

HIPO Master Data List
Document Number HI-Z10-00
FAA Project No. ST1217AC-T

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Revision: 5.8

Revision History:

- 1.0 – 10/11/2000 Initial Release
- 2.0 – 10/20/2000 FLITECAM CADR Update
- 3.0 – 10/18/2001 Dewar Drawing list updated
- 4.0 – 11/5/2001 Major changes
- 5.0 – 11/28/2005 Add release dates to table, bring up to date
- 5.1 – 12/12/2005 Accumulated corrections since window pressure test
- 5.2 – 6/2/2008 Document updates to bring list up to date. Incorporate window pressure test drawings from HI-Z01-00 and supercede it.
- 5.3 – 10/31/2008 Incorporate changes for Mac Mini user computers, Dell flat panel displays, and optional use of CCD67's.
- 5.4 – 5/16/2011 Pre-flight changes. Add list of ECOs.
- 5.5 – 12/23/11 Revise commissioning reports to agree with rev 4.6 of the ICP
- 5.6 – 9/19/2012 Update to drawing list due to new instrument ground wire.
- 5.7 – 4/1/2013 Revise to reflect new aircraft power wiring, update input circuit breakers in the power control box from 15A to 20A.
- 5.8 – 3/24/2014 Update HI-Z01-02 to Rev 5.11

INTRODUCTION

This is the Master Data List for the HIPO Science instrument for SOFIA. It indexes all of the formal HIPO documentation. The documents are categorized as follows:

- HI-Z01-xx HIPO FAA Documents
- HI-Z02-xx HIPO QA Documents
- HI-Z03-xx HIPO Test Plans
- HI-Z10-xx HIPO Commissioning and Operations Documents

The list of documents follows. HI-Z01-02 is the HIPO FAA drawing list, which is an index of all the HIPO mechanical, optical, and electrical drawings for flight components. This document is incorporated by reference. The HIPO Non-FAA Drawing List given at the end of this document is a list of drawings of non-flight items.

The documents without version numbers are ones we know have to be written but have not yet been started seriously.

There are additional HIPO-related documents that have SSMOC numbers rather than HIPO numbers. These are tracked elsewhere.

HIPO Master Data List

HIPO Documents

Document Number	Document Name	Current Revision	Release Date
HI-Z01	HIPO FAA Documents		
HI-Z01-00	HIPO FAA Master Data List. No longer maintained	3.0	6/2/08
HI-Z01-01	HIPO SOFIA Science Instrument Critical Structures	1.1	10/18/02
HI-Z01-02	HIPO Drawing List	5.11	3/24/14
HI-Z01-03	HIPO Drawing Tree	8	5/9/2011
HI-Z01-04	HIPO Structural and Loads Analysis	5.1	10/31/08
HI-Z01-05	HIPO System Safety Assessment	5.5	5/31/08
HI-Z01-06	FHA – DELETED, incorporated into HI-Z01-05	NA	NA
HI-Z01-07	HIPO Electrical Loads Analysis	1.2	10/27/08
HI-Z01-08	HIPO Compliance with SOFIA Cryogenics Special Conditions	1.5	6/4/07
HI-Z01-09	HIPO Inspection Discrepancy Report List	1.0	5/10/06
HI-Z01-10	HIPO Operations and Maintenance Plan	1.1	in work
HI-Z01-11	HIPO Operations and Maintenance Manual	1.5	in work

HI-Z02	HIPO QA Forms		
HI-Z02-01	HIPO Mechanical Inspection Procedures	2.1	4/5/05
HI-Z02-02	HIPO Production Traveler	1.0	Undated
HI-Z02-03	HIPO QA Inspection Report	1.0	Undated
HI-Z02-04	HIPO Engineering Change Order	1.1	Undated
HI-Z02-05	HIPO Welding Specification	1.0	3/22/02
HI-Z02-06	HIPO Post-Conformity Change Log	3.0	Continuous

HI-Z03	HIPO Test Reports		
HI-Z03-01	HIPO Dewar Pressure Test Plan	2.4	4/10/03
HI-Z03-02	HIPO Window Pressure Test Plan	2.1	3/10/06
HI-Z03-03	HIPO EMI/EMC Test Plan. NA – This is a DAOF document	- - -	TBD

