Test Incident Reports.

#### **C.5.12.3 Reports Writing**

**C.5.12.3.1 Scope.** The tasking is to consolidate test cost and test reporting data from multiple sources i.e. verbal, written, or via computer networking software applications, into the products listed below. The format requirements will be provided by Government/Contractor personnel as part of the work loading function and that individual/s will be available for as needed requirements clarification.

**C.5.12.3.2 Work Products.** Draft or revise low to medium complexity test plans, test incident reports, mission summaries, system documentation, data logs/reports, and other test/administrative information are to be provided in paper and soft-copy. Electronic formats for soft-copy are to be MS Office and Lotus Notes.

#### **C.5.12.4 Technical Writing**

**C.5.12.4.1 Scope.** The tasking is to consolidate test cost and test reporting data from multiple sources using field or technical material research, and/or via computer networking software applications, into the products listed below. General format requirements will be provided as part of the work loading tasking. You are expected to schedule your own data gathering activities and have work products ready when testing milestones are reached.

**C.5.12.4.2 Work Products.** Data logs/reports, equipment configuration records, equipment wear reports, test plans, test reports, test incident reports, mission summaries, system documentation, and other test/administrative information are to be provided in paper and soft-copy. Electronic formats for soft-copy are to be MS Office and Lotus Notes.

#### **C.5.12.5 Test Coordination**

**C.5.12.5.1 Scope.** The task is to assist the Test Officer in the timely conduct of testing activities and in the completion of reporting milestones. As such International Test Operations Procedures, Customer guidance, and Standard Operating Procedures will be followed when scheduling/coordinating/conducting tests. The task entails attending planning meetings, conducting general research, maintaining/establishing a control log of all test documents (publications, manuals, directives, minutes, safety reports, etcetera), and writing interim test status reports. Additional writing assignments may include; Test Integration Working Group minutes, detailed test plans, final test reports, and other test associated documents. Responsibilities require participation in the conduct of field testing in various roles from data acquisition up to direction of testing in progress. Responsibilities include the review, validation, and the taking necessary corrective action based upon data generated on assigned tests (includes information from field testing, test support and maintenance activities). You shall assure that test reports progress at a pace concurrent with testing. Typical data sources include raw field data, logs, recordings, various charts, graphs/tables generated by first level data reduction, and maintenance data.

#### **C.5.12.5.2 Work Products**

**C.5.12.5.1 Feedback:** Daily and as needed situational feedback designed to provide the Test Officer information useful for decision making. Because the tasking is to maintain control over all the data associated with the test, feedback is to cover the range of test asset status reports, cost reports, time line charts, manpower/logistics constraints, safety issues, and so on.

**C.5.12.5.2 Test Documentation:** Test Plans & Test Data reports or compilation of raw test data from all sources into formats required for data, letter, abbreviated, and formal reports.

#### **C.5.12.5.3 Classified Document Control**

**C.5.12.5.3.1 Scope.** As required, you shall establish central repositories with qualified personnel for the storage, archiving and control of classified test data and documentation. Information will typically include working papers, data sheets, logbooks, test plans, instrumentation planning documents, mass storage devices, CD-ROMs, specialized test devices, laptop computers, etc. All documentation and portable optical disks storage devices will be controlled, stored, issued, shipped and destroyed IAW applicable DoD, Army, YPG and directorate security regulations and SOPs. Only approved security containers and storage systems will be used for classified storage of

data products. Maintain auditable records of accountability for storage, transfer, and destruction for all data/equipment. Minimum qualifications: YPG classified marking class.

C.5.12.5.3.2 **Work Products.** Document trail for all classified data, equipment, and document transfers. File and maintain all security container documentations, make available for audits.

DRAFT

## **C.6 Applicable Documents**

Documents applicable to services to be performed under this work statement are listed below. The documents have been coded as advisory (A) or mandatory (M). You shall follow those coded as mandatory, but only to the extent specified in the contract when a specific part of the document is referenced herein. When specific parts of documents coded "M" are referenced, the remainder of that document may be considered "A". If not shown as being available on the Internet, we will provide documents listed as "M" and an initial supply of listed forms at contract start date. Supplements, amendments, or revisions to mandatory documents may be issued during the term of the contract, and shall be in full force and effective immediately upon receipt by you. You shall adhere to the requirements in these mandatory supplements, amendments, or revisions during the life of the contract pending negotiation. You shall post and update mandatory publications as change notices are provided. Upon completion of the contract, you shall return to us all publications provided.

