

Company : LDEO  
Vessel : Marcus G.Langseth  
Client : NSF  
  
Project : MGL1115  
Area : Gaherty - Central Pacific  
Start Date : 23 November 2011

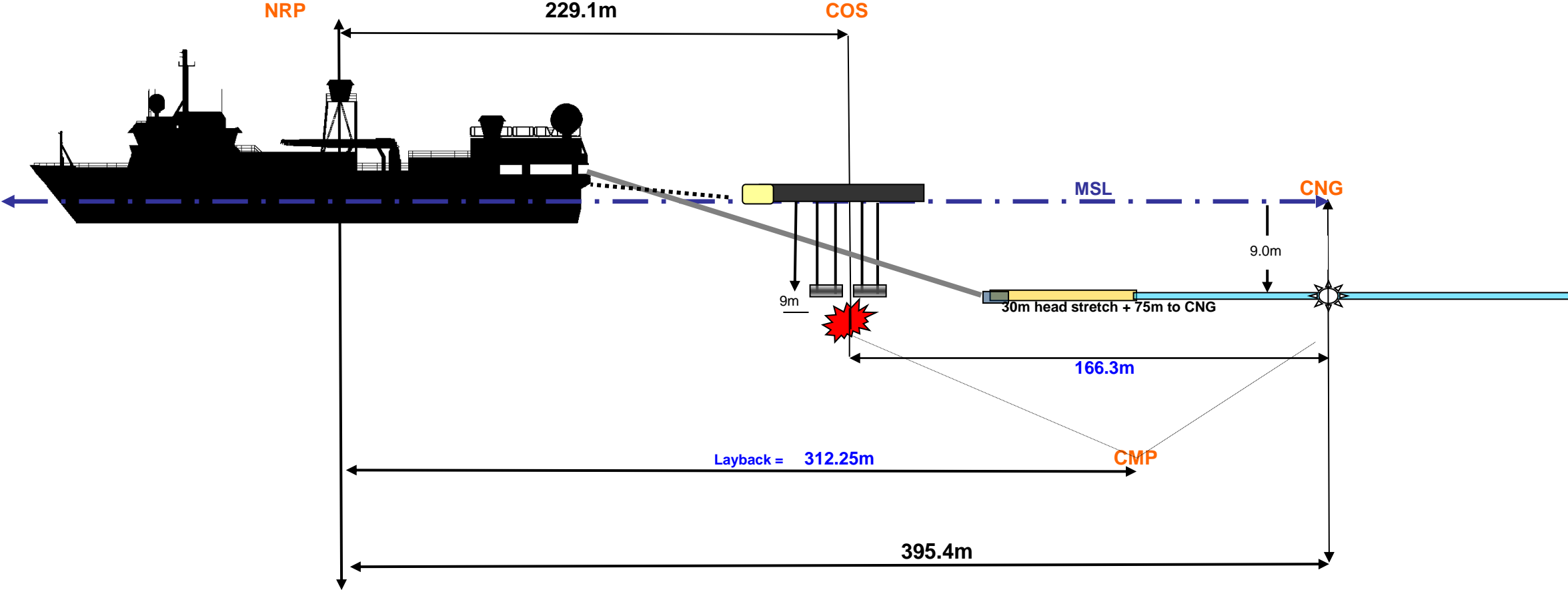


Vessel Sensor Offsets  
Towing Offsets  
Acoustic Offsets  
Gun Array Offsets  
Gun Configuration  
Streamer Front End  
Tailbuoy Offsets  
Timing Langseth  
Timing Spectra



R/V Marcus G. Langseth - Towing Offsets

Note: Sequences 001 - 003 were Source Only.  
Sequences 004 to cruise end are MCS and Source.

