

Lloyd's Register of Shipping.

SURVEYS FOR FREEBOARD.

24 OCT 1932

Computation of Freeboard for Steamer, Sailing Ship, Tanker

having *shelter deck with tonnage opening aft*

Port of Survey *of oslo*

AGIOS VLASIOS (Type of Superstructures.) *Signal letter S.V.S.C*

Ship's Name *ex* "TYSLA" Nationality and Port of Official Number *Norwegian* *Registry* *Præstø* *841* Gross Tonnage *4297* Date of Build *1914*

Moulded Dimensions: Length *405* Breadth *53.46* Depth *28.0*

Moulded displacement at moulded draught = 85 per cent. of moulded depth *11057* tons

Coefficient of fineness for use with Tables *.755*

Particulars of Classification ☒ 100 A1
S.S. Rel. N^o 3. S.27
S.S. Got Net - 31

Depth for Freeboard (D)	Depth correction	Round of Beam correction
Moulded depth 28.00	(a) Where D is greater than Table depth (D - Table depth) R = <i>(28.04 - 27.00) 3.0 = 3.12</i>	Moulded Breadth (B) <i>53.17</i>
Stringer plate ... .. .04	(b) Where D is less than Table depth (if allowed) (Table depth - D) R =	Standard Round of Beam = $\frac{B \times 12}{50} =$ <i>12.76</i>
Sheathing on exposed deck $T \left(\frac{L-S}{L} \right) =$	If restricted by superstructures	Ship's Round of Beam = <i>13</i>
Depth for Freeboard (D) = <i>28.04</i>		Difference <i>.24</i>
		Restricted to
		Correction = $\frac{\text{Diff}}{4} \times \left(1 - \frac{S_1}{L} \right) =$ <i>.24</i> \times <i>0.052</i> = <i>NIL</i>

DEDUCTION FOR SUPERSTRUCTURES.

	Mean Covered Length (S)	Equivalent Enclosed Length (S ₁)	Height	Height Correction	Effective Length (E)	
Poop enclosed	<i>26.50</i>	<i>26.50</i>			<i>26.50</i>	Standard Height of Superstructure <i>7.50</i>
" overhang						" " R.Q.D.
R.Q.D. enclosed						Deduction for complete superstructure <i>42.00</i>
" overhang						Percentage covered $\frac{S}{L} =$ <i>100.00</i>
Bridge enclosed						" " $\frac{S_1}{L} =$ <i>99.48</i>
" overhang aft						" " $\frac{E}{L} =$ <i>99.48</i>
" overhang forward	<i>374.25</i>	<i>374.25</i>	<i>8'0"</i>		<i>374.25</i>	Percentage from Table, Line A. <i>99.36</i>
Fore enclosed			<i>amidships</i>			(corrected for absence of forecastle (if required))
" overhang						Percentage from Table, Line B.
Trunk aft						(corrected for absence of forecastle (if required))
" forward						Interpolation for bridge less than 2L (if required)
Tonnage opening aft	<i>4.25</i>	<i>2.12</i>			<i>2.12</i>	Deduction = <i>-41.73</i>
" forward	<i>405.00</i>					
Total	<i>405.00</i>	<i>402.87</i>			<i>402.87</i>	

measured afloat SHEER CORRECTION.

Station	Standard Ordinate	S	M	Product	Actual Ordinate	Effective Ordinate	S	M	Product	
A.P.	<i>50.50</i>	<i>1</i>		<i>50.50</i>	<i>51.5</i>	<i>54.00</i>	<i>1</i>		<i>60.00</i>	Mean actual sheer aft = <i>Excess</i>
$\frac{1}{2}$ L from A.P.	<i>22.47</i>	<i>4</i>		<i>89.88</i>	<i>28</i>	<i>24.03</i>	<i>4</i>		<i>106.80</i>	Mean actual sheer forward = <i>Excess</i>
$\frac{3}{8}$ L "	<i>5.55</i>	<i>2</i>		<i>11.10</i>	<i>10</i>	<i>5.94</i>	<i>2</i>		<i>13.20</i>	Mean standard sheer forward = <i>Excess</i>
Amidships		<i>4</i>					<i>4</i>			Length of enclosed superstructure forward of amidships = <i>3 c.s.</i>
$\frac{3}{8}$ L from F.P.	<i>11.11</i>	<i>2</i>		<i>22.22</i>	<i>24</i>	<i>12.98</i>	<i>2</i>		<i>27.28</i>	" " aft of " =
$\frac{1}{2}$ L "	<i>44.94</i>	<i>4</i>		<i>179.76</i>	<i>55</i>	<i>52.51</i>	<i>4</i>		<i>220.72</i>	
F.P.	<i>101.00</i>	<i>1</i>		<i>101.00</i>	<i>118</i>	<i>118.00</i>	<i>1</i>		<i>124.00</i>	
Total				<i>454.46</i>		<i>46.00</i>			<i>552.00</i>	

