

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

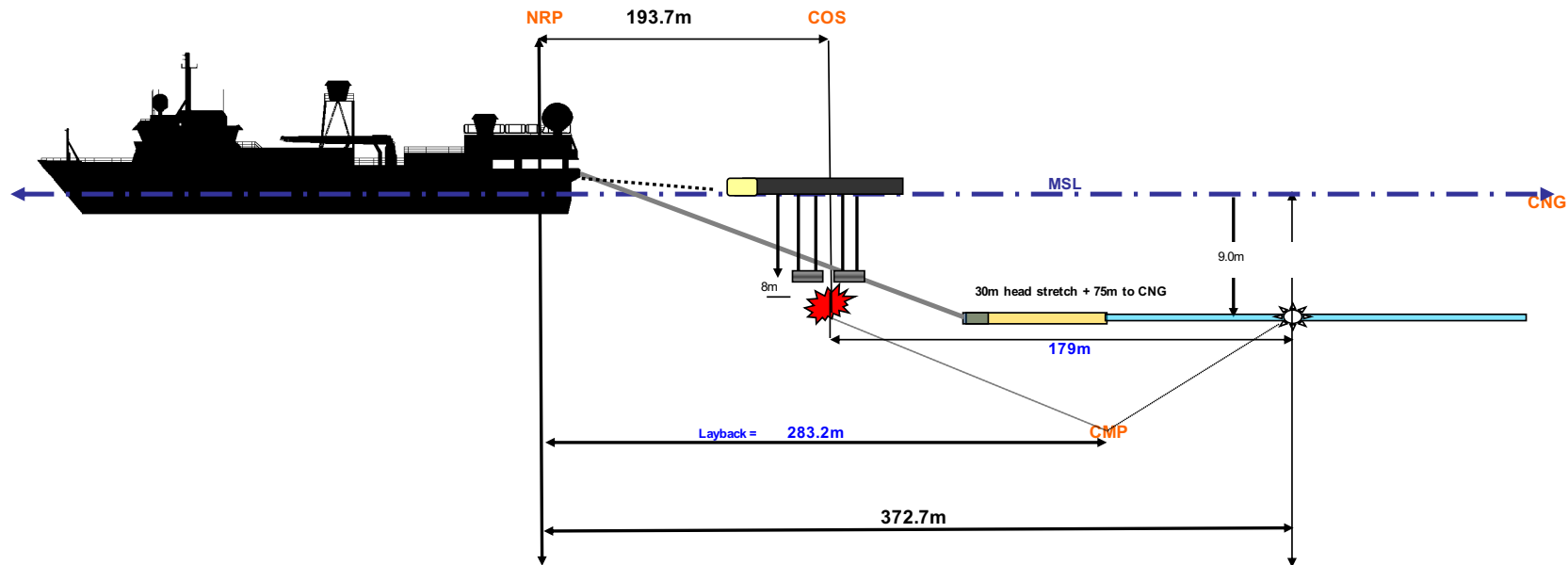
Timing Langseth

Timing Spectra

Towing Configuration



R/V Marcus G. Langseth - Towing Offsets