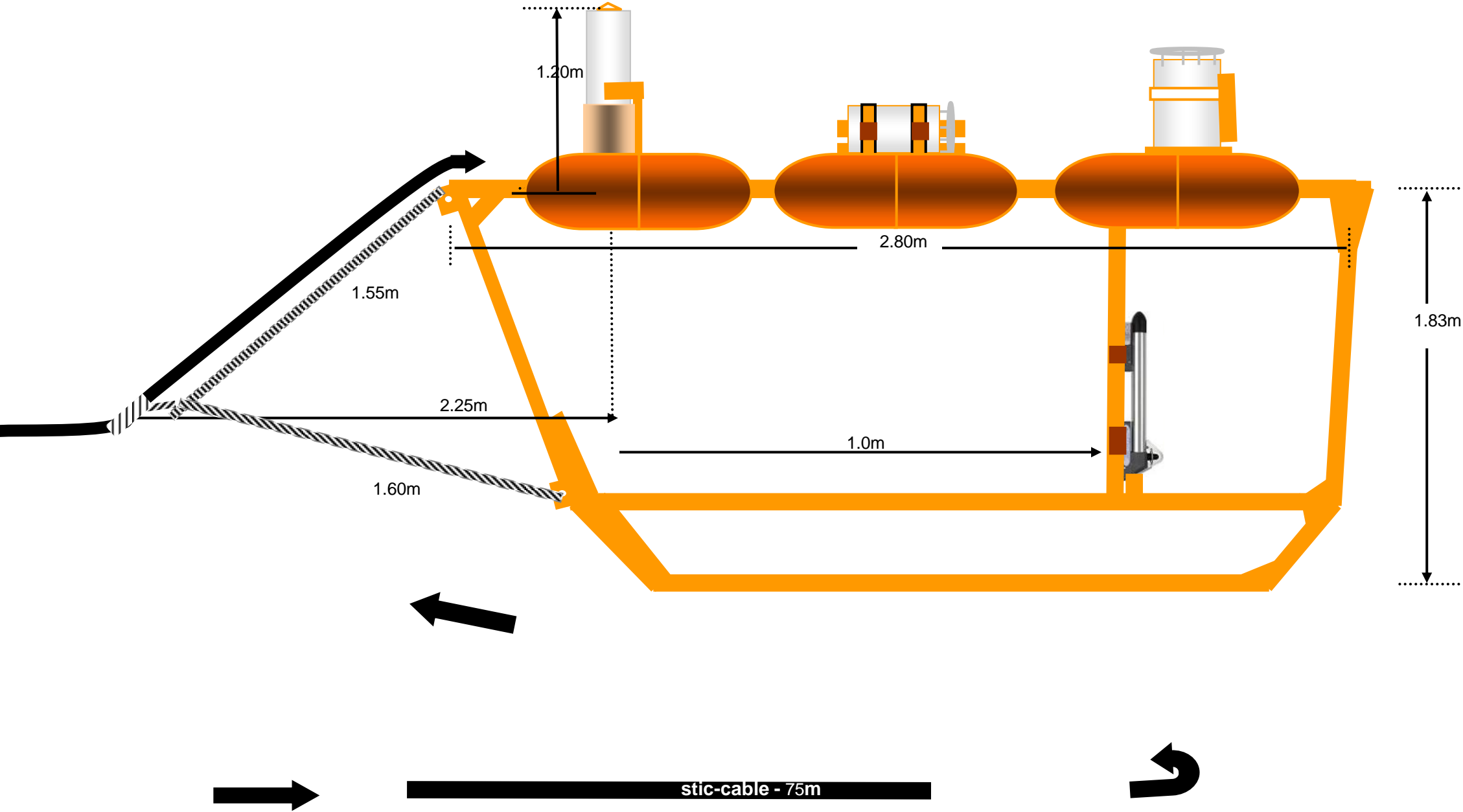


*** Offsets used for acquisition ***			
NRP-Stern	29.50	m	
NRP-COS	229.10	m	
NRP-CNG	395.40	m	
COS-CNG	166.30	m	
NRP-CMP	312.25	m	

