

Search Results

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LIGO-Number	Title	Author(s)	Topic(s)	Last Updated
D010261-v1	Lower Wire Clamp Plate, Blade Pulldown Device	Derek Bridges	Final Design Suspensions	06 Dec 2010
D010264-x0	Upper Blade Wire Clamp	Calum Torrie	Document Migration	04 Aug 2004
D010265-x0	Wire Clamp Plate	Calum Torrie	Document Migration	04 Aug 2004
D010266-v1	Wire Clamp Cylinder, Blade Pulldown Device	Derek Bridges	Final Design Suspensions	21 Dec 2010
D010268-v1	Lower Wire Clamp, Blade Pulldown Device	Derek Bridges	Final Design Suspensions	08 Dec 2010
D020023-v7	Structural Weldment Assembly, HSTS	Michael Meyer <i>et al.</i>	Final Design Suspensions	14 Jun 2019
D020116-v2	Upper Blade Clamp, Upper Side, 0.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020119-v2	Lower Blade Clamp, Upper Side, 0.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020132-v2	Lower Blade Wire Clamp (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	28 May 2013
D020133-v1	Lower Blade Wire Clamp Plate (OMCS)	Derek Bridges	Final Design Suspensions	28 May 2013
D020134-v1	Main Section, Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012
D020135-x0	Upper Blade Wire Clamp Plate	Michael M Perreux-Lloyd <i>et al.</i>	Document Migration	30 Jul 2004
D020136-v1	T-Section, Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012
D020137-v1	Pitch Insert, T-Section, Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012
D020139-v1	Wire Clamp Plate, Upper Mass (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D020148-x0	Wire Standoff, Mode Cleaner	Calum Torrie	Document Migration	02 Aug 2004
D020153-x0	Bar Jig for Int. & Upper Wires	Calum Torrie	Document Migration	04 Aug 2004
D020154-x0	Bar Jig Step Plate	Calum Torrie	Document Migration	03 Aug 2004
D020155-x0	Spacer for Mass Jig	Calum Torrie	Document Migration	03 Aug 2004
D020156-x0	Clamp Mass Jig	Calum Torrie	Document Migration	03 Aug 2004
D020157-x0	Test Mass Jig	Calum Torrie	Document Migration	03 Aug 2004
D020158-x0	Angled Attachment Upper Blade Clamp Piece	Calum Torrie	Document Migration	03 Aug 2004
D020159-x0	Lower Blade Wire Clamp, Lower Wire Jig (OMCS)	Calum Torrie	Document Migration	17 Apr 2013
D020161-x0	Assembly Upper Wire Jig	Calum Torrie	Document Migration	02 Aug 2004
D020162-x0	Lower Wire Jig	Calum Torrie	Document Migration	02 Aug 2004
D020188-x0	Coil Former	Janeen Romie <i>et al.</i>	Document Migration	04 Aug 2004
D020196-x0	Magnet Spacer	Calum Torrie	Document Migration	27 Jul 2004

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D020197-x0	Flag	Calum Torrie	Document Migration	04 Aug 2004
D020198-v1	Upper Blade Wire Clamp, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012
D020199-v1	Magnet/Flag Base (Short), Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	21 Jun 2012
D020200-x0	Magnet Holder (Longitudinal and Yaw)	Calum Torrie	Document Migration	30 Jul 2004
D020201-v1	HSTS Lower Blade	Bobby Moore	Suspensions	01 Apr 2009
D020202-v2	Lower Wire Clamp Mount, HSTS	Bobby Moore	Final Design Suspensions	18 Jun 2012
D020203-v2	Lower Wire Clamp, HSTS	Bobby Moore	Final Design Suspensions	18 Jun 2012
D020204-x0	Lower Wire Clamp Shim	Calum Torrie	Document Migration	04 Aug 2004
D020205-x0	Upper Blade	Michael M Perreur-Lloyd et al.	Document Migration	02 Aug 2004
D020210-x0	Bridge Spacer for Magnet	Calum Torrie	Document Migration	03 Aug 2004
D020211-v1	Magnet Holder Brace, Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	21 Jun 2012
D020215-x0	small catcher for lower blades	Russell Jones et al.	Document Migration	03 Aug 2004
D020225-x0	Coil Assembly	Russell Jones et al.	Document Migration	04 Aug 2004
D020236-x0	GUARD, TOP BLADE	Janeen Romie et al.	Document Migration	29 Jul 2004
D020239-v1	Coil Holder, HSTS	Bobby Moore	Final Design Suspensions	25 Jun 2012
D020282-x0	Coil Former Bracket	Russell Jones et al.	Document Migration	03 Aug 2004
D020307-v1	UPPER BLADE CLAMP, LOWER SIDE	Michael Meyer	Final Design Suspensions	24 Apr 2009
D020308-v2	Lower Blade Clamp, Lower Side, 0.0 Degree (HSTS/OMCS)	Derek Bridges	Final Design Suspensions	22 May 2013
D020309-v1	Wire Clamp Plate with Groove, Upper Mass (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D020311-v1	UPPER BLADE CLAMP, LOWER SIDE, ANGLED 2.0 DEGREES	Michael Meyer	Final Design Suspensions	24 Apr 2009
D020312-v2	Upper Blade Clamp, Upper Side, 2.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020313-v2	Lower Blade Clamp, Lower Side, 2.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020314-v2	Lower Blade Clamp, Upper Side, 2.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020316-x0	Assembly Lower Wire Clamp	Calum Torrie	Document Migration	04 Aug 2004
D020318-x0	Advanced LIGO, SUS, MC: Upper Mass, Lower Blade Wire Clamp Assembly	Calum Torrie	Document Migration	16 Dec 2008
D020319-x0	Upper Blade Wire Clamp Assembly	Michael M Perreur-Lloyd et al.	Document Migration	30 Jul 2004
D020321-v1	UPPER BLADE CLAMP, LOWER SIDE, ANGLED 0.5 DEGREES	Michael Meyer	Final Design Suspensions	24 Apr 2009
D020322-v1	UPPER BLADE CLAMP, LOWER SIDE, ANGLED 1.0 DEGREES	Michael Meyer	Final Design Suspensions	24 Apr 2009
D020323-v1	UPPER BLADE CLAMP, LOWER SIDE, ANGLED 1.5 DEGREES	Michael Meyer	Final Design Suspensions	24 Apr 2009

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D020324-v1	UPPER BLADE CLAMP, LOWER SIDE, ANGLED 2.5 DEGREES	Michael Meyer	Final Design Suspensions	24 Apr 2009
D020325-v2	Upper Blade Clamp, Upper Side, 0.5 Degree (HSTS/OMCS)	Michael Meyer	Final Design Suspensions	21 May 2013
D020326-v2	Upper Blade Clamp, Upper Side, 1.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020327-v2	Upper Blade Clamp, Upper Side, 1.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020328-v2	Upper Blade Clamp, Upper Side, 2.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020333-v2	Lower Blade Clamp, Lower Side, 0.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020334-v2	Lower Blade Clamp, Lower Side, 1.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020335-v2	Lower Blade Clamp, Lower Side, 1.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020336-v2	Lower Blade Clamp, Lower Side, 2.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020337-v2	Lower Blade Clamp, Upper Side, 0.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020338-v2	Lower Blade Clamp, Upper Side, 1.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020339-v2	Lower Blade Clamp, Upper Side, 1.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020340-v2	Lower Blade Clamp, Upper Side, 2.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020350-v3	Add-on Mass, 100g	Michael Meyer	Final Design Suspensions	21 Jun 2012
D020351-v2	Add-on Mass, 50g	Michael Meyer	Final Design Suspensions	21 Jun 2012
D020376-x0	Wire Start Grooved Clamp .006	Calum Torrie	Document Migration	02 Aug 2004
D020380-v2	Wire Start Clamp, Outside	Derek Bridges	Preliminary Design Suspensions	23 Feb 2011
D020440-x0	Upper Wire Height Balance, Upper Wire Jig (OMCS)	Calum Torrie	Document Migration	28 May 2013
D020443-x0	Catcher Assembly Plate	Calum Torrie	Document Migration	30 Jul 2004
D020445-x0	v-clamp for catcher bar	Calum Torrie	Document Migration	02 Aug 2004
D020446-x0	Bar Attach Lower	Calum Torrie	Document Migration	02 Aug 2004
D020447-x0	Bar Attach Upper	Calum Torrie	Document Migration	02 Aug 2004
D020448-x0	catcher bar for intermediate mass	Calum Torrie	Document Migration	02 Aug 2004
D020449-x0	catcher bar for test mass	Calum Torrie	Document Migration	02 Aug 2004
D020450-x0	Alum Bar Plate Lower Blades	Calum Torrie	Document Migration	30 Jul 2004
D020458-x0	Catcher Int & Test Mass	Calum Torrie	Document Migration	02 Aug 2004
D020466-v1	SMALL TRIPLES 10x10mm Magnet	Calum Torrie	Basic R&D Suspensions	07 May 2009
D020475-v1	SUS SMALLTRIPLE 2x2ARRAY (ECD) 2x2copperarray	Calum Torrie	Basic R&D Suspensions	23 Jan 2009
D020481-v1	Upper Mass C-Clamp, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012

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D020482-v2	Screwdrive System, Upper Mass (HSTS/OMCS)	Janeen Romie	Final Design Suspensions	28 May 2013
D020494-x0	Alignment Target	Calum Torrie	Document Migration	04 Aug 2004
D020499-x0	Upper Wire Clamp with Pitch Adjustment	Alastair Grant et al.	Document Migration	02 Aug 2004
D020501-x0	Bar Jig Adjuster Block	Calum Torrie	Document Migration	02 Aug 2004
D020532-x0	Assembly Magnet and Flag (for pitch)	Calum Torrie	Document Migration	04 Aug 2004
D020533-x0	Assembly Magnet and Flag	Calum Torrie	Document Migration	04 Aug 2004
D020534-v2	Upper Mass Assembly, HSTS	Michael Meyer et al.	Final Design Suspensions	13 Jul 2012
D020535-v2	Upper Mass and Coil Holder Assembly, HSTS	Michael Meyer et al.	Final Design Suspensions	12 Jul 2012
D020540-x0	Wire Start Matched Height (Grooved Clamp), Upper Wire Jig (OMCS)	Calum Torrie	Document Migration	28 May 2013
D020541-x0	Lower and Intermediate Mass	Calum Torrie	Document Migration	02 Aug 2004
D020542-x0	Assembly Upper Blade Guard	Calum Torrie	Document Migration	02 Aug 2004
D020562-x0	Catcher Assembly Plate	Calum Torrie	Document Migration	02 Aug 2004
D020617-v2	Upper Blade, HLTS	Calum Torrie et al.	Final Design Suspensions	16 Mar 2012
D020660-v1	Blade Pulldown Device, HAM Suspensions	Derek Bridges	Final Design Suspensions	26 Jan 2011
D020676-v1	Roll Insert, T-Section, Upper Mass, HSTS	Bobby Moore	Final Design Suspensions	08 Apr 2012
D020677-v3	Library of Clamps (HSTS/OMCS)	Michael Meyer	Final Design Suspensions	17 Apr 2013
D020679-v2	Upper Blade Clamp Shim, 1mm (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020680-v2	Upper Blade Clamp Shim, 2mm (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D020682-v2	HSTS/OMC Lower Blade Clamp, Shim, 1mm	Bobby Moore	Final Design Suspensions	22 Nov 2011
D020687-v1	Upper Blade Clamp, Lower Side, 3.0 Degree	Derek Bridges	Final Design Suspensions	24 Apr 2009
D020688-v1	Upper Blade Clamp, Lower Side, 3.5 Degree	Derek Bridges	Final Design Suspensions	24 Apr 2009
D020689-v2	Upper Blade Clamp, Upper Side, 3.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020690-v2	Upper Blade Clamp, Upper Side, 3.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	21 May 2013
D020700-v2	HSTS Overall Assembly	Janeen Romie	Suspensions Installation	31 Oct 2022
D030042-v1	Wire Clamp Plate, Upper Blade (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D030044-v1	Lower Blade Wire Clamp Plate, Angled, HSTS	Bobby Moore	Final Design Suspensions	31 May 2012
D030047-x0	CLAMP MASS JIG (WITH GROOVE)	Calum Torrie	Document Migration	02 Aug 2004
D030048-x0	SPACER FOR MASS JIG (LOWER WIRE)	Calum Torrie	Document Migration	02 Aug 2004
D030049-x0	Assembly Intermediate Wire Jig	Calum Torrie	Document Migration	02 Aug 2004
D030076-x0	MAGNET SPACER (STEEL)	Calum Torrie	Document Migration	04 Aug 2004

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D030078-v2	Add-on Mass, 20g	Michael Meyer	Final Design Suspensions	21 Jun 2012
D030079-x0	UPPER MASS 10g, ADD ON MASS	Calum Torrie	Document Migration	02 Aug 2004
D030122-x0	SHOULDER FOR COIL FORMER BRACKET	Russell Jones et al.	Document Migration	04 Aug 2004
D030123-x0	SPACER FOR COIL FORMER BRACKET	Russell Jones et al.	Document Migration	04 Aug 2004
D030183-x0	COIL FORMER CLAMP ONE PIECE	Russell Jones et al.	Document Migration	04 Aug 2004
D030215-v3	Eddy Current Magnet Holder	Calum Torrie	Basic R&D Suspensions	06 Mar 2009
D030243-v2	Cu Damper 2x2 Array Stripped	Calum Torrie	Basic R&D Suspensions	06 Mar 2009
D030263-x0	Copper Sleeve	Russell Jones et al.	Document Migration	04 Aug 2004
D030264-x0	Damper Arm	Russell Jones et al.	Document Migration	04 Aug 2004
D030269-x0	Blade Damper Assembly	Russell Jones et al.	Document Migration	04 Aug 2004
D030382-x0	Introduction to the LIGO Caltech PDMWorks Vault and a Summary of the Drawing & Data Templates, Macros, Bill of Materials and Customized Toolbox Created for Solidworks	Mike Pedraza et al.	Document Migration	06 Feb 2019
D030383-x0	Advanced LIGO SUS Customised Toolbox for SolidWorks	Calum Torrie et al.	Document Migration	06 Feb 2004
D030454-x0	Spacer 60g Mass	Calum Torrie	Document Migration	02 Aug 2004
D030455-x0	Spacer 35g Mass	Calum Torrie	Document Migration	02 Aug 2004
D030456-x0	Spacer 75g Mass	Calum Torrie	Document Migration	02 Aug 2004
D030457-x0	Spacer 120g Mass	Calum Torrie	Document Migration	02 Aug 2004
D030459-v3	Upper Blade Clamp, Lower Side, 0.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030460-v2	Upper Blade Clamp, Lower Side, 0.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030461-v2	Upper Blade Clamp, Lower Side, 1.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030462-v2	Upper Blade Clamp, Lower Side, 1.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030463-v2	Upper Blade Clamp, Lower Side, 2.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030464-v2	Upper Blade Clamp, Lower Side, 2.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030465-v2	Upper Blade Clamp, Lower Side, 3.0 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030466-v2	Upper Blade Clamp, Lower Side, 3.5 Degree (HSTS/OMCS)	Bobby Moore	Final Design Suspensions	22 May 2013
D030468-x0	40g ADD ON MASS	Calum Torrie	Document Migration	02 Aug 2004
D030576-x0	9 Degree Clamp for Mn Blades	Michael M Perreux-Lloyd et al.	Document Migration	13 Oct 2003
D030703-x0	Advanced LIGO, SUS, ETM: Coil, Coil Former Bracket	Calum Torrie	Document Migration	11 Oct 2006
D030710-x0	Coil Former Clamp One Piece Alt	Russell Jones et al.	Document Migration	04 Aug 2004
D030712-x0	Advanced LIGO, SUS, ETM: Coil, Coil Former Clamp Onepiece, Alt	Calum Torrie	Document Migration	11 Oct 2006

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D030735-v1	SUS_SMALLTRIPLE_2x2ARRAY_ECD_MACHINED HEX IN SHCS SUB-ASSEMBLY	Calum Torrie	Basic R&D Suspensions	23 Jan 2009
D040036-x0	Advanced LIGO, SUS, ETM CPTYPE TEST MASS, Main Body Test Mass	Calum Torrie	Document Migration	12 Oct 2006
D040037-x0	Advanced LIGO, SUS, ETM CPTYPE TEST + PEN. MASS, INSERTS, MAIN BODY	Calum Torrie	Document Migration	12 Oct 2006
D040038-x0	ADVANCED LIGO, SUS, ETM CPTYPE, TEST MASS ASSEMBLY	Calum Torrie	Document Migration	12 Oct 2006
D040043-x0	Advanced LIGO, SUS, ETM CPTYPE TEST MASS, TWO WIRE BREAK OFF ASSEMBLY	Calum Torrie	Document Migration	12 Oct 2006
D040044-x0	Advanced LIGO, SUS, ETM CPTYPE, Wire Break Off Plate	Calum Torrie	Document Migration	11 Oct 2006
D040045-x0	Advanced LIGO, SUS, ETM CPTYPE, Wire Break Off	Calum Torrie	Document Migration	11 Oct 2006
D040046-x0	ADVANCED LIGO, SUS, ETM CPTYPE TEST MASS, FACEPLATE, MAIN BODY	Calum Torrie	Document Migration	13 Oct 2006
D040052-x0	ADVANCED LIGO, SUS, ETM CPTYPE, TEST MASS FACES	Calum Torrie	Document Migration	13 Oct 2006
D040132-x0	ADVANCED LIGO, SUS, ETM CPTYPE, PENULTIMATE MASS ASSEMBLY	Calum Torrie	Document Migration	12 Oct 2006
D040135-x0	ADVANCED LIGO, SUS, ETM CPTYPE PEN MASS, FACE PLATE, MAIN BODY PEN MASS	Calum Torrie	Document Migration	12 Oct 2006
D040136-x0	Advanced LIGO, SUS, ETM CPTYPE PEN TEST MASS, MAIN BODY PEN MASS	Calum Torrie	Document Migration	12 Oct 2006
D040142-x0	ADVANCED LIGO, SUS, ETM CONT, PEN REACTION MASS ASSEMBLY	Calum Torrie	Document Migration	13 Oct 2006
D040143-x0	ADVANCED LIGO, SUS, ETM CPTYPE, PEN REACTION MASS MAIN SECTION	Calum Torrie	Document Migration	13 Oct 2006
D040145-x0	ADVANCED LIGO, SUS, ETM CONT TEST MASS, REACTION MASS REMOVABLE FACE PLATE	Calum Torrie	Document Migration	16 Oct 2006
D040161-x0	ADVANCED LIGO, SUS, ETM CPTYPE, REACTION MASS ASSEMBLY	Calum Torrie	Document Migration	13 Oct 2006
D040164-x0	ADVANCED LIGO, SUS, ETM CPTYPE REACTION TEST MASS, MAIN BODY REACTION TEST MASS	Calum Torrie	Document Migration	13 Oct 2006
D040170-x0	Advanced LIGO, SUS, ETM: Coil, Coil Assembly	Calum Torrie	Document Migration	11 Oct 2006
D040171-x0	ADVANCED LIGO, SUS, REMOVABLE CYLINDER	Calum Torrie	Document Migration	16 Oct 2006
D040183-x0	ADVANCED LIGO SUS ETM CPTYPE FLEXURE POINT OF A SPRING STEEL WIRE	Caroline Cantley <i>et al.</i>	Document Migration	08 Sep 2004
D040185-x0	ADVANCED LIGO, SUS ETM CPTYPE, PENULTIMATE REACTION MASS, REMOVABLE BACK FACE PLATE	Calum Torrie	Document Migration	13 Oct 2006
D040186-x0	ADVANCED LIGO, SUS, ETM CPTYPE PENULTIMATE REACTION MASS, ADJUSTABLE CYLINDER FOR PITCH	Calum Torrie	Document Migration	16 Oct 2006
D040259-v1	Tablecloth and Upper Mass Table Jig	Calum Torrie	Final Design Suspensions	11 Nov 2011
D040296-x0	Bottom Blade Springs Quad Controls Prototype	Justin Greenhalgh <i>et al.</i>	Document Migration	05 Aug 2004
D040297-x0	MIDDLE BLADE SPRING QUAD CONTROLS PROTOTYPE	Justin Greenhalgh <i>et al.</i>	Document Migration	05 Aug 2004
D040298-x0	TOP STAGE BLADES QUAD CONTROLS PROTOTYPE	Justin Greenhalgh <i>et al.</i>	Document Migration	05 Aug 2004
D040325-x0	Advanced LIGO, SUS, Test Mass Assembly, Main Section Bung	Calum Torrie	Document Migration	12 Oct 2006
D040380-x0	ADVANCED LIGO, SUS, TOP MASS, TOP MASS WIRE BREAK OFF AND PITCH PLATE	Calum Torrie <i>et al.</i>	Document Migration	16 Oct 2006
D040381-x0	ADVANCED LIGO, SUS, CPTYPE ETM TOP MASS, TOP WIRE BREAK OFF - MAIN BODY	Calum Torrie <i>et al.</i>	Document Migration	16 Oct 2006

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D040382-x0	ADVANCED LIGO, SUS, CPTYPE ETM TOP MASS, TOP WIRE BREAK OFF - MAIN BODY	Calum Torrie <i>et al.</i>	Document Migration	16 Oct 2006
D040391-v2	HSTS Overall Assembly and Assembly Fixtures	Bobby Moore <i>et al.</i>	Final Design Suspensions	10 Nov 2021
D040397-x0	ADVANCED LIGO, SUS, ETM CPTYPE, ASSEMBLY MAGNET FLAG & HEX SPACER	Calum Torrie	Document Migration	12 Oct 2006
D040398-x0	ADVANCED LIGO, SUS, ETM CPTYPE, HEX MAGNET SPACER	Calum Torrie	Document Migration	13 Oct 2006
D040400-x0	Advanced LIGO, SUS, CPTYPE ETM Suspension, Quad Assembly (Suspended)	Calum Torrie	Document Migration	11 Oct 2006
D040401-v1	D040401	Calum Torrie	Basic R&D Suspensions	16 Dec 2013
D040420-x0	Advanced LIGO, SUS, ETM CPTYPE PEN MASS, PEN MASS WIRE BREAK OFF & CLAMP	Calum Torrie	Document Migration	12 Oct 2006
D040421-x0	Advanced LIGO, SUS, ETM CPTYPE PEN MASS, TWO WIRE BREAK OFF ASSEMBLY PEN MASS	Calum Torrie	Document Migration	12 Oct 2006
D040422-x0	ADVANCED LIGO, SUS, REACTION TEST MASS BUNG INSERT	Calum Torrie	Document Migration	13 Oct 2006
D040445-x0	ADVANCED LIGO, SUS, ETM CPTYPE, WIRE BREAK OFF	Calum Torrie	Document Migration	13 Oct 2006
D040514-x0	Advanced LIGO, SUS, ETM Upper Str	Calum Torrie	Document Migration	11 Oct 2006
D040516-x0	Advanced LIGO, SUS, ETM Lower STR Assembly Rig	Calum Torrie	Document Migration	11 Oct 2006
D040524-x0	Advanced LIGO, SUS, CPTYPE ETM Suspension, Upper Structure with Suspended & Non Suspended Items	Calum Torrie	Document Migration	11 Oct 2006
D050018-x0	ADVANCED LIGO SUS QUAD ETM C-PTYPE DRUM ENDED WIRE TOP STAGE	Calum Torrie	Document Migration	17 Feb 2005
D050035-x0	Advanced LIGO, SUS, Assembly Rig, Single Catcher, Faceplate	Calum Torrie	Document Migration	11 Oct 2006
D050036-x0	Advanced LIGO, SUS, Lower STR, Mass Support Strut	Calum Torrie	Document Migration	11 Oct 2006
D050038-x0	Advanced LIGO, SUS, Lower STR, Lower STR Faceplate Connector	Calum Torrie	Document Migration	11 Oct 2006
D050040-x0	Advanced LIGO, SUS, ETM Lower Structure Single Catcher	Calum Torrie	Document Migration	11 Oct 2006
D050041-x0	Advanced LIGO, SUS, Lower Structure, Long, Angled V Strap	Calum Torrie	Document Migration	11 Oct 2006
D050042-x0	Advanced LIGO, SUS, Lower STR Assembly, Lower STR Long Zed Straps	Calum Torrie	Document Migration	11 Oct 2006
D050043-x0	Advanced LIGO, SUS, Lower STR Assembly, Lower STR Long Side-Straps	Calum Torrie	Document Migration	11 Oct 2006
D050044-x0	Advanced LIGO, SUS, Lower STR, Lower STR Angled Long Front Strap	Calum Torrie	Document Migration	11 Oct 2006
D050045-x0	Obsolete	Fabrice Matchard <i>et al.</i>	Seismic Isolation Final Design Document Migration	12 May 2010
D050047-x0	Advanced LIGO, SUS, Lower STR, ETM Lower STR Assembly Rig	Calum Torrie	Document Migration	11 Oct 2006
D050050-x0	Advanced LIGO, SUS, Lower STR, Longitudinal Cross Strut	Calum Torrie	Document Migration	11 Oct 2006
D050051-x0	Advanced LIGO, SUS, Lower STR, Side Plate for Safety Stops	Calum Torrie	Document Migration	11 Oct 2006
D050053-x0	Advanced LIGO, SUS, Catcher/Assembly Rig, Teflon Bearing Pad	Calum Torrie	Document Migration	11 Oct 2006
D050090-x0	Advanced LIGO, SUS, Assembly Rig, Single Catcher, Inner Faceplate	Calum Torrie	Document Migration	11 Oct 2006
D050178-x0	Advanced LIGO, SUS, ETM CPTYPE Upper Structure, Dog Clamp Alt Large	Calum Torrie	Document Migration	11 Oct 2006

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D050188-x0	Advanced LIGO, SUS ETM CPTYPE, Lower Structure, Lower Structure Top E-Stops	Calum Torrie	Document Migration	11 Oct 2006
D050195-x0	Advanced LIGO, SUS, Lower Structure, Facestop	Calum Torrie	Document Migration	11 Oct 2006
D050201-x0	Advanced LIGO, SUS, Interface J Nut	Calum Torrie	Document Migration	11 Oct 2006
D050203-x0	Advanced LIGO, SUS, Lower STR, UI Mass Top Safety Stops Vertical	Calum Torrie	Document Migration	11 Oct 2006
D050213-x0	Advanced LIGO, SUS, Catcher/Assembly Rig, PFA 440 HP Bearing Pad for Assembly	Calum Torrie	Document Migration	11 Oct 2006
D050236-x0	Advanced LIGO, SUS, Lower STR, UI Mass Top Safety Stops Vertical	Calum Torrie	Document Migration	11 Oct 2006
D050237-x0	Advanced LIGO, SUS, Lower STR, UI MASS STOP BETWEEN CHAIN	Calum Torrie	Document Migration	11 Oct 2006
D050240-x0	Advanced LIGO, SUS, Lower STR, Tie for Angled Trans Side Strap	Calum Torrie	Document Migration	11 Oct 2006
D050247-x0	ADVANCED LIGO, SUS, LOWER STR, SPACER FOR BETWEEN THE LOWER CHAINS	Calum Torrie	Document Migration	26 Oct 2006
D050328-x0	Advanced LIGO, SUS, CPTYPE, Top Blades (Top Stage), Top Blade Wire Clamp Body Cpad	Calum Torrie	Document Migration	11 Oct 2006
D050329-x0	ADVANCED LIGO, SUS, TOP BLADE, TOP BLADE WIRE CLAMP ASSEMBLY FOR DOUBLE CLAMP & PIN	Calum Torrie	Document Migration	11 Oct 2006
D050333-x0	ADVANCED LIGO, SUS, CPTYPE ETM TOP MASS, U-I WIRE CLAMP MAIN BODY	Calum Torrie	Document Migration	16 Oct 2006
D050334-x0	ADVANCED LIGO, SUS, CPTYPE ETM TOP MASS, U-I WIRE CLAMP PLATE	Calum Torrie	Document Migration	16 Oct 2006
D050338-x0	ADVANCED LIGO, SUS, MAIN CHAIN PEN MASS, MAIN CHAIN PEN MASS BUNG INSERT	Calum Torrie	Document Migration	13 Oct 2006
D060052-x0	ADVANCED LIGO, SUS, INSTALL FIXTURES, QUAD PUSHERS	Calum Torrie	Document Migration	11 Oct 2006
D060053-x0	ADVANCED LIGO, SUS, INSTALL FIXTURES, QUAD MOVERS	Calum Torrie	Document Migration	11 Oct 2006
D060072-x0	Advanced LIGO, SUS, INTERFACE PART	Calum Torrie	Document Migration	11 Oct 2006
D060093-x0	Advanced LIGO, SUS, Interface Ring Assembly (TD-1039-410)	Calum Torrie	Document Migration	11 Oct 2006
D060095-x0	ADVANCED LIGO, SUS, ALT CLAMP FOR UI MASS AS USED IN LASTI	Calum Torrie	Document Migration	16 Oct 2006
D060102-v1	aLIGO ETM and ITM SUS Recycling Mirror Envelope	Calum Torrie	Conceptual Design Suspensions	28 Feb 2010
D060104-x0	ENHANCED/ADVANCED LIGO, SUSPENSIONS, HAM CHAMBER, OUTPUT MODE CLEANER OVERALL ASSEMBLY	Calum Torrie	Document Migration	06 Nov 2006
D060189-v4	OBSOLETE ERM ESD PATTERN	Kurt Buckland	Core Optics	22 Nov 2010
D070022-v1	Wire Clamp, Top Blade (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D070023-x0	Upper Blade Wire Clamp Attachment, Upper Wire Jig (OMCS)	Calum Torrie	Document Migration	28 May 2013
D070027-v1	Metal Dummy Optical Bench (OMCS)	Calum Torrie	Suspensions	28 May 2013
D070030-v1	C-Clamp for Top Wire (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D070035-v4	Metal Bench Assembly (OMCS)	Derek Bridges	Sensing and Control Suspensions	14 May 2013
D070036-x0	ADVANCED LIGO, SUS, OMC, METAL BENCH CYLINDERS	Calum Torrie	Document Migration	17 Dec 2008
D070038-x0	Bar Jig Step Plate, Upper Wire Jig (OMCS)	Calum Torrie	Document Migration	28 May 2013
D070067-x0	Advanced LIGO, SUS OMC, Optical Bench, Lower Clamp Wire Clamp Assembly	Calum Torrie	Document Migration	16 Dec 2008

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D070068-v1	C-Spacer, OMC	Derek Bridges	Suspensions	25 Sep 2012
D070069-x0	Advanced LIGO, SUS, OMC Lower Wire Jig, INTERFACE TO WIRE JIG FOR Glass Bench Wire Clamp Assembly	Calum Torrie	Document Migration	18 Dec 2008
D070070-v1	Wire Clamp for Optical Bench, OMC	Calum Torrie	Basic R&D Suspensions	24 Feb 2009
D070075-v2	Proof bounce tester joint for clevis pin	Russell Jones et al.	Suspensions	25 Feb 2011
D070077-v2	Proof bounce tester top plate	Russell Jones et al.	Suspensions	01 Mar 2011
D070079-v1	bounce tester adjustment arm	Russell Jones et al.	Suspensions	08 Dec 2010
D070080-v2	bounce tester adjustment arm bracket	Russell Jones et al.	Suspensions	08 Dec 2010
D070213-v1	ADVANCED LIGO, SUS OMC, Lower Clamp Wire Clamp Assembly, Wire Clamp For Optical Bench	Calum Torrie	Suspensions	14 Jul 2009
D070248-x0	ADVANCED LIGO, SUSPENSIONS, OMC LOWER WIRE JIG, OMC INTERFACE FOR WIRE JIG	Calum Torrie	Document Migration	17 Dec 2008
D070250-v4	Base Plate, Lower Wire Jig (OMCS)	Derek Bridges	Final Design Suspensions	17 Apr 2013
D070441-v6	HLTS Prism Breakoff, Lower Wire, Optic	Calum Torrie et al.	Final Design Suspensions	17 Feb 2012
D070442-v7	Structural Weldment, HLTS	Derek Bridges et al.	Final Design Suspensions	29 May 2012
D070560-v2	ALIGO SUS CO2 Laser Machine Overall Assembly [CO2_GLA_ASM_OVERALL]	Russell Jones et al.	Assembly Fabrication Suspensions	09 Jul 2019
D080018-v1	Upper Blade (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D080019-v1	Lower Blade (OMCS)	Michael Meyer	Final Design Suspensions	28 May 2013
D080097-v1	Adv. LIGO - Test Mass Carrier (prototype)	Calum Torrie	System Engineering	17 Jun 2009
D080121-x0	Bar Jig for Upper Wires, Upper Wire Jig (OMCS)	Calum Torrie	Document Migration	28 May 2013
D080177-v4	Compensation Plate ESD Pattern Drawing	Kurt Buckland et al.	Sensing and Control Core Optics Preliminary Design	08 Oct 2021
D080475-v11	Aligo, SUS, QUAD, ETM / ITM PENULTIMATE REACTION MASS ASSY.	Calum Torrie et al.	System Engineering	19 Dec 2013
D080503-v3	ADVANCED LIGO, SUS, THIS, BEAM SPLITTER UPPER STRUCTURE, SHEAR PLATE	Joseph Odell et al.	Suspensions	24 May 2011
D080657-v7	aLIGO, COC Input Test Mass (ITM) Substrate (D080657 ALIGO COC ITM SUBSTRATE)	Calum Torrie	Core Optics Final Design	14 Jul 2021
D080658-v6	aLIGO, COC End Test Mass (ETM) Substrate (D080658 ALIGO COC ETM SUBSTRATE)	Calum Torrie	Core Optics Final Design	14 Jul 2021
D080659-v3	D080659 ALIGO COC_CP_SUBSTRATE	Calum Torrie	Core Optics Final Design	07 Feb 2014
D080660-v3	D080660 ALIGO COC_BS_SUBSTRATE	Calum Torrie	Core Optics Final Design	03 Jun 2014
D080661-v4	D080661 ALIGO COC_FM_SUBSTRATE	Calum Torrie	Core Optics Final Design	28 May 2010
D080662-v3	D080662 ALIGO COC_PR3_SUBSTRATE	Calum Torrie	Core Optics Final Design	28 May 2010
D080663-v3	D080663 AdLIGO COC_F-PR3_SUBSTRATE	Calum Torrie	Core Optics Final Design	09 Jun 2010
D080664-v3	D080664 AdLIGO COC_SR3_SUBSTRATE	Calum Torrie	Core Optics Final Design	28 May 2010

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D0810007-v1	SUS 2x2 EDDY CURRENT DAMPER PUSH FIT LOCATOR FOR SHCS	Calum Torrie	Basic R&D Suspensions	10 Dec 2008
D0810020-v3	TEST WITH MELODY ASSEMBLY	Calum Torrie	Basic R&D	11 Dec 2008
D0810021-v2	TEST WITH MELODY PART	Calum Torrie	Basic R&D	11 Dec 2008
D0810033-v5	HSTS Lower Mass Primary Prism	Calum Torrie	Final Design Suspensions	24 Oct 2018
D0810036-x0	HSTS (IMC) PRISM and OPTIC ASSEMBLY	Calum Torrie	Basic R&D Suspensions	11 Dec 2008
D0810037-x0	HLTS (RM) PRISM and OPTIC ASSEMBLY	Calum Torrie	Basic R&D Suspensions	03 Dec 2009
D0810046-v1	ad ligo test exam	Calum Torrie	Basic R&D	17 Dec 2008
D0810047-x0	Adv LIGO Systems Top Level Layout of Advanced LIGO	Dennis Coyne <i>et al.</i>	System Engineering	18 Dec 2008
D0900082-x0	Ad LIGO BeamSplitter Layout	Calum Torrie	Basic R&D	28 Jan 2009
D0900296-x0	Advanced LIGO SOS ASSEMBLY	Calum Torrie	Basic R&D Suspensions System Engineering	02 Mar 2009
D0900297-x0	Advanced LIGO SUS_BS_envelope_assembly	Calum Torrie	Basic R&D Suspensions System Engineering	02 Mar 2009
D0900298-x0	Advanced LIGO SUS BS OPTIC ENVELOPE	Calum Torrie	Basic R&D Suspensions System Engineering	02 Mar 2009
D0900299-x0	Advanced LIGO SUS BS FRAME ENVELOPE	Calum Torrie	Basic R&D Suspensions System Engineering	02 Mar 2009
D0900300-x0	Ad LIGO BeamSplitter Assembly - refer to D1000392	Calum Torrie	Basic R&D Suspensions System Engineering	05 Oct 2010
D0900308-v4	Structural Weldment (OMCS)	Michael Meyer <i>et al.</i>	Final Design Suspensions	16 Apr 2013
D0900341-x0	ADV LIGO SYSTEMS SEI TABLE COUNTERWEIGHT ASSEMBLY	Calum Torrie	Conceptual Design System Engineering	02 Mar 2009
D0900342-x0	ADV LIGO SYSTEMS SEI TABLE AOS TABLE BAFFLE	Calum Torrie	Auxiliary Optics Conceptual Design System Engineering	02 Mar 2009
D0900343-x0	ADV LIGO SYSTEMS SEI TABLE AOS TABLE BAFFLE ASSEMBLY	Calum Torrie	Auxiliary Optics Conceptual Design System Engineering	28 Oct 2009
D0900344-x0	ADVLIGO_SYSTEMS_SEITABLE_BSC_COUNTERWEIGHT_ASSEMBLY	Calum Torrie	Seismic Isolation Final Design Suspensions System Engineering	28 Oct 2009
D0900365-v15	aLIGO Systems_LHAM2-L1 Top Level Chamber Assembly	Ignacio Romero <i>et al.</i>	Final Design System Engineering	03 Dec 2018
D0900401-x0	Adv LIGO SYSTEMS ENVELOPE ASSEMBLY OF HLTS D070447	Calum Torrie	Final Design System	10 Mar 2009