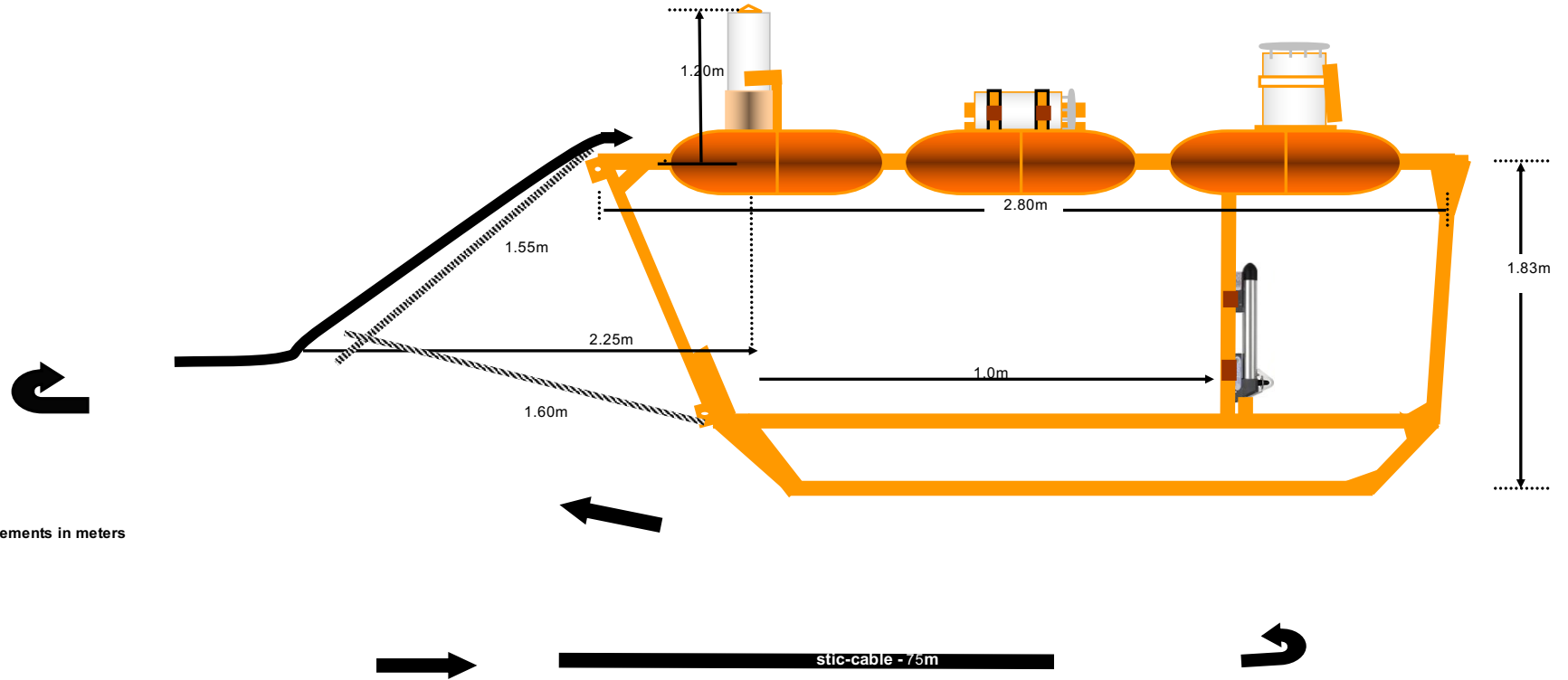


*** Offsets used for acquisition ***		
NRP-Stem	4.20	m
NRP-COS	193.70	m
NRP-CNG	372.70	m
COS-CNG	179.00	m
NRP-CMP	283.2	m