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



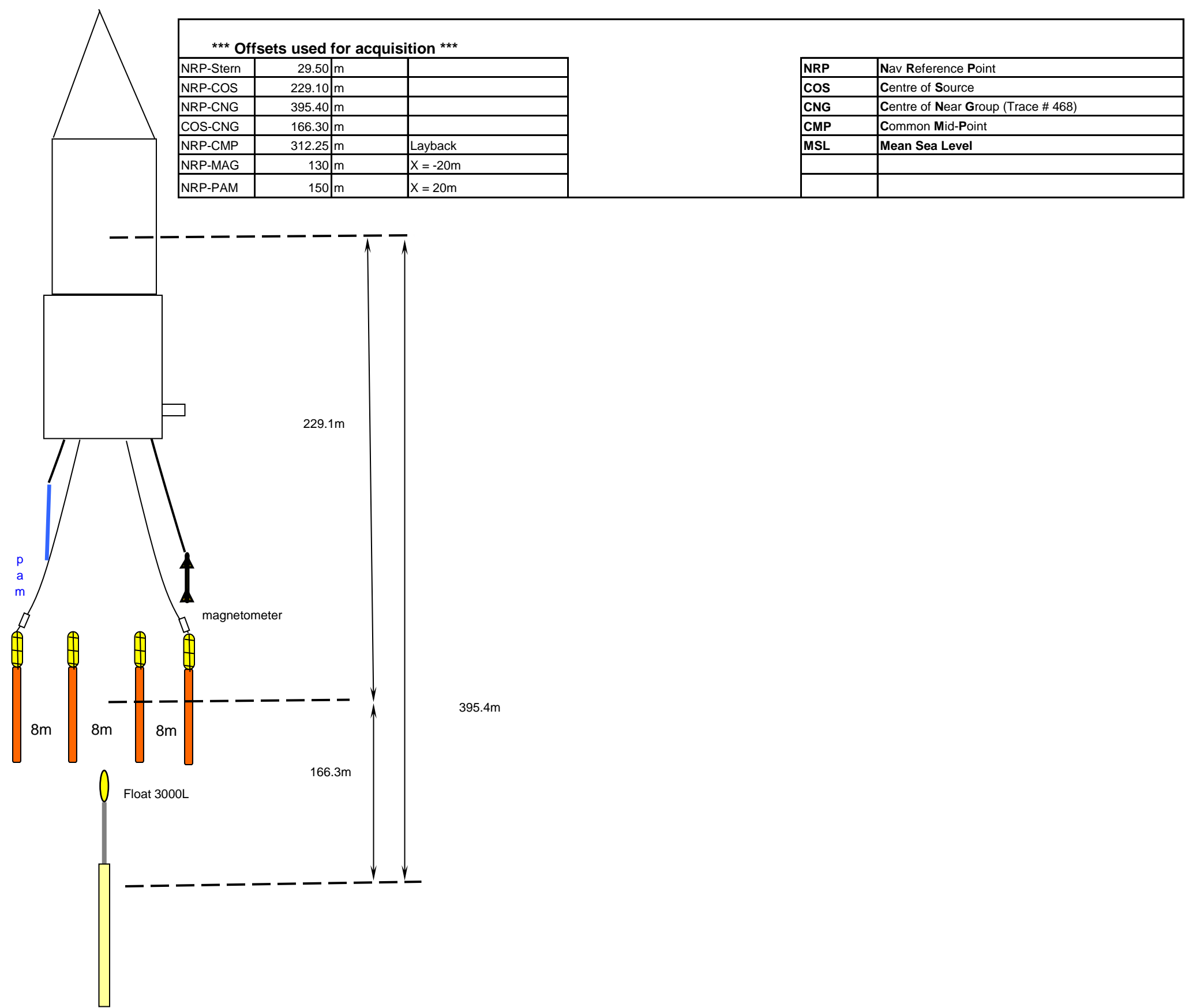
All measurements in meters

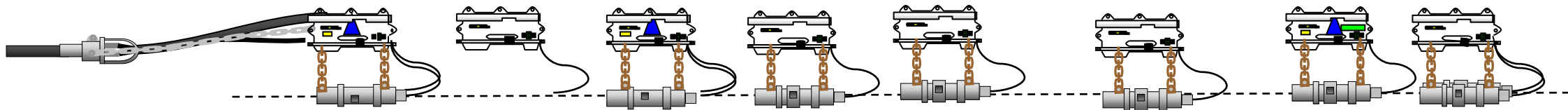
