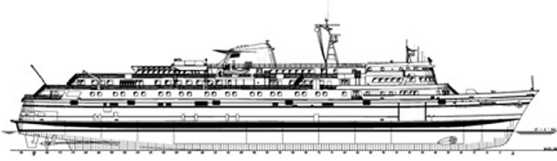


## **SECTION II**

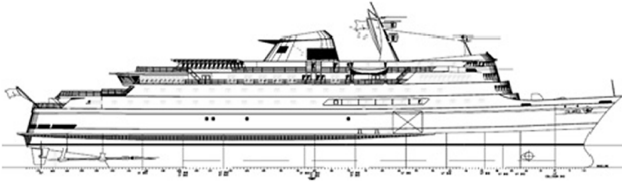
### **VESSEL INFORMATION**



**MV MATANUSKA**

408 feet

Built 1963



**MV COLUMBIA**

418 feet

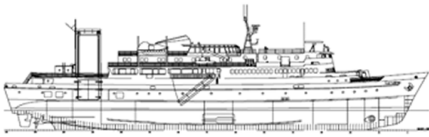
Built 1974



**MV LITUYA**

181 feet

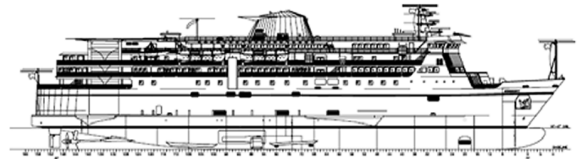
Built 2004



**MV TUSTUMENA**

296 feet

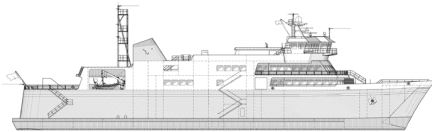
Built 1964



**MV KENNICOTT**

382 feet

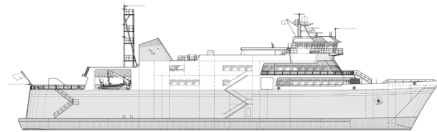
Built 1998



**MV TAZLINA**

280 feet

Built 2019



**MV HUBBARD**

280 feet

Built 2019



**MV LCONTE**

235 feet

Built 1974



**MV AURORA**

235 feet

Built 1977



# Vessel Information Table

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	Columbia	Kennicott	Malaspina	Matanuska	Tustumena	Aurora	LeConte	Tazlina	Hubbard	Chenega	Fairweather	Lituya
Year Built	1974	1998	1963	1963	1964	1977	1974	2019	2019	2005	2004	2004
Length (feet)	418	382	408	408	296	235	235	280	280	235	235	181
Beam (feet)	85	85	74	74	59	57	57	67	67	60	60	50
Displacement (long tons)	7,684	7,504	5,994	5,569	3,081	2,132	2,132	3,016	3,016	787	787	647
Loaded Draft (feet-inches)	17'-6 1/8"	17'-6"	16'-10"	16'-11 5/8"	14'-4 1/2"	13'-8"	13'-8"	13'-11"	13'-11"	8'-6"	8'-6"	12'
International Tonnage: Gross	13,009	12,635	9,121	9,214	4,529	3,124	3,124	5,304	5,304	3,420	3,424	758
(cubic capacity) Net	4,932	3,790	3,667	3,824	1,451	987	987	1,591	1,591	1,026	1,027	227
Domestic Tonnage: Gross	3,946	9,978	2,928	3,029	2,174	1,280	1,328	3,217	3,217	1,333	1,280	97
(cubic capacity) Net	2,683	7,354	1,253	1,235	898	453	566	2,188	2,188	827	870	66
Horsepower @ Service Speed	14,000	13,200	8,000	7,200	5,100	4,300	4,300	6,000	6,000	19,310	19,310	2,000
Service Speed (knots)	17.3	16.75	16.5	16.5	13.3	14.5	14.5	16.5	16.5	32	32	11.5
Fuel Usage (gallons/hour)	397	354	270	234	151	190	188	250	250	600	600	55
Normal Crew Capacity	63	55	47	48	38	24	24	14	14	10	10	5
<b>Certificate of Inspection Limits</b>												
Passengers	600	499	499	499	174	300	247	297	297	250	250	149
Vehicles (lane feet)	3,200	1,700 SE 1,460 SW	1,960	1,960	852	720	720	1,060	1,060	720	720	360
Quantity of 20 foot vehicles	160	85 SE 73 SW	98	98	42	36	36	53	53	36	36	18
Commercial Vans	16*	24*	15*	15*	13*	8*	12*	4	4	3	3	2
Staterooms - 4 berth	45	48	45	5	6	-	-	-	-	-	-	-
Staterooms - 3 berth	-	-	-	21	-	-	-	-	-	-	-	-
Staterooms - 2 berth	56	58	26	79	17	-	-	-	-	-	-	-
ADA Staterooms (4 berth)	-	2	-	-	-	-	-	-	-	-	-	-
ADA Staterooms (2 berth)	3	1	1	1	1	-	-	-	-	-	-	-
Total Staterooms	104	109	72	106	24	-	-	-	-	-	-	-
Total Berths	298	320	234	243	60	-	-	-	-	-	-	-



