

Company : LDEO
Vessel : Marcus G.Langseth
Client : NSF

Project : MGL-0812 Pacific Rise
Area : East Pacific Rise
Start Date : 22 June 2008



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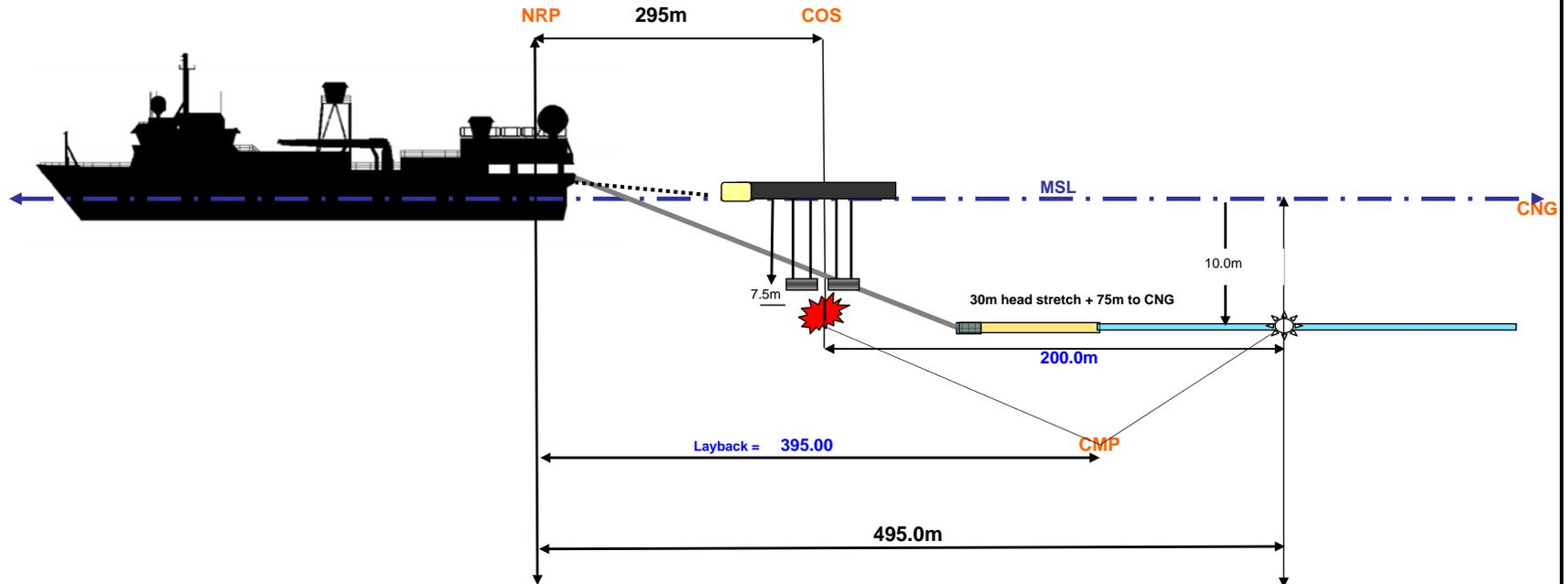
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R/V Marcus G. Langseth - Towing Offsets

*** Offsets used for sequences ***



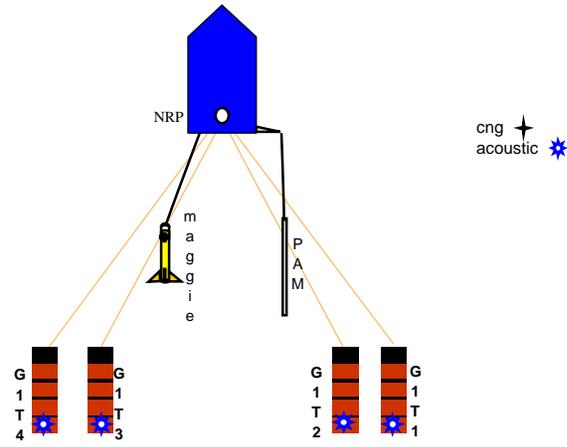
*** Offsets used for acquisition ***

NRP-Stern	4.20	m	
NRP-COS	295.00	m	
NRP-CNG	495.00	m	
COS-CNG	200.00	m	
NRP-CMP	395	m	Layback

