

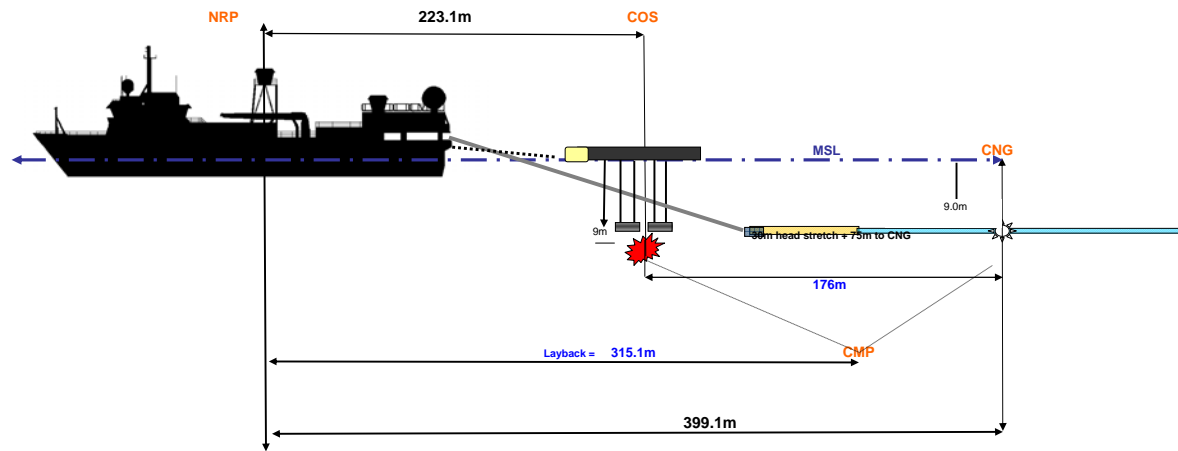
Company : LDEO  
Vessel : Marcus G.Langseth  
Client : NSF  
  
Project : MGL1109  
Area : USGS Gulf of Alaska  
Start Date : 06 June 2011



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



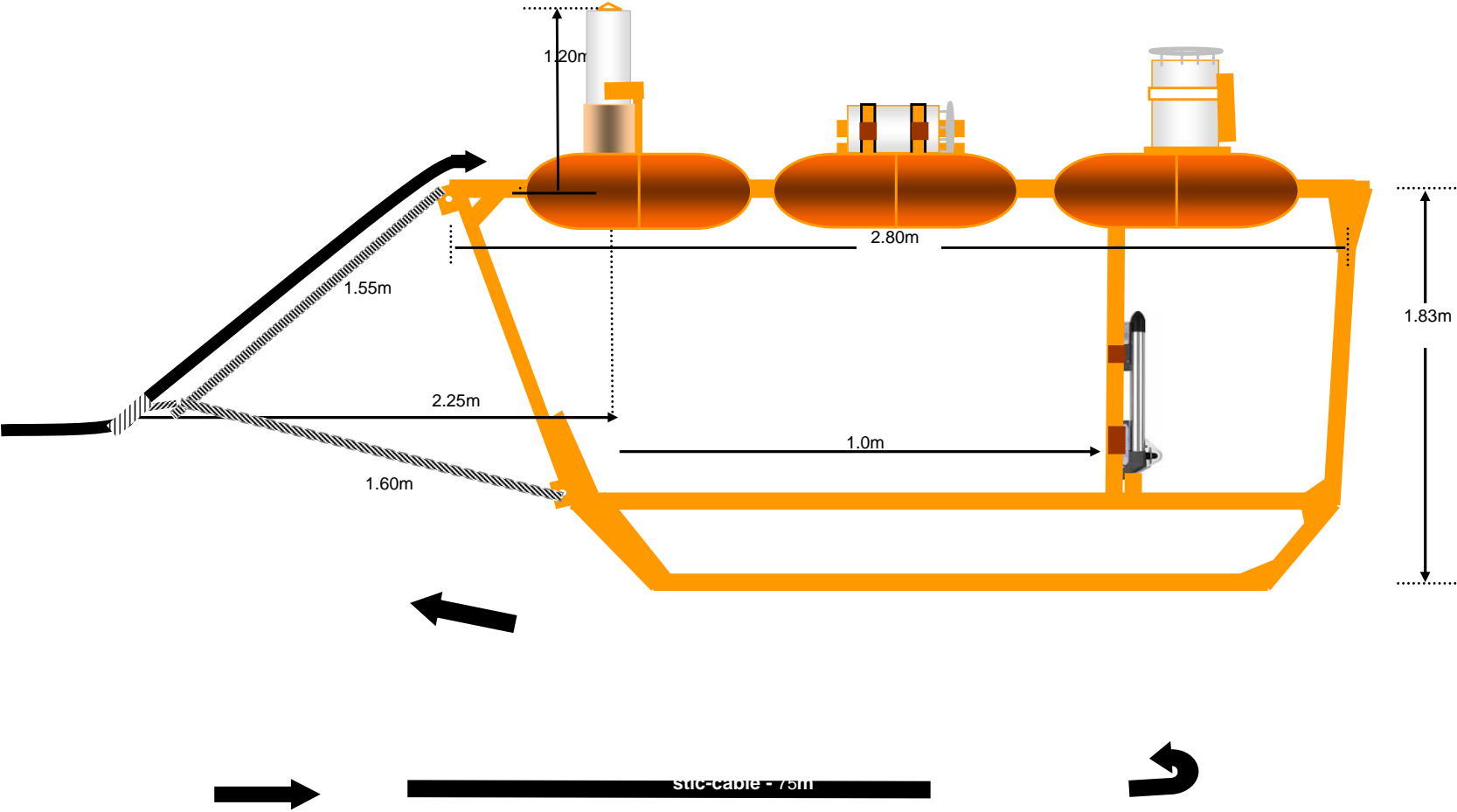
## \*\*\* Offsets used for acquisition \*\*\*