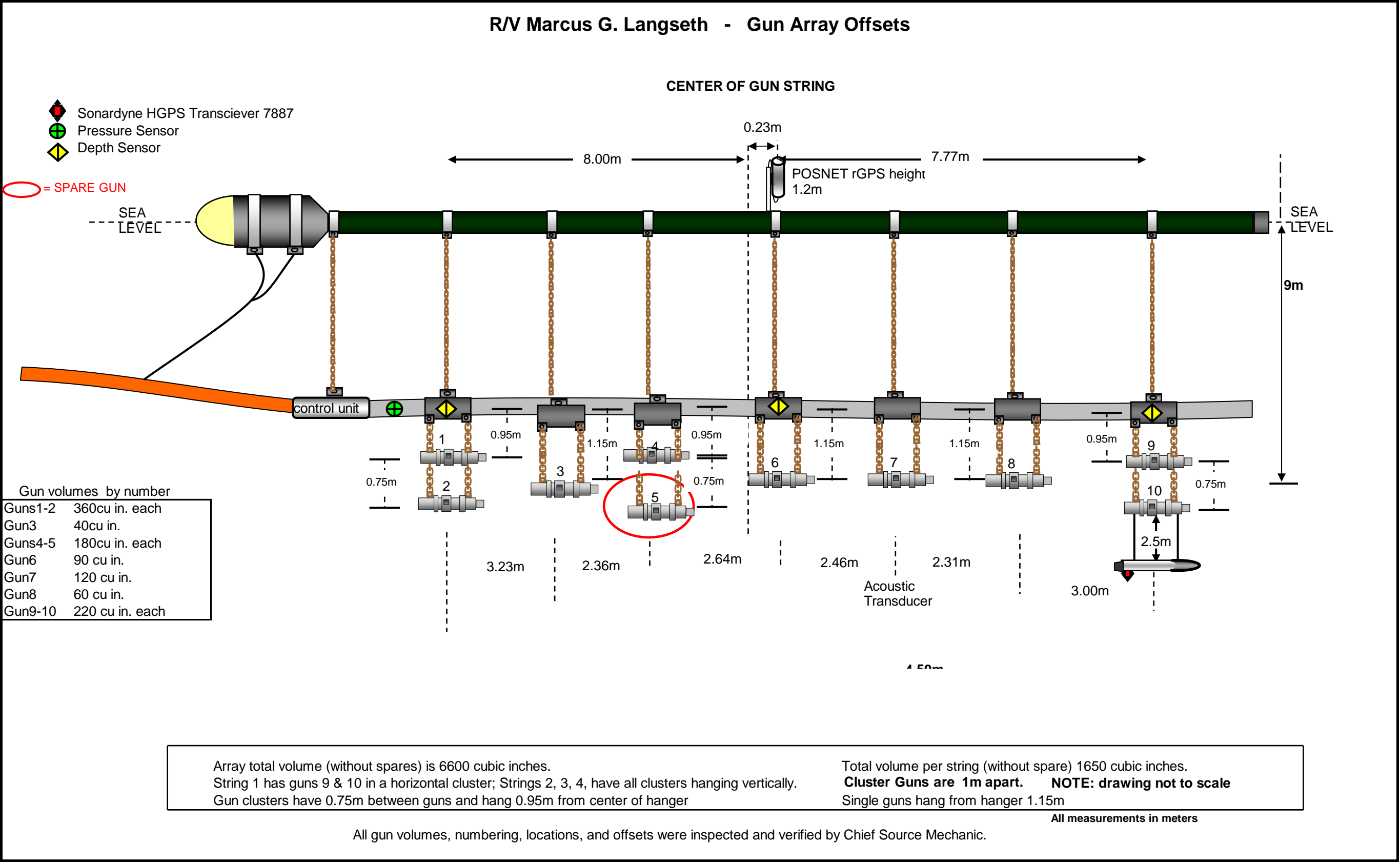
R/V Marcus G. Langseth "tow" configuriitiion

Note: Sequences 001 - 003 were Source Only.  
Sequences 004 to cruise end are MCS and Source.

