

# Marine Transportation Advisory Board Meeting

Department of Transportation and Public Facilities 3 Mile Building – Room #140

3132 Channel Drive, Juneau, AK 99801

March 11<sup>th</sup>, 2014 – Tuesday – 9:00 a.m.

Teleconference Call-in Number: 1-800-315-6338 - Conference Code 3905#

Board Members: Robert Venables (Chair), Joshua Howes, Cathie Roemmich, Shirley Marquardt, Gerald Hope, Daniel Kelly, Maxine Thompson, Ron Bressette, Tim Joyce, Patricia Branson, Richard Knapp

1. Call to Order
  2. Board Roll Call to Establish Quorum
  3. Phone Roll Call and Introduction of Those Present
  4. Approval of Agenda
  5. Administration Remarks:
    - a. Jeff Jones, Special Assistant to the Governor
    - b. DOT&PF Commissioner Pat Kemp
  6. Approval of Minutes – November 13, 2013 Meeting
  7. Public Comments (3 minutes per speaker)
  8. Report from the Chair
    - a. Long Range Transportation Meeting
    - b. SWAMC Annual Meeting
  9. Alaska Class Ferry – Progress Report
    - a. Design and GMP Update
    - b. Timeline, Next Milestones
  10. Tustumena Replacement Process Update
    - a. Draft Reconnaissance Report
    - b. Timeline, Public Outreach, Next Milestones
- Lunch 11:45 a.m. – 1:15 p.m.**
11.
    - a. AMHS Staff Reports – Fleet and Terminal Reports
    - b. Fast Ferry – New Engines
    - c. Budget Reduction Measures
    - d. Fares and Revenue Enhancements
  12. FY15 Legislative Recommendations
    - a. Construction Funding for Tustumena replacement
  13. Board Comments
  14. Next Meeting (call of the Chair or at next ACF/Tustumena milestone)
    - a. Long-range Planning and SATP Update
  15. Adjourn



THE STATE  
of **ALASKA**

GOVERNOR SEAN PARNELL

Department of Transportation and  
Public Facilities

STATEWIDE ADMINISTRATIVE SERVICES

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Juneau, Alaska 99811-2500  
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February 18, 2014

The Honorable Representative Neuman  
Chair, House Finance Transportation Subcommittee  
State Capitol Bldg., Room 513  
Juneau, Alaska 99801

Dear Representative Neuman,

In response to the questions posed by legislative staff on your behalf on February 10, 2014, the following information is provided:

- ***Provide the dollar amounts for slide 6.***

Please see Attachment 1.

- ***Provide information on reservations call center wait times for AMHS.***

Please see Attachment 2.

- ***Provide stats over the last 10 years on Prince Rupert: ridership, vehicles, shipping, lease costs and dock repairs. Is it worth maintaining this foreign port?***

Please see Attachment 3.

If you or your committee members have any further questions, please feel free to contact me at 465-8974.

Sincerely,

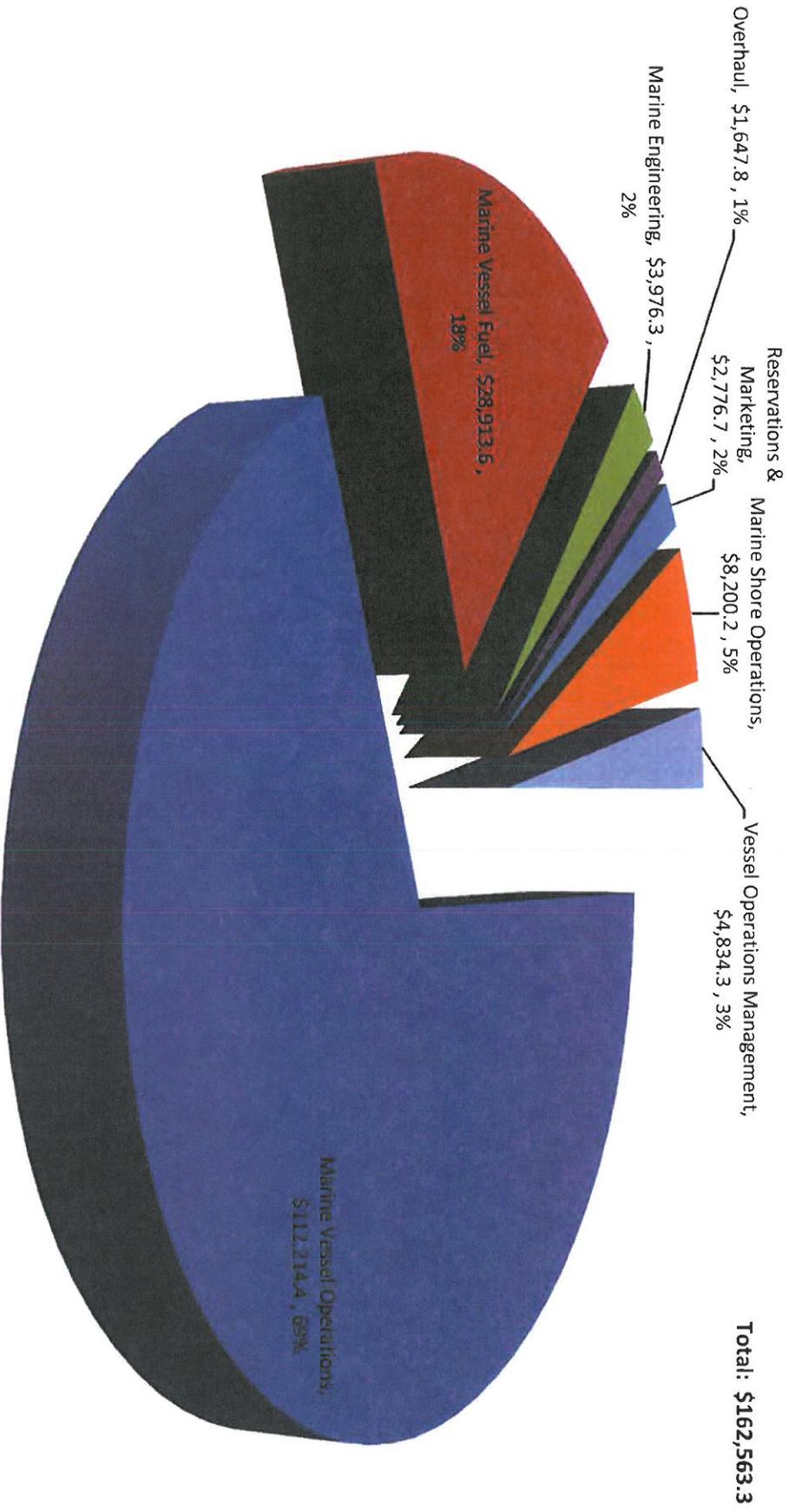
A handwritten signature in blue ink that reads "Mary P. Siroky".

Mary P. Siroky  
Administrative Services Director

cc: House Finance Transportation Subcommittee Members  
Patrick J. Kemp, P.E., Commissioner, DOT&PF  
Reuben Yost, Deputy Commissioner, DOT&PF  
Captain John Falvey, General Manager, AMHS, DOT&PF  
Richard Leary, Marine Transportation Services Manager, AMHS, DOT&PF  
Matt McLaren, Budget Analyst, AMHS, DOT&PF

Attachments

# FY15 AMHS - Component Breakdown



**DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES  
Reservations Call Center Hold Times Legislative Response:  
February 14, 2014**

**Executive Summary:**

After DOT&PF's presentation providing the AMHS overview to the House Finance Subcommittee on February 10, 2014, the question was raised to DOT&PF as to what the average hold times were for callers making reservations through the AMHS Reservations call center. The concern was raised as to whether or not wait times have been high since commissions to travel agents were eliminated on bookings for Alaska residents travelling within the State.

**Current Situation:**

DOT&PF and AMHS are able to track queue hold times for each call made to the Reservations Center. In the past 3 ½ months the average hold time has been 1:11 (One minute and 11 seconds). Of the 8,000 calls reviewed 69.6% were answered in 30 seconds or less. During this time period, there have only been 23 calls whose hold times have exceeded 10 minutes and only one of those calls exceeded 20 minutes at a duration of 20:47. The one call which exceeded 20 minutes occurred late in the day on the day before Thanksgiving when the Reservations Center was short staffed and the morning shift had already gone home for the day. The majority of the remaining 23 calls were closer to 10 minute hold times and occurred either during lunch hours or toward the end of the day when staff was limited. Previous to the change in the policy on travel agent commissions, the average call hold time was also near one minute.

**Conclusion:**

DOT&PF management does not feel that excessive hold times are currently a problem for AMHS Reservations. However, call wait times will continually be monitored and corrective action will be taken if excessive wait times become a problem.

**DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES****Prince Rupert Legislative Response:****February 13, 2014****Executive Summary:**

During DOT&PF's presentation providing the AMHS overview to the House Finance Subcommittee on February 10, 2014, the question was raised to DOT&PF as to the reason for continued ferry service to Prince Rupert since traffic has declined over the past 10 years. DOT&PF management feels it is in the best interest of Alaska residents and commercial shippers to continue current service to Prince Rupert.

**Current Prince Rupert situation – Operational and Financial:**

Currently AMHS services the Port of Prince Rupert 4 days per week during the summer months of July, August, and September and 1-2 days per week from October through June. The current annual port calls to Prince Rupert have been reduced from previous levels due to declining traffic. AMHS vessels carry approximately 8,000 passengers (2,700 Alaska residents) and 3,200 vehicles to and from Prince Rupert annually. Passenger and vehicle traffic through Prince Rupert has declined over the past 10 years; however, this port remains as a very important port for both Alaska residents and commercial haulers as it is the closest Southern road head terminus for Southeast Alaska.

There is no ongoing lease cost as we have signed a 50-year lease agreement through federal funding with a one-time lump-sum payment. DOT&PF is also currently using federal dollars to rebuild the dock in Prince Rupert. The current dock needs significant repairs in order to provide safe docking into the future. The cost of rebuilding the Prince Rupert dock is estimated at \$11,000,000 and will be funded with 91% Federal Highway Administration funding (\$10,010,000) and 9% General Fund (\$990,000).

**Relevant factors affecting Prince Rupert:**

1. Prince Rupert is a very important port for Southeast Alaska residents as it is the southern road head terminus for most passengers travelling between Southeast Alaska ports. Prince Rupert is also the chosen port for commercial haulers to get frozen fish and other goods to the road system as quickly as possible. It is nearly \$700 more expensive for an adult with a vehicle to ferry to Bellingham as opposed to Prince Rupert, and nearly \$1,300 more expensive for commercial vans.
2. Time is another factor passengers and commercial haulers consider when choosing to go to Prince Rupert or Bellingham. When travelling from Ketchikan it is 7.5 hours to Prince Rupert and 41 hours to Bellingham.
3. As can be seen in the attached data, even though Prince Rupert has seen a decline in traffic, its traffic numbers have been consistently similar to Valdez which receives a higher number of port calls annually.

