

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

Project : MGL1004  
Area : Shatsky Rise  
Start Date : 19 July 2010



**Vessel Sensor Offsets**

**Towing Offsets**

**Acoustic Offsets**

**Gun Array Offsets**

**Gun Configuration**

**Streamer Front End**

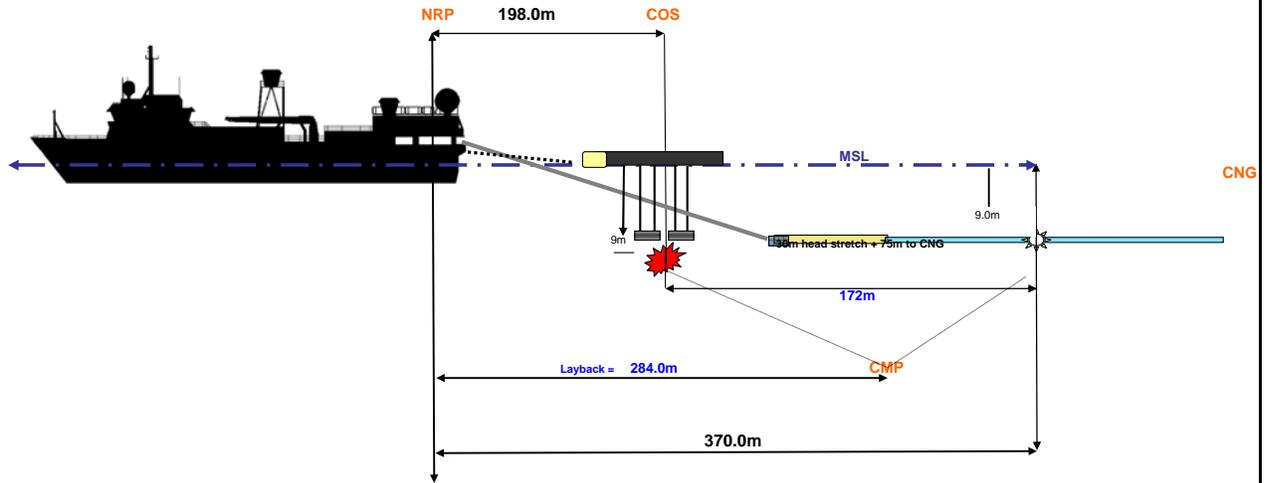
**Tailbuoy Offsets**

**Timing Langseth**

**Timing Spectra**



### R/V Marcus G. Langseth - Towing Offsets

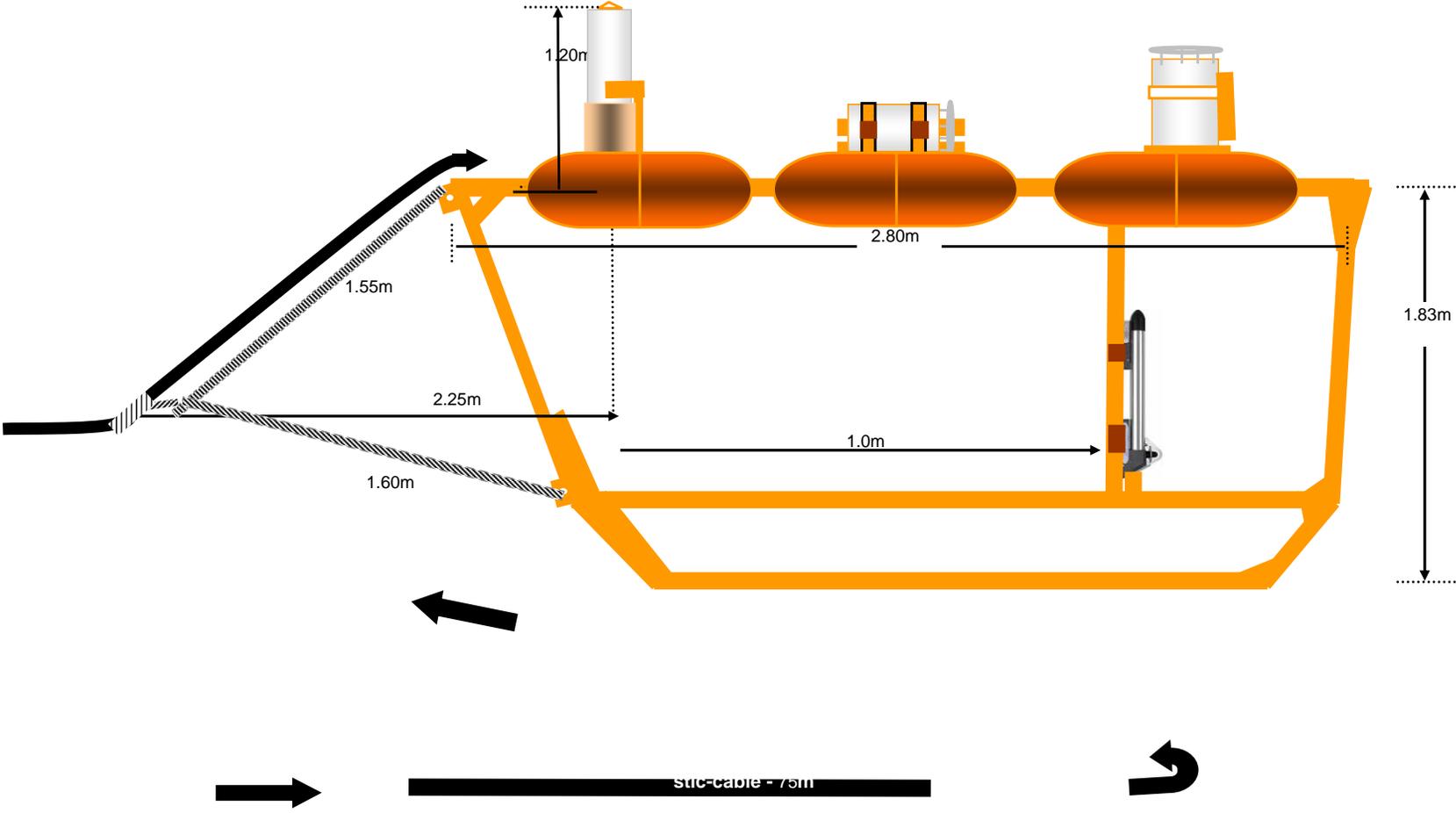