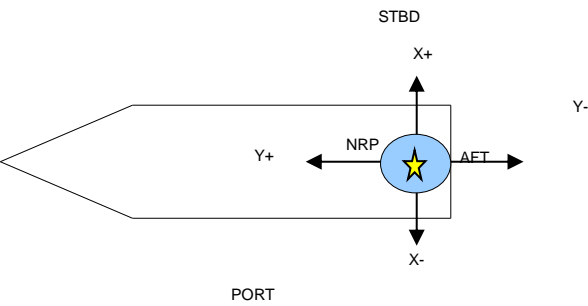
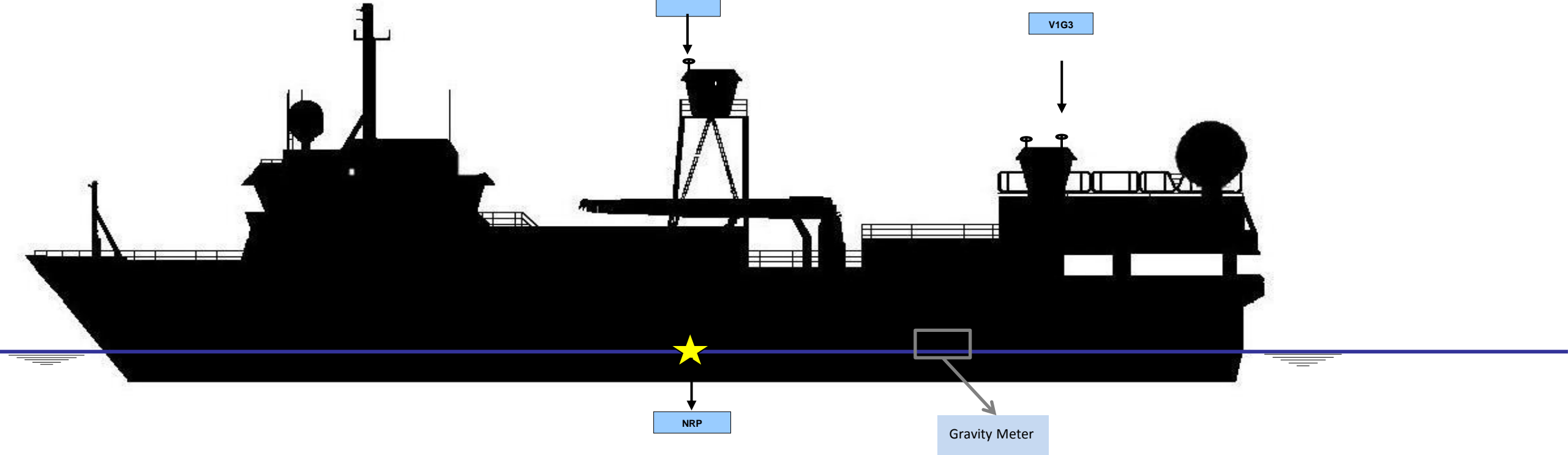
R/V Marcus Langseth  
1 x 6000  
4 Gunstrings