**Conclusion:**

DOT&PF will continue to service Prince Rupert 1-2 days per week from October through June and four days per week in the main summer months. Commercial haulers have expressed how vital it is for AMHS to continue providing this service to Prince Rupert as it is less expensive and timelier for them to be able to get frozen fish and other goods to market. DOT&PF will however continue to monitor passenger and vehicle traffic in order to match service with need.

ALASKA MARINE HIGHWAY SYSTEM  
 Prince Rupert traffic data comparison  
 2004 - 2013

Attachment 3

Embarking Traffic

Disembarking Traffic

Port	Passengers			Vehicles		Passengers			Vehicles	
	Alaska Resident	Non-Resident	Total	Commercial	Total	Alaska Resident	Non-Resident	Total	Commercial	Total
Prince Rupert	4,798	9,393	14,191	4,508	4,708	4,709	9,037	13,746	4,536	4,733
2004	3,970	8,571	12,541	4,042	4,256	4,041	8,120	12,161	3,968	4,171
2005	4,359	7,192	11,551	3,768	4,105	4,036	7,135	11,171	3,856	4,122
2006	3,669	6,600	10,269	3,268	3,515	3,754	7,089	10,843	3,769	3,990
2007	3,768	7,156	10,924	3,653	3,930	3,678	7,298	10,976	3,833	4,058
2008	3,646	6,017	9,663	3,590	3,888	3,507	6,259	9,766	3,712	3,945
2009	3,714	6,759	10,473	3,822	4,100	3,664	7,024	10,688	3,945	4,174
2010	3,352	6,004	9,356	3,427	3,725	3,039	5,875	8,914	3,081	3,306
2011	2,863	5,605	8,468	3,053	3,416	2,710	5,305	8,015	2,967	3,299
2012	2,571	5,190	7,761	2,863	3,153	2,733	5,278	8,011	2,990	3,257
2013	36,710	68,497	105,207	35,994	38,849	35,871	68,420	104,291	36,657	39,055
Valdez	5,683	7,579	13,262	4,098	4,098	5,371	6,001	11,372	3,664	3,664
2004	4,947	5,890	10,837	3,292	3,292	4,518	4,493	9,011	2,759	2,759
2005	5,799	7,635	13,434	4,223	4,223	5,116	5,244	10,360	3,350	3,350
2006	5,835	7,910	13,745	4,042	4,208	5,120	5,483	10,603	3,504	3,504
2007	5,856	7,470	13,326	4,822	4,208	4,822	5,261	10,083	3,252	3,252
2008	6,409	6,383	12,792	4,534	4,534	5,393	3,873	9,266	3,364	3,364
2009	6,242	6,399	12,641	4,259	4,259	5,523	4,081	9,604	3,299	3,299
2010	6,520	7,677	14,197	4,811	4,811	5,801	4,834	10,635	3,249	3,249
2011	5,014	6,473	11,487	3,767	3,767	4,616	4,024	8,640	2,915	2,915
2012	6,005	6,785	12,800	4,178	4,178	5,500	4,359	9,859	3,464	3,464
2013	58,310	70,211	128,521	41,412	41,412	51,780	47,653	99,433	32,820	32,820
Bellingham	6,022	11,285	17,307	6,349	6,411	6,411	7,991	14,402	5,156	5,156
2004	5,440	10,098	15,538	5,867	6,057	6,057	6,907	12,964	4,941	4,941
2005	5,695	9,609	15,294	6,054	6,054	7,067	6,723	13,790	5,394	5,394
2006	5,680	8,648	14,328	5,066	5,066	6,404	4,527	10,931	4,450	4,450
2007	5,333	7,401	12,734	5,307	5,234	6,202	4,143	10,345	4,425	4,425
2008	5,560	7,197	12,757	5,677	5,677	6,516	4,445	10,961	4,679	4,679
2009	5,367	7,438	12,805	6,185	6,185	7,097	5,306	12,403	5,311	5,311
2010	5,484	8,696	14,180	5,799	5,799	7,670	5,317	12,987	5,748	5,748
2011	5,232	9,397	14,629	5,799	5,799	7,427	5,073	12,500	5,364	5,364
2012	4,645	9,354	13,999	5,799	5,799	7,427	5,073	12,500	5,364	5,364
2013	54,448	89,123	143,571	57,259	57,259	68,478	55,740	124,218	50,906	50,906
Fares from Ketchikan	Adult	19' Vehicle	Total	Adult	Commercial Van*	Adult	Commercial Van*	Adult	Commercial Van*	Adult
Prince Rupert (7.5 hours)	\$ 54	\$ 116	\$ 170	\$ 54	\$ 244	\$ 298	\$ 298	\$ 298	\$ 298	\$ 298
Bellingham (41 hours)	\$ 239	\$ 617	\$ 856	\$ 239	\$ 1,332	\$ 1,571	\$ 1,571	\$ 1,571	\$ 1,571	\$ 1,571
Additional Cost for Bellingham (One Way)			\$ 686		\$ 1,272		\$ 1,272		\$ 1,272	

\*Based on an average van length of 34 feet.

# ALASKA STATE LEGISLATURE

## House and Senate Finance Committees

Representative Alan Austerman, Co-Chair  
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Official Business

The Honorable  
Sean Parnell, Governor  
State of Alaska

February 26, 2014

Dear Governor Parnell:

We know you are aware of the budget challenges that face our State. We appreciate the fact that you took action and submitted a budget that actually reduced funding to State agencies.

Though the legislature is not involved in the actual negotiations of contracts we are obviously involved in funding them. It is with respect for your autonomy that we encourage you to hold the line as you continue talks with representatives from the Marine Highway System unions.

The Senate rejected pay increases for Commissioners who carry substantial legal responsibilities for the day-to-day operation of State government, because highly paid staff are the least able to justify pay increases in austere times. We steadily hear from constituents on the high-cost of operation for the Alaska Marine Highway system, costs which need considerable effort to control. We encourage you to consider fiscally prudent monetary terms such as closing extravagant benefits like ferry passes and readdressing cost of living differentials. We appreciate solutions the unions can bring to the table for increased operational flexibility, and look forward to the types of fiscal terms other State employee unions have helped resolve, including reduced leave liability

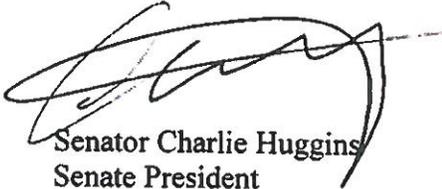
Last year we offered guidance regarding contract negotiations for the State and University. We expressed our desire to see zero growth contracts in light of approaching tough fiscal times. However, the funding picture is even bleaker now than when those negotiations took place last year.

Furthermore, potential challenges related to the massive unfunded liability of the retirement system as well as health care are still developing and we encourage you to take them into consideration as you move forward. We assure you, we are.

Although we do not speak for the entire legislature, we can tell you that there is very little appetite for increased cost in this precarious financial environment. We value Marine Highway System employees and want to protect their jobs as best we can. Making it more and more expensive to keep them employed will ultimately not be in their best interests, or in the best interests of the Alaskans who rely on the Marine Highway Ferry System. We look forward to receiving the contracts for our approval by the 60<sup>th</sup> day of this session.

We know you have a difficult job balancing your bottom line with your need to attract and keep good employees. We know you will do the best you can, and we appreciate your service to the State.

Sincerely,



Senator Charlie Huggins  
Senate President



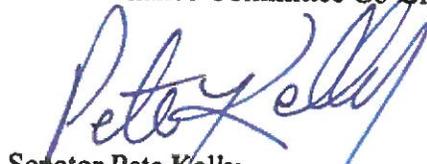
Representative Mike Chenault  
Speaker of the House



Senator Kevin Meyer  
Senate Finance Committee Co-Chair



Representative Alan Austerman  
House Finance Committee Co-Chair



Senator Pete Kelly  
Senate Finance Committee Co-Chair



Representative Bill Stoltze  
House Finance Committee Co-Chair

Project #	Federal Shoreside Project	Update Narration	Environmental Document Date*	Final PS&E Date*	Construction Mobilization Date*	Construction Complete Date*
69392	AMHS Shore Conditions Survey - Conduct and document shoreside facilities condition surveys. Prepare annual survey updates.	Ongoing project. FY12 report almost completed. FY13 inspections completed for SE locations with SC and SW inspections occurring summer of	NA	NA	NA	NA
69440	Angoon Ferry Terminal Passenger Facility This project will construct a new passenger terminal building and restroom structures and will expand the upland vehicle and pedestrian staging and access areas at the Angoon Ferry Terminal facility.	Final design completed. ROW acquisition ongoing. Construction uncertain, pending MOA with City.	Done	Dec-14	Apr-15	Dec-15
68433	Haines Ferry Terminal Improvements - Replace sheet piers with a rip-rap slope and install new mooring dolphins and fender system. Dredge existing berth and expand staging area, including relocation of generator and storage building and utility work as needed.	Bids for construction to be opened March 13, 2014.	Done	Sep-13	Mar-14	Dec-15
67463	Auke Bay Ferry Terminal Improvements - This project will remedy structural and operational deficiencies at the AMHS Auke Bay Ferry Terminal facility in Juneau. The work will include reconstruction of mooring dolphin structures and associated catwalks and electric utilities, placement of new cathodic protection anodes and refurbishment of upland and terminal building structures.	Design & env document work underway.	Jun-14	Aug-14	Apr-15	Nov-15
69446	Kake Ferry Terminal Passenger Facility - This project provides for the construction of a new passenger terminal building with restrooms and improves upland parking and staging areas at the Kake Ferry Terminal facility. The work also includes placement of new sewer and water utilities to service the new terminal building.	Final design completed. Construction uncertain, pending MOA with City.	Done	Oct-13	Apr-15	Dec-15
68238	Kake Ferry Terminal Improvements - Replace transfer bridge and float system.	Design and env document work underway	Done	Jun-14	Mar-15	Jun-15
67466	Ketchikan Ferry Terminal Improvements - This project will remedy structural and operational deficiencies at the Ketchikan Ferry Terminal facility. This project will replace and refurbish existing vessel mooring and berthing structures, provide a new mooring dolphin structure and construct upland access and terminal building improvements.	PDA in place. No design activity yet.	Feb-15	Aug-15	Mar-16	Nov-16
68531	Prince Rupert Ferry Terminal Replacement - Replace existing deteriorated ferry terminal marine structures with new marine structures at the existing site. Items to include new transfer bridge, abutment, float/lift system, and mooring structures with access catwalks. Future work may include refurbishment of terminal building, parking and staging areas.	Consultant under contract for design. Preliminary design & geotech completed. Final design and environment permitting starting. Construction funding available in FFY2015.	Aug-13	Aug-14	Apr-15	Dec-15
69200	Annette Bay Ferry Terminal - Construct new AMHS ferry terminal to support Ketchikan - Metlakatla service.	Construction nearly completed. Finishing final items of work. Facility is functional.	Done	Done	Apr-11	Jun-13
69422	Petersburg Ferry Terminal Improvements	Construction completed. Awaiting closeout.	Done	Done	Feb-13	Sep-13
69624	Skagway Ferry Terminal Modifications - Replace or refurbish AMHS float dock.	Preliminary design ongoing. Float replacement work may be deferred.	Feb-13	Jul-14	May-15	Nov-15
69432	Wrangell Ferry Terminal Improvements	Construction completed. Awaiting closeout.	Done	Done	Jun-13	Sep-13
68938	Kodiak Ferry Terminal (AK091) - Reconstruct Pier 1 dock facility.	Design consultant under contract. Design and environmental document work underway. Construction funding available FFY13. MOA at AG's Office.	Done	Aug-13	Oct-14	Jun-15
70006	Ward Cove AMHS & NOAA Moorage Facility	State Funded. Prelim design, geotech, environmental work ongoing. Geotech field investigation completed Jan-2014.				
68223	Homer Ferry Terminal Improvements - Dolphin replacement	PDA in place. Working on environmental document	Jun-14	Aug-14	May-15	Jul-15
68135	Annette Bay Ferry Terminal - Construct new IFA Dolphin	PDA in place. Working on environmental document.	Jun-14	Jul-14	May-15	Jun-15
68128	Gustavus Improvements	Working on defining project scope. Need Phase 2 PDA.	Jul-14	Sep-14	Jun-15	Sep-15
68145	Tenakee Replacement	Need Phase 2 PDA.	Mar-15	Jun-15	May-16	Aug-16