*** Offsets used for acquisition ***		
NRP-Stem	4.20	m
NRP-COS	198.00	m
NRP-CNG	370.00	m
COS-CNG	172.00	m
NRP-CMP	284.00	m

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

All measurements in meters

R/V Marcus G. Langseth - Tailbouy



All measurements in meters

# R/V Marcus G. Langseth "tow" configuration

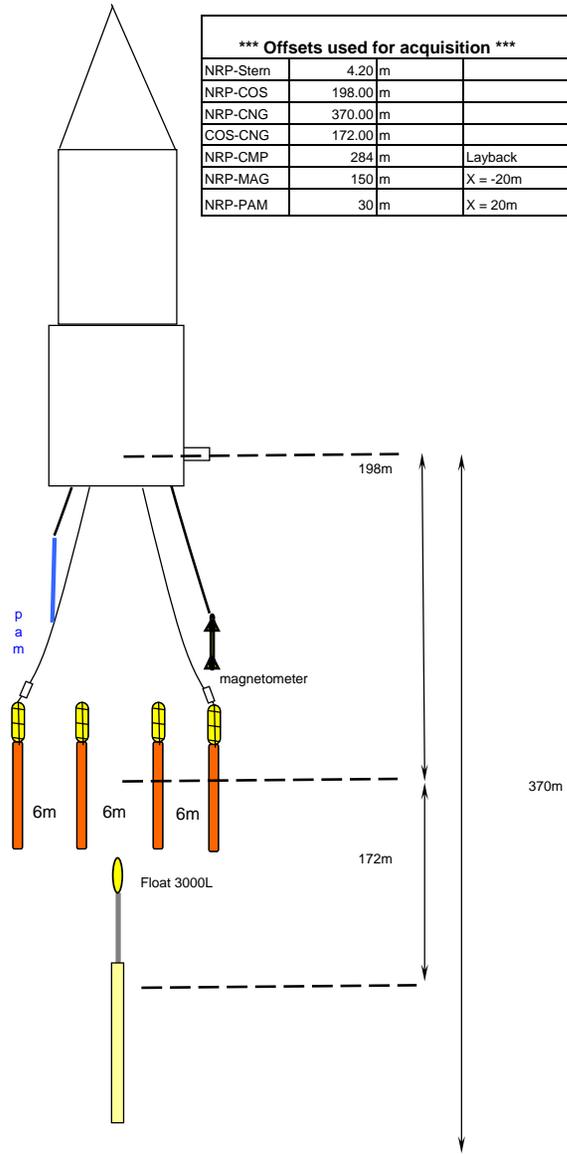
R/V Marcus Langseth  
1 x 6000  
4 Gunstrings

