

Statement of Work (SOW)

For

T-38 Cradle and Maintenance Stands



T-38 PROGRAM OFFICE, AIRFRAME
HILL AIR FORCE BASE, UTAH 84056

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T-38 CRADLES & MAINTENANCE STANDS SOW (Statement of Work)

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1.0 GENERAL INFORMATION

1.1 Scope

The T-38 Program Office has a requirement to manufacture, assemble, and deliver T-38 aircraft cradles/fixtures, maintenance stands and ladders, hereby referred to as cradle sets and stands, for delivery to Randolph AFB T-38 Depot and NASA-El Paso.

1.2 Background

Talon Repair Inspection and Maintenance (TRIM) program is intended to ensure T-38 fleet will maintain structural integrity throughout the life of the airframe. T-38 aircraft going through the TRIM program require fixtures and cradles to support the aircraft fuselage. Maintenance work stands and associated ladders are required for maintenance personnel to facilitate work on airframe.

2.0 APPLICABLE DOCUMENTS

2.1 Issues of Documents

The following documents shall be used based on the latest revision available on the date of the request for proposal, unless otherwise specified, and form a part of this Statement of Work (SOW) to the extent specified herein. When documents revisions conflict, this SOW shall govern.

2.2 Documents

TRIM WORK STANDS	
TRIM MOD STAND Assembly Drawing	T-38 TRIM WORK STAND
Stair Assembly Drawing v2.1	Mobile Stair Assembly
TRIM FUSELAGE SUPPORT CRADLES	
23179-001-1	TRIM FUSELAGE SUPPORT FIXTURE OVERVIEW
23179-163-1	FS 163.8 FUSELAGE STATION SUPPORT FIXTURE
23179-237-1	FS 237 FUSELAGE SUPPORT
23179-270-1	FS 270 FUSELAGE SUPPORT FIXTURE
23179-325-1	FUSELAGE STATION 325 WING ATTACH SUPPORT
23179-362-388-1	FUSELAGE STATION 362 AND 388 WING ATTACH SUPPORT
23179-433-1	FUSELAGE STATION 421-445 SUPPORT CRADLE
23179-445-1	ENGINE BAY WORK PLATFORM/LADDER
23179-478-1	FUSELAGE STATION 478 JACK PAD SUPPORTS SIDE FITTINGS

3.0 DESIGN

The contractor shall produce cradle sets and stands per the technical data provided in the 2.2 Documents section. These cradle sets and stands are intended to be build-to-print. Other design options and variations to the delivered technical data/drawings can be directed to T-38 Program Office for consideration.

4.0 PROGRAM MANAGEMENT

Upon request by the government, the contractor shall provide cost, schedule, and technical risk updates throughout the life of the contract. These requests may include but are not limited to:

- Contract Status, Progress Tracking, and Reporting of Milestones
- Risk Management
- Technical Reviews
- Configuration Management
- Subcontract management activity status (if applicable)
- Quality and Corrective Action Plan Status
- Action items

Additional items that will be submitted to the Government are outlined below.

4.1 Monthly Status and Production Reports

The Contractor shall submit status and production reports by the 15th of the month following the period being reported to the Government. Monthly status and production reports shall contain the following information (list is not all-inclusive; Contractor and the Government can add additional categories as appropriate throughout the period of performance): 1) production milestones, 2) manufacturing status and schedule, 3) subtotal travel, 4) deficiency reporting and remedial planning, and 5) summary of requests for variance and associated corrective action plans. (CDRL A001)

4.2 Meetings

4.2.1 Weekly Technical Interchange (TIM) Meetings

The contractor shall conduct weekly TIMs between the Government and the Contractor. Information exchanges via teleconferencing are acceptable. Support for this meeting will include preparation of briefing materials as appropriate. Contractor shall create and maintain the action item register, action items are to be submitted to the SPO no later than two days after weekly meetings. (CDRL A002)

4.2.2 Program Management Reviews (PMR)

The Contractor shall conduct quarterly PMRs. Support for these meetings will include preparation of briefing materials as appropriate to be submitted no later than seven calendar days prior to the scheduled conference date and preparation/distribution of

meeting minutes/action items no later than 10 calendar days following. These PMRs can be conducted through video conferencing or by government travel to the contractor facility. **(CDRL A003)**

4.2.3 Post Award Conference

The Contractor shall host a post award conference to review the Government requirements and the Contractor activities that must be accomplished before a comprehensive IMS has been fully developed. This conference shall be held no later than 4 weeks after contract award/receipt of order. Support for this meeting will include preparation of briefing materials as appropriate to be submitted no later than seven calendar days prior to the scheduled conference date and preparation/distribution of meeting minutes no later than 10 calendar days following. Additionally, the contractor shall travel to meet T-38 PO Government personnel at JBSA-Randolph to physically see equipment and provide a venue for questions and answers. This travel shall occur within 30 days of contract award. **(CDRL A004)**

