

Measurements 30-July-2013 CNAV antennae

Loane PRIMARY aft-rail

Z - deck to antenna 118.6 cm

X - fore-aft - BM to <sup>BM to Z</sup> fwd side rail move aft  
fwd side rail to antenna move forward 1.5 cm

Y port-stbd 153 cm BM to antenna move port

23 cm

Kallison

23.7 Antenna

notes say  
21.5 this is in  
better agreement

Primary ~~SPARE~~ Scotch coat - forward rail

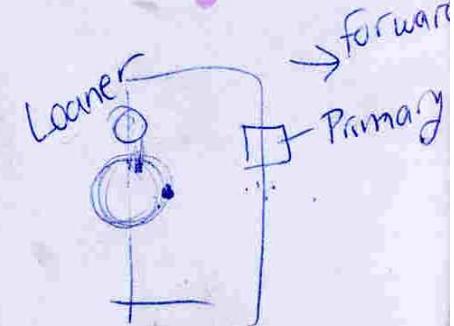
Z - deck to antenna +155.8 cm

deck to BM +~~120.0~~ cm 120.3 cm

X - fore-aft BM to <sup>aft.</sup> rail 72.0 cm move forward  
aft rail to ant 13 cm move forward

Y - port-stbd 219.0 BM to antenna move  
port

7 Apr 2013  
7 BM to  
top of  
railing  
20.5cm



SSSG / memory / GPS / Junc

**REV 4 - TABLE 5 GPS**

**Antennae**

LOCATION	X (mm)	Y(mm)	Z(mm)
AVERAGE BM POSITION	-37.655	-0.046	-29.853
to get to GP90D-GPS	move aft -0.238	move stbd 3.030	move up -0.361
GP90D-GPS position now	-37.893	2.984	-30.214
GP90D-GPS (revision 4)	-37.838	2.933	-30.624
to get to NORTHSTAR 941	move aft -0.273	move stbd 1.535	move up -0.054
NORTHSTAR 941 position now*	-37.928	1.489	-29.907
NORTHSTAR 941 GPS survey rev. 4	-37.921	1.503	-29.925
error compared to rev. 4 survey	-0.006	-0.013	0.018
to get to FURUNO GPS#1 aft-port 1850 - BRIDGE 1850	move aft -0.315	move port 231.5 -2.320	move up -0.006
FURUNO GPS#1 - aft-port 1850 position now* BRIDGE	-37.970	231.5 -2.366	-29.859
FURUNO GPS#2 survey rev. 4	-37.974	-2.365	-29.852
error compared to rev. 4 survey	0.004	0.000	-0.007
to get to FURUNO GPS#2 forward-port 1850 - CHARTROOM 1850	move forward 0.720	move port -1.520	move up -0.689
FURUNO GPS#2 - forward-port 1850 position now* CHRM	-36.935	-1.566	-30.542
FURUNO GPS#2 survey rev. 4	-36.935	-1.577	-30.537
error compared to rev. 4 survey	0.000	0.012	-0.004
to get to CNAV antenna	move forward 0.195	move port -3.085	move up -0.323
CNAV position now*	-37.460	-3.131	-30.176

\*position now - refers to the measured position on 29-April-2013

**FINAL ANTENNAE POSITIONS**

	forward-aft	stbd-port	down-up
GP90D-GPS position now	-37.893	2.984	-30.214
NORTHSTAR 941 position now	-37.928	1.489	-29.907
FURUNO GPS#1 - aft-port 1850 position now	-37.970	-2.366	-29.859
FURUNO GPS#2 - forward-port 1850 position now	-36.935	-1.566	-30.542
CNAV position now	-37.460	-3.131	-30.176

121.5  
120.3  
1.2

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