

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](#)

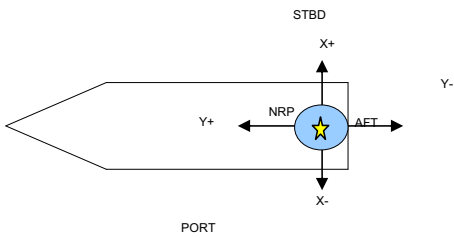
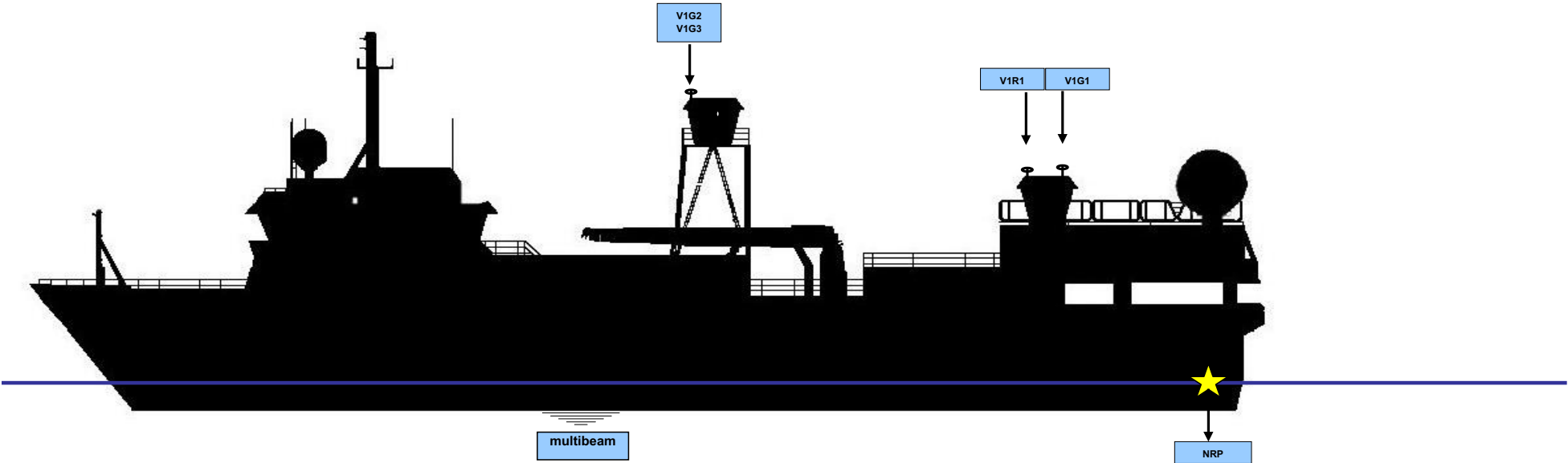
[Gun Configuration](#)

[Streamer Front End](#)

[Tailbuoy Offsets](#)

[Timing](#)





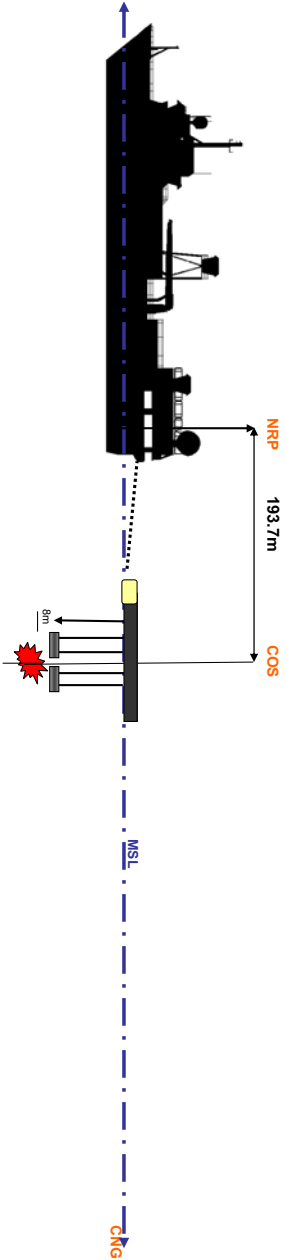
Note: All Echosounders are used in Spectra with 6.6m ship's draft correction applied.



