


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

Project : MGL-0906 Taiger  
Area : Taiwan  
Start Date : 04 May 2009



Full Service Navigation, Positioning, and Survey Solutions

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[Vessel Sensor Offsets](#)

[Towing Offsets](#)

[Acoustic Offsets](#)

[Gun Array Offsets](#)

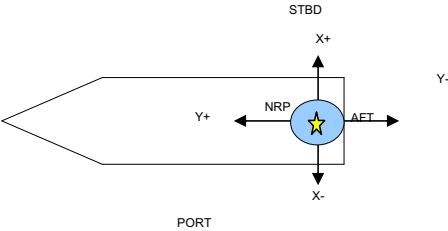
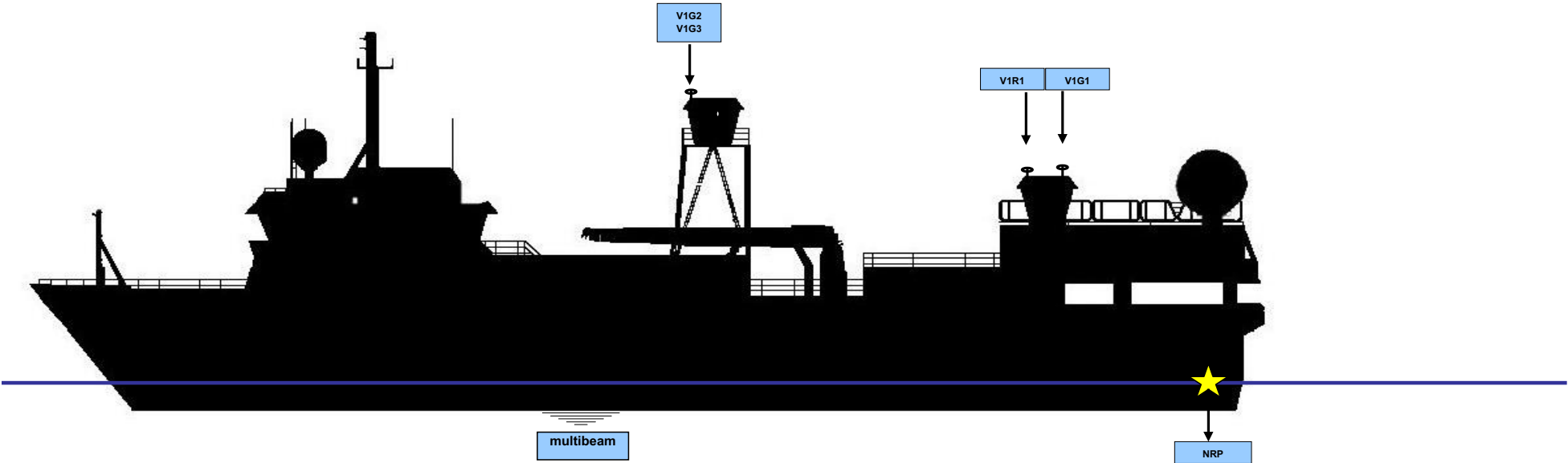
[Gun Configuration](#)

[Streamer Front End](#)

[Tailbuoy Offsets](#)

[Timing](#)





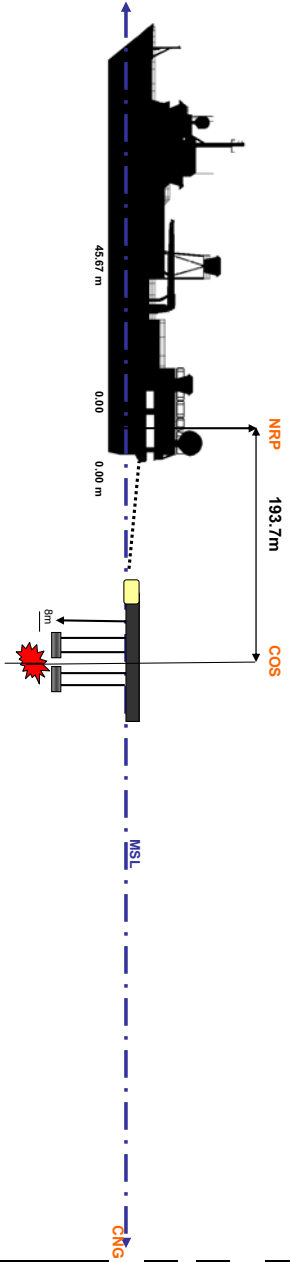
Note: All Echosounders are used in Spectra with 6.6m ship's draft correction applied.



