

**Mars Entry, Descent and Landing  
Instrumentation (MEDLI2)  
Pressure Transducer  
Deliverable Items List and Schedule**

**MEDLI2-6004**



National

**LANGLEY  
RESEARCH**

## **CM FOREWORD**

This document is a Mars Entry, Descent and Landing Instrumentation (MEDLI2) Project Configuration Management (CM)-controlled document. Changes to this document require prior approval of the applicable Configuration Control Board (CCB) Chairperson or designee. Proposed changes **shall** be submitted to the MEDLI2 CM Office (CMO), along with supportive material justifying the proposed change.

In this document, a requirement is identified by "**shall**," a good practice by "should," permission by "may" or "can," expectation by "will," and descriptive material by "is."

Questions or comments concerning this document should be addressed to:

MEDLI2 Configuration Management Office  
Hampton, Virginia

### CHANGE HISTORY LOG

Revision Level	DESCRIPTION OF CHANGE	CCR / SCoRe No.	DATE APPROVED
-	Initial Release	TBD	XX/XX/XXX

**LIST OF TBDs/TBRs**

<b>Item No.</b>	<b>Location</b>	<b>Summary</b>	<b>Ind./Org.</b>	<b>Due Date</b>

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## 1.0 INTRODUCTION

This document is the Mars Entry, Descent, and Landing Instrumentation-2 (MEDLI2) Pressure Transducer Deliverable Items List and Schedule (DILS). This document provides specific information on the hardware and data deliverables for the pressure transducers.

### 1.1 PROPRIETARY DATA

In the event data is deemed to be proprietary, and for which protection is to be maintained, the sending Party **shall** mark the document with a notice to indicate that the data therein is proprietary and **shall** be used and disclosed by the receiving Party and its related entities (e.g., contractors and subcontractors) only for the purposes of fulfilling the receiving Party's responsibilities under the Mars Entry, Descent and Landing Instrumentation (MEDLI2) Project. The identified and marked technical data **shall** not be disclosed or retransferred to any other entity without prior written permission of the document preparer.

### 1.2 APPLICABLE DOCUMENTS

MEDLI2-6003	Mars Entry, Descent, and Landing Instrumentation (MEDLI2) Project Pressure Transducer Statement of Work
MEDLI2-6005	Mars Entry, Descent, and Landing Instrumentation (MEDLI2) Project Pressure Transducer Specification

## 2.0 DELIVERABLES

**Description:** This provides the “Title” of the deliverable item.

**Reference:** This provides the reference back to the pertinent document calling out the deliverable.

**Category:**

**A = Approval** – Items in this category requires approval from the National Aeronautics and Space Administration (NASA)/Langley Research Center (LaRC) Contracting Officer (CO). Documents **shall** be provided in contractor format as long as required content, as specified in the Mars Entry, Descent, and Landing Instrumentation (MEDLI2) Project Pressure Transducer Statement of Work (MEDLI2-6003), is addressed. The NASA LaRC CO reserves the time-limited right of disapproval for each submission. The time-limited period is four weeks from receipt of documents.

**R= Review** – Items in this category do not require formal NASA LaRC CO approval, but will be reviewed by LaRC or its designated representatives in order to determine contractor effectiveness in meeting contract objectives. When Government review reveals inadequacies, the contractor may be requested to correct the inadequacies. LaRC shall review and comment within four weeks of receipt.