NRP-Stern	29.50m	
NRP-COS	223.10m	
NRP-CNG	370.00m	
COS-CNG	176.00m	
NRP-CMP	315.10m	

NRP	Nav Reference Point
COS	Centre of Source
CNG	Centre of Near Group (Trace # 636)
CMP	Common Mid-Point
MSL	Mean Sea Level

All measurements in meters

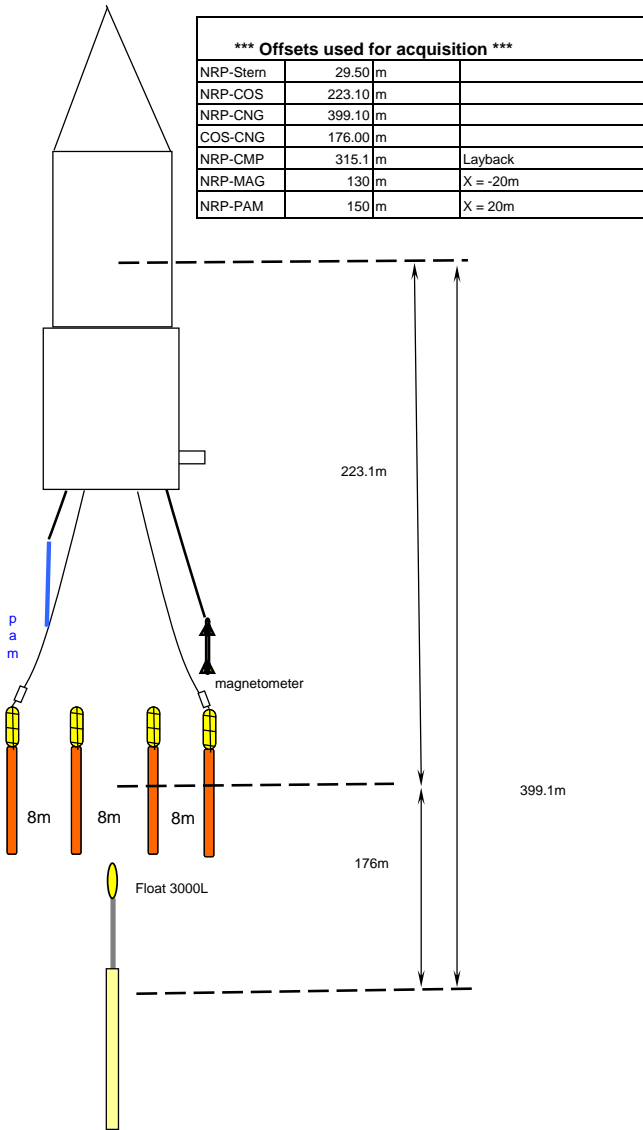
R/V Marcus G. Langseth - Tailbouy



R/V Marcus G. Langseth "tow" configuratiion

R/V Marcus Langseth  
1 x 8000  
4 Gunstrings

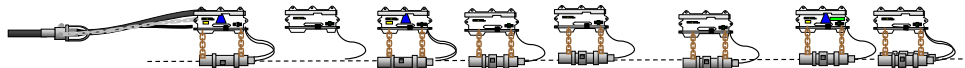
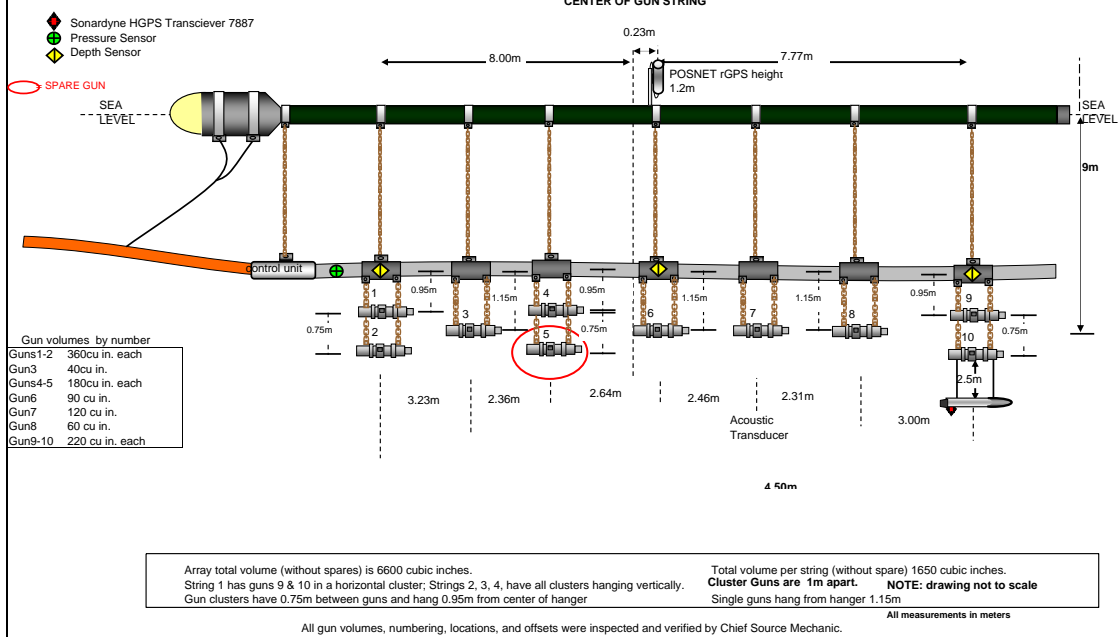
NOT to Scale