NOT to Scale





V1G1  
V1G1



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

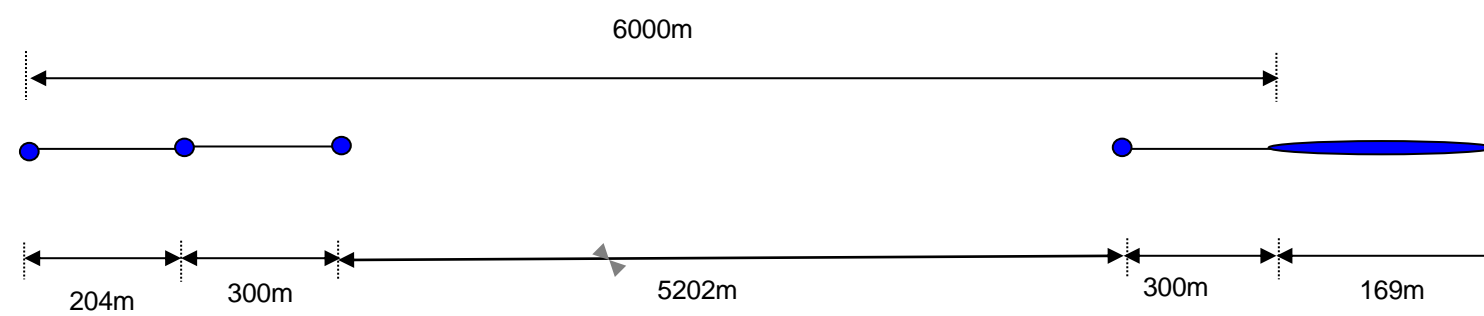


All measurements in meters			
		STBD/PORT (X)	FORE/AFT (Y)
		UP/DOWN (Z)	
NRP	NAVIGATION REFERENCE POINT	0.00	0.00
V1G1	C-Nav 3050	0.00	-16.90
V1G2	SeaPath 200	0.00	-16.90
V1G3	C-Nav 2000	4.87	-14.50
V1G4	Pos MV	-1.30	-16.90
V1R1	PosNet	-1.30	-16.90
EM122	Multibeam Transducer Array	0.00	7.49
MRU	Seapath MRU	2.30	-4.30
BGM	Bell Gravity Meter	4.40	-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  
P = Pressure Sensor - located  
in front of gun's 1 & 2

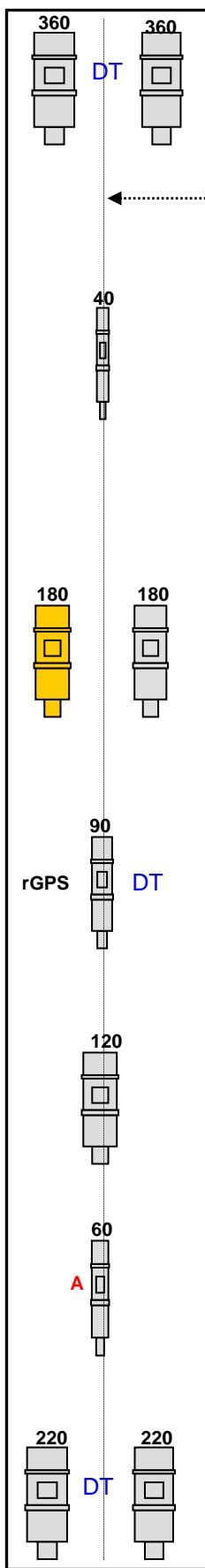
Center of Source 1 & 2

Spare Gun

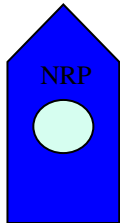
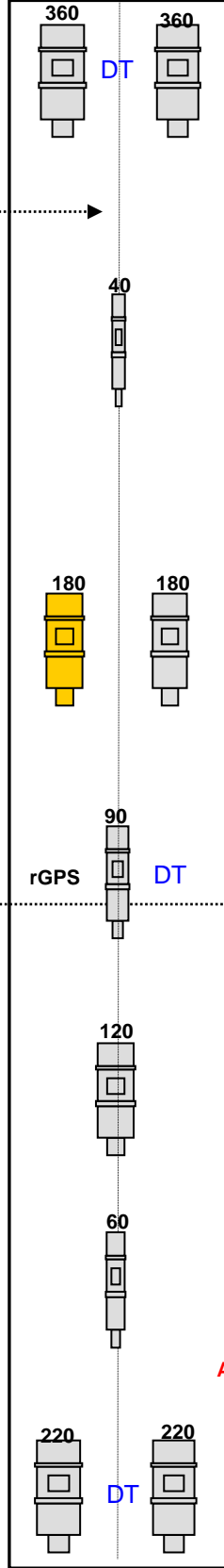
Cluster Guns are mounted 1m apart  
String 1 cluster 9 & 10 mounted  
horizontally  
String 2, 3, & 4 all clusters mounted  
vertically.