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D0900402-x0	Adv LIGO SYSTEMS ENVELOPE OF HLTS D070447 NO SUS MASSES	Calum Torrie	Engineering Final Design System Engineering	10 Mar 2009
D0900403-x0	Adv LIGO SYSTEMS ENVELOPE OF HLTS D070447 WITH SUS MASSES	Calum Torrie	Final Design System Engineering	10 Mar 2009
D0900404-x0	Adv LIGO SYSTEMS ENVELOPE ASSEMBLY OF HSTS D020700	Calum Torrie	Final Design System Engineering	10 Mar 2009
D0900419-v2	AdvLIGO SUS BSC6-H2, XYZ Local CS for TMS ETM Tel Assy	Jose Eduardo Chavez <i>et al.</i>	Auxiliary Optics	14 Aug 2012
D0900428-v8	aLIGO Systems, LBSC2-L1 Top Level Chamber Assembly	Eduardo Sanchez <i>et al.</i>	Final Design System Engineering	14 Jun 2017
D0900492-v6	aLIGO Systems, BSC3-L1 Top Level Chamber Assembly	Jose Eduardo Chavez <i>et al.</i>	Final Design System Engineering	23 Jan 2014
D0900520-v14	aLIGO Systems, LHAM3-L1 Top Level Chamber Assembly	Ignacio Romero <i>et al.</i>	Final Design System Engineering	23 Apr 2020
D0900931-v7	gold coating pattern compensation plates (CP) barrel-OBSOLETE	Calum Torrie	Core Optics System Engineering	17 Jan 2020
D0900945-v1	Gold Coating Pattern, Test Mass Barrel	Calum Torrie	System Engineering	12 May 2009
D0900958-v7	GOLD COATING PATTERN END REACTION MASS BARREL	Kurt Buckland	Core Optics System Engineering	02 Sep 2015
D0901038-x0	SEI TABLE COUNTERWEIGHT ASSEMBLY WASHINGTON	Calum Torrie	System Engineering	28 Oct 2009
D0901076-v4	adLIGO SYS ASSEMBLY OF BS OPTIC with PRISMs	Calum Torrie <i>et al.</i>	Suspensions System Engineering	06 Oct 2014
D0901477-v7	aLIGO HANFORD SYSTEMS LAYOUT	Calum Torrie <i>et al.</i>	Final Design System Engineering	13 Jul 2018
D0901490-v5	aLIGO LIVINGSTON SYSTEM LAYOUT	Jose Eduardo Chavez <i>et al.</i>	System Engineering	19 Jun 2014
D0901491-v3	aLIGO, Mechanical Layout	Calum Torrie <i>et al.</i>	System Engineering	07 Apr 2014
D0901494-v1	Adv LIGO SUS QUAD ETM/ITM ASSEMBLY TD-1084-090	Calum Torrie	Suspensions System Engineering	27 Jul 2009
D0901880-v5	aLIGO AOS Transmission Monitor System Assembly	Calum Torrie <i>et al.</i>	Auxiliary Optics Final Design	02 Oct 2013
D0902001-v8	CP COC OPTIC CONTAINER ASSEMBLY	Kurt Buckland	System Engineering	09 Sep 2015
D0902368-v2	Adv LIGO SUS FM / BS Secondary Prism Metal	Calum Torrie	Suspensions System Engineering	05 Nov 2013
D0902457-x0	ADV LIGO SYSTEMS SEI TABLE AOS LARGE TABLE BAFFLE	Calum Torrie	System Engineering	20 Oct 2009
D0902625-v1	CP Gold Coating Barrel and ESD Assembly - obsolete	Calum Torrie	Core Optics System Engineering	07 Feb 2014
D0902626-v1	ERM Gold Coating Barrel and ESD Assembly	Calum Torrie	Core Optics System Engineering	09 Nov 2009
D0902652-x0	Violin Mode Emitter and Detector Assembly	Calum Torrie	System Engineering	11 Nov 2009

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D0902709-v2	PROTECTION PLATE BETWEEN BSC and ARTICULATED ARM	Calum Torrie	System Engineering	11 Mar 2010
D1000343-v1	envelope for new esd cable connector	Calum Torrie	Suspensions System Engineering	17 Feb 2010
D1000352-v1	RODA - Request to increase the size of the cutouts in the gussets of HLTS.	Scott Shankle et al.	Conceptual Design	24 Aug 2010
D1000429-v1	SLC FM ELLIPTICAL BAFFLE ASSY	Calum Torrie	Auxiliary Optics Modelling	30 Dec 2011
D1000481-x0	Envelope of Corner Cube for use on ETM/ITM	Calum Torrie	Laser Systems System Engineering	03 Mar 2010
D1000482-x0	ETM ITM e-stop adjustment tool envelope	Calum Torrie	Suspensions System Engineering	03 Mar 2010
D1000483-x0	Envelope of 1st contact fixture etm itm	Calum Torrie	Core Optics System Engineering	03 Mar 2010
D1000576-x0	ASSEMBLY OF FM OPTIC WITH PRISMS - OBSOLETE	Calum Torrie	System Engineering	30 Oct 2013
D1000587-v3	5 AXIS INSTALLATION TABLE on CART - Historical Reference Only	Calum Torrie	System Engineering	18 Oct 2012
D1000589-v1	BSC Installation Arm	Calum Torrie	System Engineering	18 Mar 2010
D1000590-v1	Lift Table/Cart for 5 axis table	Calum Torrie	System Engineering	12 Apr 2010
D1000758-v1	Advanced LIGO SUS ETM NP-type Monolithic Assembly	Giles Hammond et al.	Assembly Suspensions	06 Sep 2010
D1000759-v3	Advanced LIGO SUS ETM Production Monolithic Assembly	Russell Jones et al.	Assembly Final Design Suspensions	12 Jul 2016
D1001679-v6	aLIGO TCS Upper Monolithic Ring Heater Shield	Mindy Jacobson et al.	Vacuum Auxiliary Optics Fabrication	06 Oct 2011
D1001680-v6	aLIGO TCS Lower Monolithic Ring Heater Shield	Mindy Jacobson et al.	Vacuum Auxiliary Optics Fabrication	06 Oct 2011
D1001729-v1	HAM suspension installation arm wrt the chamber - historical reference only.	Jack Davis et al.	System Engineering	08 Jun 2020
D1001730-v2	Sketch of Test Stand with respect to the FMP cartridge tooling	Calum Torrie	System Engineering	17 Oct 2012
D1001824-x0	Lower structure assembly with weld tooling and fibre guard	Calum Torrie et al.	Suspensions	08 Nov 2011
D1001927-x0	BSC QUAD REPAIR ARM END FIXTURE ASSEMBLY - OBSOLETE	Calum Torrie	System Engineering	18 Oct 2012
D1002022-x0	Ad LIGO BIO Completed Retina Assembly	Calum Torrie	System Engineering	04 Aug 2010
D1002023-x0	Ad LIGO BIO Completed Retina	Calum Torrie	System Engineering	04 Aug 2010
D1002024-x0	Ad LIGO BIO Completed Retina Pattern	Calum Torrie	System Engineering	04 Aug 2010
D1002027-v1	aLIGO SYS-TCS Integration of RH w TM	Mindy Jacobson et al.	Preliminary Design Vacuum Auxiliary Optics Final Design System Engineering	31 Jul 2018

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D1002067-v1	aLIGO SUS UK PROOF BOUNCE TESTER ENCLOSURE	Russell Jones et al.	Suspensions	25 Feb 2011
D1002069-v1	aLIGO SUS UK PROOF BOUNCE TESTER DOOR	Russell Jones et al.	Suspensions	25 Feb 2011
D1002071-v1	aLIGO SUS UK PROOF BOUNCE TESTER 15KG PROOF MASS	Russell Jones et al.	Suspensions	25 Feb 2011
D1002076-v1	aLIGO SUS UK PROOF BOUNCE TESTER 1KG MASS	Russell Jones et al.	Suspensions	08 Dec 2010
D1002082-v1	aLIGO SUS UK PROOF TESTER	Russell Jones et al.	Suspensions	28 Feb 2011
D1002083-v1	aLIGO SUS UK BOUNCE TESTER	Russell Jones et al.	Suspensions	08 Dec 2010
D1002105-v2	aLIGO SUS UK PROOF BOUNCE TESTER BASEPLATE	Russell Jones et al.	Suspensions	01 Mar 2011
D1002147-v1	aLIGO BS/FM Prism bonding.jig	Marielle van Veggel et al.	Suspensions Installation	11 Dec 2013
D1002148-v1	aLIGO BS/FM Prism bonding fixture	Marielle van Veggel et al.	Suspensions Installation	09 Mar 2011
D1002149-v1	aLIGO BS/FM Prism bonding baseplate	Marielle van Veggel et al.	Suspensions Installation	11 Nov 2013
D1002150-x0	aLIGO BS/FM Prism bonding alignment guide	Marielle van Veggel et al.	Suspensions Installation	09 Mar 2011
D1002151-v3	aLIGO BS/FM Prism bonding support cylinder	Marielle van Veggel et al.	Suspensions Installation	11 Nov 2013
D1002152-v1	aLIGO BS/FM Prism holder assembly	Marielle van Veggel et al.	Suspensions Installation	09 Mar 2011
D1002153-v3	aLIGO BS/FM Prism holder	Marielle van Veggel et al.	Suspensions Installation	11 Dec 2013
D1002154-x0	aLIGO SUS UK PROOF BOUNCE TESTER DOOR PANEL	Calum Torrie et al.	Suspensions	12 Aug 2010
D1002155-x0	aLIGO SUS UK PROOF BOUNCE TESTER SIDE PANEL	Calum Torrie et al.	Suspensions	12 Aug 2010
D1002156-x0	aLIGO SUS UK PROOF BOUNCE TESTER BACK PANEL	Calum Torrie et al.	Suspensions	12 Aug 2010
D1002558-x0	AMD on the test mass.SLDASM	Calum Torrie	System Engineering	01 Oct 2010
D1002605-x0	Ergo-arm top level assembly drawing	Calum Torrie	System Engineering	08 Nov 2021
D1002834-v2	aLIGO Installation, LLO Y-End Station, Cartridge & Cleanroom, Layout	Brian O'Reilly et al.	Conceptual Design Installation Observatory Facilities	14 Jan 2015
D1002872-v8	Flange Layout - H1 Horizontal Access Module1 (HAM 1)	Emery Brown et al.	Preliminary Design System Engineering	20 Nov 2018
D1002873-v10	Flange Layout - H1 Horizontal Access Module 2 (HAM 2)	Emery Brown et al.	Preliminary Design System Engineering	14 Jul 2014
D1002874-v9	Flange Layout - H1 Horizontal Access Module 3 (HAM 3)	Emery Brown et al.	Preliminary Design System Engineering	06 Dec 2021
D1002877-v14	Flange Layout - H1 Horizontal Access Module 6 (HAM 6)	Emery Brown et al.	Preliminary Design Integration Installation System Engineering	31 Aug 2022

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D1002884-v6	Flange Layout - L1 Horizontal Access Module1 (HAM 1)	Emery Brown <i>et al.</i>	Preliminary Design System Engineering	19 Jan 2015
D1002885-v10	Flange Layout - L1 Horizontal Access Module 2 (HAM 2)	Emery Brown <i>et al.</i>	Preliminary Design System Engineering	08 Jul 2016
D1002886-v7	Flange Layout - L1 Horizontal Access Module 3 (HAM 3)	Emery Brown <i>et al.</i>	Preliminary Design System Engineering	06 Dec 2021
D1002890-v13	Flange Layout – L1 Horizontal Access Module 6 (HAM 6)	Emery Brown <i>et al.</i>	Preliminary Design System Engineering	25 Oct 2022
D1100018-v3	USING A QUAD PUSHER AND MOVER ASSEMBLY	Calum Torrie <i>et al.</i>	Suspensions System Engineering	02 Jul 2012
D1101612-v1	Multi-user access to the GoogleDocs	Melody Araya <i>et al.</i>	Temporary Test Document	16 Aug 2011
D1101675-x0	WBSC6 and WBSC8 additional (secondary) related documents	Calum Torrie	System Engineering	24 Aug 2011
D1101821-v3	aLIGO, PEDESTAL, 2IN MIRROR MOUNT (7.567in)	Ayodele Cole <i>et al.</i>	Assembly Vacuum Auxiliary Optics Final Design Fabrication Cleaning	29 Nov 2017
D1101844-v3	aLIGO, PEDESTAL, 2IN MIRROR MOUNT (7.331in)	Ayodele Cole <i>et al.</i>	Basic R&D Auxiliary Optics	29 Nov 2017
D1101961-x0	AS568A-014 Parker O-ring 2-014 for TMS SEISMIC STOP SAFETY STRUCTURE ASSEMBLY	Calum Torrie	Auxiliary Optics	12 Oct 2011
D1200951-v8	ALIGO, SUS, HSTS/HLTS/BS, FC SPRAY GUARD E-COLLAR, KIT	Eduardo Sanchez	Final Design Fabrication Suspensions	27 Feb 2014
D1200962-v3	aLIGO AOS OpLev Passive Damping Assembly (Approved)	Eric James <i>et al.</i>	Fabrication	05 Nov 2014
D1201075-v1	Information on Clean room vacuum cleaner, accessories, user manuals and instructions	Kurt Buckland <i>et al.</i>	System Engineering	17 Jan 2017
D1201178-x0	AdvLigo VE H-1, X-Beam Manifold, B-9A, A-1C, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	19 Feb 2013
D1201179-x0	AdvLigo VE H1, Y-Beam Mainfold, B-9B, A-1F, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	19 Feb 2013
D1201180-x0	AdvLigo VE Input MC Tube WAMCA1-H1, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	25 Jan 2013
D1201181-x0	AdvLigo VE Input MC Tube WAMCB1-H1, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	25 Jan 2013
D1201182-x0	AdvLigo VE Output MC Tube WAMCA2-H1, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	20 Feb 2013
D1201183-x0	AdvLigo VE Output MC Tube WAMCB2-H1, Vacuum Equipment Assembly	Douglas Daniel <i>et al.</i>	Assembly Quality Assurance	25 Jan 2013
D1201362-x0	BSC Systems Level Supplementary Chamber-Level Build Documents	Calum Torrie	System Engineering	16 Jan 2014

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D1201363-x0	Obsolete - WBSC1 and WBSC3 Systems Level Secondary Documents	Calum Torrie	System Engineering	16 Oct 2012
D1201550-x0	Cleanroom and Cartridge Top Level Assembly - All sites	Calum Torrie	System Engineering	12 Dec 2012
D1300108-v1	Kapton Tubing	Calum Torrie	System Engineering	06 Feb 2013
D1300453-v3	DYCEM FLOORING LAYOUT FOR LVEA ENTRANCE AREA, CLEANING & INSTALLATION INSTRUCTIONS	Kurt Buckland <i>et al.</i>	System Engineering	11 Mar 2014
D1300948-v4	aLIGO, TOP GUN IONIZING AIR GUN SYSTEM LAYOUT (Approved)	Eduardo Sanchez <i>et al.</i>	Activity System Engineering	12 Mar 2014
D1301007-v6	Particle Evaluation Tool - Custom Microscope Templates	Calum Torrie <i>et al.</i>	System Engineering	08 Jan 2014
D1301008-v1	aLIGO, SYS, RUBBER UNIVERSE FRAME ASSY.	Eduardo Sanchez <i>et al.</i>	Fabrication System Engineering Education, Outreach	02 Dec 2013
D1400046-v1	aLIGO, SYS, LED OPTIC CONTAMINANT ILLUMINATION RING	Calum Torrie	System Engineering	06 Mar 2014
D1400060-v4	LED ring layout aka The Green Lantern (TM)	Calum Torrie	System Engineering	01 Jul 2014
D1400188-x0	ddd	Calum Torrie	System Engineering	17 Jun 2014
D1500065-v2	Custom 10" reducer ETM	Calum Torrie	System Engineering	16 Sep 2020
D1500184-x0	3" 0 Super Polished Plano/ Plano Fused Silica Substrates	Elizabeth Natividad <i>et al.</i>	Auxiliary Optics Fabrication	14 Jul 2015
D1500185-x0	5" 0 Super Polished Plano/ Plano Fused Silica Substrates	Elizabeth Natividad <i>et al.</i>	Auxiliary Optics Fabrication	10 Jun 2015
D1500186-v1	Septum Viewport Accelerometer Clamp	Calum Torrie <i>et al.</i>	Fabrication	11 Jun 2015
D1500206-x0	1" Super Polished Plano/ Plano Fused Silica Substrates	Calum Torrie	System Engineering	14 Jul 2015
D1500271-v1	QUAD, SUS, Bounce & Roll mode damper, Mass .5g (C'BORED)	Eduardo Sanchez <i>et al.</i>	Fabrication Suspensions	20 Oct 2015
D1500427-v1	Voyager, Systems Layout, X-End Station	Eduardo Sanchez <i>et al.</i>	Conceptual Design System Engineering	02 Nov 2017
D1500445-v4	AERM Coring Box Assy. Details	Eduardo Sanchez <i>et al.</i>	Core Optics Fabrication	09 Dec 2015
D1500446-v2	aLIGO, SUS, SR3/PR3 HR Side 6 O'clock baffle	Eduardo Sanchez <i>et al.</i>	Fabrication	14 Mar 2016
D1500474-v1	Layout of Mechanical and Metrology Lab, Downs, room 228	Calum Torrie	System Engineering	16 Dec 2015
D1600216-v2	Thomas II Layout, Downs 3rd floor Conference room	Eduardo Sanchez <i>et al.</i>	System Engineering	31 May 2016
D1600275-v2	100 Meter Filter cavity conceptual layout	Eduardo Sanchez <i>et al.</i>	Conceptual Design System Engineering	04 Oct 2016
D1600316-v4	OMC TOMBSTONE REINFORCEMENT BRACKET.	Calum Torrie <i>et al.</i>	System Engineering	06 Mar 2020
D1600382-v1	SRM HR SUS BAFFLE LLO (Black Glass) (Approved)	Calum Torrie <i>et al.</i>	System Engineering	29 Sep 2016

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D1600383-v4	SRM HR SUS BAFFLE ASSEMBLY (Black Glass) - OBSOLETE (REF ONLY)	Calum Torrie et al.	System Engineering	12 Apr 2017
D1600388-v1	Simplified Advanced LIGO Layout by Jeffrey Wang	Eduardo Sanchez et al.	Suspensions	30 Sep 2016
D1600402-v2	aLIGO, AR coated black glass circles 9"	Eduardo Sanchez et al.	Fabrication	01 Dec 2016
D1600453-v5	P-Cal Periscope Shield Top Level Assembly Concept Images	Calum Torrie et al.	System Engineering	30 Jan 2018
D1600460-v1	OBSOLETE (DO NOT USE)	Eduardo Sanchez et al.	Fabrication	05 Sep 2018
D1600461-v1	OBSOLETE (DO NOT USE)	Eduardo Sanchez et al.	Fabrication	05 Sep 2018
D1700026-v2	Stray Light Control: HAM Table Baffles Concepts - OBSOLETE (REF ONLY)	Eduardo Sanchez et al.	Conceptual Design System Engineering	12 Apr 2017
D1700115-v8	Proposed Baffles for PR, SR & MC cavities - SLIC	Eduardo Sanchez et al.	Fabrication System Engineering	24 Apr 2019
D1700315-v1	4" left handed in-vacuum Siskiyou mirror mount: IXM400.CL1-VC LIGO SPEC. CONTROL DRAWING	Aidan Brooks et al.	Assembly Auxiliary Optics	16 Aug 2017
D1700361-v3	Layout of SLC Baffles with new 2017 SLiC Baffles	Eduardo Sanchez et al.	Integration System Engineering	12 Apr 2019
D1700462-v1	EEC Disk Magnet Nickel Plated SmCo 3mm diameter x 6 mm thick. (D118236M108O0T)	Calum Torrie et al.	System Engineering	25 Sep 2017
D1800027-v26	Top Level Conceptual Layout of A+	Calum Torrie et al.	Operations A+ System Engineering	02 Dec 2021
D1800103-v7	aLIGO, AOS, SLiC, OFI SHROUD	Alena Ananyeva et al.	Fabrication Suspensions System Engineering	21 Jul 2021
D1800268-v1	Zemax files posted for review - temp file shared to compare PR2 ghosts	Calum Torrie et al.	System Engineering	07 Nov 2018
D1800300-v1	GV11 Screw Head Chase	Rich Abbott et al.	System Engineering	11 Dec 2018
D1800301-v1	VE, GV11, LIFTING ARRANGEMENT DETAILS	Eduardo Sanchez et al.	System Engineering	12 Dec 2018
D1800302-v1	VE, GV11, SAFETY PLATE	Eduardo Sanchez et al.	Vacuum Fabrication	11 Dec 2018
D1900198-v5	aLIGO, VE, HIGH QUALITY VP ASSY., YAWED	Eduardo Sanchez et al.	Vacuum Conceptual Design System Engineering	04 Jan 2022
D1900262-v1	aLIGO, SLIC, TMS SHROUD ASSY.	Eduardo Sanchez et al.	Fabrication System Engineering	10 Jun 2022
D1900269-v2	End Test Mass Substrate re-polish OBSOLETE	Calum Torrie et al.	Core Optics Final Design	02 Dec 2019
D1900424-v11	A+ SLiC FC TUBE, BAFFLE ASSEMBLY	Alena Ananyeva et al.	A+	03 Feb 2021

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D2000172-v2	A+ SUS OMC Breadboard Assembly	Russell Jones et al.	Sensing and Control A+ Suspensions	09 Mar 2023
D2000619-v3	A+ Cable Tray Structural Steel Supports Fastening	Eduardo Sanchez et al.	Fabrication	27 Jun 2022
D2100090-v3	aLIGO, SLIC, HAM 5, Septum Baffle Assy., Baffle Kit	Eduardo Sanchez et al.	Fabrication	09 Mar 2023
D2100091-v4	aLIGO, SLIC, HAM 5, Septum Baffle Assy., STIFFENER	Eduardo Sanchez et al.	Fabrication	26 Oct 2021
D2100092-v2	aLIGO, SLIC, HAM 5, Septum Baffle Assy., OFI Brace	Eduardo Sanchez et al.	Fabrication	30 Jul 2021
D2100093-v1	aLIGO, SLIC, HAM 5, Septum Baffle Assy., Aux. Brace	Eduardo Sanchez et al.	Fabrication	18 May 2021
D2100102-v3	aLIGO, SLIC, HAM5, XYZ Local CS For Septum Wall Baffle Assy. (-X Side)	Eduardo Sanchez et al.	System Engineering	12 Nov 2021
D2100547-v1	32 HML Natural (No Lube) polyimide coated copper wire	Calum Torrie	A+ System Engineering	08 Jul 2021
D2100601-v1	A+ SYSTEMS HAM6-H1 SUSPENSION LAYOUT (O5)	Russell Jones et al.	A+ Suspensions System Engineering	31 Aug 2022
D2100602-x0	A+ SYSTEMS HAM6-L1 SUSPENSION LAYOUT (O5)	Russell Jones et al.	A+ Suspensions System Engineering	03 May 2022
D2100666-v1	Fast Shutter (HAM6): 6 Pin Circular Feedthrough on a 2.75" CF Flange	Rich Abbott et al.	System Engineering	23 Sep 2021
D2100721-v1	A+, ISC, OMC Bracket-Bracket Adapter	Srinath Karat et al.	A+	20 Dec 2022
D2100729-v1	Sample Filter Cavity Tube Section - Example Only	Calum Torrie	A+ System Engineering	16 Nov 2021
D2100742-x0	TEST TEST	Calum Torrie	System Engineering	18 Nov 2021
D2200052-v2	A+ SUS BHSS OMC Cradle Assembly	Russell Jones et al.	A+ Final Design Suspensions	09 Mar 2023
D2200097-v1	VAC, COVERS (DOOR), FLANGE BOLT, 7/8-9 X 4" LG.	Eduardo Sanchez et al.	Vacuum System Engineering	10 Mar 2022
D2200229-v1	A+, SUS, Passive Vibration Absorber Damper Assembly	Srinath Karat et al.	A+ Suspensions System Engineering	14 Mar 2023
D2200370-v1	TMS Telescope Primary Parabolic Mirror	Gabriele Vajente et al.	Auxiliary Optics	22 Nov 2022
D2200371-v1	TMS Telescope Secondary Parabolic Mirror	Gabriele Vajente et al.	Auxiliary Optics	22 Nov 2022
D2200372-v2	TMS Telescope First Fold Mirror	Gabriele Vajente et al.	Auxiliary Optics	22 Nov 2022
D2200373-v1	TMS Telescope Second Fold Mirror	Gabriele Vajente et al.	Auxiliary Optics	22 Nov 2022
D2200417-x0	A+ SUS BHSS OMC Cable Pylon Assembly	Russell Jones et al.	A+ Final Design Suspensions	14 Mar 2023

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D2300135-v4	SPECIFICATION CONTROL DRAWING: LIGO, VE, COMFORMANT VIEWPORTS.	Madeline Lesovsky et al.	Vacuum Fabrication System Engineering	22 Mar 2023
D2300148-x0	BHQS, SUS, TOP MASS (DUMMY, 117 Kg)	Eduardo Sanchez et al.	Conceptual Design System Engineering	11 Mar 2023
D2300149-x0	BHQS, SUS, UPPER INTERMEDIATE MASS (DUMMY, 83 Kg)	Eduardo Sanchez et al.	Conceptual Design System Engineering	11 Mar 2023
D970075-v2	Dumbbell Standoff	Calum Torrie	Final Design Suspensions	17 Mar 2012
D980184-v2	LOS Clamp, Long	Derek Bridges	Final Design System Engineering	07 Feb 2011
E030350-v4	Configuration Control & Drawing Requirements (Approved)	Calum Torrie	System Engineering	01 Mar 2023
E030507-x0	ADVANCED LIGO SUS MC PROJECT DRAWING TREE FOR OVERALL ASSEMBLY, D020700	Calum Torrie	Document Migration	24 Aug 2004
E030508-x0	ADVANCED LIGO SUS MC MATERIAL LIST (OR OVERALL BOM)	Calum Torrie	Document Migration	24 Aug 2004
E030518-v25	HSTS Assembly Procedure	Janeen Romie et al.	Assembly Suspensions	29 Nov 2021
E040303-x0	DOCUMENT CHANGE NOTICE (DCN) - ADVANCED LIGO SUS CPTYPE MODE CLEANER SUSPENSION D020700 INITIAL RELEASE AS BUILT FOR LASTI JUNE 2004	Calum Torrie	Document Migration	04 Aug 2004
E040329-x0	Advanced LIGO Quadruple Pendulum Suspension Failure Modes and Subsequent Repair Approaches	Michael M Perreux-Lloyd et al.	Document Migration	06 Aug 2004
E040355-x0	Document Change Notice (DCN) - Blade Spring Quad ETM Controls Prototype	Justin Greenhalgh et al.	Document Migration	06 Aug 2004
E050051-x0	Document Change Notice (DCN) - ADVANCED LIGO SUS QUAD ETM C-PTYPE DRUM ENDED WIRE TOP STAGE	Calum Torrie	Document Migration	17 Feb 2005
E050148-x0	Document Change Notice (DCN) - Initial Release of Drawing Requirements	Calum Torrie	Document Migration	26 May 2005
E060057-x0	Document Change Notice (DCN) - ADVANCED LIGO SUS ETM CPTYPE	Calum Torrie	Document Migration	19 Oct 2006
E060059-x0	ADVANCED LIGO SUS ETM CPTYPE OVERALL PROJECT DRAWING TREE	Calum Torrie	Document Migration	18 Oct 2006
E060178-x0	AOS Pick Off Beam Suspension and ETM Telescope Suspension Requirements	Janeen Romie et al.	Document Migration	28 Jul 2006
E070025-x0	Document Change Notice (DCN) - ADVANCED LIGO SUS OMC FOR METAL BENCH ASSEMBLY	Calum Torrie	Document Migration	17 Dec 2008
E070186-x0	Document Change Notice (DCN) - Advanced LIGO SUS OMC Bench Assembly	Calum Torrie	Document Migration	17 Dec 2008
E070194-x0	Document Change Notice (DCN) - GLASS C SPACER	Calum Torrie	Document Migration	17 Dec 2008
E080111-x0	Document Change Notice (DCN) - ADVANCED LIGO SUS OMC METAL BENCH ASSEMBLY	Calum Torrie	Document Migration	16 Dec 2008
E080169-x0	Document Change Notice (DCN) - OMC & RM blades	Calum Torrie	Document Migration	06 May 2008
E080527-v1	Small Triple Suspension Lessons Learned and Changes Needed	Norna Robertson et al.	Preliminary Design Suspensions	30 Oct 2009
E0810007-v1	DCN SUS HSTS 2x2 Array Eddy Current Damper (Approved)	Calum Torrie	Basic R&D Suspensions	14 Jan 2009
E0810008-v1	DRAWING TREE FOR D030243	Calum Torrie	Basic R&D Suspensions	01 Apr 2012

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E0810024-x0	DCN Advanced LIGO SUS 2x2 Array Eddy Current Damper (Approved)	Calum Torrie	Basic R&D Suspensions	14 Jan 2009
E0810025-x0	DCN SUS HSTS 2x2 Array Eddy Current Damper (Approved)	Calum Torrie	Basic R&D Suspensions	15 Jan 2009
E0900023-v14	PROCESS FOR MANUFACTURING CANTILEVER SPRING BLADES FOR AdvLIGO (Approved)	Douglas Cook et al.	Basic R&D System Engineering	27 Oct 2021
E0900024-v1	HSTS and HLTS PRISM DCN (Approved)	Calum Torrie	Basic R&D Suspensions	07 May 2011
E0900039-x0	Welding Workflow - Production Guide	Calum Torrie	Basic R&D	24 Feb 2009
E0900047-v23	LIGO Contamination Control Plan (Approved)	Betsy Weaver et al.	Cleaning Risk Management Observatory Facilities	17 Sep 2020
E0900048-v9	Welding Specification for Weldments used within the Advanced LIGO Vacuum System (Approved)	Dennis Coyne et al.	Final Design System Engineering	21 Aug 2019
E0900084-v11	Adv LIGO BSC/HAM Chambers Configuration for systems reference L1, H1 & H2	Calum Torrie et al.	Final Design System Engineering	10 Oct 2011
E0900085-v1	Experimental Modal Analysis (EMA) System (Approved)	Dennis Coyne et al.	Procurements Basic R&D System Engineering	16 Mar 2009
E0900099-v1	HSTS and HLTS PRISM DCN inc LASER ABLATION (Approved)	Calum Torrie	Final Design Suspensions	09 Apr 2009
E0900137-x0	adv LIGO DCN ASSOCIATED WITH GOLD COATING PATTERNS on Barrel (Approved)	Calum Torrie	Core Optics System Engineering	12 May 2009
E0900167-v4	Bill of Materials for the ETM / ITM Quad Suspension Assembly (Production)	Joseph Odell et al.	Suspensions	12 Jul 2011
E0900190-v2	Statement of Work for the Adv LIGO Large Optic containers	Calum Torrie et al.	Core Optics Final Design System Engineering	17 Jul 2009
E0900200-v1	DCN associated with Advanced LIGO COC Large Optic Containers (Approved)	Calum Torrie	Core Optics Final Design System Engineering	24 Jul 2009
E0900237-v7	Machining Fluids for UHV Parts (Approved)	Michael Meyer et al.	Fabrication System Engineering	25 Jan 2023
E0900283-x0	DCN NEW CP OPTIC CONTAINER PROTOTYPE (Approved)	Kurt Buckland et al.	System Engineering	01 Oct 2009
E0900306-x0	dcn for CP optic cake tins (Approved)	Calum Torrie	System Engineering	01 Oct 2009
E0900343-x0	DCN AdvLIGO ESD Pattern CP and ERM Optics (Approved)	Calum Torrie	System Engineering	20 Jun 2014
E0900364-v10	Metal components intended for use in the Adv LIGO Vacuum System (Approved)	Dennis Coyne et al.	System Engineering	02 Dec 2020
E0900394-v7	aLIGO optic container shipping and storage procedure	GariLynn Billingsley et al.	Core Optics	20 Sep 2022
E0900400-x0	DCN BARREL PATTERN	Calum Torrie	System Engineering	09 Nov 2009
E0900412-x0	DCN for optic container (cake tin) updates (Approved)	Kurt Buckland et al.	Core Optics System Engineering	18 Mar 2011
E0900415-x0	DCN for final release on the ESD (face) patterns used on all CP and ERM optics for advanced LIGO (Approved)	Calum Torrie	System Engineering	17 Nov 2009

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E0900422-x0	DCN for updates to CP & ERM barrel gold coating pattern	Kurt Buckland et al.	System Engineering	18 Jan 2011
E0900432-x0	DCN for initial release of FM/BS 2nd PRISM (Approved)	Calum Torrie	System Engineering	24 Nov 2009
E0900445-x0	DCN for updates to CP & ERM barrel gold coating pattern (Approved)	Kurt Buckland et al.	System Engineering	14 Dec 2009
E0900449-x0	DCN for updates to CP barrel gold coating pattern (Approved)	Kurt Buckland et al.	System Engineering	14 Dec 2009
E0900478-x0	DCN to approve changes / additions to the BS/FM faceplates D080005 (Approved)	Calum Torrie	System Engineering	09 Dec 2009
E0900483-v4	Statement of Work for Pro E file translation	Michael Meyer et al.	System Engineering	28 Jun 2010
E0900488-v4	CAD Committee SW, PDMWorks Task and Ongoing work list	Dennis Coyne et al.	System Engineering	14 Jan 2011
E1000016-v3	Systems Designee list for key sub assemblies interfaces	Calum Torrie	System Engineering	18 Mar 2010
E1000019-v2	A guide to LIGO Lab weld inspectors as to what to look out for?	John Worden et al.	System Engineering	09 Mar 2010
E1000046-v2	Vacuum System Viton O-ring Procurement Specification	Travis Sadecki et al.	Operations Vacuum	09 Mar 2023
E1000086-v13	Systems Mechanical Design and drafting tasks	Dennis Coyne et al.	System Engineering	08 Nov 2011
E1000154-v1	DCN, aLIGO TCS Monolithic Ring Heater Shield	Mindy Jacobson et al.	Preliminary Design Auxiliary Optics Final Design Fabrication	07 May 2010
E1000212-x0	FMP Tooling Review Final Design Review BSC Quad & FM / BS repair tooling & HAM installation tooling	Calum Torrie	System Engineering	06 Jun 2011
E1000222-v2	Interface Control Document, ICD - Trans Mon Suspension (TMS) to Interferometer Sensing and Control (ISC) and TMS to Suspension (SUS)	Calum Torrie	Sensing and Control Auxiliary Optics Suspensions System Engineering	11 Feb 2015
E1000223-x0	Internal Guidelines for LIGO staff to aid with defining requirements for metal components used vacuum	Calum Torrie	System Engineering	18 Jun 2010
E1000252-v4	BSC Installation Repair arm and HAM Installation arm Hazard Analysis	Scott Shankle et al.	Safety System Engineering	13 Aug 2021
E1000297-x0	Vibration Absorbers Design Review	Sebastien Biscans et al.	System Engineering	22 Oct 2012
E1000338-v4	Vibration Absorber : Final Design Review	Sebastien Biscans et al.	Basic R&D Suspensions	20 May 2014
E1000354-v1	Vibration Absorbers Hazard Analysis	Calum Torrie	System Engineering	24 Aug 2010
E1100137-x0	DCN - aLIGO Dog Clamps, HAM Table. (Approved)	Scott Shankle et al.	Final Design Fabrication	06 Jun 2011
E1100257-v1	heli-coil / oversized tapped holes - instruction guide	Calum Torrie et al.	System Engineering	18 Mar 2011
E1100329-v1	Quad Re-Design & Tooling Tasks	Dennis Coyne et al.	Suspensions	05 Apr 2011
E1100359-x0	DCN, BEAM SPLITTER UPPER STRUCTURE, SHEAR PLATE (Approved)	Eduardo Sanchez et al.	Suspensions	24 May 2011
E1100382-x0	DCN, INITIAL RELEASE OF ALIGO BSC CLEANING TEST PLATE	Eduardo Sanchez et al.	Seismic Isolation Final Design Fabrication	21 Apr 2011