Correction = $\frac{\text{Difference between sums of products}}{18} \left(.75 - \frac{S}{2L} \right) = \frac{97.54}{18} (.75 - .50) = -1.35$

If limited on account of midship superstructure.

If limited to maximum allowance of $1\frac{1}{2}$ ins. per 100 ft.

Deduction for Tropical Freeboard.

Addition for Winter and Winter North Atlantic Freeboard.

Depth to Freeboard Deck = <i>28.04</i>	Ft.	
Summer freeboard = <i>3.08</i>		
Moulded draught (d) = <i>24.96</i>		
Deduction for Tropical freeboard and addition for Winter freeboard = $\frac{d}{4}$ inches = <i>6.24</i> <i>6 1/4</i>		
Addition for Winter North Atlantic Freeboard (if required) =		

Deduction = $\frac{\Delta}{40 T}$ inches = *159* $\frac{1}{m}$ = *6 1/4* = *159* $\frac{1}{m}$

Deduction for Fresh Water.

Displacement in salt water at summer load water line

Tons per inch immersion at summer load water line

Deduction = $\frac{\Delta}{40 T}$ inches

TABULAR FREEBOARD corrected for Flush Deck (if required)

Correction for coefficient <i>.755 + .68</i>	<i>1.435</i>	<i>73.05</i>
<i>1.36</i>	<i>+ 1.36</i>	<i>77.08</i>
Depth Correction	<i>3.12</i>	
Deduction for superstructures	<i>- 41.73</i>	
Sheer correction	<i>- 1.35</i>	
Round of Beam correction	<i>-</i>	
Correction for Thickness of Deck amidships	<i>-</i>	
Other corrections, scantlings, etc.	<i>-</i>	
	<i>3.12 43.08 - 39.96</i>	
	Summer Freeboard = <i>37.12</i>	

SUMMER FREEBOARD amidships from Centre of Disc to top of Deck Line, ~~Wood~~ Steel, Deck:—

Tropical Fresh Water Line above Centre of Disc ... <i>12 1/2</i>	<i>= 318</i>	Tropical Fresh Water Freeboard	<i>2 - 0 1/2</i>	<i>= 622</i>
Fresh Water Line " " ... <i>6 1/4</i>	<i>= 159</i>	Fresh Water " "	<i>2 - 6 3/4</i>	<i>= 781</i>
Tropical Line " " ... <i>6 1/4</i>	<i>= 159</i>	Tropical " "	<i>2 - 6 3/4</i>	<i>= 781</i>
Winter Line below " " ... <i>6 1/4</i>	<i>= 159</i>	Winter " "	<i>3 - 7 1/2</i>	<i>= 1099</i>
Winter North Atlantic Line " " ...		Winter North Atlantic " "		

PARTICULARS OF PROTECTION TO OPENINGS, ETC.