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

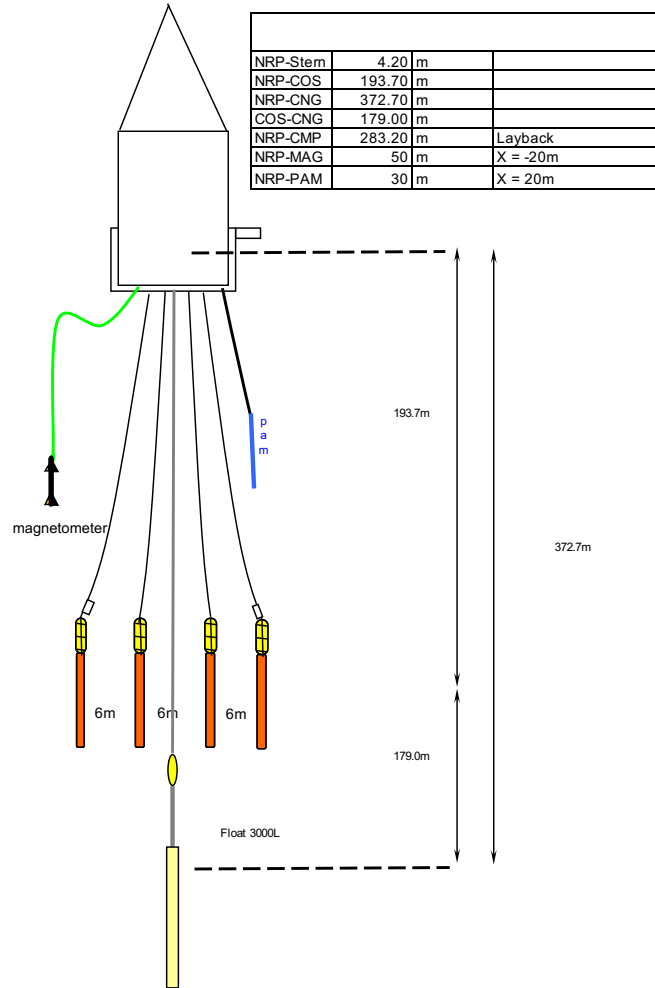


All measurements in meters

r/v Marcus G. Langseth "tow" configuration

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

NOT to Scale

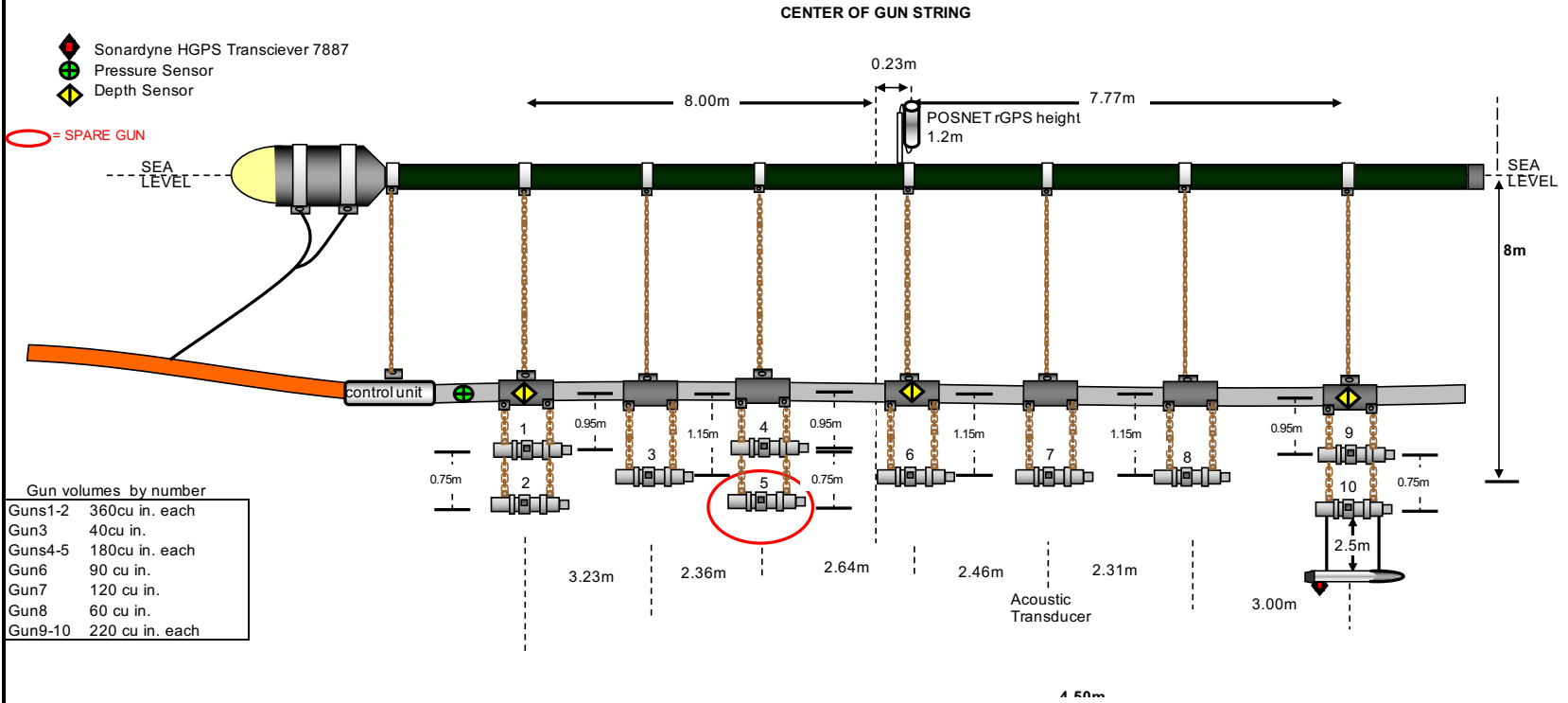


NRP-Stem	4.20	m	
NRP-COS	193.70	m	
NRP-CNG	372.70	m	
COS-CNG	179.00	m	
NRP-CMP	283.20	m	Layback
NRP-MAG	50	m	X = -20m
NRP-PAM	30	m	X = 20m

