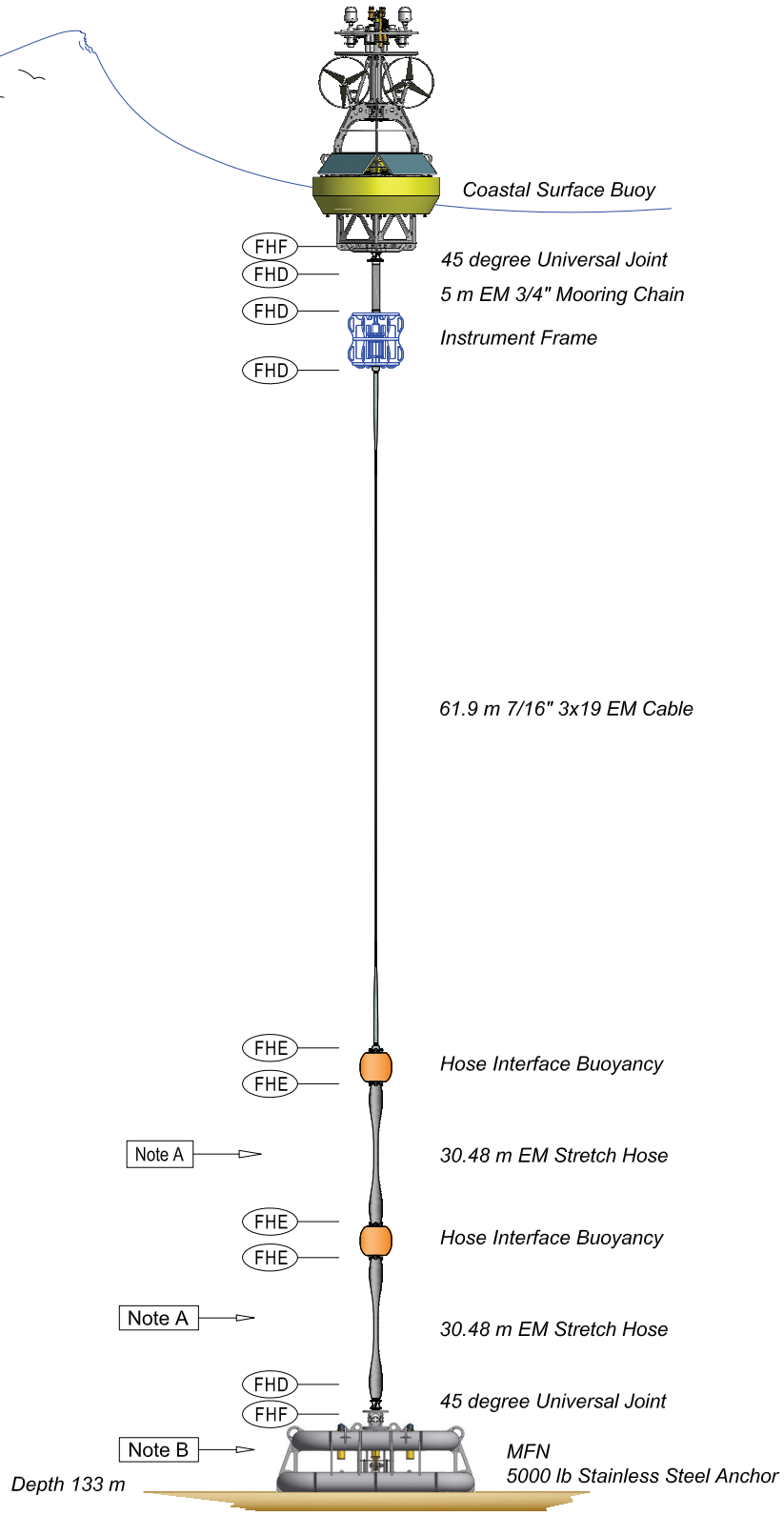


FLANGE FASTENING HARDWARE Grade 2 Titanium, Designation and Requirement		
FHD	24	1/2" x 3.5" Hex Head Bolt
	48	1/2" Flat Washer
	24	1/2" Lock Washer
	48	1/2" Hex Nut
	48	1/2" Delrin Bolt Bushing
FHF	12	3/4" x 3.5" Hex Head Bolt
	24	3/4" Flat Washer
	12	3/4" Lock Washer
	24	3/4" Hex Nut
	24	3/4" Delrin Bolt Bushing
Symbol	Qty Ea	Description

FLANGE FASTENING HARDWARE Type 316 SST, Designation and Requirement		
FHE	24	1/2" Flat Washer
	24	1/2" Lock Washer
	48	1/2" Hex Nut
	24	1/2" Delrin Bolt Bushing
	24	Stud Anode (1/4" -20)
	24	1/4" Nylon Washer
Symbol	Qty Ea	Description

Note A
Hoses are not prestretched

Note B
Anchor Recovery Line Pack contains 450 meters of 5/8" Spectra Blue.