NRP	Nav Reference Point
COS	Centre of Source
CNG	Centre of Near Group (Trace # 001)
CMP	Common Mid-Point
MSL	Mean Sea Level

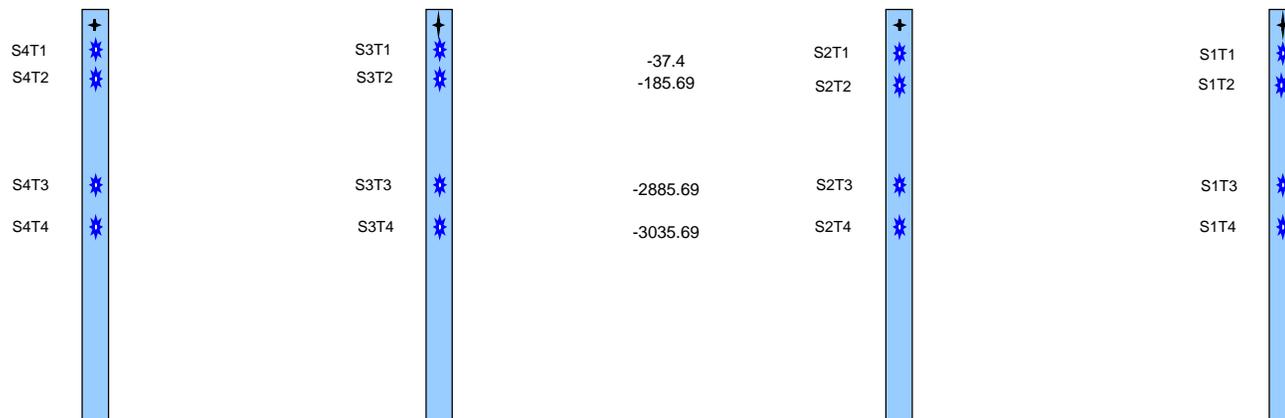
All measurements in meters

cng -> S1T1 = -37.04m
 cng -> S1T2 = -186.04m
 G1T1 -> G1S1: x = 0.0 y = -8.23 z = -11.88
 G1T2 -> G1S2: x = 0.0 y = -8.23 z = -11.88
 G1T3 -> G1S3: x = 0.0 y = -8.23 z = -11.88
 G1T4 -> G1S4: x = 0.0 y = -8.23 z = -11.88