**I = Information** – Items in this category are informal and are for information only.

**Quantity:** This provides the required number of copies for the deliverable. For documents, the following formats apply:

**H = Hardcopy** – Provide a reproducible hardcopy of submittal to NASA/LaRC.

**E = Electronic** – Provide submittal in electronic format to the Mars Entry, Descent, and Landing Instrumentation (MEDLI2) Project Library, COTR, and Contracting Officer

Table 2-1 HARDWARE DELIVERY AND SCHEDULE

Item #	Description	Reference	Category	Quantity	Delivery Date
1	Pressure Transducer Developmental Unit(s) (0 – 1 psia)	SOW 4.2(a,a)	A	2	02/15/2016
2	Pressure Transducer Developmental Unit(s) (0 – 0.1 psia)	SOW 4.2(a,b)	A	2	02/15/2016
3	Mass Model of Pressure Transducer (0 – 1 psia)	SOW 4.2 (b,a)	A	2	06/01/2016
4	Mass Model of Pressure Transducer (0 – 0.1 psia)	SOW 4.2 (b,b)	A	2	06/01/2016
5	EDU/EM Units (0 – 1 psia)	SOW 4.2 (c,b)	A	2	06/01/2016
6	EDU/EM Units (0 – 0.1 psia)	SOW 4.2 (c,c)	A	2	06/01/2016
7	Pressure Transducer Flight Unit (0 – 1 psia)	SOW 4.2(d,b)	A	6	09/01/2017
8	Pressure Transducer Flight Unit (0 – 0.1 psia)	SOW 4.2(d,c)	A	1	09/01/2017
9	Pressure Transducer Flight Unit Spares (0 – 1 psia)	SOW 4.2(e,b)	A	7	10/02/2017
10	Pressure Transducer Flight Unit Spares (0 – 0.1 psia)	SOW 4.2(e,c)	A	3	10/02/2017
11	Connector Savers	SOW 4.3	A	As Required	With each Flight and Flight Spare Sensors
12	Mating Connectors	SOW 4.4(a)	A	As Required	With each sensor (including Mass Models)
13	ESD Protective Plastic Caps	SOW 4.4(c)	A	As Required	With each sensor (including Mass Models)
14	Pressure Port Protective Caps	SOW 4.4(d)	A	As Required	With each sensor (including Mass Models)

**Table 2-2 DATA DELIVERY DOCUMENTATION AND SCHEDULE**

<b>Item #</b>	<b>Description</b>	<b>Reference</b>	<b>Category</b>	<b>Quantity</b>	<b>Delivery Date</b>
15	Monthly Status Report	SOW 2.2	I	E	Seven (7) calendar days following the month being reported.
16	Notifications	SOW 2.3	R	E	Fourteen (14) calendar days in advance of all mandatory hardware inspections, test activities, TIM's, and deliveries.
17	Kick-off Meeting	SOW 2.4.1	R	1	Within thirty (30) days after award of the contract
18	Kick-off Meeting Presentation Package	SOW 2.4.1	A	E	Seven (7) calendar days prior to the meeting
19	Design Conformance Review	SOW 2.4.2	R	1	Four (4) months after Award of Contract
20	Design Conformance Review Presentation Package	SOW 2.4.2	I	E	Fourteen (14) calendar days before DCR
21	Design Conformance Review Report	SOW 2.4.2	R	E	Fourteen (14) calendar days after completion of DCR
22	Flight Unit(s) Pre-Ship Review Presentation(s)	SOW 2.4.3	R	E	Seven (7) calendar days prior to PSR
23	Flight Unit(s) Pre-Ship Review	SOW 2.4.3	R	1	Seven (7) calendar days prior to delivery of each Flight Unit
24	Flight Unit(s) Data Delivery Package(s)	SOW 2.4.3	A	E	With each delivered Flight Unit
25	TIM	SOW 2.4.4	R	5	As negotiated
26	Interface Control Document(s)	SOW 3.1	A	E	Seven (7) calendar days before DCR
27	Drawing Package	SOW 3.2	R	E	Seven (7) calendar days before DCR
28	Structural Analysis Report	SOW 3.4	R	E	Seven (7) calendar days before DCR
29	Thermal Analysis Report	SOW 3.7	R	E	Seven (7) calendar days before DCR
30	Worst Case Circuit Analysis Report	SOW 3.8	R	E	Seven (7) calendar days before DCR
31	Parts Stress Analysis Report	SOW 3.9	R	E	Seven (7) calendar days before DCR
32	Radiation Analysis	SOW 3.10	R	E	Seven (7) calendar days before DCR
33	FMEA Report	SOW 3.13	R	E	Seven (7) calendar days before DCR
34	Fabrication, Assembly, and Inspection Flow Plan	SOW 4.1	R	E	Seven (7) calendar days before DCR
35	Preliminary Qualification Report	SOW 5.1	I	E	Seven (7) calendar days before Kick-off Meeting
36	Final Qualification Report	SOW 5.1	I	E	Fourteen (14) calendar days before PSR

