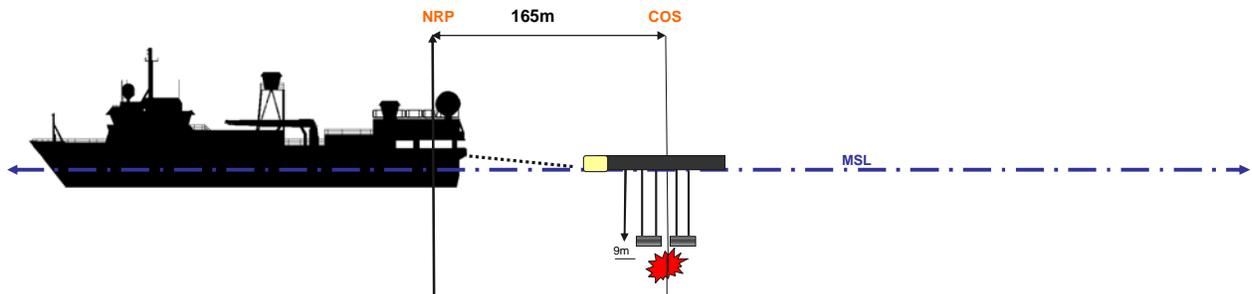


# R/V Marcus G. Langseth - Towing Offsets

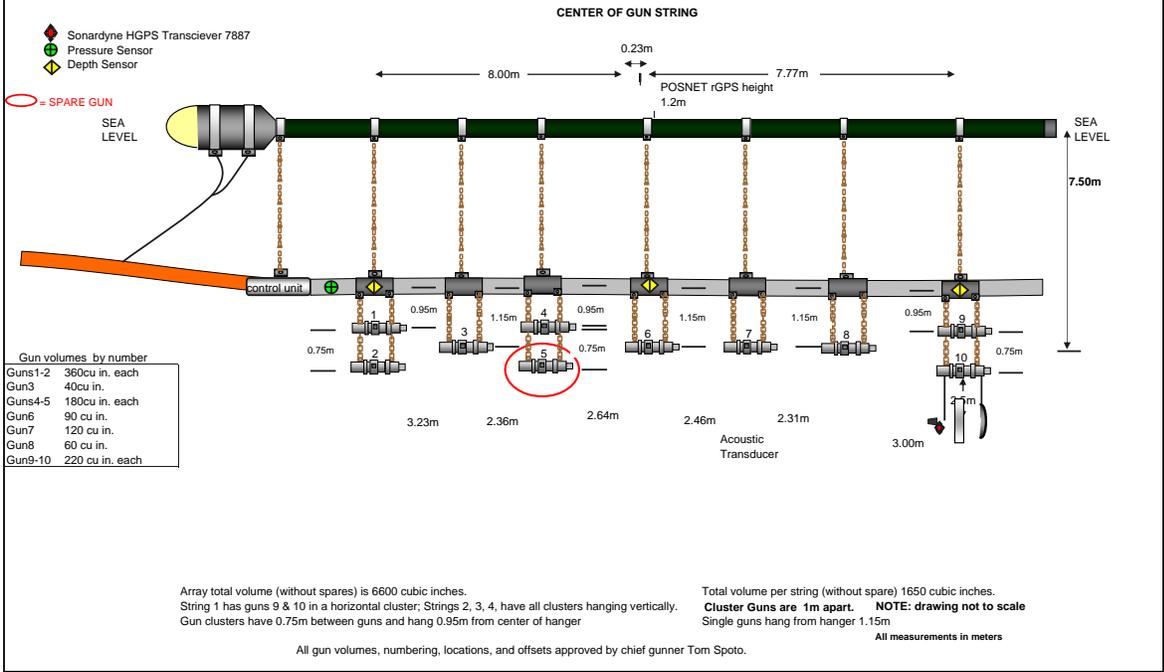
\*\*\* Offsets used for sequences \*\*\*

