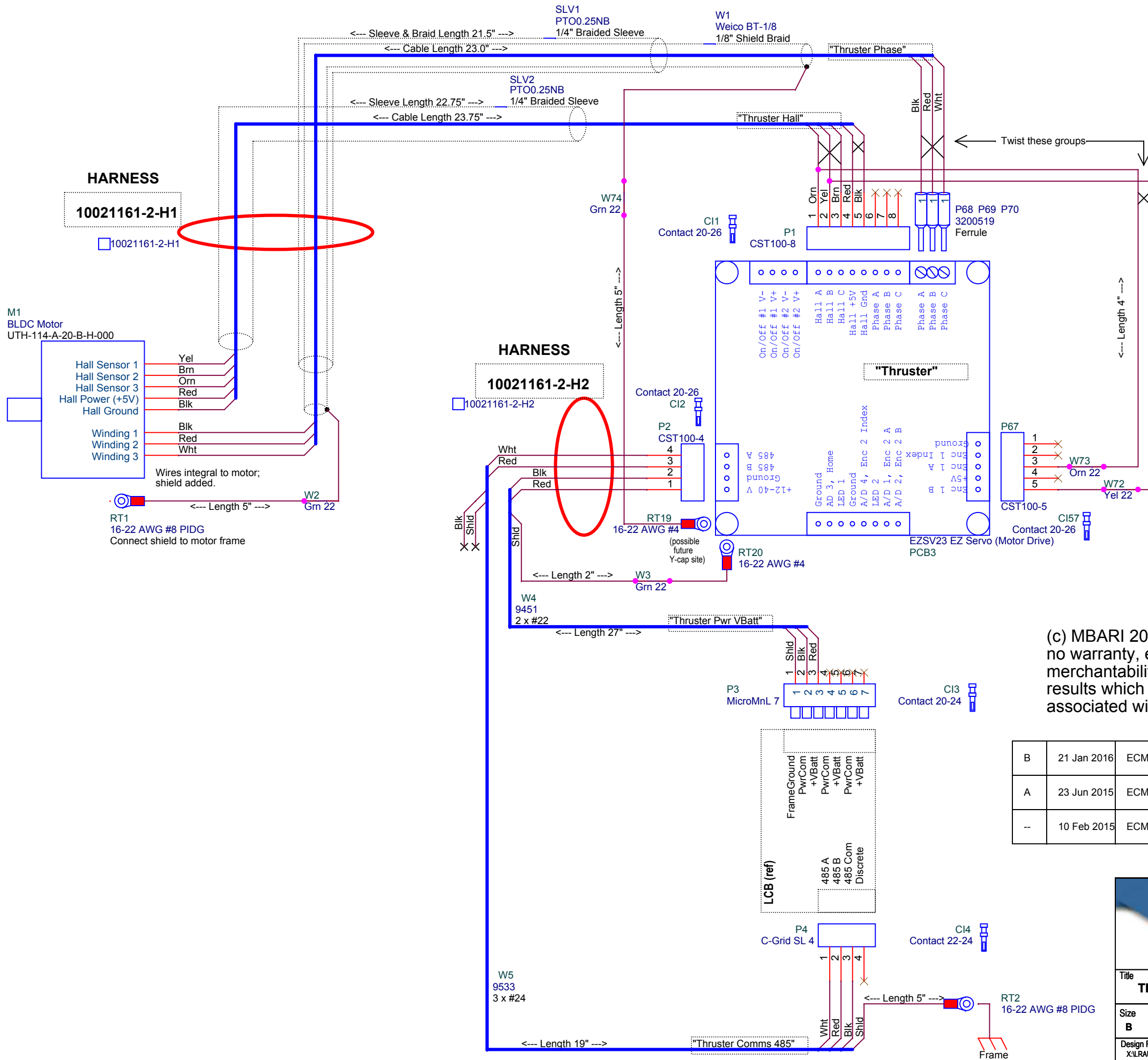




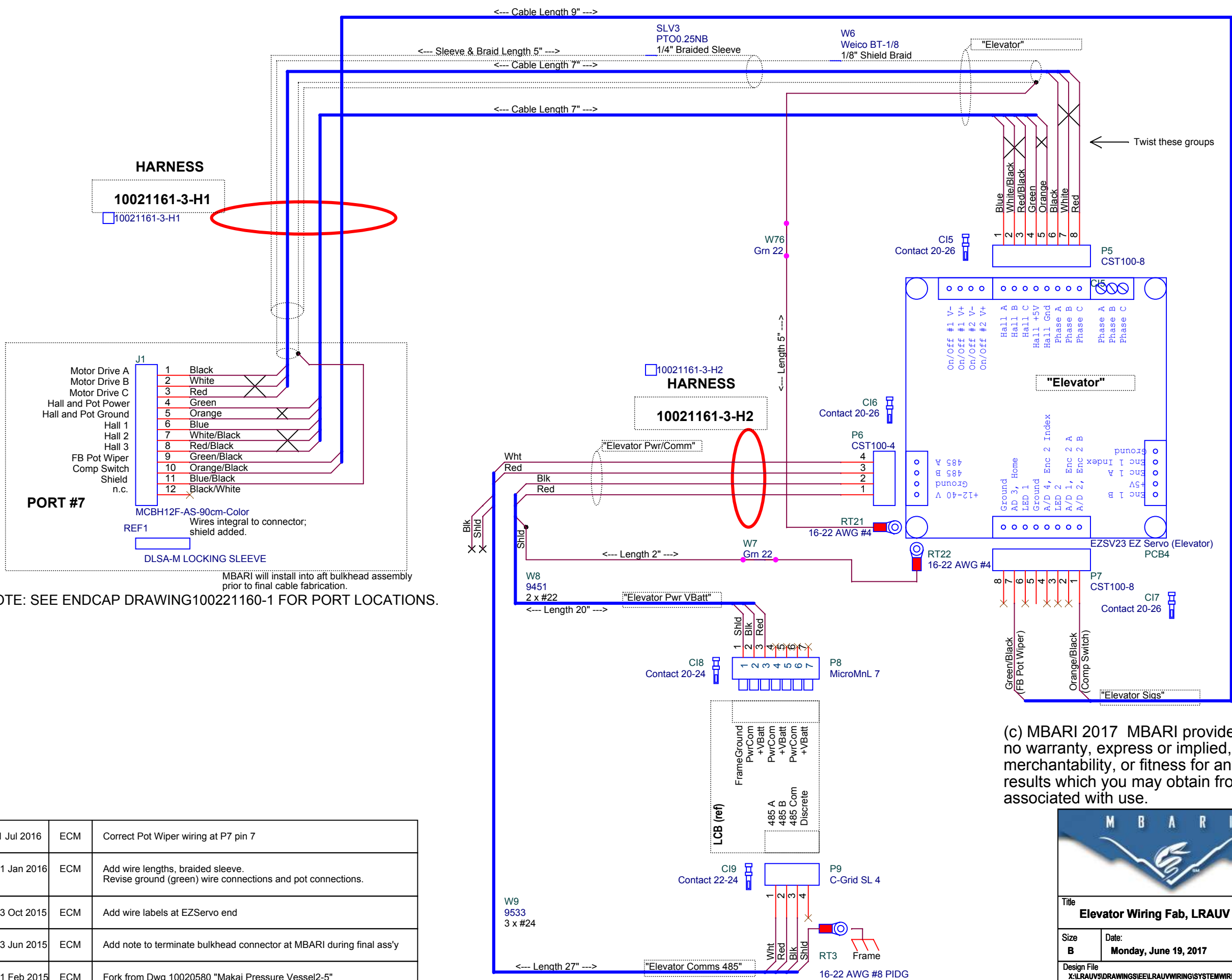
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B	21 Jan 2016	ECM	add lengths; add encoder wires; add braided sleeve, revise ground (green) wire arrangement
A	23 Jun 2015	ECM	add note to terminate Motor wires at MBARI during final ass'y
--	10 Feb 2015	ECM	Fork from Dwg 10020580 "Makai Pressure Vessel2-5"



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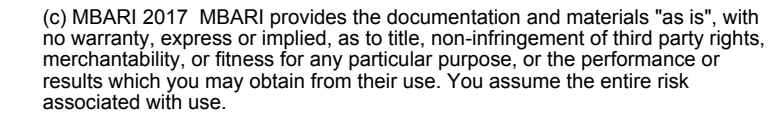
Title Thruster Wiring Fab, LRAUV Int Press Vess Wiring, Daphne		Document Number 100221161	Rev B
Size B	Date: Monday, June 19, 2017	Engineer Mellinger	Sheet 2 of 14
Design File X:\LRAUV5\DRAWINGS\IEEL\RAUV\WIRING\SYSTEM\WIRING\100221189_LRAUV_BUILD5_SYSTEM\WIRING\DRAWINGSET.DSN			
Schematic Name LRAUV5BuildInternalWiring		Page Name 02 Thruster Wiring Fab	Layout File <Layout File>



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D	1 Jul 2016	ECM	Correct Pot Wiper wiring at P7 pin 7
C	21 Jan 2016	ECM	Add wire lengths, braided sleeve. Revise ground (green) wire connections and pot connections.
B	23 Oct 2015	ECM	Add wire labels at EZServo end
A	23 Jun 2015	ECM	Add note to terminate bulkhead connector at MBARI during final ass'y
--	11 Feb 2015	ECM	Fork from Dwg 10020580 "Makai Pressure Vessel2-5"

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Title Elevator Wiring Fab, LRAUV Int Press Vess Wiring, Daphne		Document Number 100221161	Rev D
Size B	Date: Monday, June 19, 2017	Engineer Mellinger	Sheet 3 of 14
Design File X:\LRAUV\DRAWINGS\IEEL\RAUV\WIRING\SYSTEM\WIRING\100221189_LRAUV_BUILD5_SYSTEMWIRINGDRAWINGSET.DSN			
Schematic Name LRAUV5BuildInternalWiring		Page Name 03 Elevator Wiring Fab	Layout File <Layout File>