Note:
MOORING CONFIGURATION INFORMATION CONTAINED IN THIS DRAWING IS DEFINED AND CONTROLLED BY THE MOORING DESIGN SPREADSHEET - DWG# 3604-40101

REV	DATE	DESCRIPTION	APPROVED
B	07/13/2012	UPDATES PER ECR # 1303-00767	R. SISSON
A	11/02/2009	INITIAL RELEASE PER ECR# 1303-00024	R. SISSON

REVISION HISTORY

OOI - CGSN

OCEAN OBSERVATORIES INITIATIVE COASTAL & GLOBAL SCALE NODES

REFERENCE DESIGNATOR	CP01CNSM		
DESIGN	JOHN KEMP	DATE	07/09/2012
DRAFT	B. DOHERTY	DATE	07/09/2012
CHECKED	J. KEMP	DATE	07/09/2012
APPROVED	R. SISSON	DATE	07/09/2012
MFG APPROVAL	N/A	DATE	N/A

WOODS HOLE OCEANOGRAPHIC INSTITUTION
APPLIED OCEAN PHYSICS & ENGINEERING
86 WATER STREET, WOODS HOLE, MA, 02543

TITLE
Pioneer Central Coastal Surface Mooring Water Depth 133 m

SIZE	DWG NO	REV
A	3604-40001	B

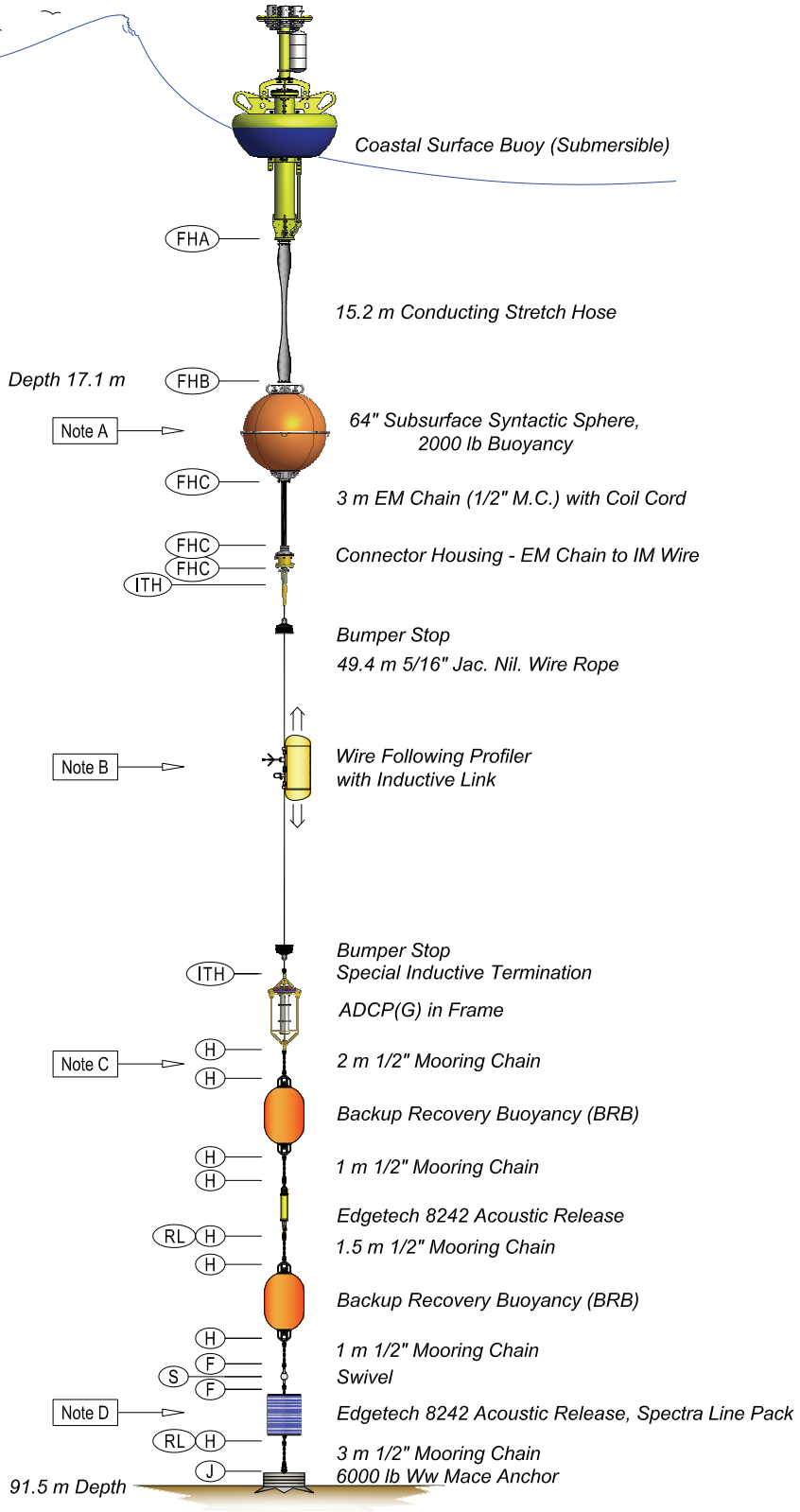
NOT TO SCALE | SHEET 1 OF 1

FLANGE FASTENING HARDWARE Grade 2 Titanium, Designation and Requirement		
FHA	6	3/8" - 16 x 3" Hex Head Bolt
	12	3/8" Flat Washer
	6	3/8" Lock Washer
	12	3/8" Hex Nut
	12	3/8" Delrin Bolt Bushing
FHB	6	3/8" - 16 x 2.5" Hex Head Bolt
	12	3/8" Flat Washer
	6	3/8" Lock Washer
	12	3/8" Hex Nut
	12	3/8" Delrin Bolt Bushing
FHC	18	1/2" - 13 x 3" Hex Head Bolt
	36	1/2" Flat Washer
	18	1/2" Lock Washer
	36	1/2" Hex Nut
	36	1/2" Delrin Bolt Bushing