Project #	AMHS Vessel Federal Project	Phase	Update Narration
70030	AMHS FVF System Upgrades - Design and install modifications/upgrades to existing ship's systems to address problems that have been identified during vessel operations.	2	Glosten selected as Engineering Consultant on 10JAN14. Negotiation completed and documentation being prepared for submittal.
70038	AMHS FFY 14/15 Fleet Condition Survey - Identify capital improvements required to maintain class, including regulatory required work such as SOLAS; identify the costs associated with performing capital improvements; identify condition of multiple vessel systems and spaces; update computer database used to track vessel work items and update vessel reports; publish annual update; assist with project planning. Integration of current survey program with the ADOT Transportation Asset Management System to be vetted.	8	A visit to each vessel starting Spring 2014 to prepare for the next Overhaul Season. Each Fleet Condition Survey Item will be updated with photos and an Engineer's Estimate. FCS Database is presently not functioning properly. Plan to submit a RFP to Coastwise Engineering to update and repair the database. Fleet Tanks / Paint Survey is being conducted as vessels cycle through the shipyard.
70062	Tustumena Replacement - Design and construct an ocean going vessel to replace the M/V Tustumena.	2	PSA to Glosten issued on 04NOV13. Glosten on track to complete Reconnaissance Report by the 3rd of March 2014. Draft Reconnaissance Report includes Concept Vessel and Procurement Approach Analysis is under review. Negotiate for Design Study Report underway. The goal is to have Design Study Report completed include detailed cost project NLT 01JUN14.
70110	M/V Kennicott Refurbishment and Upgrades - Upgrade and/or Refurbishment of the following systems: vehicle elevator, fin stabilizer control units, motorize seawater cooler reach rods, sea water system piping, MSD components, vehicle elevator roller doors, refrigeration, bridge heated windows, HVAC, ventilation (ducting and fire dampers), fuel oil system, electrical distribution systems, passenger and public spaces, ADA upgrades, watertight doors, CAPAC, control and monitoring systems, lifesaving equipment, deck machinery and fittings, IT upgrades, forward sponsons modifications, tanks & voids, exterior and interior coatings, car deck doors, security, bilge and ballast. Perform weight reduction investigation & removals. Technical Manual Drawing upgrade to new AMHS number system. Stability assessment, sea trials, regulatory required inspections, annual overhaul and dry docking.	4	Phase 1 of Contract completed and working on completing minor punchlist items. Vessel scheduled to depart for Bellingham on the 6th of March, with first passenger voyage scheduled for the 8th of March from Bellingham, WA. The vessel crew will have to coordinate with Coast Guard to ensure that COI is completed so vessel can depart on schedule. Phase 2 of contract is scheduled to start on October 1, 2014. See Weekly Construction Report for status of contract.
70126	Columbia Bridge Deck Renovation	2	Art Anderson Associates was selected as Engineering Consultant and negotiation are underway for Design Study Report.
73068	M/V Tustumena Refurbishment - Upgrades and/or refurbishment to the following systems: EOS, Bridge Wing Stands and Controls, Mechanical Rooms, Crew and Passenger space, steering pumps, elevator, refrigeration, HVAC, Tanks and Voids, exterior and interior coatings, card deck, car deck doors, crew spaces, passenger spaces, crew space fire screen doors, security camera equipment relocation, galley refurbishment, 1st aid Sat Phone, Doppler Speed Log, Bridge Space, life boat and raft, anchor windlass, vessel drawings/records, safety placards, stateroom refurbishment, vehicle lift, ADA upgrades, IT upgrades. Stability assessment; sea trials; annual overhaul work and dry dock.	4	Vessel departed Seward, AK on the 17th of October 2013 and the one year warranty period started. Seward Ship's Drydock has submitted Claim in the amount of \$3,991,461 which includes \$600K in Liquidated Damages. Meeting with SSD and their Lawyers were held on the 21st of February at the State Of Alaska Department of Law Office in Anchorage, AK. Contracting Officer's Decision is due by March 9, 2014.

73086	M/V Malaspina Refurbishment - Upgrades and Refurbishment of the following Systems: Crew and Passenger Spaces; Curtain Plate, Windows, Vent Louvers, Coating Renewals and Plate Repairs; P&S Car Deck Door Renovations; Stern Door Renovations; Steering Gear Motor Controller Renewals; Power Management System Installation; Interior and Exterior Paint; Miscellaneous Floor Covering Renewals; Computer and Network Upgrades; Ships Main Engine (SME) Rebuild; Tank-Void blast and coatings; Hull Blast and Coatings; Steel Repair and Upgrades; Required Dry Docking, Update Vessel Drawings and Stability Manuals; Stability Assessment; Sea Trials; and perform State Funded Annual Overhaul Work. Due to the age of the Vessel, the State anticipates there will be unidentified discovery work related to many of these work items that will be need to be addressed by change orders.	4	Contract awarded to Vigor Marine, LLC. Contract completed on the 5th of April. Vessel in 1 year warranty period.
73093	FVF Propulsion System Replacement	4	State settlement with NTP change scope of project, from State purchasing and installing new engines to MTU providing and installation replacement engines. Spare engines received and storage in Marine Engineering Facility Warehouse, Ketchikan, AK. MTU selected Foss Seattle as shipyard for installation of New Engines on Fairweather. Fairweather has arrived at Foss Seattle and replacement of Old Engines has started.
73098	AMHS Reservations and Manifest System - Acquire software, hardware, peripherals for AMHS HQ, reservations, terminals, and all ships (compatible with ships systems); and development, implementation and training to replace or upgrade the current AMHS Reservations System, payment processing, ticketing, marketing/financial reporting. The application will be accessible to reservations agents, terminal staff, shipboard and administrative personnel through the State Wide Area Network. The Application will be accessible through the AMHS Website and allow on-line pricing availability, and reservations. The application will use current technology, and will meet the States Departmental Information Technology Standards.	4	Phase 4 activated. Funding increase was received. Phase 2 expenditures were \$608,495.00. \$18,900 remains in Phase 2 Funds. Phase 4 funding level is established as \$8,099,455.00.
73108	AMHS Fleetwide Lifesaving Equipment Upgrades - Identify and upgrade or refurbish existing lifesaving equipment.	2	Design Study Report has been completed. PS&E has been completed for FWX, CHE, COL and KEN. Letter approval removal Lifeboats COL approved & construction being completed as part of CIP 73120 at Vigor Marine, Portland, Or. Equivalency Letters for FVFs presently under by Coast Guard. Phase 4 PDA received on 25SEP14.
73117	M/V Aurora Security Systems Upgrade	Complete	Upgrades included as part of Project 73165.
73171	AMHS Fleetwide Electrical Generation Upgrade - TUS, MAL, TAK, COL, MAT	2	100% PS&E package has been developed and delivered for Columbia, Taku and Malaspina. Phase 4 funding received on 25SEP13. Present the plan is to include the Columbia Emergency Generator Package with Project 70126 M/V Columbia Bridge Renovation. In the near future a contract is to be on the street for fabrication of new Main Electrical Switchboard for both the Taku and Malaspina. Installation of switchboards to be part of either a State Overhaul or Federal Project.

73120	M/V Columbia Repower & Ship System Improvements - Design and prepare construction drawings for installation of replacement main propulsion engines and subsystem upgrades. Project will include review of existing documentation, engine and product identification related to engines, reduction gears, shafting and propulsion equipment, control and monitoring, exhaust and waste heat boilers, electrical generation and auxiliary equipment. 9/2012 Revise Scope: to include Installation of replacement main propulsion engines and subsystem upgrades. 9/2013 Revised Scope: Add upgrades and refurbish the lifesaving systems, removal of existing systems, installation of new equipment and testing and training. Design for lifesaving systems was accomplished under PJ 73108 / 9500(132) AMHS FLEETWIDE LIFESAVING EQUIPMENT UPGRADES.	4	Contract on schedule. See Weekly Construction Report for details.
73200	AMHS Fleetwide Marine Evacuation Slide Construction	4	Installation and commissioning of new MES completed on both Malaspina and Columbia. Installation on Tustumena was completed as part of Federal Project 73068, and is in warranty until October, 2014. Minor with the browsing line attachment to hull that maybe a warranty item.
73205	AMHS FFY13/14 Fleet Condition Survey	8	All FY-13 reports are complete (with exception of Tusty) and ready to be distributed on CD's. RFP for PSA to updated all Vessel Asbestos Surveys is being developed.
73216	Marine Intelligent Transportation System Upgrades - Shoreside and vessel electronics and stationary security upgrades.	4	Phase 4 approved by FHWA - Security Upgrades on Vessels and Shoreside Facilities.
73214	M/V LeConte Refurbishment and Upgrade - Refurbishment of machinery spaces; main engine refurbish and/or major overhaul; mechanical and electrical systems upgrades; IT, Security and Navigation System upgrades; preservation of exterior and interior structure; deck equipment upgrades; renovation of crew accommodation spaces; public space upgrades; upgrades as recommended in the 2010 Vessel Condition Survey, the ABS current and future survey status, the Coast Guard inspection status and compliance with existing and pending regulations. Stability assessment; sea trials; and annual State funded overhaul work and dry docking.	2	100% PS&E completed. Phase 4 PDA received on 20SEP13. Bids opened on the 6th of February 2014 and Vigor Marine LLC Portland, Oregon was the low bidder.
73215	M/V Tustumena MSD Upgrade - Competitive Ferry Boat Grant award to upgrade existing MSD system.	4	MSD Upgrade was completed under Federal Project 73068 at Seward Ships Drydock, Seward, AK. See Project 73068 Weekly Progress Reports for contract progress. Installation is in warranty until October, 2014

