

Statement of Work

FAME Propellant Tank

1.0 GENERAL

The Contractor/supplier shall provide the manpower, facilities, material, and services necessary to design, develop, analyze, fabricate, test, and deliver the items as specified in this Statement of Work (SOW).

All propellant tanks manufactured under this contract shall be in the form of precision cleaned and assembled propellant tanks. Final propellant tank acceptance testing with a precision clean flush, checking nonvolatile residue and particle counts for acceptance shall be performed at the Naval Research Laboratory. The supplier may have personnel on site to witness all testing performed at the customer's facility if desired but this is not a requirement of this SOW.

2.0 TASK DESCRIPTION

2.1 DESIGN/DEVELOPMENT.

2.1.1 The supplier shall design and develop the items as specified by NCST-S-FM006, FAME Component Specification, Reaction Control Subsystem, Propellant Tank.

2.1.2 The supplier shall design and deliver shipping containers for the items.

2.1.3 The supplier shall design and develop all tooling, inspection and test equipment necessary to manufacture, test, and deliver the items required by this SOW.

2.1.4 The supplier shall conduct those analyses required to justify the chosen design and to support the qualification and development activities of the controlling specification.

2.1.5 The supplier shall conduct a Preliminary Design Review (PDR) at their facility upon completion of all development activities (layouts, tests, and trade studies), but prior to completing detailed design.

2.1.6 The supplier shall conduct a Critical Design Review (CDR) at their facility upon completion of all detailed design activities, but prior to fabrication of qualification or delivery items.

2.1.7 Any design changes after the CDR shall have customer approval before implementation and shall be authorized by the contracting officer.

2.2 TESTING

2.2.1 The supplier is responsible for all development and qualification testing necessary to justify the design at PDR and CDR.

2.2.2 The supplier is responsible for compliance with all test requirements as defined by the controlling specification and approved by the customer. This includes all hardware, services, manpower, materials/fluids, equipment, test article(s), procedures, plans, and for obtaining all necessary approvals.

2.2.3 The supplier shall make provisions for the customer and/or the customer's representative to witness all tests. The supplier shall notify the customer, by phone, at least 72 hours prior to

planned start of testing. The customer shall require source inspection of the testing and test data prior to shipment.

2.3 DATA REQUIREMENTS

2.3.1 The supplier shall provide two (2) of each of the following documentation:

- a. Complete set of As-Built Engineering Drawings and Material/Process Specifications. Updated drawings shall be submitted as required.
- b. Summary of manufacturing and test discrepancies, and final disposition (as required).
- c. Failure Analyses Reports (as required).
- d. Photographs as required to document significant items and events (failures, test setups, etc..).
- e. Qualification Test Report after Design Qualification
- f. Log Book, containing the following information as a minimum
 - Certificates of Conformance
 - Copies of All MRB Actions
 - Tank As-Built Configuration
 - Tank As-Run Acceptance Test Data
 - Material Certifications
- g. Test Plans and Procedures for Acceptance and Qualification Testing at CDR
- h. Copies of other technical documents and analyses generated or performed as part of the design process, including mass properties data

2.3.2 The supplier shall maintain the following data on file for five (5) years and allow access by the customer or the customer's representative for material review:

- a. Complete manufacturing and inspection records for all test and delivered hardware.
- b. All checkout and test records.
- c. Material and process certifications and validations.
- d. All equipment certification/calibrations.
- e. All material review board (MRB) records.

2.3.3 The contractor shall report the following via phone to the customer:

- a. Biweekly status report including technical, cost, and schedule information
- b. All test failures are to be reported within 24 hours of the failure. No further testing shall take place prior to receipt of approval by the customer.
- c. Significant events that could impact this procurement (schedule, performance, quality, etc.) are to be reported within 24 hours of such determination.

2.4 Schedule and Delivery

2.4.1 The supplier shall implement this SOW in accordance with the following schedule:

- Authority to proceed - At Contract Award
- Submit design for review –To be supplied by vendor
- Acceptance Testing – To be supplied by vendor
- Item Deliveries - Sixty (60) Weeks after contract award

2.4.2 Delivery Location - All deliverables are to be submitted to:

Naval Research Laboratory
4555 Overlook Ave, S.W.
Washington, D.C. 20375-5000
Attn: Mr. Mike Osborn, Code 8232

2.4.3 Deliverables - The contractor shall provide the following to the delivery location (2.4.2):

- a. Data as required by Section 2.3.1 herein (Two Copies)
- b. Qualification Test Tank(s) and process qualification samples
- c. Two (2) propellant tanks manufactured to customer approved specifications and drawings
- d. Special ground handling, shipping equipment, and procedures

2.4.4 Delivery Schedule - The contractor shall deliver each of the deliverable of Section 2.4.3 to the delivery location of Section 2.4.2 according to the following schedule:

<u>ITEM</u>	<u>DELIVERABLE</u>	<u>DELIVERY DATE</u>
1.	Section 2.4.3 (a) and (b)	After qualification of design or process
2.	Section 2.4.3 (c) and (d)	60 weeks ARO