Symbol	Qty Ea	Description

INDUCTIVE TERMINATION HARDWARE Type 316 SST, Designation and Requirement		
ITH	2	3/4"-10 x 4" Hex Head Bolt, Cotter Pin Hole
	4	3/4" Flat Washer (Type A and B)
	2	3/4" Lock Washer
	2	3/4" Hex Nut
	2	Stud Anode (1.15" OD x 1.25" H)
	2	1/4" Nylon Washer
	2	3/16" x 1.25" SST Cotter Pin
Symbol	Qty Ea	Description

MOORING HARDWARE DESIGNATION	
F	(1) 5/8" SH, (1) 5/8" SL, (1) 3/4" SH
H	(2) 5/8" SH, (1) 5/8" SL
J	(1) 5/8" SH, (1) 7/8" EL, (1) 7/8" SH
S	(1) 5 ton Swivel, bushings, anode
RL	Edgetech Release Link

MOORING HARDWARE REQUIRED	
19	5/8 " Anchor Shackles
2	3/4 " Anchor Shackles
1	7/8 " Anchor Shackle
10	5/8 " Sling Links
1	7/8" End Link
1	5 ton Swivel, bushings, anode
2	Edgetech Release Links
Qty Ea	Description



Note A
Sphere Depth is Critical at 17.1 m

Note B
Profile Depth Interval = 23 to 71 m

Note C
Adjustable Depth Section

Note D
Anchor Recovery Line Pack
contains 300 m of 1/2" Spectra

Note:
MOORING CONFIGURATION INFORMATION CONTAINED IN THIS DRAWING IS DEFINED AND CONTROLLED BY THE MOORING DESIGN SPREADSHEET - DWG# 3604-40107

REV	DATE	DESCRIPTION	APPROVED
C	11/20/2012	UPDATES PER ECR # 1303-00882	R. SISSON
B	06/12/2012	UPDATES PER ECR # 1303-00713	R. SISSON
A	11/02/2009	INITIAL RELEASE PER ECR# 1303-00024	R. SISSON