		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



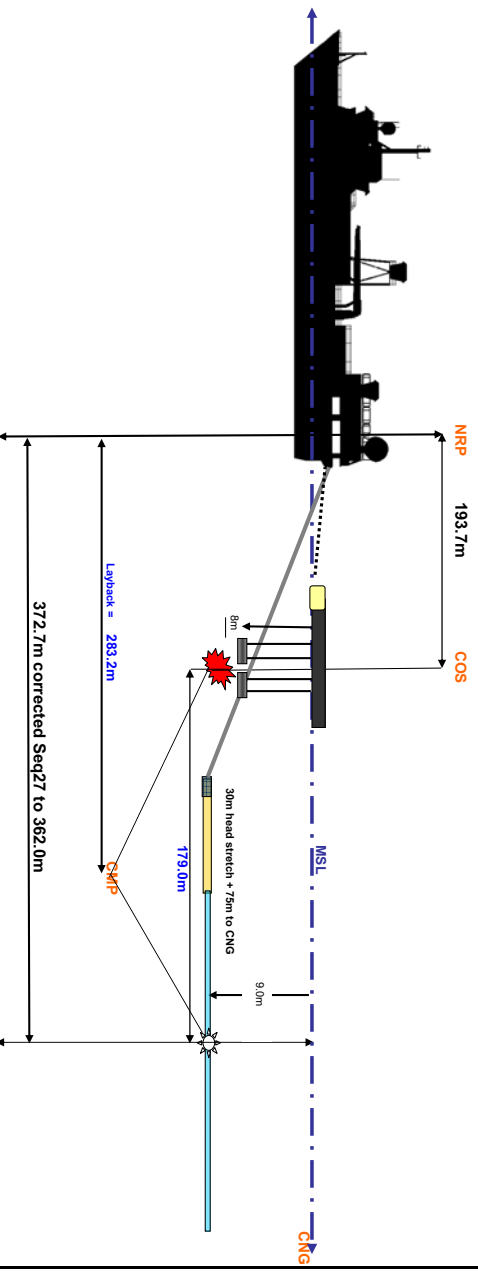
*** Offsets used for acquisition ***				
NRP-Sem	4.20m		NRP	Nava Reference Point
NRP-COS	193.70m		COS	Centre of Source
NRP-CNG				
COS-CNG				
NRP-CMP				

All measurements in meters

R/V Marcus G. Langseth - Towing Offsets

*** Offsets used for sequences 016-XXX ***

Note: NRP->CNG offset change to 362.0m at seq027 to end of Taiger2





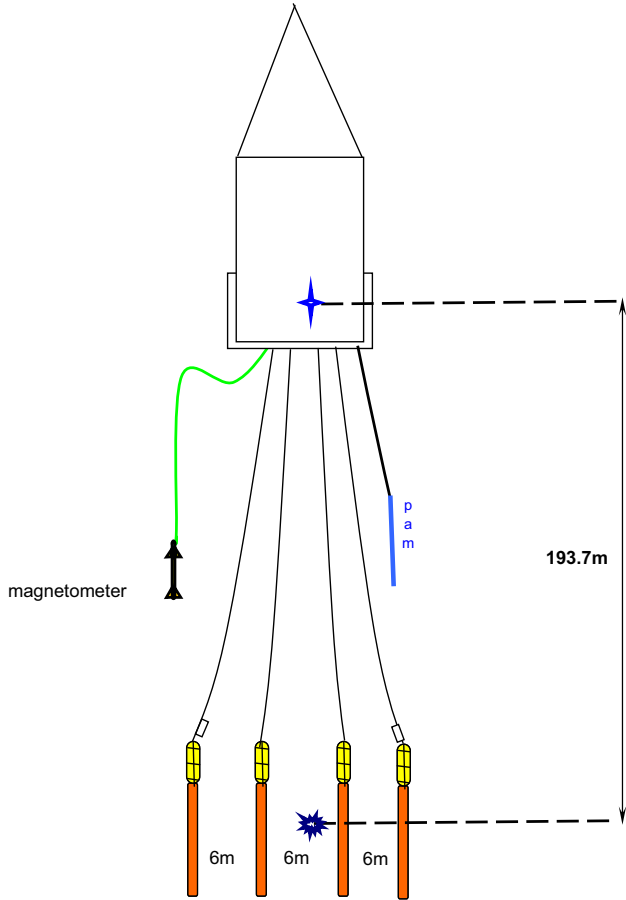
*** Offsets used for acquisition ***		
NRP-Stem	4.20 m	
NRP-COS	193.70 m	
NRP-ONG	372.70 m	Sag27 now 362.0m
COS-ONG	179.00 m	
NRP-CMP	283.20 m	layback