		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	8.06	4.87	14.50
V1G2	SeaPath 200	25.30	1.50	16.90
V1G3	Pos MV	22.30	8.50	16.90
V1G4	PosNet	10.45	4.87	14.50
V1R1	PosNet	10.45	4.87	14.50
EM120	Multibeam	49.70	8.50	-6.60

R/V Marcus G. Langseth - Towing Offsets

\*\*\* Offsets used for sequences 001 - >15



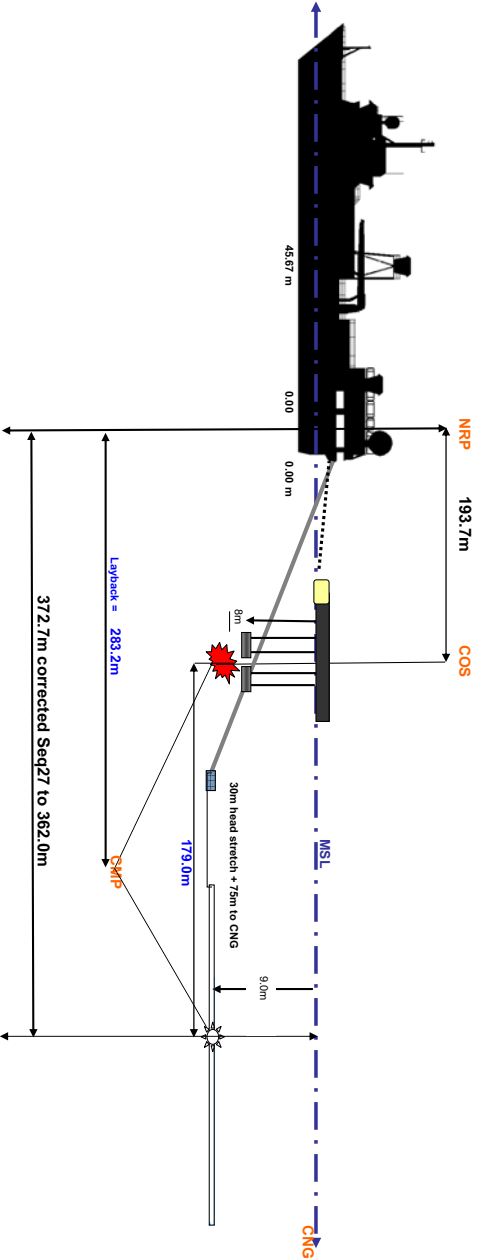
*** Offsets used for acquisition ***			NRP		Narrow Reference Point	
NRP-Sum	4.20 m		COS		Centre of Source	
NRP-COS	193.70 m					
NRP-CNG						
COS-CNG						
NRP-CMP						

All measurements in meters

RV Marcus G. Langseth - Towing Offsets

\*\*\* Offsets used for sequences 01e-XXX \*\*\*

Note: NRP->CNG offset change to 362.0m at seq027 to end of Targe12



*** Offsets used for acquisition ***		
NRP-Sem	4.20 m	
NRP-COS	193.70 m	
NRP-CNG	372.70 m	Seq27 now 362.0m
COS-CNG	179.00 m	
NRP-CMP	283.20 m	layback