NOT to Scale

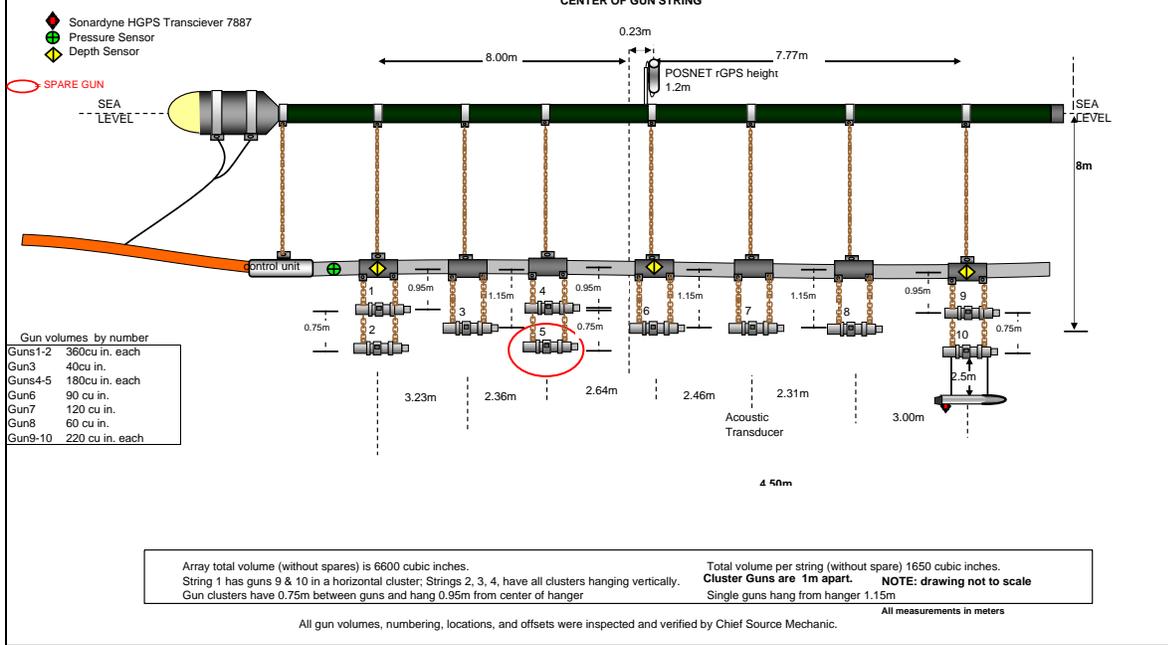
*** Offsets used for acquisition ***		
NRP-Stem	4.20 m	
NRP-COS	198.00 m	
NRP-CNG	370.00 m	
COS-CNG	172.00 m	
NRP-CMP	284 m	Layback
NRP-MAG	150 m	X = -20m
NRP-PAM	30 m m	X = 20m