# Fairweather Repower Project Status

(2.28.2014)

## Complete

- Old engines removed
- Engine girders (hull structure) modified for new engines
- Reduction gears (overhauled and gear ratio changed for new engines)
- Car deck pillars modified for engine removal
- New engines installed in engine rooms
- Fabrication and Installation of Fuel Oil Day Tanks
- Overhaul of Water Jets (state work; jets removed/replaced pier side; overhaul completed at Rolls Royce Seattle)
- Engine room dampers renewed (state work; accomplished while engines were out)

## In Process

- Auxiliary system modifications resulting from new engines (electrical, piping, etc.)
- Alignment of the new engines and reduction gears has been delayed due to requirements for collision chocks; alignment should be complete the week of March 3<sup>rd</sup>; (MTU is treating the repower as a new construction project)
- Modification of Exhaust Ducting for new engines (some sections are being renewed due to carbon steel failure)

## To be Completed Prior to Departure from Seattle

- Modification to Gratings, Handrails and Supports
- Preliminary and Operational Testing of affected systems (still missing test memos)
- Lightship Survey
- Dock & Sea Trials
- DNV Main Class Renewal Inspections (less sea valve inspection)

## To be Completed in Ketchikan

- State Overhaul (dry docking)
- DNV sea valve inspection (required for main class renewal)
- Installation of SatCom system and network upgrades
- Installation of new rescue boat

## Project Timeline

- Scheduled project complete date --- 27Mar2014
- Projected Project completed date --- 07Apr2014
- FWX Overhaul starts in Ketchikan --- 15Apr2014
- FWX Return to service date --- 15May2014



New Engine (MTU 20V4000 M73L)



Old Engine (MTU 16V595 TE70)

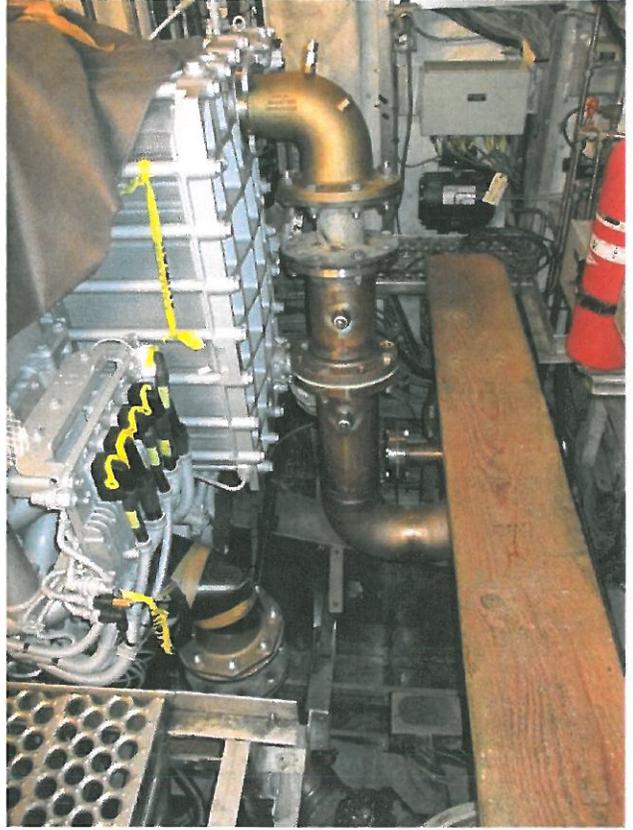


The new engines sit considerably lower than the old engines



Removal of the old engines.





# MEMORANDUM

**STATE OF ALASKA**  
**Department of Transportation & Public Facilities**  
**Alaska Marine Highway System**

To: MTAB Members

Date: February 10, 2014

From: Captain John Falvey  
General Manager

Subject: AMHS UPDATE for MTAB  
Meeting on March 11, 2014

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## VESSEL UPDATE:

### MATANUSKA

- M/V Matanuska entered Lay up on October 1, 2013 and the engines have been repaired. New cylinder liners have been installed and the vessel is currently dry docked at Vigor ASD.

### MALASPINA

- M/V Malaspina is currently on the Bellingham run until relieved by the Matanuska on March 9, 2014.

### TUSTUMENA

- M/V Tustumena resumed revenue service on October 20, 2013 and is due for an overhaul on March 9, 2014 in Ketchikan.

### KENNICOTT

- M/V Kennicott entered CIP at Alaska Ship and Drydock on October 20, 2013 and is due to resume cross gulf service on March 8, 2014.

### TAKU

- M/V Taku entered revenue on time - June 9, 2013, after a successful overhaul period. The vessel is currently operating on the Prince Rupert run making the turn in Juneau and is due to enter overhaul on May 2, 2014.

### COLUMBIA

- M/V Columbia is currently at Vigor Shipyard in Portland undergoing a mid-life main engine replacement. Everything is going well and the vessel is due to resume service on the Bellingham run April 30, 2014. Also, AMHS is currently securing a three year extended engine warranty.

### FAIRWEATHER

- M/V Fairweather began an engine replacement project October 1, 2013 at Foss Shipyard in Seattle. The project is moving along and the vessel is expected to resume service to

Sitka on the 4X week schedule May 15, 2014.

- Two swing (standby engines) are now in storage at AMHS warehouse in Ketchikan.

#### CHENEGA

- M/V Chenega entered Layup on October 5, 2013 with a March 2014 overhaul scheduled in Ketchikan. The vessel resumes service in PWS on April 1, 2014.
- The vessel enters engine replacement phase on October 1, 2014. NOTE: MTU will issue a new competitive bid for this project.

#### LECONTE

- M/V LeConte had an unexpected keel cooler leak – repair was made in the water using clad welding repairs when it was tied up at night after providing service. No dry docking or interruption in service occurred. The ship is due to enter a federal CIP September 15, 2014 for stateroom upgrades and bow thruster replacement.

#### AURORA

- M/V Aurora will have a state overhaul on April 1, 2014 in Ketchikan.

#### PROJECTS AND OTHER MATTERS OF INTEREST:

##### WINTER 2014/2015 Capital Projects

- Federal CIP Overhaul Kennicott
- Federal CIP Overhaul Leconte
- Chenega Re-Engine Project

##### POINT-OF-SALE CASH REGISTER SYSTEM ABOARD VESSELS

- The inventory management portion of the POS system (MenuLink) has been procured and we are currently in the process of rolling the system out this winter/spring. A team has been assembled and we expect a successful implementation.

##### ANNETTE BAY

- Service out of the new facility commenced on Saturday July 6, 2013. There were some electrical issues discovered with the ramp initially but those issues have been resolved. Contracts have been put in place to provide fuel for the generator, sewage removal for public restrooms, and general janitorial services. The facility is now connected to city power.

##### ENVIRONMENTAL

- We have begun addressing some of the more pressing environmental issues concerning VGP, Ship to Shore Environmental Guide, terminal waste water systems, HAZMAT, terminal potable water systems, terminal runoff water, communication unifying AMHS with the DOT initiative and Waste Management.

## STOWAWAY ISSUES

- Short term: immediate actions include signage, testing security barriers, increased screenings and crew training. Long term: project is underway to bring subject matter experts together for testing new methods to reduce security breaches.

## SCHEDULE UPDATE

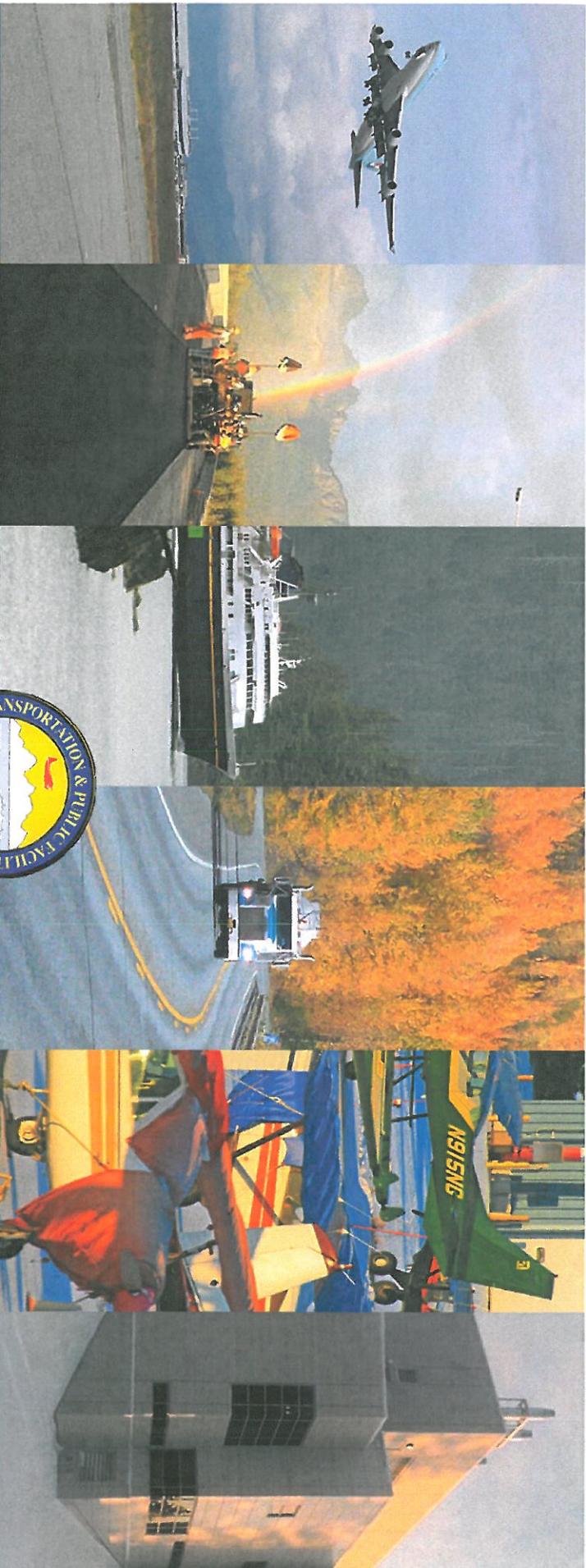
- Legislative cross gulf sailings were completed out of the Whittier Cruise Ship Dock on January 9, 2014, January 16, 2014, and January 23, 2014 using the Tustumena.
- Summer 2014 schedule was open for booking on October 11, 2013.
- Alternate Aurora schedule was successfully developed to work around the damaged ramp in Whittier.
- The new Whittier fabricated ramp parts are en-route to AMHS – will store them and use them as needed as spare parts. We can operate the ramp as is.
- Winter 2014/2015 scheduling teleconference is being planned for April 2014.

## RESERVATION & MANIFEST SYSTEM

- An RFP was issued during February 2014 – we now have 8.1 million in funds for the project. RFP closes March 15, 2014.

## TARIFF STUDY

- A Tariff Study is currently being conducted. The study will be completed the end of April 2014.