HI-Z10	HIPO Commissioning and Operations Documents		
HI-Z10-00	HIPO Master Data List (This document). This document now supercedes HI-Z01-00.	5.8	3/24/14
HI-Z10-01	HIPO CADR Introduction	1.2	10/9/00
HI-Z10-02	HIPO Airworthiness Schedule	20	11/16/05
HI-Z10-03	HIPO Envelope Fit Analysis	2.0	2/2/04
HI-Z10-04	HIPO Weight Budget and Center of Gravity Determination	4.1	5/7/08
HI-Z10-05	HIPO Finite Element Analysis Report	Final	3/6/02
HI-Z10-06	HIPO Instrument Cart ICD Compliance	1.0	2/24/04
HI-Z10-07	HIPO Commissioning Plan	4.5	5/16/11
HI-Z10-08	HIPO Operations Manual – DELETED. See HI-Z01-11	NA	NA
HI-Z10-10	HIPO-MCCS Software Interface	- - -	TBD
HI-Z10-11	HIPO-DCS Software Interface	1.6	9/29/08

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HI-Z10	HIPO Commissioning and Operations Documents, Cont'd		
HI-Z10-12	HIPO Sensitivity Calculation	1.1	1/4/08
HI-Z10-13	MCCS Communication Functional Test	- - -	TBD
HI-Z10-14	SMA Control Functional Test	- - -	TBD
HI-Z10-15	HIPO GPS Test	1.0	5/12/08
HI-Z10-16	INF Vacuum Integrity Test	1.0	9/10/07
HI-Z10-17	Raw Photometric Sensitivity Test	- - -	TBD
HI-Z10-18	Differential Photometric Sensitivity Test	- - -	TBD
HI-Z10-19	HIPO Basic Properties Test	- - -	TBD
HI-Z10-20	Miscellaneous Additional Tests	- - -	TBD
HI-Z10-21	HIPO Proposer's Manual	- - -	TBD
HI-Z10-22	HIPO Data Analysis Manual	- - -	TBD

HIPO Non-Flight Drawing List

Included in HI-Z10-00 Full Master Data List
Revision 1.3

Drawing Number	Rev. No.	ECO Rev.	Number of Sheets	Drawing Title	From Assembly	Drawn By	Date
MISC-0384 - HIPO Aircraft Dolley							
MISC-0384	1	1	1	HIPO Aircraft Dolley	NA	Nye	2/19/04
MISC-0384-A	1		1	Aircraft Elevator Assembly for HIPO	MISC-0384	Nye	12/12/03
MISC-0384-B	1		1	Aircraft Dolley Assembly for HIPO	MISC-0384	Nye	12/12/03
MISC-0384-01	1		1	Cam Mount	MISC-0384	Nye	2/26/04
MISC-0384-02	1		1	Air Spring Top	MISC-0384	Nye	2/26/04
MISC-0384-03	1		1	Air Spring Bottom	MISC-0384	Nye	2/26/04
MISC-0384-04	1		1	Manifold	MISC-0384	Nye	2/25/04
MISC-0384-05	1		1	Air Spring Spacer	MISC-0384	Nye	12/5/03
MISC-0384-06	1		1	Bulkhead Bracket	MISC-0384	Nye	12/5/03
MISC-0384-07	1		1	Back Elevator Beam	MISC-0384	Nye	12/8/03
MISC-0384-08	1		1	Insert	MISC-0384	Nye	12/8/03
MISC-0384-09	1		1	Flange	MISC-0384	Nye	12/8/03
MISC-0384-10	1		1	Guide Rod	MISC-0384	Nye	12/8/03
MISC-0384-11	1		1	Stop	MISC-0384	Nye	12/8/03
MISC-0384-12	1		1	Right and Left Elevator Support	MISC-0384	Nye	12/9/03
MISC-0384-13	1		1	Right and Left Track	MISC-0384	Nye	12/9/03
MISC-0384-14	1		1	Track Support	MISC-0384	Nye	12/9/03
MISC-0384-15	1		1	Front Elevator Beam	MISC-0384	Nye	12/9/03
MISC-0384-16	1		1	Stop Rod	MISC-0384	Nye	12/9/03
MISC-0384-17	1		1	Manifold Bracket	MISC-0384	Nye	2/25/04
MISC-0384-18	1		1	Front and Rear Cart Beam	MISC-0384	Nye	12/12/03
MISC-0384-19	1		1	Lower Beam	MISC-0384	Nye	12/12/03
MISC-0384-20	1		1	Rear Wheel Mount Right and Left	MISC-0384	Nye	12/12/03
MISC-0384-21	1		1	Front Wheel Mount Right and Left	MISC-0384	Nye	12/12/03
MISC-0384-22	1		1	Motor Mount Bracket	MISC-0384	Nye	12/15/03
MISC-0384-23	1		1	Brake Release	MISC-0384	Nye	12/18/03
MISC-0384-24	1		1	Welded Cart Handle	MISC-0384	Nye	2/26/04
MISC-0384-25	1		1	Brake Handle	MISC-0384	Nye	2/25/04