# Vessel Engine and Power Plant

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	Columbia	Kennicott	Malaspina	Matanuska	Tustumena	Aurora	LeConte	Tazlina	Hubbard	Chenega	Fairweather	Lituya
<b>Main Engines</b>												
Number	2	2	2	2	2	2	2	2	2	4	4	2
Make	Wartsilla	Wartsilla	EPD	EMD	EMD	EMD	EMD	EMD	EMD	MTU	MTU	CAT
Model	9L32	32E Diesel	DMRV-12-3	16-710G7C-T3	12V645F7B	R12-645-E7	12V645F7B	12-710G7C-T3	12-710G7C-T3	16V595 TE70L	16V595 TE70L	3508B
Max hp/unit	5220	6690	4062	4000	2550	2150	2550	3,000	3,000	4830	4830	1000
RPM	750	750	375	900	900	900	900	900	900	1850	1850	1600
Year Installed	2014	1998	1963	2018/2019	1996	1977	2000	2,019	2,019	2,004	2,004	2004
<b>Propulsion</b>												
Type	CPP	Wartsilla	CPP	CPP	Fixed Pitch	Fixed Pitch	Fixed Pitch	CPP	CPP	Waterjet	Waterjet	Fixed Pitch
Make	Lipps	Lips	Rolls Royce	Rolls Royce	Bird Johnson	Peterson	Peterson	RR Kamewa 60A/4-B	RR Kamewa 60A/4-B	Kamewa 90S II	Kamewa 90S II	Sound Propeller
Blades/Vanes	4	4	4	4	4	4	4	4	4	6	6	3
<b>Generator Plants</b>												
How many	3	2	3	3	2	2	2	2	2	3	3	1
Make	CAT	Baylor	CAT	CAT	CAT	CAT	CAT	CAT	CAT	Northern Lights	Northern Lights	CAT
Model	D3512	PTO	3508	3508	3508	D353E	3412DITA	C18	C18	M6125T	M6125T	3304 DIT
Cylinders	12	N/A	8	8	8	6	12	8	8	6	6	4
KW/Unit	845	2,400	560	560	560	300	435	550	550	185	185	105
RPM	1200	1800	1200	1200	1200	1200	1800	1800	1800	1800	1800	1800
<b>Emergency Generator</b>												
Make	CAT	CAT	Cummins	Cummins	CAT	CAT	CAT	CAT	CAT	Northern Lights	Northern Lights	CAT
Model	C18	3408	NHRS 6G	NHRS 6G	D336	D353E	D3406	C18	C18	M6125T	M6125T	3406C
KW/Unit	?	385	160	160	150	300	315	550	550	185	185	320
RPM	?	1800	1200	1200	1800	1200	1800	1800	1800	1800	1800	1800
<b>Bow Thruster</b>												
Type	Diesel	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric	Electric (2)	Electric (2)	Electro Hydraulic
Make	White-Gill	White-Gill	Kamewa	Kamewa	Siemens	Brunvoll	Kamewa	Rolls Royce	Rolls Royce	Quantum Marine	Quantum Marine	Thrustmaster
Model	60T3	60T3S	50/3STAY/C.P.	50/3STAY/C.P.	CGZ	SPT-2706	3513	TT1650	TT1650	QT-120	QT-120	36TT250L
HP	1750	2113	600	600	600	300	400	480 KW	480 KW	200 (100ea)	200 (100ea)	250
RPM	1800	460	1800	1800	1795	1800	1800	1200	1200	1800	1800	900

