

## Draft Check

The Contracting Officer's Representative will periodically verify the accuracy of the fore and aft draft sensors by comparing the vessel hull draft marks to the corresponding sensor readings indicated on the SI screen. The vessels draft reading will be viewed from an auxiliary vessel circling the dredge. The Contracting Officer's Representative will review the difference between averaged drafts recorded by the instruments and those visually estimated off the draft marks to insure that the system is operating within acceptable accuracy (within approximately  $\pm 0.1$  ft. in calm seas conditions), directing the contractor to re-calibrate or repair system components as necessary. This check may be performed separately or as a part of the Water Load Test.

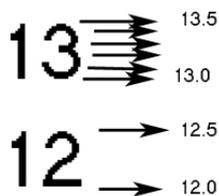
Purpose: To verify accuracy of forward and aft draft sensors for displacement calculations

Material Required:

- 1) Draft check form.
- 2) Auxiliary vessel to observe vessel hull draft markings.
- 3) Radio communication between the vessels.

Procedure:

Board auxiliary vessel and circle dredge to observe and record draft markings forward and aft (both port and starboard). A draft mark is read by interpreting where the water crosses the draft mark. The width of the font of a draft mark is equal to a tenth of a foot with the bottom of the number equal to zero and the top equal to 0.5. The blank space between the two number is also 0.5 for a total of 1 foot of change from the bottom of one number up to the bottom of the next. In the figure below, the arrow above 13.0 would be 13.1 and continue incrementing by .1 until 13.5.



Read and record system measured draft values indicated on SI screen.

Calculate the difference between instrument and manually-measured drafts. The difference between instrument and visually estimated drafts should be within 0.1 ft. As wave heights increase measurement error increases. Record remarks accordingly. Draft checks should be made both when the hopper is empty and fully loaded to verify accuracy throughout the working range of the draft sensor.

	Time	Zone			Time	Zone
<b>START</b>				<b>End</b>		
<b>Light Drafts</b>						
	Manually Measured			SI Drafts		
	Port	Stbd	Average (ft)	Instruments	Difference (ft)	
<b>Fwd</b>						
<b>Aft</b>						
<b>Loaded Drafts</b>						
	Manually Measured			SI Drafts		
	Port	Stbd	Average (ft)	Instruments	Difference (ft)	
<b>Fwd</b>						
<b>Aft</b>						
<b>Check Results:</b>			<b>pass</b>		<b>fail</b>	
<b>Remarks:</b>	-					