37	Acceptance Test Procedure(s)	SOW 5.8	A	E	Twenty-eight (28) calendar days before start of testing and as changes occur.
38	Acceptance Test Report(s)	SOW 5.9	I	E	Delivered at PSR
39	Quality Assurance Plan	SOW 6.1.1	R	E	With proposal
40	Anomaly/Failure Reports	SOW 6.1.3	R	E	Seven (7) calendar days after Contractor Failure Review Process determines disposition
41	Class I CM Changes	SOW 6.1.4	A	E	Seven (7) calendar days after Contractor CM review
42	Class II CM Changes	SOW 6.1.4	R	E	Seven (7) calendar days after Contractor CM review
43	Trended Parameter List	SOW 6.3.1	R	E	Due at PSR
44	Limited Life Items List	SOW 6.3.2	A	E	Fourteen (14) calendar days before DCR
45	Expired Shelf Life Waiver	SOW 6.3.2	A	E	Fourteen (14) calendar days before DCR
46	Alternate Workmanship Standards	SOW 6.6.6	A	E	Fourteen (14) calendar days before DCR
47	EEE Parts Identification List	SOW 6.7.1	A	E	Fourteen (14) calendar days before DCR
48	As-Built Parts List	SOW 6.7.1	R	E	Due at PSR
49	GIDEP Alert Disposition and Preparation	SOW 6.7.6	R	E	Due 3 working days after Contractor disposition
50	Part Failure Reporting	SOW 6.7.8	A	E	72 hrs of failure determination
51	Materials and Processes Identification List	SOW 6.8.1	A	E	Fourteen (14) calendar days before DCR
52	As-Built Materials List	SOW 6.8.1	R	E	Due at seven (7) calendar days prior to PSR
53	Materials Usage Agreement	SOW 6.8.1.1	A	E	Fourteen (14) calendar days before DCR
54	Materials Certificate of Compliance	SOW 6.8.2	R	E	On Request
55	Vendor's Welding and Inspection Procedure	SOW 6.8.4	R	E	Twenty-one (21) calendar days after completion of DCR
56	Contamination Control Plan	SOW 6.8.8	A	E	Twenty-one (21) calendar days after completion of DCR

## APPENDIX A. ABBREVIATIONS AND ACRONYMS

Abbreviation/ Acronym	Definition
A	Approve
CCB	Configuration Control Board
CCR	Configuration Change Request
CM	Configuration Management
CMO	Configuration Management Office
CO	Contracting Officer
COTR	Contracting Officer's Technical Representative
DCR	Design Conformance Review
DILS	Deliverable Items List and Schedule
EEE	Electrical, Electronic, and Electromechanical
FMEA	Failure Modes and Effects Analysis
GIDEP	Government Industry Data Exchange Program
GSE	Ground Support Equipment
LaRC	Langley Research Center
I	Information
INST	Instrument
MEDLI2	Mars Entry, Descent and Landing Instrumentation 2
NASA	National Aeronautics and Space Administration
PDL	Product Design Lead
PER	Pre-Environmental Review
PSR	Pre-Ship Review
PWB	Printed Wiring Board
R	Review
SCoRe	Signature Controlled Request
SOW	Statement of Work
TBD	To Be Determined
TBR	To Be Resolved
TIM	Technical Interchange Meeting
Yrs	Years