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E1100383-v4	Final Design Review of the HAM Extension Table including FEA (Approved)	Calum Torrie <i>et al.</i>	System Engineering	27 Jul 2011
E1100520-v3	Key safety information associated with the FMP supplied Genie's, lifts and carts	Calum Torrie <i>et al.</i>	System Engineering	22 Oct 2012
E1100523-v11	FMP SUS Tooling List - BSC test stand install and in chamber repair as well as suspension HAM install tooling	Calum Torrie	System Engineering	28 Feb 2012
E1100622-v1	HLTS FEA	Kristen Holtz <i>et al.</i>	Suspensions System Engineering	28 Jun 2011
E1100730-v5	HAM and BSC SEI In-Vacuum Cabling Counts including payload cables as well as BSC SLC ACB and BSC TCS	Calum Torrie <i>et al.</i>	System Engineering	18 Jun 2014
E1100763-v6	aLIGO Chamber (Top Level) Installation Procedure: WBSC8	Dennis Coyne <i>et al.</i>	Installation	06 Nov 2012
E1100812-v13	BSC8-H2 Top Level Chamber Assembly BOM	Calum Torrie	System Engineering	17 Mar 2012
E1100813-v9	BSC6-H2 Top Level Chamber Assembly BOM	Calum Torrie	System Engineering	18 Oct 2011
E1100814-v1	Cartridge Assembly Hazard Analysis	Norna Robertson <i>et al.</i>	Safety Suspensions Installation	18 Dec 2011
E1100818-v3	HAM3-L Top Level Chamber Assembly BOM	Calum Torrie	System Engineering	14 Jun 2016
E1100820-v3	HAM2-L Top Level Chamber Assembly BOM	Calum Torrie	System Engineering	14 Jun 2016
E1100976-v8	BSC8 Cartridge Installation Hazard Analysis	Sam Barnum <i>et al.</i>	Safety Installation System Engineering	11 Feb 2014
E1100985-x0	available	Calum Torrie	System Engineering	05 Oct 2011
E1100988-v2	Critical lift plan for the aLIGO BSC8 cartridge installation	Michael Landry <i>et al.</i>	Detector Safety Fabrication	08 Dec 2011
E1101016-v2	BSC8 H2 Requirements and Procedure, Cartridge Flight and Insertion into BSC Chamber, aLIGO	Jose Eduardo Chavez <i>et al.</i>	Installation System Engineering	07 Jun 2013
E1101129-x0	DCN for updates to the fibre guard D0902505 (Approved)	Calum Torrie <i>et al.</i>	Suspensions System Engineering	29 Nov 2011
E1200023-x0	aLIGO Chamber (Top Level) Installation Procedures	Dennis Coyne <i>et al.</i>	Installation	04 Nov 2014
E1200253-v4	BSC6 Cartridge Installation Hazard Analysis	Sam Barnum <i>et al.</i>	Safety Installation System Engineering	31 Mar 2012
E1200270-v1	aLIGO Repair Procedure: WBSC8	Eric James <i>et al.</i>	Operations Installation	07 Mar 2012
E1200275-v1	Critical lift plan for the aLIGO BSC6 cartridge installation	Michael Landry <i>et al.</i>	Detector Safety Installation	02 Apr 2012
E1200278-v1	modal and SEI transfer function test plan for HAM chambers	Calum Torrie <i>et al.</i>	System Engineering	24 Apr 2012
E1200322-v3	BSC2-L1-H1 Requirements and Procedure, Cartridge Flight and Insertion into BSC Chamber, aLIGO	Sam Barnum <i>et al.</i>	Seismic Isolation Suspensions Installation Observatory Facilities	07 Jun 2013
E1200327-v4	BSC2-L1 Cartridge Installation Hazard Analysis	Sam Barnum <i>et al.</i>	Safety Installation	23 Apr 2013
E1200329-v3	aLIGO Chamber (Top Level) Installation Procedure: LBSC2	Dennis Coyne <i>et al.</i>	Installation	08 Oct 2013

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E1200344-v4	All BSC, Install Completed Cartridge Into Chamber Procedure, aLIGO	Sam Barnum <i>et al.</i>	Seismic Isolation Core Optics Suspensions Installation	18 Dec 2014
E1200444-v5	aLIGO Chamber (Top Level) Installation Procedure: LHAM5	Kaitlin Gushwa <i>et al.</i>	Installation System Engineering	07 Feb 2013
E1200562-v4	aLIGO Tree and Chamber Level DCC Drawing Numbers	Calum Torrie <i>et al.</i>	System Engineering	21 Apr 2014
E1200566-v6	aLIGO Chamber (Top Level) Installation Procedure: WHAM2	Kaitlin Gushwa <i>et al.</i>	Installation System Engineering	19 Feb 2013
E1200615-v3	aLIGO Chamber (Top Level) Installation Procedure: LHAM4	Kaitlin Gushwa <i>et al.</i>	Installation	20 May 2013
E1200634-v9	aLIGO Chamber (Top Level) Installation Procedure: LBSC1	Kaitlin Gushwa <i>et al.</i>	Safety Installation	08 Oct 2013
E1200700-x0	DCN to release PCAL Periscope (Approved)	Scott Shankle <i>et al.</i>	Fabrication	28 Sep 2012
E1200707-x0	DCN for HAM1 and HAM6 Flange Layouts to support purged air and isc-pulse (Approved)	Calum Torrie	System Engineering	18 Jul 2012
E1200710-v2	DCN for LHAM2/3 and WHAM2/3 Flange Layouts Jan 2013 (Approved)	Calum Torrie <i>et al.</i>	System Engineering	25 Jan 2013
E1200722-v2	Example DCN used for acceptance of LLO HAM Aux - frequency measurements. LLO LHAM2 and LHAM3	Calum Torrie <i>et al.</i>	System Engineering	27 Jul 2012
E1200885-x0	DCN, Part Modifications for Proper UHV Standards	Mindy Jacobson <i>et al.</i>	Assembly Vacuum Auxiliary Optics Cleaning	08 Oct 2012
E1200900-x0	aLIGO BSC Installation Procedures (from sub-systems)	Calum Torrie	System Engineering	12 Jul 2013
E1200901-x0	aLIGO BSC Safety Procedures (associated with install)	Calum Torrie	System Engineering	17 Sep 2013
E1200902-x0	aLIGO BSC Test Procedures (associated with install)	Calum Torrie	System Engineering	25 Mar 2013
E1200903-x0	aLIGO BSC Alignment Procedures (associated with install)	Calum Torrie	Installation System Engineering	11 Apr 2013
E1200904-x0	aLIGO General Documents (associated with install)	Calum Torrie	System Engineering	12 Oct 2012
E1200911-x0	In-Chamber Secondary Prism Inspection Procedure	Margot Hennig <i>et al.</i>	Suspensions	12 Oct 2012
E1200915-v1	aLIGO Chamber (Top Level) Installation Procedure: WBSC1	Kaitlin Gushwa <i>et al.</i>	Installation System Engineering	21 Jan 2014
E1200918-v2	aLIGO Chamber (Top Level) Installation Procedure: LBSC3	Kaitlin Gushwa <i>et al.</i>	Installation System Engineering	08 Oct 2013
E1200921-x0	aLIGO HAM Test Procedures (associated with install)	Calum Torrie	Installation System Engineering	18 Jun 2014
E1200922-x0	aLIGO HAM Alignment Procedures (associated with install)	Calum Torrie	Installation System Engineering	17 Oct 2012
E1200923-x0	aLIGO HAM Safety Procedures (associated with install)	Calum Torrie	Installation System Engineering	14 Aug 2013
E1200924-x0	aLIGO HAM Install Procedures (associated with install)	Calum Torrie	Installation System Engineering	04 Dec 2012

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E1200925-v3	BSC Cartridge Installation (Universal) Hazard Analysis, aLIGO	Sam Barnum <i>et al.</i>	Seismic Isolation Safety Suspensions Installation	05 Feb 2014
E1200927-v1	BSC1-L1 Requirements and Procedure, Cartridge Flight and Insertion into BSC Chamber, aLIGO	Sam Barnum <i>et al.</i>	Seismic Isolation Suspensions Installation	07 Jun 2013
E1200971-v3	aLIGO Chamber (Top Level) Installation Procedure: WBSC2	Calum Torrie <i>et al.</i>	System Engineering	23 Jan 2015
E1200999-v1	External Vacuum Components - LHO	Scott Shankle <i>et al.</i>	Integration	09 Nov 2012
E1201000-v1	External Vacuum Components - LLO	Scott Shankle <i>et al.</i>	Integration	14 Nov 2012
E1201035-v25	aLIGO Chamber Entry & Exit Procedures	Calum Torrie <i>et al.</i>	Safety System Engineering	15 Feb 2022
E1201069-v5	Interferometer Layout Checking	Eric Gustafson <i>et al.</i>	System Engineering	03 Apr 2018
E1201073-v1	ECR aLIGO PCAL Mirror Mount Bases	Scott Shankle <i>et al.</i>	Fabrication	03 Dec 2012
E1201096-v5	Contamination Sample Handling - How to receive, use, send, buy and store samples. (Approved)	Calum Torrie <i>et al.</i>	System Engineering	06 May 2015
E1300017-v8	First Contact Spray Application & Removal Procedure	Calum Torrie <i>et al.</i>	System Engineering	12 Aug 2021
E1300107-v1	BSC3-L1-H1 Requirements and Procedure, Cartridge Flight and Insertion into BSC Chamber, aLIGO	Sam Barnum <i>et al.</i>	Installation System Engineering	07 Jun 2013
E1300122-v2	ECR - ISS PD Array (Approved)	Calum Torrie <i>et al.</i>	System Engineering	19 Jun 2014
E1300142-v2	DCN Update to documents associated with chamber work as a result of charge / discharge effort (Approved)	Calum Torrie	System Engineering	25 Apr 2015
E1300164-v2	Specimen 4 Inch wafer from HAM2 at LLO	GariLynn Billingsley <i>et al.</i>	System Engineering	14 Feb 2014
E1300182-v1	Latex glove test	Calum Torrie <i>et al.</i>	System Engineering	28 Mar 2014
E1300183-v1	Dust on wafer photos - proof of concept	Calum Torrie <i>et al.</i>	System Engineering	28 Mar 2014
E1300204-x0	aLIGO Chamber (Top Level) Installation Procedure: WHAM4	Calum Torrie <i>et al.</i>	System Engineering	04 Oct 2013
E1300205-x0	aLIGO Chamber (Top Level) Installation Procedure: WHAM5	Calum Torrie <i>et al.</i>	System Engineering	24 Apr 2014
E1300266-v1	aLIGO Chamber (Top Level) Installation Procedure: WBSC10	Calum Torrie	System Engineering	01 Apr 2014
E1300267-v3	aLIGO Chamber (Top Level) Installation Procedure: WBSC9	Calum Torrie	System Engineering	06 Nov 2013
E1300268-x0	aLIGO Chamber (Top Level) Installation Procedure: LBSC5	Calum Torrie	System Engineering	10 Apr 2013
E1300269-x0	aLIGO Chamber (Top Level) Installation Procedure: LBSC4	Calum Torrie	System Engineering	10 Apr 2013
E1300272-x0	aLIGO Contamination Control - Dust Data Analysis	Calum Torrie <i>et al.</i>	System Engineering	27 Oct 2015
E1300273-v8	Contamination Sample Data Spreadsheet - 1" Optics	Margot Hennig <i>et al.</i>	System Engineering	01 Jul 2014
E1300274-v9	Contamination Sample Data Spreadsheet - 4" Wafers	Calum Torrie <i>et al.</i>	System Engineering	25 Feb 2014

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E1300315-v2	Procedure for removing EP30 residue from LLO SR2 Optic	Calum Torrie <i>et al.</i>	Suspensions Installation	14 May 2013
E1300359-v1	TMS Acceptance Documentation (Common to all instances of the top assembly) (Approved)	Calum Torrie <i>et al.</i>	Auxiliary Optics System Engineering	24 Sep 2014
E1300360-x0	TMS Acceptance Documentation H1-TMSY (WBSC10) (Approved)	Calum Torrie <i>et al.</i>	Auxiliary Optics System Engineering	07 Oct 2014
E1300361-x0	TMS Acceptance Documentation H1-TMSX (WBSC9) (Approved)	Calum Torrie <i>et al.</i>	Auxiliary Optics System Engineering	07 Oct 2014
E1300362-v1	TMS Acceptance Documentation L1-TMSY (LBSC5) (Approved)	Calum Torrie <i>et al.</i>	Auxiliary Optics System Engineering	07 Oct 2014
E1300363-x0	TMS Acceptance Documentation L1-TMSX (LBSC4) (Approved)	Calum Torrie <i>et al.</i>	Auxiliary Optics System Engineering	07 Oct 2014
E1300399-v13	CONTAMINATION CONTROL SUPPLIES AND CLOTHING - Buy List (Approved)	Calum Torrie	System Engineering	17 Sep 2020
E1300462-v1	Procedure for Making LIGO Solvent Wipes	Jodi Fauver <i>et al.</i>	System Engineering	30 May 2013
E1300601-v1	Basic Design Requirements of the aLIGO Clean and Bake Ticketing System	Jodi Fauver <i>et al.</i>	Observatory Facilities	15 Jul 2013
E1300605-x0	aLIGO Chamber (Top Level) Installation Procedure: WBSC3	Dennis Coyne <i>et al.</i>	Installation	02 Dec 2014
E1300662-v1	ECR - Upgrade of ISS PD Array lid (Approved)	Calum Torrie <i>et al.</i>	Laser Systems Installation System Engineering	19 Jun 2014
E1300710-v1	FLIR E60 Documentation	Jeffrey Lewis <i>et al.</i>	System Engineering	14 Nov 2017
E1300713-v3	OBSOLETE	Calum Torrie <i>et al.</i>	System Engineering	13 Sep 2013
E1300749-x0	Optical contamination control: tools for laser damage prevention in an ultra-high vacuum system	Margot Hennig <i>et al.</i>	Core Optics System Engineering	04 Oct 2013
E1300769-v4	Core Optics Fabrication Acceptance Documentation (Approved)	GariLynn Billingsley <i>et al.</i>	Core Optics	12 Mar 2015
E1300799-v2	Thermal Compensation System Ring Heater Acceptance Documentation	Mindy Jacobson <i>et al.</i>	Auxiliary Optics	29 Jan 2014
E1300800-x0	aLIGO, PSL, Intensity Stabilization (ISS) Documents	Calum Torrie <i>et al.</i>	Laser Systems	21 Oct 2013
E1300802-v4	Thermal Compensation System Hartman Wavefront Sensor Acceptance Documentation	Mindy Jacobson <i>et al.</i>	Auxiliary Optics	15 Mar 2014
E1300806-v38	Stray Light Control and Viewport Fabrication Acceptance Punch List	Robert Schofield <i>et al.</i>	Auxiliary Optics	17 Apr 2015
E1300848-x0	aLIGO SUS QUAD ESD Design Documentation	Calum Torrie <i>et al.</i>	System Engineering	03 Mar 2017
E1300937-v1	Contamination Control - Air Knife / Nozzle Top Level [AKIFE "Air knife particulate removal"]	Calum Torrie	System Engineering	14 Feb 2022
E1400019-v1	aLIGO SUS Grouping of Fabrication Acceptance Documentation	Calum Torrie <i>et al.</i>	Suspensions	11 Feb 2015
E1400026-x0	aLIGO, Parts Cleaning / Processing & Material Qualification	Calum Torrie	System Engineering	20 Dec 2019

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E1400027-x0	aLIGO, Particulate Contamination Tools of the trade	Calum Torrie	System Engineering	13 May 2015
E1400028-x0	aLIGO, Particulate Contamination Talks, Papers and Posters	Calum Torrie	System Engineering	01 Jun 2020
E1400029-x0	LIGO, Contamination Control Training Material (Approved)	Calum Torrie	System Engineering	13 May 2015
E1400030-x0	aLIGO, Particulate Contamination Requirement and Policy Documents	Calum Torrie	System Engineering	13 May 2015
E1400031-x0	aLIGO, Particulate Contamination Grouping of Recommendations, Input to Policy Documents including data, research, links, documents etc	Calum Torrie	System Engineering	19 Jun 2014
E1400032-x0	Contamination control (Engineering R&D, Caltech)	Calum Torrie	System Engineering	28 Apr 2015
E1400061-v4	ECR - Upgrade of core optic tooling for LHO and LLO	Calum Torrie et al.	Operations Core Optics Suspensions Installation System Engineering	23 Sep 2015
E1400086-x0	Contamination Control - Air Knife / Nozzle Project Plan	Calum Torrie	System Engineering	08 May 2015
E1400087-v1	Contamination Control - Air Knife Design	Calum Torrie	System Engineering	12 May 2016
E1400094-v2	Operations R&D Documentation Requirements	Calum Torrie et al.	System Engineering	14 Oct 2014
E1400096-x0	Contamination Control - Air Knife Requirements	Calum Torrie	System Engineering	27 Aug 2014
E1400097-x0	Contamination Control - Air Knife Account and budget information	Calum Torrie	System Engineering	28 Feb 2014
E1400098-x0	Contamination Control - Air Nozzle Implementation / Results - Vacuum Test Bed	Calum Torrie	System Engineering	17 Mar 2016
E1400108-v2	Airborne Particle Counters (Handheld) - Requirements & Recommendation (Approved)	Calum Torrie et al.	System Engineering	17 Apr 2014
E1400167-x0	DCN to update Stray Light Control (SLC) Long Term Storage for the 3rd aLIGO Interferometer (Approved)	Calum Torrie	System Engineering	20 Mar 2014
E1400168-x0	aLIGO Dust Change Requests ACRs and associated documents	Calum Torrie	System Engineering	20 Mar 2014
E1400173-x0	Top Level Modest size vacuum system for rapid, full sized HAM suspension work	Calum Torrie	System Engineering	24 Mar 2014
E1400174-x0	Project Plan - Modest size vac sys for rapid, full sized HAM sus work	Calum Torrie	System Engineering	24 Mar 2014
E1400175-x0	Requirements - Modest size vac sys for rapid, full sized HAM sus work	Calum Torrie	System Engineering	24 Mar 2014
E1400176-v2	Design - Modest size vac sys for rapid, full sized HAM sus work	Calum Torrie	System Engineering	12 May 2014
E1400179-v3	aLIGO Installation Acceptance Document for LBSC1 (Y) (Approved)	Dennis Coyne et al.	Installation	21 Jun 2014
E1400181-v2	aLIGO Installation Acceptance Document for LBSC3 (X) (Approved)	Dennis Coyne et al.	Installation	21 Jun 2014
E1400183-v1	DCN to update ransmission Monitor Suspension (TMS) Long Term Storage (LTS) for the 3rd IFO and LIGO LTS (Approved)	Calum Torrie	Auxiliary Optics System Engineering	29 Apr 2014
E1400185-v6	aLIGO Installation Acceptance Document for LBSC4 (X) (Approved)	Dennis Coyne et al.	Installation	21 Jun 2014
E1400186-v1	Grouping of 1" Optics Prepared at Caltech for Laser Damage Testing (March 2014 Onward)	Kaitlin Gushwa et al.	System Engineering	22 Dec 2014
E1400195-v1	aLIGO Installation Acceptance Document for LHAM3 (Approved)	Calum Torrie	Installation	21 Jun 2014

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E1400196-v1	aLIGO Installation Acceptance Document for LHAM4 (Approved)	Calum Torrie	Installation	21 Jun 2014
E1400197-v1	aLIGO Installation Acceptance Document for LHAM5 (Approved)	Calum Torrie	Installation	21 Jun 2014
E1400212-x0	DCN, Initial release of Aligo System Layouts (Approved)	Eduardo Sanchez et al.	Integration System Engineering	21 Apr 2014
E1400215-v3	aLIGO Installation Acceptance Document for LLO Vacuum Equipment. (Approved)	Calum Torrie	Installation	21 Jun 2014
E1400216-v1	aLIGO Installation Acceptance Document for L1 DAQ (Approved)	Brian O'Reilly et al.	Installation	21 Jun 2014
E1400223-x0	Operations R&D Collection of Useful Documents and Links	Calum Torrie	Operations	05 May 2014
E1400224-x0	LIGO-E1400029: LIGO, Grouping of Contamination Control Buy List Docs	Calum Torrie	Operations Installation System Engineering	17 Sep 2020
E1400231-v3	aLIGO ECR - Upgrade of ISS PD Array (May 2014) & a fix for the current mode-matching issue to the ISS-PD Array (Approved)	Calum Torrie et al.	System Engineering	25 Sep 2014
E1400238-v2	OBSOLETE - TOP LEVEL BOM OF IN-VACUUM ASSEMBLIES FOR 3rd IFO	Calum Torrie	System Engineering	19 May 2014
E1400258-v3	Contamination Control Mitigation Processes and the resulting Cleanliness Levels (Approved)	Calum Torrie et al.	Operations Core Optics Installation System Engineering	19 Jun 2014
E1400268-x0	LHAM4-ISI Acceptance Document, LLO unit #4 (Approved)	Calum Torrie et al.	System Engineering	11 Feb 2015
E1400275-x0	LHAM5-ISI Acceptance Document, LLO unit #5 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400276-x0	LHAM6-eISI Acceptance Document (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400277-x0	LHAM3-ISI Acceptance Document, LLO Unit #3 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400278-x0	LHAM2-ISI Acceptance Document, LLO unit #2 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400279-x0	LLO Unit #1 (LIGO-MIT) Acceptance Document (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400280-x0	WHAM1-ISI Acceptance Document - Obsolete (please delete page)	Calum Torrie	System Engineering	02 Dec 2014
E1400281-x0	WHAM2-ISI Acceptance Document LHO Unit #4 (Approved)	Calum Torrie	System Engineering	12 Feb 2015
E1400282-x0	WHAM3-ISI Acceptance Document, LHO unit #5 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400283-x0	WHAM4-ISI Acceptance Document, LHO unit #7 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400284-x0	WHAM5-ISI Acceptance Document, LHO unit #6 (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400285-x0	WHAM6-eISI Acceptance Document (Approved)	Calum Torrie	System Engineering	11 Feb 2015
E1400287-x0	3rd IFO ISI Acceptance Documents (group of 5) LHO Unit #1, #2, #3 and LLO Unit #6, #7 (Approved)	Calum Torrie	System Engineering	12 Feb 2015
E1400294-x0	Align/Install Output Faraday Isolator 3rd IFO Tests	Calum Torrie	Auxiliary Optics	05 Feb 2015
E1400305-v1	ECR: Beamsplitter Suspension Wire Shielding Baffle (Approved)	Calum Torrie	Change Control Suspensions System Engineering	20 Jun 2014
E1400327-v1	ECR for Picomotor Collar Retrofit (Approved)	Rich Abbott et al.	Sensing and Control	10 Jul 2014

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E1400347-v5	Initial Alignment System Fabrication Acceptance Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	31 Mar 2015
E1400352-v1	Air Knife Vacuum Chamber Operation Procedure	Calum Torrie <i>et al.</i>	Basic R&D	12 May 2016
E1400355-x0	Contamination Control - Laser Induced Damage Threshold due to Particulate Contamination - Top Level	Calum Torrie <i>et al.</i>	Core Optics Basic R&D System Engineering	23 Aug 2016
E1400363-x0	Collection of Documents associated with cleaning optics for advanced LIGO	Calum Torrie <i>et al.</i>	Core Optics System Engineering	01 Aug 2018
E1400388-x0	Tracking Page for Final Design and Review Documents	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	01 Apr 2015
E1400436-v2	Align/Install Output Faraday Isolator 3rd Interferometer Test	Eric Gustafson <i>et al.</i>	System Test Auxiliary Optics	24 Mar 2015
E1400437-x0	aLIGO Chamber (Top Level) Installation Procedure: W/LHAM1	Eduardo Sanchez <i>et al.</i>	System Engineering	04 Nov 2014
E1400472-v3	Test Mass In Situ Cleaning Procedure	GariLynn Billingsley <i>et al.</i>	Core Optics System Engineering	15 Dec 2014
E1500029-x0	WBSC1-ISI Acceptance Document (Unit #1) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500030-x0	WBSC10-ISI Acceptance Document (Unit #2) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500031-x0	WBSC2-ISI Acceptance Document (Unit #3) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500032-x0	WBSC3-ISI Acceptance Document (Unit #4) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500033-x0	WBSC9-ISI Acceptance Document (Unit #5) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500034-x0	3rd IFO BSC-ISI Acceptance Document (Unit #6, #7, #8, #9, #10) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	08 Feb 2015
E1500035-x0	LBSC2-ISI Acceptance Document (Unit #1) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500036-x0	LBSC1-ISI Acceptance Document (Unit #2) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500037-x0	LBSC3-ISI Acceptance Document (Unit 3) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500038-x0	LBSC4-ISI Acceptance Document (Unit 4) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015

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E1500039-x0	LBSC5-ISI Acceptance Document (Unit 5) (Approved)	Calum Torrie <i>et al.</i>	Seismic Isolation System Engineering	29 Jan 2015
E1500123-v2	Fabrication Acceptance Review Status of Input Optics EOM Testing, Modeling and Discussion of need for Waivers from Systems	Christopher Guido <i>et al.</i>	Input Optics Reviews	11 Mar 2015
E1500201-v2	Specification: aLIGO, Anti-Reflection Coating for OMC Stray Light baffle Black Glass	Eduardo Sanchez <i>et al.</i>	Fabrication Suspensions	09 Jun 2020
E1500211-x0	obsolete: OMC glass shroud assembly procedure	Kaitlin Gushwa <i>et al.</i>	Installation System Engineering	20 Apr 2015
E1500213-x0	Collection of documents associated with the OMC stray light baffling concept aka OMC black glass	Calum Torrie	System Engineering	03 May 2017
E1500214-v6	Assembly procedure - OMC stray light baffle aka Black Glass Shroud	Kaitlin Gushwa <i>et al.</i>	System Engineering	07 Mar 2017
E1500226-v2	LLO Grout Anion Content: Water Soluble Ionic Analysis	Calum Torrie <i>et al.</i>	Operations System Engineering	27 Apr 2015
E1500232-x0	Contamination Control - Green Lantern (handheld version) - top level	Calum Torrie	Operations System Engineering	28 Apr 2015
E1500233-x0	Test Mass Discharge Effort	Calum Torrie	Operations System Engineering	06 Jun 2015
E1500234-x0	OMC stray light baffle	Calum Torrie	Operations System Engineering	29 Apr 2015
E1500235-v1	Test Mass Discharging System (TMDS)	Calum Torrie	Operations System Engineering	04 Nov 2021
E1500236-x0	Test Mass Discharging System (with top gun and conductive sheet)	Calum Torrie	Operations System Engineering	06 Jun 2015
E1500243-x0	Contamination Control - Air Nozzle Implementation / Results - In-Air Test Setup	Calum Torrie <i>et al.</i>	Operations Basic R&D System Engineering	17 Mar 2016
E1500252-v1	Test Mass Discharge System (TMDS) Operation Procedure Video (Turn ON and Turn OFF)	Benjamin Abbott <i>et al.</i>	Operations Vacuum System Engineering	25 Apr 2018
E1500268-x0	Requirements on Surface and airborne particle measurements (Approved)	Calum Torrie	Operations System Engineering	10 Jun 2015
E1500294-x0	Grouping of key contractual / procurement / inventory documents associated with this CR	Calum Torrie	System Engineering	14 Jul 2015
E1500295-v1	ECR - Moving air-side TCS tables adjacent to ITM's (X and Y) (Approved)	Calum Torrie <i>et al.</i>	System Engineering	12 Jul 2016
E1500296-v1	ECR - Installation of accelerometers into HAM6 (Approved)	Calum Torrie <i>et al.</i>	System Engineering	20 Jul 2015
E1500311-v2	ECR - Core Optic (ETM / ITM) tooling (Approved)	Calum Torrie	System Engineering	29 Oct 2015
E1500314-x0	Deviation Report: Use of non- standard dog clamps on OMC suspension (LLO Only) (Approved)	Eduardo Sanchez <i>et al.</i>	Integration Installation System Engineering	28 Jul 2015
E1500324-v1	Keck Segment Repair Project (SRP), Technical Documents	Dennis Coyne <i>et al.</i>	System Engineering	02 Aug 2016
E1500418-v2	LIGO OFI Faraday Rotator Test Results PO: S230407 S/N 006	Calum Torrie <i>et al.</i>	System Engineering	05 Dec 2019
E1500457-v1	Instructions, Archive of AlphaLab App .exe files & Trifield links for USSVM2 Electrometer	Calum Torrie <i>et al.</i>	System Engineering	19 Mar 2018

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E1500466-v1	Manuals for Mechanical and Metrology Lab, Downs, room 228	Calum Torrie <i>et al.</i>	System Engineering	04 Apr 2016
E1600006-x0	Development effort to build a QUAD, SUS, BOUNCE and ROLL MODE DAMPER (BRD)	Calum Torrie	System Engineering	17 Jul 2017
E1600007-x0	Development effort to build a QUAD, SUS, NON-MAGNETIC BLADE DAMPER ASSY.	Calum Torrie	System Engineering	03 Nov 2016
E1600008-x0	Development effort with respect to SUS BS Actuation	Calum Torrie	System Engineering	03 Aug 2016
E1600009-x0	Development effort to update and replace various Stray Light Baffles	Calum Torrie	System Engineering	27 Jan 2017
E1600010-x0	Development effort for the HAM5, Thermal ROC actuator for SR3	Calum Torrie	System Engineering	26 Aug 2016
E1600013-v2	aLIGO OMC: Handling procedure for high quantum efficiency photodiodes	Koji Arai <i>et al.</i>	Sensing and Control	24 Mar 2016
E1600043-v5	Data from CIT measurements on BRDs	Calum Torrie <i>et al.</i>	System Engineering	11 Nov 2016
E1600079-v1	CP03 AR Coating Absorption	Liyuan Zhang <i>et al.</i>	Core Optics Subsystem Test	08 Mar 2016
E1600083-v7	Data from CIT measurements on NMBDs (non- magnetic blade dampers)	Calum Torrie <i>et al.</i>	System Engineering	11 Nov 2016
E1600106-v2	Incoming Inspection Checklist ONLY for Mechanical Components	Calum Torrie	Suspensions	04 Mar 2019
E1600167-v1	LHO, LLO, CIT and MIT preliminary structural survey and cleanroom identifications	Richard Oram <i>et al.</i>	Operations Safety Observatory Facilities	25 Jan 2021
E1600181-v3	Third IFO Component Request: SRM Surrogate Mass and 2" Optic Holder (Approved)	Betsy Weaver <i>et al.</i>	Suspensions	15 Jul 2016
E1600223-x0	Contamination Control - LIDT Implementation / Results - In-Air	Calum Torrie <i>et al.</i>	System Engineering	03 Aug 2016
E1600224-x0	Contamination Control - LIDT Implementation / Results - Vacuum	Calum Torrie <i>et al.</i>	System Engineering	31 Jan 2017
E1600225-x0	Contamination Control - LIDT Project Plan	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600226-x0	Contamination Control - LIDT Requirements	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600241-x0	Contamination Control - LIDT Account and Budget Information	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600242-x0	Contamination Control - LIDT Design	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600250-x0	Laser Damage Facility (LDF) Setup (Top Level)	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600262-v4	aLIGO OMC: Spare OMC production plan	Koji Arai <i>et al.</i>	Assembly Sensing and Control	09 Dec 2016
E1600263-v2	First Contact Spray Application for In-situ Viewports, including view-ports where one side is under vacuum	Calum Torrie <i>et al.</i>	Cleaning System Engineering	14 Sep 2016
E1600264-x0	Contamination Control - LIDT Implementation / Results	Calum Torrie <i>et al.</i>	System Engineering	24 Aug 2016
E1600265-v3	Sustainment Engineering for O2 and O3	Dennis Coyne <i>et al.</i>	System Engineering	01 Feb 2017
E1600266-v2	Optical Darkfield Microscopy Lab (Lauritsen B139) Setup - Top Level	Kaitlin Gushwa	System Engineering	17 Mar 2017
E1600267-v1	FTIR Swipe Samples from OMC Bench at CIT Aug 2016	Calum Torrie	System Engineering	24 Aug 2016
E1600268-v1	Initial Inspection of OMC Bench at CIT Aug 2016	Calum Torrie <i>et al.</i>	System Engineering	23 Sep 2016
E1600281-v1	Vacuum recovery planning FY17-20	Michael Zucker <i>et al.</i>	Operations Procurements Change	13 Sep 2016

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			Control Vacuum Operations Liens List Operations Business Technical Review Board Risk Management System Engineering	
E1600282-v1	Collection of PSL and TCS Coolant System Reliability issues	Calum Torrie et al.	System Engineering	19 Jan 2017
E1600286-v1	Symmetry FEA of HAM Chambers - Ham1, Ham 2 and beam tube	Calum Torrie	System Engineering	16 Sep 2016
E1600303-v1	Fast Shutter - movie files	Rich Abbott et al.	System Engineering	19 Oct 2016
E1600308-v2	PCal Structure AR Baffle Shields - Requirements Document	Calum Torrie et al.	System Engineering	01 May 2017
E1600321-v2	Chevron baffle for ion pumps - Requirements Document	Alena Ananyeva et al.	Basic R&D	18 Jan 2017
E1600323-v1	Systems Engineering and Standards for the LIGO Observatories	Dennis Coyne et al.	System Engineering LIGO-India	13 Feb 2018
E1600325-v9	Process Specification of coating for Chevron Baffles used on Ion Pumps	Alena Ananyeva et al.	System Engineering	29 Aug 2018
E1600326-v3	Process Specification: mAR Coating	Alena Ananyeva et al.	System Engineering	01 May 2017
E1600327-v4	Process Specification: DLC Coating	Calum Torrie et al.	System Engineering	09 Jun 2020
E1600331-v2	Engineering Purchase Requests and Inventory Locations	Nichole Washington et al.	Operations	10 Nov 2016
E1600332-v5	General Requirements Document - Stray Light Improved Control (SLIC)	Calum Torrie et al.	System Engineering	04 Jun 2020
E1600342-v1	Eng Labs at CIT - Summary of use, contacts etc ...	Calum Torrie	System Engineering	09 Apr 2019
E1600360-x0	DCN, Preliminary release OF 50.8 mm silicon disk centering / retain system	Eduardo Sanchez et al.	Fabrication	20 Jan 2017
E1700042-x0	Collection of 1" optic samples for LIDT testing under vacuum	Kaitlin Gushwa et al.	System Engineering	06 Feb 2017
E1700096-v1	ECR for PSL Chiller Coolant Line Air Bleed/Trap (Approved)	Jeffrey Bartlett et al.	Laser Systems Fabrication	23 Mar 2017
E1700115-v7	Using LIGO Zemax layout for Stray Light Evaluation 2017	Corey Austin et al.	System Engineering	23 Jun 2017
E1700125-v3	P-Cal Mirrors Removal and Vibration Absorber Installation Procedure	Calum Torrie et al.	Operations System Engineering	01 May 2017
E1700127-x0	Process Specification: Black Nickel Coating	Alena Ananyeva et al.	Operations System Engineering	01 Mar 2019
E1700128-x0	Collection of ECR's associated with 2017 Stray Light Improved Effort (and related including TCS)	Calum Torrie	Operations System Engineering	16 Aug 2017
E1700162-x0	Collection of documents for Baffles Baffles and more baffles (SLIC review part 2 of 2)	Calum Torrie	Operations System Engineering	07 Jun 2017

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E1700181-v1	Witness Samples removed from ITMx at LHO - May 2017 - JPL for particulate analysis	Calum Torrie	Operations System Engineering	01 Jun 2017
E1700196-v8	SLIC Status and Costing - Summary of 2017 effort	Calum Torrie	Operations System Engineering	09 Jan 2018
E1700210-v1	ECR: Remove P-Cal camera view relay mirrors (Approved)	Calum Torrie	Operations System Engineering	29 Jun 2017
E1700211-v1	ECR: Stray Light Mitigation 2017/18. (Approved)	Calum Torrie	Operations System Engineering	19 Jul 2017
E1700212-x0	Collection of documents associated with updates and replacement of the BS Elliptical and ITM Elliptical Baffles	Calum Torrie	Operations Core Optics Auxiliary Optics System Engineering	26 Jun 2017
E1700226-v1	ECR: Actuation for OFI Suspension (Approved)	Norna Robertson et al.	Operations System Engineering	21 Jul 2017
E1700292-x0	ECR: Replacement of HWSX STEER M1 mirror mount to reduce scatter from this object	Aidan Brooks et al.	Operations Auxiliary Optics	02 Jul 2019
E1700297-v1	Third IFO Component Request - Viton Spring HAM Tables (Approved)	Calum Torrie	System Engineering	17 Aug 2017
E1700305-v1	LLO SLiC baffles status	Alena Ananyeva et al.	Commissioning System Engineering	28 Aug 2017
E1700309-v5	Procedure for handling, cleaning and baking DLC coated stray light baffles	Calum Torrie et al.	Cleaning System Engineering	19 Mar 2021
E1700311-v1	OFI actuation and squeezed beam path	Eduardo Sanchez et al.	Squeezer	01 Sep 2017
E1700317-v1	Procedure for handling, cleaning and baking DLC coated stainless steel or aluminum non polished parts	Alena Ananyeva et al.	Cleaning System Engineering	14 Jan 2021
E1700318-v5	Procedure for handling, cleaning and baking black nickel coated non-polished SSTL and AI components	Alena Ananyeva et al.	Cleaning System Engineering	15 Apr 2021
E1700319-x0	Grouping of procedures for handling, cleaning and baking coated stray light baffles and hardware (Approved)	Alena Ananyeva et al.	Cleaning System Engineering	03 Mar 2021
E1700321-v1	Baffle Centering and Alignment 2017 SLIC effort - Google sheet	Calum Torrie et al.	System Engineering	04 Nov 2021
E1700337-v3	Copy of SDS sheet for Hexanes from JPL - Hexanes now used with FTIR kit	Calum Torrie	System Engineering	13 Apr 2021
E1700338-x0	Collection of SLiC BRDF Measurements	Alena Ananyeva et al.	Basic R&D System Engineering	12 Jan 2018
E1700341-v4	aLIGO Beamsplitter and ITM elliptical baffle alignment procedure	GariLynn Billingsley et al.	Installation	14 Nov 2017
E1700385-v1	JPL FTIR ANALYSIS of ITM ELLIPTICAL BAFFLE CENTER SKIN (Approved)	Calum Torrie	System Engineering	16 Feb 2018
E1700386-v1	engineering estimate on the air knife system for the liens list.	Calum Torrie	System Engineering	07 Nov 2017
E1700388-v3	Laser induced damage test on black glass, Silicon Carbide and DLC coated SSTL (in-vacuum vs in-air)	Alena Ananyeva et al.	Basic R&D System Engineering	23 Jan 2018