# Alaska Department of Transportation & Public Facilities Tustumena Replacement Marine Transportation Advisory Board

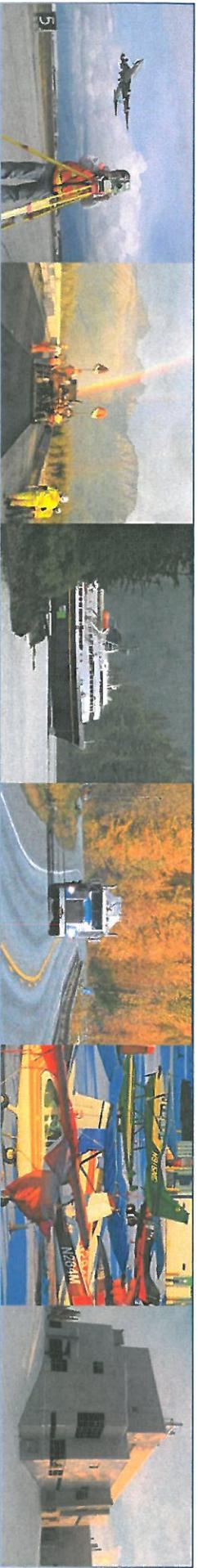
March 11, 2014



## VESSEL SPECIFICATIONS

### M/V TUSTUMENA REPLACEMENT

- Vessel Type – Roll On – Roll Off (RO-RO) Passenger/Vehicle Ferry
- USCG Classification:
  - Subchapter H
- Classed by American Bureau of Shipping (ABS) as:
  - ~~⌘~~A1
    - ~~⌘~~ – Constructed under survey by ABS
    - A1 – Compliance with the Hull requirements of the ABS Rules for unrestricted ocean service
  - AMS
    - Machinery, boilers and systems not constructed and installed under ABS survey but meet ABS requirements
  - Vehicle Passenger Ferry
    - Vessel transports vehicles and more than twelve (12) passengers



## VESSEL SPECIFICATIONS

- Service:
  - Domestic Voyage
- Service Route Type:
  - Oceans, no further than 50 nautical miles from shore
- Southeast Alaska Stability Policy:
  - Exposed Routes
- Specifications

	<u>Existing</u>	<u>Replacement</u>
▪ Length Overall	296'-0"	325'-0"
▪ Beam (Main Deck)	59'-0"	68'-0"
▪ Depth (molded)	21'-9"	23'-0"
▪ Draft (Full Load)	14'-4-1/2"	14'-10"





## Additional Design Features

- No Bar; Cafeteria with horseshoe shaped galley
- Forward observation lounge above cabin deck
- Forward Starboard door for floating ramp terminals
- Offset casing with mezzanine deck to utilize non-van deck height
- Liquefied Natural Gas (LNG) Analysis continuing.  
Need to work with United States Coast Guard (USCG) regarding fuel tank issues



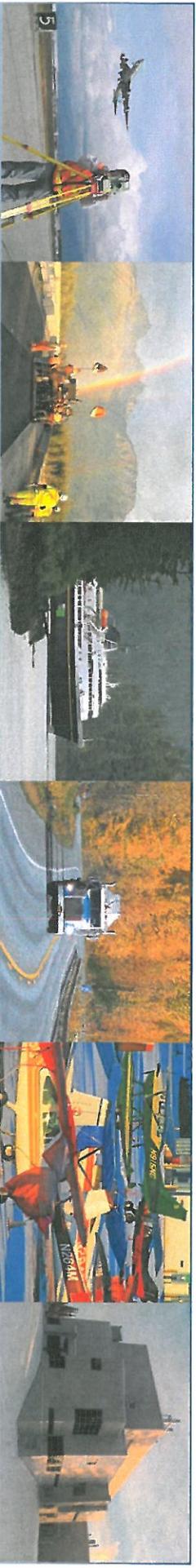
# Preliminary Cost Estimate

Cost Basis	Volumetric Method	SWBS Method (West Coast)	SWBS Method (Gulf Coast)
Estimated capital cost	173,000,000	169,000,000	160,000,000
Owner Contingency (10%)	17,000,000	17,000,000	16,000,000
<b>Shipyard Total</b>	<b>190,000,000</b>	<b>186,000,000</b>	<b>176,000,000</b>
Program Contingency (10%)	19,000,000	18,600,000	17,600,000
ICAP (4.79%)	9,100,000	8,900,000	8,500,000
Loose Outfitting and Equipment	4,000,000	4,000,000	4,000,000
Construction Engineering (10%)	19,000,000	18,600,000	17,600,000
<b>Program Total</b>	<b>51,100,000</b>	<b>50,100,000</b>	<b>47,700,000</b>
<b>Project Total</b>	<b>241,100,000</b>	<b>236,100,000</b>	<b>223,700,000</b>



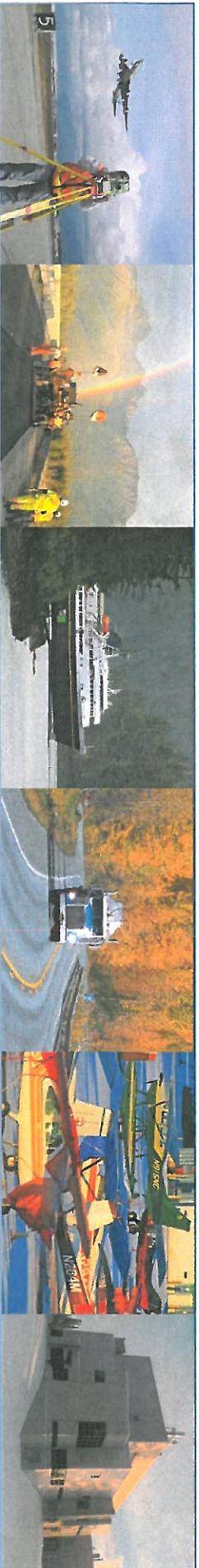
## DELIVERABLES TO FINAL DESIGN

- Reconnaissance Report - develop and refine the operating requirements (operating characteristics) for the vessel. The Reconnaissance Report will include a rough cost estimate and recommendation to proceed with a particular vessel under a specific procurement method.
- Environmental Analysis - prepare the required Federal Highway Administration (FHWA) environmental document based on the project scope as defined in the draft Reconnaissance Report.
- Design Study Report (DSR) - develop and refine various alternatives to accomplish the project. Each proposed solution will be analyzed to determine how well it satisfies the project purpose. The DSR will conclude with a recommendation to proceed with a particular vessel design under the preferred procurement method.



## DELIVERABLES FOR FINAL DESIGN

- Plans, Specifications & Estimates (PS&E) – Major Components
  - Regulatory Research
  - General Arrangement and Profiles
  - Intact and Damage Stability
  - Structural Plans/Elevations
  - Structural Sections
  - Superstructure
  - Speed and Power Calculations
  - Major Equipment List
  - Weight Estimate
  - Cost Estimate



# PROJECT MILESTONES

## Tustumena Replacement Project 70062

AMHS Ketchikan Alaska

Awarded Consultant Professional Services Agreement (PSA)  
The Glosten and Associates Team, Seattle WA

November 2013

AMHS Terminal Sight Visits (Project Team and Southeast Region  
Terminal Design Section)

December 2013

Reconnaissance Report

February 2014

Public Participation (Homer, Kodiak, Dutch Harbor, etc.)