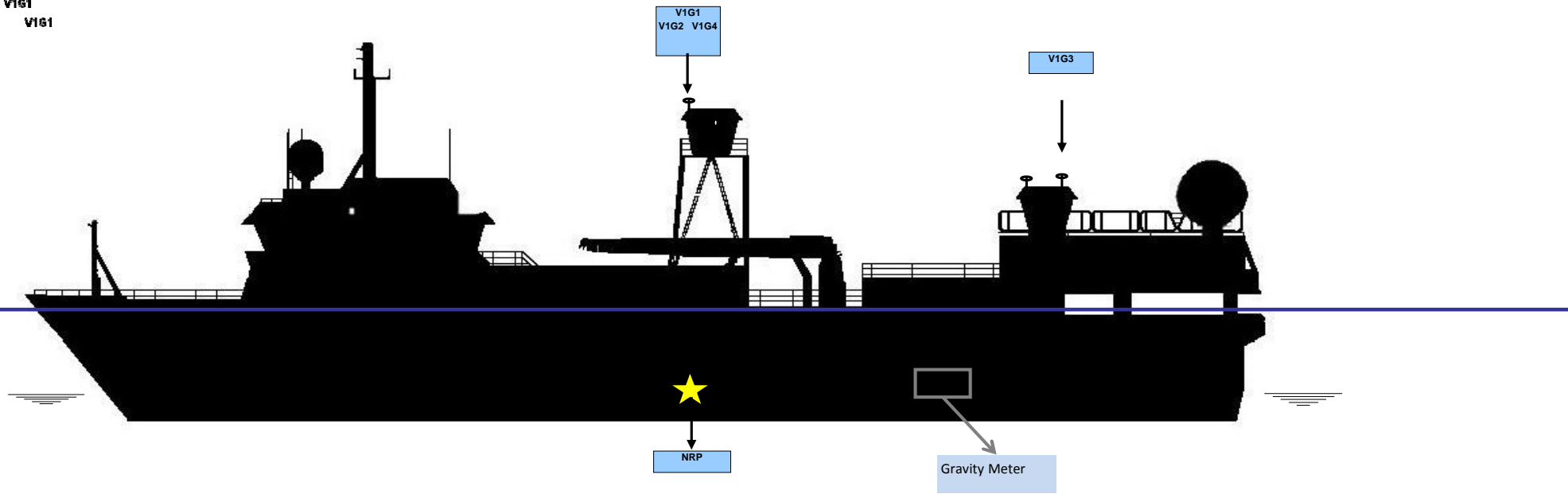
*** Offsets used for acquisition ***		
NRP-Stem	29.50 m	
NRP-COS	223.10 m	
NRP-CNG	399.10 m	
COS-CNG	176.00 m	
NRP-CMP	315.1 m	Layback
NRP-MAG	130 m	X = -20m
NRP-PAM	150 m	X = 20m

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

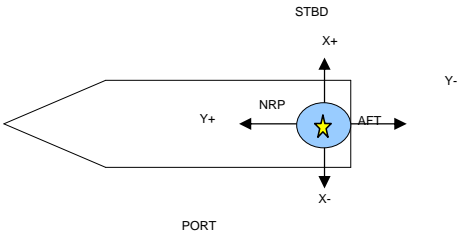
R/V Marcus G. Langseth - Gun Array Offsets



V1G1  
V1G1



All measurements in meters



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

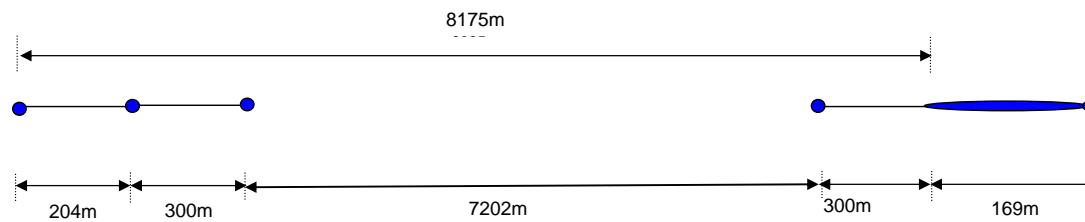


		STBD/PORT (X)	FORE/AFT (Y)	UP/DOWN (Z)
NRP	NAVIGATION REFERENCE POINT	0.00	0.00	0.00
V1G1	C-Nav 3050	0.00	0.00	-16.90
V1G2	SeaPath 200	0.00	1.50	-16.90
V1G3	C-Nav 2000	4.87	-15.27	-14.50
V1G4	Pos MV	-1.30	1.20	-16.90
V1R1	PosNet	-1.30	0.00	-16.90
EM122	Multibeam Transducer Array	0.00	20.20	7.49
MRU	Seapath MRU	2.30	-14.16	-4.30
BGM	Bell Gravity Meter	4.40	-13.10	-3.49