### **C.6.1 Publications**

Note 1: <http://www.apd.army.mil/>

Note 2: (<http://www.dtic.mil/whs/directives/search.htm>)

Note 3: (<http://web1.whs.osd.mil/icdhome/formtab.htm>)

### **C.6.2 Directives**

Identifier	Note	Code	Title
(no number)		M	TMDE Support Center — Yuma External Standing Operation Procedure
(no number)		A	Joint Technical Architecture — Army
29 CFR 1910.120		M	Hazardous Waste Operations and Emergency Response
40 CFR 265.16		M	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities
AMC R 350-4		M	Training and Certification Program for Personnel Working with Ammunition Operations
AMC R 385-100		M	Safety Manual
AR 5-12	1	A	Army Management of the Electromagnetic Spectrum
AR 5-20	1	A	Compleitive Sourcing Program
AR 12-8	1	A	Security Assistance — Operations and Procedures
AR 25-1	1	M	Army Knowledge Management and Information Technology
AR 25-2		M	Information Assurance
AR 25-3		A	Army Life Cycle Management of Information Systems
AR 25-9	1	A	Army Data Management and Standards Program
AR 25-10	1	M	Reduction and Control of Information Transfer in an Emergency
AR 25-30	1	M	The Army Publishing Program
AR 25-50	1	M	Preparing and Managing Correspondence
AR 25-400-2	1	M	The Army Records Information Management Systems (ARIMS)
AR 37-100		A	Account Code Structure
AR 70-1	1	M	Army Acquisition Policy
AR 190-11	1	M	Arms, Ammunition and Explosives
AR 190-13	1	M	The Army Physical Security Program
AR 190-5	1	M	Motor Vehicle Traffic Supervision

Identifier	Note	Code	Title
AR 190-51	1	M	Security of Unclassified Army Property (Sensitive and Insensitive)
AR 200-1	1	A	Environmental Protection and Enhancement
AR 310-4		A	Publication in the Federal Register of Rules Affecting the Public
AR 310-25		A	Dictionary of United States Army Terms
AR 310-49-1		A	The Army Authorization and Documentation System (TAADS)
AR 310-50		A	Authorized Abbreviations and Brevity Codes
AR 335-15		A	Management Information Control Systems with AMC Supplement 1
AR 340-21	1	A	The Army Privacy Program
AR 340-26		A	Duplicate Emergency Files Program
AR 381-14	1	M	Technical Counterintelligence (TCI)(U)
AR 385-9		A	Safety Requirements for Military Lasers
AR 385-10	1	M	The Army Safety Program
AR 385-11		M	Ionizing Radiation Protection
AR 385-16		M	System Safety Management Guide
AR 385-40		M	Accident Reporting and Records
AR 385-55		M	Prevention of Motor Vehicle Accidents
AR 385-64		M	U.S. Army Explosive Safety Program
AR 385-95	1	A	Army Aviation Accident Prevention
AR 415-20		M	Project Development Design and Approval
AR 420-43		A	Electrical Services
AR 600-55	1	A	The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)
AR 700-68	1	M	Storage and Handling of Liquefied and Gaseous Compressed Gasses and Their Full and Empty Cylinders
AR 710-2	1	M	Supply Policy Below the National Level
AR 71-13		A	The Department of the Army Equipment Authorization and Usage Program