All measurements in meters

GUNSTRING 4



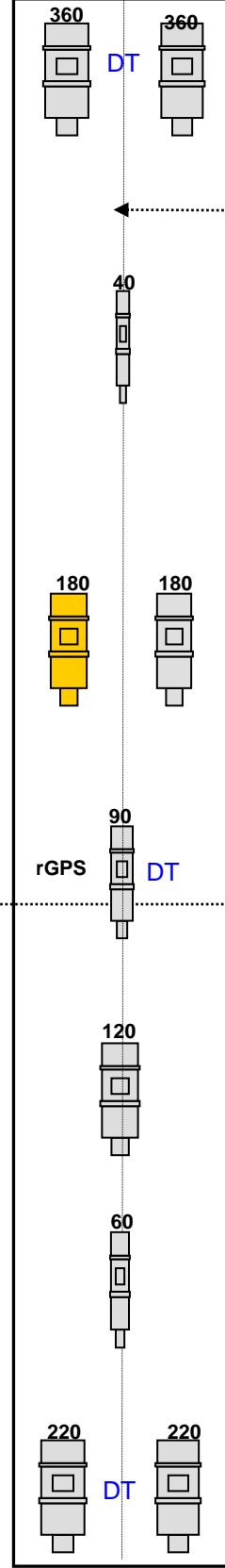
GUNSTRING 3



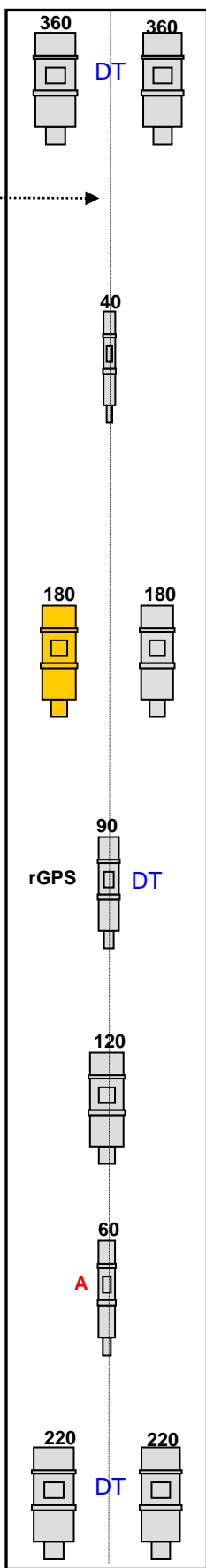
8.0m

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GUNSTRING 2



GUNSTRING 1

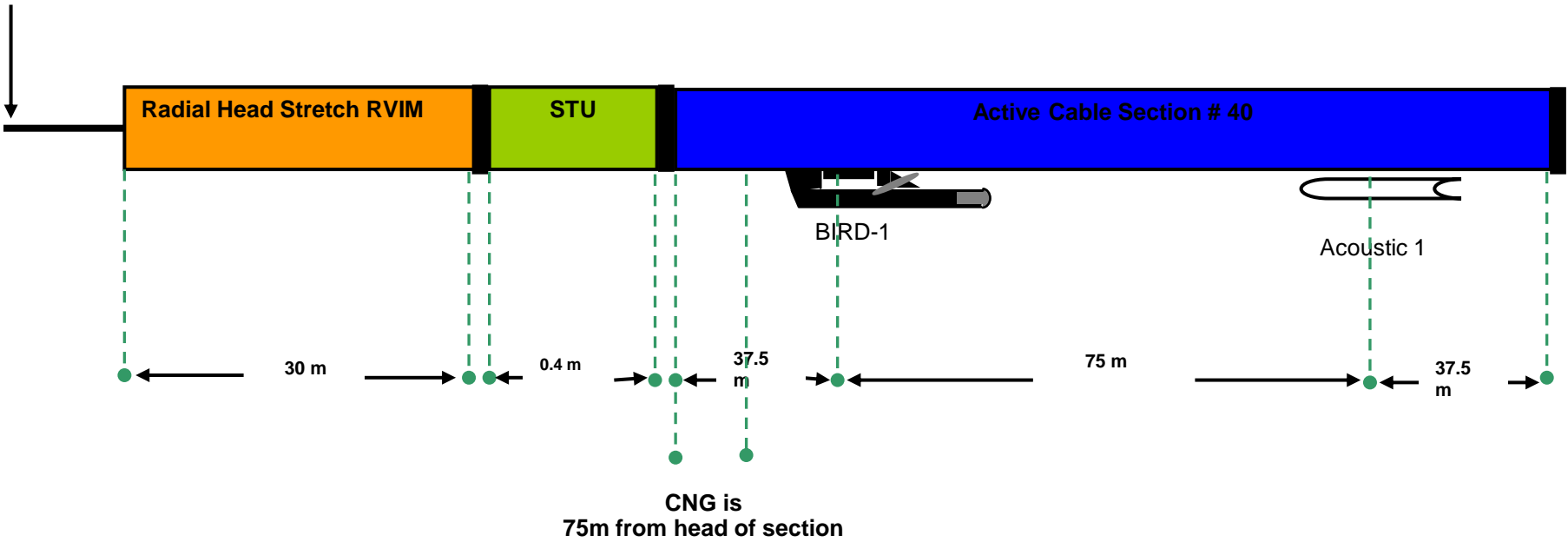