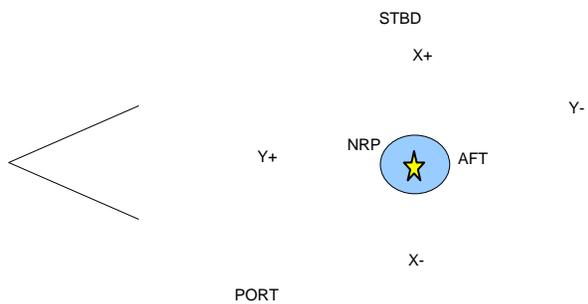
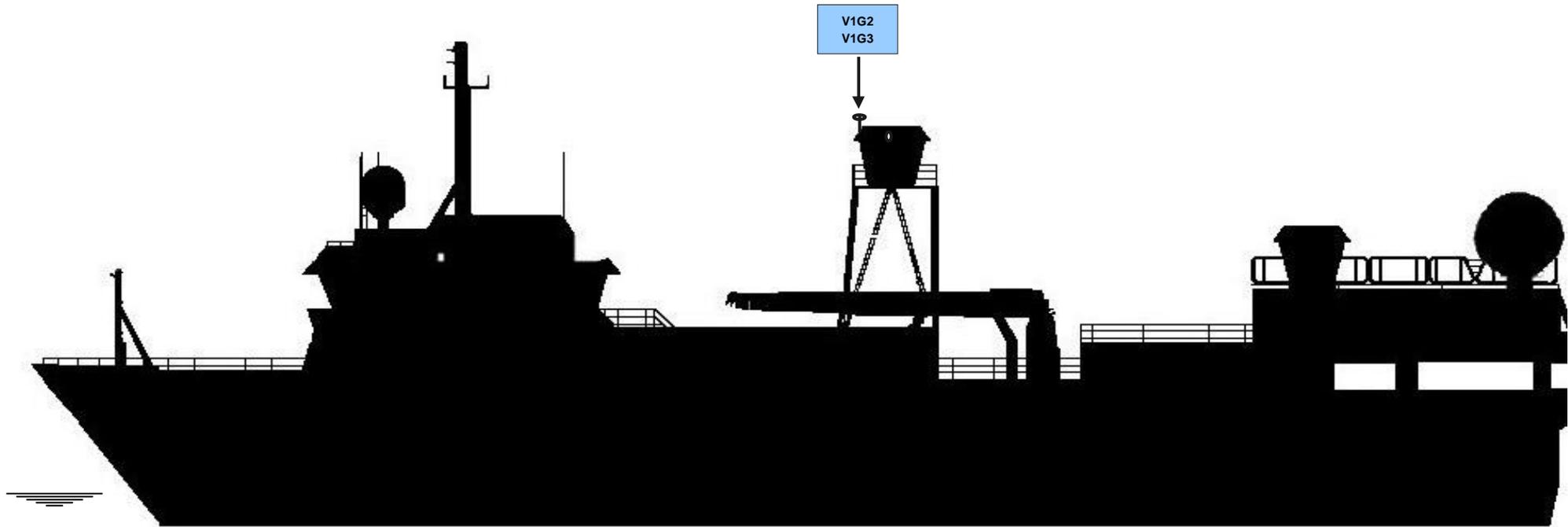


*** Offsets used for acquisition ***				
NRP-Stern	4.20	m	NRP	Nav Reference Point
NRP-COS	165.00	m	COS	Centre of Source
NRP-CNG	na		CNG	Centre of Near Group (Trace # 001)
COS-CNG	na		CMP	Common Mid-Point
NRP-CMP	na		MSL	Mean Sea Level