April 2014

Environmental Document

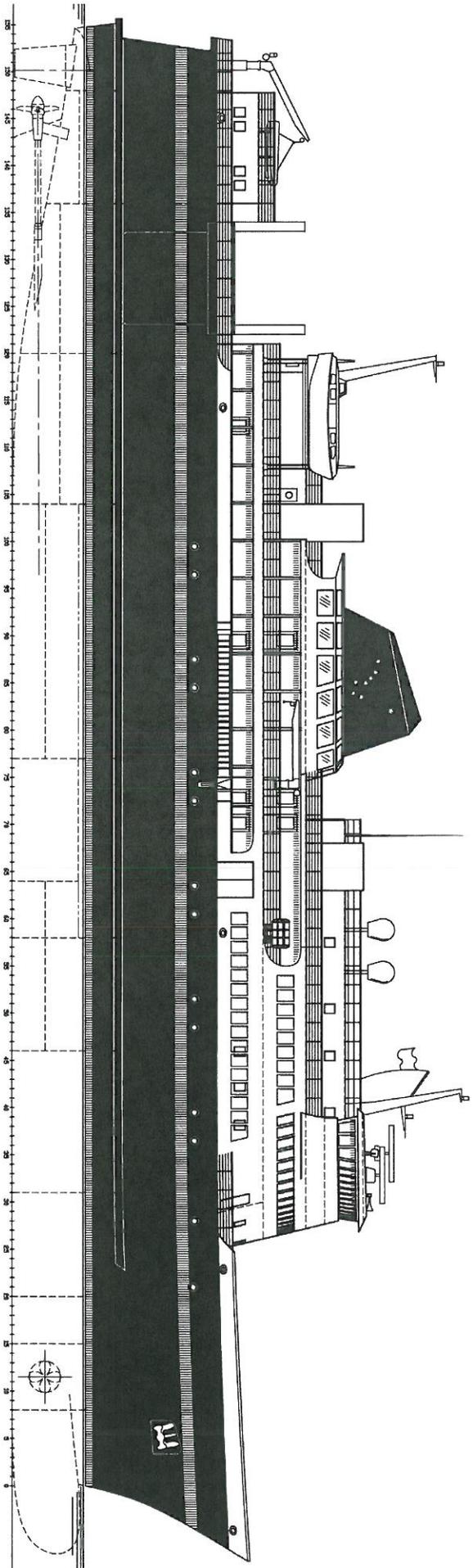
May 2014

Design Study Report

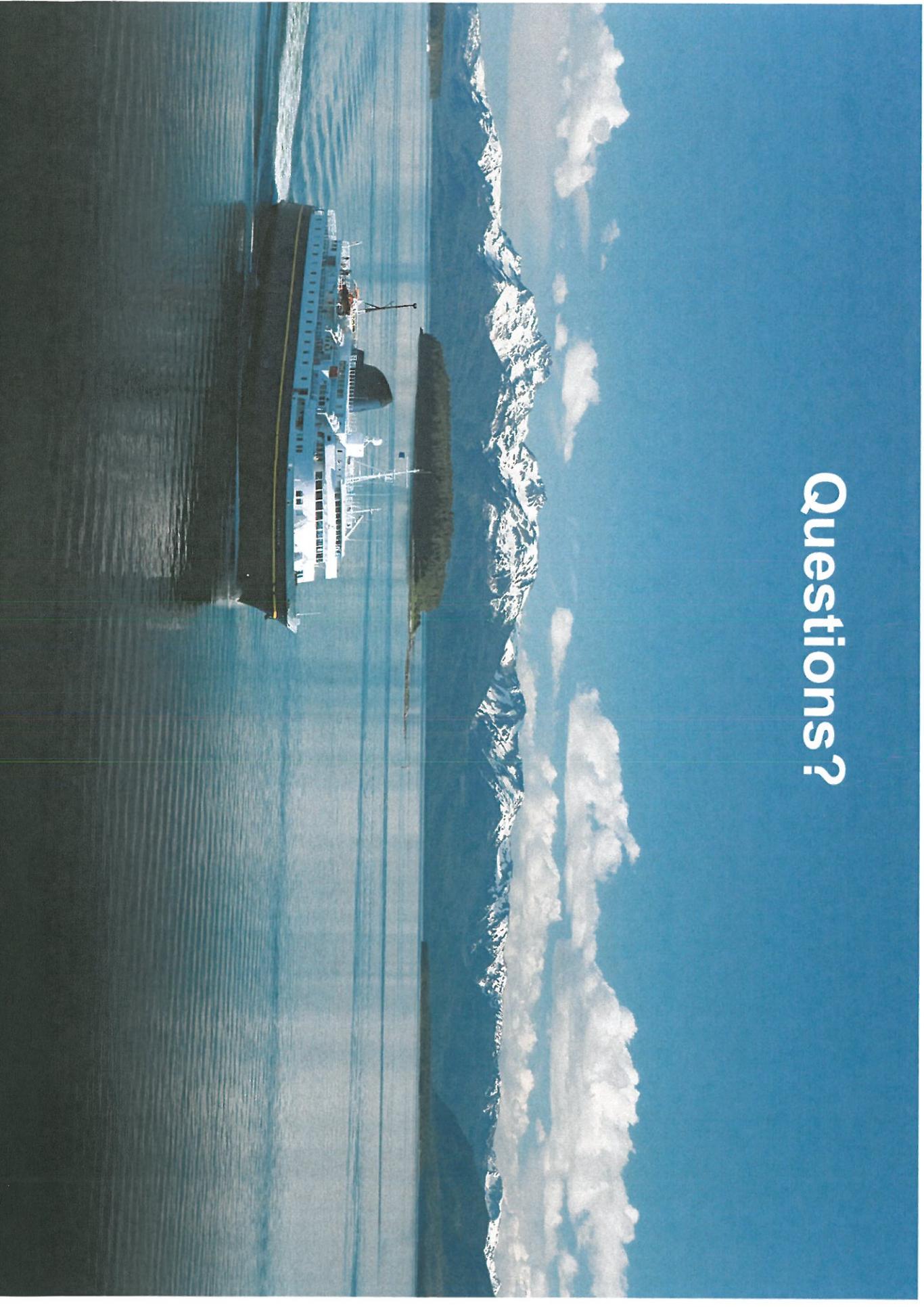
September 2014

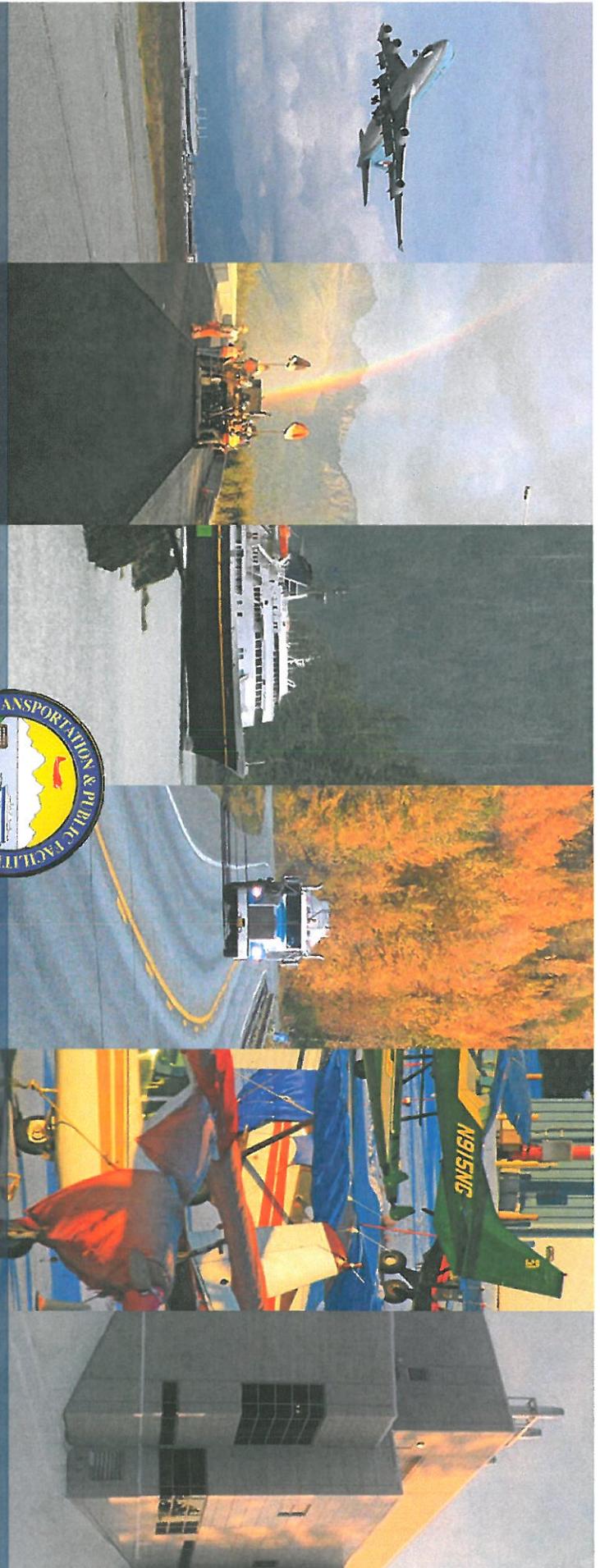
Final Design Completion

June 2015



# Questions?

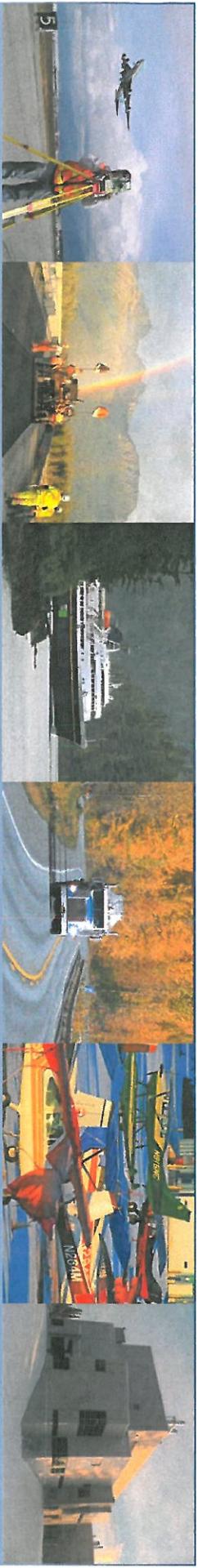




# Alaska Department of Transportation & Public Facilities Day Boat ACF

Marine Transportation Advisory Board

March 11, 2014



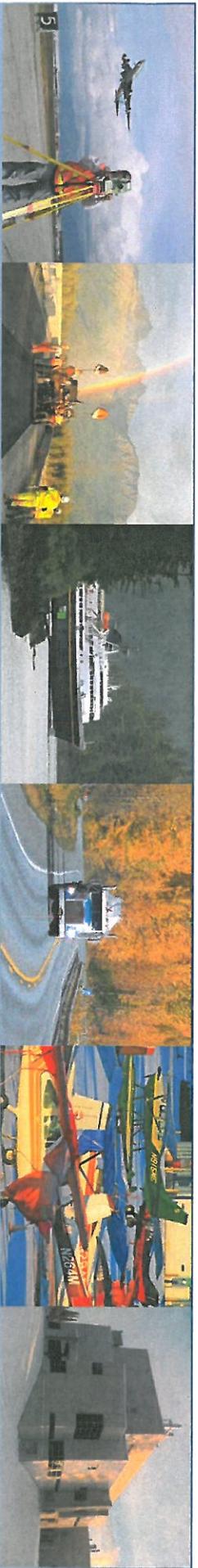
## Day Boat ACF

- Vessel Mission Requirements
  - Payload – 53 vehicles and 300 passengers
  - Speed – 15.5 knot schedule speed
  - 16 knot service speed @ 85% Maximum Power
  - Single ended, with drive through loading/unloading (Bow and Stern Doors)
  - Rapid load/unload of passengers/vehicles
  - Highly maneuverable



# Day Boat ACF – Design Study

- Proposed Routes
  - 1st Priority – Lynn Canal
  - 2nd Priority – Short Existing AMHS Routes
  - 3rd Priority – Juneau Access Routes, if required
- Operational Constraints
  - Terminal configuration
  - Vehicle loading
  - Walk on passenger loading
  - Overnight mooring



# Day Boat ACF

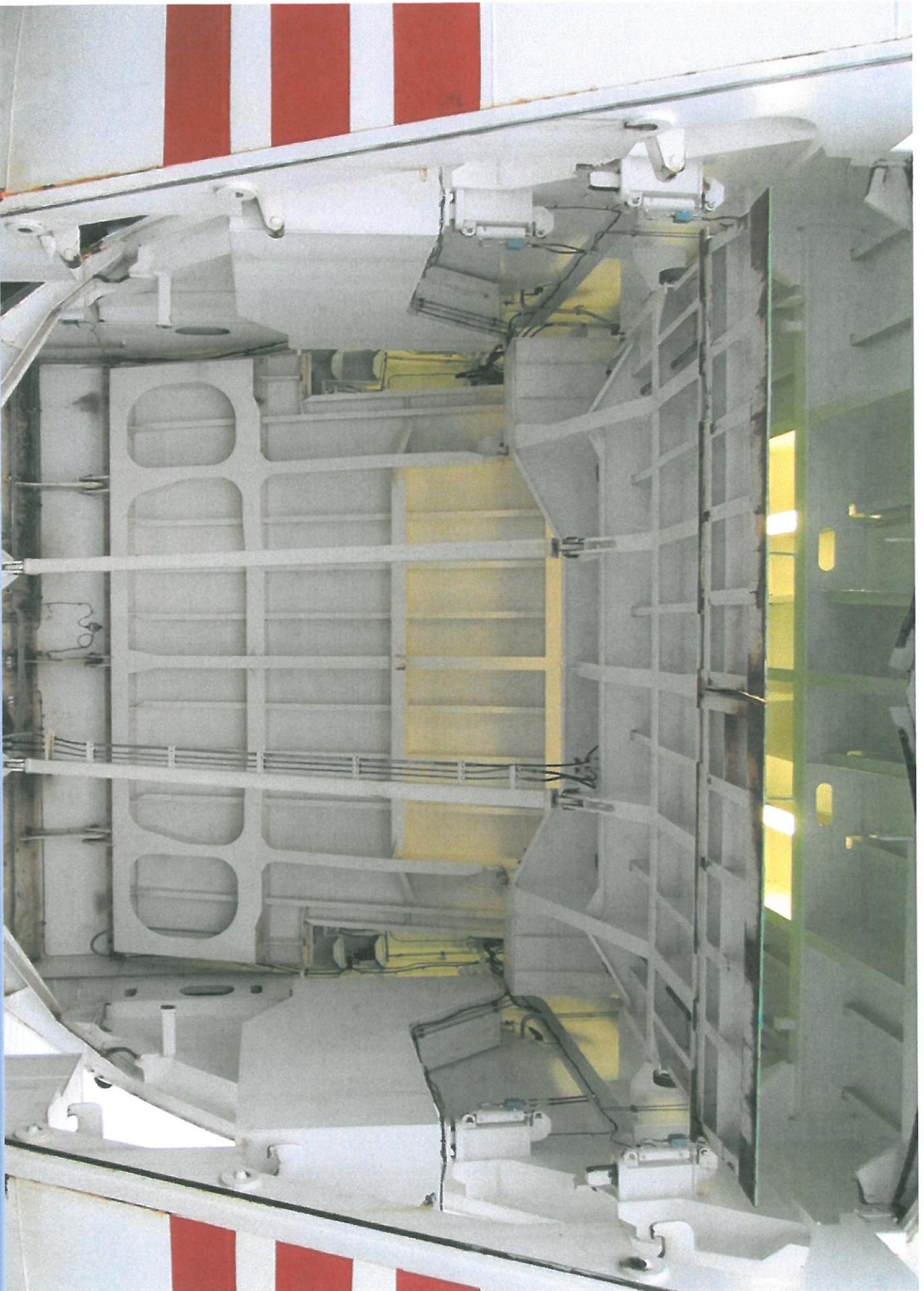
- Major Design Decisions
  - Closed Aft Deck vs Open
    - Pros:
      - ♦ Increased weather protection, potential lower maintenance
    - Cons
      - ♦ Slightly increased cost – materials, ventilation
- Conclusion
  - Car deck will be completely enclosed

