

Company : LDEO  
Vessel : Marcus G.Langseth  
Client : NSF  
  
Project : Taiger Leg 1 MGL0905  
Area : Taiwan  
Start Date : 28 March 2009



**Vessel Sensor Offsets**

**Towing Offsets**

**Acoustic Offsets**

**Gun Array Offsets**

**Gun Configuration**

**Streamer Front End**

**Tailbuoy Offsets**

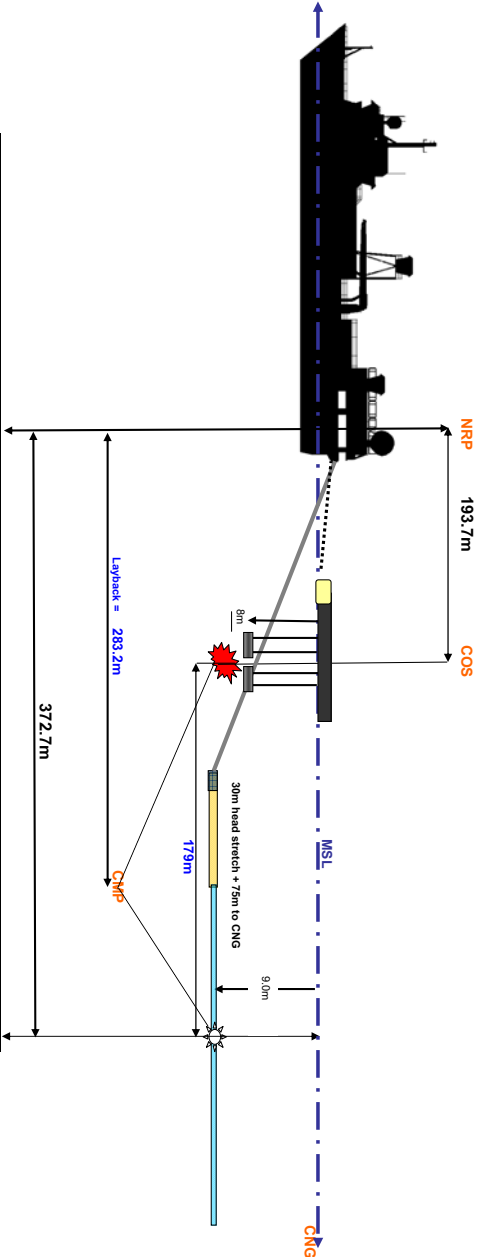
**Timing Langseth**

**Timing Spectra**

**Towing Configuration**



R/V Marcus G. Langseth - Towing Offsets



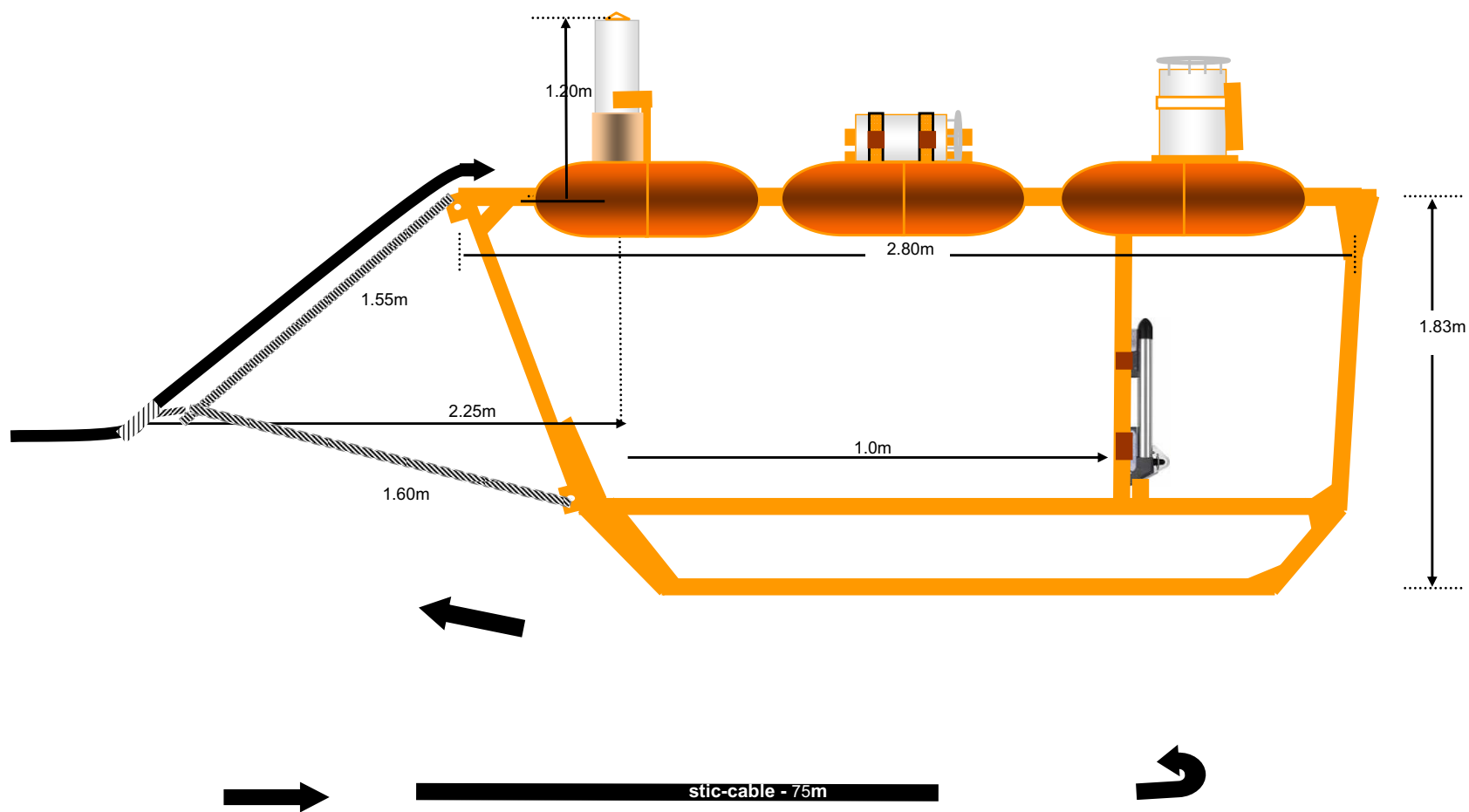
\*\*\* Offsets used for acquisition \*\*\*