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E1700389-v1	Epo-Tek 302-3M glue vacuum compatibility testing for AMD	Alena Ananyeva et al.	Basic R&D System Engineering	29 Aug 2018
E1700395-v1	Collection of Requirements and Interfaces for AMD's and AMD Tooling	Calum Torrie	Operations System Engineering	29 Nov 2017
E1700418-v1	ECR - Proposal to modify the BS Wire Baffle - due to it occluding the view through the BS (AR side) (Approved)	Calum Torrie et al.	Operations System Engineering	05 Jan 2018
E1700422-v1	ECR - Proposal to replace black glass on OMC REFL's Beam Diverter Dump with SiC (Approved)	Calum Torrie	Operations System Engineering	05 Jan 2018
E1700423-v1	ECR - Proposal to change aperture for HWC on existing (2017) SR2 baffle in HAM4 - results in new baffle (Approved)	Calum Torrie et al.	Operations System Engineering	05 Jan 2018
E1800021-x0	Optical Modeling and Design, Evaluation of Optical Modeling Software	Corey Austin et al.	Modelling Conceptual Design System Engineering	29 Jan 2018
E1800024-v5	SW LAYOUT: POP, FROM HAM 3 TO HAM6 [input only, refer to version 3 for cases investigated]	Eduardo Sanchez et al.	System Engineering	05 Dec 2019
E1800029-v2	FTIR Analysis - PCAL Flat Baffle Panels PART 1 (LHO) (Approved)	Betsy Weaver et al.	Installation	16 Feb 2018
E1800037-v2	Analysis of Ade Crystalair Compression Packs	Calum Torrie	Operations System Engineering	29 Jan 2019
E1800049-x0	Electric Field Meter (Top Level)	Calum Torrie et al.	Operations System Engineering	27 Jun 2018
E1800050-v3	Electric Field Meter Final Design Document	Calum Torrie et al.	Operations System Engineering	12 Jun 2018
E1800051-v2	Electric Field Meter Parts List / Bill of Materials	Calum Torrie et al.	Operations System Engineering	16 Nov 2018
E1800052-v2	Electric Field Meter Cost Estimate	Calum Torrie et al.	Operations System Engineering	28 Feb 2018
E1800058-v1	Contamination Sample spreadsheet log - vent 2017-2018 LHO	Betsy Weaver et al.	Cleaning Installation System Engineering	06 Mar 2018
E1800062-v2	Procedures for handling, cleaning and baking black nickel coated UV Chevron baffles (Approved)	Alena Ananyeva et al.	Vacuum Cleaning Installation System Engineering	29 Aug 2018
E1800063-v2	FEA of HAM Chambers - Ham4, Ham5, Ham6 and beam tube	Calum Torrie et al.	Operations System Engineering	18 Nov 2021
E1800065-v1	ZEMAX and SW analysis of P-Cal Periscope wrt ETM.	Richard Savage et al.	Operations System Engineering	06 Jul 2021
E1800072-v3	TRB Report associated with the AMD Review 2017-18. (Approved)	GariLynn Billingsley et al.	Operations System Engineering	27 Mar 2018
E1800076-v1	WBSC9 ETMX PUM crack - 2013 to 2018 picture comparison	Betsy Weaver et al.	Core Optics Installation	22 Mar 2018
E1800082-x0	Vacuum System	Dennis Coyne et al.	Vacuum	29 Jun 2022

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E1800121-v2	Zemax model of OFI bench for input to OFI shroud analysis / design - 1st and 2nd order ghost beams	Calum Torrie et al.	Operations System Engineering	12 Jun 2018
E1800138-v2	Procedure: Filling the EFM with Neon Gas (Neon charging)	Rich Abbott et al.	Subsystem Test System Engineering	25 May 2018
E1800159-x0	Grouping of EFM testing including electrical, leak and accumulation	Calum Torrie et al.	System Engineering	18 Sep 2018
E1800173-v1	GV Carriage Connector FEA	Stephen Appert et al.	Vacuum Modelling System Engineering	08 Jun 2018
E1800175-x0	Collection of Drawings Electric Field Meter	Calum Torrie	Operations System Engineering	14 Jun 2018
E1800176-v1	Electric Field Meter - Install Procedure (Approved)	Calum Torrie	Operations System Engineering	11 Nov 2019
E1800178-v1	GV Bonnet Weld FEA	Stephen Appert et al.	Assembly Vacuum Modelling System Engineering	12 Jun 2018
E1800183-v1	Design Review - New Beam dumps for HAM5 and HAM6 - slic part b	Calum Torrie	Operations System Engineering	14 Jun 2018
E1800184-x0	Design Review - SRM ghost beam on MC Tube Baffle - slic part b	Calum Torrie	Operations System Engineering	14 Jun 2018
E1800197-v1	aLIGO Chamber (Top Level) Installation Procedure: utilized during ETM / ITM optic replacement through door	Calum Torrie et al.	Operations System Engineering	19 Apr 2021
E1800198-v2	FTIR staining sample from beam tube @ LLO June 2018 (JPL)	Calum Torrie	Operations System Engineering	22 Sep 2021
E1800204-x0	Top Level collection of documents and notes associated with two fiber breaks (LHO ETMx & LLO ETMy) as well as the delamination investigation of one area of one ear of ETM15 @ LLO ETMy. [Covering April-July 2018.]	Calum Torrie	Operations Core Optics Suspensions System Engineering	02 Jan 2019
E1800205-x0	Collection of FEA documents associated with 2018 welding, fiber and bond related issues	Calum Torrie	Operations Core Optics Suspensions System Engineering	06 Jul 2018
E1800212-x0	DCN to cover updates to allowing brushing (as option) for cleaning optics / addition of Electric Field Meter / collecting optical surface for cleaning decision. (Approved)	Calum Torrie	Operations System Engineering	12 Jul 2018
E1800216-v1	Procedure to test water and air outgassing contribution from components	Calum Torrie et al.	Operations System Engineering	29 Aug 2018
E1800226-v1	LLO ETMx water Spot - slide deck of progress July 2018	Calum Torrie et al.	Operations System Engineering	14 Oct 2019
E1800231-v1	first contact training material	Calum Torrie et al.	Operations System Engineering	02 Aug 2018
E1800249-v9	A+ Vacuum Equipment Modification Design Requirements	Chandra Romel et al.	Vacuum A+	04 Mar 2023
E1800257-x0	Third Advanced LIGO Interferometer [3rd IFO / India] Storage Top Level	Calum Torrie et al.	Operations System Engineering	06 Sep 2018

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E1800267-x0	A + (plus) top level system layouts	Calum Torrie <i>et al.</i>	Operations System Engineering	10 Sep 2019
E1800278-x0	A + (plus) Optical layouts	Calum Torrie	System Engineering	22 Jun 2020
E1800279-x0	A + (plus) Vacuum layouts	Calum Torrie	System Engineering	10 Sep 2019
E1800314-v5	HDS, HXDS, SAMS - Design Requirements Document	Aidan Brooks <i>et al.</i>	Basic R&D Suspensions System Engineering	09 Feb 2022
E1800317-x0	PDM Pro Tracker and FAQ	Stephen Appert <i>et al.</i>	Preliminary Design Final Design Conceptual Design System Engineering	28 Feb 2019
E1800359-v9	Sprint: Sub-Schedule Commissioning, Vent, Vacuum and Engineering Runs - 10,000 ft view	Calum Torrie	System Engineering Management	10 Mar 2019
E1900020-v1	ECR: neoVAN amplifier change request (Approved)	Richard Savage <i>et al.</i>	Operations System Engineering	01 Mar 2019
E1900024-v11	SOW: A+ FC Beam Line Fabrication	Chandra Romel <i>et al.</i>	Procurements Vacuum A+	27 Apr 2020
E1900028-v1	Proposed Solution to Quad SUS Cable Mating Issues	Rich Abbott <i>et al.</i>	Operations Suspensions	30 Jan 2019
E1900042-v4	CDD: A+ SYSTEMS LAYOUTS	Eduardo Sanchez <i>et al.</i>	A+ System Engineering	04 Oct 2019
E1900069-v3	Requirements and Interfaces for the 450mm Diam Beamsplitter (BS) and associated suspension for A+	Calum Torrie <i>et al.</i>	Operations A+ System Engineering	23 Sep 2019
E1900072-v1	Jitter Attenuation Cavity (JAC) - Cost and schedule	Stephen Appert <i>et al.</i>	Conceptual Design Input Optics	14 Mar 2019
E1900075-x0	A + (plus) grouping of systems Interface Control Documents (ICD) / chamber and associated reference documents	Calum Torrie	System Engineering	27 Sep 2019
E1900076-x0	A + (plus) grouping of systems Beam Stay Clear Zones / chamber	Calum Torrie	System Engineering	31 Aug 2021
E1900085-v1	FDR Update for HSTS	Norna Robertson <i>et al.</i>	A+ Final Design Fabrication Upgrades Suspensions System Engineering	25 Sep 2020
E1900086-x0	aLIGO, SUS, VMD	Richard Mittleman <i>et al.</i>	Basic R&D Suspensions	05 Oct 2022
E1900087-v1	aLIGO, VMD - Design Requirements Document	Alvaro Fernandez-Galiana <i>et al.</i>	Basic R&D Suspensions	02 Nov 2020
E1900088-v1	aLIGO, VMD - Project schedule	Alvaro Fernandez-Galiana <i>et al.</i>	Basic R&D Suspensions	23 Mar 2019
E1900109-v1	Defects on ETM08 after O2	Alena Ananyeva <i>et al.</i>	Core Optics Subsystem Test	05 Apr 2019

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E1900203-v2	Hazard Analysis (HA) Document for the Newtonian Calibrator (NCAL) prototype. (Approved)	Calum Torrie <i>et al.</i>	System Engineering	17 Oct 2019
E1900257-v1	Review Report: LIGO A+ Active Wavefront Control sensors and actuators (ISC) Design Requirements Review (DRR)	Calum Torrie	A+ System Engineering	18 Dec 2019
E1900258-x0	A+ Systems Top Level Chamber Assemblies	Calum Torrie	A+ System Engineering	05 Sep 2019
E1900264-x0	A + (plus) site layouts	Calum Torrie	A+ System Engineering	10 Sep 2019
E1900265-x0	Grouping of documents related to LIGO CAD Layout System Tools	Calum Torrie	A+ System Engineering	23 Aug 2021
E1900266-x0	A+ HSTS Top Level	Calum Torrie <i>et al.</i>	A+ System Engineering	18 Oct 2021
E1900267-x0	A+ Input to Systems Layouts (Grouping Level)	Calum Torrie	A+ System Engineering	10 Sep 2019
E1900306-v2	FTIR: Nozzle Baffles x4 (D1800227) - Report from JPL (Approved)	Alena Ananyeva <i>et al.</i>	System Engineering	02 Dec 2020
E2000003-v2	Aplus Vacuum Feedthrough Performance Requirements (Approved)	Rich Abbott <i>et al.</i>	A+ System Engineering	09 Jan 2020
E2000061-v2	FTIR Sample of GV-11 Unknown Substance	Adam Branch <i>et al.</i>	Vacuum Cleaning	03 Aug 2020
E2000132-v1	HDS delivery schedule	Betsy Weaver <i>et al.</i>	A+	06 Feb 2020
E2000153-v1	Zar files BBS wedge variations	Alena Ananyeva <i>et al.</i>	A+	25 Feb 2020
E2000184-v2	Detector Development Projects for O4: Status and impact of MIT / CIT shutdown / restricted access as well as LLO/LHO "phase 3" on all detector development projects for O4 (including A+).	Calum Torrie <i>et al.</i>	A+ System Engineering	28 Apr 2020
E2000192-x0	Staff Potential Telecommuting Availability for Re-assignment during the COVID-19 pandemic	Dennis Coyne <i>et al.</i>	System Engineering	01 Apr 2020
E2000231-v13	LIGO, CIT Campus: Restarting Research Activities	Calum Torrie <i>et al.</i>	System Engineering	21 Jun 2021
E2000243-v2	ECR: Addition of Bounce and Roll Dampers on the aLIGO Beam Splitter (Approved)	Marie Kasprzak <i>et al.</i>	Suspensions Installation	21 May 2020
E2000244-v1	3D Visor Files	Rich Abbott <i>et al.</i>	Safety	30 Apr 2020
E2000272-x0	Summary Table: Availability of PPE / Alternate PPE used in various work scenarios	Danny Sellers <i>et al.</i>	Safety Risk Management System Engineering	09 Jun 2020
E2000284-v4	COVID-19 Risk Assessment of Restoring the IFOs in Phase 2 at the Observatories (Approved)	Betsy Weaver <i>et al.</i>	Operations Safety System Engineering	02 Jul 2020
E2000289-x0	aLIGO, Grouping of Project and Program Documents	Calum Torrie	System Engineering	29 May 2020
E2000292-v2	COVID-19 Risk Assessment of TMDS Discharge Exercise (Approved)	Chandra Romel <i>et al.</i>	Operations Core Optics Vacuum Safety Risk Management	10 Aug 2020

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E2000305-v1	Review Report: LIGO A+ Active Wavefront Control sensors and actuators (ISC/AWC) Preliminary Design Review (PDR)	Calum Torrie et al.	System Engineering A+ System Engineering	31 Jul 2020
E2000312-x0	Work document to collect A+ optic locations and to define A+ baffle apertures and stay clear zones	Alena Ananyeva et al.	A+ System Engineering	02 Dec 2021
E2000434-v1	test mass scatter model for Zemax	Srinath Karat et al.	Modelling	10 Aug 2020
E2000452-v2	procedure for damping modes in Manifold/Cryopump Baffle at LLO ETMY	Srinath Karat et al.	Seismic Isolation Suspensions Installation System Engineering	22 Nov 2021
E2000477-v1	UHV Connector Backshell, DB9, Right Angle Single Port	Srinath Karat et al.	System Engineering	04 Sep 2020
E2000479-v1	A+, SYS, BSC/HAM Chambers Configuration, BOM (L1, H1)	Eduardo Sanchez et al.	A+ System Engineering	04 Nov 2021
E2000539-v3	TMDS Failure Analysis	Rich Abbott et al.	Subsystem Test	06 Nov 2020
E2000540-x0	SLIC 05 BAFFLES, PRELIMINARY BOM (L1, H1)	Eduardo Sanchez et al.	System Engineering	15 Oct 2020
E2000623-v1	Cable Tray Support FEA	Calum Torrie et al.	A+ System Engineering	27 Jun 2022
E2000626-v1	PAPR User Guide and Notes for use with LIGO	Calum Torrie et al.	System Engineering	05 Jan 2021
E2100039-v5	Summary on SRM and OFI baffles	Alena Ananyeva	A+ System Engineering	21 Apr 2021
E2100084-x0	Grouping of Clean and Bake Process Documents	Rich Abbott et al.	System Engineering	04 Mar 2021
E2100125-v3	Process Specification: Plasma-Spray Aluminum Oxide coating	Marie Kasprzack et al.	Fabrication System Engineering	30 Jun 2021
E2100144-v1	Safety Bulletin: High-Vibration Construction Activity in or near LVEA or VEA (Approved)	Michael Zucker et al.	Operations A+ Integration Safety Installation Risk Management Observatory Facilities	22 Apr 2021
E2100180-v1	Proposal for protection of H1 during A+ FCTE/FCES and access road site preparation (Approved)	Michael Zucker	Operations A+ Integration Safety Installation Risk Management Observatory Facilities	13 May 2021
E2100225-v6	A+, ISC, AWC, Cable List (with quotes and ordering information)[-V6 is final version]	Aidan Brooks	A+ Auxiliary Optics	09 Sep 2021
E2100316-v1	D071050 SN19 - FTIR Sample 151030 Optical Table (Approved)	Calum Torrie	A+ System Engineering	21 Jul 2021

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E2100317-v1	D071051 SN19 - FTIR Sample 150788 Stage 1 Floor (Approved)	Calum Torrie	A+ System Engineering	21 Jul 2021
E2100318-v4	Grouping of OMC Drawings and associated DCN's for review and handover to UK (Approved)	Calum Torrie <i>et al.</i>	A+ System Engineering	15 Sep 2021
E2100319-x0	DCN: Breadboard OMC aLIGO (Approved)	Calum Torrie	A+ System Engineering	22 Jul 2021
E2100329-x0	Accumulation Testing of QPD Enclosures - Top Level Node	Rich Abbott <i>et al.</i>	Sensing and Control A+ System Engineering	19 May 2022
E2100363-v3	A+ SUS HAM6 Top level Drawing Listing for H1 and L1	Russell Jones <i>et al.</i>	A+ Suspensions System Engineering	10 Feb 2022
E2100391-v1	Filter cavity tube baffles installation procedure	Alena Ananyeva <i>et al.</i>	A+ Installation System Engineering	11 Nov 2021
E2100434-x0	Node of HAM Chamber FEA - SYS Level	Calum Torrie	A+ System Engineering	01 Dec 2021
E2100445-x0	Vacuum Viewport Documentation	Calum Torrie <i>et al.</i>	System Engineering	14 Dec 2021
E2100491-v2	D2100729 01 001 SN19 - IPA FTIR Sample Record (CIT) - Oct 27th 2021. (Unapproved)	Calum Torrie	A+ System Engineering	12 Nov 2021
E2100492-v2	D2100729 01 001 SN19 - IPA FTIR Sample Record (CIT) - Nov 5th 2021. (Approved)	Calum Torrie	A+ System Engineering	12 Nov 2021
E2100493-v2	D2100729 01 002 SN19 - IPA FTIR Sample Record (CIT) - Nov 12th 2021 (Approved)	Calum Torrie	A+ System Engineering	12 Nov 2021
E2100494-v29	Weekly Notes from the Systems Issues Meeting Friday, IIET.	Calum Torrie <i>et al.</i>	System Engineering	23 Sep 2022
E2100495-v12	Notes from the Wednesday Systems Meeting. [November 2022]	Calum Torrie <i>et al.</i>	System Engineering	02 Nov 2022
E2100498-v6	Weekly Notes from the Project Management Meeting.	Calum Torrie	System Engineering	11 Jan 2023
E2100499-x0	Meeting Notes from discussions on Potential DI and RnD Projects for O5 and beyond	Calum Torrie	System Engineering	16 Nov 2021
E2100517-v2	Galled eyebolt in stage 0	Arnaud Pele <i>et al.</i>	Seismic Isolation	21 Mar 2023
E2100537-x0	Angled septum window ghost beams checks	Alena Ananyeva <i>et al.</i>	A+ System Engineering	15 Dec 2021
E2100538-x0	RGA Vacuum Documents	Dennis Coyne <i>et al.</i>	Vacuum System Engineering	14 Dec 2021
E2100539-x0	Clean & Bake - Vacuum Documents	Dennis Coyne <i>et al.</i>	Vacuum System Engineering	14 Dec 2021
E2100540-x0	FTIR Vacuum Documents	Dennis Coyne <i>et al.</i>	Vacuum System Engineering	14 Dec 2021
E2100541-x0	Procedures - Vacuum Documentation	Dennis Coyne <i>et al.</i>	Vacuum System Engineering	15 Dec 2021

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E2200018-v1	ECR: Addition of another in-vac photodiode for monitoring the OMC reflected light (rejected by the OFI) (Approved)	Alena Ananyeva	System Engineering	18 Jan 2022
E2200060-x0	Spring inventory for 3IFO HAM-ISI build	Arnaud Pele et al.	Seismic Isolation	15 Feb 2022
E2200065-x0	CIT Facilities Operation & Maintenance: Labs and Shops	Nately Sych et al.	Activity System Engineering Management	10 Mar 2022
E2200100-v1	Document Change Notification, DCN: Vacuum Covers (Door) Flange Bolts [WIP]	Calum Torrie et al.	System Engineering	22 Jun 2022
E2200105-x0	HAM1 stack to HAM1-ISI	Arnaud Pele et al.	Seismic Isolation	12 Apr 2022
E2200116-x0	Schedule and Tasks for implementation of Test Mass HWS Point Absorber Diagnostic (TM-HPAD)	Stephen Appert et al.	Core Optics Basic R&D System Engineering	14 Mar 2022
E2200157-x0	SLiC Collection of ECRs and Work Packages	Alena Ananyeva et al.	System Engineering	28 Mar 2022
E2200181-v3	Locking (Muting) the tip-tilt (RM HTTS) blades	Arnaud Pele et al.	Suspensions	13 Jun 2022
E2200254-x0	Add photodiodes to AERMs & CPs for beam position sensing -collection node (top level)	Calum Torrie	System Engineering	02 Nov 2022
E2200257-v1	O4 decision flowchart	Calum Torrie	System Engineering	09 Jun 2022
E2200284-v2	LTREX Installation at CIT	Jon Feicht et al.	Vacuum	22 Feb 2023
E2200289-v2	A+ Filter Cavity Nomenclature and Install Details (Bellows, Gate Valves, 6-way Crosses etc ...) (Approved)	Chandra Romel et al.	Vacuum Installation	08 Dec 2022
E2200305-v1	post-C&B info of HTDS Compression Fit Ring + mirror sent from Adelaide to CIT	Huy-Tuong Cao et al.	A+ Cleaning Suspensions	21 Jul 2022
E2200308-v2	FTIR CIT LASER DAMAGE CHAMBER	Madeline Lesovsky et al.	Vacuum Cleaning	29 Jul 2022
E2200317-x0	DCN: Release of VMD for Assembly and Associated Drawings as per FDD update March 2022 (Approved)	Calum Torrie	System Engineering	28 Jul 2022
E2200351-v1	Larger PR3 and SR3 optic: Viability and knock-on effects	Eduardo Sanchez et al.	System Engineering	24 Aug 2022
E2200358-v2	Interface Control Document (ICD): BHD path HAM3 to HAM6 (Approved)	Calum Torrie	A+ System Engineering	03 Mar 2023
E2200361-v1	LIGO List of hand tools for use on clean / in-chamber installations	Calum Torrie et al.	Operations System Engineering	01 Sep 2022
E2200363-v1	10x 1" Alum Machined cubes for coolant compatibility testing with LIGO vacuum (NOVAMET 760) (Approved)	Calum Torrie et al.	A+ System Engineering	07 Sep 2022
E2200364-v1	Novamet 760 SDS Sheet	Madeline Lesovsky et al.	Vacuum Cleaning	07 Sep 2022
E2200368-v2	FTIR: Novamet 760 Pre-Bake (Approved)	Calum Torrie et al.	Vacuum Cleaning	07 Sep 2022
E2200370-v2	[Draft] Hazard Analysis: Review of LLO's X arm readiness for a storm under current conditions i.e. GV11 in locked open position, through consideration of a range of preparation scenarios.	Calum Torrie	System Engineering	30 Nov 2022
E2200375-x0	DCN for the A+ BHSS Suspended Bench and Picture Frame (Approved)	Russell Jones et al.	A+ Suspensions	02 Nov 2022

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E2200379-x0	Collection Node for RGA Scans	Jordan Vanosky <i>et al.</i>	Vacuum System Engineering	18 Nov 2022
E2200402-x0	Interface Control Document (IDC): Higher Order Mode Ring Heater	Huy-Tuong Cao <i>et al.</i>	A+ System Engineering	29 Sep 2022
E2200406-v1	10x 1" Alum Cube Samples for Coolant Compatibility Testing with LIGO Vacuum (TRIM Microsol 515) (Approved)	Madeline Lesovsky <i>et al.</i>	A+ System Engineering	19 Oct 2022
E2200407-v1	2x Large Steel Clamps for Coolant Compatibility Testing With LIGO Vacuum (Ecocool Ultra-Motive) (Approved)	Madeline Lesovsky <i>et al.</i>	A+ System Engineering	19 Oct 2022
E2200409-v2	FTIR: Ecocool Ultra-motive and TRIM Microsol 515 Pre-Bake CIT (Approved)	Madeline Lesovsky <i>et al.</i>	A+ System Engineering	18 Oct 2022
E2200411-x0	Collection Node for Analysis of Machining Fluids ~ 2022	Calum Torrie	System Engineering	07 Oct 2022
E2200412-x0	SLiC O5 A+ budget adjustments	Alena Ananyeva <i>et al.</i>	A+ System Engineering	13 Dec 2022
E2200446-v1	TMS Telescope Primary Parabolic Mirror Specifications	Gabriele Vajente <i>et al.</i>	Auxiliary Optics	22 Nov 2022
E2200447-v1	TMS Telescope Secondary Parabolic Mirror Specifications	Gabriele Vajente <i>et al.</i>	Auxiliary Optics	22 Nov 2022
E2300003-v1	HAM5/6 path options for O5&/O6 - Presentation to SYSTEMS team Feb 2023	Alena Ananyeva <i>et al.</i>	Vacuum System Engineering	22 Mar 2023
E2300005-v2	A+ BHSS OMC Cradle Butterdish Clamping Tests	Russell Jones <i>et al.</i>	A+ Basic R&D Suspensions	28 Feb 2023
E2300037-x0	DCN for Final A+ BHSS Picture Frames, following proof of manufacture prototype (Approved)	Russell Jones <i>et al.</i>	A+ Final Design Suspensions	28 Feb 2023
E2300059-x0	A+ (aPLUS, Aplus), SUS	Calum Torrie	Sensing and Control Seismic Isolation Suspensions System Engineering	01 Mar 2023
E2300075-v2	FTIR: Nozzle Baffle D2000285-V3-13-0003 (Pending - No approved version)	Calum Torrie <i>et al.</i>	Vacuum Cleaning	22 Mar 2023
E2300082-v1	A+ BHSS v1 draft Drawing Checks GLA to Caltech	Russell Jones <i>et al.</i>	A+ Final Design Suspensions	20 Mar 2023
E960022-v25	LIGO Clean and Bake Methods and Procedures	Betsy Weaver <i>et al.</i>	Vacuum Fabrication Cleaning	14 Dec 2022
F030014-v8	Obsolete - Clean and Bake Request Form	John Worden <i>et al.</i>	Assembly Policies Cleaning	20 Apr 2017
F0900004-v1	DOCUMENT CHANGE NOTICE (DCN) TEMPLATE	Calum Torrie	System Engineering	14 Jan 2009
F0900044-v13	Solidworks Templates and Sheet Formats.	Michael Meyer <i>et al.</i>	Preliminary Design Final Design Conceptual Design	17 Feb 2023
F0900052-v17	Advanced LIGO Inventory Database Part Import (ICS Template)	Jeffrey Kissel <i>et al.</i>	Quality Assurance	02 Feb 2022
F1000033-v2	CONTRACT CHANGE REQUEST TEMPLATE	Calum Torrie <i>et al.</i>	System Engineering	23 Apr 2021

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F1100030-x0	HAM Systems Level Supplementary Chamber-Level Build Documents	Calum Torrie	System Engineering	16 Jan 2014
F1100031-x0	aLIGO Systems HAM2-H1 Related Documents	Calum Torrie	System Engineering	08 Jul 2011
F1200021-v4	ADVANCED LIGO PARTICULATE SAMPLE FORM (Approved)	Carolyn Peterson et al.	Reports System Engineering	11 Mar 2014
F1500004-v2	Template for graphing data	Calum Torrie et al.	Basic R&D	08 Jul 2015
F1900002-x0	Template for Detector Improvement (DI), Work Package	Calum Torrie et al.	System Engineering	19 Mar 2019
F2000014-v1	FY2020 CIT Staff Respirator Medical Eval & Fit Test Records	Danny Sellers et al.	Safety	15 Sep 2020
F2100018-v1	Meeting Notes Template (Approved)	Calum Torrie	System Engineering	15 Nov 2021
F2300002-v2	LIGO Floor Sign.	Calum Torrie	Management	17 Feb 2023
G010291-x0	Prototype Quadruple Pendulum Update, Part 1 - LSC Meeting August 13 - 16, Hanford WA	Norna Robertson et al.	Document Migration	15 Aug 2001
G020394-v1	Advanced LIGO Suspension Research	Dan Mason et al.	Document Migration System Engineering	19 Mar 2013
G030350-x0	Triple Update - LSC Meeting, August 18th - 21st, Hannover, Germany	Mark Barton et al.	Document Migration	09 Sep 2003
G030384-x0	Update and Status on the Controls Prototype Local Control Coil for the MC and RM Suspension	Helena Armandula et al.	Document Migration	12 Sep 2003
G030385-x0	Suspension Eddy Current Damper Assembly	Mark Barton et al.	Document Migration	12 Sep 2003
G030386-x0	HAM Overview - One Possible method of Assembly for the Advanced LIGO Mode Cleaner Controls Prototype Triple Pendulum Suspension - LSC Meeting, August 18th - 21st, Hannover, Germany	Calum Torrie	Document Migration	18 Sep 2003
G030387-x0	BSC Overview - One Possible Method of assembly for the Advanced LIGO Controls Prototype ETM Quadruple Pendulum Suspension - LSC Meeting, August 18th - 21st, Hannover, Germany	Michael M Perreux-Lloyd et al.	Document Migration	18 Sep 2003
G030388-x0	Methods of Adjustment used in the Controls Prototype Mode Cleaner Suspension at Caltech	Michael M Perreux-Lloyd et al.	Document Migration	12 Sep 2003
G030410-x0	Recycling Mirror Suspension	Michael M Perreux-Lloyd et al.	Document Migration	12 Sep 2003
G030530-x0	Introduction to Advanced LIGO Suspension Design and Development	Norna Robertson et al.	Document Migration	14 Oct 2003
G040058-x0	Some recent work on blade performance - LSC Meeting, March 15 - 18th, Livingston, LA	Caroline Cantley et al.	Document Migration	17 Mar 2004
G040059-x0	Blade committee notes - LSC Meeting, March 15 - 18th, Livingston, LA	Caroline Cantley et al.	Document Migration	17 Mar 2004
G040095-x0	A Quad for Christmas - LSC Meeting, March 15 - 18th, Livingston, LA	Calum Torrie	Document Migration	18 Mar 2004
G050175-x0	ADVANCED LIGO SUS ETM ADVANCED LIGO Sub-assembly procedure tooling development and associated testing leading to the build of the sus prototypes - LSC Meeting, March 20-23, 2005, Livingston LA	Calum Torrie	Document Migration	25 Mar 2005
G050178-x0	Passive attenuation for the LIGO Output mode cleaner; HAM SAS - LSC Meeting, March 20-23, 2005, Livingston LA	Alessandro Bertolini et al.	Document Migration	28 Mar 2005
G050187-x0	ADVANCED LIGO SUS ETM STRUCTURAL DESIGN SUMMARY - LSC Meeting, March 20-23, 2005, Livingston LA	Caroline Cantley et al.	Document Migration	07 Apr 2005
G050267-x0	Passive seismic attenuation for the LIGO Output mode cleaner; HAM-SAS	Alessandro Bertolini et al.	Document Migration	25 May 2005

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G050316-x0	Update on Aspects of the Suspension Design for Advanced LIGO	Helena Armandula et al.	Document Migration	28 Jun 2005
G050461-x0	A method for Killing the parametric instabilities dead	Eric Black et al.	Document Migration	25 Aug 2005
G060055-x0	All-Metal Controls Prototype Quadruple Pendulum Suspension - LSC Meeting, March 19-22, 2006, Hanford WA	Calum Torrie	Document Migration	14 Apr 2006
G060058-x0	All-Metal Controls Prototype Quadruple Pendulum Suspension (ETM) - LSC Meeting, March 19-22, 2006, Hanford WA	Calum Torrie	Document Migration	14 Apr 2006
G070444-x0	Production and characterisation of fused silica suspension ribbons for Advanced LIGO - 7th Edoardo Amaldi Conference on Gravitational Waves, July 8 -14 2007, Sydney Australia	Mark Barton et al.	Document Migration	21 Dec 2007
G070656-x0	Welding Experiences: Output Modecleaner and Recycling Mirror Designs - LSC/Virgo Collaborations Meeting, October 22-25 2007, Hannover Germany	Calum Torrie	Document Migration	29 Oct 2007
G0810006-v3	QUAD LOWER STRUCTURE ON FIXTURE TOOLING LASTI	Calum Torrie	Basic R&D Reports	20 Jun 2014
G0810009-v3	New DCC for Advanced LIGO	Stuart Anderson et al.		02 Apr 2009
G0810027-v1	ADV LIGO SUS IMAGES OF LARGE SUSPENSIONS at RAL and LASTI	Calum Torrie	Basic R&D Suspensions	10 Dec 2008
G0810028-v5	AD LIGO IMAGES OF LARGE SUSPENSIONS and ISI at LASTI	Ken Mailand et al.	Basic R&D	10 Dec 2008
G0900067-v4	SolidWorks 2009 settings (also relevant for 2010)	Gerardo Moreno et al.	Basic R&D Final Design Conceptual Design System Engineering	07 Jul 2010
G0900418-v2	Optomechanical Layout Status	Calum Torrie	System Engineering	20 May 2009
G0900507-v2	Overview of monolithic suspension work for Advanced LIGO	Timothy Bodiya et al.	Basic R&D Suspensions	19 Jun 2009
G0900783-v1	Update on monolithic suspension work in Glasgow and at MIT	Giles Hammond et al.	Basic R&D Suspensions	03 Nov 2009
G1000026-v1	e-stops and line stops shown together on quad ETM / ITM	Joseph Odell et al.	Suspensions System Engineering	02 Feb 2010
G1000060-v1	Simulation of Viton damping	Calum Torrie et al.	System Engineering	28 Jan 2010
G1000095-v1	Feb 2010 Upgraded LASTI Ergo-arm videos	Margot Hennig et al.	System Engineering	03 Feb 2015
G1000414-v3	Brief Summary of HAM & BSC Installation Tooling	Calum Torrie	System Engineering	22 Jun 2010
G1000462-v1	SYS Technical Status, NSF Review April 2010	Dennis Coyne et al.	Reviews System Engineering	04 Jun 2010
G1000486-v1	setup and instructions for using payload and suspended mass assembly for HAM table	Calum Torrie et al.	Seismic Isolation Suspensions System Engineering	22 Apr 2010
G1000619-x0	Install tooling design review – Baseline / top level plan - FMP & SYS	Calum Torrie	System Engineering	09 Jun 2010
G1000734-v1	Crate dimensions for 5-axis table, D1001847	Calum Torrie	System Engineering	03 Aug 2010
G1100510-v2	SYS Technical Status, NSF Review April 2011	Calum Torrie et al.	System Engineering	22 Apr 2011
G1200133-v1	BSC Installation Repair Arm movies and pictures - historical reference only	Calum Torrie et al.	System Engineering	18 Oct 2012

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G1200150-v1	HAM Installation Arm movies and pictures - historical only	Scott Shankle et al.	System Engineering	18 Oct 2012
G1200357-v2	SYS Technical Status, NSF Review April 2012	Dennis Coyne et al.	Reviews System Engineering	11 Apr 2012
G1200685-v1	LIGO CIT GROUP PHOTO 2011	Julie Hiroto et al.	Management	11 Aug 2020
G1200828-v6	Proposed new pendulum suspension for beyond advanced LIGO	Madeleine Waller et al.	Suspensions System Engineering	09 Aug 2013
G1201262-v5	The Role of LIGO Engineering – Breakout Session NSF Dec 2012	Calum Torrie	System Engineering	05 Dec 2012
G1300128-v1	EAG Training Material	Calum Torrie	System Engineering	10 Apr 2013
G1300427-v3	Slides for Contamination Control - March 2013	Calum Torrie et al.	System Engineering	11 Mar 2014
G1300441-v3	Poster - Gowning and De-gowning Sequence (Approved)	Calum Torrie et al.	System Engineering	25 Mar 2014
G1300777-v3	Contamination Control Requirements - Gloves, Cleaning on the Go and The Plan (past, present and future)	Calum Torrie et al.	System Engineering	11 Mar 2014
G1300824-v1	Proposed Longer Quad Pendulum for Advanced LIGO	Madeleine Waller et al.	Suspensions System Engineering	09 Aug 2013
G1300956-v2	Beamsplitter Structure Design Modifications for Increased Size	Calum Torrie et al.	Suspensions System Engineering	18 Sep 2013
G1301149-v1	Systems Fabrication Acceptance Punch List	Eric Gustafson et al.	System Engineering	11 Oct 2013
G1301188-v4	BS optic - views from adjacent chambers / through existing baffles in addition to highlighting any "viewable wire"	Calum Torrie	System Engineering	14 Dec 2017
G1301202-v1	aLIGO Optical Contamination Control: Tools for Laser Damage Prevention in a High Vacuum System Sept 2013 Poster	Margot Hennig et al.	System Engineering	11 Mar 2014
G1301249-v3	Hanford and Livingston Contamination Control Update Dec 2013-Jan2014 (Approved)	Kaitlin Gushwa et al.	System Engineering	11 Mar 2014
G1301252-v1	FY2014 Costs v. Budget, End of October 2013	Ed Jasnow et al.	Operations Reports Operations Business	25 Nov 2013
G1301288-v6	Ripples Across the Cosmos: the Search for Gravitational Waves	Norna Robertson et al.	Education, Outreach	09 Nov 2015
G1301300-v1	FY2014 Costs v. Budget, End of November 2013	Ed Jasnow et al.	Operations Operations Business	16 Dec 2013
G1301315-v1	Video from Gravity Waves & Dust Talk	Norna Robertson et al.	Education, Outreach	07 Jan 2014
G1400080-v1	FY2014 Costs v. Budget, End of December 2013	Ed Jasnow et al.	Operations Operations Business	27 Jan 2014
G1400116-v1	FY2014 Costs v. Budget, End of January 2014	Ed Jasnow et al.	Operations Reports Operations Business	24 Feb 2014
G1400142-v1	Summary of 4" Wafer Data	Calum Torrie et al.	System Engineering	11 Mar 2014
G1400209-v2	Laser Induced Damage due to Particulate Contamination	GariLynn Billingsley et al.	Core Optics Basic R&D	08 Sep 2014
G1400210-v1	FY2014 Costs v. Budget, End of February 2014	Ed Jasnow et al.	Operations Reports	14 Mar 2014