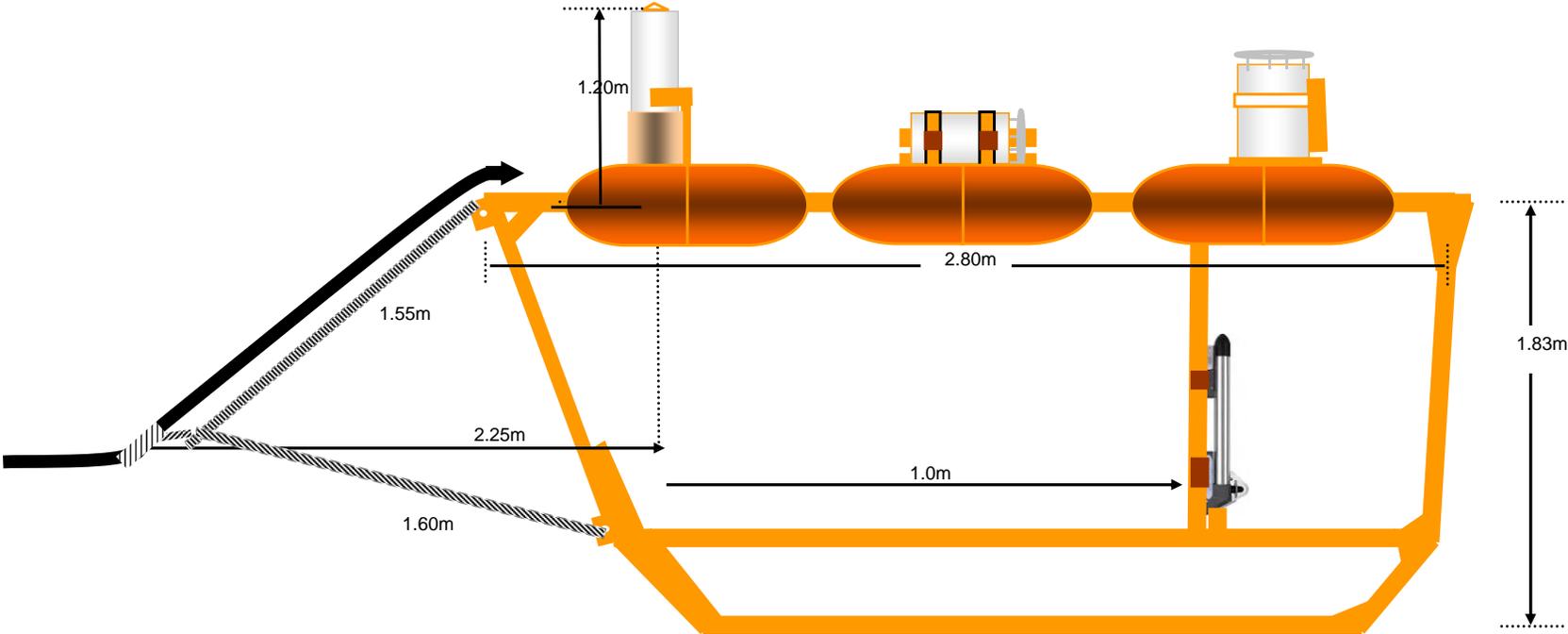


Cable acoustic offsets are referenced to cng on individual streamers

Tailbuoy acoustics referenced to dGPS pod