NRP-Sem	4.20m	
NRP-COS	193.70m	
NRP-CNG	372.70m	
COS-CNG	179.00m	
NRP-CMP	283.2m	

NRP	Near 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

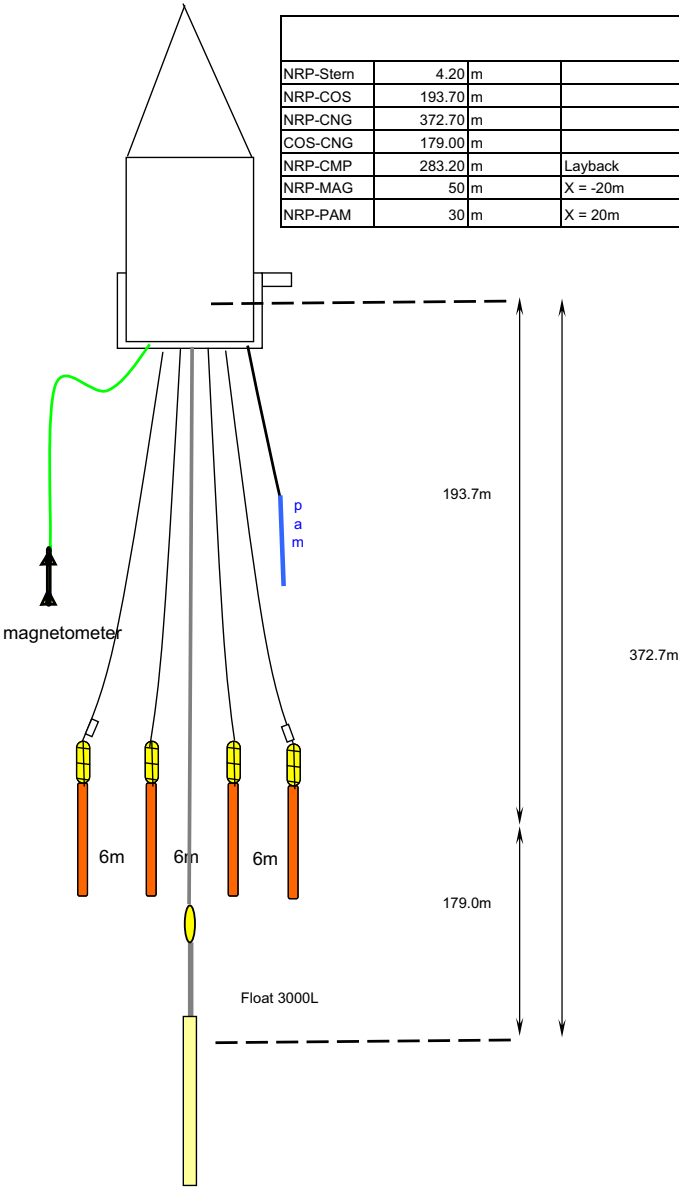


r/v Marcus G. Langseth "tow" configuration

NRP-Stem	4.20	m		NRP	Nav Reference Point
NRP-COS	193.70	m		COS	Centre of Source
NRP-CNG	372.70	m		CNG	Centre of Near Group (Trace # 468)
COS-CNG	179.00	m		CMP	Common Mid-Point
NRP-CMP	283.20	m	Layback	MSL	Mean Sea Level
NRP-MAG	50	m	X = -20m		
NRP-PAM	30	m	X = 20m		

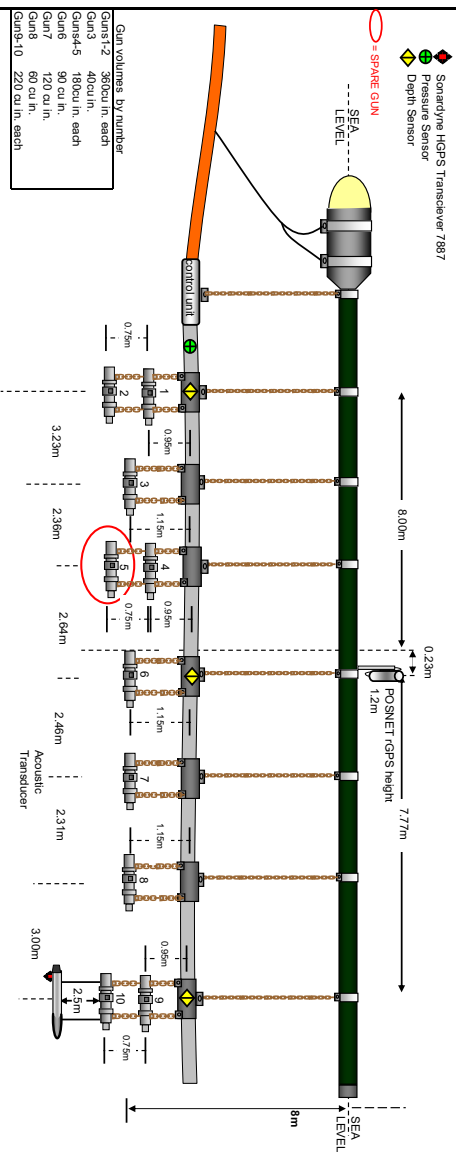
R/V Marcus Langseth  
1 x 6000m Streamer  
4 Gunstrings Source