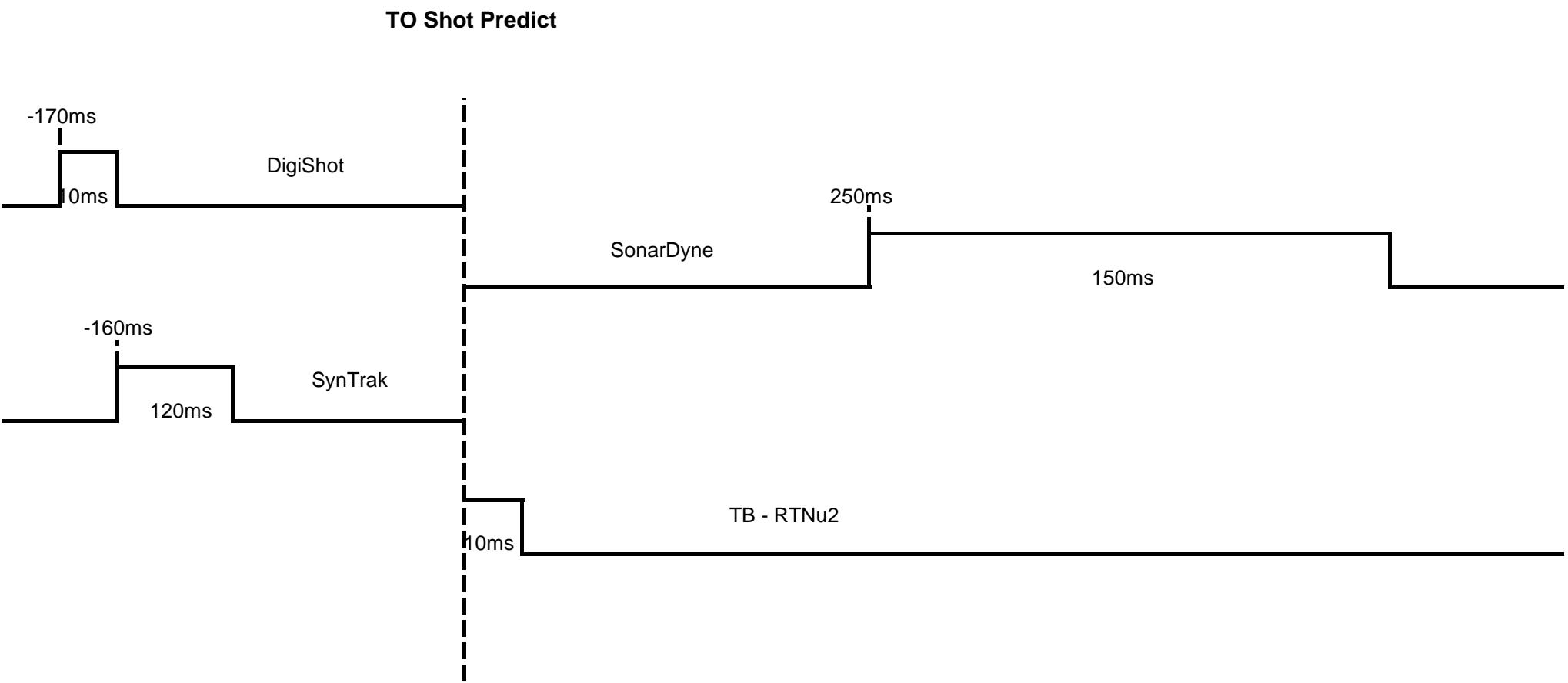
3.23m  
2.36m  
2.64m  
2.46m  
2.31m  
3.0m



R/V Marcus G. Langseth - Streamer Front End

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





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