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G1400378-v2	Hanford Contamination Control Update - Back to Basics (March 2014)	Kaitlin Gushwa <i>et al.</i>	Operations Business System Engineering	21 Oct 2014
G1400396-v5	Plenary Lecture for SPIE Laser Damage 2014	Calum Torrie <i>et al.</i>	System Engineering	18 Sep 2014
G1400449-v1	FY2014 Costs v. Budget, End of March 2014	Ed Jasnow <i>et al.</i>	Operations Reports Operations Business	21 Apr 2014
G1400507-v2	Poster for CIT cleaning of Clean-rooms	Calum Torrie	Operations	07 May 2014
G1400535-v1	FY2014 Costs v. Budget, End of April 2014	Ed Jasnow <i>et al.</i>	Operations Reports Operations Business	15 May 2014
G1400614-v7	Contamination Control Update - NSF 2014	Calum Torrie	Operations Installation System Engineering	24 Jun 2014
G1400616-v7	Acceptance Process and Status (June 2014 NSF Review)	Dennis Coyne <i>et al.</i>	Reviews System Engineering	24 Jun 2014
G1400670-v2	3IFO Technical Progress-NSF June 2014	Jodi Fauver <i>et al.</i>	NSF LIGO-India	19 Jun 2014
G1400804-v3	Risk Reduction Work on Advanced LIGO Suspensions	Norma Robertson <i>et al.</i>	Basic R&D Suspensions	01 Oct 2018
G1400819-v1	UWash Tiltmeter foam box	Jeffrey Kissel <i>et al.</i>	Seismic Isolation Fabrication	29 Jul 2014
G1400831-v1	FY2014 Costs v. Budget, End of June 2014	Calum Torrie <i>et al.</i>	Reports Operations Business	12 Dec 2014
G1401135-v1	FY2014 Costs vs. Budget, End of August 2014	Calum Torrie <i>et al.</i>	Reports Operations Business	22 Sep 2014
G1401252-v1	FY2014 Costs vs. Budget, End of September 2014	Rudy Arvizu <i>et al.</i>	Reports Operations Business	27 Oct 2014
G1401337-v1	Test Mass Discharging System (TMDS) Design Review Presentation	Rich Abbott <i>et al.</i>	Vacuum Final Design System Engineering	20 Nov 2014
G1401352-v1	FY2015 Costs vs. Budget, End of October FY2015	Rudy Arvizu <i>et al.</i>	Reports Operations Business	01 Dec 2014
G1401402-v2	Summary and Images of ETM03 (pilot optic) Dec 2014 - Jan 2015	Calum Torrie <i>et al.</i>	Core Optics System Engineering	30 Jan 2023
G1401405-v1	FY2015 Costs vs. Budget, End of November FY2015	Rudy Arvizu <i>et al.</i>	Reports Operations Business	07 Jan 2015
G1500076-v4	Summary and Images of ETM06 (pilot optic) Jan 2015	Kaitlin Gushwa <i>et al.</i>	Core Optics System Engineering	13 Feb 2015
G1500105-v1	LDF Operator Video Procedure - in air procedure (out of date)	Calum Torrie	System Engineering	04 Aug 2016
G1500108-v6	Summary of 1" optic huff tests at Caltech (Jan / Feb 2015)	Calum Torrie <i>et al.</i>	System Engineering	04 Feb 2015
G1500383-v1	Setup and Utilization of Top Gun™ Ionizing Blow-Off Gun	Kyle Baric <i>et al.</i>	Meeting	17 Mar 2015
G1500539-v3	You can look but you can't touch - slides prepared for SYS meeting 22nd April 2015	Calum Torrie <i>et al.</i>	System Engineering	06 Jun 2015

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G1500612-v1	2015 Garb Contract Review	Jeffrey Bartlett <i>et al.</i>	Operations Observatory Facilities	08 May 2015
G1500739-v3	Contamination Control - NSF Review June 2015	Dennis Coyne <i>et al.</i>	Operations System Engineering	16 Jun 2015
G1501076-v1	C is For Charging - Update on aLIGO Test Mass Charging	Kaitlin Gushwa <i>et al.</i>	System Engineering	07 Mar 2017
G1501228-v6	LIGO, GW and Engineering Group	Calum Torrie <i>et al.</i>	System Engineering	10 Feb 2017
G1600267-v2	Front Page the Day After	Matthew Heintze <i>et al.</i>	Education , Outreach	21 Mar 2016
G1600291-v4	Front Page the Day After - Authors only - Collection of newspaper images	Calum Torrie <i>et al.</i>	System Engineering	09 Oct 2017
G1600331-v1	Notes for BRD Discussion	Norna Robertson <i>et al.</i>	Basic R&D Final Design Suspensions	01 Mar 2016
G1600371-v3	A Tale of Two Dampers: Bounce and Roll Mode Damping for the Quads	Norna Robertson <i>et al.</i>	Basic R&D Final Design Suspensions	13 Mar 2016
G1600801-v6	Are you remembering about QA?	Calum Torrie	System Engineering	21 Feb 2023
G1600933-v1	Document Change Notification, DCN's - a refresher on DCNs - whys and hows.	Calum Torrie	System Engineering	04 Mar 2019
G1601083-v7	Third Interferometer aka 3IFO Storage - NSF Break0out Session June 2016	Nichole Washington <i>et al.</i>	System Engineering	18 Jun 2016
G1601210-v3	Raiders of the lost ark	Calum Torrie <i>et al.</i>	Operations System Engineering	25 Jan 2018
G1601553-v5	projecting 3D renderings	Jeffrey Wang	System Engineering	14 Sep 2016
G1601592-v1	Q3 Report - FY2016 Costs vs. Budget, End of June FY2016	Hannah Hansen <i>et al.</i>	Reports Operations Business	03 Nov 2016
G1601598-v1	Trip to Carmen Menoni's group at Colorado State University Fort Collins	Eric Gustafson <i>et al.</i>	Basic R&D	10 Aug 2016
G1601615-v2	3IFO Handoff Presentation	Nichole Washington <i>et al.</i>	Operations System Engineering	10 Oct 2016
G1601654-v4	Plans for Near Term Detector Upgrades / Changes (Thu).	Calum Torrie	System Engineering	07 Sep 2016
G1601752-v3	LIGO Engineering - Highlights of Current Tasks and Future Projects (Mon).	Calum Torrie	System Engineering	07 Sep 2016
G1602118-v1	Systems Meeting: October 12, 2016 - Consideration of an end station Vent	Calum Torrie <i>et al.</i>	System Engineering	25 Apr 2017
G1602227-v1	Stray light issues - status summary of shields and coating options - Systems Meeting 11/02/2016	Calum Torrie <i>et al.</i>	System Engineering	31 Jan 2017
G1602378-v2	Bi-Monthly Update on Development Engineering, for the LIGO Excomm 5-Dec-2016	Dennis Coyne <i>et al.</i>	Reports System Engineering	05 Dec 2016
G1700152-v2	Bi-Monthly Update on Development Engineering, for the LIGO Excomm 6-Feb-2017	Dennis Coyne <i>et al.</i>	Reports System Engineering	02 Apr 2017
G1700172-v3	LIGO and the Detection of Gravitational Waves	Norna Robertson <i>et al.</i>	Public Talk / Colloquium System Engineering Astrophysics / Multi- messenger	17 Jul 2018

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G1700204-v1	CAD Camera images from PR and SR Cavities for Scatter evaluation	Eduardo Sanchez et al.	Auxiliary Optics System Engineering	13 Mar 2019
G1700269-v3	LIGO and the Detection of Gravitational Waves - AMSC	Norna Robertson et al.	Detector Public Talk / Colloquium	03 Mar 2017
G1700348-v1	Coating RIng-down MEasurement experiment	Gabriele Vajente et al.	Core Optics Basic R&D	12 Mar 2017
G1700349-v1	Coating Ring-down MEasurement experiment: from Q to phi	Gabriele Vajente et al.	Core Optics Basic R&D	12 Mar 2017
G1700350-v1	Update on coating research at Caltech	Gabriele Vajente et al.	Core Optics Basic R&D	13 Mar 2017
G1700569-v1	How black holes relate to relaxation phenomena in amorphous oxide thin films	Alena Ananyeva et al.	Core Optics Basic R&D	18 Mar 2017
G1700639-v1	Zemax Update for SLC weekly meeting	Corey Austin et al.	System Engineering	20 Apr 2017
G1700753-v4	Introduction to Stray Light Improved Control, SLIC (2017)	Calum Torrie	Operations System Engineering	04 May 2017
G1700757-v2	Swiss Cheese and Asparagus	Betsy Weaver et al.	Operations System Engineering	05 May 2017
G1701019-v5	Scattered Light Mitigation	Calum Torrie	Operations System Engineering	13 Jun 2017
G1701054-v4	Investigation of Damping using ANSYS	Cormac O'Neill et al.	Basic R&D System Engineering	26 Jan 2018
G1701144-v1	FY19-23 Budget Proposal Meeting 6-15-17	Giselle Hepker et al.	Proposals Operations Business	12 Oct 2018
G1701248-x0	FY19-23 Budget Proposal Meeting 7-5-17	Giselle Hepker et al.	Proposals Operations Business	04 Jul 2017
G1701310-v1	FY19-23 Budget Proposal Meeting 7-10-17	Giselle Hepker et al.	Proposals Operations Business	12 Oct 2018
G1701416-v1	East LA College Talk on Science and Engineering	Calum Torrie et al.	Education, Outreach	05 Nov 2019
G1701519-v2	Summary of OFI Actuation Concept (Design Review)	Calum Torrie et al.	System Engineering	21 Aug 2017
G1701888-v1	In-situ optic inspection and elliptical baffle alignment tool	GariLynn Billingsley et al.	Core Optics Auxiliary Optics Installation	28 Sep 2017
G1702112-v2	LIGO ENGINEERING LABS, NSF Review 2019 Back-up Talk	Calum Torrie	Operations System Engineering	06 Nov 2017
G1702183-v1	Methodology for Determining the Historical Experience used for Analogy Estimating (40 Meter and West Bridge Labs Caltech)	Eric Gustafson et al.	Basic R&D NSF	14 Mar 2018
G1702467-v4	Stray Light Improved Control (SLIC), parts A, B and C	Calum Torrie	System Engineering	18 Apr 2018
G1800041-v1	Suggestion for LLO Fast Shutter Wire Dressing	Rich Abbott et al.	Operations System Engineering	09 Jan 2018
G1800061-v1	Beam dump materials evaluation - scatter, reflectivity and laser damage threshold (CW 1064nm)	Alena Ananyeva et al.	Basic R&D System Engineering	29 Aug 2018

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G1800087-v6	LIGO and the Detection of Gravitational Waves (Monrovia)	Norna Robertson et al.	Public Talk / Colloquium	07 Jun 2019
G1800293-v4	Presentation of Electric Field Meter (1st article) at Systems Meeting 2/28/2017 - updated with slides fo C F2F.	Rich Abbott et al.	Operations System Engineering	10 Apr 2018
G1800420-v1	Laser Damage investigations of 1064 nm absorbing materials in vacuum	Alena Ananyeva et al.	Public Talk / Colloquium System Engineering	29 Aug 2018
G1800436-x0	Photos, Chevron UV Baffle production workflow	Stephen Appert et al.	Vacuum Fabrication System Engineering	16 Mar 2018
G1800459-v2	Plans for the A+ Balanced Homodyne readout	Teng Zhang et al.	Sensing and Control Core Optics Detector A+ Basic R&D	07 Jul 2019
G1800630-v1	CAD Hi. Res. Images of LLO ETMx with AMDs	Eduardo Sanchez et al.	System Engineering	23 Mar 2018
G1801477-v2	A+ Systems Presentation for A+ baseline F2F meeting, Caltech, 24th to 26th July 2018	Calum Torrie et al.	Operations A+ System Engineering	24 Aug 2018
G1801900-v5	Alignment of the LIGO Detector: International Workshop on Accelerator Alignment 2018 at FNAL	Calum Torrie et al.	Operations System Engineering	08 Oct 2018
G1801931-v2	Survival & Training Material in support of 2018 LIGO upgrade to PDMPro	Calum Torrie et al.	Operations System Engineering	17 Apr 2020
G1801935-v5	Aplus meeting minutes	Michael Zucker et al.	A+	23 Mar 2023
G1801936-v13	A+ OPTICAL LAYOUT AND VACUUM EQUIPMENT LAYOUT SNAPSHOTS.	Calum Torrie et al.	Operations System Engineering	06 May 2020
G1801998-v2	A+ Some preliminary design ideas for the HAM Relay Triple Suspension (HRTS)	Norna Robertson et al.	A+ Suspensions	18 Mar 2019
G1802121-v8	How to select account numbers FY19-23 - Useful Flow diagram and table (Approved)	Calum Torrie et al.	System Engineering	24 May 2022
G1802144-v4	LHO HAM3 PR2 CAM VIEW FROM WAMCA1 VP3-2	Calum Torrie et al.	Commissioning System Engineering	09 Nov 2018
G1802223-v1	CAD Camera images from LLO ETMy for Scatter Evaluation	Eduardo Sanchez et al.	Auxiliary Optics System Engineering	27 Nov 2018
G1802260-v2	Bi-Monthly Update on Development Engineering, for the LIGO Excomm 3-Dec-2018 (Also Det Eng version 13-Dec-2018)	Dennis Coyne et al.	Detector Vacuum Reports System Engineering	09 May 2019
G1900171-v1	Bi-Monthly Update on Development Engineering, for the LIGO Excomm 4-Feb-2019	Calum Torrie et al.	Operations Vacuum Reports System Engineering	09 May 2019
G1900341-v2	Workflow for DCN's and Procurement (from technical side) - obsolete	Calum Torrie	Operations System Engineering	17 Feb 2023

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G1900706-v3	Bi-Monthly Update on Development Engineering AND LIGO Lab Integrated Resource Loaded Project Plan - Summary and Rules.	Calum Torrie <i>et al.</i>	Vacuum Reports System Engineering	09 May 2019
G1900890-v6	Program Management (LIGO's Program Plan) - Main	Calum Torrie	Management	13 Feb 2020
G1901027-v4	Observation and Detector Improvement Plan Considerations: LOPS, ALTS & A+	Dennis Coyne <i>et al.</i>	Detector A+ Integration Commissioning Installation System Engineering Management	05 Jun 2019
G1901099-v1	Project Management (Project Planning and Execution) - Breakout	Calum Torrie	Management	18 Jun 2019
G1901930-v1	Bi-Monthly Update on ALTS, for the LIGO Excomm 7-Oct-2019	Dennis Coyne <i>et al.</i>	Detector Commissioning Upgrades System Engineering	08 Dec 2019
G1901998-v2	Plans for O4: PAC #48 talk 2019	Calum Torrie	System Engineering Management	22 Nov 2019
G1902018-v3	A+ project status for PAC#48	Dennis Coyne <i>et al.</i>	Advisory Boards (e.g., PAC, PAP, ...)	16 Oct 2019
G1902098-v4	OBSOLETE (DO NOT USE)	Don Griffith <i>et al.</i>	A+	03 Dec 2020
G1902295-v1	Bi-Monthly Update on ALTS, for the LIGO Excomm 9-Dec-2019	Dennis Coyne <i>et al.</i>	Detector Commissioning Upgrades System Engineering	09 Dec 2019
G1902357-v1	CHRAAC presentation update - 16-Dec-2019	Aidan Brooks <i>et al.</i>	Basic R&D Auxiliary Optics	16 Dec 2019
G2000526-v2	CIT PPE Huntington Hospital Donation COVID-19 03262020	Elizabeth Natividad <i>et al.</i>	Public relations	23 Apr 2020
G2000528-v1	CIT PPE Methodist Hospital Arcadia Donation 03302020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	23 Apr 2020
G2000529-v2	CIT PPE City Of Hope Duarte Donation 2020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000530-v2	CIT PPE LA Mission Donation 040320 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	22 Apr 2020
G2000531-v2	CIT PPE Veterans Affairs (VA) Hospital Donation 2020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000568-v1	CIT PPE Caltech Student Health Center Donation 2020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	10 Apr 2020
G2000599-v1	CIT PPE Huntington Hospital Donation 2020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	17 Apr 2020
G2000600-v1	CIT PPE LA Mission Donation 2020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	17 Apr 2020
G2000610-v2	PAC 2020: Plans For Detector Improvements for O4; impacts of COVID-19	Calum Torrie	System Engineering	22 Apr 2020
G2000632-v1	CIT PPE City of Hope Duarte Donation 042020 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	22 Apr 2020

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G2000633-v1	CIT PPE Methodist Hospital Donation 042120 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	22 Apr 2020
G2000743-v1	CIT PPE British Home Donation 050220 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000744-v1	CIT PPE Brighton Convalescent Home Donation 050220 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000746-v1	CIT PPE Rose Garden Convalescent Center Donation 050320 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000747-x0	CIT PPE Donation 051120 COVID-19	Elizabeth Natividad <i>et al.</i>	Public relations	12 May 2020
G2000900-v3	NSF Meeting June 2020: LIGO Integrated Program Plan	Calum Torrie <i>et al.</i>	Operations Detector Upgrades	24 Jun 2020
G2001190-v1	LIGO All Hands Meeting: COVID-19 update and Employee Development [Caltech Status]	Calum Torrie	Management	24 Jul 2020
G2001197-v1	Meeting Recording -- All Hands Meeting, July 24, 2020	David Reitze <i>et al.</i>	Operations Business Management	24 Jul 2020
G2001699-v3	BS BRD installation update	Marie Kasprzack <i>et al.</i>	Final Design Suspensions	27 May 2021
G2001795-v1	L1 ETMY (ETM15) microscope inspection report - Post O3b	Marie Kasprzack <i>et al.</i>	Core Optics Basic R&D	02 Dec 2022
G2001904-v1	Lab Preparations for O4: Detectors (for PAC #50)	Calum Torrie	System Engineering	10 Nov 2020
G2001950-v1	COVID-19 impact on operations	Joe Giaime <i>et al.</i>	Advisory Boards (e.g., PAC, PAP, ...)	09 Nov 2020
G2100036-v1	Private Council Meeting Recording 20210106	Rana Adhikari <i>et al.</i>	Meeting Collaboration	07 Jan 2021
G2100258-v6	NSF Annual Review June 2021: Management of the LIGO Laboratory Detector Improvement Program	Calum Torrie	System Engineering	14 Jun 2021
G2100886-v2	LIGO All Hands Meeting 4/28/21 Presentation Slides	Danny Sellers <i>et al.</i>	Safety	28 Apr 2021
G2101215-x0	LLO HSTS Assembly Update Presentation (06/03/21)	Timothy O'Hanlon <i>et al.</i>	Assembly Suspensions	07 Jun 2021
G2102177-v1	PAC#52: DI and Comm Update OCT 2021 PAC#52	Calum Torrie <i>et al.</i>	System Engineering	19 Oct 2021
G2200066-x0	Supplemental Guidance to Installation Readiness Reviews (companion to section 11.4 of M1500263)	Calum Torrie	A+	20 Jan 2022
G2200606-v1	Add photodiodes to AERMs & CPs for beam position sensing (progress summary)	Peter Fritschel <i>et al.</i>	System Engineering	07 Feb 2023
G2200642-v2	PAC: DI and Comm Update Apr 2022 PAC#53	Calum Torrie <i>et al.</i>	System Engineering	23 May 2022
G2200786-v3	NSF Annual Review June 2022: Detector Improvements for O4: Program Management	Calum Torrie	System Engineering	01 Jun 2022
G2200870-v4	FC Tube Bellows Tool	Don Griffith <i>et al.</i>	A+ Suspensions	28 Jun 2022
G2200892-v7	Filter Cavity Tube Fixed Supports - A Summary of Re-design effort	Stephen Appert <i>et al.</i>	A+ System Engineering	15 Mar 2023
G2200997-v3	LIGO's Space Use and Request	Calum Torrie <i>et al.</i>	System Engineering	13 Feb 2023
G2201676-v1	Summary of issues associated with LLO SUS Hang ETMx Sept 2022	Huyen Pham <i>et al.</i>	System Engineering	15 Sep 2022

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G2201704-v2	LLO ETMx Sept 22, fibre selection C + D teams	Alan Cumming <i>et al.</i>	Suspensions	20 Sep 2022
G2201882-v2	PAC #54 - Meeting October 18, 19 2022: Preparations for 4, planning for Q5	Calum Torrie	System Engineering	18 Oct 2022
G2202066-v1	FC transmitted path alignment?	Calum Torrie <i>et al.</i>	A+ System Engineering	06 Jan 2023
G2202106-v1	SPC Presentation summarizing Dec 22 Report and Recommendations	Hannah Hansen <i>et al.</i>	Personnel Operations Business	12 Dec 2022
G2300051-v1	NSF Annual Review Feb 2023: Detector Improvement Project Management	Calum Torrie	Upgrades System Engineering Management	21 Feb 2023
G2300286-v2	A+ BHSS Picture Frame Inspection image requests from UofG (17 Feb 2023)	Russell Jones <i>et al.</i>	A+ Final Design Suspensions	17 Feb 2023
G2300334-x0	Answers to 2023 NSF Review panel Day 2 HW questions	David Reitze <i>et al.</i>	NSF Reviews Management	23 Feb 2023
G2300692-v2	BHQS installation and BHQS sizing ideas - Mar 2023 presentation at heavy-sus workshop at MIT	Calum Torrie <i>et al.</i>	Suspensions System Engineering	23 Mar 2023
L080022-v1	Report on B-OSEM Final Design Review and Fabrication Readiness Review	Betsy Weaver <i>et al.</i>	Document Migration	17 Feb 2013
L080026-x0	Review Committee Report on the E/ITM Structural Weldments FDR & FRR documents	Betsy Weaver <i>et al.</i>	Document Migration	08 Nov 2012
L080030-v1	Input Optics: Long-lead procurements Final Design Review	Gregg Harry <i>et al.</i>	Preliminary Design Letters Input Optics	02 Oct 2009
L080038-v1	Review committee questions to IO regarding the Longlead procurements Final Design Review	Gregg Harry <i>et al.</i>	Preliminary Design Letters Input Optics	02 Oct 2009
L080041-v1	Review committee questions to IO regarding the Longlead procurements Final Design Review	Gregg Harry <i>et al.</i>	Preliminary Design Letters Input Optics	02 Oct 2009
L080069-v1	Review committee report on the Input Optics Long-lead procurements Final Design Review	GariLynn Billingsley <i>et al.</i>	Document Migration	22 Sep 2012
L0900116-v7	AdL AOSEM Final Design Review and Fabrication Readiness Review (FDR.FRR) Committee Questions (Approved)	David Tanner <i>et al.</i>	Final Design Reviews	07 Mar 2014
L0900242-v3	IO FDR Review Reading Assignments	Jay Heefner <i>et al.</i>	Input Optics Reviews	14 Sep 2011
L0900243-v2	Input Optics FDR Review Committee First Questions to the IO Team	Jay Heefner <i>et al.</i>	Input Optics Reviews	22 Nov 2009
L1000003-v3	Ear Fabrication Readiness Review (Approved)	Gregg Harry <i>et al.</i>	Final Design Suspensions Reviews	15 Jan 2010
L1000031-v3	recommendations / questions / deliveries associated with the monolithic test hang at LASTI	Calum Torrie	System Engineering	11 Feb 2010
L1000062-v5	Review Committee Report on the Input Optics FDR Documents	Jay Heefner <i>et al.</i>	Final Design Input Optics Reviews	14 Sep 2011
L1000100-v1	Process used by vendor on Jan-Mar 2010 suspension prototype blades including curly ones.	Calum Torrie	Suspensions System Engineering	05 Mar 2010

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L1000101-v2	Clarification of request for transfer functions in Stray Light Control Preliminary Design Review Report	Calum Torrie	Auxiliary Optics System Engineering	09 Mar 2010
L1000270-v1	Questions and comments on Output Faraday Isolator Final Design documentation	Robert Schofield et al.	Auxiliary Optics Reviews	06 Oct 2010
L1000288-v1	Advanced LIGO Review Committee Report: Initial Questions on the Transmission Monitor and Suspension (TMS) Preliminary Design Review	GariLynn Billingsley et al.	Preliminary Design Letters Auxiliary Optics	21 Jun 2010
L1000297-v2	Advanced LIGO Review Committee Report: Initial Questions on the Transmission Monitor and Suspension (TMS) Preliminary Design Review and Answers from the TMS Team	GariLynn Billingsley et al.	Preliminary Design Letters Auxiliary Optics Reviews	30 Jun 2010
L1000298-v2	Review Committee Report on the Transmission Monitor and Suspension (TMS) Preliminary Design Review Documents	GariLynn Billingsley et al.	Auxiliary Optics Reviews	14 Jul 2010
L1000357-v3	Advanced LIGO Review Committee Report: Monolithic Stage of the Quad Suspension (Approved)	Douglas Cook et al.	Final Design Suspensions Reviews	05 Feb 2014
L1000458-v1	IO BAFFLE REVIEW COMMENTS	Calum Torrie	Input Optics System Engineering	03 Jan 2011
L1000459-v2	aLIGO Review Committee First Questions and Comments on the Input Optics Baffles and Beam Dumps Final Design Review Documents	Hiro Yamamoto et al.	Final Design Input Optics	22 Dec 2010
L1100029-v1	Advanced LIGO Review Committee Report: HAM IO Auxiliary SUS	Jay Heefner et al.	Final Design Reports Suspensions Input Optics	27 Oct 2011
L1100042-x0	NOTES ASSOCCOATED WITH SIGNATURES IN C1101402-v1	Calum Torrie	System Engineering	17 Feb 2011
L1100048-v1	Advanced LIGO Review Committee Report: Chamber Cleaning (Approved)	John Worden et al.	Vacuum Reviews System Engineering	09 Mar 2011
L1100085-v2	Input Optics FDR Organizing Document	Bob Anderson et al.	Final Design Input Optics Reviews	17 Apr 2011
L1100086-v2	aLIGO Review Committee Report: IO Baffle Final Design Review"	Bob Anderson et al.	Final Design Reports Input Optics	17 Apr 2011
L1100088-v1	aLIGO Review Committee First Questions and Comments on the Input Optics Installation Plan	GariLynn Billingsley et al.	Final Design Reports Input Optics	21 Apr 2011
L1100228-v3	TMS Team Answers for aLIGO FDR Review Committee First Questions, Comments and Action Items for the Transmission Telescope and Suspension (TMS) Documentation	Bob Anderson et al.	Auxiliary Optics Reviews	19 Jan 2012
L1200041-v1	TMS FDR Review Committee Business	Bob Anderson et al.	Core Optics Final Design	16 Feb 2012
L1200042-v1	Review Committee Report on the Transmission Monitoring Telescope and Suspension System (TMS) Final Design Documentation	Bob Anderson et al.	Auxiliary Optics Final Design	22 Sep 2012
L1200091-v2	AOS SLC Signal Recycling Cavity Baffles FDR Committee Questions	Calum Torrie	System Engineering	30 Apr 2012
L1200116-v1	Good News - An FM elliptical baffle is really only an FM elliptical baffle	Calum Torrie	System Engineering	04 Apr 2012
L1200210-v1	Recent experience in the Vacuum Preparation Lab at CIT	Dennis Coyne et al.	Operations Vacuum Quality	23 Feb 2021

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L1200232-v1	Cookie Cutter Alignment Templates - summary of assignments	Calum Torrie	Assurance System Engineering	03 Aug 2012
L1200291-v5	TRB Report: Recommendation related to the discrepancy between single version of the quad ITM suspensions and the optical layout which calls for a left and right handed versions (Approved)	Calum Torrie <i>et al.</i>	Installation System Engineering	11 Mar 2015
L1300009-v2	Response to Outer Loop FDR Report	Peter King <i>et al.</i>	Final Design Reviews	12 Mar 2013
L1300019-v1	Proposed ICS enhancements (list and associated cost) - Dec 2012	Calum Torrie <i>et al.</i>	System Engineering	13 Feb 2013
L1300024-x0	LHAM3 Install Task List OBSOLETE	Calum Torrie	Installation	04 Nov 2021
L1300025-x0	WHAM3 Install Task List OBSOLETE	Calum Torrie	Installation	04 Nov 2021
L1300026-v1	WHAM2 Install Task List	Calum Torrie <i>et al.</i>	Input Optics Installation	05 Feb 2015
L1300027-x0	LHAM2 Install Task List - OBSOLETE	Calum Torrie	Installation	04 Nov 2021
L1300028-x0	aLIGO Chamber (Top Level) Install Task Lists	Calum Torrie	Installation	17 Jul 2013
L1300049-v1	Wiha (Hex) Allen Keys - waiver on bake	Calum Torrie	System Engineering	11 Mar 2015
L1300055-v1	HSTS Lower Wire - Draft Statement and Recommendations Feb 2013	Calum Torrie	System Engineering	05 Mar 2013
L1300081-v1	Contamination Control Requirements on Vacuum Cleaners going forward	Calum Torrie	System Engineering Management	19 Apr 2013
L1300082-v1	Contamination Control Requirements on Cleaning Oily Greasy Floors	Calum Torrie	System Engineering Management	26 Apr 2013
L1300083-v1	Contamination Control Guidance on Cleanroom Ladders / Steps	Calum Torrie	System Engineering Management	03 Apr 2013
L1300086-v3	Contamination Control Guidance on Cleanroom ESD Scrubs (Approved)	Calum Torrie	System Engineering	24 Apr 2015
L1300087-v8	Contamination Control Guidance on Cleaning Cleanrooms and VEA like areas	Calum Torrie	System Engineering	11 Mar 2014
L1300094-v1	Contamination Control Suggestion on flooring for cleanrooms and transition areas	Calum Torrie	System Engineering	03 Jun 2013
L1300095-v1	Contamination Control Guidance on dedicated shoes for clean area	Calum Torrie	System Engineering	25 Aug 2022
L1300096-v1	Contamination Control Guidance on cleaning dirty shoe covers and cleanroom boots	Calum Torrie	System Engineering	12 Apr 2013
L1300097-v2	Contamination Control Requirement on sticky mats	Calum Torrie	System Engineering	04 Jun 2021
L1300098-v1	Contamination Control Requirement on Bouffant Caps	Calum Torrie	System Engineering	24 Apr 2013
L1300130-v4	Contamination Control Requirements for regular cleaning of Cleanroom and Clean area floors	Calum Torrie <i>et al.</i>	System Engineering Management	11 Mar 2014
L1300225-v1	Review committee report on the TMS Acceptance Documentation	Rich Abbott <i>et al.</i>	Auxiliary Optics	06 Nov 2013
L1300226-v29	Transmission Monitoring Telescope and Suspension Fabrication Acceptance Review Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics	20 Mar 2015
L1300227-v36	AOS Optical Levers Fabrication Acceptance Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics	13 Mar 2015
L1400006-x0	Fabrication Acceptance Review Documents and Status	David Shoemaker <i>et al.</i>	Detector Reviews	06 May 2015
L1400020-v1	Recommendation - Containing the spread of magnetized metal particles	Calum Torrie	Operations Installation System	07 Feb 2014

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L1400049-v3	Gustafson's TCS Hartman Wavefront Sensor Fabrication Acceptance Review Questions	Eric Gustafson <i>et al.</i>	Engineering Auxiliary Optics Reviews	06 May 2014
L1400065-v1	Gustafson's Input Optics Table Fabrication Acceptance Review Questions	Guido Mueller <i>et al.</i>	Input Optics Reviews	17 Apr 2014
L1400069-x0	Caltech Laser Standard Operating Procedures and their Status	Eric Gustafson <i>et al.</i>	Safety	02 Nov 2020
L1400078-v2	Memo describing the LHO and LLO Repository and its relationship to 3rd IFO Storage and storage of L1 and H1 in-process spares (Approved)	Calum Torrie	System Engineering	25 Jan 2018
L1400082-v2	LLO Installation Acceptance Review Report (Approved)	Michael Landry <i>et al.</i>	Detector Installation Reviews	21 Jun 2014
L1400147-v12	IO PSL Table Fabrication Acceptance Punch List	Guido Mueller <i>et al.</i>	Auxiliary Optics Reviews	19 Feb 2015
L1400148-v6	TCS CO2 Laser Projector Fabrication Acceptance Review Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	13 Mar 2015
L1400149-v1	TCS Hartman Wavefront Sensor Fabrication Acceptance Review Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	19 Oct 2014
L1400150-v1	TCS Ring Heater Fabrication Acceptance Review Punch List	David Shoemaker <i>et al.</i>	Auxiliary Optics Reviews	13 Sep 2014
L1400166-v7	AOS Photon Calibrator Fabrication Acceptance Punch List	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	31 Mar 2015
L1400167-v7	IO Power Control Fabrication Acceptance Punch List	Matthew Heintze <i>et al.</i>	Input Optics Reviews	01 Apr 2015
L1400173-v11	This is a list of Actions and Findings from the IO Final Design Review Report L1000062 and their status as part of the Fabrication Acceptance Review	Eric Gustafson <i>et al.</i>	Input Optics Reviews	01 Apr 2015
L1400175-x0	Fabrication Acceptance Review Punchlists and their Status	Eric Gustafson <i>et al.</i>	Fabrication Reviews	19 Oct 2014
L1500019-v1	LHO Installation Acceptance Review Report (Approved)	Michael Landry <i>et al.</i>	Reviews	06 May 2015
L1500038-v1	J. Bartlett email on the status of Eddy Current Damping Magnets in TMS	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	10 Mar 2015
L1500040-v1	K. Kawabe email on the status of Eddy Current Damping Magnets in TMS	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	12 Mar 2015
L1500047-v3	Resolution of Fabrication Acceptance Review Punch List Item related to the Output Faraday Isolator (OFI) Final Design Review Report	Dennis Coyne <i>et al.</i>	Auxiliary Optics Reviews	31 Mar 2015
L1500069-v1	VOYAGER Meeting Notes	Rana Adhikari <i>et al.</i>	Basic R&D	05 Jun 2015
L1500077-v2	Voyager 'Roadmap' for Suspensions	Dennis Coyne <i>et al.</i>	Basic R&D Suspensions	30 Apr 2015
L1500080-v1	OMC Black Glass - key communication	Calum Torrie	Operations System Engineering	29 May 2015
L1500091-v1	Trip Report to PG&O - OMC Black Glass	Calum Torrie <i>et al.</i>	System Engineering	29 May 2015
L1500092-v2	Review report: BSC auxiliary optics platform for LASTI squeezing experiment	Norna Robertson <i>et al.</i>	Seismic Isolation Requirements Vacuum Basic R&D	10 Aug 2015

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			Conceptual Design Reports Suspensions Subsystem Test Reviews Squeezer System Engineering	
L1500107-v2	Thermodyne Visit- Surface Charge Control Ionizer	Elizabeth Natividad et al.	System Engineering	06 Aug 2015
L1600066-v2	Memo on use of tape in and around clean (class A) components for LIGO (Approved)	Calum Torrie	System Engineering	21 Jun 2018
L1600105-x0	Summary of OMC Stray Light Baffle / OMC Black Glass Shroud ICS Entries	Calum Torrie et al.	Auxiliary Optics Installation	06 Sep 2016
L1600116-x0	Material for the preparation of talks	David Reitze et al.	Public Talk / Colloquium	14 May 2019
L1600118-v1	RDC Review: CIT coating mechanical loss test apparatus (Approved)	Michael Zucker et al.	Core Optics Proposals Basic R&D Operations Business Technical Review Board Reviews	19 Sep 2016
L1600151-v1	Review of Single UV Chevron Baffle - response to comments from committee (Approved)	Calum Torrie	System Engineering	30 Nov 2016
L1600154-v1	Review of VOPO Suspension - Response from committee (and approval) (Approved)	Calum Torrie	Operations System Engineering	30 Nov 2016
L1800033-v1	Review of Electric Field Meter - collection of questions / recommendations / suggestions @ Systems Meeting 28th Feb 2018	Calum Torrie	Operations System Engineering	01 Mar 2018
L1800064-v1	LLO Shipment FTIR Kit CIT Calum 03232018	Nichole Washington et al.	Operations Shipping	23 Mar 2018
L1800081-v1	VRB: Request for approval to install a conflat sealed electric field meter	Rich Abbott et al.	Operations System Engineering	17 Apr 2018
L1800158-v1	CIT Shipment to LHO Savage Appert 20170504	Stephen Appert et al.	Shipping	25 Sep 2018
L1800216-v1	"6 points" from CIT visit to LLO (associated with 2018 fiber issues)	Calum Torrie	Operations Suspensions System Engineering	05 Jul 2018
L1800217-v1	Copy of memo "Dennis, Peter, Calum" (associated with delamination investigation of one area of one ear of ETM15 @ LLO ETMy)	Calum Torrie et al.	Operations Suspensions System Engineering	05 Jul 2018
L1800218-v1	Copy of e-mail chain titled "something to be concerned about" (associated with delamination investigation of one area of one ear of ETM15 @ LLO ETMy)	Calum Torrie et al.	Operations Suspensions System Engineering	24 Jul 2019
L1800299-v2	CDR Report: A+ SEI External Structure (Approved)	Calum Torrie et al.	System Engineering	16 Jan 2019
L1800328-v1	Tips and Tricks for PDM Pro Solidworks Vault Users	Stephen Appert et al.	System Engineering	03 Mar 2021
L1800351-v1	FDR update on the HAM-ISI - Committee Report (Approved)	Calum Torrie	Operations System Engineering	29 Oct 2018