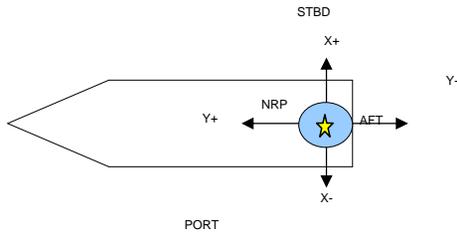
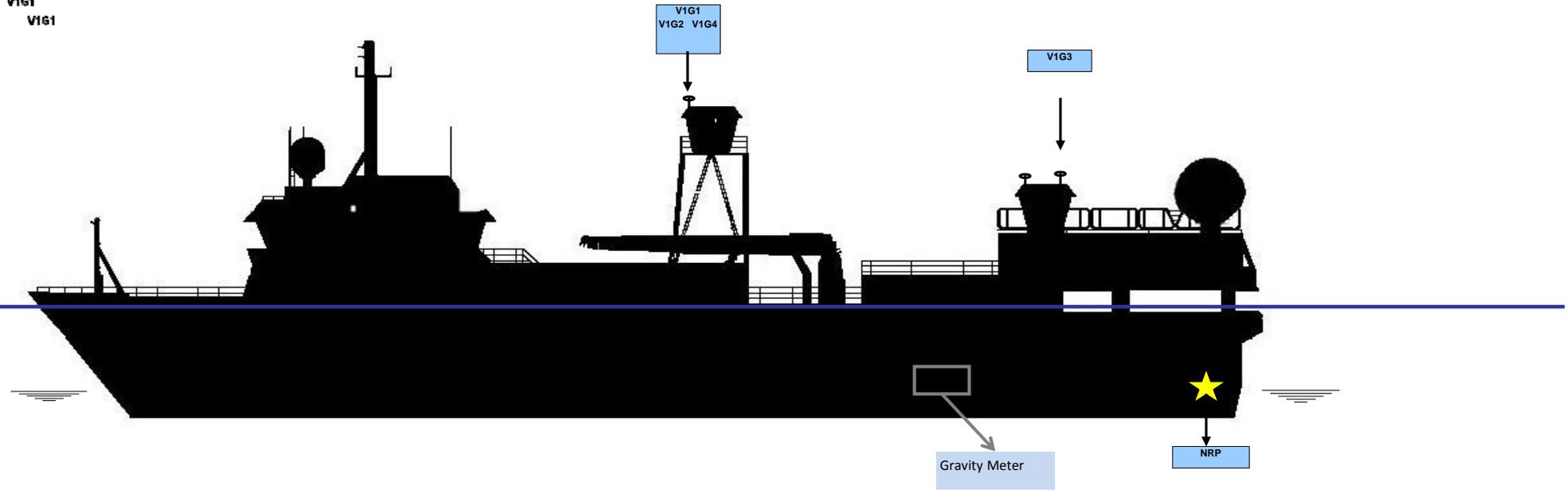
<b>NRP</b>	<b>Nav Reference Point</b>
<b>COS</b>	<b>Centre of Source</b>
<b>CNG</b>	<b>Centre of Near Group (Trace # 468)</b>
<b>CMP</b>	<b>Common Mid-Point</b>
<b>MSL</b>	<b>Mean Sea Level</b>



### R/V Marcus G. Langseth - Gun Array Offsets



V1G1  
V1G1



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

All measurements in meters

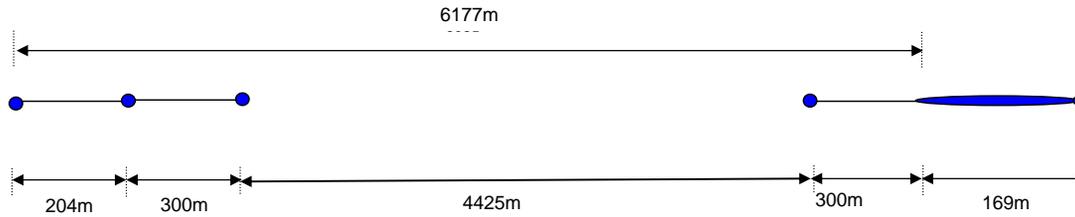


		STBD/PORT (X)	FORE/AFT (Y)	UP/DOWN (Z)
	<b>NRP</b> NAVIGATION REFERENCE POINT	0.00	4.20	0.00
	<b>V1G1</b> C-Nav 3050	0.00	23.40	16.90
	<b>V1G2</b> SeaPath 200	0.00	22.30	16.90
	<b>V1G3</b> C-Nav 2000	4.87	8.06	14.50
	<b>V1G4</b> Pos MV	-1.50	25.30	16.90
	<b>V1R1</b> PosNet	-2.00	23.40	16.90
	<b>EM122</b> Multibeam	8.50	49.70	-6.60
	<b>BGM</b> Bell Gravity Meter	4.40	12.20	-3.49

