SCARANO BOAT BUILDING, INC.

May 5, 2006

Modified page 2 bar chart from "Effects of Various Canopy Configurations on Vessel ETHAN ALLEN's Ability to Satisfy USCG Stability Standard" using JMS model. Supporting analysis. showing the max GZ at various configurations is also shown below.

The below demonstrates that no significant difference in the relative effects of the canopy modification exist between the SBI or JMS models.

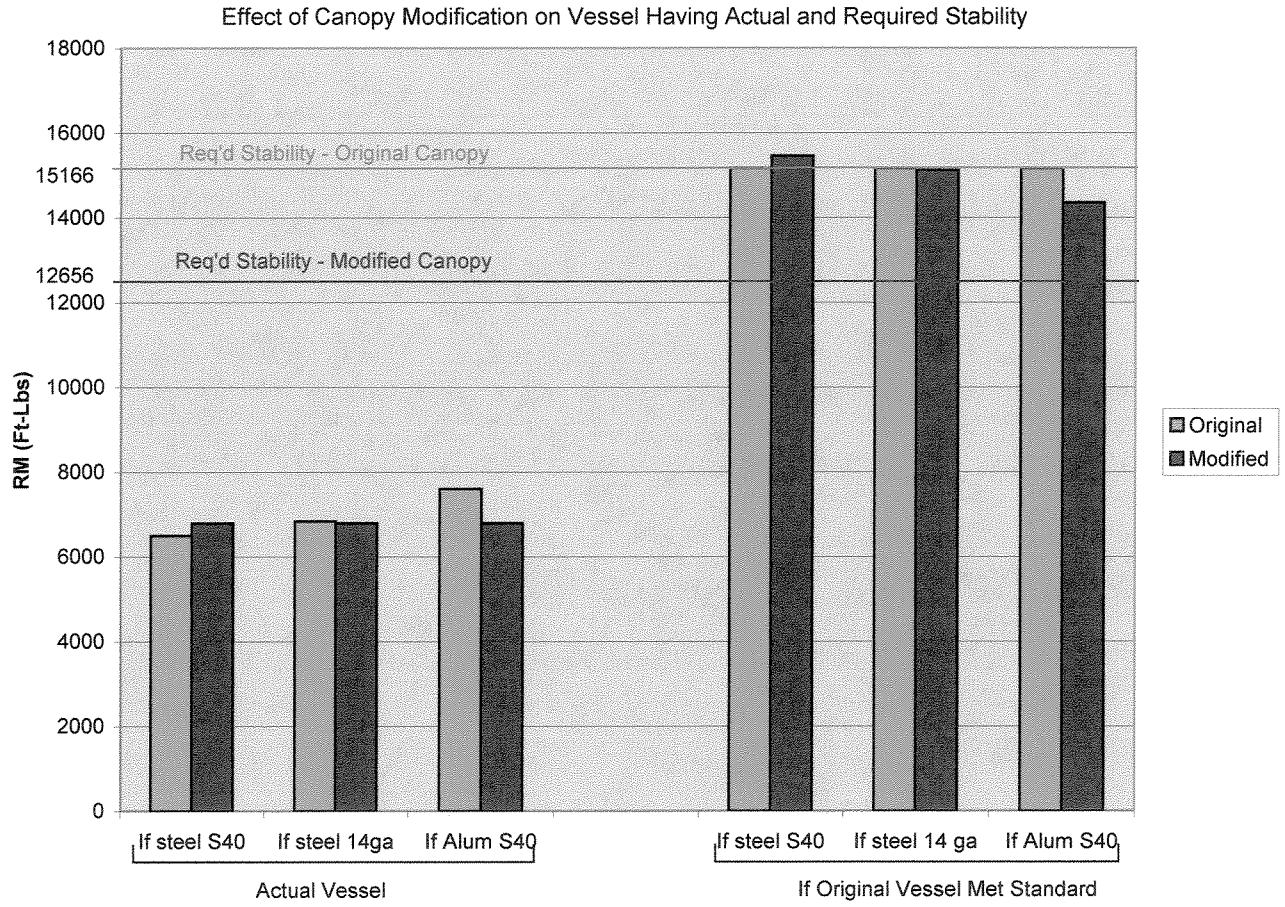

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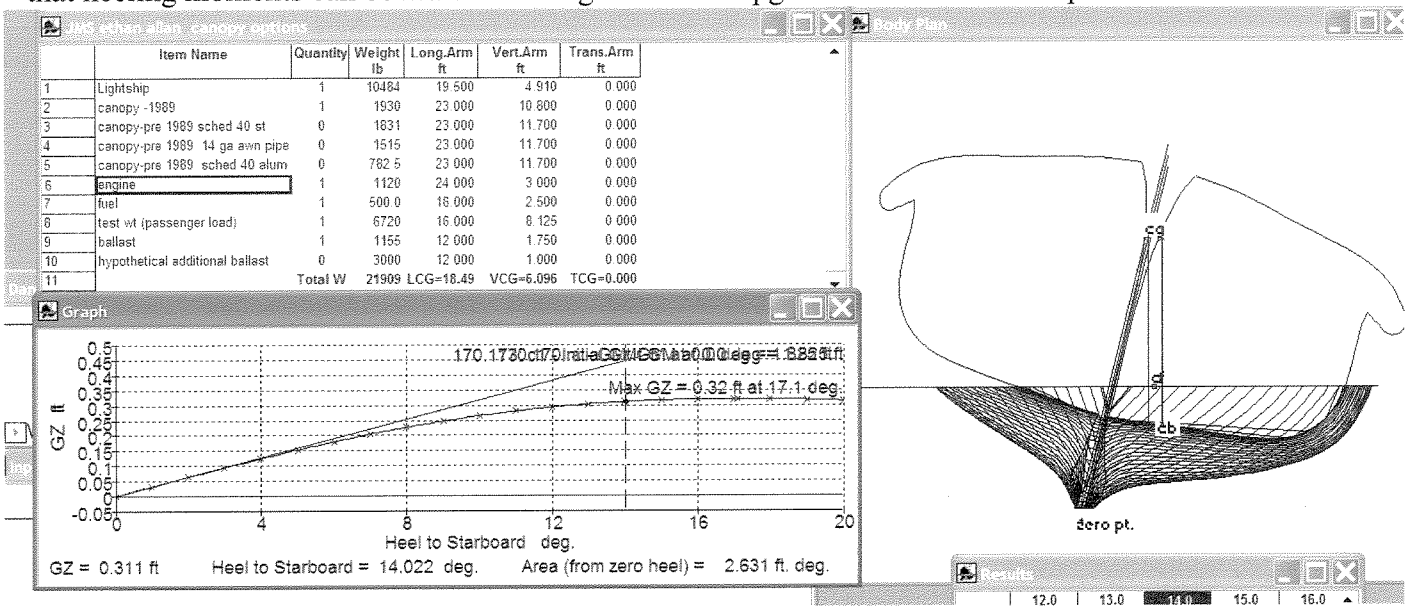
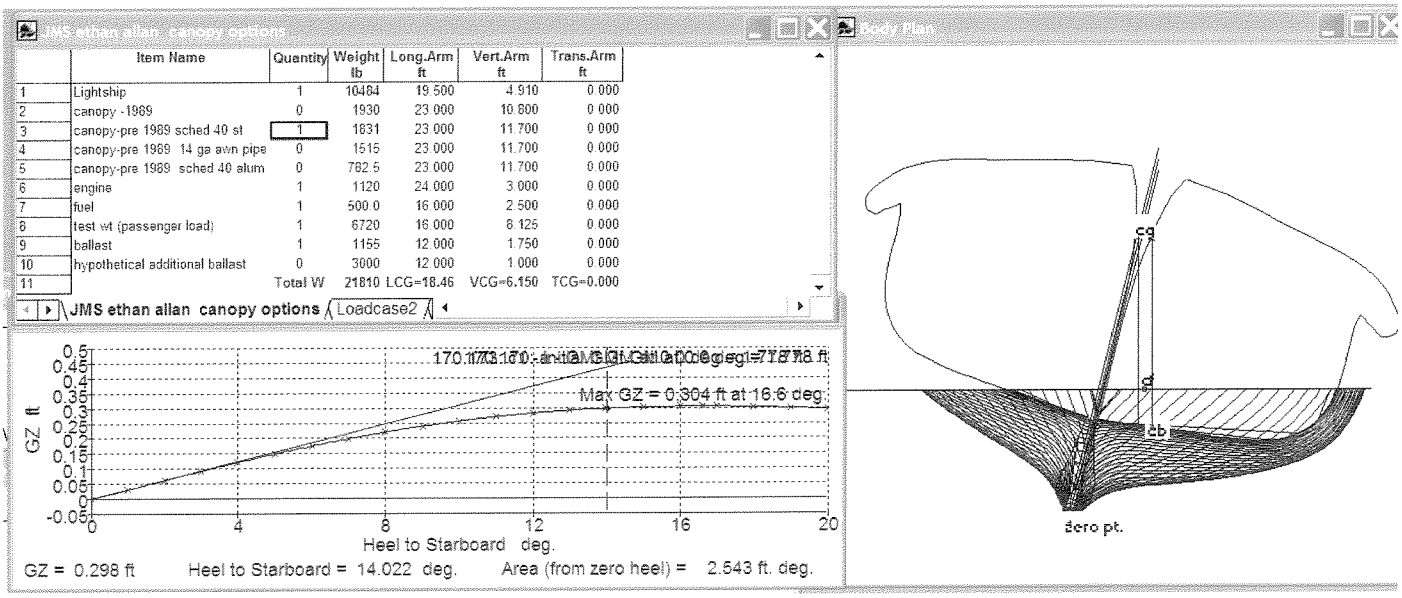
Illustration #1 From JMS Model (matches 18,000 ftlb pg11 figure 5 of JMS Report)
Also note loading is matched to steel, aluminum, and wood canopy VCGs shown on pg B-2 and that heeling moments can be matched to Fig. 5 and 6 on pgs 11 and 12 of JMS report.