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

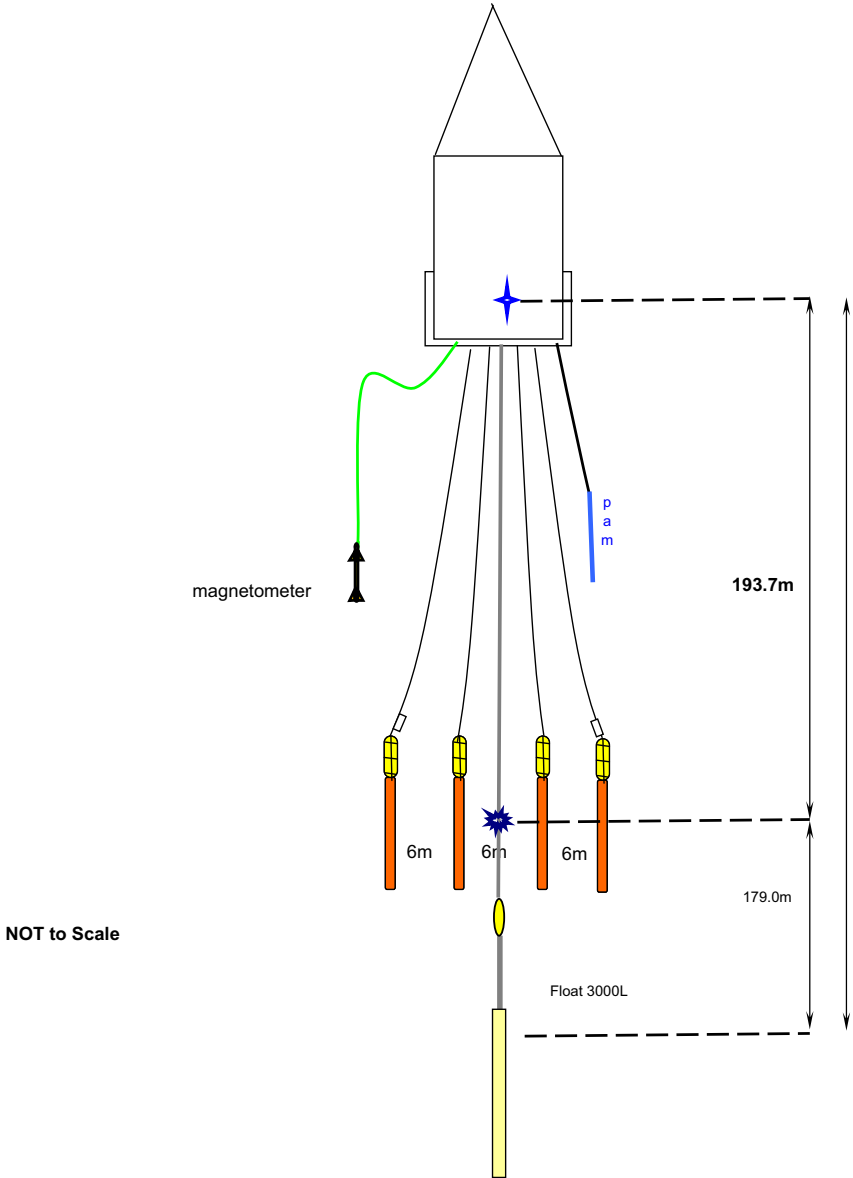
All measurements in meters

rv Marcus G. Langseth - Tow Configuration

Source only				
Sequences 001 - 015				
NRP-Stern	4.20	m		NRP  Nav Reference Point
NRP-COS	193.70	m		COS  Centre of Source
			Layback	
NRP-MAG	100	m	X = -20m	
NRP-PAM	70	m	X = 20m	