HATCHWAYS ON FREEBOARD AND SUPERSTRUCTURE DECKS									
		Shelter Deck		2nd Deck		Shelter Deck		2nd Deck	
Description of Hatchway	...	N ^o 1, 2 4 x 5	N ^o 3 18'-0"	N ^o 1, 2 4 x 5 21'-6" 20'-0"	N ^o 3 18'-0" 18'-0"	Hatch for to fore peak 3'-10" x 2'-0"	Builder's Hatch to amidships 6'-9" x 4'-0"	Hatch to eng'g 2'-5" x 2'-5"	Builder's Hatch to aft 3'-0" x 4'-0"
Dimensions of Hatchway	...	3'-10" x 2'-0"	18'-0"	21'-6" x 20'-0"	18'-0" x 18'-0"	3'-10" x 2'-0"	6'-9" x 4'-0"	2'-5" x 2'-5"	3'-0" x 4'-0"
COAMINGS	Height above Deck	2'-7 1/2"	2'-7 1/2"	10" Ba.	10" Ba.	12"	9'-3" Ba.	36"	10" Ba.
	Thickness	.54	.44	.54	.54	.38	.50	.28	.52
	Sides	...	...	...	...	...	...	...	...
	Stiffeners	...	...	...	...	...	...	...	...
	Brackets, Stays	...	none	...	...	...	...	...	...
HATCH BEAMS	Number	5	3	3	3	...	...	...	...
	Spacing	5'-3"	4'-6"	5'-3"	4'-6"	...	...	...	...
	Scantling and Sketch	28" x 22" x .36	22" x 16" x .34	24" x 22" x .38	22" x 18" x .38	...	...	...	...
	Bearing Surface	4' x 3' x .38 40	4' x 3' x .38	4' x 3' x .40	4' x 3' x .40	...	...	...	...
FORE AND AFTERS	Number	...	...	...	...	...	...	...	...
	Spacing	...	...	...	...	...	...	...	...
	Unsupported Lengths	...	...	...	...	...	...	...	...
	Scantling* and Sketch	...	...	...	...	...	...	...	...
	Bearing Surface	...	...	...	...	...	...	...	...
HATCH COVERS	Material	...	wood	...	wood	wood	wood	wood	wood
	Thickness	...	2 1/2"	3"	2 1/2"	3"	3"	2 1/2"	2 1/2"
	How fitted	...	f.o.a.	...	f.o.a.	althwart	f.o.a.	f.o.a.	f.o.a.
	Bearing Surface	...	3"	...	2"	2"	2"	2"	2"
Spacing of Cleats	...	24"	19"-24"	24"-28"	28"	27"	23"	18"	23"
Number of Tarpaulins	...	2	2	2	2	2	2	2	1

*Are wood fore and afters steel shod at all bearing surfaces? ☒

Are battens and wedges efficient and in good condition? ☒

Are tarpaulins in good condition and in accordance with rule requirements? ☒

Are lashings provided in accordance with rule requirements? ☒

Particulars of fiddle, funnel and ventilator coamings:— Fiddle openings closed by steel hinged covers, in good condition.
Funnel vent. coamings on top of casing, 4'-0", above wood deck, in good condition.

Particulars of Flush Bunker Scuttles:— *None*

Particulars of Companionways:— none. Steel skylight on shelter dk. at front of deck house aft, steel, strongly constructed.

Particulars of Ventilators in exposed positions on freeboard and superstructure decks :—

Fore deck: Five 24" x 3'-0" x 36"

Amidsaligs: Two 20" x 3'-0" x .36. Two 21" derrick post vents.

After dock: Two $20'' \times 3'-0'' \times .36$. Three $24'' \times 3'-0'' \times .36$.

apt: Three 6' x 6" P.V.S. mushroom vents to crew space. means of closing provided

Particulars of Air Pipes in exposed positions on freeboard, raised quarter, or superstructure decks :—

one 8½" x 20" forward.

one. $8\frac{1}{2}" \times 20"$ aft.

Means of closing provided.

Particulars of Gangway Cargo and Coaling Ports :—

none

ash shoot ^{none} S.B. side, tube from shelter dk, inside B.R.-casing, discharging
ab. 2'-9" below 2nd deck, in good condition.

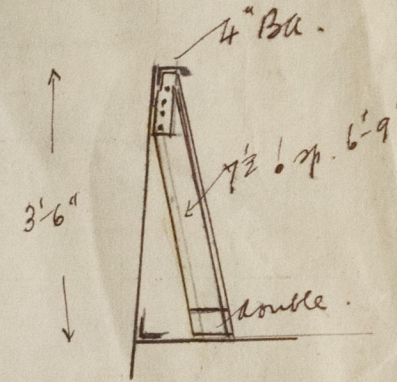
Particulars of Scupperns and Sanitary Discharge Pipes:—