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<u>L1800367-v2</u>	<u>Hawaii Observatories Trip Report – 14-18 October 2018</u>	<u>Fred Raab et al.</u>	<u>Operations</u> <u>Operations</u> <u>Business</u>	07 Nov 2018
<u>L1800378-v1</u>	<u>Notes for LIGO-India Quarterly Systems Meeting, 4-Sep-2018</u>	<u>Calum Torrie</u>	<u>System Engineering</u> <u>LIGO-India</u>	08 Nov 2018
<u>L1900039-v2</u>	<u>PDR Report: A+ SEI External Structure</u> (Approved)	<u>Calum Torrie</u>	<u>A+</u> <u>System Engineering</u>	04 Mar 2019
<u>L1900050-v1</u>	<u>DRR / CDR Report: Violin Mode Damper</u>	<u>Calum Torrie</u>	<u>Operations</u> <u>System Engineering</u>	04 Mar 2019
<u>L1900064-v2</u>	<u>OBSOLETE - Informal guidance for A+ large procurements</u>	<u>GariLynn Billingsley et al.</u>	<u>Policies</u> <u>Procurements</u> <u>A+</u> <u>Operations</u> <u>Business</u>	17 Nov 2022
<u>L1900107-v4</u>	<u>DRR / CDR Report: SLiC C1</u>	<u>Calum Torrie</u>	<u>System Engineering</u>	11 Apr 2019
<u>L1900210-v2</u>	<u>FDR Report: A+ SEI External Structure</u> (Approved)	<u>Calum Torrie</u>	<u>A+</u>	17 Jul 2019
<u>L1900222-v1</u>	<u>LIGO Responses to "Notes from LIGO Telecon 10 June"</u>	<u>David Reitze et al.</u>	<u>NSF</u> <u>Reviews</u> <u>Management</u>	15 Jun 2019
<u>L1900243-v1</u>	<u>O3 LIGO Observatory Commissioning Break Period</u>	<u>Fred Raab et al.</u>	<u>Operations</u> <u>Business</u> <u>Management</u>	30 Jul 2019
<u>L1900323-v1</u>	<u>LIGO A+ Active Wavefront Control sensors and actuators (ISC) Design Requirements Review (DDR) Charge</u>	<u>Calum Torrie</u>	<u>A+</u> <u>System Engineering</u>	05 Sep 2019
<u>L1900501-v2</u>	<u>Phase B FDR Report, A+ Vacuum System Modification</u> (Approved)	<u>Stephen Appert et al.</u>	<u>Vacuum</u> <u>System Engineering</u>	02 Jan 2020
<u>L2000020-v1</u>	<u>FDR (Questions &) Report: A+ Vac Part A</u> (Approved)	<u>Calum Torrie et al.</u>	<u>Vacuum</u> <u>A+</u> <u>System Engineering</u>	28 Feb 2020
<u>L2000033-v1</u>	<u>(Questions &) Report: Review of GV11 (2nd) Retrofit @ LLO.</u>	<u>Calum Torrie</u>	<u>Operations</u> <u>System Engineering</u>	04 Nov 2021
<u>L2000036-v1</u>	<u>Committee Report: Cleanroom design for over HAM 5 6 7 Conceptual Design Review</u> (Approved)	<u>Calum Torrie</u>	<u>Operations</u> <u>System Engineering</u>	12 Feb 2020
<u>L2000082-v1</u>	<u>Approval - Procedure for H2 de-installation of vacuum chambers and equipment and seismic support tubes.</u>	<u>Calum Torrie</u>	<u>Operations</u> <u>Vacuum</u> <u>System Engineering</u>	13 Mar 2020
<u>L2000084-v1</u>	<u>A+ HDS PDR: Reviewer Report</u> (Approved)	<u>Calum Torrie</u>	<u>A+</u> <u>System Engineering</u>	02 Apr 2020
<u>L2000099-x0</u>	<u>Reviewer Questions (and report) A+ ISC Final Design Review [Obsolete]</u>	<u>Daniel Sigg et al.</u>	<u>Sensing and Control</u> <u>A+</u> <u>System Engineering</u>	05 Mar 2020
<u>L2000106-v1</u>	<u>LIGO A+ Ham Relay Triple Suspension (HRTS) (SUS) Preliminary Design Review (PDR) REPORT</u>	<u>Calum Torrie et al.</u>	<u>A+</u> <u>System Engineering</u>	09 Mar 2020
<u>L2000129-v1</u>	<u>Agenda(s) for CIT / MIT Weekly Group Meeting</u>	<u>Calum Torrie et al.</u>	<u>System Engineering</u>	24 Aug 2020
<u>L2000143-v1</u>	<u>Committee Report: A+ Baffles for O4 CDR</u> (Approved)	<u>Calum Torrie</u>	<u>A+</u> <u>System Engineering</u>	24 Aug 2020

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L2000153-v1	VRB Response to request to use Thorlabs BKF12 aluminum epoxy AR foil	Jon Feicht et al.	Vacuum System Engineering	24 Apr 2020
L2000166-v4	Review Report of Proposed Covid-19 Mitigation Measures and Risk/Hazard Assessment	Calum Torrie et al.	Safety System Engineering	01 Jun 2020
L2000174-v1	LIGO Operations Restart Cost Estimates related to COVID-19	Dennis Coyne et al.	NSF Memorandum Management	01 Jun 2020
L2000182-v3	Respirator & Mask Options for LIGO Laboratory in Covid era (Approved)	Nichole Washington et al.	Operations Procurements Memorandum	18 Feb 2021
L2000190-x0	Airflow and Air-Scrubber Options for LIGO Laboratory in Covid era	Calum Torrie	Safety System Engineering	04 Jun 2020
L2000193-v1	LIGO A+ Active Wavefront Control sensors and actuators (ISC/AWC) Preliminary Design Review (PDR) Charge	Calum Torrie et al.	A+ System Engineering	10 Jun 2020
L2000197-v2	YOURNAME Health Attestation and Self-Reported Contact and Location Log	GariLynn Billingsley et al.	Safety	11 Jun 2020
L2000199-v2	Student Worker Job Description Postbac Summer 2020	Stephen Appert et al.	Personnel	12 Jun 2020
L2000201-v2	Returning to work — Agreement form (CIT staff)	Calum Torrie et al.	Management	11 Jul 2021
L2000224-v1	Astro Pak Knepper shipment LIGO SEI parts samples to JPL Mennella 072320	Calum Torrie et al.	Operations Shipping	03 Aug 2020
L2000225-x0	FTIR Kits and FTIR Inventory 2020-2021	Calum Torrie et al.	Operations	09 Dec 2021
L2000240-v1	Committee Report: HAM 5/6/7 Cleanroom Final Design (Approved)	Calum Torrie	A+ System Engineering	24 Aug 2020
L2000241-v1	A+ Reviewer Report: HAM7 and HAM8 Baffles for O4 FDR [part 1] (Approved)	Calum Torrie	A+ System Engineering	27 Sep 2020
L2000242-v1	Committee Report: A+ Final Design of FC Tube Baffles for O4 (Approved)	Calum Torrie	A+ System Engineering	25 Aug 2020
L2000243-v1	[Memo] Readiness Review: LLO EndY Ops / DI vent Sept 2020 (Approved)	Calum Torrie et al.	System Engineering	26 Aug 2020
L2000244-v1	A+ HDS Common Machined Parts: Final Design Report (Pending - No approved version)	Calum Torrie et al.	A+ System Engineering	07 Feb 2022
L2000254-v1	Committee [Interim] Report: VMD Tooling and VMD Update [Sept 2020]	Calum Torrie	Suspensions System Engineering	06 Nov 2020
L2000256-v1	Report on Review of Magnet Bonding Tooling for A+ Filter Cavity Optics (Approved)	Norna Robertson et al.	A+ Suspensions	30 Sep 2020
L2000259-v1	BS BRD for O4: Installation Readiness Review Report (Approved)	Calum Torrie et al.	Operations System Engineering	09 Oct 2020
L2000260-v1	LIGO, Caltech Laboratory Self-Inspection Checklist 2020	Calum Torrie et al.	Management	21 Oct 2020
L2000264-v2	A+ Bigger Beamsplitter Suspension (BBSS) - Final Design Review Committee Questions & [Draft Report] (Approved)	Rich Abbott et al.	A+ System Engineering	05 Jan 2021
L2000265-v2	Installation Readiness Review Report: A+ HAM7 Chamber Installation Plan	Calum Torrie	A+ System Engineering	30 Nov 2020
L2100007-v1	LIGO's COVID-19 Testing Program: Responses to NSF Questions	David Reitze et al.	NSF Memorandum Management	11 Jan 2021

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L2100010-v1	A+ HDS FDR: Meeting Recording 1/21/21	GariLynn Billingsley et al.	A+ Suspensions Reviews	21 Jan 2021
L2100017-x0	VRB Request log #34: A+ Production BOSEMs and aLIGO LED Refurbishment	Rich Abbott et al.	Operations A+ System Engineering	29 Jan 2021
L2100020-v2	Notes on the EDC Meeting, 20-Jan-2021	Dennis Coyne et al.	Meeting Personnel Memorandum	11 Feb 2021
L2100023-v1	DI and Comm Meeting Summary & Definition 2021	Calum Torrie	A+ System Engineering	04 Nov 2021
L2100029-x0	LIGO A+ Active Wavefront Control sensors and implementation (ISC/AWC) Final Design Review (FDR) Charge	Calum Torrie et al.	A+ Auxiliary Optics Final Design	22 Feb 2021
L2100036-v1	Notes for LIGO-India Systems Meeting, 16-Mar-2021	Calum Torrie	Meeting System Engineering LIGO-India	16 Mar 2021
L2100039-v1	LIGO Facilities Use of Protective Face Coverings	Danny Sellers et al.	Safety	19 Mar 2021
L2100056-v1	A+ O4 HAM5/HAM7 Installation Readiness Review Report (Approved)	Calum Torrie	A+ System Engineering	28 Jul 2021
L2100058-v1	LIGO, Caltech Laboratory Self-Inspection Checklist 2021	Nately Sych et al.	Management	13 Jul 2021
L2100060-v6	Technical Review Board (TRB): Deinstallation/Cleaning/Reinstallation plan of LLO HAM7 Chamber (Approved)	Michael Zucker et al.	A+ System Engineering	12 Jul 2021
L2100066-v1	VRB request to clean LLO HAM 8 for A+ use	Jon Feicht et al.	Vacuum Letters A+	11 Jun 2021
L2100084-v2	Technical Review Board (TRB): SEI Nickel Plating Review (Approved)	Calum Torrie et al.	System Engineering	06 Oct 2021
L2100093-v1	[Memo] Readiness Review: LHO ITMY Swap and associated BSC vent activities (Approved)	Calum Torrie	System Engineering	10 Jun 2021
L2100094-v1	[Memo] Readiness Review: LHO Vertex Vent Readiness Review 2021 (Approved)	Calum Torrie	System Engineering	10 Jun 2021
L2100096-v2	Review of Shipping Condition of HAM Chambers: Review Charge	Calum Torrie	Operations A+ System Engineering	28 Jul 2021
L2100105-v1	Manufacture of Production Blades for BBSS (Approved)	Norna Robertson et al.	A+ Suspensions	30 Jun 2021
L2100110-v1	OMC FDR Update - Charge	Calum Torrie	A+ System Engineering	08 Jul 2021
L2100112-v1	VRB Request: Request to waive further testing on new Actuator Wire given equivalence to previously approved wire.	Calum Torrie et al.	A+ System Engineering	08 Jul 2021
L2100140-v2	Calum Torrie Resume, Cover Letter and Engineering Documents Oct 2021	Calum Torrie	System Engineering	04 Oct 2021
L2100151-v3	Technical Review Board (TRB) Report: LLO HAM Bake-out Plan (and follow up scans on LHAM8)	Calum Torrie	Operations A+ System Engineering	20 Jul 2022
L2100152-v1	A+ HSTS (FC1s) Installation Readiness Review Report (IRRR) (Approved)	Calum Torrie et al.	A+ System Engineering	20 Jan 2022

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L2200015-v1	HRTS FDR Update (PRR) - Charge	Calum Torrie	A+ System Engineering	10 Mar 2022
L2200016-v1	BBSS FDR Update (PRR) - Charge	Calum Torrie	A+ System Engineering	10 Mar 2022
L2200034-v1	LIGO, Caltech Laboratory Self-Inspection Checklist 2022	Nately Sych et al.	Management	07 Jul 2022
L2200042-v2	VRB Request: Connection of the WHAM7 Vacuum Chamber to the Existing Vertex (Corner) Volume @ LHO	Jordan Vanosky et al.	Vacuum A+ System Engineering	24 May 2022
L2200053-v1	Answers to Pre-review Questions to LIGO from the NSF 2022 review panel	Fred Raab et al.	NSF Reviews Management	26 May 2022
L2200054-v2	TRB Charge: Filter Cavity Tube Assembly Damage Risks.	Calum Torrie	A+ System Engineering	14 Jul 2022
L2200057-x0	Responses to homework questions from the 2022 NSF Review Panel	David Reitze et al.	NSF Reviews Management	02 Jun 2022
L2200064-v1	Analysis: Review and define allowed maximum distance between a filter Cavity fixed support and Bellows	Calum Torrie et al.	Vacuum System Engineering	08 Jul 2022
L2200066-v1	Re-allocation of space in Downs (and Bridge) - proposal from LIGO Engineering	Calum Torrie	System Engineering	21 Jul 2022
L2200069-v1	VRB Request: Connection of a new dry air compressor in the corner station at LIGO Livingston (Approved)	Scott McCormick et al.	Operations Vacuum System Engineering	08 Sep 2022
L2200070-v1	VRB Request: Connection of a new dry air compressor in the FCES at LIGO Livingston (Pending - No approved version)	Matthew Heintze et al.	Vacuum A+	20 Oct 2022
L2200072-v4	VRB Request Waiver - RGA Scans of Recent HTDS Shipments (Approved)	Calum Torrie et al.	A+ System Engineering	24 Aug 2022
L2300002-v2	Technical Review Board (TRB) report on the potential impact of the proposed Scout Wind Farm Expansion (2023)	Dennis Coyne et al.	Seismic Isolation System Engineering	20 Jan 2023
L2300013-v1	LIGO's Responses to the Questions from the LIGO 2024-28 pre-review Telecon #2	Peter Fritschel et al.	NSF Reviews Management	17 Feb 2023
L2300015-x0	A+ vacuum acceptance review assignments, meeting plan and location for questions (and report v1)	Calum Torrie et al.	A+ System Engineering Management	16 Mar 2023
L2300016-v1	CIT Communications for Weld Lab Support	Madeline Lesovsky et al.	Basic R&D	08 Mar 2023
L2300017-v1	Criteria for the O4 Detector Author List	Peter Fritschel et al.	Policies Collaboration	17 Mar 2023
P000040-v1	[Thesis] DEVELOPMENT OF SUSPENSIONS FOR THE GEO 600 GRAVITATIONAL WAVE DETECTOR	Calum Torrie	Suspensions	12 Nov 2021
P020001-x0	Quadruple Suspension Design for Advanced LIGO	Gianpietro Cagnoli et al.	Document Migration	26 Jun 2002
P020048-x0	Silica Research in Glasgow	Bryan Barr et al.	Document Migration	11 May 2007
P040044-x0	Seismic Isolation and Suspension Systems for Advanced LIGO	Benjamin Abbott et al.	Document Migration	21 Oct 2004
P050024-x0	Design and Prototype Tests of a Seismic Attenuation System for the Ad-LIGO Output Mode Cleaner	Alessandro Bertolini et al.	Document Migration	31 Aug 2005

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P060013-x0	An investigation of eddy-current damping of multi-stage pendulum suspensions for use in interferometric gravitational wave detectors	Mark Barton <i>et al.</i>	Document Migration	08 May 2006
P0900053-v3	Thermal noise arising from bonds in the Advanced LIGO test mass suspensions	Iain Martin <i>et al.</i>	Suspensions	22 Jan 2014
P1100048-v1	Digital Scale Instruction Manual	Jeffrey Bartlett <i>et al.</i>	Suspensions	15 Apr 2011
P1300192-v2	Optical contamination control in the Advanced LIGO ultra-high vacuum system	Margot Hennig <i>et al.</i>	Core Optics System Engineering	11 Mar 2014
P1400205-v8	Coming Clean: Understanding and Mitigating Optical Contamination and Laser Induced Damage in Advanced LIGO	Kaitlin Gushwa <i>et al.</i>	Core Optics System Engineering	28 Oct 2014
P1400228-v1	Method for Analyzing Digital images of witness samples from with LIGO	Kaitlin Gushwa <i>et al.</i>	Core Optics System Engineering	03 Nov 2014
P1600328-v7	Design of a Tuned Mass Damper for High Quality Factor Suspension Modes in Advanced LIGO	Brett Shapiro <i>et al.</i>	Basic R&D Suspensions	11 Apr 2017
P1700078-v2	A high throughput instrument to measure mechanical losses in thin film coatings	Gabriele Vajente <i>et al.</i>	Core Optics Basic R&D	21 Apr 2017
P1700372-v1	Effect of elevated substrate temperature deposition on the mechanical losses in tantala thin film coatings	Gabriele Vajente <i>et al.</i>	Core Optics Basic R&D	01 Nov 2017
P1900316-v1	Cosmic Explorer: The U.S. Contribution to Gravitational-Wave Astronomy beyond LIGO	David Reitze <i>et al.</i>	Detector Activity Basic R&D	11 Oct 2019
P2100315-v4	Piezo-deformable Mirrors for Active Mode Matching in Advanced LIGO (PSAMS Design Paper)	Varun Srivastava <i>et al.</i>	Sensing and Control A+ Auxiliary Optics	07 Feb 2022
T010103-v1	aLIGO Suspension System Conceptual Design	Russell Jones <i>et al.</i>	Conceptual Design Suspensions	09 Jun 2011
T020011-x0	Suspension model comparisons	Mark Barton <i>et al.</i>	Document Migration	11 Jul 2014
T030104-x0	Mode Cleaner Controls Prototype Blade Length Measurements with Deflection & Thickness Measurements Embedded as an Excel File	Helena Armandula <i>et al.</i>	Document Migration	09 Oct 2003
T030107-x0	Cantilever Blade Spring Analysis for the Modecleaner Suspension of Advanced LIGO	Michael M Perreux-Lloyd <i>et al.</i>	Document Migration	15 Sep 2003
T030125-x0	Controls Prototype: - Library of Clamps for the Cantilever Blades in the Mode Cleaner Suspension.	Russell Jones <i>et al.</i>	Document Migration	25 Aug 2004
T030135-x0	Controls Prototype: - Measurements on the Mode Cleaner Triple Pendulum at Caltech	Mark Barton <i>et al.</i>	Document Migration	16 Jul 2008
T030137-x0	ETM Controls Prototype: Mass Estimate of an ETM Suspension Layout	Caroline Cantley <i>et al.</i>	Document Migration	13 Apr 2006
T030143-x0	Designing in Solidworks: Customised Tools for Design and Documentation of LIGO Parts, Assemblies, and Drawings	Michael M Perreux-Lloyd <i>et al.</i>	Document Migration	06 Feb 2004
T030147-x0	Advanced LIGO SUS Mode Cleaner Spacers & Standoffs for the Top Mass	Michael M Perreux-Lloyd <i>et al.</i>	Document Migration	09 Oct 2003
T030197-x0	Advanced LIGO SUS Controls Prototype: - Advanced LIGO Suspension Workshop Schedule, 13-18 October 2003	Janeen Romie <i>et al.</i>	Document Migration	09 Oct 2003
T030211-x0	Advanced LIGO SUS ETM Summary of Work for a Blade Test Facility	Caroline Cantley <i>et al.</i>	Document Migration	09 Oct 2003
T030220-x0	ADVANCED LIGO SUSPENSIONS, VISIT TO RUTHERFORD APPLETON LABORATORY, MAY 2002	Russell Jones <i>et al.</i>	Document Migration	07 Oct 2003
T030222-x0	ADVANCED LIGO SUSPENSIONS - Questions: How much work is required to dis-assemble and re-assemble the 2001 quadruple pendulum at MIT? And what if instead work was done to align the two suspensions with respect to each other?	Calum Torrie	Document Migration	07 Oct 2003

<u>LIGO-Number</u>	<u>Title</u>	<u>Author(s)</u>	<u>Topic(s)</u>	<u>Last Updated</u>
T030223-x0	Review of basic shorting tests on Coil Formers D020188-04 and D020188-08	Russell Jones et al.	Document Migration	07 Oct 2003
T030241-x0	MEETING ADVANCED LIGO MODE CLEANER MIRROR SUSPENSION NOISE REQUIREMENTS WITH COMBINATIONS OF ACTIVE AND EDDY CURRENT LOCAL DAMPING	Ken Strain et al.	Document Migration	09 Oct 2003
T030242-x0	Advanced LIGO SUS Summary of Cantilever Blade Wire Clamp Testing	Caroline Cantley et al.	Document Migration	09 Oct 2003
T030257-x0	Discussion: Supply of COILS and ASSOCIATED PARTS FOR THE LASTI CONTROLS PROTOTYPES	Russell Jones et al.	Document Migration	04 Nov 2003
T030273-x0	Case Study: Using ANSYS to Predict the Lowest Flexural Internal Mode Frequency of the MC and RM Upper Blades	Russell Jones et al.	Document Migration	03 May 2004
T030278-x0	Advanced LIGO SUS Preliminary Frequency Analysis of the Mode Cleaner Structure	Mark Barton et al.	Document Migration	07 Apr 2005
T030734-x0	Concept for Addition/Subtraction of 500g to/from the Recycling Mirror Intermediate Mass	Alastair Grant et al.	Document Migration	06 Feb 2004
T040004-x0	Review of the GEO 600 Blade Eddy Current Damper	Russell Jones et al.	Document Migration	03 May 2004
T040013-v2	ETM Controls Prototype Information Related to Design	Calum Torrie et al.	Conceptual Design Suspensions	06 Jun 2013
T040016-x0	ADVANCED LIGO SUS QUAD ETM CONTROLS PROTOTYPE TASK SUMMARY	Caroline Cantley et al.	Document Migration	26 Aug 2004
T040027-v2	Conceptual Design of Beamsplitter Suspension for aLIGO	Norna Robertson et al.	Conceptual Design Suspensions	14 Mar 2019
T040028-x0	Investigation of Wire Lengths in Advanced LIGO Quadruple Pendulum Design for ETM/ITM	Mark Barton et al.	Document Migration	25 Feb 2004
T040038-x0	Investigation of Suspension of Compensator Plate in ITM Reaction Chain	Norna Robertson et al.	Document Migration	14 Dec 2004
T040071-x0	Top Mass for ETM Controls Prototype Quad Pendulum Suspension - Product Design Specification	Caroline Cantley et al.	Document Migration	27 Jul 2005
T040073-x0	Top Mass for the ETM Controls Prototype Quad Pendulum Suspension	Michael M Perreur-Lloyd et al.	Document Migration	03 May 2004
T040080-x0	Advanced LIGO Catcher Jig Product Design Specification for the ETM Controls Prototype	Caroline Cantley et al.	Document Migration	14 Sep 2004
T040095-x0	Upper-Intermediate Mass for the ETM Controls Prototype Quad Pendulum Suspension - Design Brief	Michael M Perreur-Lloyd et al.	Document Migration	02 Jun 2004
T040096-x0	Upper-Intermediate Mass for the ETM Controls Prototype Quad Pendulum Suspension - Product Design Specification	Michael M Perreur-Lloyd et al.	Document Migration	28 Jul 2004
T040108-v1	Blade process	Justin Greenhalgh	Fabrication Suspensions	02 Nov 2010
T040111-v1	Galling Tendencies and Particles Produced by Ultra Clean Screw Threads	Michael Gerfen et al.	Basic R&D System Engineering	10 Nov 2015
T040112-x0	Summary of Results of CAD File Format Compatibility Tests	Michael M Perreur-Lloyd et al.	Document Migration	26 May 2004
T040118-x0	Mode Cleaner Top Blade Rotational Adjuster Design	Alastair Grant et al.	Document Migration	23 Jul 2004
T040141-x0	ETM Upper Structure Product Design Specification	Michael M Perreur-Lloyd et al.	Document Migration	06 Aug 2004
T040153-x0	Blade Specification Document (Quad Controls Prototype)	Michael M Perreur-Lloyd et al.	Document Migration	05 Aug 2004
T040206-x0	Sketches of Blade and Clamp to an Assist Explanation of the Placement of the Recess in the Blade Clamp	Alastair Grant et al.	Document Migration	13 Oct 2004

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<u>T040214-x0</u>	<u>Advanced LIGO Parameters for Current ETM/ITM Main Chain Noise Prototype Design</u>	<u>Helena Armandula et al.</u>	<u>Document Migration</u>	14 Dec 2004
<u>T040229-v1</u>	<u>Blade Characterization ETM C-PTYPE</u>	<u>Calum Torrie</u>	<u>Suspensions</u>	14 Jan 2010
<u>T050010-x0</u>	<u>Monolithic Suspension Workshop (Glasgow Jan 2005): Minutes & Actions</u>	<u>Helena Armandula et al.</u>	<u>Document Migration</u>	15 Feb 2005
<u>T050019-x0</u>	<u>ADVANCED LIGO: Information Related to the Procurement of Cantilever Blades for the Controls Prototype Quad ETM Suspension</u>	<u>Calum Torrie</u>	<u>Document Migration</u>	02 Mar 2005
<u>T050033-x0</u>	<u>Advanced LIGO SUS ETM Controls Prototype: The Question of Mass To Mass Separation Within the Catcher / Assembly Rig</u>	<u>Caroline Cantley et al.</u>	<u>Document Migration</u>	28 Mar 2005
<u>T050034-x0</u>	<u>ETM Controls Prototype: "3 & 1" Assembly Technique plus additional discussion material</u>	<u>Caroline Cantley et al.</u>	<u>Document Migration</u>	28 Mar 2005
<u>T050046-x0</u>	<u>Seismic and Thermal Noise Peaks from Blade Internal Modes in an ETM/ITM Quadruple Pendulum</u>	<u>Norna Robertson et al.</u>	<u>Document Migration</u>	29 Mar 2005
<u>T050067-x0</u>	<u>New mirror support point design</u>	<u>Riccardo DeSalvo et al.</u>	<u>Document Migration</u>	28 Apr 2005
<u>T050077-x0</u>	<u>Separation of chains in quad suspensions</u>	<u>Caroline Cantley et al.</u>	<u>Document Migration</u>	15 Sep 2005
<u>T050084-x0</u>	<u>LIGO Output Mode Cleaner HAM Seismic Attenuation System</u>	<u>Alessandro Bertolini et al.</u>	<u>Document Migration</u>	25 Aug 2005
<u>T050095-x0</u>	<u>Response to Advanced LIGO Suspensions Subsystem (SUS) Design Requirements Review Report (L010161-00-D)</u>	<u>Norna Robertson et al.</u>	<u>Document Migration</u>	27 Jul 2005
<u>T050171-x0</u>	<u>Selection of Aluminum Alloys for Use on Advanced LIGO UK Parts</u>	<u>Dennis Coyne et al.</u>	<u>Document Migration</u>	02 Dec 2005
<u>T050172-x0</u>	<u>Modifications to Quad Controls Prototype to fix the "d's"</u>	<u>Calum Torrie</u>	<u>Document Migration</u>	12 Nov 2021
<u>T050213-v2</u>	<u>ETM/ITM Monolithic Stage Fabrication and Assembly</u>	<u>Angus Bell</u>	<u>Final Design Suspensions</u>	01 Sep 2010
<u>T050215-x0</u>	<u>Monolithic stage conceptual design for Advanced LIGO ETM/ITM</u>	<u>Helena Armandula et al.</u>	<u>Document Migration</u>	25 Sep 2006
<u>T050237-x0</u>	<u>Advanced LIGO Preliminary Frequency Analysis of the Quadruple Pendulum Controls Prototype (second) Structure</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	13 Apr 2006
<u>T050255-x0</u>	<u>Investigation into Blade Torsion, Blade Lateral Flexibility, and the Effect They Have on Blade and Wire Performance</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	06 Jun 2007
<u>T060012-x0</u>	<u>COMMENTS RELATING TO THE CONTROLS PROTOTYPE ELECTROSTATIC DRIVE DESIGN</u>	<u>Helena Armandula et al.</u>	<u>Document Migration</u>	25 Jan 2006
<u>T060039-x0</u>	<u>Caltech controls method for suspending masses</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	10 Apr 2006
<u>T060059-x0</u>	<u>Finite Element Analysis of Advanced LIGO SUS ETM Structures</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	16 Mar 2006
<u>T060087-x0</u>	<u>Finite Element Analysis of Advanced LIGO SUS ETM Structures using ANSYS Classic beam models</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	07 Aug 2007
<u>T060088-x0</u>	<u>Finite Element Analysis of Advanced LIGO SUS ETM structures using ANSYS workbench</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	07 Aug 2007
<u>T060113-x0</u>	<u>Welding and cleaning specification for SUS ETM structures</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	14 Mar 2008
<u>T060135-x0</u>	<u>Design development of the SUS ETM structures</u>	<u>Mark Barton et al.</u>	<u>Document Migration</u>	14 Mar 2008
<u>T060147-x0</u>	<u>Bonding, Ear, Ribbon/Fibre PDR - Response to Committee Report</u>	<u>Helena Armandula et al.</u>	<u>Document Migration</u>	23 Jun 2006
<u>T060257-x0</u>	<u>Conceptual Design of a Double Pendulum for the Output Mode Cleaner</u>	<u>Dennis Coyne et al.</u>	<u>Document Migration</u>	10 Jan 2007
<u>T060264-x0</u>	<u>Output Mode Cleaner Concept</u>	<u>Christopher Echols et al.</u>	<u>Document Migration</u>	25 Feb 2009

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T070086-v4	MODAL FEA METHOD and PREDICTED FREQUENCIES FOR THE OMC STRUCTURE	Calum Torrie	Suspensions	30 Apr 2009
T070138-x0	Ribbon/Fibre Length Budget	Mark Barton <i>et al.</i>	Document Migration	25 Sep 2007
T070155-x0	Preliminary Measured and Predicted Frequency Analysis of the Noise Prototype Structures	Caroline Cantley <i>et al.</i>	Document Migration	07 Aug 2007
T070185-x0	Summary of work on LIGO structures	Tim Hayler <i>et al.</i>	Document Migration	17 Aug 2007
T070205-v4	OMC STRUCTURE SUMMARY (inc. building the FEA model, limited FEA results and weld tests)	Norna Robertson <i>et al.</i>	Preliminary Design Suspensions	24 Apr 2009
T070211-v1	OBSOLETE	Calum Torrie	Final Design Suspensions	25 Jul 2011
T070241-v1	Enhanced LIGO Output Mode Cleaner Suspension Alignment Specification (How to align the suspension in 6 degrees of freedom).	Calum Torrie	Conceptual Design Suspensions	25 Feb 2009
T070248-x0	Advanced LIGO Input Optics Preliminary Design Review Report	Dennis Coyne <i>et al.</i>	Document Migration	06 Nov 2007
T080053-x0	Comments and Questions and Responses on the BOSEM FDR and FRR, and Responses	Betsy Weaver <i>et al.</i>	Document Migration	06 Mar 2008
T080091-x0	Proposal for baseline change from ribbons to fibres in AdvLIGO test mass suspension monolithic stage	Mark Barton <i>et al.</i>	Document Migration	21 Apr 2008
T080158-x0	SPI interface to structure sleeve discussion	Amanda Brummitt <i>et al.</i>	Document Migration	21 Jul 2008
T080163-v2	FEA MODEL OF BOND	Calum Torrie <i>et al.</i>	Basic R&D	26 Feb 2010
T080168-x0	Concepts for the Gold Barrel Sleeve For both the ETM and TCP Optics	Amanda Brummitt <i>et al.</i>	Document Migration	30 Jul 2008
T080187-v1	HAM Small and Large Triple Suspensions - Preliminary Design	Norna Robertson <i>et al.</i>	Preliminary Design Suspensions	08 Mar 2019
T080188-v2	Models of the Advanced LIGO Suspensions in MATLAB	Mark Barton <i>et al.</i>	Modelling Suspensions	24 Aug 2022
T080230-v3	Quad Pendulum Structure Pushers	Calum Torrie <i>et al.</i>	Installation	02 Jul 2012
T080233-x0	Beam Splitter Optical Surface Deformation Due to Gravity	Dennis Coyne <i>et al.</i>	Document Migration	18 Apr 2019
T080252-v1	Performance of a Commercial Pneumatic Isolation System for the ISC Output Chambers (HAMs 1 & 7)	Calum Torrie <i>et al.</i>	System Engineering	28 Jul 2011
T080266-v2	Suspending optics on steel wire loops - use of prisms	Norna Robertson <i>et al.</i>	Basic R&D Suspensions	09 Apr 2012
T080267-v1	Redesign of Blades for Improved Vertical Isolation for Triple Suspensions in Advanced LIGO	Norna Robertson <i>et al.</i>	Modelling Suspensions	26 Jun 2018
T080319-v1	Preliminary Frequency Analysis of the HAM Large Triple Suspension Structure	Mark Barton	Suspensions	01 Sep 2010
T080332-v5	AD LIGO ETM ITM Layout wrt Acoustic Mode Dampers	Calum Torrie	Basic R&D	04 Feb 2011
T0810003-x0	ADVANCED LIGO TEST FILE CARD	Calum Torrie	Basic R&D	10 Dec 2008
T0810004-v1	INERTIA RELIEF FEA MODEL	Calum Torrie	Basic R&D	10 Dec 2008
T0810006-v2	UPLOAD SITUATIONS USER and MIGRATION	Calum Torrie	System Test	01 Jun 2009
T0810009-v8	ADVANCED LIGO 2 LAYER COATING FEA ANALYSIS	Calum Torrie <i>et al.</i>	Basic R&D	04 Nov 2013
T0810011-v5	ETM / ITM OPTIC BARREL VIEW SHOWN ROLLED OUT FLAT	Calum Torrie	Basic R&D	28 Feb 2011
T0810013-v1	ADVANCED LIGO SYSTEMS MEETING NOTES DISCUSSING DOC DB	Calum Torrie	System Engineering	19 Feb 2009
T0810022-v1	Tolerance on COC optic thickness	Russell Jones <i>et al.</i>	Basic R&D	10 Dec 2008

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T0810044-v2	BS Earthquake Stops interference with elliptical beam	Calum Torrie	Basic R&D System Engineering	22 Dec 2008
T0900003-v1	Training quad to visit LASTI after LLO	Calum Torrie	Basic R&D	06 Jan 2009
T0900010-v1	Test Mass Optic (ETM) and all of its associated items	Calum Torrie	Basic R&D	25 Mar 2009
T0900060-v2	OMC Suspension Final Design Document	Jay Heefner et al.	Final Design Suspensions	20 Feb 2014
T0900070-v1	Advanced LIGO HSTS LOWER BLADE SPRING FEA	Calum Torrie	Basic R&D Suspensions	02 Mar 2009
T0900091-v2	Adv LIGO SYS Summary of Maraging Steel used in Advanced LIGO	Norna Robertson et al.	Requirements System Engineering	26 Jun 2009
T0900092-v8	Adv LIGO Systems - List of Items used in and around the test mass (ETM/ITM)	Calum Torrie	Final Design System Engineering	04 Mar 2010
T0900123-v1	Competitive Procurement Justification for EMA as per LIGO-E900085	Dennis Coyne et al.	System Engineering	24 Mar 2009
T0900193-v1	Ad LIGO SYS Modal FEA of HAM loaded HAM chamber	Calum Torrie	System Engineering	13 May 2009
T0900243-v2	CALUM TORRIE CALUM TORRIE - Calendar and days off	Calum Torrie et al.	Operations	06 Jun 2018
T0900260-v4	OBSOLETE - How to Document Procurements	Dennis Coyne et al.	Procurements	06 Oct 2022
T0900293-v1	Capabilities of B&K Experimental Modal Analysis (EMA) System	Calum Torrie	System Engineering	19 Jun 2009
T0900365-v2	EXCEL spreadsheet for design of OMC SUS Blades	Norna Robertson et al.	Final Design Suspensions	06 Aug 2010
T0900398-v1	Suspensions-CantileverBlades - AdvLIGO CDS WIKI	Calum Torrie	Suspensions System Engineering	24 Aug 2009
T0900403-v5	Advanced LIGO SYS Summary of COC/SUS OPTIC Substrates & associated attachments	Calum Torrie et al.	System Engineering	02 Aug 2019
T0900435-v9	HAM Small Triple Suspension (HSTS) Final Design Document	Norna Robertson et al.	Final Design Suspensions	10 Sep 2013
T0900441-v5	Adv LIGO Systems Damping Struts results at Caltech	Norna Robertson et al.	System Engineering	09 Apr 2010
T0900561-v1	Blade Calculations for HSTS	Norna Robertson et al.	Final Design Suspensions	02 Nov 2009
T0900576-v1	LASTI Prototype Articulated Arm - List of Required Work & associated When, Where, Why e-mail's	Ken Mailand et al.	System Engineering	12 Nov 2009
T0900586-v1	Proof load test and vertical bounce frequency test apparatus for ITM/ETM silica suspension fibres	Ken Strain et al.	Final Design Suspensions	26 Aug 2010
T0900595-v1	Production Readiness review for Test Mass and Suspension Mass Ears Questions from the Committee	Gregg Harry et al.	Final Design Suspensions	25 Nov 2009
T1000012-v6	HAM Large Triple Suspension (HLTS) Final Design Document	Norna Robertson et al.	Final Design Suspensions	17 Oct 2013
T1000082-v1	Ergo Arm Users Manual - Quick Start Guide	Calum Torrie	Core Optics Suspensions System Engineering	22 Mar 2018
T1000120-v1	Case Study - Could the FM suspensions structure accommodate the elliptical baffle	Calum Torrie	Auxiliary Optics Suspensions System Engineering	30 Sep 2010
T1000121-v1	MATLAB code for measuring frequencies and transfer functions of a single pendulum.	Calum Torrie	Suspensions System	05 Mar 2010