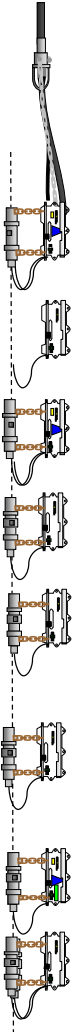


Source/Streamer				
Sequences 016 - xxx				
NRP-Stern	4.20	m		NRP  Nav Reference Point
NRP-COS	193.70	m		COS  Centre of Source
NRP-CNG	372.70	m	362.0m	CNG  Centre of Near Group (Trace # 468)
COS-CNG	179.00	m		CMP  Common Mid-Point
NRP-CMP	283.20	m	Layback	
NRP-MAG	100	m	X = -20m	
NRP-PAM	70	m	X = 20m	



NOT to Scale

Array total volume (without spares) is 6600 cubic inches. String 1, 2, 3, 4, have all clusters hanging vertically. Gun clusters have $\approx 0.75m$ between guns and hang $0.95m$ from center of hanger	Total volume per string (without spares) 1650 cubic inches. Cluster Guns are 1m apart. NOTE: drawing not to scale Single guns hang from hanger 1.5m
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Array total volume (without spares) is 6600 cubic inches.
String 1, 2, 3, have all clusters hanging vertically.
Gun clusters have 0.75m between guns and hang 0.95m from center of hanger

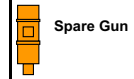
Cluster guns are 1m apart. NOTE: drawing not to scale
Single guns hang from hanger 1.15m

All measurements in meters

r/v Marcus G. Langseth - Gun Configuration

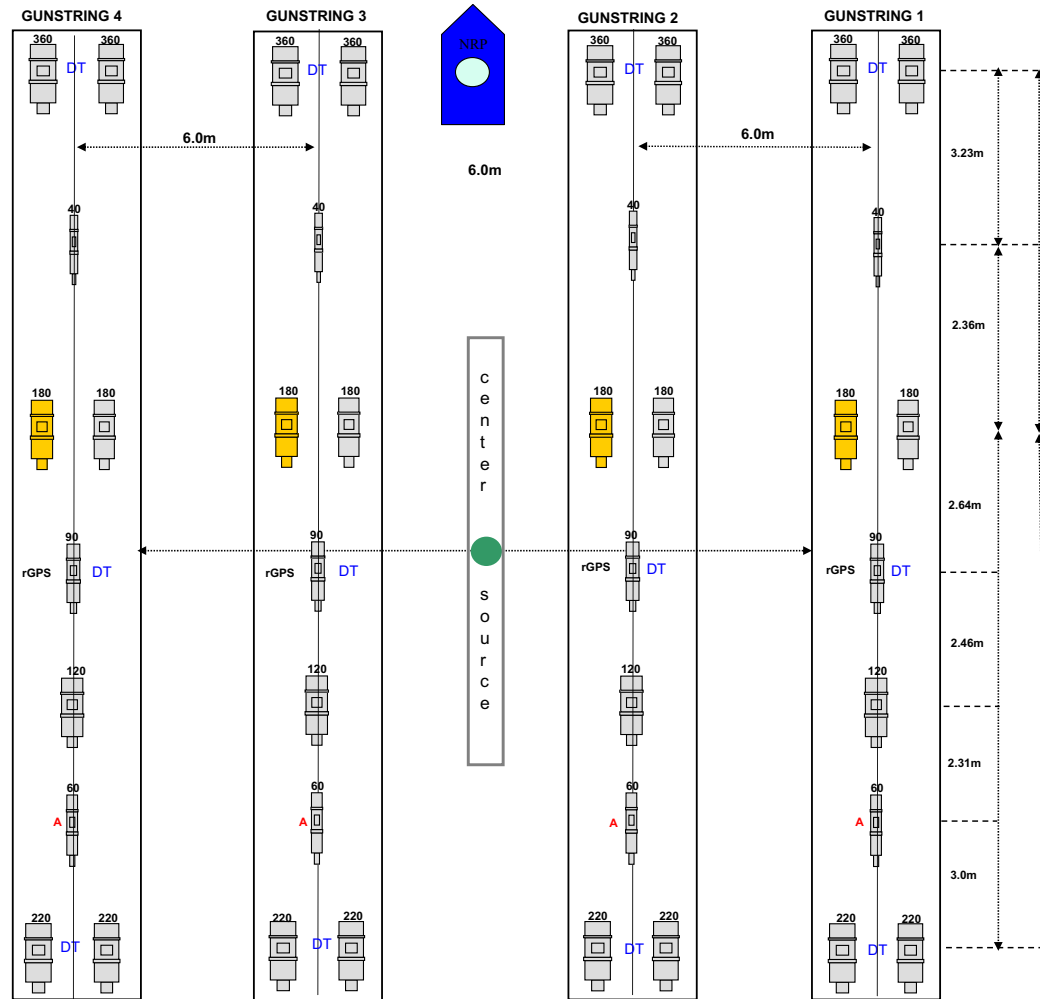
DT = Depth Transducer
A = Acoustic
P = Pressure Sensor - located
in front of gun's 1 & 2