NOT to Scale



R/V Marcus G. Langseth - Gun Array Offsets

CENTER OF GUN STRING

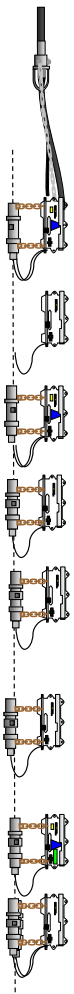


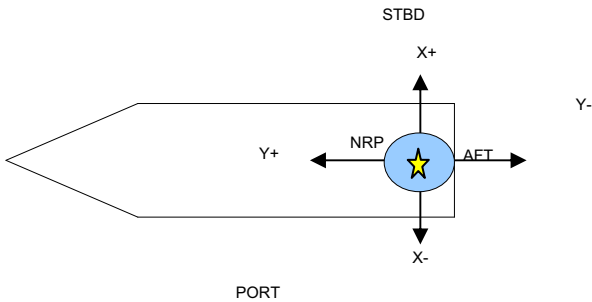
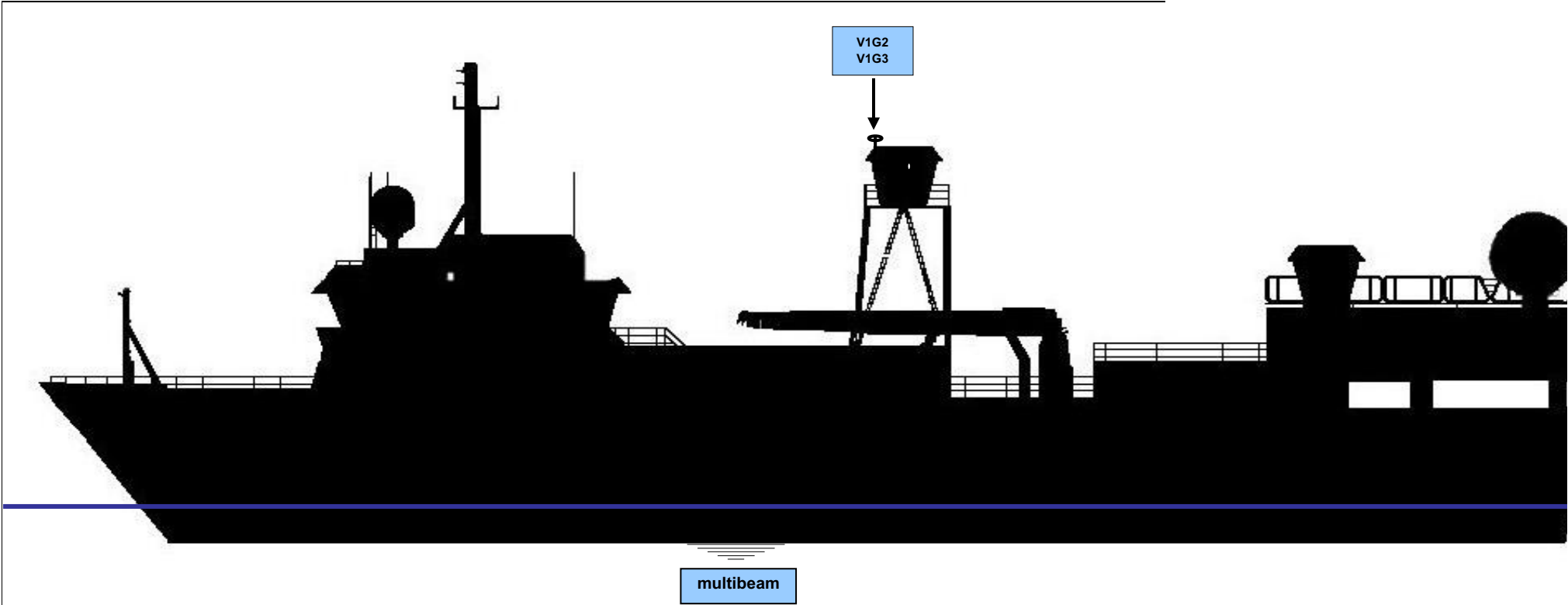
Array total volume (without spares) is 6600 cubic inches.  
String 1 has guns 9 & 10 in a horizontal cluster. Strings 2, 3, 4, have all clusters hanging vertically.  
Gun clusters have 0.75m between guns and hang 0.95m from center of hanger

Total volume per string (without spares) 1660 cubic inches.  
Cluster Guns are 1m apart.  
Single guns hang from hanger 1.15m

All gun volumes, numbering, locations, and offsets were inspected and verified by Chief Source Mechanic.

All measurements in meters



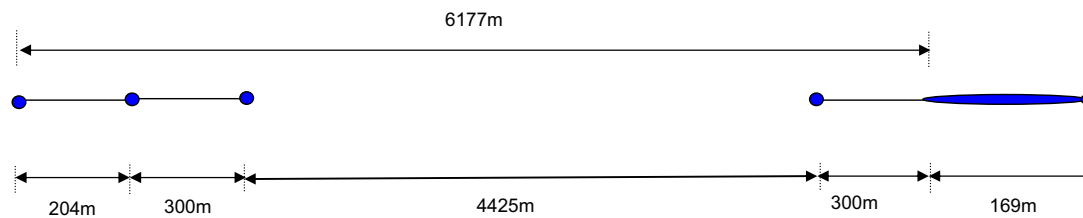


NRP	NAVIGATION REFERENCE
V1G1	C-Nav
V1G2	SeaPath 200
V1G3	Pos MV
V1G4	PosNet
V1R1	PosNet