REVISION HISTORY

OOI - CGSN

OCEAN OBSERVATORIES INITIATIVE COASTAL & GLOBAL SCALE NODES

REFERENCE DESIGNATOR CP02PMUI		WOODS HOLE OCEANOGRAPHIC INSTITUTION APPLIED OCEAN PHYSICS & ENGINEERING 86 WATER STREET, WOODS HOLE, MA, 02543
DESIGN J. KEMP	DATE 06/06/2012	
DRAFT B. DOHERTY	DATE 06/06/2012	TITLE Pioneer Upstream Inshore Coastal Profiler Mooring Water Depth 91.5 m
CHECKED J. KEMP	DATE 06/12/2012	
APPROVED R. SISSON	DATE 06/12/2012	SIZE A · DWG NO 3604-40007 · REV A
MFG APPROVAL N/A	DATE -	NOT TO SCALE · SHEET 1 OF 1

FLANGE FASTENING HARDWARE Grade 2 Titanium, Designation and Requirement		
FHA	6	3/8" - 16 x 3" Hex Head Bolt
	12	3/8" Flat Washer
	6	3/8" Lock Washer
	12	3/8" Hex Nut
	12	3/8" Delrin Bolt Bushing
FHB	6	3/8" - 16 x 2.5" Hex Head Bolt
	12	3/8" Flat Washer
	6	3/8" Lock Washer
	12	3/8" Hex Nut
	12	3/8" Delrin Bolt Bushing
FHC	18	1/2" - 13 x 3" Hex Head Bolt
	36	1/2" Flat Washer
	18	1/2" Lock Washer
	36	1/2" Hex Nut
	36	1/2" Delrin Bolt Bushing
Symbol	Qty Ea	Description

INDUCTIVE TERMINATION HARDWARE Type 316 SST, Designation and Requirement		
ITH	2	3/4"-10 x 4" Hex Head Bolt, Cotter Pin Hole
	4	3/4" Flat Washer (Type A and B)
	2	3/4" Lock Washer
	2	3/4" Hex Nut
	2	Stud Anode (1.15" OD x 1.25" H)
	2	1/4" Nylon Washer
	2	3/16" x 1.25" SST Cotter Pin
Symbol	Qty Ea	Description

MOORING HARDWARE DESIGNATION	
F	(1) 5/8" SH, (1) 5/8" SL, (1) 3/4" SH
H	(2) 5/8" SH, (1) 5/8" SL
J	(1) 5/8" SH, (1) 7/8" EL, (1) 7/8" SH
S	(1) 5 ton Swivel, bushings, anode
RL	Edgetech Release Link