	Six scupper P.S., from shelter tween decks, no storm valves, the scupper at amidships is of lead, led overboard 19' below 2nd dh.	Wood plugs supplied for closing
Sanitary discharges:	Amidships from saloon house, led overboard 2-5' below 2nd deck, Bronze, with storm valve	
Tern officers acc.	one from A.C. " "	" "
" "	one " wash basin " "	" "
" crew space P.S.	" "	" "
" R.S.	" "	" "

Particulars of Side Scuttles:— In fore space aft: Fitted with hinged deadlights:

Particulars of Guard Rails :— *home*

Particulars of Gangways, Lifelines, etc. :—

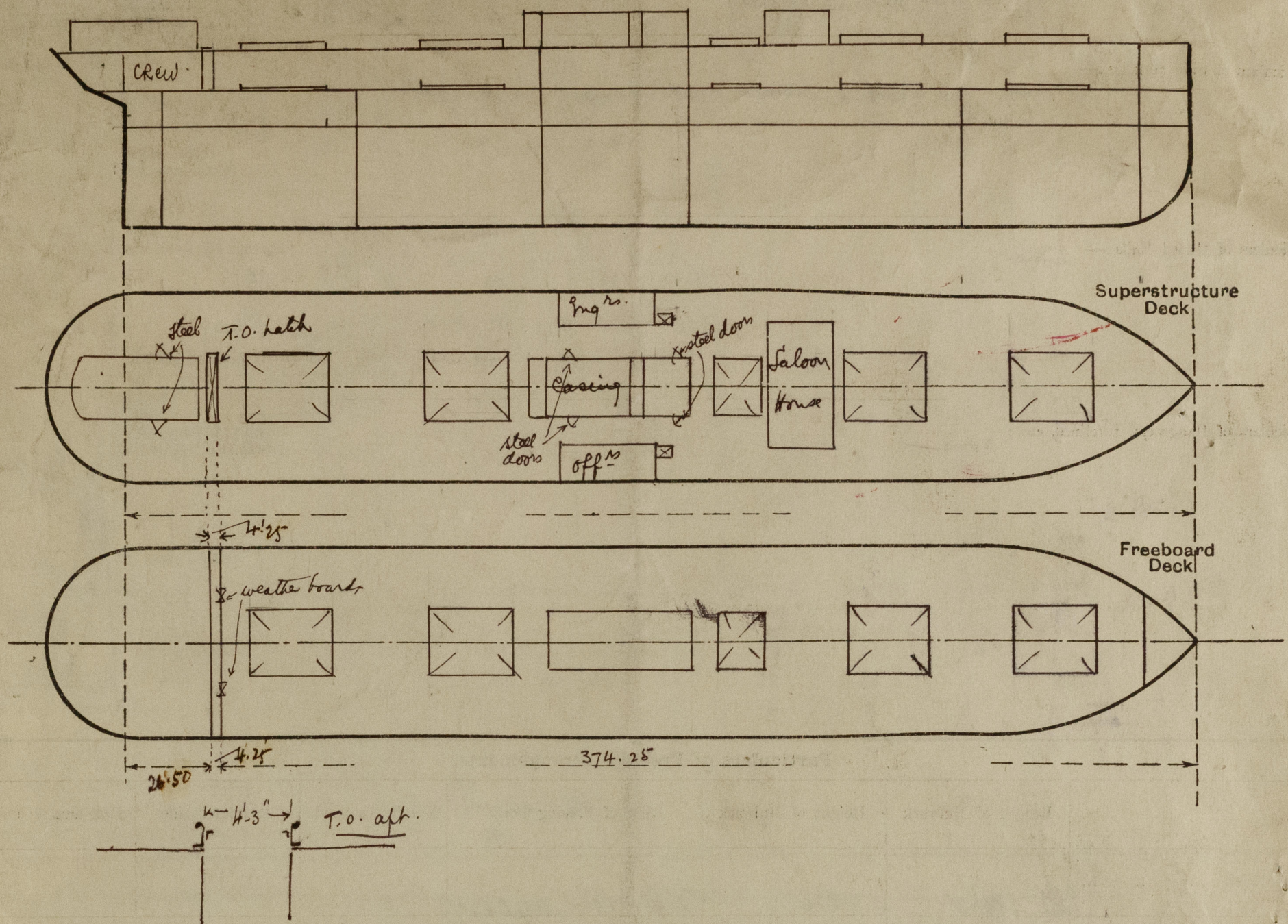


Particulars of Freeing Arrangements.						
	Length of Bulwark	Height of Bulwark	Size of Freeing Ports	Number each side	Area each side	Rule area each side
After Well	} <i>total 37'0"</i>	<i>3'6"</i>	<i>2'0" x 1'6" elliptical</i>	<i>8.</i>		
Forward Well						
<p>State position of each freeing port <i>from amidships</i> After Well:— <i>52'3" 94'9" 123'6" 169'0"</i> (F. and A. position and height above deck edge) Forward Well:— <i>2'3" 103'6" 123'6" 155'6"</i></p> <p>State whether the freeing ports are fitted with shutters, bars, or rails, and give particulars of such:— <i>15" above dk. edge</i> <i>2 rails</i></p> <p>Additional area where sheer is less than standard.</p>						

Particulars of Superstructures, Trunks, Casings, Deckhouses.								
	Coaming	Plating	Stiffeners	Spacing	End Attachments of Stiffeners	Size of Openings	Height of Sills	Height of Casings
Poop Bulkhead								
Raised Quarter Deck Bulkhead ...								
To Bridge, After Bulkhead	none	.26"	3½" x 3' x .32" <i>oa.</i>	24"-32"	none	none	✓	8'-0"
To Bridge, Forward Bulkhead	none	.26"	3½" x 3' x .32" <i>oa.</i>	27"-30"	none	3'-6" x 8'-0"	none	8'-0"
Forecastle Bulkhead								
Trunk, Aft								
Trunk, Forward								
Exposed Machinery Casings on Free- board or Raised Quarter Decks ...								
(Exposed) Machinery Casings on Super- structure Decks <i>protected by class I fire</i>	20" x 36"	.28"	5" x 3' x .40" <i>oa.</i>	39"	<i>buckled at top (except engine) and at bottom</i>	4'-6" x 2'-0"	18"	7'-0"