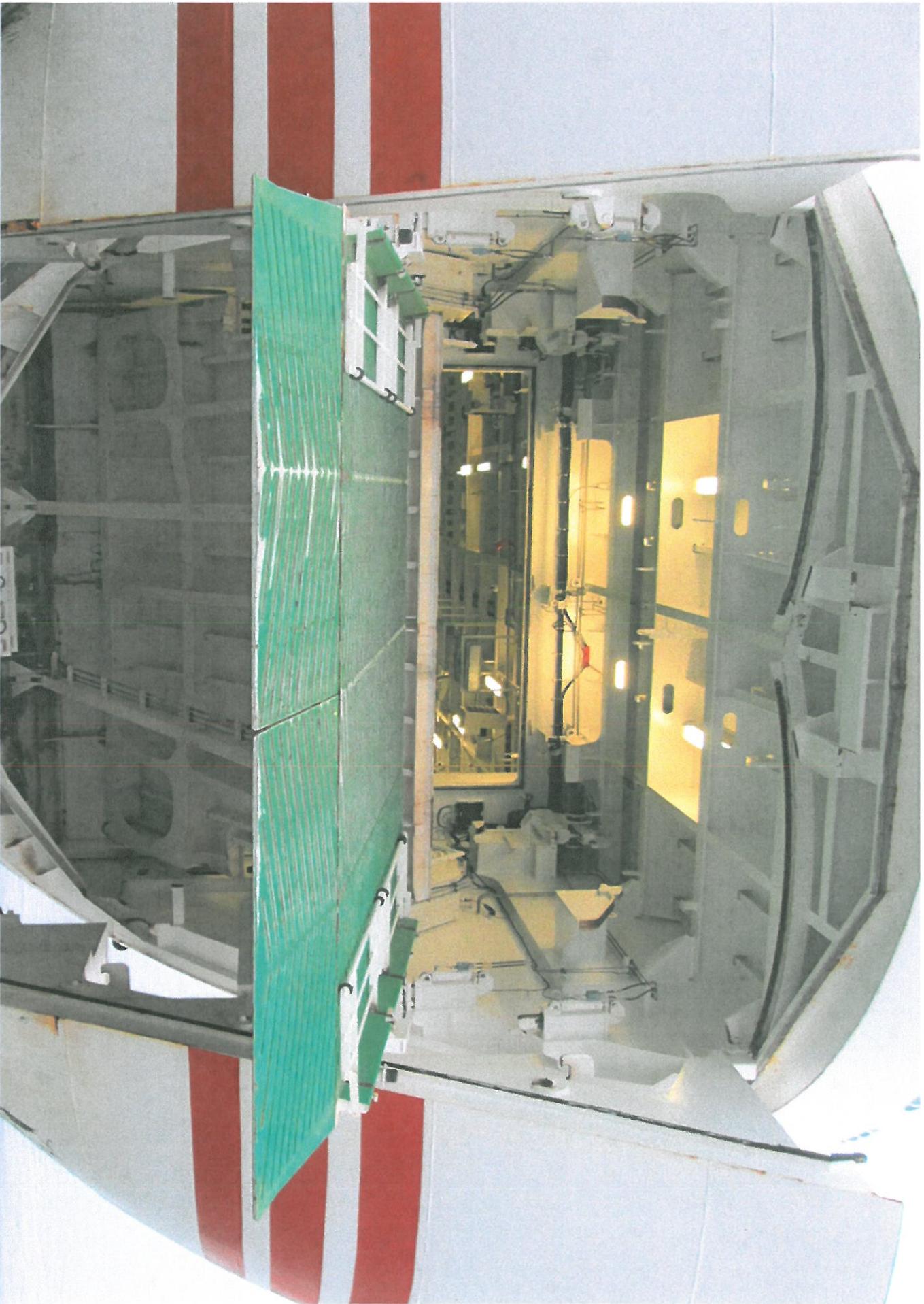


# Day Boat ACF – Design Study

- Major Design Decisions
  - Bow Loading, Side Opening Doors

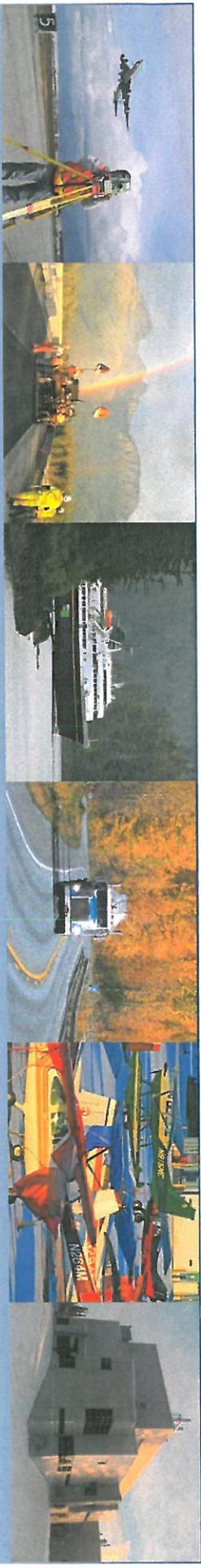












# Day Boat ACF

- Major Design Decisions
  - Seakeeping considerations
    - Length greater than 235 Ft LECONTE
    - Eliminate forward guard sponsons
    - Optimize bow shape – reduce spray
    - Shelter important equipment from ice accumulation
    - Concept Design is 280 ft length overall



# Day Boat ACF

- Major Design Decisions
  - Seakeeping analysis
    - Wind, Wave & Seakeeping Studies (Glosten)
      - ◆ Used historical wind speeds, directions & wave heights
      - ◆ Used series of hulls – LECONTE to TAKU size
      - ◆ Calculated Motion Sickness Indices (MSI) using wave data
- Conclusion
  - Based on length and location of passenger accommodations, the MSI for the Day Boat ACF will be within the accepted calculated standards



# Day Boat ACF – Design Development

Model Testing Conducted at Force Technology in Denmark,  
October 2013

- Model Test Program
  - Hull Optimization
  - Model Construction
  - Bare Hull Resistance
  - Appended Resistance
  - Seakeeping
  - Maneuvering

Actual acceleration measured on test model confirms predictions that the Day Boat ACF will be much more comfortable for passengers than the Le Conte and is within established passenger ferry standards

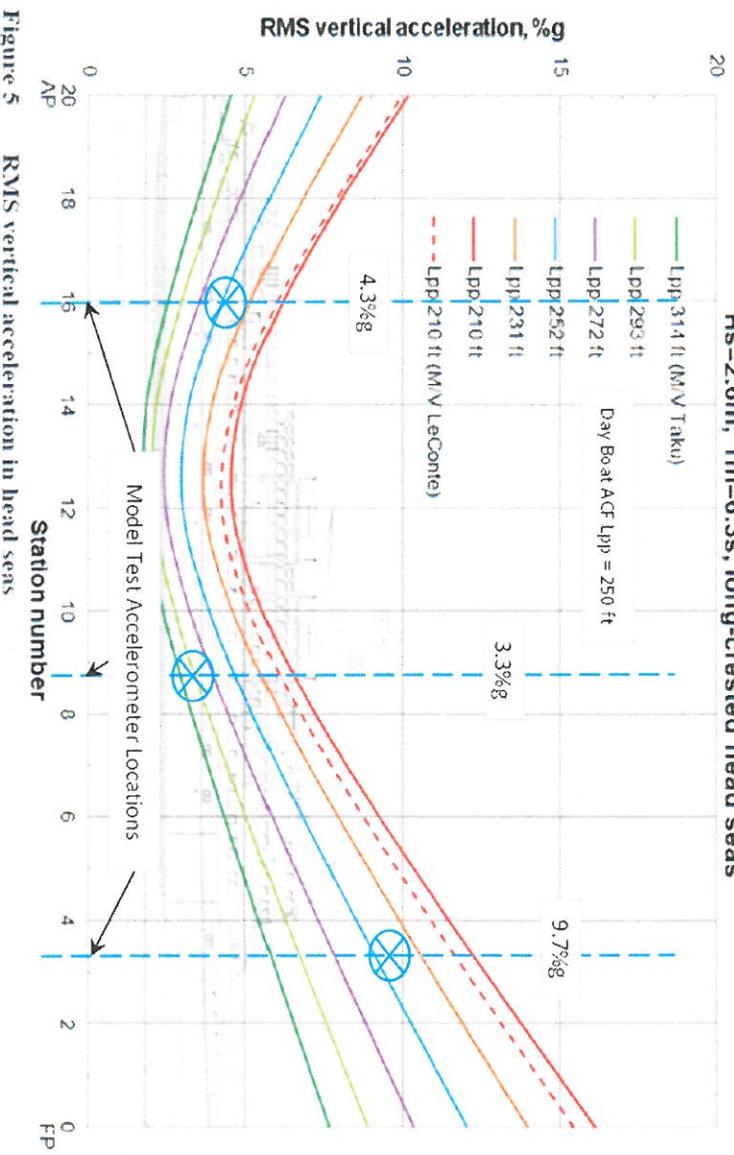




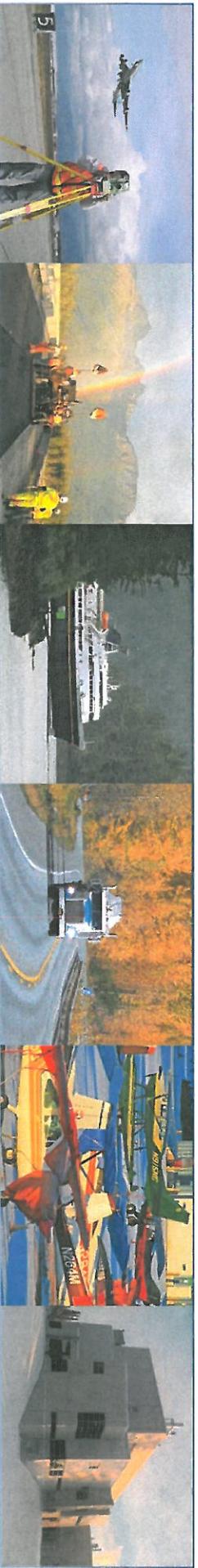
# Day Boat ACF - Design Development

## MSI vs. Vessel Length & Longitudinal location

Average (RMS) vertical acceleration: 15 knots:  
 $H_s=2.6m$ ,  $T_m=6.3s$ , long-crested head seas