Identifier	Note	Code	Title
AR 725-50	1	M	Requisition, Receipt and Issue of System
AR 735-17	1	A	Accounting for Library Materials
AR 735-5	1	M	Policies and Procedures for Property Accountability
AR 750-1	1	M	Army Materiel Maintenance Policy
AR 750-10	1	A	Army Modification Program
AR 750-25		A	Army TMDE Repair & Calibration
AR 750-32	1	M	Airdrop, Parachute Recovery, and Aircraft Personnel Escape Systems
AR 750-43	1	A	Army Test, Measurement and Diagnostic Equipment Program
AR 870-5	1	A	Military History: Responsibilities, Policies, and Procedures
DA PAM 25-2		A	Information Mission Area Planning Process
DA Pam 25-32		A	Foreign Military Sales Publications Guide
DA Pam 25-91		M	Visual Information Procedures
DA PAM 73-1		M	Test Incident and Related Reporting
DA PAM 385-16		M	System Safety Management Guide
DA PAM 385-40		M	Army Accident Investigation and Reporting
DA Pam 385-64		M	Ammunition and Explosives Safety Standards
DA Pam 710-2		A	Inventory Management Supply Policy below the Wholesale Level
DG 1110-3-110		A	Design Guide for Libraries ( <i>NOTE: Available from OCE Publications Depot, 890 South Pickett Street, Alexandria VA 22304</i> )
DOD 3405.1		A	Computer Programming Language Policy
DOD 3405.2		A	Use of ADA in Weapons Systems
DOD 4270.1-M		A	Construction Criteria Manual
DOD 4525.8-M		A	Organization and Functions, Headquarters, Department of the Army

Identifier	Note	Code	Title
DOD 4630.5		A	Compatibility and Interoperability of Tactical Command, Control, Communications and Intelligence Systems (C3I)
DOD 5000.1		A	Defense Acquisitions
DOD 5000.2		A	Defense Acquisition Management Policies Procedures
DOD 5700.7-R		M	Standards of Ethical Conduct
DOD 5000.9		A	Standardization of Military Terminology
DOD 5220-22-M		M	National Industrial Security Program Operating Manual
DOD 7950.1M		M	Defense Automation Resource Management
DSM 4120.3		A	Defense Standardization Manual
FM 11-490-2		A	Army Communications Facilities: Telecommunications Center Operating Procedures
ITOP 4-2-602		A	Rough Handling Tests
JFTR (TDY)	2	M	Joint Federal Travel Regulation (Per diem Rates)
MIL-STD-810E		A	Test Method Standard for Environmental Engineering Considerations and Laboratory Tests
RCS CSIM-46		M	Information Management Requirement/Project Document (DA Form 5695-9)
TB 700-2		M	Department of Defense Explosives Hazard Classification Procedures
TECOM PAM 37-1		A	Structure of Selected Cost Accounting Codes and Rates
TECOM PAM 750-1		A	Test, Measurement, and Diagnostic Equipment (TMDE) Support Coordinators
YPG Commanders Policy Statement		M	Permissible Use of Federal Government Communications Resources
YPG R 25-1		M	Technical Architecture for Information Management Systems

Identifier	Note	Code	Title
YPG R 385-1		M	Yuma Proving Ground Safety and Occupational Health Program
YPG R 420-1		M	Fire Prevention and Protection
YPG R 750-8		A	YPG TMDE Program
YPG SOP LO-120		M	Training and Issue of a Military Driver License
YPG SOP MT-06		M	Range Scheduling
YPG SOP MT-16		M	Range Control
YP SOP YP-YTPO-P-1000		M	Range Operations

Note 1: <http://www.apd.army.mil/>

Note 2: (<http://www.dtic.mil/whs/directives/search.htm>)

Note 3: (<http://web1.whs.osd.mil/icdhome/formtab.htm>)

**C.6.3 List of Technical Exhibits**

- TE-1 PRS - Summary Level Elements
- TE-2 Award Fee Criteria
- TE-3 Government-Furnished Property List
- TE-4 PWS Functional Area Status/Government Furnished Facilities List
- TE-5 Government Owned Vehicle List
- TE-6 Example Work Authorization Order (WAO) WAO/Modification
- TE-7 LEFT BLANK INTENTIONALLY (Consolidated with TE-4)
- TE-8 Theatre Support
- TE-9 DD254
- TE-10 Workload History
  - Number of Test per Year per Test Center
  - FY07 Major Test Programs (excluding NACCITEC)
  - Summary of Average Percentage of Workload by Commodity for FY08
  - Staffing Level by Functional Area (excluding Management Staff)
  - Productive Hours Worked by Functional Area (excluding Management Staff)
  - Current Manning Level
  - Listing of all Labor Categories (SCA and professional, excluding Management) with Current Average Wage Rates by Labor Category, Current AWD Rate, Productive and Overtime Hours Worked and FTE's – 1JUN07 through 31MAY08
- TE-11 Required Plans