# R/V Marcus G. Langseth - Acoustic Offsets

## Sonardyne SIPS 1

- HGPS Transciever 7887 & Shock Mounted Transducer 7660
- XSRS 8005 Acoustic Transceiver (Longlife Battery)



All measurements in meters

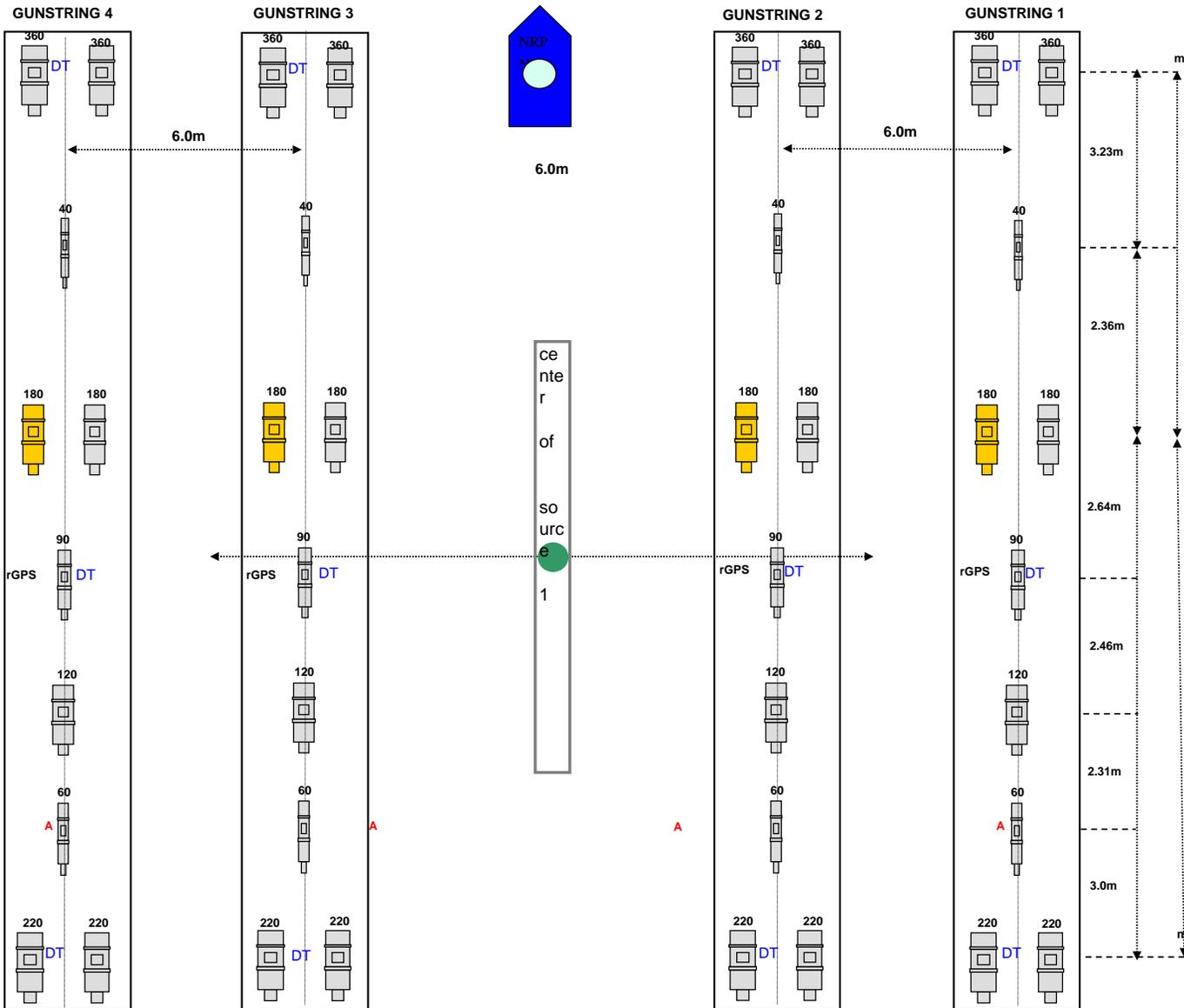
### r/v Marcus G. Langseth - Gun Configuration