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

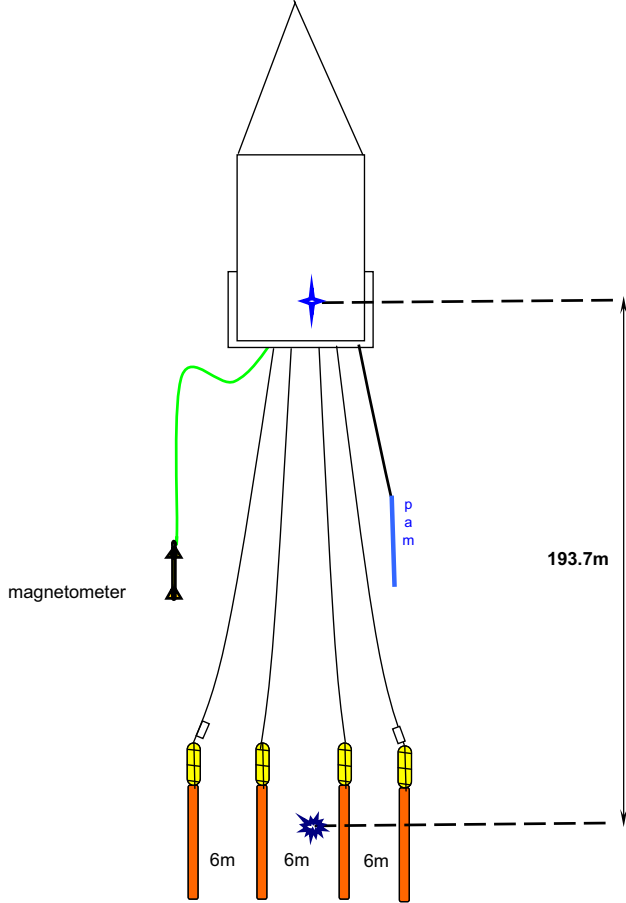
All measurements in meters

## rv Marcus G. Langseth - Tow Configuration

**Source only**

## Sequences 001 - 015

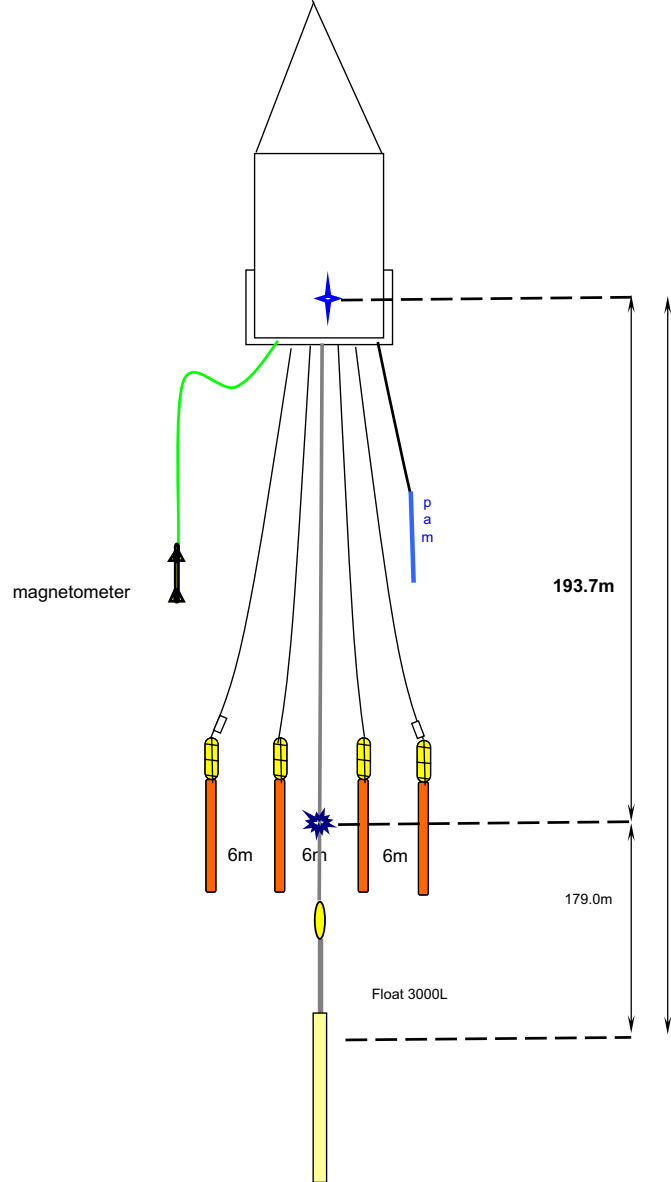
NRP-Stern	4.20 m	Layback	NRP		Nav Reference Point
NRP-COS	193.70 m		COS		Centre of Source
NRP-MAG	100 m	X = -20m			
NRP-PAM	70 m	X = 20m			