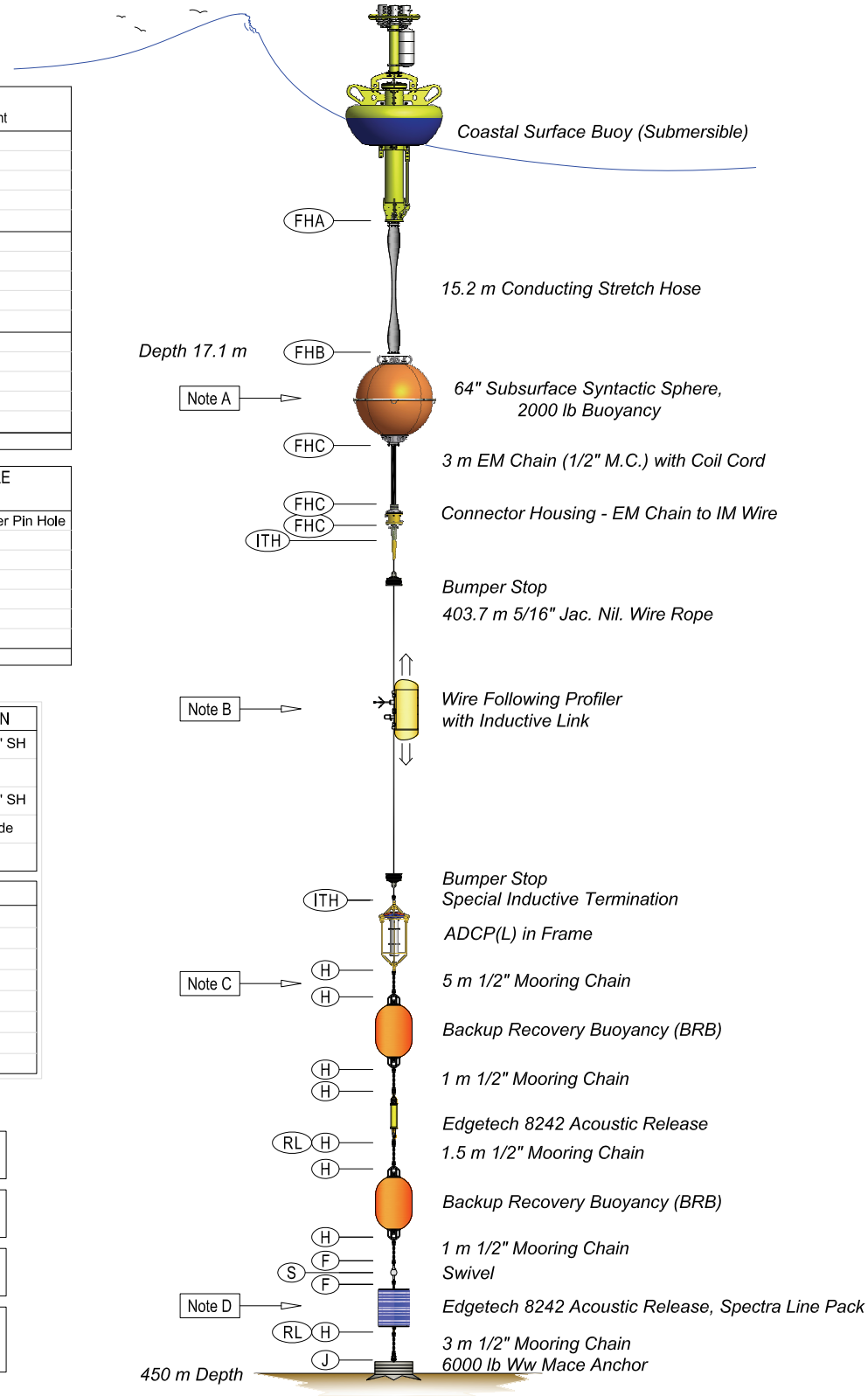
MOORING HARDWARE REQUIRED	
19	5/8 " Anchor Shackles
2	3/4 " Anchor Shackles
1	7/8 " Anchor Shackle
10	5/8 " Sling Links
1	7/8" End Link
1	5 ton Swivel, bushings, anode
2	Edgetech Release Links
Qty Ea	Description

Note A
Sphere Depth is Critical at 17.1 m

Note B
Profile Depth Interval = 23 to 427 m

Note C
Adjustable Depth Section

Note D
Anchor Recovery Line Pack
contains 750 m of 1/2" Spectra



Note:
MOORING CONFIGURATION INFORMATION CONTAINED IN THIS DRAWING IS DEFINED AND CONTROLLED BY THE MOORING DESIGN SPREADSHEET - DWG# 3604-40108

REV	DATE	DESCRIPTION	APPROVED
C	11/20/2012	UPDATES PER ECR # 1303-00882	R. SISSON
B	06/12/2012	UPDATES PER ECR # 1303-00713	R. SISSON
A	11/02/2009	INITIAL RELEASE PER ECR# 1303-00024	R. SISSON

REVISION HISTORY

OOI - CGSN

OCEAN OBSERVATORIES INITIATIVE COASTAL & GLOBAL SCALE NODES

REFERENCE DESIGNATOR CP02PMUO	WOODS HOLE OCEANOGRAPHIC INSTITUTION APPLIED OCEAN PHYSICS & ENGINEERING 86 WATER STREET, WOODS HOLE, MA, 02543
DESIGN: J. KEMP — DATE: 06/06/2012	TITLE: Pioneer Upstream Offshore Coastal Profiler Mooring Water Depth 450 m
DRAFT: B. DOHERTY — DATE: 06/06/2012	
CHECKED: J. KEMP — DATE: 06/12/2012	
APPROVED: R. SISSON — DATE: 06/12/2012	SIZE: A — DWG NO: 3604-40008 — REV: A
MFG APPROVAL: N/A — DATE: -	NOT TO SCALE — SHEET 1 OF 1