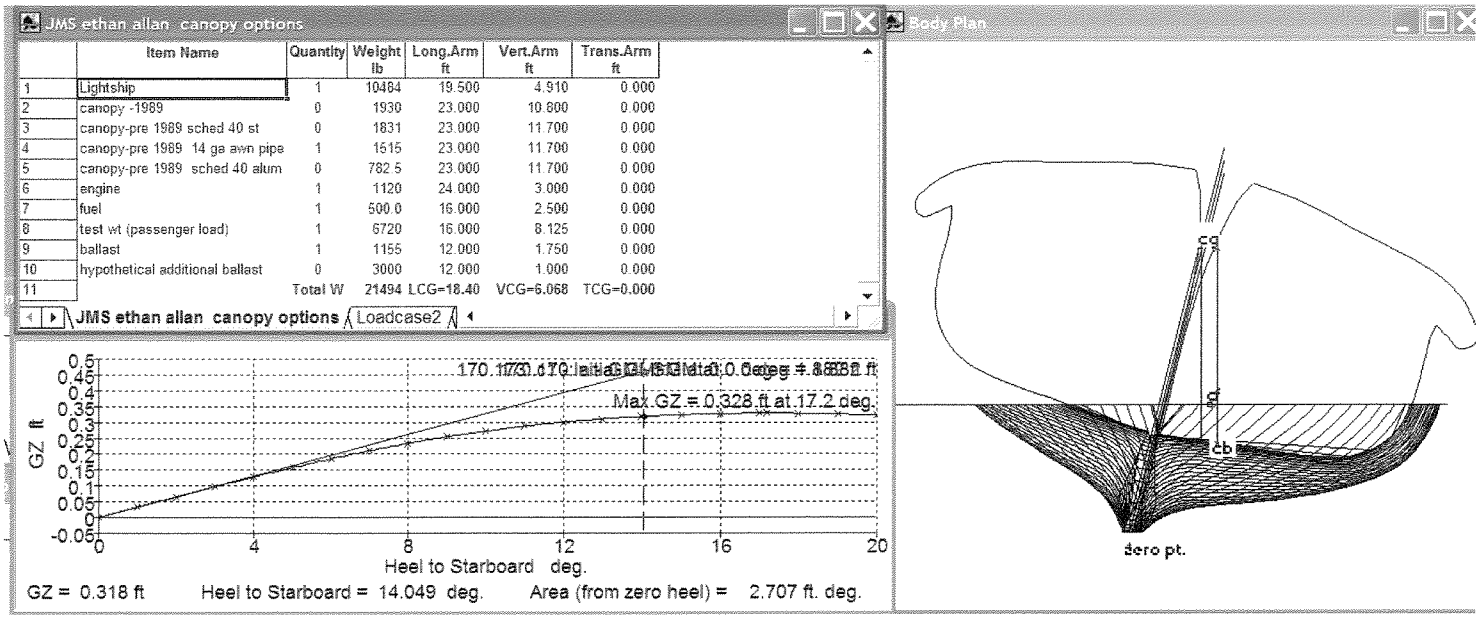
Heel Analysis showing .32(21909) = 6,791 ft-lbs with post 89 canopy