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

### Sonardyne SIPS 1

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



All measurements in meters

# r/v Marcus G. Langseth - Gun Configuration

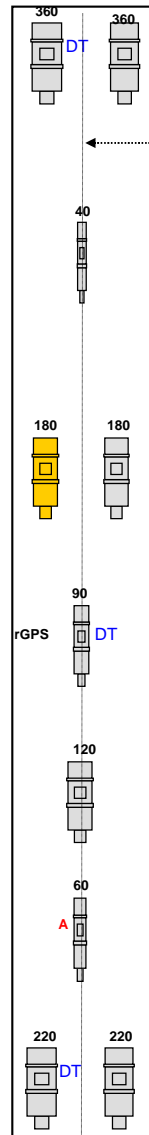
DT = Depth Transducer  
 A = Acoustic  
 Pressure Sensor - located  
 in front of gun's 1 & 2

Center of Source 1 & 2  
 Spare Gun

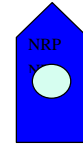
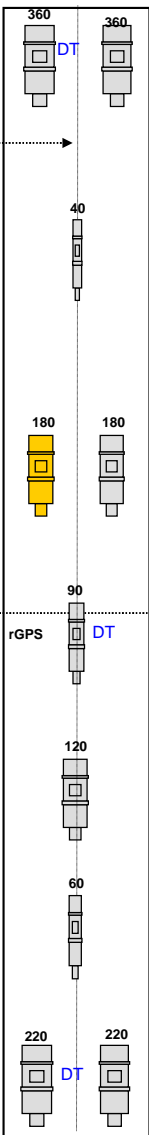
Cluster Guns are mounted 1m apart  
 String 1 cluster 9 & 10 mounted  
 horizontally  
 String 2, 3, & 4 all clusters mounted  
 vertically.