## 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

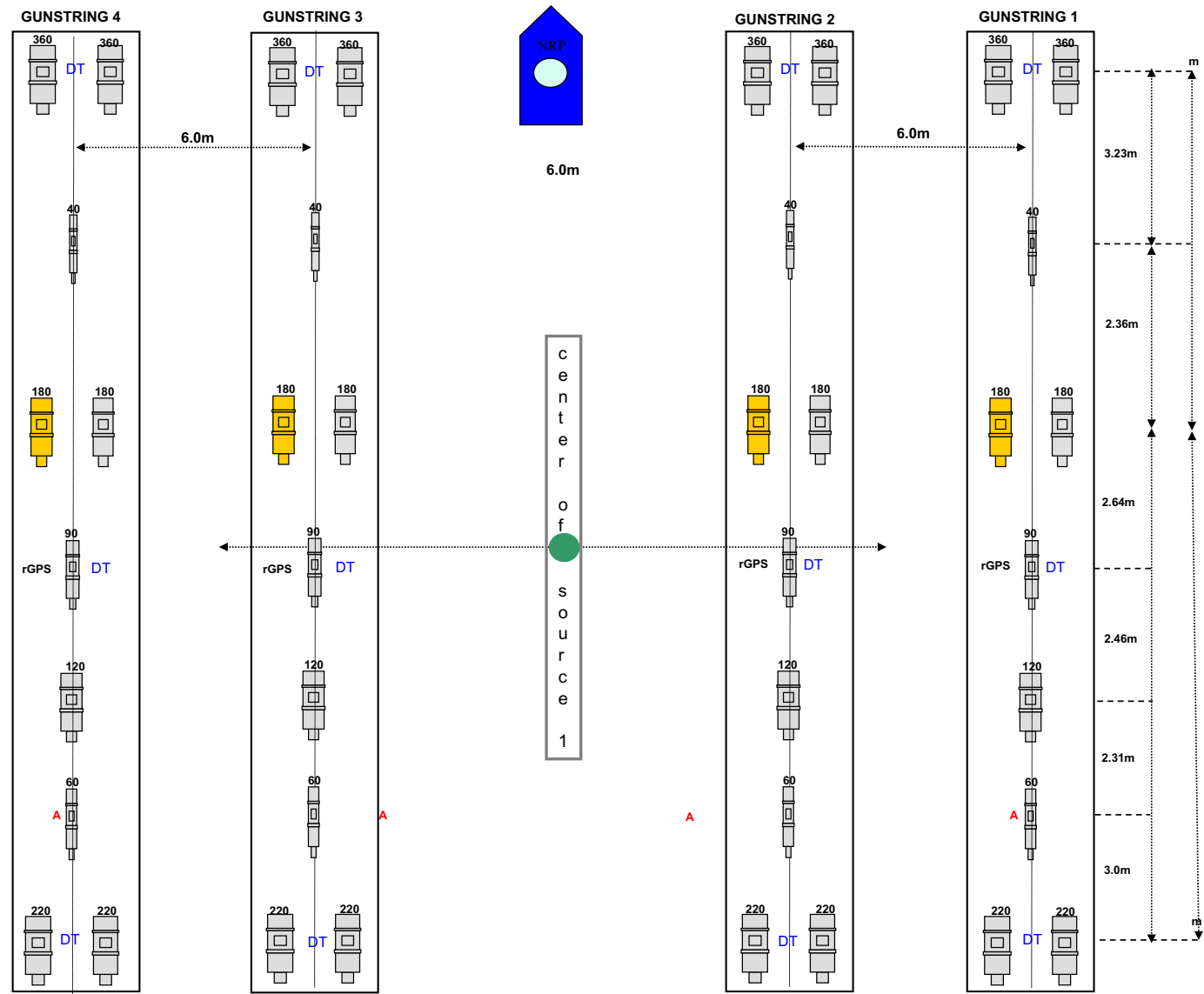
**DT** = Depth Transducer  
**A** = Acoustic  
**P** = Pressure Sensor - located  
 in front of gun's 1 & 2

 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.