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T1000165-v1	Romer & Microscribe CMM Arms & PowerINSPECT	Sam Barnum <i>et al.</i>	Engineering Assembly Sensing and Control Seismic Isolation Incoming Inspection Suspensions System Engineering	15 Aug 2013
T1000186-v1	Adv LIGO Quad Structure FEA	Calum Torrie	Suspensions System Engineering	07 Apr 2010
T1000221-v1	tuned mass dampers on HLTS	Kurt Buckland <i>et al.</i>	Suspensions System Engineering	22 Apr 2010
T1000262-v1	alternative HSTS lower blade spring fea	Norna Robertson <i>et al.</i>	Suspensions System Engineering	19 May 2010
T1000279-v4	Advanced LIGO Inventory Control System Users Manual (Approved)	Dwayne Giardina <i>et al.</i>	Operations Quality Assurance Operations Business	10 Nov 2020
T1000341-v8	Final Design Review BSC Quad & FM / BS repair tooling & HAM installation tooling	Scott Shankle <i>et al.</i>	System Engineering	06 Nov 2020
T1000345-v2	The Design of the IGR MKII Strength Testing Machine	Russell Jones <i>et al.</i>	Basic R&D Suspensions	11 Oct 2011
T1000349-v2	BSC and HAM Chamber Configurations	Calum Torrie	System Engineering	01 Jul 2010
T1000352-v3	EXCEL spreadsheet for design of HSTS Blades	Norna Robertson <i>et al.</i>	Final Design Suspensions	06 Aug 2010
T1000353-v3	EXCEL spreadsheet for design of HLTS Blades	Norna Robertson <i>et al.</i>	Final Design Suspensions	07 Sep 2010
T1000402-v1	BSC and HAM Installation Arm Extents and Usage	Scott Shankle <i>et al.</i>	Basic R&D Conceptual Design System Engineering	14 Jul 2010
T1000420-v1	Access and Component Clearances for BSC 6	Scott Shankle <i>et al.</i>	System Engineering	20 Jul 2010
T1000440-v2	Testing the vibration absorbers on the mock up HLTS	Kurt Buckland <i>et al.</i>	System Engineering	05 Aug 2010
T1000452-v2	Update on the Production Redesign of the HAM Large Triple Suspension Structure	Derek Bridges <i>et al.</i>	Modelling Final Design Reports Suspensions	27 Aug 2010
T1000515-v1	Viton Procurement Plan for the Vibration Absorbers	Calum Torrie <i>et al.</i>	Seismic Isolation Final Design Suspensions	31 Aug 2010
T1000558-v2	Output Faraday Isolator (OFI) Table Deflection and Modal Analysis	Dennis Coyne <i>et al.</i>	Auxiliary Optics	24 Jan 2013
T1000589-v1	Status of repaired parts machined by A&M Tool and Die	Michael Zucker <i>et al.</i>	Seismic Isolation Quality Assurance Incoming Inspection	08 Oct 2010
T1000644-v1	HAM IO Aux SUS FDR - Questions from the Committee	Jay Heefner <i>et al.</i>	Auxiliary Optics	25 Oct 2010

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T1000653-v1	FEA testing of the MC3 baffle concept	Calum Torrie	Final Design Input Optics System Engineering	29 Oct 2010
T1000654-v1	FEA of the AOS SLC ARM Cavity Baffle - top section	Calum Torrie	System Engineering	29 Oct 2010
T1000697-v3	B&K Modal Software Templates	Timothy MacDonald et al.	System Engineering	30 Nov 2017
T1000734-v5	FM / BS PROPOSED LAYOUTS	Calum Torrie et al.	System Engineering	20 Jul 2011
T1100040-v3	HSTS Weldment Simulation Files	Michael Meyer et al.	Suspensions System Engineering	01 Feb 2011
T1100053-v1	FEA Testing of AOS SR2 Scrapper Baffle Concept	Manuel Ruiz et al.	Auxiliary Optics System Engineering	12 Sep 2013
T1100066-v7	Torque values	Celine Ramet et al.	Assembly	19 Nov 2020
T1100112-v1	FEA on Optical Lever Periscope	Calum Torrie	System Engineering	23 Feb 2011
T1100120-v2	Technical Note on inspecting / accepting (existing) music wire	Norna Robertson et al.	Suspensions System Engineering	05 Apr 2021
T1100132-v3	FEA of the Optical Lever Piers	Calum Torrie	System Engineering	13 Jun 2011
T1100152-v6	OpLev Experimental Modal Data Summary Matrix	Timothy MacDonald et al.	System Engineering	05 Feb 2015
T1100174-v4	Weighing ALL assemblies that are mounted to a HAM isolation table, BSC isolation table or a BSC stage 0	Calum Torrie et al.	System Engineering	05 Jan 2012
T1100202-v1	Competitive Procurement Justification for C1101234 - Cable Bracket Assys	Scott Shankle et al.	Fabrication	05 Apr 2011
T1100207-v1	Advanced LIGO TMS Upper Structure FEA	Calum Torrie	System Engineering	19 Apr 2011
T1100236-v1	Design Brief for BSC arm use using SolidWorks and D1001730	Calum Torrie	System Engineering	25 Apr 2011
T1100275-v2	Testing HAM and BSC tooling on HAM2 and BSC8 mock-up's	Calum Torrie	System Engineering	17 May 2011
T1100299-v3	ALIGO SUS Quad ETM/ITM Design of the Central Protective Fin in the Lower Structure	Russell Jones et al.	Assembly Suspensions Installation	03 Jun 2011
T1100336-v2	FEA Results of Optical Lever Pylons	Kristen Holtz et al.	System Engineering	06 Jul 2011
T1100341-v1	Competitive Procurement Justification for C1101852 - HSTS, HLTS and OFI Spacers	Scott Shankle et al.	Fabrication	28 Jun 2011
T1100360-v3	Analysis of FM/BS using B&K PULSE System	Kristen Holtz et al.	System Engineering	29 Aug 2011
T1100363-v1	HLTS FEA Comparison	Kristen Holtz et al.	System Engineering	07 Jul 2011
T1100386-x0	Summer Task List - Kurt Buckland	Calum Torrie et al.	System Engineering	17 Aug 2011
T1100387-x0	Summer Task List - Tim MacDonald	Calum Torrie et al.	System Engineering	18 Aug 2011
T1100388-x0	Summer Systems Task List - Top Level list for general reference	Kristen Holtz et al.	System Engineering	22 Jul 2011
T1100389-x0	Summer Task List - Scott Shankle	Calum Torrie et al.	System Engineering	27 Jul 2011
T1100393-x0	Summer Task List - Kate Gushwa	Calum Torrie et al.	System Engineering	22 Jul 2011

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T1100394-x0	Summer Task List - Kristen Holtz	Calum Torrie <i>et al.</i>	System Engineering	31 Aug 2011
T1100395-x0	Summer Task List - Michael Hillard	Calum Torrie <i>et al.</i>	System Engineering	20 Sep 2011
T1100396-x0	Summer Task List - Sam Barnum	Calum Torrie <i>et al.</i>	System Engineering	12 Aug 2011
T1100397-x0	Summer Task List - Ignacio Romero	Calum Torrie <i>et al.</i>	System Engineering	29 Aug 2011
T1100398-x0	Summer Task List - Eddie Sanchez	Calum Torrie <i>et al.</i>	System Engineering	19 Aug 2011
T1100399-v1	Summer Task List - Ed Chavez	Calum Torrie <i>et al.</i>	System Engineering	04 Aug 2011
T1100400-x0	Summer Task List - Neil Custard	Calum Torrie <i>et al.</i>	System Engineering	27 Sep 2011
T1100421-v4	INSTALL & SUSPENSION INSTALLATION MATRIX of PARTS and TOOLS	Calum Torrie	System Engineering	15 Sep 2011
T1100426-v1	FEA TESTS ON STRUCTURE WITH DAMPING - RANDOM VIBRATION and HARMONIC ANALYSIS	Calum Torrie <i>et al.</i>	System Engineering	03 Aug 2011
T1100482-v1	Glasgow visit Summary (w/b August 1st 2011) to IGR at University of Glasgow	Calum Torrie	System Engineering	12 Sep 2011
T1100530-v7	Overall Work flow for in-vacuum cables.	Calum Torrie <i>et al.</i>	System Engineering	08 Dec 2020
T1100534-v2	Note on scribing in vacuum cables that are already cleaned to class A	Calum Torrie	System Engineering	11 Nov 2011
T1100548-v2	Brief for web based clean and bake request	Calum Torrie	System Engineering	24 Oct 2011
T1100563-v1	Quad Guarding ideas 2nd nov 2011 draft	Calum Torrie	Suspensions System Engineering	03 Nov 2011
T1100618-v1	Laser vibrometer measurements on a FM / BS structure	Calum Torrie <i>et al.</i>	System Engineering	09 Feb 2012
T1200048-x0	TMS Prodcution Plan / Task List & Documents to Support Install	Calum Torrie	Auxiliary Optics	14 Feb 2012
T1200088-v2	Ag-Plated Hardware Torque Testing	Michael Meyer <i>et al.</i>	Suspensions	16 Feb 2012
T1200107-v1	TMS Blade spring FEA	Calum Torrie <i>et al.</i>	Suspensions System Engineering	07 Mar 2012
T1200121-v3	SLC FEA of on table Baffles	Calum Torrie	System Engineering	11 Jul 2012
T1200149-v1	Cleaning Procedure for Optics Lens Caps	Calum Torrie <i>et al.</i>	Cleaning	19 Aug 2014
T1200156-v1	SUS UK Maraging steel material being used for TMS blade springs - conclusion	Calum Torrie	System Engineering	04 Apr 2012
T1200161-v2	Bond Stress and Failure Prediction for Suspension Stand-offs (prisms)	Dennis Coyne <i>et al.</i>	Suspensions	02 Jul 2013
T1200167-v1	Super Ion Air Knife testing of Model# 1111012	Patrick Murphy <i>et al.</i>	Core Optics Cleaning	12 Apr 2012
T1200168-v5	FEA of ITM Elliptical Baffle (ITMEB) and Arm Cavity Baffle (ACB)	Calum Torrie	System Engineering	12 Sep 2012
T1200198-v10	First Contact Application Layer Scenarios	GariLynn Billingsley <i>et al.</i>	Core Optics System Engineering	12 Jul 2018
T1200203-v2	HAM cable routing / weaving summary recommendations to avoid ground loops and laser beams	Rich Abbott <i>et al.</i>	Suspensions System Engineering	12 Jun 2012
T1200222-v6	FMP Tooling LIGO India (Approved)	Calum Torrie <i>et al.</i>	Core Optics System Engineering	01 May 2018
T1200223-v1	SolidWorks Education Watermark check utility	Sam Barnum <i>et al.</i>	Modelling	18 May 2012

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T1200262-v1	IO FEA of on table Baffles	Calum Torrie	System Engineering	30 May 2012
T1200273-v5	P-Cal Periscope Ring Assembly FEA	Calum Torrie	System Engineering	12 Apr 2017
T1200321-v9	Guidelines on protecting the Cavity Optics in chamber	Calum Torrie <i>et al.</i>	Core Optics System Engineering	12 Jul 2018
T1200370-x0	SUMMARY DOCUMENT ASSOCIATED WITH JULY 2012 RND in-vacuum CABLE ORDER	Calum Torrie <i>et al.</i>	System Engineering	25 Jul 2012
T1200403-v2	WHAM3 MC2 BandK in chamber	Calum Torrie	System Engineering	23 Aug 2012
T1200405-v2	DinoLite photos of LHO bake vs CIT bake	Kaitlin Gushwa <i>et al.</i>	System Engineering	28 Aug 2012
T1200434-v3	HSTS and HLTS Prism Experiment Plan - Sept 2012	Calum Torrie <i>et al.</i>	Core Optics Suspensions System Engineering	14 Sep 2012
T1200438-v1	HSTS and HLTS QAME Metal Prism Inspection at CIT	Calum Torrie <i>et al.</i>	Input Optics	27 Nov 2012
T1200439-v3	Report on Prism Bonding at CIT - HSTS and HLTS metal prisms	Calum Torrie <i>et al.</i>	Core Optics Suspensions System Engineering	10 Oct 2012
T1200491-v1	Analysis of Rosin Core Solder for UHV Applications	Rich Abbott <i>et al.</i>	Cleaning System Engineering	01 Nov 2012
T1200530-v2	Specimen Mount #3	Matthew Heintze <i>et al.</i>	System Engineering	14 Oct 2013
T1200534-v3	Specimen Mount #7	Hannah Rodriguez <i>et al.</i>	System Engineering	14 Oct 2013
T1200537-v3	Specimen Mount #10	Hannah Rodriguez <i>et al.</i>	System Engineering	14 Oct 2013
T1200539-v2	Specimen Mount #12	Hannah Rodriguez <i>et al.</i>	System Engineering	14 Oct 2013
T1200541-v2	Specimen Mount #14	Matthew Heintze <i>et al.</i>	System Engineering	14 Oct 2013
T1200550-v3	T1200550 - Particulate Sample In-Put Manifold	Jodi Fauver <i>et al.</i>	Quality Assurance System Engineering	14 Oct 2013
T1300006-v5	Stray Light Control (SLC) Long Term Storage for the 3rd aLIGO Interferometer	Calum Torrie	Auxiliary Optics LIGO-India	18 May 2020
T1300007-v4	Transmission Monitor Suspension (TMS) Long Term Storage (LTS) for the 3rd IFO and LIGO LTS	Calum Torrie	Auxiliary Optics LIGO-India	06 Sep 2018
T1300010-v6	Facilities Modifications and Tooling (FMP) Long Term Storage for the 3rd aLIGO Interferometer	John Worden <i>et al.</i>	Installation Observatory Facilities	04 May 2018
T1300017-v3	Installation of bolt on spray cone - OBSOLETE by E1300017	Calum Torrie <i>et al.</i>	System Engineering	21 Feb 2013
T1300049-v3	Invoices and documents for Wafernet 4" diameter silicon wafers used as aLigo Witness Plates	Calum Torrie	Vacuum Installation	18 Nov 2014
T1300093-v7	Prudential Body Box Results	Kaitlin Gushwa <i>et al.</i>	Basic R&D System Engineering	01 Nov 2013
T1300094-v1	CALTECH SEM DATA #1 Feb 5th 2013	Calum Torrie <i>et al.</i>	System Engineering	02 Apr 2013

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T1300096-v1	Specimen Mount #1 SEI Table LLO Dec 2012	Calum Torrie <i>et al.</i>	System Engineering	07 Feb 2013
T1300097-v2	Specimen Mount #2 SEI Table LLO Dec 2012	Calum Torrie <i>et al.</i>	System Engineering	14 Oct 2013
T1300098-v2	Specimen Mount #3 SEI Table LLO Dec 2012	Calum Torrie <i>et al.</i>	System Engineering	14 Oct 2013
T1300099-v2	Specimen Mount #4 Overhead Crane LLO Dec 2012	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300110-x0	N2 and CO2 Gas Purity Information	Margot Hennig <i>et al.</i>	Core Optics System Engineering	11 Feb 2013
T1300111-v2	Specimen Mount #41	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300112-v2	Specimen Mount #42	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300113-v2	Specimen Mount #43	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300114-v2	Specimen Mount #44	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300115-v2	Specimen Mount #45	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300116-v2	Specimen Mount #46	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2013
T1300131-v4	Specimen #10 Inch wafer from HAM2 at LLO	Hannah Rodriguez <i>et al.</i>	System Engineering	15 Oct 2014
T1300147-v1	CALTECH SEM DATA #2 Feb 20th 2013	Kaitlin Gushwa <i>et al.</i>	System Engineering	02 Apr 2013
T1300159-v1	EAG Training Day Visit FEB 2013 - Summary of techniques applicable to LIGO	Calum Torrie <i>et al.</i>	System Engineering	21 Feb 2013
T1300165-v5	"Known" Particulate Samples	Kaitlin Gushwa <i>et al.</i>	System Engineering	22 Jan 2014
T1300179-v1	Caltech SEM Data #3 4th March 2013	Calum Torrie <i>et al.</i>	System Engineering	09 Apr 2013
T1300192-v1	PSL Outer Loop Power Stabilization Delta Final Design Review	Calum Torrie	Installation	13 Mar 2013
T1300196-v1	Grouping of 4" Wafer Specimens measured at CIT on Counting Microscope OBSOLETE	Calum Torrie <i>et al.</i>	System Engineering	19 Mar 2021
T1300197-x0	Grouping of 1" Optic Specimens-obsolete	Calum Torrie	System Engineering	15 Oct 2021
T1300198-x0	Grouping of "FBI" Carbon Adhesive Tab Specimens	Calum Torrie	System Engineering	14 Nov 2017
T1300245-v2	Specimen Mount #92	Margot Hennig <i>et al.</i>	System Engineering	08 Oct 2013
T1300322-v6	Guidance on Gluing with EP30-2 (Approved)	Betsy Weaver <i>et al.</i>	Suspensions Installation	27 May 2020
T1300335-x0	Grouping of All SEM Data Runs	Calum Torrie	System Engineering	17 Apr 2014
T1300336-x0	Caltech SEM Data #4 20th March 2013	Calum Torrie	System Engineering	09 Apr 2013
T1300338-x0	Grouping of ALL EAG Data Runs - characterization of organic and elemental materials	Calum Torrie	System Engineering Management	22 Jan 2014
T1300339-v2	Calum Torrie's trip to LLO in March 2013 - Contamination Control	Calum Torrie	System Engineering Management	31 May 2013
T1300363-x0	Grouping of ALL JPL Data Runs - characterization of organic and elemental materials	Calum Torrie	System Engineering	20 Jun 2014
T1300393-x0	LLO LHAM3 Mobility Experiment	Calum Torrie <i>et al.</i>	Installation System Engineering	14 Mar 2014

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T1300394-v2	LHO WHAM3 Mobility Experiment	Calum Torrie <i>et al.</i>	Installation System Engineering	03 Oct 2014
T1300447-v1	Specimen #1 LHO Witness plate wafer HAM2 NW STG0 L	Betsy Weaver <i>et al.</i>	System Engineering	20 Jun 2014
T1300448-v1	Specimen #2 LHO Witness plate wafer HAM2 SW STG0 R	Betsy Weaver <i>et al.</i>	System Engineering	12 Feb 2014
T1300449-v1	Specimen #3 LHO Witness plate wafer HAM2 NW STG0 R	Betsy Weaver <i>et al.</i>	System Engineering	12 Feb 2014
T1300450-v2	Specimen #4 LHO Witness plate wafer HAM2 N ISI tabletop, R	Betsy Weaver <i>et al.</i>	System Engineering	21 Feb 2014
T1300451-x0	LHO Witness plate wafer from BS FC spray	Betsy Weaver <i>et al.</i>	System Engineering	17 Oct 2013
T1300453-v3	Specimen #1 LLO Witness plate wafer HAM2	Calum Torrie <i>et al.</i>	System Engineering	13 Oct 2014
T1300454-v4	Specimen #2 LLO Witness plate wafer HAM2	Calum Torrie <i>et al.</i>	System Engineering	04 Nov 2014
T1300455-v3	Specimen #3 LLO Witness plate wafer HAM2	Matthew Heintze <i>et al.</i>	System Engineering	13 Oct 2014
T1300456-v3	Specimen #4 LLO Witness plate wafer HAM2	Calum Torrie <i>et al.</i>	System Engineering	04 Nov 2014
T1300457-v2	Specimen #5 LLO Witness plate wafer HAM2	Calum Torrie <i>et al.</i>	System Engineering	20 Feb 2014
T1300460-v4	Specimen Mount - L1 PSL Xtal water lines (elemental)	Calum Torrie <i>et al.</i>	System Engineering	30 May 2013
T1300461-v2	Specimen Mount - L1 PSL Xtal water lines (chemical and elemental)	Calum Torrie <i>et al.</i>	System Engineering	30 May 2013
T1300493-v1	"Known" Particulate Sample Poster	Kaitlin Gushwa <i>et al.</i>	System Engineering	11 Feb 2021
T1300502-v1	Calum Torrie's trip to LLO in April / May 2013 - Contamination Control	Calum Torrie	System Engineering Management	31 May 2013
T1300515-v3	4" witness sample wafer from HAM2 LLO	Kaitlin Gushwa <i>et al.</i>	System Engineering	14 Oct 2014
T1300565-x0	Horizontal optic- LHAM2 Aug 2012-Oct 2012	Calum Torrie	Installation	28 Feb 2014
T1300569-x0	Vertical optic LLO HAM6 During 6/12 vent	Calum Torrie	Core Optics	28 Feb 2014
T1300570-x0	Horizontal optic LLO HAM6 during 6/12 vent	Calum Torrie	Core Optics	24 Feb 2014
T1300572-v3	HAM2 silicon wafer position 1	Matthew Heintze <i>et al.</i>	System Engineering	13 Oct 2014
T1300573-v3	HAM2 silicon wafer position 2	Matthew Heintze <i>et al.</i>	System Engineering	16 Oct 2014
T1300595-v1	Estimate of thermal and seismic noise from aLIGO quad suspension blade springs	Giles Hammond <i>et al.</i>	Basic R&D Suspensions	24 Sep 2014
T1300600-v2	The TMS is a double pendulum	Calum Torrie	Suspensions System Engineering	02 Jul 2013
T1300607-v4	IO Components on PSL Table Reviewers Acceptance Document	Matthew Heintze <i>et al.</i>	Input Optics	08 Jul 2015
T1300614-v3	FEA of PUM prism under heat from welding	Calum Torrie <i>et al.</i>	Core Optics Suspensions System Engineering	19 Jul 2013
T1300623-v1	Analysis of the Prism bond to the Penultimate Mass	Dennis Coyne <i>et al.</i>	Final Design Suspensions	15 Jul 2013
T1300626-x0	Specimen dust - SOS from iLIGO	Calum Torrie <i>et al.</i>	Suspensions System Engineering	16 Jul 2013
T1300642-v1	Sapphire Prism bond test: Results	GariLynn Billingsley <i>et al.</i>	Activity Suspensions System	23 Sep 2020

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T1300643-v1	Contamination Data	Madeleine Waller <i>et al.</i>	Engineering System Engineering	22 Jul 2013
T1300648-v1	NIF Trip Report July 25th 2013	Calum Torrie <i>et al.</i>	Core Optics System Engineering	26 Jul 2013
T1300665-v9	The LIGO Particulate Evaluation Tool (PET) (Approved)	Kaitlin Gushwa <i>et al.</i>	System Engineering	03 Jun 2014
T1300678-v1	User Guide and Manual for AmScope Microscope	Calum Torrie <i>et al.</i>	Core Optics System Engineering	05 Sep 2013
T1300681-x0	Specimen Mount - FBI Sample of metal particulate from LLO baffle	Calum Torrie <i>et al.</i>	System Engineering	12 Aug 2013
T1300684-v1	Caltech SEM Data #11 August 13 2013	Margot Hennig <i>et al.</i>	System Engineering	14 Aug 2013
T1300687-v5	Guidance on Top Gun Ionizing Air Gun System – from Gas to Gun	Calum Torrie <i>et al.</i>	System Engineering	12 Oct 2020
T1300694-v2	Air Blow-Off Experiment at CIT with Air Knife and Top Gun cf. Fist Contact - proof of concept	Calum Torrie	System Engineering	31 Mar 2014
T1300847-v3	Vertical Wafer-LLO HAM2 6/13-9/13	Kaitlin Gushwa <i>et al.</i>	System Engineering	07 Oct 2014
T1300848-v1	Vertical Optic-LLO HAM3 6/13-9/13	Margot Hennig <i>et al.</i>	System Engineering	05 Feb 2014
T1300849-v3	Horizontal Optic-LLO HAM3 6/13-9/13	Margot Hennig <i>et al.</i>	System Engineering	30 Apr 2014
T1300850-v3	Horizontal Optic-LLO HAM2 6/13-9/13	Margot Hennig <i>et al.</i>	System Engineering	22 Apr 2014
T1300851-v3	Vertical Optic-LLO HAM2 6/13-9/13	Margot Hennig <i>et al.</i>	System Engineering	11 Apr 2014
T1300852-v3	LIGO LLO FALL 2103 VENT STATUS and LESSONS LEARNED	Garilynn Billingsley <i>et al.</i>	Input Optics Installation	10 Dec 2013
T1300860-v1	ISS PD Array Alignment Procedure	Rich Abbott <i>et al.</i>	Laser Systems Subsystem Test	07 Jan 2014
T1300862-v1	200 psi air knife silvent nozzle and top gun pictures - proof of concept	Jeffrey Lewis <i>et al.</i>	System Engineering	06 Dec 2013
T1300879-v8	LLO HAM Chamber Wafer Data	Margot Hennig <i>et al.</i>	Suspensions	26 Feb 2014
T1300897-v3	IO HAM2 Reviewers Acceptance Document	Matthew Heintze <i>et al.</i>	Input Optics	08 Jul 2015
T1300933-v2	11/7/13 SEM Analysis of damaged optic	Margot Hennig <i>et al.</i>	Core Optics System Engineering	04 Apr 2014
T1300976-v2	horizontal Wafer HAM2 LLO Nov 2013 Vent	Kaitlin Gushwa <i>et al.</i>	System Engineering	04 Nov 2014
T1300977-v3	Vertical Wafer HAM2 LLO Nov 2013 Vent	Kaitlin Gushwa <i>et al.</i>	System Engineering	07 Oct 2014
T1300978-v4	vertical optic HAM2 LLO Nov 2013 Vent	Margot Hennig <i>et al.</i>	System Engineering	30 Apr 2014
T1300979-v4	vertical optic HAM3 LLO Nov 2013 Vent	Margot Hennig <i>et al.</i>	System Engineering	18 Jun 2014
T1300989-x0	LHO BSC Chamber 1" Optic Data	Calum Torrie	System Engineering	29 Mar 2018
T1400004-x0	TCS Ring Heater Fabrication Acceptance Reviewers Document (Approved)	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	26 Mar 2015
T1400024-v9	Memo on Using Handheld Airborne Particle Counters in LIGO (Approved)	Janeen Romie <i>et al.</i>	Cleaning System Engineering	02 May 2022

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T1400042-v4	Instructions for counting wafers and optics on the Nikon LV100 Microscope using the NIS-Elements Software	Calum Torrie <i>et al.</i>	Operations Core Optics Installation System Engineering	23 Sep 2014
T1400056-x0	3IFO Viewport Requirements by Chamber (LTS)	Calum Torrie <i>et al.</i>	Requirements	13 Feb 2014
T1400151-x0	3IFO FMP/Install Tooling Checklist	Jodi Fauver <i>et al.</i>	Installation	14 Feb 2014
T1400177-v3	aLIGO Contamination Control Quiz (Approved)	Calum Torrie	System Engineering	05 May 2015
T1400181-v23	Status of SUS Individual and General Acceptance Reports (Punchlist) (Approved)	Norna Robertson <i>et al.</i>	Fabrication Suspensions Installation	31 Mar 2015
T1400203-v4	Contamination Control - Memo to LHO March 18th 2014	Calum Torrie <i>et al.</i>	System Engineering	25 Mar 2014
T1400228-v1	aLIGO Air Knife Estimate for Liens List	Calum Torrie	System Engineering	10 Apr 2014
T1400236-v4	VEA Garb Requirements Poster (Approved)	Margot Hennig <i>et al.</i>	System Engineering	27 Apr 2019
T1400253-v6	Homemade 1" optic: 30 micron Al dust	Kaitlin Gushwa <i>et al.</i>	System Engineering	09 Jul 2014
T1400254-v5	Homemade 1" optic: 30 micron Al dust	Calum Torrie <i>et al.</i>	System Engineering	07 May 2014
T1400255-v4	Homemade 1" optic: 30 micron Al dust	Kaitlin Gushwa <i>et al.</i>	System Engineering	02 Jul 2014
T1400271-v6	Homemade 1" optic: 1) 30 micron Al dust, 2) 5 micron Al dust	Kaitlin Gushwa <i>et al.</i>	System Engineering	29 Apr 2014
T1400272-v6	Homemade 1" optic: 5 micron Al dust	Kaitlin Gushwa <i>et al.</i>	System Engineering	28 Apr 2014
T1400273-v3	Homemade 1" optic: 5 micron Al dust	Kaitlin Gushwa <i>et al.</i>	System Engineering	10 Apr 2014
T1400287-v1	Caltech SEM Data #12 April 16 2014	Kaitlin Gushwa <i>et al.</i>	System Engineering	17 Apr 2014
T1400310-v3	Contamination Control Kits - Parts list, poster and kiting plan and use.	Calum Torrie <i>et al.</i>	System Engineering	16 May 2014
T1400336-x0	Initial Alignment System Reviewers Acceptance Document	Dennis Coyne <i>et al.</i>	Auxiliary Optics Reviews	15 May 2014
T1400386-x0	LIGO Contamination Control Processes and Mitigation Steps - Obsolete	Calum Torrie <i>et al.</i>	System Engineering	03 Jun 2014
T1400404-x0	Optical Lever Installation Acceptance Phase 3 Testing Status	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	15 Jun 2014
T1400405-v1	Stray Light Control Short Check List for Fabrication Acceptance Review	Eric Gustafson <i>et al.</i>	Auxiliary Optics Reviews	15 Jun 2014
T1400458-v3	Homemade 1" optic	Kaitlin Gushwa <i>et al.</i>	System Engineering	23 Sep 2014
T1400462-v3	Homemade 1" optic	Kaitlin Gushwa <i>et al.</i>	System Engineering	17 Oct 2014
T1400466-v3	Testing the cleanliness of the Top Gun ionizing system - background to procedure	Kyle Baric <i>et al.</i>	Cleaning System Engineering	09 Sep 2016
T1400473-v1	Laser Irradiation Setup	Calum Torrie	System Engineering	12 Jul 2014
T1400482-v3	2014 MOU Report on LIGO Lab Instrument Science and Engineering Research	Eric Gustafson <i>et al.</i>	MOU Basic R&D	02 Aug 2014
T1400492-v3	1" Witness Optic: Ionizer	Kaitlin Gushwa <i>et al.</i>	System Engineering	02 Dec 2014

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T1400512-v1	Format for ISG 2014 Annual Report	Eric Gustafson <i>et al.</i>	Basic R&D NSF	11 Aug 2014
T1400534-x0	DAQ Fabrication Acceptance Reviewers Document	Eric Gustafson <i>et al.</i>	Data Acquisition System Reviews	26 Oct 2021
T1400555-v1	How to Use Anti-Fog Cloths	Sabrina Waller <i>et al.</i>	Cleaning System Engineering	07 Jun 2016
T1400566-v1	Attempting to turn a new Top Gun into an old Top Gun - background to procedure	Calum Torrie <i>et al.</i>	Cleaning System Engineering	09 Sep 2016
T1400567-v4	Summary of wafers from Top Gun experiment	Kyle Baric <i>et al.</i>	Cleaning System Engineering	09 Feb 2015
T1400572-v1	Organics work on 1" optic in 015 Downs, CIT	Calum Torrie	Core Optics System Engineering	03 Sep 2014
T1400573-v1	Using the Nikon Camera (via laptop) on the Olympus dark field Microscope (015, Downs, CIT)	Calum Torrie	Core Optics System Engineering	18 Nov 2015
T1400574-v6	Wafers from Top Gun experiments	Kyle Baric <i>et al.</i>	Cleaning System Engineering	05 Nov 2014
T1400582-v1	Analysis of LLO viewport sent for inspection at CIT	Calum Torrie	System Engineering	07 Nov 2014
T1400591-v8	Data from the Top Gun experiment.	Kyle Baric <i>et al.</i>	Cleaning System Engineering	09 Feb 2015
T1400595-v1	Invention Disclosure	Calum Torrie <i>et al.</i>	Operations Core Optics System Engineering	16 Sep 2014
T1400596-v7	Characterization of Green Lantern Images - 3" Optic Vacuum Test Bed	Calum Torrie <i>et al.</i>	System Engineering	10 Apr 2015
T1400609-v1	SPIE Laser Damage Trip Report	Calum Torrie <i>et al.</i>	Core Optics System Engineering	19 Sep 2014
T1400614-v5	1" optic sample for clean laser damage analysis at high power	Calum Torrie <i>et al.</i>	Core Optics System Engineering	04 Nov 2014
T1400616-v8	BSC-ISI and HAM-ISI and HEPI Acceptance Punch-list (Approved)	Calum Torrie	Seismic Isolation System Engineering	02 Apr 2015
T1400618-v2	Top gun experiments	Kyle Baric <i>et al.</i>	Cleaning System Engineering	09 Feb 2015
T1400635-v2	How to clean a TopGun ionization system - draft report	Calum Torrie <i>et al.</i>	Cleaning Suspensions	09 Sep 2016
T1400645-v1	1" Optic for humidity test with First Contact	Kaitlin Gushwa <i>et al.</i>	Core Optics	09 Oct 2014
T1400711-v1	Prism removal from ITM09	GariLynn Billingsley <i>et al.</i>	Core Optics Suspensions	16 Dec 2015
T1400712-v1	aLIGO OpLev BOM Spreadsheets OBSOLETE	Jodi Fauver <i>et al.</i>	System Engineering	18 Mar 2015
T1400713-v3	Test Mass Discharge System (TMDS): Design Document	Eduardo Sanchez <i>et al.</i>	Vacuum Final Design System Engineering	25 Apr 2018

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T1400732-v2	Comparing Gas Filters - Summary of Work [Final Report]	Calum Torrie	System Engineering	12 Aug 2020
T1500065-v1	Cleanroom Dust Monitor	Calum Torrie et al.	Basic R&D System Engineering	27 Feb 2015
T1500074-v6	Test results for non-magnetic UIM blade damper design	Evan Sloan et al.	Basic R&D Suspensions	18 May 2015
T1500083-v1	3IFO PSL Table Contents Packing Lists/Inventory	Gary Davis et al.	Project Controls System Engineering	04 Mar 2015
T1500086-v3	Charge gap test at CIT on 1" glass plates - March 2015	Calum Torrie et al.	System Engineering	22 Apr 2015
T1500091-v1	3IFO PSL ISS Photodetector Array Inventory Peter King Email	Gary Davis et al.	Project Controls	20 Mar 2015
T1500101-v3	ETM / ERM Gap discharge procedure & ITM / Cavity Optic discharge procedure	Calum Torrie et al.	System Engineering	12 Jul 2018
T1500105-v2	3IFO Viewport Inventory	Jodi Fauver et al.	System Engineering	21 Nov 2019
T1500106-v3	3IFO SLC aka Baffles Cross Check and Custody	Jodi Fauver et al.	System Engineering	26 Mar 2015
T1500107-v5	3IFO SUS Cross Check and Custody	Jodi Fauver et al.	System Engineering	30 Mar 2015
T1500108-v2	3IFO OpLev Cross Check and Custody	Jodi Fauver et al.	System Engineering	23 Mar 2015
T1500109-v1	3IFO PCal Cross Check and Custody	Jodi Fauver et al.	System Engineering	20 Mar 2015
T1500110-v1	3IFO COC Cross Check and Inventory	Jodi Fauver et al.	System Engineering	20 Mar 2015
T1500111-v3	3IFO TCS Cross Check and Custody	Jodi Fauver et al.	System Engineering	31 Mar 2015
T1500112-v2	3IFO SLC BOM	Mitchell Robinson et al.	System Engineering	20 Mar 2015
T1500119-v2	3IFO ISC Cross Check and Custody	Jodi Fauver et al.	System Engineering	01 Apr 2015
T1500124-v1	3IFO IO Cross Check and Custody	Jodi Fauver et al.	Input Optics	25 Mar 2015
T1500128-v2	3IFO INS/FMP Cross Check and Custody	Jodi Fauver et al.	System Engineering	30 Mar 2015
T1500132-v2	3IFO IAS Storage Verification	Jodi Fauver et al.	System Engineering	30 Mar 2015
T1500133-v2	3IFO SEI Combined Cross Check and Custody	Jodi Fauver et al.	System Engineering	31 Mar 2015
T1500135-v2	3IFO Viewport Cross Check and Custody	Jodi Fauver et al.	System Engineering	19 May 2016
T1500137-v1	3IFO IAS Cross Check and Custody (BOM for IAS)	Jodi Fauver et al.	System Engineering	14 Jun 2016
T1500141-v8	Review of OMC stray light baffling concept	Calum Torrie et al.	System Engineering	17 Apr 2015
T1500156-v1	Obsolete - Testing static residue of gloves	Calum Torrie et al.	Cleaning	21 Apr 2015
T1500157-v8	Static residue tests Gloves and plastics	Calum Torrie et al.	Cleaning	10 Jun 2015
T1500162-v2	Schedule Planning to O1	Vernon Sandberg et al.	Detector	18 May 2015
T1500170-v3	Charge Experiments at LHO - March 2015	Kaitlin Gushwa et al.	Core Optics System Engineering	22 Apr 2015

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T1500185-v3	Notes on Design of Non-Magnetic Damper for UIM Blades	Norna Robertson et al.	Requirements Basic R&D Final Design Suspensions	29 Apr 2015
T1500186-v4	Test results for non-magnetic UIM blade damper vertical redesign	Evan Sloan et al.	Basic R&D Suspensions	24 Sep 2015
T1500189-v1	Charge Experiments at CIT - March 2015 (Lab notes)	Calum Torrie et al.	Core Optics System Engineering	21 Apr 2015
T1500201-v1	Individual Manuals for the Components of TMDS and Gas Delivery System	Calum Torrie et al.	Operations System Engineering	12 Aug 2020
T1500220-v1	Gas alert extreme O2 detector	Kyle Baric et al.	Cleaning	06 May 2015
T1500221-v1	Contamination Control - Air NozzleTest Setup - Operation Instructions	Calum Torrie et al.	Operations Basic R&D System Engineering	04 Nov 2021
T1500223-v4	(In-Air) Air Nozzle Experiment #1 - May 8 2015	Kaitlin Gushwa et al.	Operations Basic R&D System Engineering	13 Oct 2015
T1500282-v3	SSTL Needle samples from TMDS - Contamination	Calum Torrie et al.	System Engineering	23 Jul 2015
T1500324-v1	Glove Information	Kyle Baric et al.	Cleaning	24 Jun 2015
T1500367-v1	Showing that ameristat bags are conductive.	Calum Torrie et al.	Cleaning	08 Jul 2015
T1500370-v5	Files associated with Discharge of LHO end stations optics (in chamber)	Kaitlin Gushwa et al.	System Engineering	17 Aug 2015
T1500376-v2	Core Optic (HSTS, HLTS, BS & CP) Mode Shapes & Frequencies (FEA Model)	Calum Torrie	System Engineering	11 Mar 2016
T1500395-v2	Helium Leak Test Results for the TMDS Ionizer Assembly	Calum Torrie et al.	Operations System Engineering	23 Jul 2015
T1500445-v1	EQstop data from 7-15-15	Calum Torrie et al.	Basic R&D	17 Aug 2015
T1500471-v1	Maraging Steel Blade History	Betsy Weaver et al.	System Engineering	31 Aug 2015
T1500483-v2	Test results for BOUNCE and ROLL mode damper	Calum Torrie et al.	System Engineering	29 Oct 2015
T1500494-v1	Proper Use of the MCR-4V	Kyle Baric et al.	Basic R&D Data Analysis	21 Sep 2015
T1500497-v3	(In-Air) Air Nozzle Experiment #2 - May 15 2015	Kaitlin Gushwa et al.	Operations Basic R&D System Engineering	06 Nov 2015
T1500547-v1	Preliminary Testing of Bounce and Roll Mode Damper	Evan Sloan et al.	Basic R&D Suspensions	17 Nov 2015
T1500572-v4	(Vacuum) Air Nozzle Experiment #2	Kaitlin Gushwa et al.	Operations Basic R&D System Engineering	17 Dec 2015
T1500604-v1	Chevron Baffle - Background documentation	Calum Torrie	System Engineering	18 Jan 2017
T1500612-x0	(Vacuum) Air Nozzle System Test - Dec 1, 2015	Kaitlin Gushwa et al.	System Engineering	17 Dec 2015
T1500615-v1	Pictures from Green Lantern with 4K Sony Handycam (WIP)	Kyle Baric et al.	Cleaning	18 Dec 2015
T1500616-v1	Pictures and video from adding dust to a wafer	Kyle Baric et al.	Cleaning	18 Dec 2015