R/V Marcus G. Langseth - Tailbouy



All measurements in meters

stic-cable - 75m

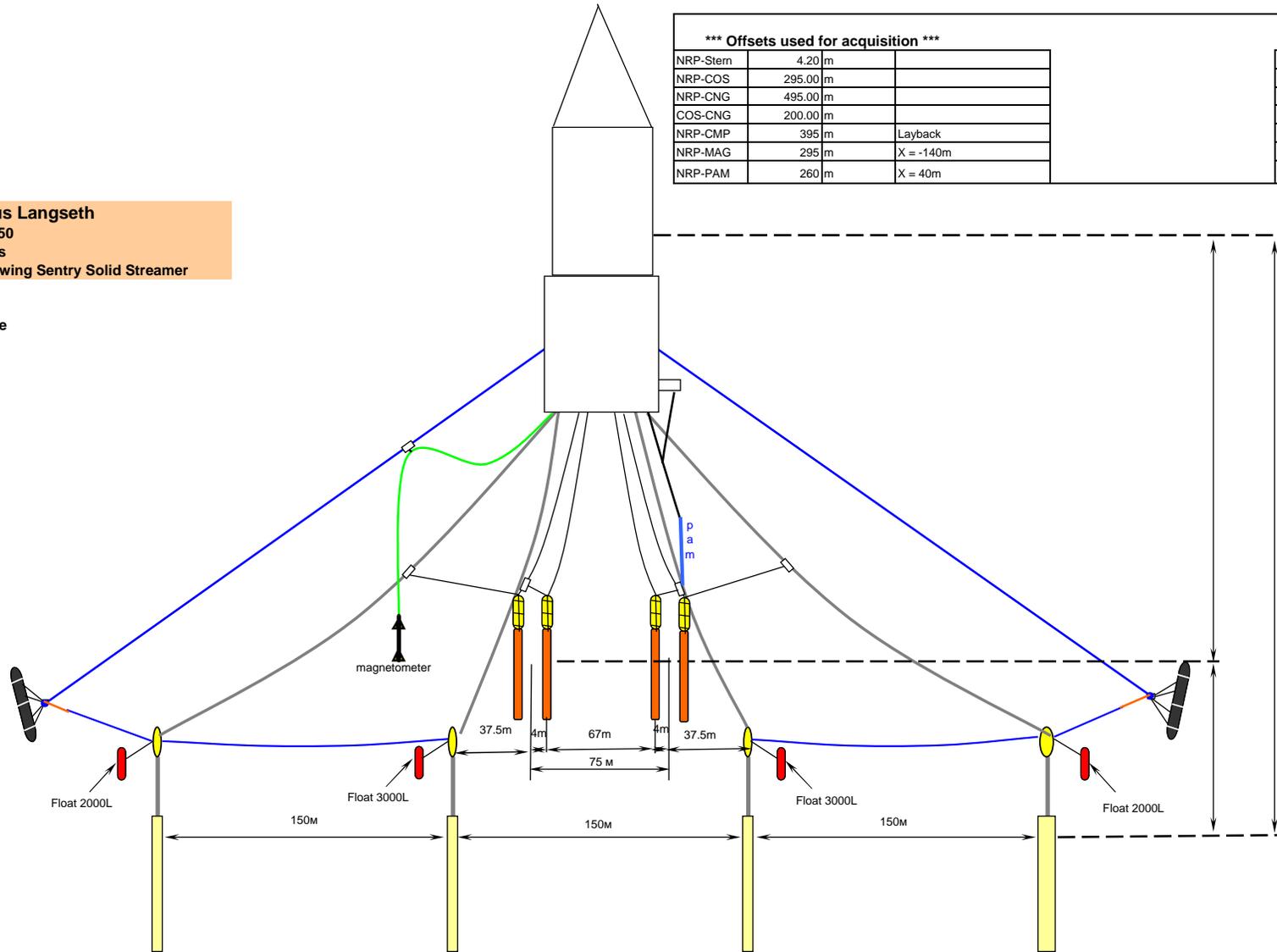
r/v Marcus G. Langseth "tow" configuration