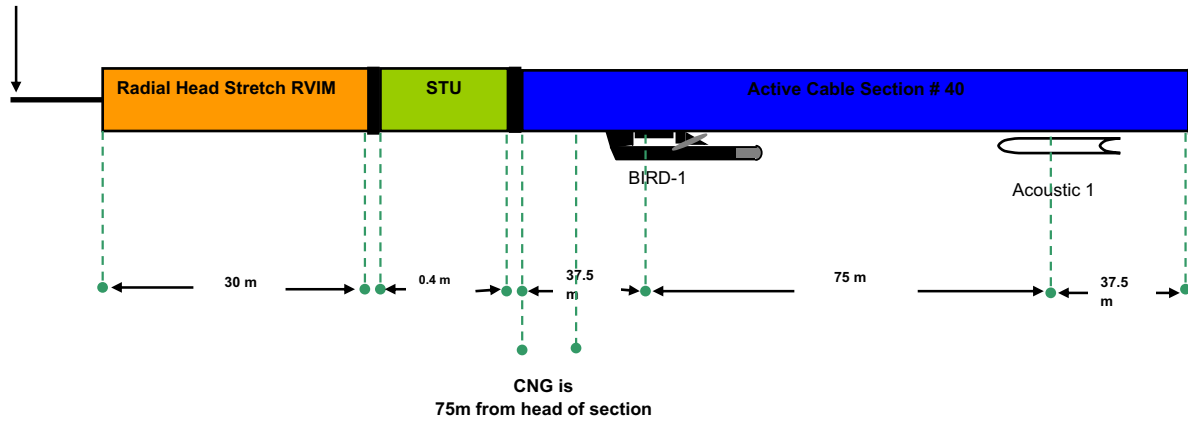
All measurements in meters

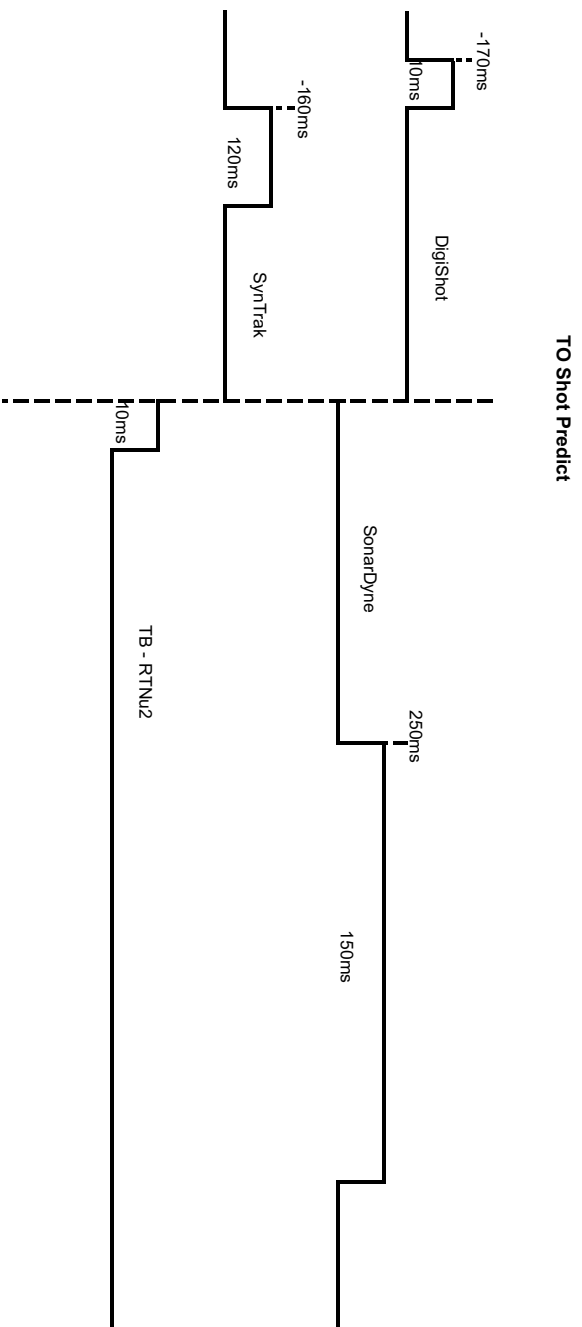




# R/V Marcus G. Langseth - Streamer Front End

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





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

