

STATEMENT OF WORK

TRIPLEX (ATF-1) C-Band Feed Replacement and Integration

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1. Scope

This document covers the requirements for the new C-Band tracking feed to be provided and integrated to the Dryden Flight Research Center Western Aeronautical Test Range. The C-Band allocation has been redefined for utilization of telemetry operations and now covers 4400-5250MHz. As most users may move to this band we shall have the need to auto track and receive in the entire band. TCS has evaluated this requirement and determined its feasibility on the 7 meter systems by the submission of proposal P12-2017

2. Applicable Documents

- 2.1 TRIPLEX (ATF-1) C-Band Feed Specification and Feed Integration requirements Document.
- 2.2 Telemetry & Communications Systems, Inc. Proposal P12-2017 (Upgrade of the Model 6000-7m antenna system to add C-Band auto-tracking capability)

3. Requirements

- 3.1 TCS shall hold a design review to finalize any specific requirements
- 3.2 TCS shall deliver one C-band feed as specified and proposed in said documents (including Test inject and LNA attenuation mode) and excluding any acquisition aid devices
- 3.3 TCS shall Integrate all hardware on the TRIPLEX (ATF-1) tracking system on site at NASA DFRC
- 3.4 TCS shall Implement M1 controller GUI updates on the TRIPLEX (ATF-1) tracking system on site at NASA DFRC

4. Acceptance Testing

- 4.1 TCS shall conduct all acceptance test prior to delivery as applicable with the understanding that CSI may be present
- 4.2 TCS shall deliver a Final Acceptance Test Procedure (FATP) to Arcata prior to delivery and integration activities. The FATP shall be in the form of Microsoft word and enable to allow track changes. This will allow Arcata to request/suggest procedure modifications

5. Quality Assurance

- 5.1 TCS shall conduct all inspections of both physical hardware and documentation insuring that all articles and materials conform to contract requirements and applicable drawing and specifications. This shall be demonstrated by a certificate of conformance

6. Deliverables

- 6.1 TCS shall provide one C-Band feed and associated interface hardware to complete all work.
- 6.2 TCS shall provide Spares as proposed (P12-2017)
- 6.3 TCS shall provide documentation updates to current TCS system manuals
- 6.4 TCS shall provide Updated software for communications and control of new feed

7. Schedule

- 7.1 TCS shall complete all deliveries, integrations and testing within 180 days from award