R/V Marcus Langseth
 4 x 6000 x 150
 4 Gunstrings
 Baro 16's towing Sentry Solid Streamer

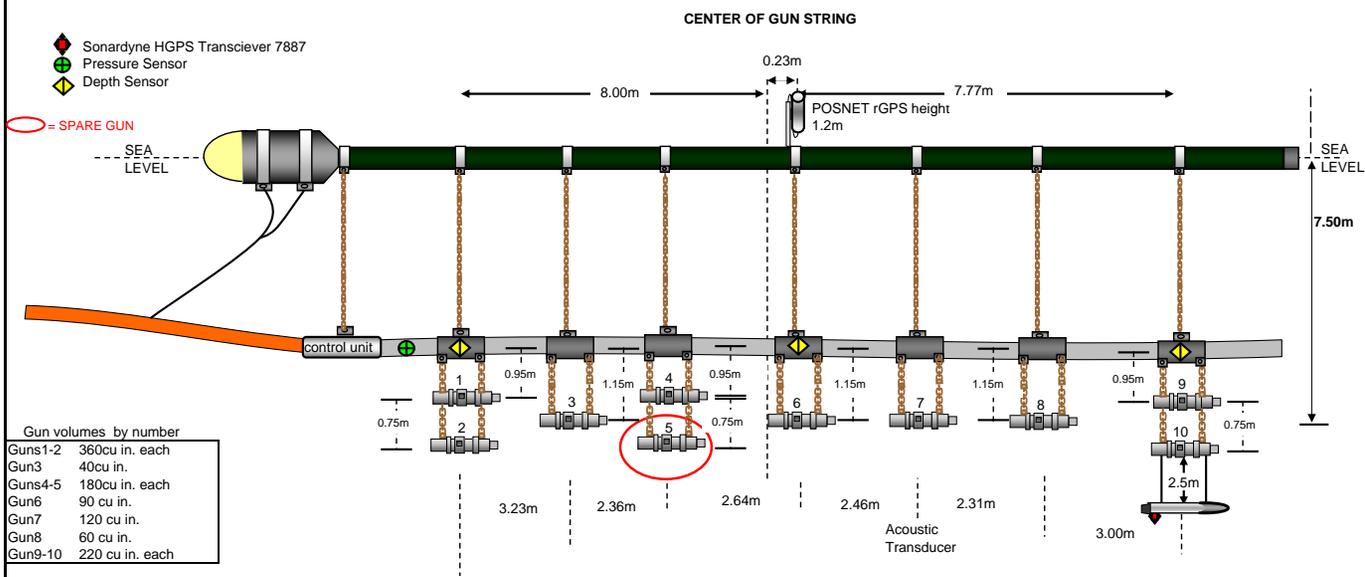
NOT to Scale

*** Offsets used for acquisition ***		
NRP-Stem	4.20 m	
NRP-COS	295.00 m	
NRP-CNG	495.00 m	
COS-CNG	200.00 m	
NRP-CMP	395 m	Layback
NRP-MAG	295 m	X = -140m
NRP-PAM	260 m	X = 40m

NRP	Nav Reference Point
COS	Centre of Source
CNG	Centre of Near Group (Trace # 468)
CMP	Common Mid-Point
MSL	Mean Sea Level



R/V Marcus G. Langseth - Gun Array Offsets

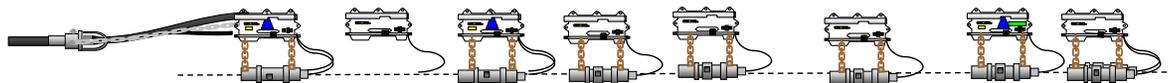


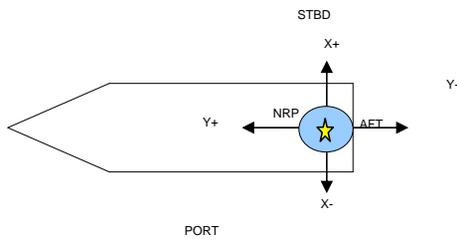
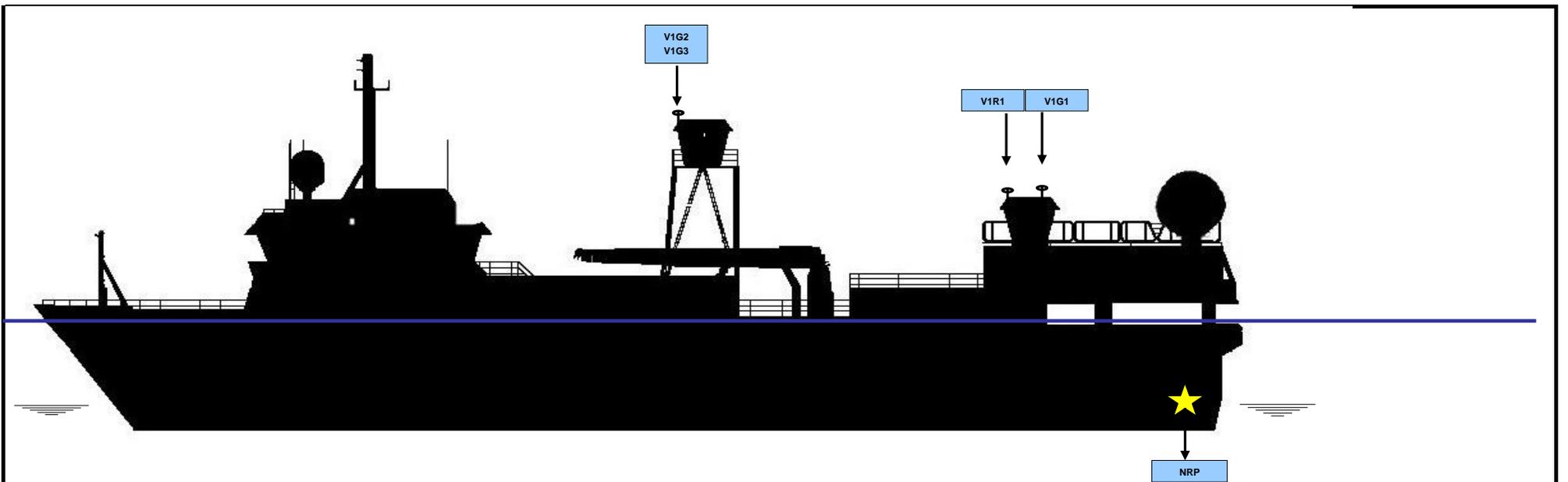
Array total volume (without spares) is 6600 cubic inches.
 String 1 has guns 9 & 10 in a horizontal cluster; Strings 2, 3, 4, have all clusters hanging vertically.
 Gun clusters have 0.75m between guns and hang 0.95m from center of hanger