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

Float 3000L

R/V Marcus G. Langseth - Gun Array Offsets



Gun volumes by number

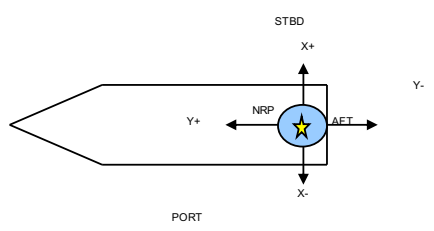
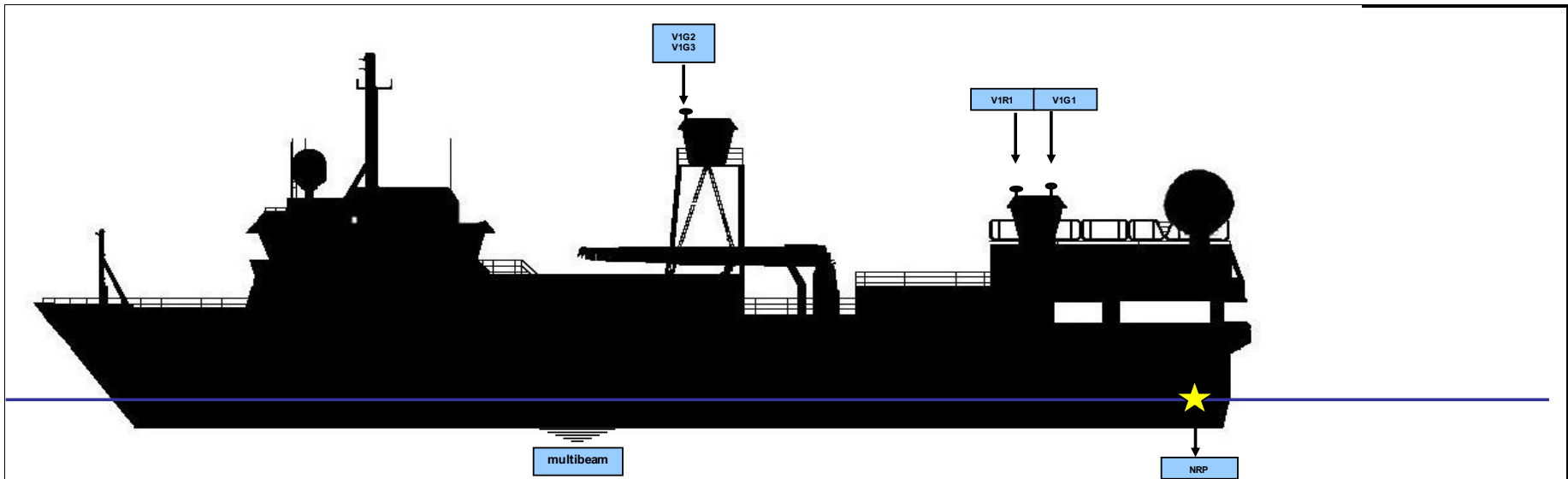
Guns1-2	360cu in. each
Gun3	40cu in.
Guns4-5	180cu in. each
Gun6	90 cu in.
Gun7	120 cu in.
Gun8	60 cu in.
Gun9-10	220 cu in. each

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 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

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



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

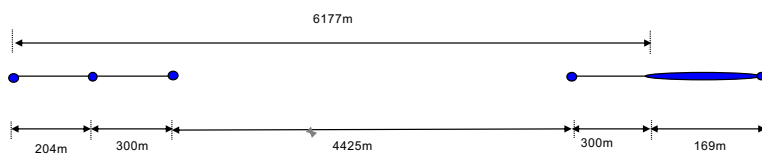


All measurements in meters				
		FORE/AFT (Y)	STBD/PORT (X)	UP/DOWN (Z)
NRP	NAVIGATION REFERENCE POINT	0.00	0.00	0.00
V1G1	C-Nav	8.06	4.87	14.50
V1G2	SeaPath 200	25.30	1.50	16.90
V1G3	Pos MV	22.30	8.50	16.90
V1G4	PosNet	10.45	4.87	14.50
V1R1	PosNet	10.45	4.87	14.50
EM120	Multibeam	49.70	8.50	-6.60