Center of Source 1 & 2



Cluster Guns are mounted 1m apart vertically

All measurements in meters



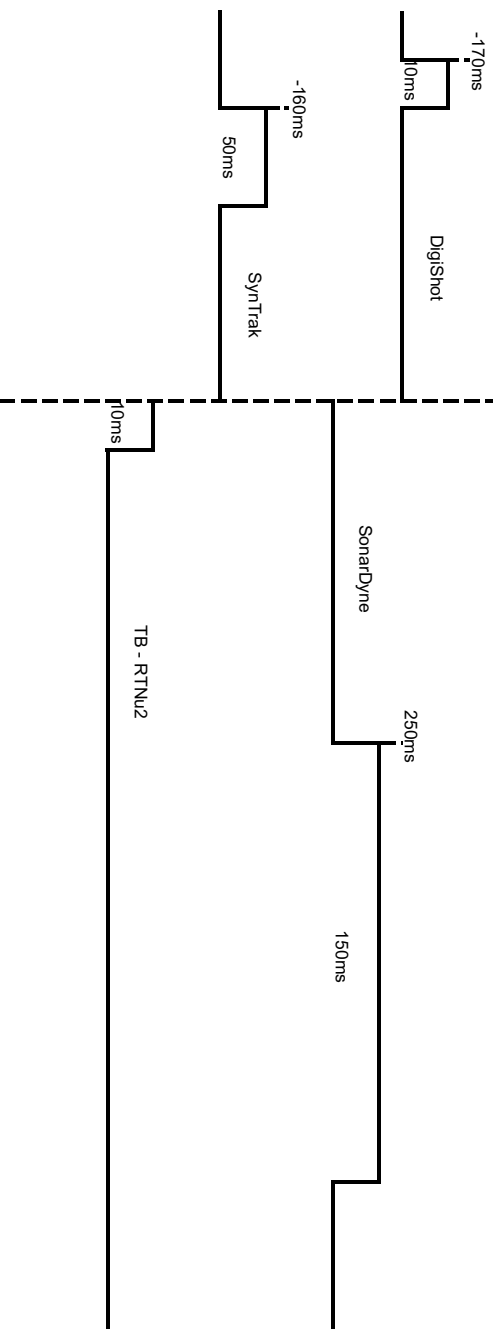
RV Marcus G. Langseth

SPECTRA TIMING

taiger 2

MGL0905

TO Shot Predict



Spectra timing for r/v Marcus G. Langseth