Illustration #1 From JMS Model



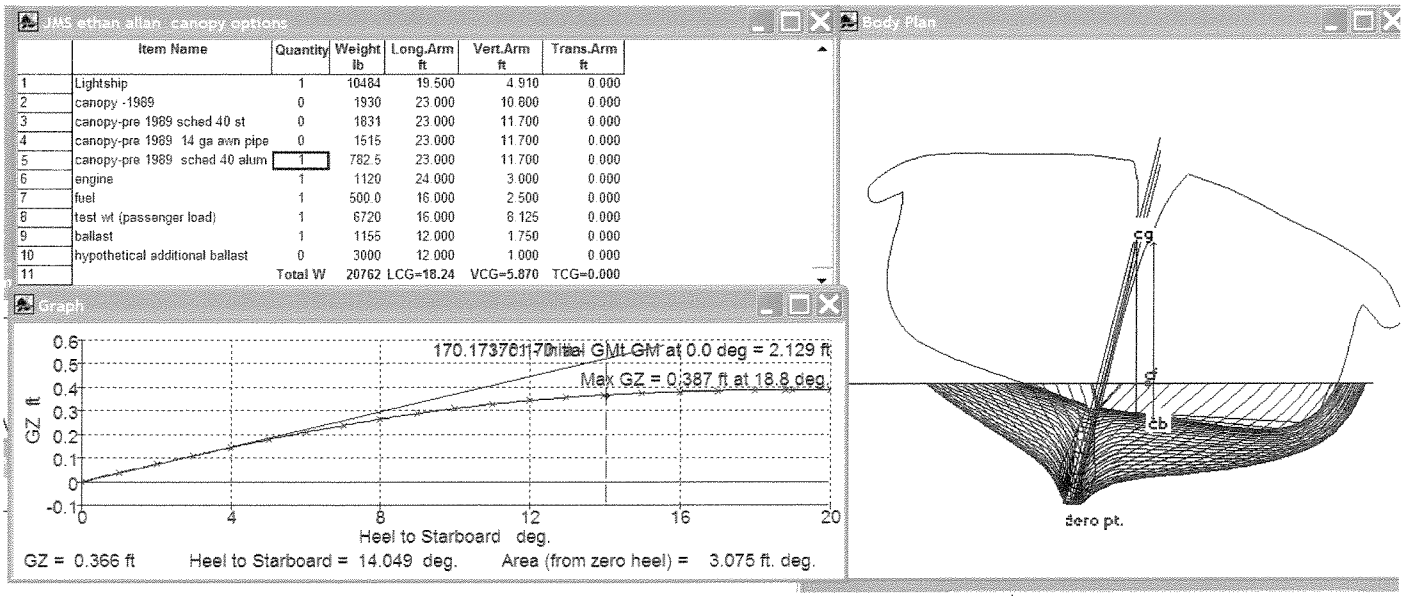
Heel Analysis showing .298(21810) = 6,499 ft-lbs of RM available at 14 deg with pre 1989 canopy (if sched 40 steel pipe)

Illustration #3 From JMS Model



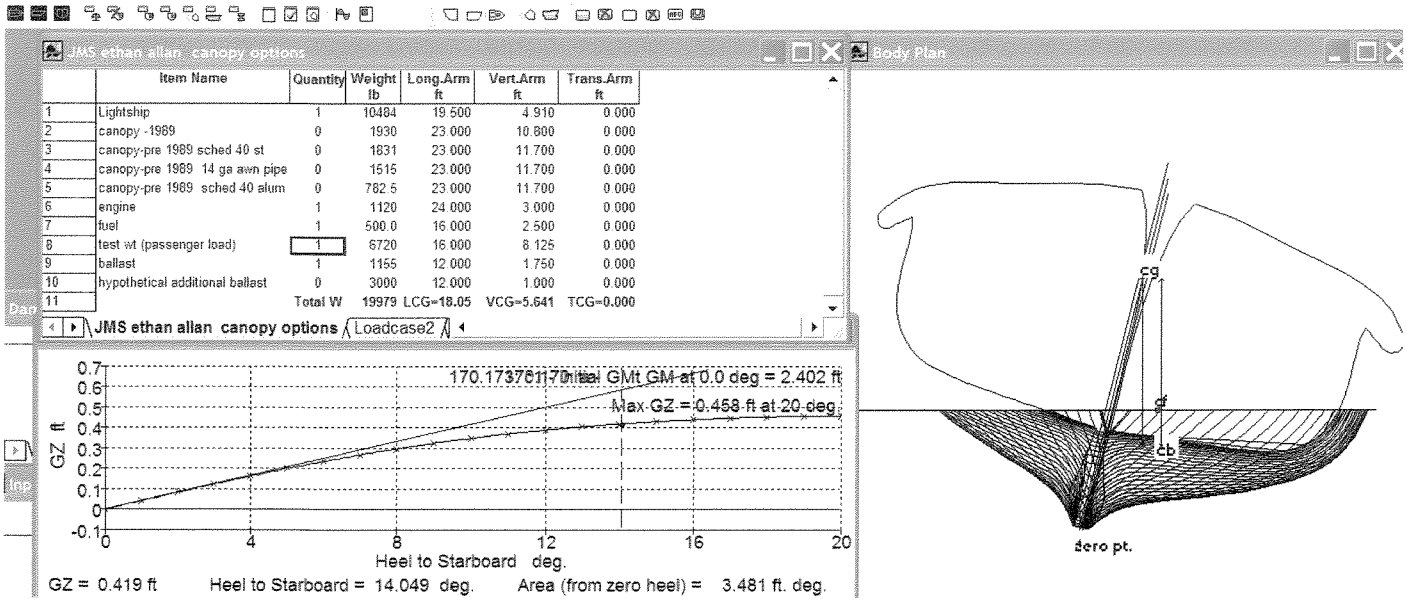
Heel Analysis showing .318(21,494) = 6,835 ft-lbs of RM available at 14 deg with pre 1989 canopy (if 14 guage awning pipe)

