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(For London Office only).

# Lloyd's Register of Shipping.

## SURVEYS FOR FREEBOARD.

(COMPUTATION FOR STEAMER, SAILING SHIP, TANKER.)

Ship's Name <b>NUEVA ANDALUCIA</b>	Official Number	Nationality and Port of Registry <b>Norwegian Oslo</b>	Gross Tonnage <b>10044</b> <b>Vessel being remeasured</b>	Date of Build <b>1940</b> <b>Rebuilt 1947</b>	Port of Survey <b>Newport News, Virginia</b>
Moulded Dimensions: Length <b>495</b> Breadth <b>67</b> Depth <b>34' 2"</b> <i>To centre of rudder stock 496.25'</i>					Date of Survey <b>Whilst rebuilding</b>
Moulded displacement at moulded draught = 85 per cent. of moulded depth <b>21040</b> tons					Surveyor's Signature <i>J. Buchanan</i>
Coefficient of fineness for use with Tables <b>763</b>					Particulars of Classification <b>* 100 A1</b> <b>Carrying petroleum in bulk.</b>

<b>Depth for Freeboard (D).</b> Moulded depth ... <b>34.16</b> Stringer plate ... <b>21.5 mm. .07</b> Sheathing on exposed deck $T \left( \frac{L-S}{L} \right) =$ Depth for Freeboard (D) = <b>34.23</b>	<b>Depth correction.</b> (a) Where D is greater than Table depth $(D - \text{Table depth}) R =$ $(34.23 - 33.08) \times 1.15 = +3.45$ (b) Where D is less than Table depth (if allowed) (Table depth - D) R = If restricted by superstructures	<b>Round of Beam correction.</b> Moulded Breadth (B) <b>67</b> Standard Round of Beam = $\frac{B \times 12}{50} = 16.08$ Ship's Round of Beam = <b>16.12</b> Difference <b>+ .04</b> Restricted to Correction = $\frac{\text{Diff}}{4} \times \left( 1 - \frac{S_1}{L} \right) = \frac{.04}{4} \times .5747 = -.01$
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### DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S <sub>1</sub> )	Height	Height Correction	Effective Length (E)
Poop enclosed <del>37.53</del>	<b>123.12</b>	<b>123.12</b>	<b>8.0</b>	<b>12</b>	<b>123.12</b>
" overhang ...	<b>2.39</b>	<b>1.19</b>			<b>1.19</b>
R.Q.D. enclosed					
" overhang	<b>47.00</b>				
Bridge enclosed. <i>59.00</i>	<b>37.00</b>	<b>41.00</b>	<b>7.75</b>		<b>41.00</b>
" overhang aft ...	<b>1.00</b>	<b>.75</b>			<b>.75</b>
" overhang forward					
F'cle enclosed ...	<b>45.00</b>	<b>45.00</b>	<b>7.75</b>		<b>45.00</b>
" overhang ...					
Trunk aft ...					
" forward ...					
Tonnage opening aft ...					
" " forward					
Total ...	<b>212.51</b>	<b>211.06</b>			<b>211.06</b>

Standard Height of Superstructure <b>7.5'</b>	
" " R.Q.D. <b>42.00"</b>	
Deduction for complete superstructure	
Percentage covered $\frac{S}{L} =$ <b>42.82</b>	
" " $\frac{S_1}{L} =$ <b>42.53</b>	
" " $\frac{E}{L} =$ <b>42.53</b>	
Percentage from Table, Line A. <i>Tanker</i> <b>33.53</b>	
(corrected for absence of forecastle (if required))	
Percentage from Table, Line B. (corrected for absence of forecastle (if required))	
Interpolation for bridge less than .2L (if required)	
Deduction = <b>42.00 x .3353 = -14.08</b>	

### SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product
A.P. ...	<b>59.50</b>	<b>1</b>		<b>59.62</b>	<b>57.80</b>	<b>57.80</b>	<b>1</b>		<b>57.80</b>
1/4 L from A.P. ...	<b>26.48</b>	<b>4</b>		<b>106.12</b>	<b>26.90</b>	<b>26.90</b>	<b>4</b>		<b>107.60</b>
3/4 L " ...	<b>6.54</b>	<b>2</b>		<b>13.12</b>	<b>6.62</b>	<b>6.62</b>	<b>2</b>		<b>13.24</b>
Amidships ...		<b>4</b>					<b>4</b>		
3/4 L from F.P. ...	<b>13.69</b>	<b>2</b>		<b>26.24</b>	<b>18.25</b>	<b>18.25</b>	<b>2</b>		<b>36.50</b>
1/4 L " ...	<b>52.06</b>	<b>4</b>		<b>212.24</b>	<b>59.37</b>	<b>59.37</b>	<b>4</b>		<b>237.48</b>
F.P. ...	<b>119.00</b>	<b>1</b>		<b>119.25</b>	<b>118.00</b>	<b>118.00</b>	<b>1</b>		<b>118.00</b>
Total ...				<b>536.59</b>					<b>570.62</b>

Mean actual sheer aft = **1.75**  
Mean standard sheer aft = **1.75**  
Mean actual sheer forward = **1.71**  
Mean standard sheer forward = **1.71**  
Length of enclosed superstructure forward of amidships = **17.5**  
" " aft of " = **not applicable**

Correction =  $\frac{\text{Difference between sums of products}}{18} \left( \frac{.75 - S}{.2L} \right) = \frac{34.03}{18} \left( \frac{.75 - .2141}{.5359} \right) = -1.01$   
If limited on account of midship superstructure.

<b>Deduction for Tropical Freeboard.</b> <b>Addition for Winter and Winter North Atlantic Freeboard.</b> Depth to Freeboard Deck = <b>34.23</b> Summer freeboard = <b>6.69</b> Moulded draught (d) = <b>27.54</b> Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <b>6.89 = 7"</b> Addition for Winter North Atlantic Freeboard (if required) = <b>6.88 + 4.96 = 11.84 = 11 3/4"</b>	<b>Deduction for Fresh Water.</b> Displacement in salt water at summer load water line $\Delta = 19983$ Tons per inch immersion at summer load water line $T = 67.25$ Deduction = $\frac{\Delta}{40T}$ inches = <b>7.43</b> <b>= 7 1/2"</b>	<b>TABULAR FREEBOARD</b> corrected for Fresh Deck (if required) Correction for coefficient $\frac{763 + .68}{1.36} = 1.443/1.36$ Depth Correction ... <b>3.45</b> Deduction for superstructures ... <b>14.08</b> Sheer correction ... <b>1.01</b> Round of Beam correction ... <b>.01</b> Correction for Thickness of Deck amidships ... Other corrections, scantlings, etc. ... Summer Freeboard = <b>80.24</b>
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### SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, Wood, Steel, Deck:

Tropical Fresh Water Line above Centre of Disc ... <b>14 1/2" = 36.8"</b>	Tropical Fresh Water Freeboard ... <b>5' 5 3/4" = 167.0"</b>
Fresh Water Line " " ... <b>7 1/2" = 19.0"</b>	Fresh Water " " ... <b>6' 0 3/4" = 184.8"</b>
Tropical Line " " ... <b>7" = 17.8"</b>	Tropical " " ... <b>6' 1 1/4" = 186.0"</b>
Winter Line below " " ... <b>7" = 17.8"</b>	Winter " " ... <b>7' 3 1/4" = 221.6"</b>
Winter North Atlantic Line " " ... <b>11 3/4" = 29.8"</b>	Winter North Atlantic " " ... <b>7' 8" = 233.6"</b>



the Surveyor should endorse the form on this side with his signature and the date.

COMPUTATION

Back out

37'

1'

37  
4 =  $\frac{2}{3} \times 6'$   
41'  
ohang = 1' aft

ions and particulars abaft amidships tak

P.S. Dimensions and particulars abaft amidships taken from Hamburg Report No. 36195

Trade of ship	<b>Tanker</b>
Names of sister ships	
Builder's name and yard number	<b>After part - Deutsche Weeft : Forward part - Newport News Shipbuilding Company</b>
Owners	<b>The Texas Company A/S Oslo</b>
Fee £	