R/V Marcus G. Langseth - 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

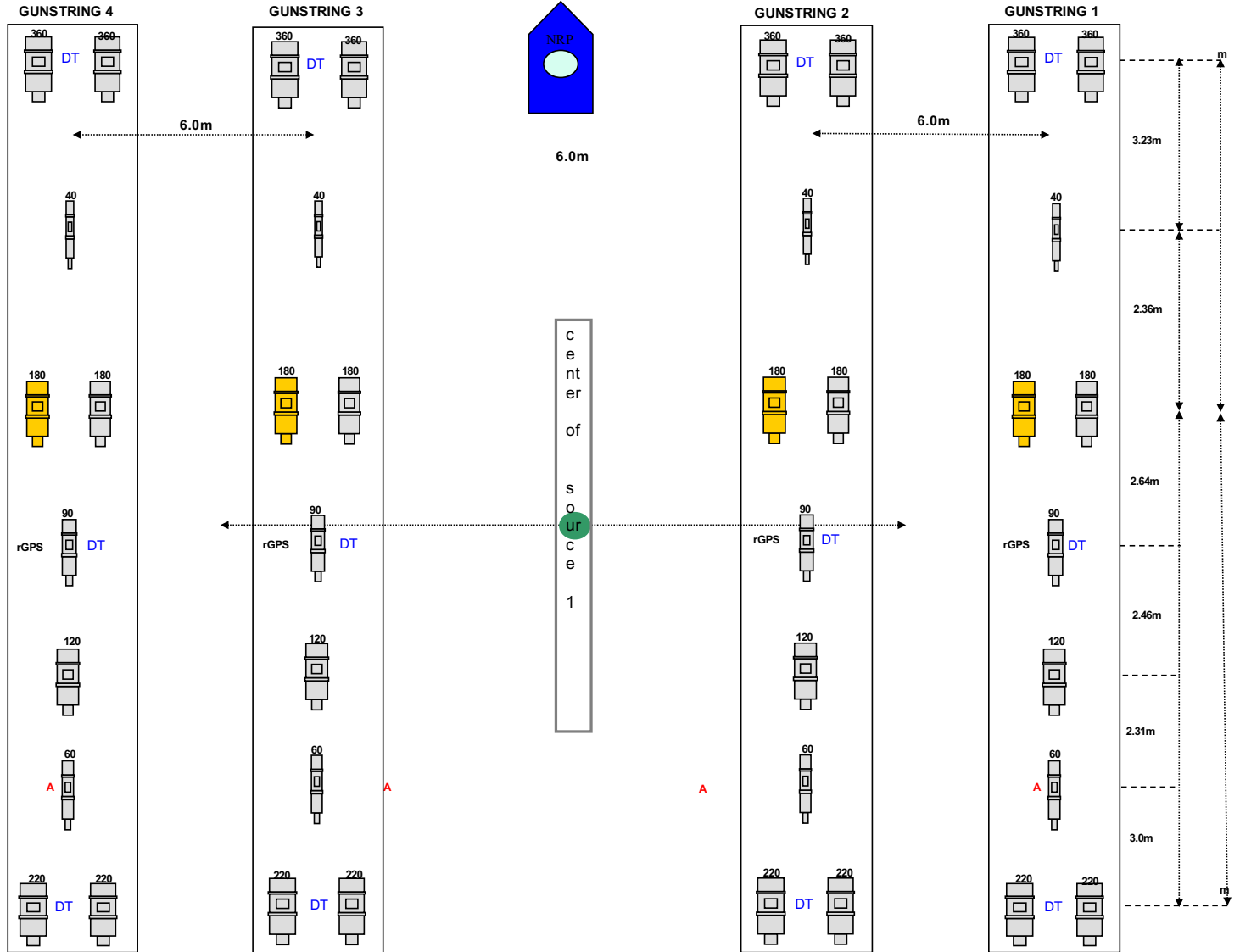
DT = Depth Transducer
 A = Acoustic
 P = Pressure Sensor - located
 in front of gun's 1 & 2