Illustration #4 From JMS Model



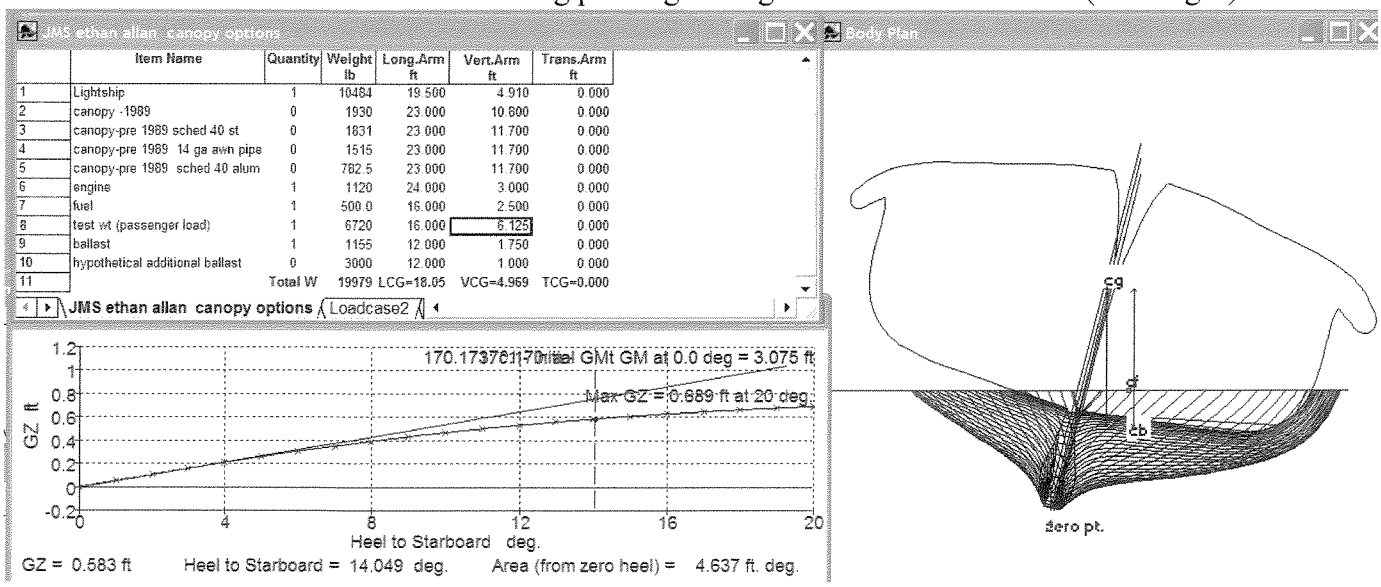
Heel Analysis showing .366(20762) = 7,599 ft-lbs of RM available at 14 deg with pre 1989 canopy (if sched 40 aluminum)

Illustration #5 From JMS Model



Heel Analysis showing .419(19979) = 8371.2 ft-lbs of RM available at 14 deg with no canopy.

Illustration #6 From JMS Model showing passenger weight .125' above the deck (sandbags?)



Heel Analysis showing .583(19979) = 11,647 ft-lbs of RM available at 14 deg with no canopy.
So it would maybe just pass with top of sandbags 3" off the deck as requirement is 11,659 ft-lbs.