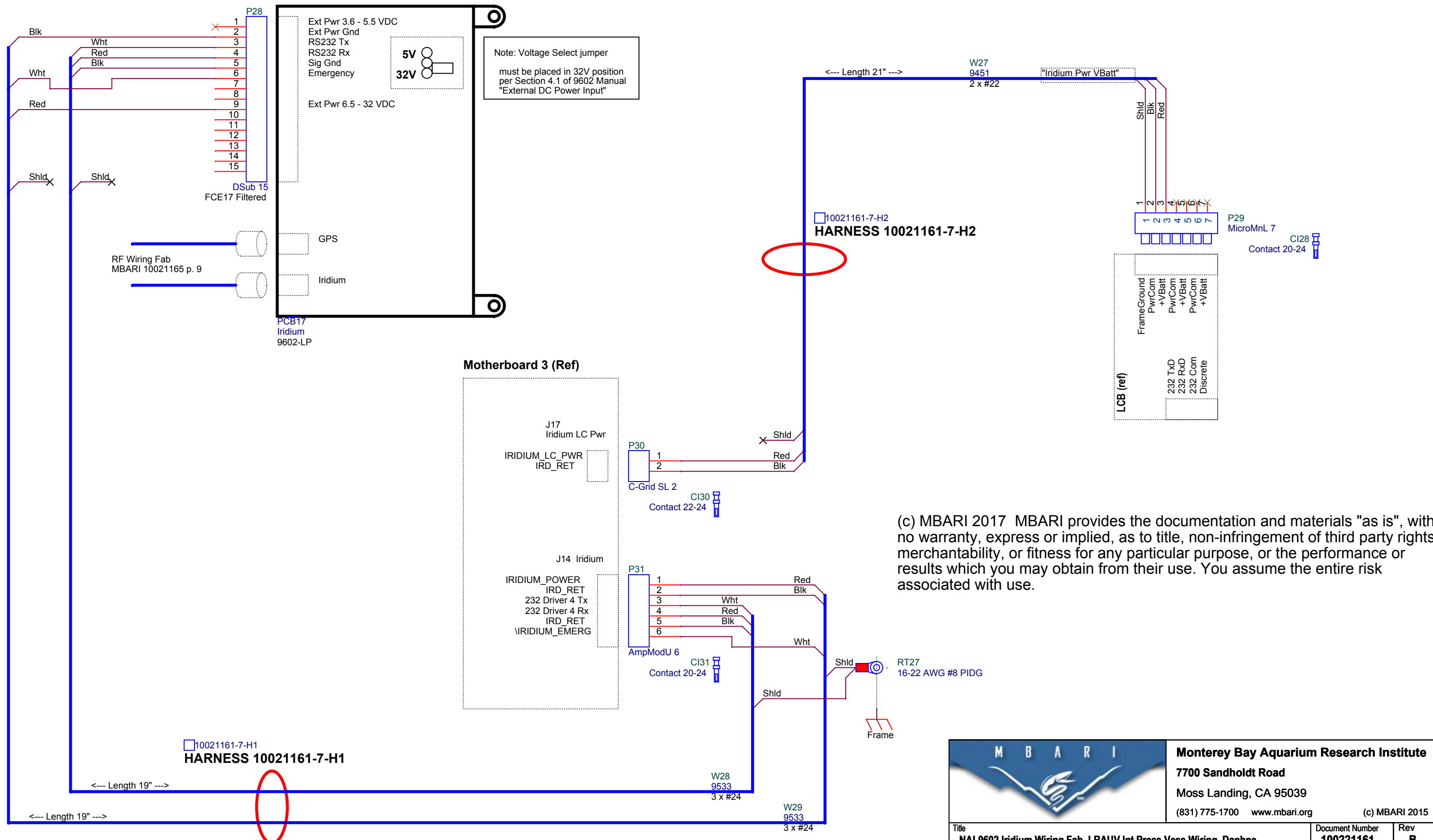


B	27 Jan 2016	ECM	Show VB Pump wires as integral and add shield; add lengths from redlines. Add ferrules to pump motor wires
A	23 Jun 2015	ECM	add note to cut cables and terminate at MBARI during final ass'y
--	12 Feb 2015	ECM	Fork from Dwg 10020580 "Makai Pressure Vessel2-5"



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Title Variable Buoyancy Wiring Fab, LRAUV Int Press Vess Wiring, Daphne			Document Number 100221161	Rev B
Size C	Date: Wednesday, June 21, 2017	Engineer Mettlinger	Sheet 5	of 14
Design File K:\LRAUV\DRAWINGS\EEEL\RAUV\WIRING\SYSTEM\WIRING\100221161_LRAUV_BUILD5_SYSTEMWIRING\DRAWINGSET.DGN				
Schematic Name LRAUV5Build5InternalWiring		Page Name 65 Variable Buoyancy Wiring Fab	Layout File <Layout File>	