Machinery Casings within Superstruc- tures not fitted with Class I Closing Appliances	19" x 30"	.28"	5" x 3' x .40" <i>oa.</i>	39"	<i>coil from above</i>	none	18"	8'-0"
<i>aft.</i> Deckhouse on Flush Deck Ships ...							18"	

Particulars of Closing Appliances (state if capable of being manipulated from both sides).	
Poop Bulkhead	
Raised Quarter Deck Bulkhead ...	
T.O. Bridge, After Bulkhead	<i>No opening.</i>
T.O. Bridge, Forward Bulkhead	<i>2½" weather boards in riveted angles, full height.</i>
Forecastle Bulkhead	
Exposed Machinery Casings on Free-board or Raised Quarter Decks ...	
(Exposed) Machinery Casings on Super-structure Decks protected by pl. ...	<i>hinged Steel door, P.S. to E.R. -- " -- " -- " stockhold.</i>
Machinery Casings within Superstructures not fitted with Class I Closing Appliances	
Deckhouses ^{apd.} on Flush Deck Ships ...	<i>steel hinged doors P.S. to crewspace.</i>

Superstructure bulkheads, trunks, deckhouses, casings, cargo and coaling hatchways, extent and thickness of sheathing on the freeboard deck, gangway, cargo and coaling ports, and any other openings, etc., which would affect the seaworthiness of the ship are to be shewn on the following sketches:—



State any special features in the construction of the ship:—

Tonnage opening aft: - 4'-3" x 20'-0"
 Coaming 9 1/2" x 3 1/2" x .50" BA
 2 3/4" corner, f.o.a., on 2" ledge bar.
 Temporary means of closing, no order
 overhang, for aft, nil.
 Freeing port, P. & S. 21" x 21", 10" above dk. edge
 1 sample P. & S.; no storm valve.

The following information was
 obtained from the owners:

draught str.	Tonnage
23'-0"	41.84
24'-0"	42.00
25'-0"	42.18
26'-0"	42.34

The vessel has had no
 freeboards assigned
 by the Norske Veritas

The survey was held afloat & was
 confined to obtaining the above particulars.

Builder's name and yard number Northumberland Shipbuilding Co., Ltd., Newcastle-on-Tyne.

Names of sister ships

Owners MTS A/S Den Norske Afrika Australia Linie (Wied. Wilhelmsen)

Fee 234.00

Received by me

+ Gr.



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