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

Center of Source 1 & 2  
 Spare Gun

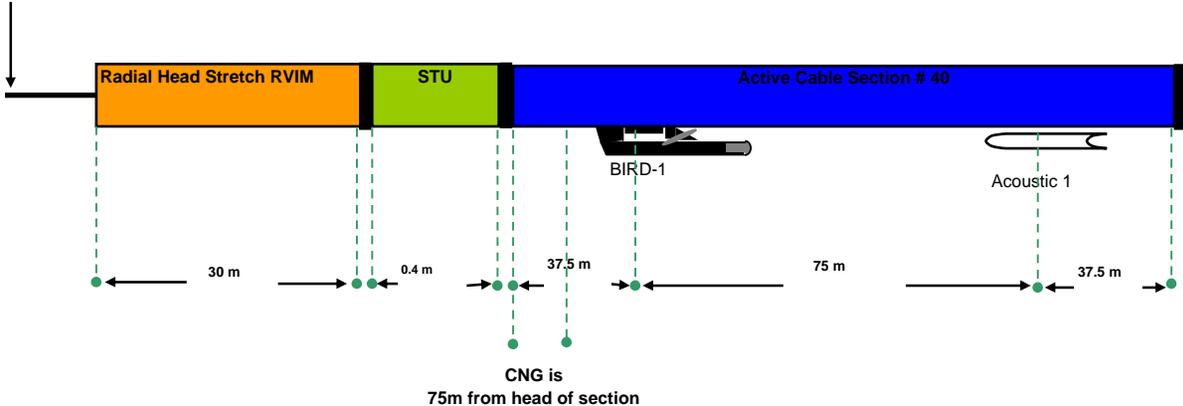
Cluster Guns are mounted 1m apart  
 String 1 cluster 9 & 10 mounted  
 horizontally  
 String 2, 3, & 4 all clusters mounted  
 vertically.

All measurements in meters

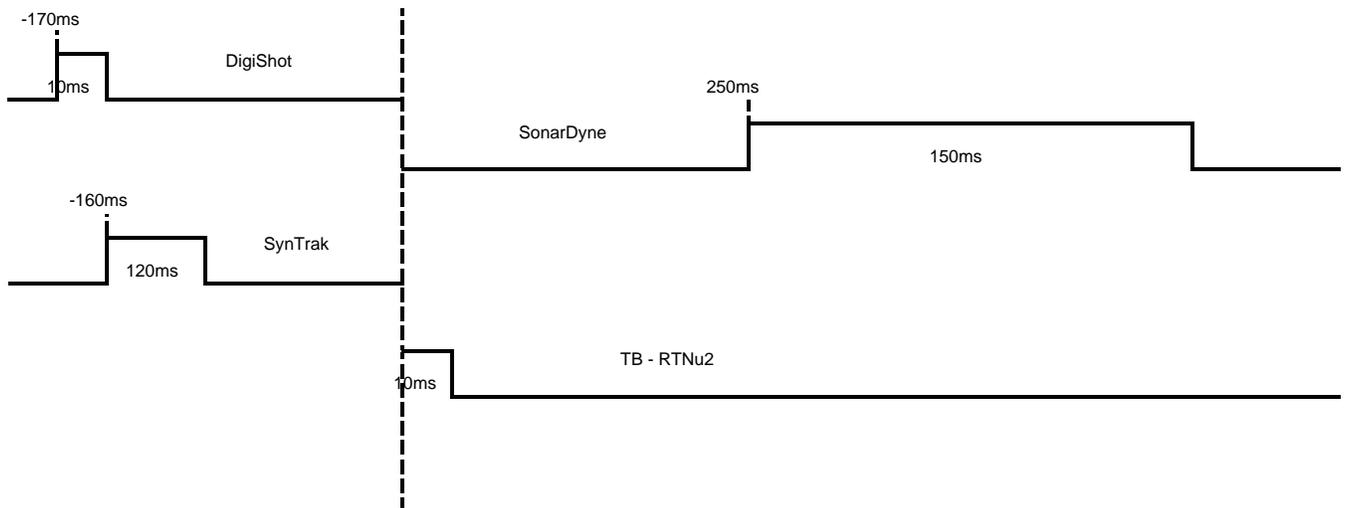


R/V Marcus G. Langseth - Streamer Front End

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



TO Shot Predict



## Spectra timing for r/v Marcus G. Langseth