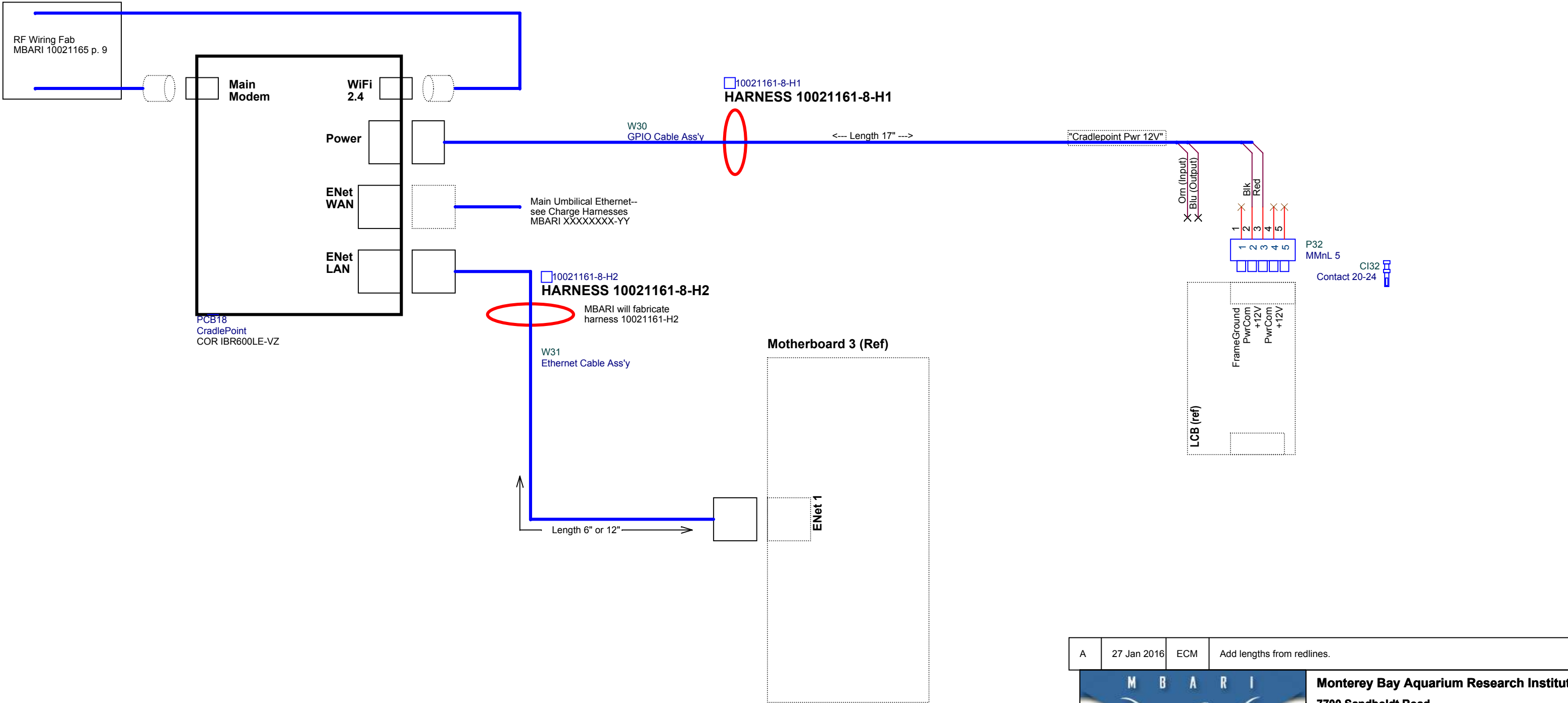
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Title NAL9602 Iridium Wiring Fab, LRAUV Int Press Vess Wiring, Daphne		Document Number 100221161	Rev B
Size B	Date: Monday, June 19, 2017	Engineer Mellinger	Sheet 7 of 14
Design File X:\LRAUV5\DRAWINGS\IEEE\LRAUVWIRING\SYSTEMWIRING\100221189_LRAUV_BUILD5_SYSTEMWIRINGDRAWINGSET.DSN		Layout File <Layout File>	
Schematic Name LRAUV5BuildInternalWiring		Page Name 07 NAL9602 Iridium Wiring Fab	

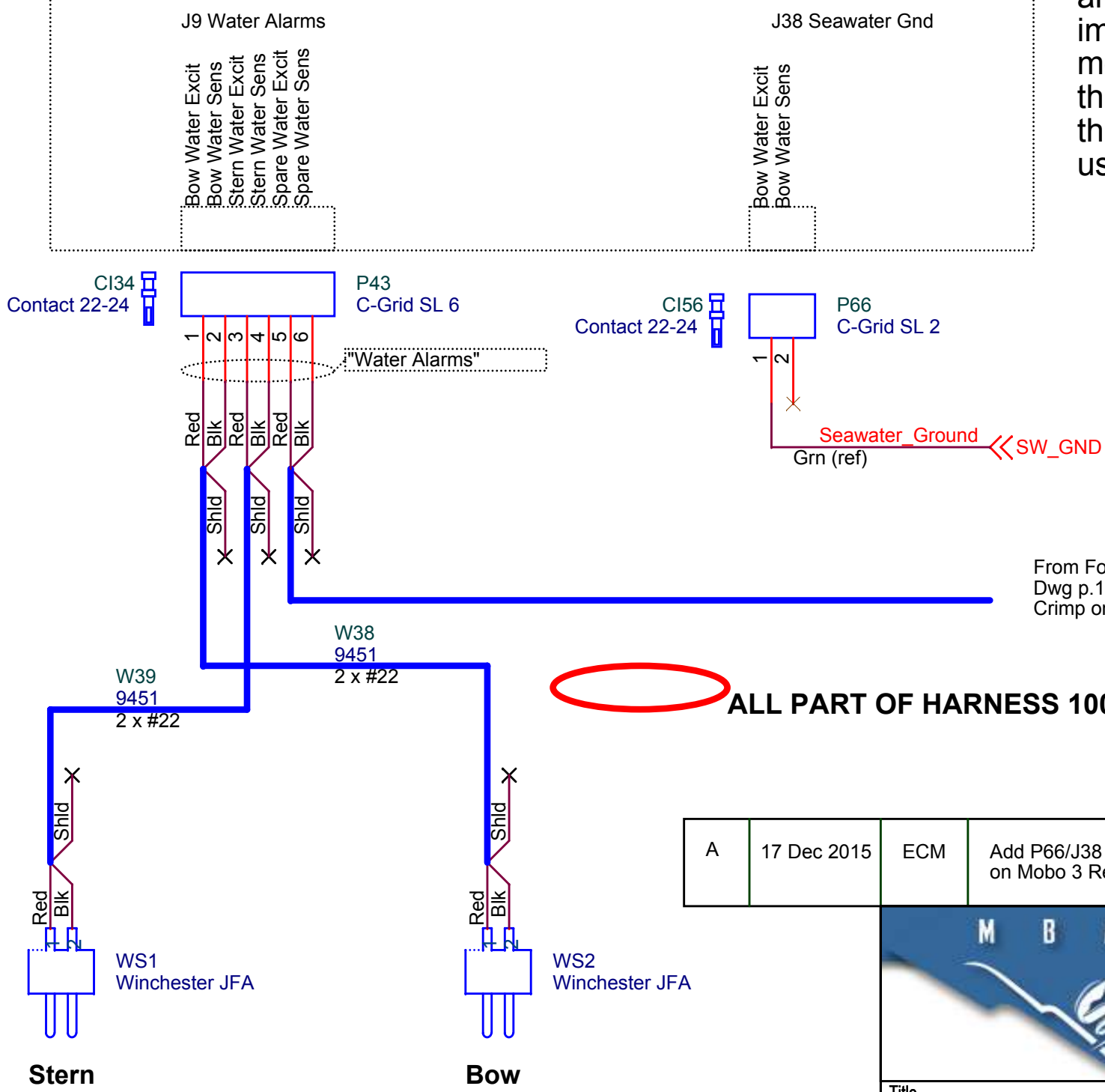
B	16 Mar 2016	ECM	Change P28 D-Sub to Amphenol FCE17 Filtered type; delete CI29 contact.
A	27 Jan 2016	ECM	Add lengths from redlines. Add ground lugs to Iridium cable shields. Add Voltage Select Jumper note.