EPD = Enterprise Delaval  
 FM = Fairbanks Morris

EMD = Electro Motor Division  
 PTO = Propulsion Shaft Power Take-Off



# Vessel Static and Dynamic Information Table

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	<u>Columbia</u>	<u>Kennicott</u>	<u>Malaspina</u>	<u>Matanuska</u>	<u>Tustumena</u>	<u>Aurora</u>	<u>LeConte</u>	<u>Tazlina</u>	<u>Hubbard</u>	<u>Chenequa</u>	<u>Fairweather</u>	<u>Lituya</u>
Stern to door CL	268' - 9"	51' - 10"	310' - 1"	310' - 1"	58' - 8"	165' - 10"	165' - 10"	32'-0"	32'-0"			
Bow to door CL	147' - 4"	330' - 1"	98' - 3"	98' - 3"	237' - 2"	71' - 9"	71' - 9"	252'-4"	252'-4"			
Main dk to low point of vessel	*15' - 3"	*25' - 9"	*24' - 0"	24' - 0"	*22' - 5"	5' 5 - 1/2"	5' 5 - 1/2"	20'-6"	20'-6"			
Main dk to main dk chocks	*0' - 6"	*0' - 11"	*0' - 9"	0' - 9"	N/A	N/A	N/A	N/A	N/A			
Main dk to upper dk chocks	*15' -7"	*20' - 3"	*18' - 3"	18' - 3"	*9' - 4"	17' -11"	17' -11"	19'-0"	19'-0"			
Side door vertical opening	*15' - 0"		*15' 0"	15' 0"	*14' - 0"	15' - 1/2"	15' - 1/2"	16'-0"	16'-0"			
Side door horizontal opening	*20' - 0"	*21' - 4"	*20' - 0"	20' - 0"	*14' - 1"	20' - 1"	20' - 1"	18'-8"	18'-8"			
Ramp width, max out to out			N/A	N/A		16' - 2"	16' - 2"	14'-8"	14'-8"			
Ramp length, hinge to hinge			N/A	N/A		24' - 7"	24' - 7"	36'-3"	36'-3"			
Main dk to low point of bridge wing			*35' - 0"	35' - 0"		24' - 10"	24' - 10"	38'-0"	38'-0"			
CL vessel to extreme outboard of wing			*36' - 9"	36' - 9"		27' - 9"	27' - 9"	33'-6"	33'-6"			
Stern (bow) vertical opening			*14' - 6"	14' - 6"		15' - 2"	15' - 2"	16'-0"	16'-0"			
Stern (bow) horizontal opening			*23' - 6"	23' - 6"		16' - 0"	16' - 0"	24'-0"	24'-0"			
Side door dk to water line, lightly laden	7' - 6"		8' - 9"	7' - 10"		6' - 11"	6' - 11"	8'-6"	8'-6"			
Side door dk to water line, avg loading	7' - 5 1/2"	*9' - 9"	8' - 1"	7' - 7"	*8' - 0"	6' - 0"	6' - 0"	7'-6"	7'-6"			
Side door dk to water line, fully loaded	6' - 7 1/2"		7' - 5"	7' - 0"		5' - 4"	5' - 4"	6'-1"	6'-1"			
Side (bow) door dk to water line, extrm light				8' - 3"		6' 11"	6' 11"	N/A	N/A			
Side (bow) door dk to water line, extrm hvly				6' - 11"		4' 10"	4' 10"	N/A	N/A			
Rear door dk to water line, lightly laden	9' - 5"		9' - 2"	8' - 3"		6' - 9"	6' - 9"	9'-0"	9'-0"			
Rear door dk to water line, avg loading	8' - 9"		8' - 6"	7' - 7"		5' - 6"	5' - 6"	8'-0"	8'-0"			
Rear door dk to water line, fully loaded	8' - 1"		7' - 10"	7' - 0"		4' - 10"	4' - 10"	6'-7"	6'-7"			
Rear door dk to water line, extrm light				8' - 4"		5' - 4"	5' - 4"					
Rear door dk to water line, extrm heavy				6' - 10"								
Roll diff. @ side door, heavy van & tractor	3 1/2"		16"	1' - 6"		2' - 4"	2' - 4"					
Pitch diff. @ rear door, heavy van & tractor	2 1/2"		5.73"	5"		2' - 0"	2' - 0"					

