

21 OCT 2013

CNAV

Fore/aft

$$X = \left(\begin{array}{l} 45 \text{ meters forward} \\ \text{to CNAV to back of rail} \end{array} \right) - \left(\begin{array}{l} 215 \text{ meters} \\ \text{BM to back of rail} \\ \text{(also forward)} \end{array} \right)$$

$$= 0.235 \text{ meters forward of BM}$$

PORT/STBD

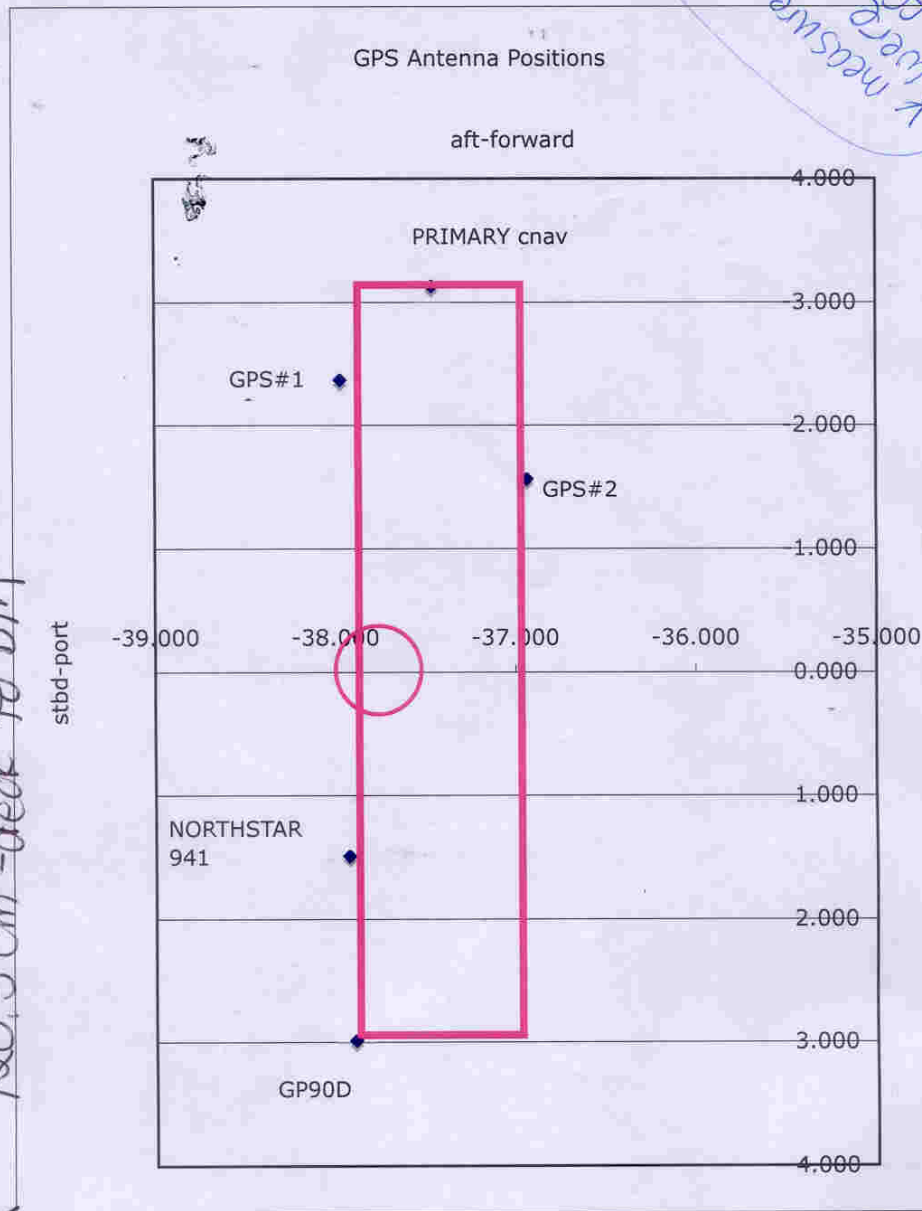
$$Y = 3.12 \text{ meters port of BM}$$

$$Z = \left(\begin{array}{l} 1.61 \text{ meters up} \\ \text{CNAV up from deck} \\ \text{to base of antenna} \end{array} \right) - \left(\begin{array}{l} 1.205 \text{ meters} \\ \text{BM up from deck} \end{array} \right) = 0.405 \text{ meters up}$$

add 6.5 ~~cm~~ = 0.065 for base antenna to average phase center L1 & L2

$$Z = 0.47 \text{ meters up from BM}$$

GNSS antenna
 45 cm of
 back of rail
 21.5 to base of
 part/stbd = 312 part
 cm
 Z = 161 cm up
 120.5 cm - deck to BM
 6 m from rail
 21 OCT 2013



* measurements were up to 4.1m from previous
 0.516
 0.516

Δ = 3 cm
 now meters Δ = 7.000
 0.005 meters Δ = 0.012 meters
 now = 21.5 + 6 = 27.5 cm
 prev = 31.6 cm
 Δ = 4.1 cm

previous measure
 231 cm

1850 aft/bridge

234 cm port
 121 cm up from deck
 6 cm aft of rear side of rail

Phase Center above antenna base
 L2 = 59 mm L4 = 70 mm

Check