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A	27 Jan 2016	ECM	Add lengths from redlines.		
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Title			Document Number		Rev
Cradlepoint 3G/WiFi Wiring Fab, LRAUV Int Press Vess Wiring, Daphne			100221161		A
Size	Date:	Engineer		Sheet	of
B	Wednesday, June 21, 2017	Mellinger		8	14
Design File X:\LRAUV5\DRAWINGS\EEI\LRAUVWIRING\SYSTEMWIRING\100221189_LRAUV_BUILD5_SYSTEMWIRINGDRAWINGSET.DSN					
Schematic Name		Page Name		Layout File	
LRAUV5BuildInternalWiring		08 Cradlepoint 3G/WiFi Wiring		<Layout File>	

Motherboard 3 (Ref)



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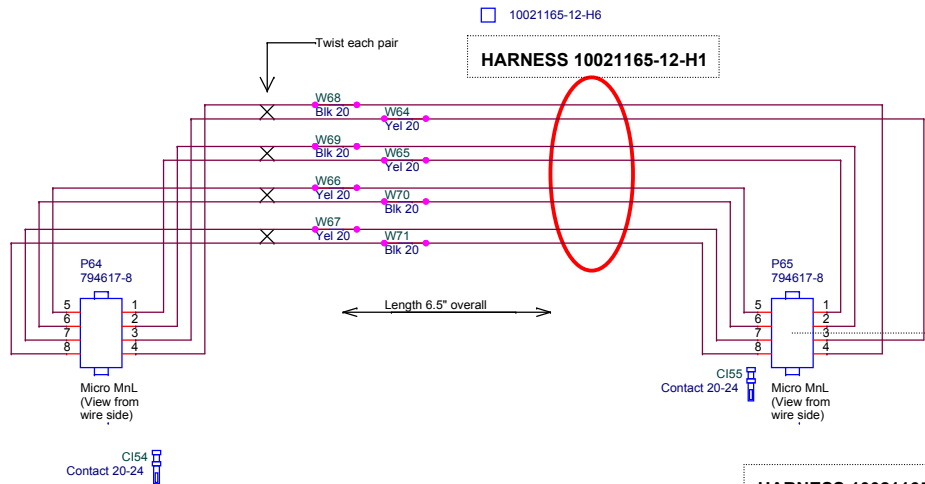
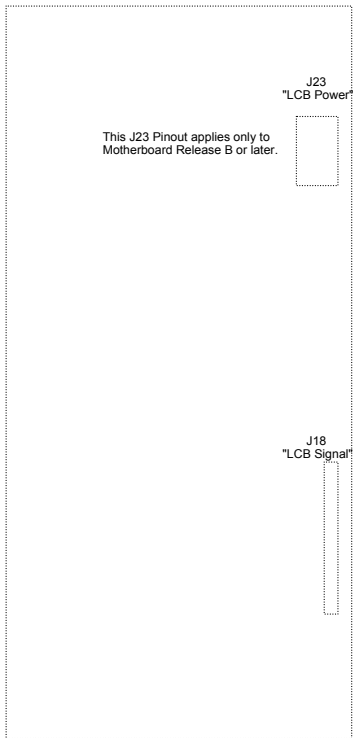
From Forward Section Connector (88-pin)
Dwg p.13 "Fwd Section Conn"
Crimp on contact and insert into housing

From Forward Section Connector (88-pin)
Dwg p.13 "Fwd Section Conn"
Crimp on contacts and insert into housing

ALL PART OF HARNESS 10021161-13-H1 (SEE PAGE 13)

A	17 Dec 2015	ECM	Add P66/J38 connector and SW_Gnd signal (removed from Mobo J33 and given its own connector on Mobo 3 Rev B)			
						