Total volume per string (without spare) 1650 cubic inches.
Cluster Guns are 1m apart. NOTE: drawing not to scale
 Single guns hang from hanger 1.15m

All gun volumes, numbering, locations, and offsets approved by chief gunner Tom Spoto.

All measurements in meters





Note: All Echosounders are used in Spectra with 6.6m ship's draft correction applied.

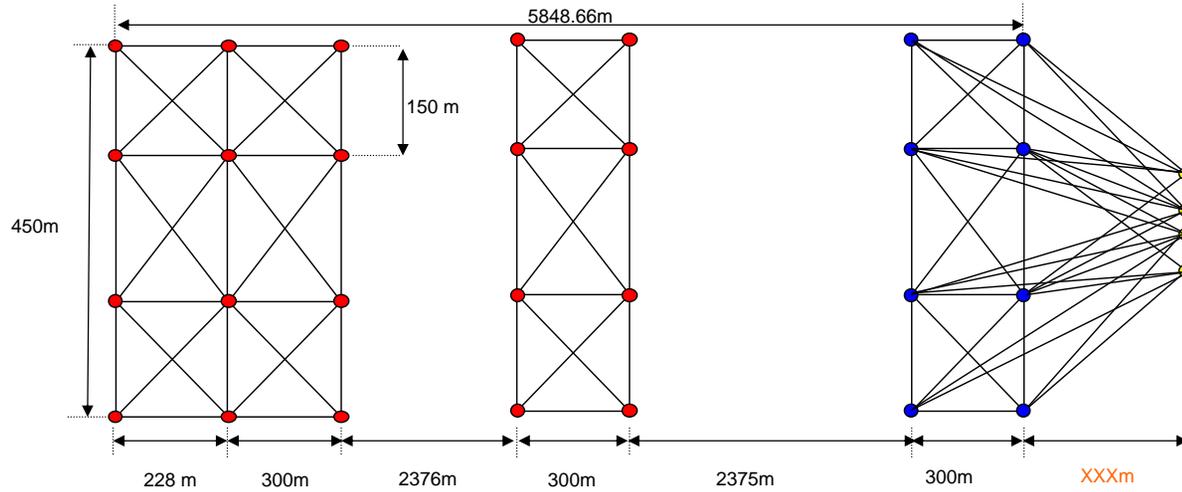


All measurements in meters					
		FORE/AFT (Y)	STBD/PORT (X)	UP/DOWN (Z)	
★	NRP	NAVIGATION REFERENCE POINT	0.00	0.00	0.00
	V1G1	C-Nav	4.87	8.06	14.50
	V1G2	SeaPath 200	1.50	25.30	16.90
	V1G3	Pos MV	8.50	22.30	16.90
	V1R1	PosNet	4.87	10.45	14.50
	EM120	Multibeam	49.70	8.50	-6.60

R/V Marcus G. Langseth - Acoustic Offsets

Sonardyne SIPS 1

- HGPS Transceiver 7887 & Shock Mounted Transducer 7660
- XSRS 8005 Acoustic Transceiver (Longlife Battery)
- XSRS 7885 Acoustic Transceiver
- XSRS 8018 ASV (Combined Transceiver and Velocimeter)



