

1. General Scope of Work

1.1 Purpose and Objective

Manage and maintain the Propulsion Office facility systems and mobile and ancillary equipment related to TS-328, TS-301, and TS-403 in accordance with WSI-PROP-0020. This includes:

- " Maintenance and operations of said systems as defined in WSI-PROP-0200
- " Minor and remedial repairs of the systems summing to less than \$2500 - assume 4 repairs for the DO
- " Maintenance of files, instructions, O&M plans - this includes the biannual review of WAD as defined in WSI-05-SW-0004 for WJI's and WSI-05-SW-0017 for WSI's and WSP's. Monthly notifications will be sent to responsible authors for review of the documents.
- " Maintenance of the Propulsion database items for said systems
- " Maintenance and replenishment of spares as necessary to keep the systems in ready state
- " Configuration control of systems and associated documentation
- " Correcting SIMS items not specified for future funding summing to less than \$3500 - assume 4 items for this DO
- " Responding to close calls related to systems
- " Monthly project reporting, including earned value data (SPI, CPI, EAC, SV and CV)
- " Pressure vessel re-certification for facility systems and mobile and ancillary equipment related to TS-328, TS-301, and TS-403
- " Environmental and process safety compliance based on the WSTF MSM and documentation system.

Processes specified in WSTF Management System Manual for maintenance of systems will also be adhered to. All test stands for this Delivery Order, TS-328, TS-301, and TS-403, currently have test articles in them and therefore shall remain in ready state throughout this DO. If the status of the test stands changes a delivery order revision will be processed denoting the change.

The customer for the Delivery Order is WSTF NASA Propulsion. Changes in requirements will be administrated through the NASA Project Manager and NASA PTO Office Chief. The project leader shall manage the project to the said requirements based on the task plan. If new tasks are added, please add them to the task plan. When they sum to more than \$10k notify the PM to negotiate a Delivery Order mod.

2. Technical Requirements

2.1 Description of Work

Systems to be maintained under this DO are test stands 403, 301, and 328. Systems include the test stand and supporting systems such as run tanks and permanently assigned mobile equipment such as aspirators. This does not include any test

specific equipment such as regulator carts or VLDs, which should be maintained under the Fleet Leader project DO 5ID0004 which uses the equipment. Requirements are outlined in the scope section.

In addition please provide the following:

1. Develop and maintain a task plan for FY04 effort. The task plan shall:
 - " Have no task longer than 2 weeks, unless reasonable for a longer duration. If a specific task is longer than 2 weeks, break it up into smaller measurable milestones.
 - " Ensure each task has a definitive, measurable output.
 - " Identify primary individual responsible for completion of each task, and when appropriate identify a backup individual for each task. This may be accomplished using a responsibility matrix.
2. Maintain the task plan through the life of the project. If additional tasks are negotiated and added to the project, add the new tasks to the bottom of the task plan. When they sum to greater than \$10K notify PM to negotiate a DO revision. Since the project estimate is at the current budget limit, additional requirements require negotiation of which requirements not to be met.
3. Provide support for project planning, executing, and control activities in accordance WSP 09-0014.
4. Provide biweekly activity reports indicating:
 - " Tasks started and tasks completed in the previous two weeks
 - " List of activities performed that were not identified on the original task plan (i.e. action items, risk mitigation).
 - " Top 5 project risks with potential mitigation (These should be taken from the risk management plan developed and maintained in the project plan).
 - " Current Earned Value for each task plan.
5. Support weekly discussions as requested by PM.

2.2 Contractor Products/Services Required

- " FY05 Task Plan
- " Systems maintained in ready state as defined in the scope section above
- " Monthly status briefings, which include project reporting of earned value to show status to plan and compliance to the MTDB items
- " Maintained Task Plan
- " Review system WJIs, WSIs, and WSPs identified for biannual review this year
- " Update system WJIs, WSIs, and WSPs required to be updated for process safety requirements
- " Update system O&M plans and database entries as items are maintained in ready state (calibrations completed, review of documentation, re-certification of pressure vessel packages, etc. as defined in the MTDB for propulsion)
- " Identification of non-operational equipment at the beginning, middle, and end of the year
- " Spares listing including location at beginning and end of year

2.3 Materials and Travel Requirements

1. NASA will provide all propellants and gases.
2. The Contractor will purchase remaining required materials using project funds.
3. No travel is anticipated.

2.4 Task Plan/Summary Sheet

5ID1003
5ID1003

3. Schedule Requirements

The systems are to be maintained in ready state for entire year unless otherwise negotiated with NASA Systems Engineer. Therefore, documentation reviews should be completed by their due date as indicated in the notification for review and maintained in WSI-05-SW-0017 and 0001. The items in the MTDB should be completed by their due date as indicated in the MTDB.

4. Cost Tracking Requirements

Charge Number	Rev	Function Codes	Fund Source	WSTF Overhead %	\$K Amounts	Charge Number Title
VDA	E	SA	95715	22	28.6	TS-301 Mech & Elec- Preventative Maintenance
VDB	E	SA	95715	22	3.3	TS-301 Mech & Elec-Minor Repairs
VDE	B	SA	95715	22	4.9	TS-301 Mech and Elec - Project Management
VDF	B	SA	95715	22	22	TS-301 Mech and Elec - Pressure Vessel Packages
V31	C	SA	95720	22	5	TS-301 materials in support of preventative maintenance, minor repiars and operations
VDX	-	SA	95715	22	2.7	TS 301 Maint Non-Propulsion Support
VGA	E	SA	95715	22	13.6	TS-328 Mech & Elec- Preventative Maintenance
VGB	E	SA	95715	22	3.3	TS-328 Mech & Elec-Minor Repair

VGE	B	SA	95715	22	10.2	TS-328 Mech and Elec - Project Management
VGf	B	SA	95715	22	98.7	TS-328 Mech and Elec - Pressure Vessel Packages
V32	C	SA	95720	22	5	TS-328 materials in support of preventative maintenance, minor repairs and operations
VGX	-	SA	95715	22	2	TS 328 Maint Non- Propulsion Support
VNA	E	SA	95715	22	3.9	TS-403 Mechanical & Electrical-Preventative Maintenance
VNB	F	SA	95715	22	3.3	TS-403 Mechanical & Electrical-Minor Repair
VNC	H	SA	95715	22	3.3	TS-403 Mechanical & Electrical-Associated Maintenance Activities
VNE	A	SA	95715	22	12.3	TS-403 Mech and Elec - Project Management
VNF	A	SA	95715	22	63.4	TS-403 Mech and Elec - Pressure Vessel Packages
V34	C	SA	95720	22	5	TS-403 materials in support of preventative maintenance, minor repairs and operations
VNX	-	SA	95715	22	3.1	TS403 Maint Non- Propulsion Support

Notes Total \$K 293.6

5. Evaluation Criteria

The contractor will be evaluated on the ready state of all systems identified for this DO. The ready state implies the system can immediately support currently allocated testing for the Fleet Leader test as defined in DO 4ID0004. The contractor will also be evaluated on compliance to the biannual documentation

review and the maintenance tracking database.

Increased scores will also be given for improvements that increase availability, reliability, capacity, performance, and documented knowledge of the systems that are obtained within the allocated maintenance funding for these systems.

Note: This is only a summary of revision history. Details of the changes must be contained in the text of the Delivery Order.

Rev	Approved	Change (+/- \$K)	Contract Value	Revision Summary
-		293.6	243.24583	