## Source/Streamer

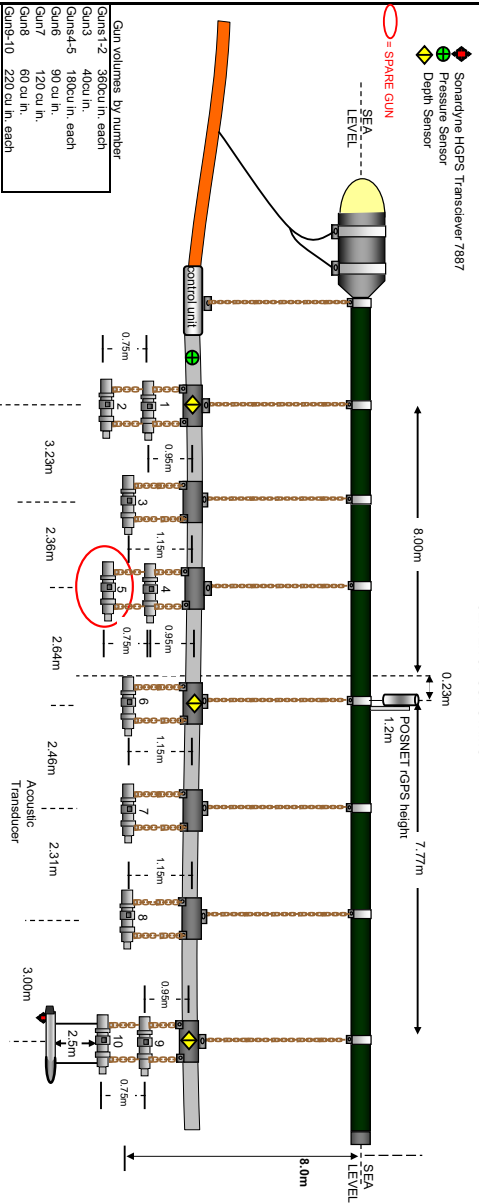
## Sequences 016 - xxx

NRP-Stern	4.20 m			 <b>NRP</b> Nav Reference Point <b>COS</b> Centre of Source <b>CNG</b> Centre of Near Group (Trace # 468) <b>CMP</b> Common Mid-Point  NRP->CNG changed from seq027 to end of trip was 372.7m. now 362'0m.
NRP-COS	193.70 m			
NRP-CNG	372.70 m	362.0m		
COS-CNG	179.00 m			
NRP-CMP	283.20 m	Layerback		
NRP-MAG	100 m	X = -20m		
NRP-PAM	70 m	X = 20m		



**NOT to Scale**

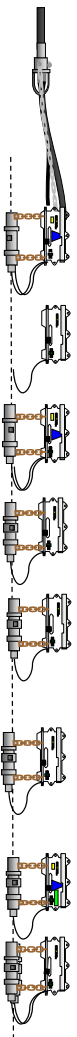
# R/V Marcus G. Langseth - Gun Array Offsets



Array total volume (without spares) is 8600 cubic inches.  
 String 1, 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 measurements in meters



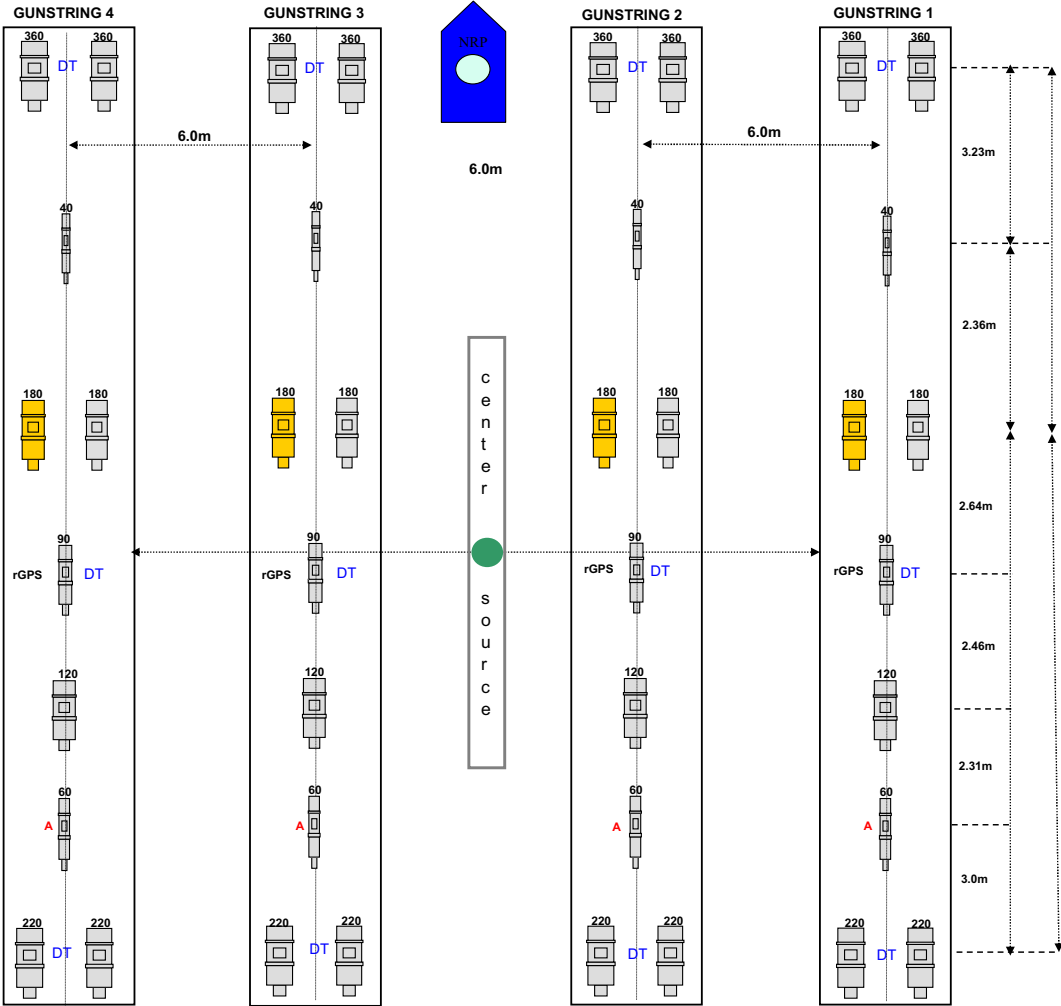
r/v Marcus G. Langseth - Gun Configuration