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T1600006-v2	(Vacuum) Air Nozzle Experiment #3 - Jan 7, 2016	Kaitlin Gushwa <i>et al.</i>	Operations Basic R&D System Engineering	08 Feb 2016
T1600025-v1	Use of DI-145 Data logger (WIP)	Kyle Baric <i>et al.</i>	Basic R&D	01 Feb 2016
T1600035-v1	(Vacuum) Air Nozzle Experiment #4 - Feb 9-26, 2016	Kaitlin Gushwa <i>et al.</i>	Operations Basic R&D System Engineering	01 Mar 2016
T1600046-v4	Recent Results and Conclusions from Tests of the UIM Blade Non-Magnetic Damper	Norna Robertson <i>et al.</i>	Basic R&D Final Design Suspensions	05 Mar 2020
T1600048-v1	Recent Results and Conclusions from Tests of the Bounce and Roll Damper (BRD)	Norna Robertson <i>et al.</i>	Basic R&D Final Design Suspensions	22 Feb 2016
T1600058-v1	(Vacuum) Air Nozzle Experiment #5 - Mar 1-?, 2016	Kaitlin Gushwa <i>et al.</i>	Operations Basic R&D System Engineering	16 Mar 2016
T1600060-v5	Resonances & jitter suppression observation on the PZT-actuated steering mirrors of the PSL/IO Periscope	Alena Ananyeva <i>et al.</i>	Assembly Other data analysis Reports Input Optics	29 Aug 2018
T1600074-v1	(In-Air) Air Nozzle Experiment #5 - March 16-?, 2016	Kaitlin Gushwa <i>et al.</i>	Operations Basic R&D System Engineering	16 Mar 2016
T1600076-v3	(Vacuum) Air Nozzle Experiment #6 - Mar 17, 2016	Kaitlin Gushwa <i>et al.</i>	Operations Basic R&D System Engineering	06 Oct 2020
T1600082-v2	Improving use of the Top Gun system (WIP)	Kyle Baric <i>et al.</i>	Cleaning	29 Mar 2016
T1600116-v1	Technical Note on use of Monroe charge plate monitor (Model 288-1/22) to Calibrate Sigmco-ION's Top Gun Ionizers.	Calum Torrie <i>et al.</i>	System Engineering	25 Apr 2016
T1600121-v1	Comparing a balanced and an unbalanced TopGun - background to procedure.	Kyle Baric <i>et al.</i>	Cleaning	09 Sep 2016
T1600125-v1	Oily Waste Cans aka red wipe bins	Elizabeth Natividad <i>et al.</i>	Cleaning	26 Apr 2016
T1600139-x0	Fabrication Issues Surrounding Stray Light Black Glass Baffles	Stephen Appert <i>et al.</i>	Auxiliary Optics Fabrication	06 Mar 2020
T1600163-v3	B & K Modal Analysis in Advanced LIGO (LLO)	Jennifer Wright <i>et al.</i>	Operations Seismic Isolation Suspensions Installation	05 Nov 2020
T1600176-v3	Edits made to the MATLAB code from T1400515	Calum Torrie <i>et al.</i>	Cleaning	06 Sep 2016
T1600179-v1	1" optic 1/2 fog sample from LLO May 2016	Kaitlin Gushwa <i>et al.</i>	Core Optics System Engineering	26 May 2016
T1600210-v2	Surface deformation and modal analysis of the aLIGO composite SRM optic	Calum Torrie <i>et al.</i>	System Engineering	27 Aug 2016
T1600226-v4	Test optic with Alum dust (trial of vacuum LDF setup)	Calum Torrie <i>et al.</i>	System Engineering	04 Aug 2016
T1600406-v2	Signal Recycling Mirror (SRM) Modal Investigation	Stephen Appert <i>et al.</i>	Basic R&D Suspensions	04 Apr 2018
T1600413-v1	Helicoil Specification Guidelines	Stephen Appert <i>et al.</i>	Fabrication	29 Jul 2020

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T1600415-x0	Inspection Information on TopGun Balance and Cleanliness - CIT/LHO Inspection records	Kyle Baric <i>et al.</i>	Cleaning	12 Dec 2022
T1600429-x0	Influence of distance and pressure on a balance test with the CPM	Kyle Baric <i>et al.</i>	Cleaning	19 Sep 2016
T1600445-v1	Testing Cleanliness of a Top Gun System After Two Years (WIP)	Kyle Baric <i>et al.</i>	Cleaning	05 Oct 2016
T1600447-v1	FEA of the PMC bench - 3 point contact	Calum Torrie	System Engineering	04 Oct 2016
T1600458-v1	Annealing run (432-437) on 3" wafers - Crime 10/10/2016	Alena Ananyeva <i>et al.</i>	System Engineering	12 Jun 2017
T1600466-v1	Cleaning and inspection of samples from Annealing run (432-437)	Calum Torrie <i>et al.</i>	System Engineering	16 Dec 2016
T1600468-v1	Old Darkfield Microscopy Lab (Downs SB 015) - data dump	Kaitlin Gushwa <i>et al.</i>	System Engineering	17 Mar 2017
T1600470-v1	Annealing run (438) on 3" wafers - Crime 10/19/2016	Calum Torrie <i>et al.</i>	System Engineering	12 Jun 2017
T1600476-v1	Annealing run (439) on 3" wafers - Crime 10/21/2016	Alena Ananyeva <i>et al.</i>	System Engineering	12 Jun 2017
T1600478-v2	Keeping up with Caltech's move from Air Liquide to Air Gas for specialty gases	Nichole Washington <i>et al.</i>	System Engineering	06 Jun 2018
T1600485-v1	Annealing run (447-448) on 3" wafers - Crime 10/27/2016	Alena Ananyeva <i>et al.</i>	Basic R&D	12 Jun 2017
T1600486-x0	The Coating Ring-down MEasurement system (CRiMe) Document Tree	Eric Gustafson <i>et al.</i>	Basic R&D	03 Jan 2022
T1600487-x0	CRiMe Grouping of Annealing Runs	Eric Gustafson <i>et al.</i>	Basic R&D	09 Jun 2020
T1600488-v1	CRiMe Grouping of Coating Runs	Eric Gustafson <i>et al.</i>	Basic R&D	27 Sep 2019
T1600489-x0	CRiMe Grouping of Wafer Orders (Invoices & Packing Slips)	Eric Gustafson <i>et al.</i>	Basic R&D	23 Oct 2019
T1600491-x0	CRiMe Grouping of Drawings and Purchases	Eric Gustafson <i>et al.</i>	Basic R&D	16 Dec 2019
T1600492-x0	CRiMe Grouping of Inspection and cleaning Records	Eric Gustafson <i>et al.</i>	Basic R&D	15 Jun 2020
T1600493-x0	CRiMe Grouping of Q measurements, Oct 2016	Eric Gustafson <i>et al.</i>	Basic R&D	03 Nov 2016
T1600494-v6	OMC Bench Damping Investigations	Cormac O'Neill <i>et al.</i>	Sensing and Control Basic R&D Suspensions	08 Mar 2017
T1600498-v1	Example Coating Run on 3" wafer for Q Measurements @ Torrie Coating Inc (Template use only)	Calum Torrie	System Engineering	28 Oct 2016
T1600501-v1	Example annealling run on 3" wafer for Q Measurements (template use only)	Calum Torrie	System Engineering	28 Oct 2016
T1600507-v1	Annealing run (449-453) on 3" wafers - Crime 11/01/2016	Alena Ananyeva <i>et al.</i>	Basic R&D	12 May 2017
T1600508-v1	JPL Evaluation of OMC optic (E1600268) and FTIR sample wipes (E1600267) for particulates that may have caused damage to the optic.	Calum Torrie	Operations System Engineering	03 Nov 2016

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T1600510-v1	Annealing run (454-459) on 3" wafers - Crime 11/02/2016	Calum Torrie <i>et al.</i>	Basic R&D	12 Jun 2017
T1600513-v1	Annealing run (460-465) on 3" wafers - Crime 11/04/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 Jun 2017
T1600523-v1	Development Effort Chevron Baffles Project (for Ion Pumps)	Calum Torrie <i>et al.</i>	System Engineering	16 Mar 2017
T1600524-v1	Annealing run (466-471) on 3" wafers - Crime 11/10/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	11 Nov 2016
T1600526-v4	Vibration Absorber Test at Varying Angles	Cormac O'Neill <i>et al.</i>	Basic R&D Auxiliary Optics	21 Feb 2017
T1600527-v1	Annealing run (472-477) on 3" wafers - Crime 11/11/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1600534-v3	Stray Light Solutions - New host and new team. Presented @ Commissioning F2F, February 2017	Calum Torrie	System Engineering	12 Apr 2017
T1600535-x0	Collection of documents for SR / PR / MC Cavity Shields and Table Baffles (SLIC review part 1 of 2)	Calum Torrie	System Engineering	24 Apr 2019
T1600536-x0	Collection of documents for P-Cal Periscope Shield (SLIC review part 1 of 2)	Calum Torrie	System Engineering	30 Jan 2018
T1600537-v1	List of Baffles where possibly replace oxidized stainless for DLC, Black Ni or black glass	Calum Torrie <i>et al.</i>	System Engineering	24 Apr 2019
T1600538-x0	Collection of documents for Coating Suspension Parts (Process specifications, vendor & procurement documents)	Calum Torrie	System Engineering	24 Apr 2019
T1600539-v1	Annealing run (478-483) on 3" wafers - Crime 11/14/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1600541-v1	Coating run (Uni of Montreal) on 3" wafers - Crime 11/18/2016	Calum Torrie <i>et al.</i>	System Engineering	16 Dec 2016
T1600543-v1	Glue comparisons	Cormac O'Neill <i>et al.</i>	Basic R&D System Engineering	13 Feb 2018
T1600546-v1	Annealing run (484-486) and 439 on 3" wafers - Crime 11/14/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1600549-v1	Annealing run (487) on 3" wafers - Crime 11/23/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1600550-v1	Annealing run (488) on 3" wafers - Crime 11/21/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1600551-v1	Shipment to Fort Collins - 3" wafers - Crime 11/21/2016	Alena Ananyeva <i>et al.</i>	System Engineering	30 Jan 2017
T1600552-v1	Part list and assembly instructions for Top Gun gas cart	Kyle Baric <i>et al.</i>	Cleaning	23 Nov 2016
T1600553-v5	Top Level Tree for collection of agenda / actions / minutes from Stray Light Improved Control (SLIC) meetings	Calum Torrie	Operations System Engineering	25 Mar 2022
T1600560-v1	Scienceware Secador Desiccator Cabinets Digital Hygrometer Spec and Calibr Instructions	Calum Torrie <i>et al.</i>	Incoming Inspection Calibration	30 Nov 2016
T1600562-v1	OMC Bench FEA (OMC Breadboard)	Calum Torrie	System Engineering	02 Dec 2016
T1600564-v1	Shipment to Steve Penn - Crime 12/02/2016	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	23 Feb 2017
T1600565-v3	KAGRA Witness Wafer	Kaitlin Gushwa <i>et al.</i>	System Engineering	05 Sep 2017

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T1600573-v1	18- 3 inch Pure Wafers - WRS Materials COC EG12.616 CC-6617 Washington 120916	Elizabeth Natividad <i>et al.</i>	Incoming Inspection	09 Dec 2016
T1600575-x0	Collection of documents associated with the PMC "re-work" FDR (Dec 16 / Jan 17)	Richard Savage <i>et al.</i>	Operations System Engineering	04 Apr 2017
T1600579-v1	Modal Testing User Guides, Maintenance of Modal Testing Equipment	Kyle Baric <i>et al.</i>	Subsystem Test System Engineering	30 Nov 2017
T1600582-v2	Comparing cleanliness of using Airgas Research Plus Instead of AlphaGaz 2	Kyle Baric <i>et al.</i>	Cleaning	23 Jan 2017
T1600585-v1	PSL MOUNT FEA OF D1500167	Calum Torrie	System Engineering	15 Dec 2016
T1600587-x0	CRiMe Grouping of Shipments	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	14 May 2020
T1600590-v1	Inspection of samples (447, 456, 457, 458, 463)	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	16 Dec 2016
T1600604-v3	KAGRA Witness Wafer #2	Kaitlin Gushwa <i>et al.</i>	System Engineering	05 Sep 2017
T1700003-v1	LDF losses measurement	Alena Ananyeva <i>et al.</i>	Basic R&D	04 Jan 2017
T1700006-v1	CRiMe database	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	29 Aug 2018
T1700009-v1	Coating run (Uni of Montreal) on 3" wafers - Crime 1/10/2017	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	10 Jan 2017
T1700010-v1	Inspection of samples (448, 451, 453, 459, 461, 466)	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	10 Jan 2017
T1700022-x0	Collection of documents associated with the Chevron Baffle Procurement	Calum Torrie <i>et al.</i>	System Engineering	18 Jan 2017
T1700023-v3	Evaluation of Hawkeye IR Source	Aidan Brooks <i>et al.</i>	Basic R&D	25 Jan 2017
T1700028-v2	Balancing a Top Gun system with a charge plate	Calum Torrie <i>et al.</i>	Cleaning	28 Nov 2022
T1700033-v1	JPL ANALYTICAL CHEMISTRY LABORATORY - Swagelock SS-4BG-V51 ("As is" and Baked out) Testing for Lubricants	Calum Torrie	System Engineering	20 Jan 2017
T1700034-v1	Pop off valve used on TMDS System (IRV-4V-V-10-X)	Calum Torrie	System Engineering	20 Jan 2017
T1700036-v1	Annealing run (491-496) on 3" wafers - Crime 01/20/2017	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	12 May 2017
T1700042-v4	OMC Structural Frequency Investigations	Norna Robertson <i>et al.</i>	Sensing and Control Final Design Fabrication Suspensions Subsystem Test	03 May 2017
T1700048-v1	Shipment to Uni of Montreal - Crime 01/27/2017	Nichole Washington <i>et al.</i>	Core Optics Basic R&D	08 Feb 2018
T1700051-v1	Glue comparison materials and discussion doc	Kyle Baric <i>et al.</i>	Basic R&D	13 Feb 2018
T1700052-v1	Tensile Testing SolidWorks files	Kyle Baric <i>et al.</i>	Fabrication	30 Jan 2017

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T1700081-v1	Inspection of samples (469, 471, 474, 475, 476, 481, 483)	Alena Anyeyeva et al.	Core Optics Basic R&D	21 Feb 2017
T1700094-x0	Shipment to Uni of Montreal - Crime 02/28/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	28 Feb 2017
T1700095-v1	Shipment to Uni of Montreal - Crime 02/28/2017	Nichole Washington et al.	Core Optics Basic R&D	01 Mar 2017
T1700108-v1	Annealing run (469, 471, 481, 483) on 3" wafers - Crime 03/06/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	15 May 2017
T1700110-v1	Shipment to Uni of Montreal - Crime 03/07/2017	Nichole Washington et al.	Core Optics Basic R&D	08 Mar 2017
T1700111-v2	BRDs for HSTS: Design, Results and Conclusions	Norna Robertson et al.	Basic R&D Final Design Suspensions	12 Apr 2017
T1700113-v1	aLIGO, SQZ, Final Design Review - Part 2, Design Feedback from Systems Engineering	Stephen Appert et al.	Preliminary Design Squeezer System Engineering	28 Mar 2017
T1700128-v9	Infrared Reflectance & Scatter Tests for Potential Scattered Light Mitigation Coatings (R^2 vs. BRDF)	Alena Anyeyeva et al.	Basic R&D System Engineering	01 Apr 2019
T1700137-v1	Coating run (Fort Collins) on 3" wafers - Crime 03/30/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	30 Mar 2017
T1700140-v1	Inspection of samples (525, 526, 527, 528)	Alena Anyeyeva et al.	Core Optics Basic R&D	31 Mar 2017
T1700141-v1	Annealing run (525 -528) on 3" wafers - Crime 03/30/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	15 May 2017
T1700152-v1	Annealing run (529, 530, 531, 532, 533, 535, 536, 537) on 3" wafers - Crime 02/17/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	10 Apr 2017
T1700153-v1	Shipment to Ashot 04/7/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	11 Apr 2017
T1700157-v1	Annealing run (538-545) on 3" wafers - Crime 04/11/2017	Alena Anyeyeva et al.	Core Optics Basic R&D	14 Apr 2017
T1700158-x0	Collection of REFERENCE documents for SR / PR / MC Cavity Shields and Table Baffles (REF ONLY)	Calum Torrie	Operations System Engineering	24 Apr 2019
T1700167-v3	Trade Study (Analysis) of method to be deployed for Stray Light Improved Control, SLIC (2017).	Calum Torrie et al.	Operations System Engineering	24 Apr 2019
T1700172-v1	Z-Baffle Design Guidelines for Stray Light Control	Stephen Appert et al.	Fabrication System Engineering	07 Jun 2017
T1700182-v2	Procedure for Gluing of Elliptical Mirror to IO PSL PZT Actuator	Stephen Appert et al.	Assembly System Engineering	17 Oct 2018
T1700184-v2	Laser damage setup (in air)	Alena Anyeyeva et al.	Basic R&D System Engineering	12 May 2017
T1700187-v1	FEA in ANSYS of the Swiss Cheese (MCA1 MC Tube) Baffle	Norna Robertson et al.	System Engineering	05 May 2017

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T1700193-v1	ITM03 inspection at LHO and investigation of circular features	GariLynn Billingsley et al.	Core Optics	14 Feb 2019
T1700200-v1	Data Sheet for OMS LaserPoint LP01 Laser Vibrometer	Stephen Appert et al.	Basic R&D System Engineering	13 Dec 2022
T1700201-v1	Data Sheet for Ometron VQ-400-A Type 8336 Laser Vibrometer (and similar + Polytec)	Stephen Appert et al.	Basic R&D System Engineering	03 Jan 2023
T1700210-v1	In-air laser damage test of black coatings	Alena Ananyeva et al.	Basic R&D System Engineering	26 May 2017
T1700217-x0	Shipment to Uni of Montreal - Crime 11/18/2016	Alena Ananyeva et al.	Core Optics Basic R&D	23 May 2017
T1700218-v1	LLO sample for analysis - laser cooling system (Calcium or metal build up) - JPL	Calum Torrie et al.	Operations Laser Systems	24 May 2017
T1700219-v1	Overview of Contamination Tests of PMC PZTs	Calum Torrie et al.	System Engineering	12 Jun 2017
T1700220-v1	Size of Baffle Aperture for SR3	Calum Torrie et al.	Auxiliary Optics Final Design Suspensions	24 May 2017
T1700221-v1	JPL ANALYTICAL CHEMISTRY LABORATORY - Cleanliness of PI UHV PZT for PMC	Calum Torrie et al.	System Engineering	24 May 2017
T1700244-v4	Design Documentation for SLiC SR2 Scraper Baffle	Stephen Appert et al.	System Engineering	19 Dec 2017
T1700252-v1	3rd IFO Annual Inventory Review (stock-taking) - June 2017	Calum Torrie et al.	Operations Property System Engineering	08 May 2019
T1700264-x0	Grouping of IR absorbing coating samples - Scatter test	Alena Ananyeva et al.	Basic R&D System Engineering	16 Jun 2017
T1700270-v4	ITM Elliptical Baffles and BS Elliptical Baffles - The Apertures wrt the BS Optic	Calum Torrie et al.	System Engineering	20 Jul 2017
T1700274-v1	Using the Thorlabs XZ stage	Kyle Baric et al.	Cleaning	22 Jun 2017
T1700282-v1	How to use makeblock XY stage	Kyle Baric et al.	Cleaning	23 Jun 2017
T1700293-v1	Annealing run (547-552) on 3" wafers - Crime 06/27/2017	Alena Ananyeva et al.	Core Optics Basic R&D	05 Jul 2017
T1700294-v1	Damping of PMC Body	Norna Robertson et al.	Basic R&D	28 Jun 2017
T1700319-v1	comparing accuracy of dataloggers	Kyle Baric et al.	Basic R&D	30 Jun 2017
T1700320-v1	using the Dataq Model DI-245	Kyle Baric et al.	Basic R&D	30 Jun 2017
T1700351-v2	Modal Testing of SR2 Scraper Baffle	Stephen Appert et al.	Basic R&D System Engineering	06 Dec 2017
T1700352-v1	Wall art for B137 labs at Downs	Alena Ananyeva et al.	Basic R&D System Engineering	19 Jul 2017
T1700357-v3	SLIC - HAM dog clamps and cookie cutters	Calum Torrie	System Engineering	12 Sep 2017
T1700360-v1	Shipment to Fort Collins - 3" wafers - Crime 07/07/2017	Alena Ananyeva et al.	Core Optics Basic R&D	24 Jul 2017

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T1700368-v1	Testing useability of out of date gloves	Calum Torrie <i>et al.</i>	Cleaning	26 Jul 2017
T1700371-x0	Annealing run (553 - 560) on 3" wafers - Crime 07/31/2017	Alena Ananyeva <i>et al.</i>	Core Optics Basic R&D	07 Aug 2017
T1700411-v1	Coatings Kapton tape peel test	Kyle Baric <i>et al.</i>	Basic R&D	25 Aug 2017
T1700448-v1	Documentation of Stainless Steel Surface Finish for SLiC Baffles	Stephen Appert <i>et al.</i>	Fabrication System Engineering	22 Sep 2017
T1700469-v7	Documentation associated with shipping "dangerous goods" in excepted quantities, in particular FTIR sample packages.	Calum Torrie <i>et al.</i>	System Engineering	18 Nov 2021
T1700471-v2	Technical note on OMC body mode damping	Calum Torrie <i>et al.</i>	System Engineering	26 Aug 2021
T1700472-v2	Technical note on BS Elliptical Baffle damping	Calum Torrie <i>et al.</i>	System Engineering	28 Nov 2017
T1700473-v3	Technical note on Suspension Cage Baffle damping	Calum Torrie <i>et al.</i>	System Engineering	28 Nov 2017
T1700511-v1	Assembly and Damping Guidelines for SLiC Baffles	Stephen Appert <i>et al.</i>	Basic R&D Subsystem Test System Engineering	24 Apr 2019
T1700535-v2	Testing a Vibration Absorber at ~30 Hz	Norna Robertson <i>et al.</i>	Basic R&D System Engineering	17 Nov 2017
T1700547-x0	Modal Testing User Guides	Calum Torrie <i>et al.</i>	System Engineering	09 Apr 2020
T1800003-v1	Notes associated with looking for delamination on the OMC bench	Koji Arai <i>et al.</i>	Operations System Engineering	08 Jan 2018
T1800004-v2	Troubleshooting for Removing Bolts	Stephen Appert <i>et al.</i>	Assembly System Engineering	18 Jan 2018
T1800030-x0	Annealing run (515-522) on 2" wafers - Crime 1/26/2018	Gabriele Vajente <i>et al.</i>	Core Optics Basic R&D	01 Feb 2018
T1800063-v3	Investigations of a suspension system for the electric field meter.	Norna Robertson <i>et al.</i>	Basic R&D Suspensions	06 Apr 2018
T1800080-v1	RTS cleanroom cleanliness evaluation, cleaning and possible HEPA filter replacement plan etc.	Alena Ananyeva <i>et al.</i>	Cleaning System Engineering	06 Mar 2018
T1800081-v2	Epoxy Test Procedures	Alexei Garcia <i>et al.</i>	Basic R&D Suspensions	09 Apr 2018
T1800100-v4	Epoxy Bond Tests	Alexei Garcia <i>et al.</i>	Basic R&D	06 Jun 2018
T1800121-v1	Specimen: 1" Inch optic from WBSC10 Jan2018	Calum Torrie <i>et al.</i>	Operations System Engineering	11 May 2018
T1800137-v2	An Inventory of Optical Lever (OpLev) Components to be Shipped and an Inventory of OpLev Components that will not be Shipped to India	Eric Gustafson <i>et al.</i>	Auxiliary Optics	04 May 2018
T1800169-v4	FEA of a fused silica fiber in ANSYS	Calum Torrie <i>et al.</i>	Operations System Engineering	10 Jul 2018
T1800174-v1	aLIGO, SYS, Electric Field Meter, Build Records	Stephen Appert <i>et al.</i>	Assembly System Engineering	20 Apr 2018
T1800197-x0	Grouping of sub-system docs listing detector equipment which is not being provided to India. (Approved)	Calum Torrie	System Engineering	28 Aug 2018

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T1800212-v8	Neon Accumulation Testing of Electric Field Meter (EFM) SN 0001 (Approved)	Stephen Appert <i>et al.</i>	Vacuum Subsystem Test System Engineering	25 May 2018
T1800241-v2	Neon Accumulation Testing of Electric Field Meter (EFM) SN 0002 (Approved)	Calum Torrie <i>et al.</i>	System Engineering	31 May 2018
T1800242-v1	Neon Accumulation Testing of Electric Field Meter (EFM) SN 0003 (Approved)	Calum Torrie <i>et al.</i>	System Engineering	27 May 2018
T1800253-v1	LCP-4 (cryo-trap) Internal Photos (Livingston)	Scott McCormick <i>et al.</i>	Operations Vacuum Quality Assurance System Engineering	09 Jul 2018
T1800270-v1	ESD Connector Failure Analysis - Short Circuit	Rich Abbott <i>et al.</i>	System Engineering	12 Jun 2018
T1800300-v1	ANSYS Tutorial Files - NOT to be shared or made public	Mike Pedraza <i>et al.</i>	Operations System Engineering	26 Jun 2018
T1800310-v2	FEA of ETM Ear Bond Delamination	Stephen Appert <i>et al.</i>	Basic R&D System Engineering	09 Jul 2018
T1800358-v3	Final Report - Printing and Assembling LIGO Mini Model (scale 1:24)	Agnese Sanavio <i>et al.</i>	System Engineering Education, Outreach	26 Jul 2019
T1800370-v2	Water and Air Outgassing Rate from surface of vacuum oven exposed to atmosphere	Robert Taylor <i>et al.</i>	Vacuum Basic R&D	30 Aug 2018
T1800382-v2	Boot Durability Testing	Kyle Baric <i>et al.</i>	Cleaning	14 Sep 2018
T1800390-v1	Water and Air Outgassing Rate from surface of Black Ni coated panels exposed to atmosphere	Alena Ananyeva <i>et al.</i>	Operations System Engineering	30 Aug 2018
T1800393-v1	Comparison of water and air outgas rates from material exposed to atmosphere	Alena Ananyeva <i>et al.</i>	Operations Vacuum System Engineering	06 Sep 2018
T1800403-v5	A+ (plus) SW Layout and Zemax Ray Trace for BHD (A Plus) - Path from HAM3 to HAM6 via BSC2 and HAM4 - draft (input only)	Calum Torrie <i>et al.</i>	System Engineering	10 Sep 2019
T1800421-v3	Status and Overview of Test Mass Ring Heaters	Stephen Appert <i>et al.</i>	Auxiliary Optics System Engineering	10 Jul 2020
T1800444-v1	Trade Study comparing existing Optical Ray Trace package Zemax (Optic Studio) to FRED (Photon Engineering) (Approved)	Calum Torrie <i>et al.</i>	Operations Suspensions	25 Oct 2018
T1800463-x0	reserved (Approved)	Calum Torrie	Basic R&D Suspensions	25 Jan 2019
T1800474-v8	Violin Mode Damper Prototype Tests at CIT	Craig Worley <i>et al.</i>	Basic R&D Suspensions	15 Nov 2019
T1800485-v6	U200 Mount Damping Study	Craig Worley <i>et al.</i>	Basic R&D Input Optics	04 Sep 2020
T1800509-v1	4-Directional Bolt Mounted Triple Suspension Modal Tests	Alexei Garcia <i>et al.</i>	Basic R&D Suspensions Data Analysis	24 Jan 2019
T1800522-v2	TMS ghost beams	Alena Ananyeva <i>et al.</i>	Commissioning Installation System Engineering	24 Feb 2022
T1800523-v1	GV11 Escalation Nov/Dec 2018: Loading Considerations	Stephen Appert <i>et al.</i>	Vacuum System Engineering	11 Dec 2018

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T1800530-v2	Trial doc - obsolete (delete)	Calum Torrie	System Engineering	12 Dec 2018
T1800550-v2	Revisiting Vacuum Compatibility of 2016-2018 PMC Redesign	Stephen Appert <i>et al.</i>	Laser Systems Final Design System Engineering	28 Feb 2019
T1900039-v2	How to Download BK Connect Software	Stephen Appert <i>et al.</i>	Basic R&D Installation System Engineering	03 Apr 2020
T1900062-v1	PMC Body Damping Investigations using Dummy at CIT	Stephen Appert <i>et al.</i>	Basic R&D System Engineering	14 Feb 2019
T1900102-v2	SLiC part C1 Conceptual Design Review Document	Alena Ananyeva <i>et al.</i>	Upgrades System Engineering	07 May 2019
T1900258-v2	Static Structural Analysis (ANSYS) of APlus Beam Splitter Optic	Danielle Petterson <i>et al.</i>	Core Optics A+ Modelling System Engineering	16 Sep 2020
T1900282-v3	BBS wedge design	Alena Ananyeva <i>et al.</i>	Core Optics A+ Modelling System Engineering	09 Mar 2020
T1900336-x0	temp	Alena Ananyeva <i>et al.</i>	Modelling System Engineering	04 Jun 2019
T1900337-v2	TMS Stray light analysis	Alena Ananyeva <i>et al.</i>	Modelling System Engineering	25 Jun 2019
T1900357-v4	NCal Final Design Review (of UWash prototype)	Krishna Venkateswara <i>et al.</i>	Sensing and Control Final Design	13 Apr 2020
T1900410-v1	Desired results of the Cosmic Explorer engineering study	Rana Adhikari <i>et al.</i>	Vacuum Conceptual Design Observatory Facilities	09 Jul 2019
T1900436-x0	BRDs for the Beamsplitter: update with new blade design	Marie Kasprzack <i>et al.</i>	Basic R&D Suspensions	17 Jul 2019
T1900444-v1	Virtual Reality Setup and User Guide	Agnese Sanavio <i>et al.</i>	Preliminary Design System Engineering	22 Jul 2019
T1900445-v3	Ring-down measurements of tip-tilt at CIT	Arnaud Pele <i>et al.</i>	Suspensions	04 Jan 2022
T1900711-v3	Newtonian Calibrator Procedure	Timesh Mistry <i>et al.</i>	Operations	21 Oct 2019
T1900728-v2	LIGO-India A+ Filter Cavity (FC) Parallel to the X-Arm	Dennis Coyne <i>et al.</i>	System Engineering LIGO-India	21 Jul 2020
T2000155-v1	UV-C germicidal lamp for (secondary) disinfection of surfaces and areas difficult to reach	Calum Torrie	Operations System Engineering	30 Apr 2020
T2000236-v1	CIT SYS User Guides, How to Use the ANSYS Learning Hub	Stephen Appert <i>et al.</i>	Basic R&D System Engineering	22 May 2020
T2000272-x0	Working-under-covid-19-in-the-weeds (Volunteer team, Weekly Meeting and Trello Board)	Danny Sellers <i>et al.</i>	Safety System Engineering	09 Jun 2020

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T2000284-x0	Summary of Proposed [Temporary] Cleanroom Protocols (for the sites and campuses)	Jeffrey Bartlett <i>et al.</i>	Operations System Engineering	13 Jul 2020
T2000285-v1	HAM4 scraper baffles ghost beam analysis	Alena Ananyeva <i>et al.</i>	Upgrades	06 Aug 2020
T2000295-x0	CIT SYS User Guides, How to Use the FEA User Group Mailing List (now with Archive!)	Stephen Appert <i>et al.</i>	Basic R&D System Engineering	01 Jun 2020
T2000298-x0	Software summary (needs, specifics and use) for exchange with LIGO India	Calum Torrie	System Engineering	05 May 2020
T2000299-x0	manifold/cryopump baffle as source of potential coupling	Srinath Karat <i>et al.</i>	Laser Systems Upgrades	01 Oct 2020
T2000302-v1	Collection of information re bathroom use in Covid-19 era.	Calum Torrie	Operations System Engineering	04 Nov 2021
T2000313-x0	Alternative Masks A Summary [Considerations associated with reviewing and approving possible alternates]	Alena Ananyeva <i>et al.</i>	System Engineering	09 Jun 2020
T2000385-v4	A+ SUS BBSS COC Container Design Logbook	Russell Jones <i>et al.</i>	A+ Suspensions	08 Nov 2022
T2000471-x0	end station FEA model of the vacuum equipment	Srinath Karat <i>et al.</i>	System Engineering	27 Jul 2020
T2000557-v1	Procedure for visual microscope inspection of ETMY at LLO	Marie Kasprzak <i>et al.</i>	Core Optics Commissioning	12 Oct 2020
T2000729-v2	BS BRD tuning and installation for LHO	Marie Kasprzak <i>et al.</i>	Suspensions Installation	01 Feb 2021
T2100119-v1	OFI Integration SYS Level Document Review	Betsy Weaver <i>et al.</i>	Integration System Engineering	19 Mar 2021
T2100124-v1	Collection of information associated with the first A+ batch of UK BOSEMs	Calum Torrie	A+ System Engineering	18 Mar 2021
T2100328-v4	Neon Accumulation Testing of QPD Enclosures - SN S2100825	Rich Abbott <i>et al.</i>	Sensing and Control A+ System Engineering	11 Aug 2021
T2100351-v1	LMA Coating Chamber cleaning	Alena Ananyeva <i>et al.</i>	Core Optics System Engineering	30 May 2022
T2100378-v3	OBSOLETE	Luis Sanchez <i>et al.</i>	A+ System Engineering	05 Jul 2022
T2100404-x0	"real" numbers from L1 for HAM5-7 situation	Matthew Heintze <i>et al.</i>	A+ System Engineering	10 Jun 2022
T2100414-v2	Oct 2021: LLO CP (1,2,3,4) post Hurricane Ida Data / Timeline.	Calum Torrie <i>et al.</i>	System Engineering	31 Jan 2022
T2100423-v1	LLO Post Hurricane Ida Vacuum Recovery Plan	Dennis Coyne <i>et al.</i>	Vacuum System Engineering	21 Oct 2021
T2100436-v2	Passive Dampers for the HXDS Structure Resonances	Norna Robertson <i>et al.</i>	System Engineering	15 Sep 2022
T2100446-v1	BRDs for BBSS and HRTS	Norna Robertson <i>et al.</i>	A+ Basic R&D Suspensions	07 Nov 2021
T2100467-v1	LLO Layout Kerfuffle	Eduardo Sanchez <i>et al.</i>	A+	10 Nov 2021

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T2200018-x0	Additional monitoring PD for A+ OFI (concept)	Alena Ananyeva et al.	Conceptual Design System Engineering	18 Jan 2022
T2200034-v2	Meeting Notes from JPL Contamination RnD Call 2022.01.27	Alena Ananyeva et al.	Core Optics Vacuum System Engineering	15 Apr 2022
T2200036-v1	LHO Corner Station H0 VAC LY Y1 PT120B PRESS TORR Comparing pump-down from (1) Feb 2021 to (2) Dec 2021 to Jan 2022	Calum Torrie et al.	Vacuum System Engineering	27 Jan 2022
T2200049-v4	LIGO A+ O5 BHD HAM6 in-vacuum cable discussions	Ken Strain et al.	A+ Data Acquisition System Conceptual Design	13 Mar 2023
T2200095-x0	FEA of HXDS structure (Modal and Harmonic)	Calum Torrie	A+ System Engineering	17 Mar 2022
T2200118-v1	ANSYS Workbench FEA Template for modelling a cantilever blade spring	Calum Torrie	System Engineering	06 Apr 2022
T2200120-x0	Passive Dampers for the HRTS Structure Resonances	Srinath Karat et al.	A+ Basic R&D	07 Apr 2022
T2200123-x0	HAM5 to HAM7 Relay Tube - Status Collection of Information associated with design (circa 2022)	Calum Torrie et al.	Vacuum System Engineering	20 Jul 2022
T2200152-v1	LHO Corner pump down archeology	Calum Torrie	Vacuum System Engineering	05 May 2022
T2200156-v1	LLO HAM7: Particle counts and humidity measurements without the KOBELCO purge air	Karla Ramirez et al.	Cleaning System Engineering	06 May 2022
T2200190-x0	Cantilever FEA effort associated with Filter Cavity Tube - Sanchez (Torrie)	Eduardo Sanchez et al.	A+ System Engineering	30 Jun 2022
T2200211-v1	LLO OM2 T-SAMS failure May 2022	Calum Torrie et al.	A+ Auxiliary Optics Suspensions	08 Sep 2022
T2200237-x0	Review of Acceptable Machining Fluids for UHV Parts	Srinath Karat et al.	Fabrication System Engineering	28 Oct 2022
T2200342-v1	ITM 03 post re-polishing face-barrel cut outs	Graeme McGhee et al.	Modelling	28 Oct 2022
T2300056-v1	A+ BHSS Blade Manufacture Inspection Data and Photos	Russell Jones et al.	A+ Final Design Suspensions	08 Feb 2023
T2300072-v1	Review: Assembly High-bay HVAC Replacement of Equipment to Include Positive Pressure	Gary Traylor et al.	Operations	20 Mar 2023

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