 Center of Source 1 & 2

 Spare Gun

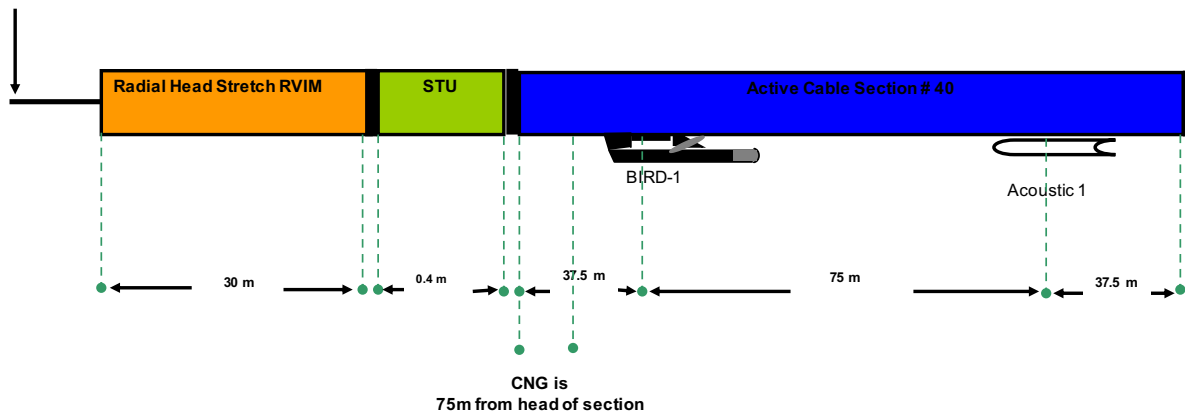
Cluster Guns are mounted 1m apart
 String 1 cluster 9 & 10 mounted
 horizontally
 String 2, 3, & 4 all clusters mounted
 vertically.

All measurements in meters

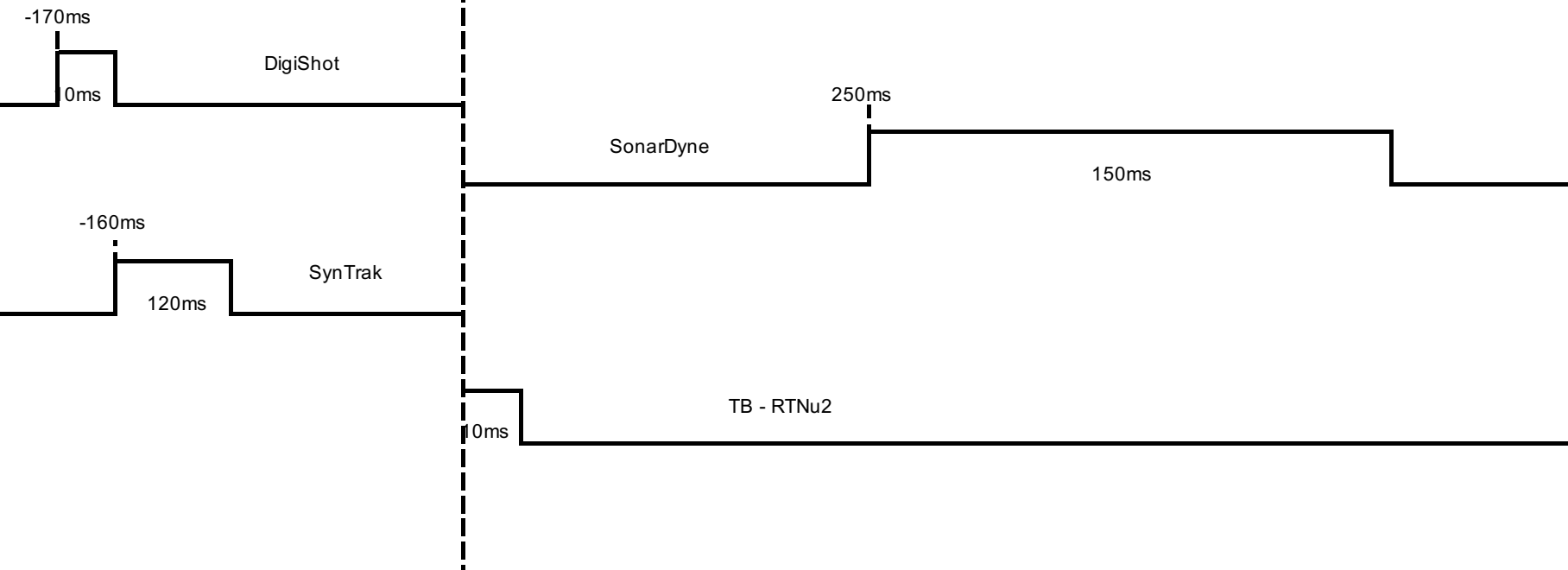


R/V Marcus G. Langseth - Streamer Front End

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



TO Shot Predict



Spectra timing for r/v Marcus G. Langseth