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



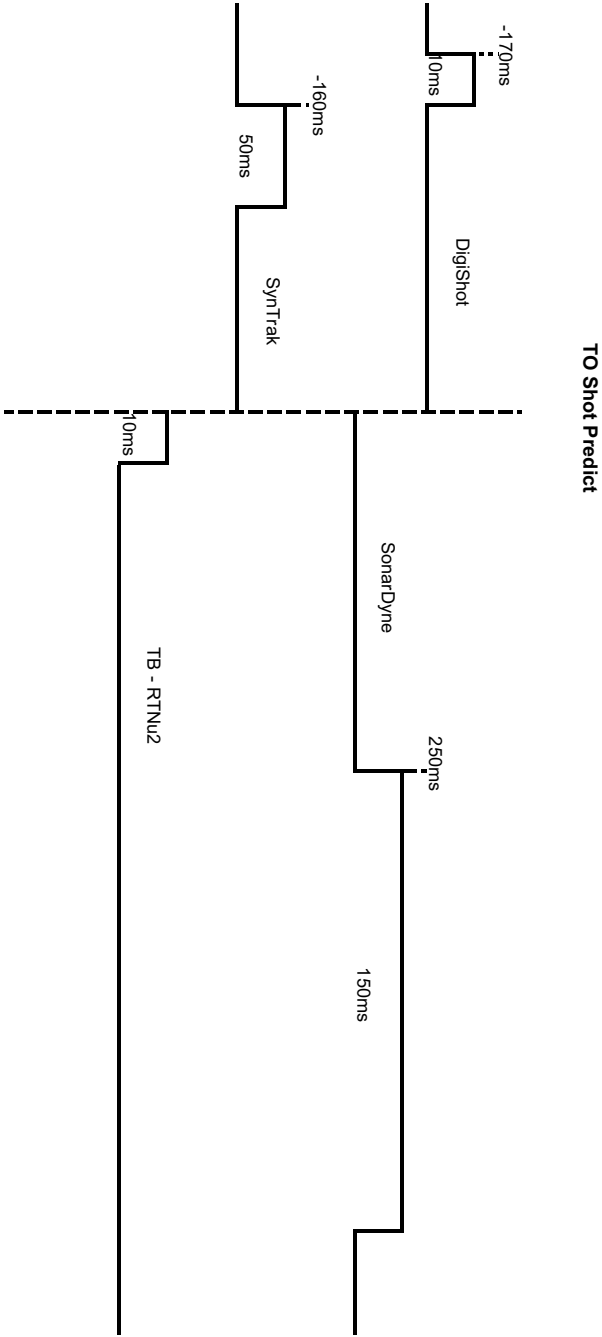
Cluster Guns are mounted 1m apart vertically

All measurements in meters



taiger 2

MGL0905





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