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			Moss Landing, CA 95039			
			(831) 775-1700 www.mbari.org (c) MBARI 2015			
Title			Water Alarm/GF Wiring Fab, LRAUV Int Press Vess Wiring, Dapne		Document Number 100221161	Rev A
Size A	Date: Monday, June 19, 2017		Engineer Mellinger		Sheet 11	of 14
Design File X:\LRAUV5DRAWINGS\IEE\LRAUVWIRING\SYSTEMWIRING\100221189_LRAUV_BUILD5_SYSTEMWIRINGDRAWINGSET.DSN						
Schematic Name LRAUV5BuildInternalWiring			Page Name 11 Water Alarm/GF Wiring Fab		Layout File <Layout File>	

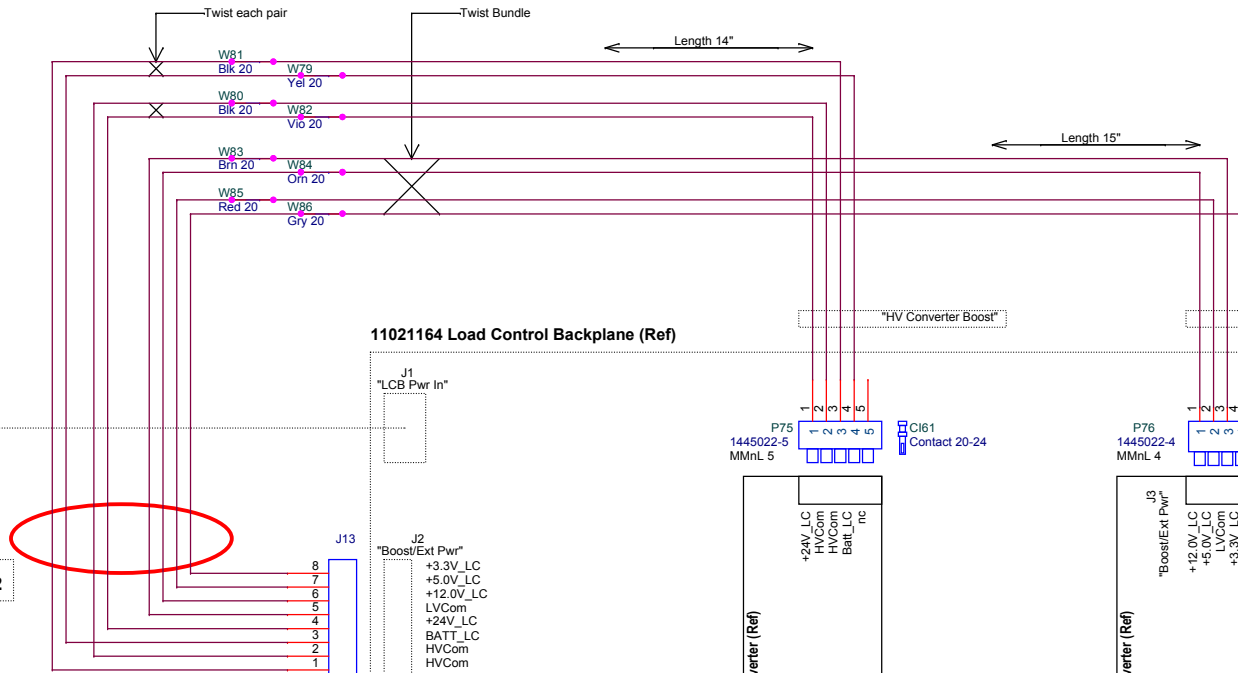
10020881 Motherboard 3 (Ref)