All measurements in meters

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





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

### r/v Marcus G. Langseth - Gun Configuration

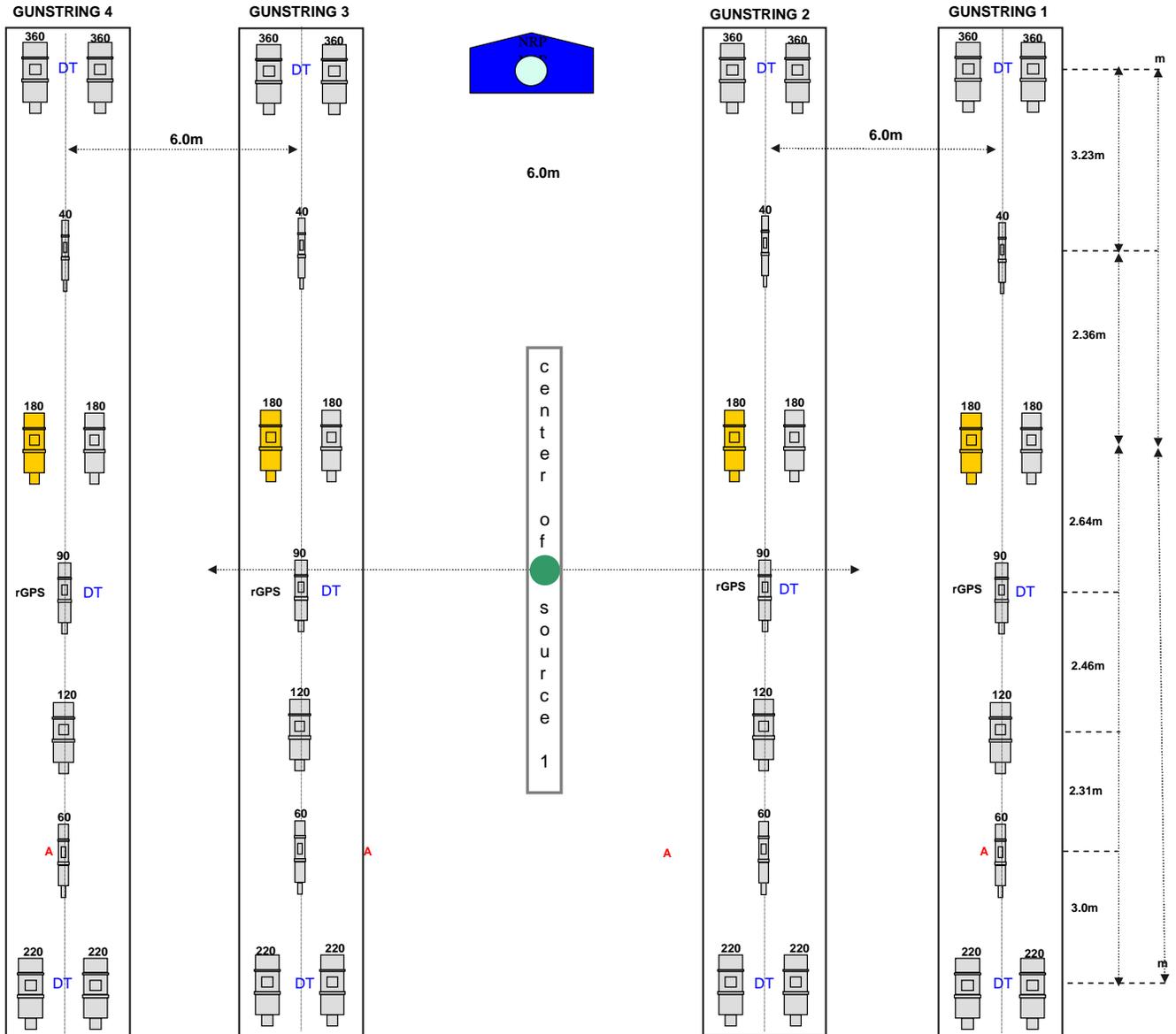
DT = Depth Transducer  
 A = Acoustic  
 P = Pressure Sensor - located in front of gun's 1 & 2

● Center of Source 1 & 2

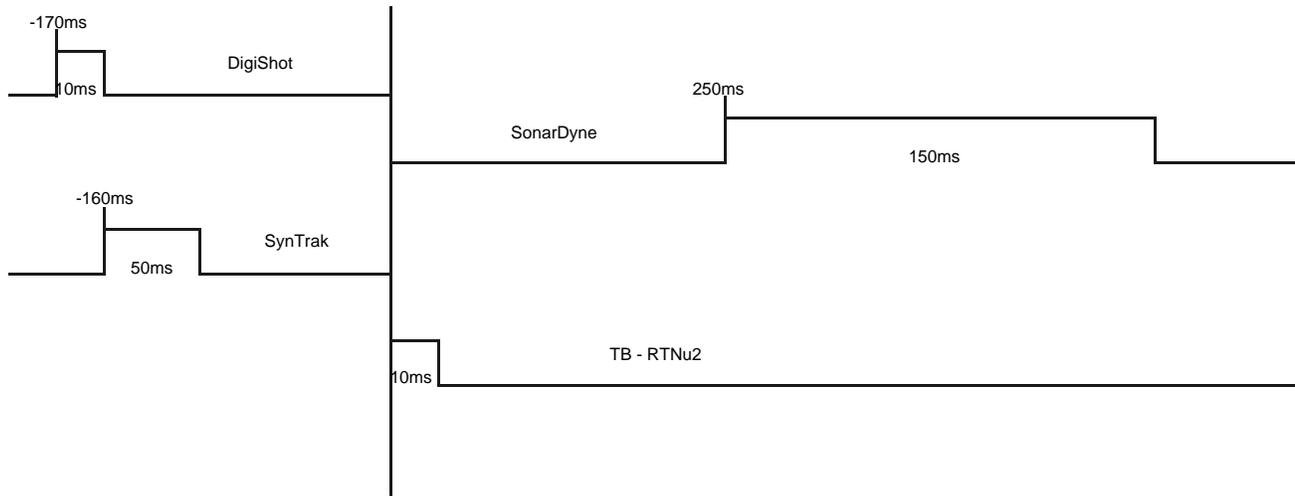


Cluster Guns are mounted 1m apart  
 String 1 cluster 9 & 10 mounted horizontally  
 String 2, 3, & 4 all clusters mounted vertically.

All measurements in meters



TO Shot Predict



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