HIPO Master Data List

Drawing Number	Rev. No.	ECO Rev.	Number of Sheets	Drawing Title	From Assembly	Drawn By	Date
N00 - 72-Inch HIPO Adapter							
HI-N00-00	1		1	72-Inch HIPO Adapter Assembly	NA	Nye	
HI-N00-01	1		1	Spacer	HI-N00-00	Nye	
HI-N00-02	1		1	Insert	HI-N00-00	Nye	7/24/03
HI-N00-03	1		1	72-Inch Telescope Adapter Plate for HIPO	HI-N00-00	Nye	7/23/03
HI-N00-04	1		1	Pin	HI-N00-00	Nye	7/24/03
HI-N00-05	1		1	Cover Plate	HI-N00-00	Nye	7/24/03
HI-N00-06	1		1	Center Cover Plate	HI-N00-00	Nye	7/23/03
N01 - Window Pressure Test Assembly							
HI-N01-01	1		2	Window Pressure Test Assembly	NA	Dunham	10/6/05
HI-N01-02	1		1	Pressure Test Mount	HI-N01-00	Dunham	10/6/05
HI-N01-03	1		1	Pressure Test Cap	HI-N01-00	Dunham	8/24/05
N02 - Ground Support Rack Components							
HI-N02-01	1		1	Connector Plate	NA	Dunham	
HI-N02-02	1		1	Rack Shim	NA	Dunham	
HI-N02-03	1		1	Mirrored Rack Shim	NA	Dunham	
N03 - Ground Lab and Test Cables							
HI-N03-01	1		1	AC Power for Lab Use	NA	Dunham	
HI-N03-02	1		1	Pontech PP232-485 Adapter Power	NA	Dunham	
HI-N03-03	1		1	Pontech Test External RS-485	NA	Dunham	
HI-N03-04	1		1	RS-232 Pontech Test Cable	NA	Dunham	
N04 - HIPO Flange Fiducial Assembly							
HI-N04-00	1		1	HIPO Flange Fiducial Assembly	NA	Dunham	
HI-N04-01	1		1	Modified Window Cell	HI-N04-00	Dunham	
HI-N04-02	1		1	Modified Window Retainer	HI-N04-00	Dunham	
HI-N04-03	1		1	Spacer Tube	HI-N04-00	Dunham	
HI-N04-04	1		1	Test Pattern Plate	HI-N04-00	Dunham	
N05 - HIPO IMC Test Assembly							
HI-N05-00	1		1	HIPO IMC Test Assembly	NA	Dunham	
HI-N05-01	1		1	Field Lens Cell	HI-N05-00	Dunham	
HI-N05-02	1		1	Field Lens Retainer	HI-N05-00	Dunham	
HI-N05-03	1		1	Lower Flange Base Plate	HI-N05-00	Dunham	
HI-N05-04	1		1	Bottom Plate	HI-N05-00	Dunham	
HI-N05-05	1		1	Left Plate	HI-N05-00	Dunham	
HI-N05-06	1		1	Right Plate	HI-N05-00	Dunham	
HI-N05-07	1		1	Top Plate	HI-N05-00	Dunham	
HI-N05-08	1		1	Baffle	HI-N05-00	Dunham	
HI-N05-09	1		1	Mounting Platform	HI-N05-00	Dunham	
HI-N05-10	1		1	Upright	HI-N05-00	Dunham	
HI-N05-11	1		1	Spreader Bar	HI-N05-00	Dunham	
HI-N05-12	1		1	Pellicle Mount	HI-N05-00	Dunham	
HI-N05-13	1		1	Integrating Sphere Mount	HI-N05-00	Dunham	
HI-N05-14	1		1	Star Plate Retaining Ring	HI-N05-00	Dunham	
HI-N05-15	1		1	Star Plate	HI-N05-00	Dunham	
HI-N05-16	1		1	Telescope Lens Mount	HI-N05-00	Dunham	
HI-N05-17	1		1	Telescope Lens Retainer	HI-N05-00	Dunham	

LIST OF ECOs

HIPO-M00-00-1. ~~MADS implementation change.~~ Change folded into Rev 4, 4/1/2013.
 HIPO-P00-00-1. Rack mounting hardware provided by facility
 HIPO-P01-00-1. Provide additional cable clamps
 HIPO-MISC-0384-1. Add fork pockets to ease handling