(courtesy: The Glosten Associates)



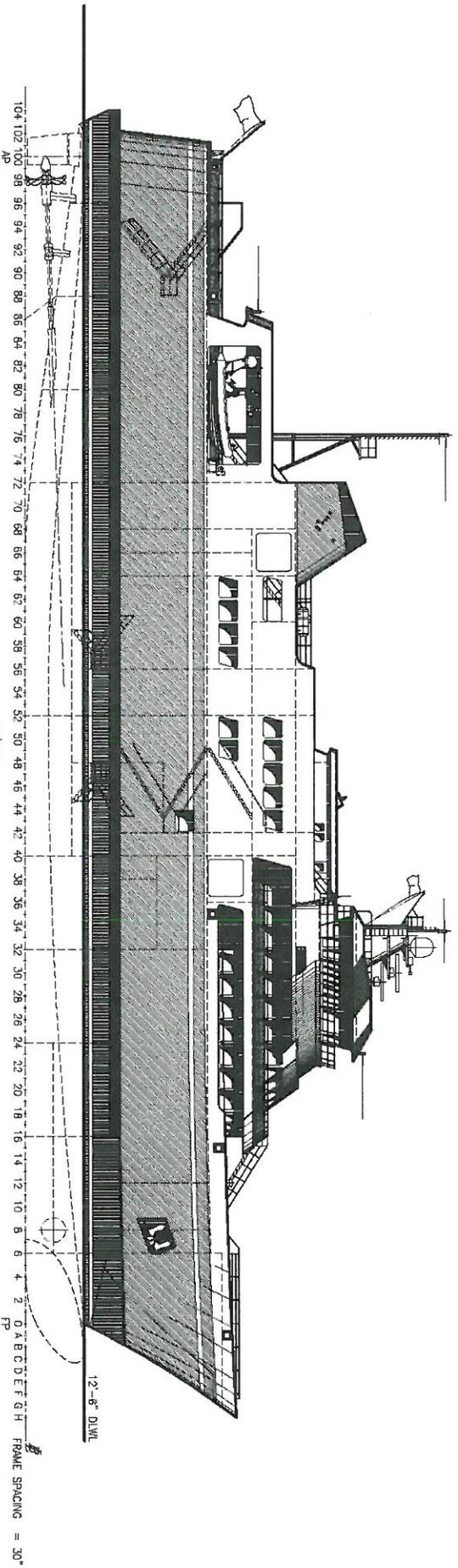
# Day Boat ACF – Design Development

Principal Design Element	Day Boat ACF	M/V Leconte
Length Overall	280'	235'
Beam Over Guards	67'	57'
Draft	12' – 6"	13' – 11"
Passenger Capacity	300 (326 seats)	247 (230 seats)
Vehicle Capacity	53 ASV	34 ASV
Propulsion Horsepower	6,000	4,300
Speed	16.0 Kts	14.5 Kts

Note: Tustumena overall length is 296'



# Day Boat ACF

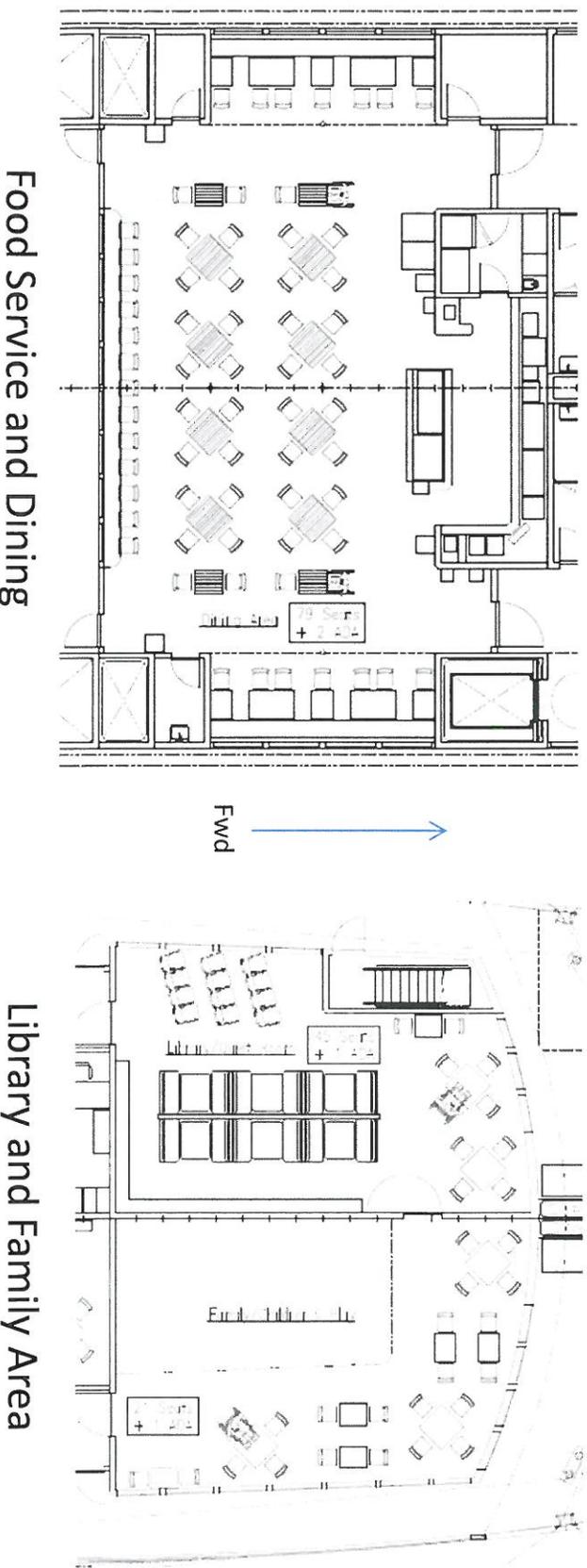






# Day Boat ACF

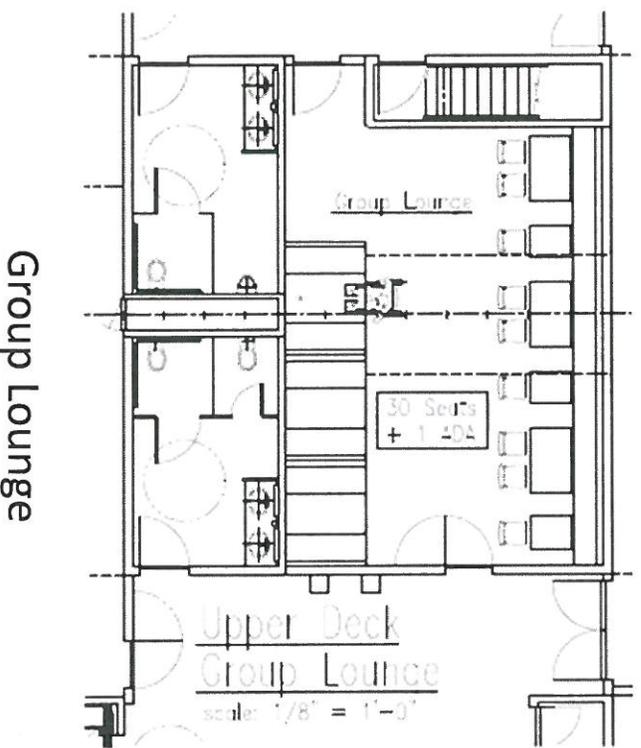
- Proposed Space Arrangements
  - Lower Passenger Deck



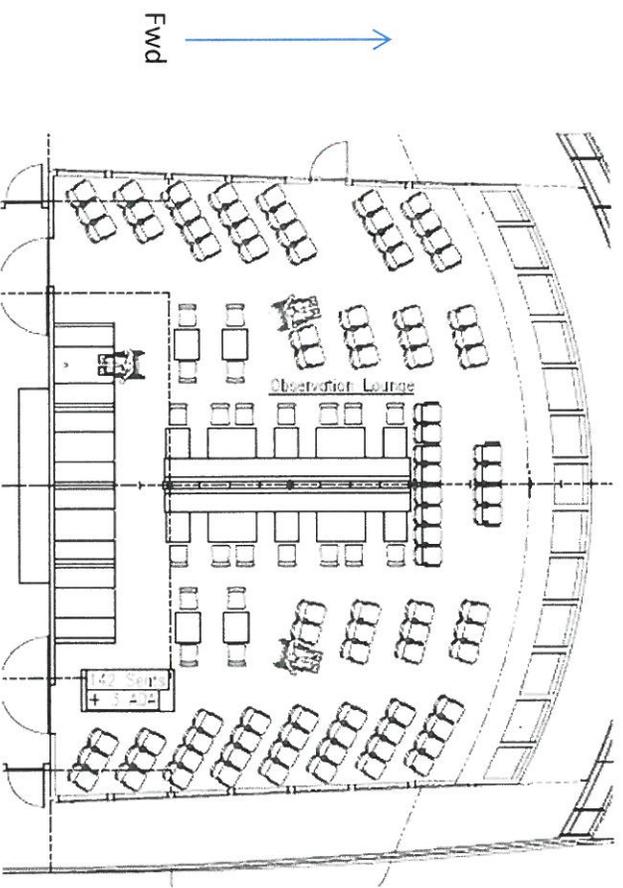


# Day Boat ACF

- Proposed Space Arrangements
  - Upper Passenger Deck



Group Lounge



Forward Observation Lounge



## Day Boat ACF

- Remaining Schedule
  - Final Contract Design – Completed February 2014
  - Final Estimates: Vigor & Elliott Bay– March 2014
  - Negotiate Guaranteed Maximum Price or Advertise
    - April 2014
  - Award Shipyard Contract – June 2014
  - Delivery of Vessels:
    - 1<sup>st</sup> Vessel Target Date Mid 2016
    - 2<sup>nd</sup> Vessel Target Date May 2017

# Questions?