All measurements in meters

GUNSTRING 4



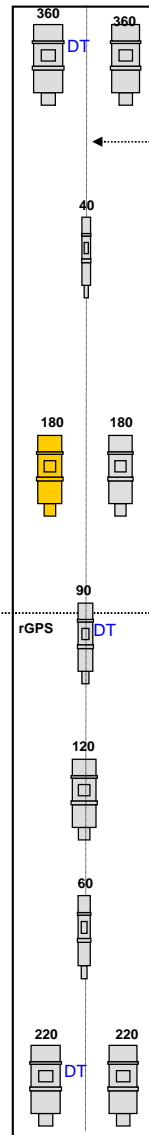
GUNSTRING 3



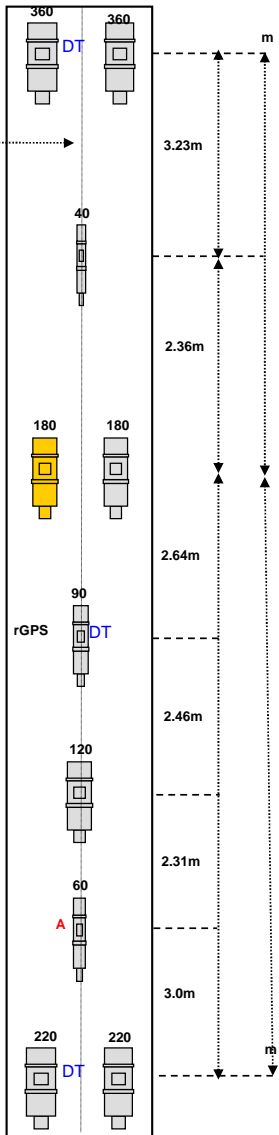
8.0m

center  
 of  
 source  
 1

GUNSTRING 2



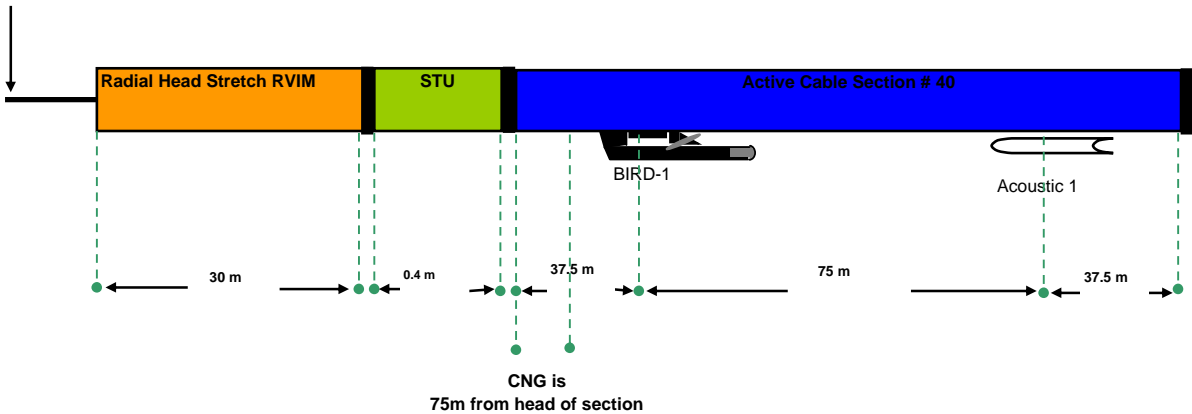