4.3 Integrated Master Plan/Integrated Master Schedule

The Contractor shall produce an Integrated Master Plan (IMP). The IMP shall include a detailed, fully integrated management approach that identifies how the contractor will accomplish contract requirements. The IMP shall include an Integrated Master Schedule (IMS) for the processes and milestones involved in: procurement of materials, production, assembly, first articles (FA) items. The IMS shall include a detailed timeline of the following: tooling production, material purchase to include long lead items, FA inspections by the Government, manufacturing process, necessary subcontractor actions and milestones, production rate/delivery schedule risk, scheduled audits and acceptance checks. The file must be unlocked and format must be Microsoft Project 2016 or a compatible earlier version. First submittal shall be within 30 days of contract award. The IMS will be reviewed monthly at the corresponding TIM. **(CDRL A005)**

4.4 Risk Mitigation

The Contractor shall provide a thorough risk analysis and mitigation plan from the date of contract award through the end of the period of performance (PoP). The risk mitigation plan shall be reviewed semiannually at the corresponding PMR. First submittal shall be within 45 days post contract award. **(CDRL A006)**

5.0 SYSTEMS ENGINEERING

A standard system engineering process shall be used during the performance of this contract. The contractor shall support the following:

5.1 Critical Design Review (CDR)

The CDR is a technical assessment that ensures the system under review has a reasonable expectation of being judged operationally effective and suitable. The CDR shall be conducted within 60 calendar days of the Post Award Conference and will be conducted at

Hill AFB. Design changes after the CDR must be authorized in writing by the Government Program Manager. Upon Government approval of the CDR the contractor shall produce and deliver the fixtures IAW paragraph 5.2. The contractor shall include in the CDR (**CDRL A007**):

- Present cost, schedule, and performance risks as well as risk mitigation plans. This shall be in the form of one (1) CD-R/DVD-R digital copy containing the risk presentation file(s) in Microsoft Office or PDF format.

5.1.1. CDR Entrance Criteria

- Updated Risk Management Plan (**CDRL A006**)

5.1.2. CDR Exit Criteria

- Completion of any Action Items that result from the CDR
- Government approval of successful CDR milestone

5.1.3. Engineering Assistance Requests

- Contractor requests for clarification, assistance and formal response from the T-38 Engineering Personnel will be accomplished with the Engineering Assistance Request (EAR) process. The EAR form will be submitted by the contractor to engineering, contract and program management POCs; response will be drafted by engineering and reply will be sent from T-38 engineering personnel and contracting to the contractor.

5.2 Delivery and Acceptance

5.2.1. Delivery Costs

All costs associated with the shipping of the T-38 cradle sets and stands for delivery to Randolph AFB T-38 Depot/NASA El Paso shall be the responsibility of the contractor.

5.2.2. Delivery Schedule

First Delivery Order

Upon government approval of the CDR, the contractor shall produce, assemble, and complete the first set of cradle sets and stands within 120 days. The Government will then approve/disapprove the first articles within 14 days after completion of set 1. See paragraph 5.2.3. Upon approval, the first set of cradles/stands will be shipped to NASA-El Paso and the T-38 Depot at Randolph AFB. The remainder of the sets of cradle sets and stands shall be produced, delivered and assembled to Randolph AFB T-38 Depot and NASA El Paso according to the delivery schedule outlined in the table below:

First Article (FA) Cradles and Stands for Government Review	Reviewed by Government/Approved NLT 120 Days After Receipt of Order
1st Set (Cradles & Stands)	Delivered NLT 60 Days after FA Acceptance
Sets 2 & 3	Delivered NLT 60 Days after 1st Set
Sets 4 & 5	Delivered NLT 60 Days after sets 2 & 3
Sets 6 & 7	Delivered NLT 60 Days after sets 4 & 5
Sets 8 & 9	Delivered NLT 60 Days after sets 6 & 7
Sets 10 & 11	Delivered NLT 60 Days after sets 8 & 9
Sets 12 & 13	Delivered NLT 60 Days after sets 10 & 11
Sets 14 & 15	Delivered NLT 60 Days after sets 12 & 13
Sets 16 & 17	Delivered NLT 60 Days after sets 14 & 15
Sets 18 & 19	Delivered NLT 60 Days after sets 16 & 17
Set 20	Delivered NLT 30 Days after sets 18 & 19

Subsequent Delivery Orders

Upon award of subsequent delivery orders the contractor shall produce, deliver and assemble the first two sets of cradle sets and stands to the Randolph AFB T-38 Depot and NASA El Paso within 90 calendar days after award. The remainder of the sets of cradle sets and stands shall be produced and delivered to Randolph AFB T-38 Depot and NASA El Paso at a rate of at least two per 60 calendar days. The minimum quantity of cradle sets and stands to be delivered under the basic contract will be 12 cradle sets and 12 maintenance work stands/ladders, the maximum will be 30 cradle sets and 30 maintenance work stands/ladders.