\*Not field verified, estimated value only

\*Not field verified, estimated value only



# Hull Surface Areas

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	<u>Columbia</u>	<u>Kennicott</u>	<u>Malaspina</u>	<u>Matanuska</u>	<u>Tustumena</u>	<u>Aurora</u>	<u>LeConte</u>	<u>Tazlina</u>	<u>Hubbard</u>	<u>Chenega</u>	<u>Fairweather</u>	<u>Lituya</u>
LOA	418.00	381.00	408.00	408.00	296.00	235.75	235.75	280.00	280.00			
LBP	375.00	338.00	370.00	370.00	276.00	210.00	210.00	250.00	250.00			
Beam, Main Deck	85.00	85.00	73.50	73.63	59.00	57.33	57.33	67.00	67.00			
Beam, WL		80.25			54.50			64.73	64.73			
Depth, Molded	24.00	25.50	23.50	23.50	21.75	19.00	19.00	20.00	20.00			
Full Load Draft	17.57	17.50	16.95	16.97	14.38	13.63	13.67	13.91	13.91			
Full Load Displ	7,774.00	7,500.00	5,553.00	5,570.00	3,067.00	2,122.00	2,150.00	3,001.00	3,001.00			
<b>Surface Areas</b>												
Keel - WL	29,300	34,117	23,320	23,320	14,000	11,060	11,060	15,587	15,587			
WL-Guard	8,289	8,891	6,227	6,227	5,534	3,437	3,437	2,499	2,499			
Guard - Gunnel	32,696	25,000	23,572	23,575	10,579	8,902	8,902	11,870	11,870			
Keel - Guard	37,589	38,148	29,547	29,547	19,534	14,497	14,497	18,086	18,086			
Keel - Gunnel	70,285	63,148	53,118	53,122	30,112	23,399	23,399	29,956	29,956			



# Elevators

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	<u>Columbia</u>	<u>Kennicott</u>	<u>Malaspina</u>	<u>Matanuska</u>	<u>Tustumena</u>	<u>Aurora</u>	<u>LeConte</u>	<u>Tazlina</u>	<u>Hubbard</u>	<u>Chenequa</u>	<u>Fairweather</u>	<u>Lituya</u>
Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator	Passenger Elevator
Manufacturer	Otis Sr# 10495	Crane Defense Type 1569-1	Elevator System Group Unidynamics, ID SSK371556 upgraded GE Fanuc 90-30 PLC	Otis LRVF-0304010	Hydraulic-Montgomery Elevator Co. Type D05053	Hydraulic Cantilevered-Otis Elevator Type 5143045, S# SSJ-852751	Hydraulic-CEMCO Lift DC500-36493	Bagby 2:1 Roped Hydraulic, No S/N	Bagby 2:1 Roped Hydraulic, No S/N	MacGregor Type MC 3000	MacGregor Type MC3000	Hydraulic-Bagby, #D63605
Elevator	Service Elevator	Service Elevator	Dumbwaiter	Service Elevator		Wheelchair Scissor Lift	Wheelchair Scissor Lift					
Manufacturer	Otis SR#CP18447, 10NIBL	Crane Defense Type 1570-1	Matot, Inc Type 201 S/N 9758	Model 81564 Vintage 10		Porch-Lift Vertical Platform lift, American Stair-Glide	Access Industries Serial # L1294WLT501331 88 Hydraulic Type					
Elevator	Galley Dumbwaiter Elec.	Dumbwaiter										
Manufacturer	MATOT Inc. Model 100, Sr. #10097	Crane Defense 1568-1										
Elevator	Laundry Dumbwaiter Elec.											
Manufacturer	Matot 100, Sr#113594											



# Refrigerated Van Matrix

	Mainline Ferries					Day Boat Ferries				Shuttle Ferries		
	Columbia	Kennicott	Malaspina	Matanuska	Tustumena	Aurora	LeConte	Tazlina	Hubbard	Cheneqa	Fairweather	Lituya
Number of Van Receptacles	22	12	20	20	5	6	6	4	4	None*	None*	None*
Number of XFMR	1	1	2	2	Fitted as 460 Vac	1	1	480VAC	480VAC	N/A	N/A	N/A
Size of XFMR (KVA)	500	150	(3)x50	(3)x50		100	100	-	-	N/A	N/A	N/A
Number of Distr panels to be replaced	1 of 2	1 of 1	2 of 2	2 of 2	N/A	0 of 1	1 of 1	N/A	N/A	N/A	N/A	N/A
Remove XFMRs YN	Y	Y	Y	Y	N/A	Y	N	N/A	N/A	N/A	N/A	N/A
Comments	Has crew dryer. Find alternate source											

\*None: No Van receptacles installed