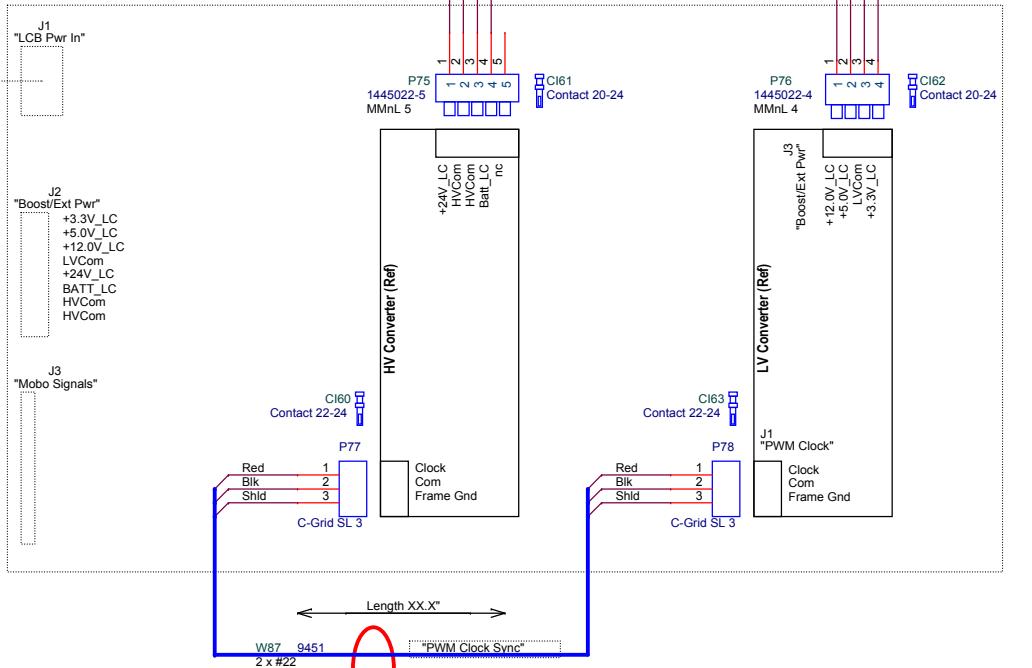
HARNESS 10021165-12-H2

10021165-12-H5

CBL2
98267-0469
Flat Flex Cable 30

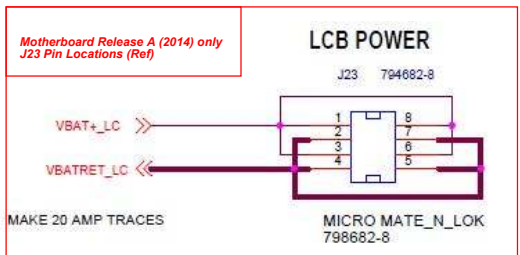


11021164 Load Control Backplane (Ref)



HARNESS 10021165-12-H3

10021165-12-H4

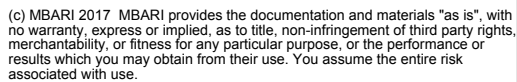


D	2017-May-5	ECM	Add cable lengths, correct J13 callout
C	2016-May-11	ECM	Add Converter Boost and PWM Clock Cables
B	2015-Oct-22	ECM	Change flat flex cable CBL2 to 3" length
A	2015-Sep-10	ECM	move Test Cable to separate Schematic

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Title Load Control Backplane Wiring Fab, LRAUV Int Press Vess Wiring, MiVEGAS		Document Number 10021165	Rev D
Size Custom	Date: Monday, June 19, 2017	Engineer Mollinger	Sheet 12 of 14
Design File X:\LRAUV\DRAWINGS\EE\LRAUV\WIRING\SYSTEM\WIRING\10021165_LRAUV_BUILD_SYSTEM\WIRING\DRAWINGSET.DSN			
Schematic Name LRAUVBuildInternalWiring		Page Name 12 Ld Cbl Backplane Wiring Fab	Layout File <Layout File>

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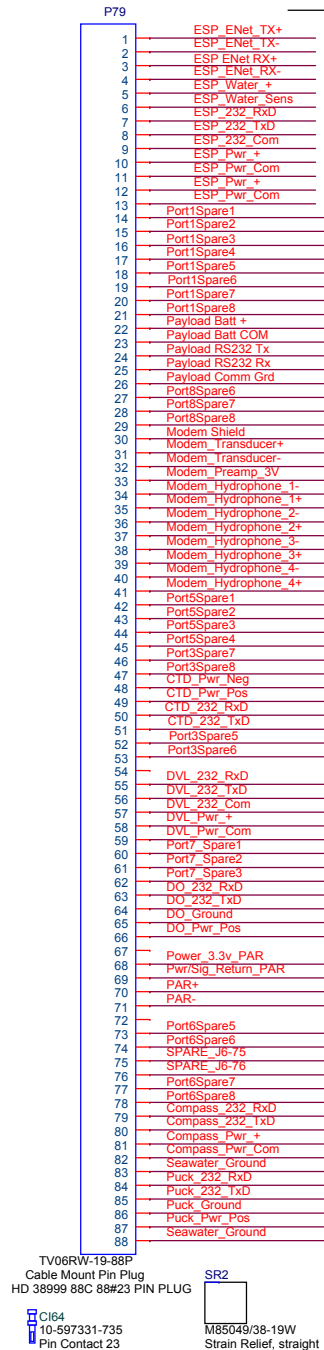


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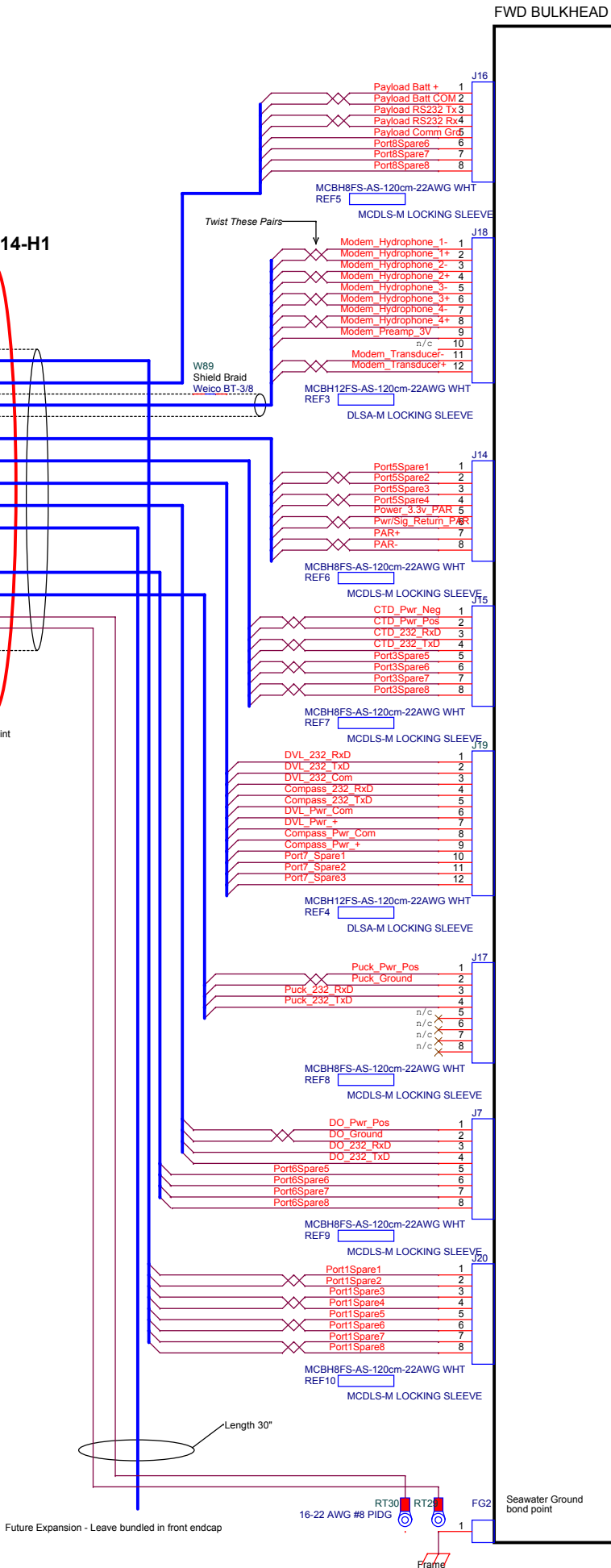
Title Fwd Section Connector, LRAUJV Internal Pressure Vessel Wiring, Daphne			Document Number 100221161	Rev M
Size	Date	Engineer	Sheet	of
Custom	Wednesday, June 21, 2017	Mellinger	13	14
Design File X:\LRAUJV\DRAWINGS\DESIGN\LRAUJV\SYSTEMS\SYSTEMS\WIRING\100221161\LRAUJV_BUILD_SYSTEMS\WIRING\CONNECTOR\FWD_SECTION_CONNECTOR.DWG				
Schematic Name		Page Name	Layout File	