All measurements in meters

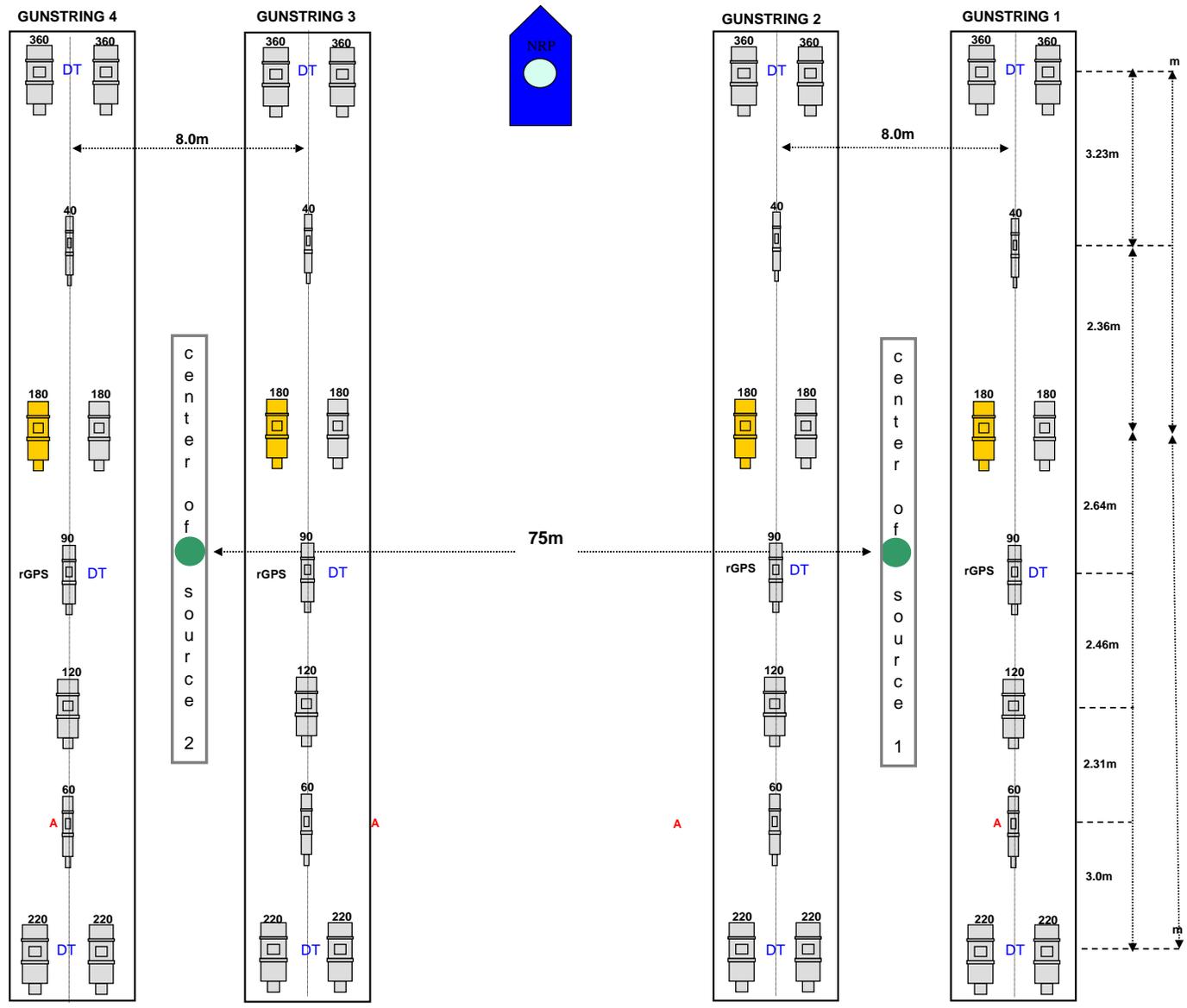
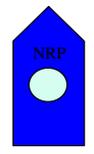
r/v Marcus G. Langseth - Gun Configuration

DT = Depth Transducer
 A = Acoustic
 P = Pressure Sensor - located in front of gun's 1 & 2
 Center of Source 1 & 2