5.2.3. Government Acceptance

The Government will accept the cradle sets and stands using DD Form 250 (Material Inspection and Receiving Report). The Government will be granted access to manufacturing facility to inspect First Article set of cradle sets and stands. The contractor shall accompany the delivery of at least the first set of cradle sets and stands in order to address any potential issues with assembled components. The contractor shall be responsible for correcting any failures to meet the requirements of the technical data described in 2.0 APPLICABLE DOCUMENTS Section at no cost to the government. This shall include but is not limited to technical data interpretation issues, and unacceptable manufacturing standards which lead to shipping and/or travel required to correct deficiencies. The contractor shall correct these deficiencies within 30 calendar days of identification at acceptance, unless otherwise agreed upon by the Government.

5.3 Physical Configuration Audit (PCA)

The contractor shall coordinate with the Government to conduct a PCA on cradle sets and stands within 90 days after the first cradle sets and stands are complete. The objective of this is to verify that the final drawing package matches the Configuration Item (production unit) being produced. A PCA is a technical audit consisting of a direct comparison of the characteristics of a production unit with the characteristics specified on the applicable Product Configuration Identification (drawings, associated lists, specifications, etc.). **(CDRL A002)**

5.4 Quality Assurance

The contractor shall continually manage and improve the quality of all products and services delivered under this contract and the processes by which they are realized. The system used by the contractor to manage quality shall be compliant with all requirements of, and at a minimum be functionally equal to, a current active version of the ANSI/ISO/ASQ Q9001, Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation and Servicing. The Government shall have the right to audit the contractors, or subcontractors, quality system for ANSI/ISO/ASQ Q9001 compliance. In the event a new subcontractor is utilized a new FAT submittal may be required and should be provided at no-cost to the Government.

6.0 WARRANTY

6.1 Warranty Commencement. The warranty shall commence upon written final acceptance of each delivered set of cradle sets and stands.

6.2 Length of Warranty. The test stand shall come with a written industry standard warranty starting at the date of final acceptance.

6.3 Replacement of Defective Parts. During this warranty period, the contractor shall be responsible for the replacement of any defective parts or systems, the failure of which is due to faulty materials, workmanship, or inadequate service life. Consumables are expected to be excluded from this warranty requirement.

7.0 GENERAL BASE REQUIREMENTS

7.1 Delivery

Trucks delivering equipment to Randolph AFB T-38 Depot must use the South gate for entry onto the base.

7.2 Badging

Due to the short duration of the delivery of each set of cradle sets and stands, permanent base access badges will not be provided to the contractor. Temporary base access will be authorized for the duration of the delivery.

The contractor shall provide a list to the 575 AMXS Engineering representative not less than 7 business days prior to the date access to the base is required. The list will be computer generated or typed and organized alphabetically by the visitor's last name. The list will include last name, first name, driver's license number, and state listed on license of all guests that will need access.

The contractor shall be provided a temporary visitors badge by the 575 AMXS Security Office, authorizing escorted access to the industrial area within the flight line. This badge will be provided each day the contractor enters the flight line and shall be returned to the 575 AMXS Security Office by the end of the work day.

7.3 Escorts

The contractor shall be escorted at all times within the flight line by an authorized government representative. The contractor shall coordinate schedule and escorting services with 575 AMXS personnel Mr. Louis Yznaga and Mr. Tim Gonzalez/and/or NASA personnel Mr. Joe Garza or Ms. Aldora Louw.

7.4 Normal Hours of Operation

The contractor shall have access to the facility during the following normal hours of operations from 6am to 5pm Monday thru Friday and after hour access approval is at Government's discretion.

7.5 Observed Holidays

Holidays observed at Randolph AFB are New Year's Day, Martin Luther King Day, Presidents Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Veterans Days, Thanksgiving Day and Christmas Day. If the holiday falls on Saturday, it is observed on Friday. If the holiday falls on a Sunday, it is observed on Monday.

CDRL Table

A001	Monthly Progress and Status Report
A002	Technical Interchange Meetings
A003	Program Management Review
A004	Post Award Conference
A005	IPMDAR
A006	Risk Management Status Report
A007	Critical Design Review

A008	Briefing Material
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