E	8 Jun 2015	ECM	Replace Bionetics DAT Modem cables with in-house fabricated cables and parts callouts
D	29 Apr 2015	ECM	Move this page out of 10021157 and insert here inside 10021165, add BOM info
C	30 Jan 2015	ECM	Re-arrange LCBs, show ISUS as future expansion.
B	30 Jan 2015	ECM	Delete Neil Brown CTD and add Sea-Bird Glider CTD. Change wiring and LCB config.
A	30 Jan 2015	ECM	Fork from Dwg 10021111 Makas Forward Section Connector for ESP

N	2 Jan 2017	BWH	Added Port 1 NBOSI, NBOSI PCB, Port 8 Wiring and 232/Batt LCB for Payload/Sipper, Removed ESP LCBs and PPP Motherboard cable
M	29 Jun 2016	ECM	Change DVL Power from 24V to VBatt (change LCB, change P49)
L	19 Apr 2016	ECM	Repurpose ISUS comm cable, for ESP PPP via LCB to Mobo. Delete slot numbers from LCB callouts.



10021161-14-H1
ALL HARNESS 10021161-14-H1



Wire colors for standard 8 and 12 pin
SUBCONN connectors (ref.).

1 Black
2 White
3 Red
4 Green
5 Orange
6 Blue
7 White/Black
8 Red/Black
9 Green/Black
10 Orange/Black
11 Blue/Black
12 Black/White

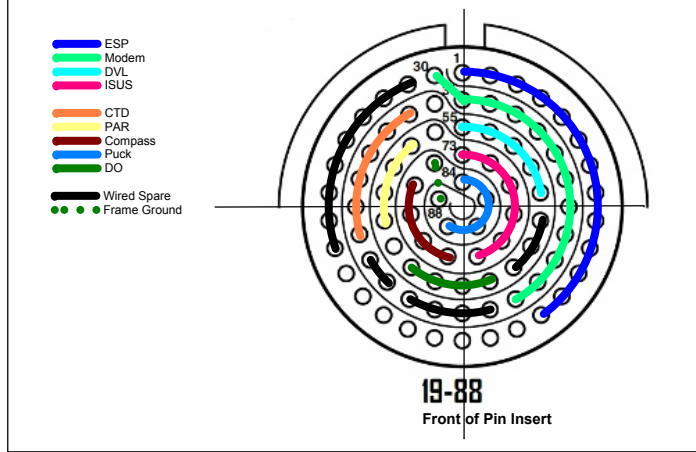
Port #1
Port #2
Port #3
Port #4
Port #5
Port #6
Port #7
Port #8

Gather Point

Forward End Cap Wet Cables - Ref Dwg 10020582
Internal View, from Stern looking Forward

Note: 12 Pin connectors designated MCBH12FS-22AWG-White are required for wire compatibility with
J3 (88 pin Pin Plug)

FORWARD BULKHEAD



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D	2 Jan 2017	BWH	Modified MIVEGAS for Daphne; added Port 1 for NBOSI CTD, Port 8 for Payload Bay/SIPPER	
C	13 Jan 2016	ECM	Change Braided Sleeve from 0.25" to 0.5"	
B	05 Jan 2016	ECM	Flip endcap layout drawing and add gather point definition, change spiral wrap to braided sleeve	
A	12 Nov 2015	ECM	Fork from Dwg 10021158 Rev G 'Makai Forward Endcap Harness'. Change length to 16"	

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Title Fwd Endcap, LRAUV Internal Pressure Vessel Wiring, Daphne		Document Number 100221161	Rev M
Size Custom	Date Monday, June 19, 2017	Engineer Mellinger	Sheet 14 of 15
Design File X:\LRAUV\DRAWINGS\GEE\LRAUV\WIRING\SYSTEM\WIRING\100221161_LRAUV_BUILD_SYSTEM\WIRING\DRAWINGSET.DGN			
Schematic Name LRAUV\Build\InternalWiring		Page Name 14 Fwd Endcap	Layout File <Layout File>