 Spare Gun

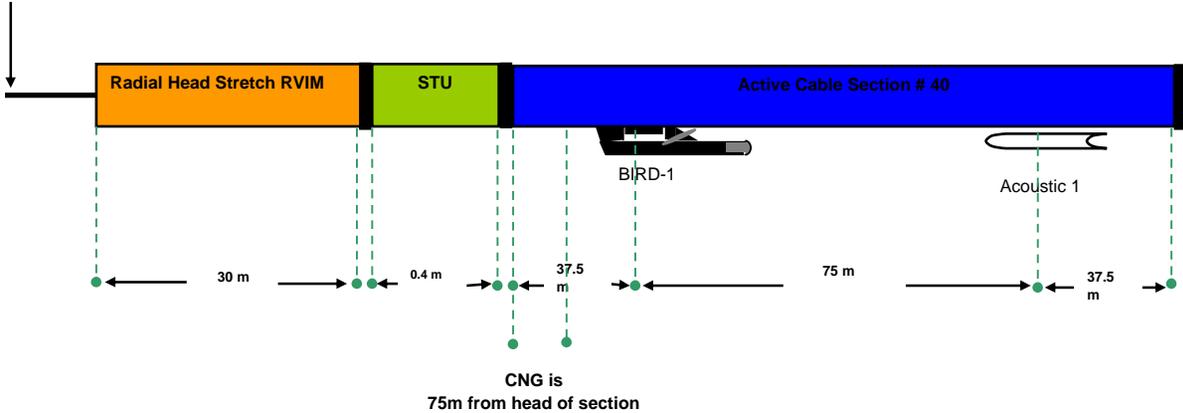
Cluster Guns are mounted 1m apart
 String 1 cluster 9 & 10 mounted horizontally
 String 2, 3, & 4 all clusters mounted vertically.

All measurements in meters

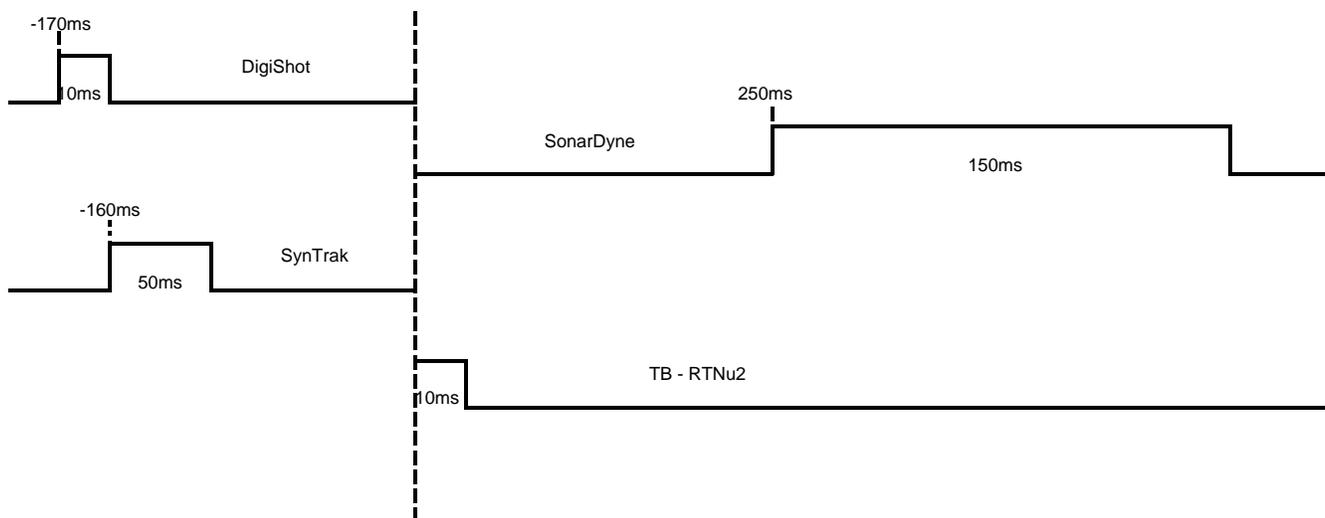


R/V Marcus G. Langseth - Streamer Front End

Lead-in:
Outer = 505m
Inner = 465m



TO Shot Predict



Spectra timing for r/v Marcus G. Langseth