GUNSTRING 1

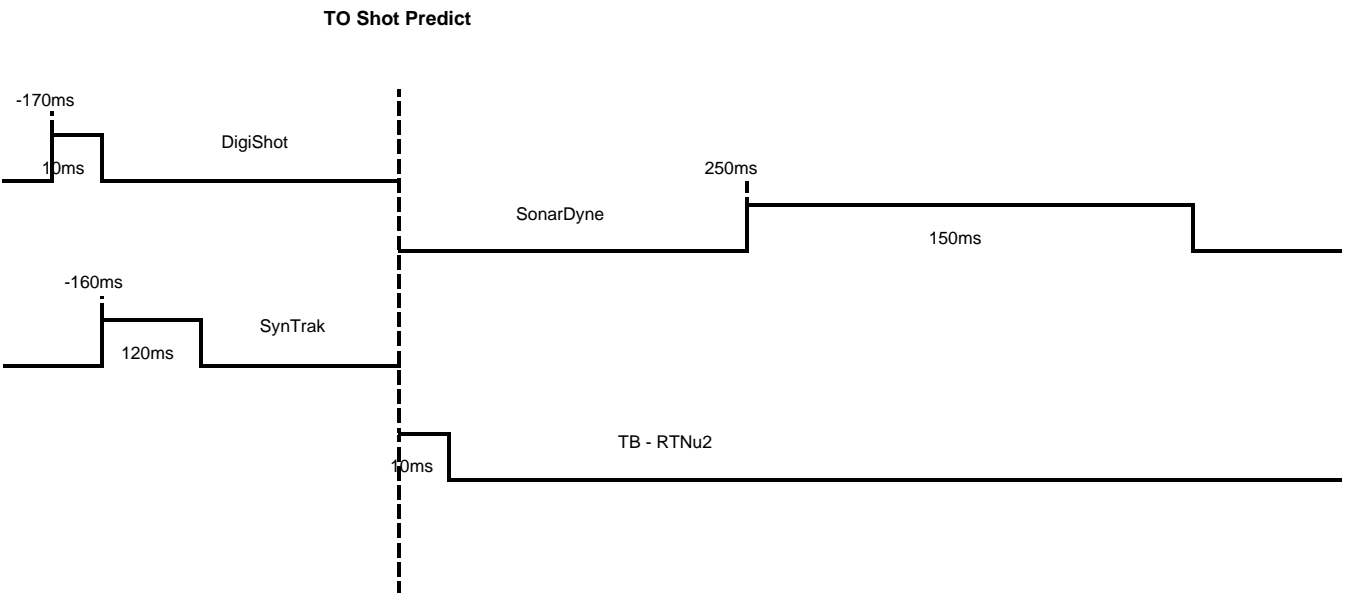




R/V Marcus G. Langseth - Streamer Front End

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





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

