

AMHS Vessel Deferred Maintenance

FY 2010

Reference Number: 42001

Depart of Transportation & Public Facilities

Department of Transportation and Public Facilities				AMHS Vessel Deferred Maintenance -- FY09			
				GF			
				Project	Running	GF	Running
Dept.	Project Title	Cost (\$000)	Total (\$000)	Cost (\$000)	Total (\$000)	Project Description	Location (City)
1	Mens Toilet/Shower	2.00	2.0	2.0	2.0	Determine the location of the vents from the drain piping. Ensure that the vents have not been painted over. Replace drain pipes with new if blocked vents are not the issue. Explore the use of PVC or similar types of pipes to prevent problems seen with	Tustumena
2	Lower Hold Level HVAC Enclosure (HPU3)	3.00	7.0	3.0	7.0	Monitor and renew coating systems as needed. A structural survey [should] be conducted to determine the extent of the damage in the overhead.	Tustumena
1	Top of Mooring Compartment (Port)	5.00	12.0	5.0	12.0	Trim the insulation studs and install buttons to prevent injuries.	Chenega
2	MCC Space	5.00	17.0	5.0	17.0	Renew wasted deck and modify drain to provide proper drainage from the compartment.	Taku
2	Oil Tank	6.00	23.0	6.0	23.0	Prep and paint the steel deck in the MCC Space.	LeConte
1	General Alarm Signage	10.00	33.0	10.0	33.0	Replace the bilge pump.	Malaspina
		10.00	43.0	10.0	43.0	Renew the general alarm signage.	Aurora
						PC...All ductwork is of steel construction. Some of the steel ductwork is of at least 11 gauge thickness, thereby affording suitable A-0 protection in some locations Structural fire protection insulation is fitted only on the galley exhaust ductwork. [1.4	Matanuska
1	Auto Fire Dampers in MVZ Bulkheads	10.00	53.0	10.0	53.0		Matanuska
						PC...Refer to S&A 054, [1.4,2008...Mike Aholt, Beacon Professional Services] The vessel passenger elevator is not currently compliant with 1974 SOLAS regulations. It is recommended that a request for a waiver be sent to MSC to approve the current configurat	Matanuska
1	Passenger Elevator Doors	10.00	63.0	10.0	63.0	Replace stair treads with new unpainted treads.	Tustumena
1	Lifeboat Davit	10.00	73.0	10.0	73.0	Repair pipe hanger.	Malaspina
2	Shaft Alley	10.00	83.0	10.0	83.0	Replace steel in the bottom 1/3 of compartments as required. Prep and paint compartments to prevent any additional corrosion.	Tustumena
2	Chain Lockers (P/S)	10.00	93.0	10.0	93.0		Tustumena
2	Forepeak SW Ballast Tank	12.00	12.0	12.0	12.0	Monitor and renew coating systems within the next 5 years [by 2011].	Tustumena
1	Rebuild EOS Electrical Transit	15.00	27.0	15.0	27.0	Remove Transit and repack with proper spacing blocks to make smoke and fire tight.	Aurora
						Update the tank & void names on the vessel to create a standard for all future reference to the tanks & voids. This would include the Sounding Procedures, Fueling Manual, Stability Manual, Capacity Plan and General Arrangements. Updates in Signage may a	Taku
1	Naming Convention	15.00	42.0	15.0	42.0	Research an appropriate bow thruster of suitable size (need to verify thrust requirements with crew) and install. Approx cost \$250,000	Chenega
2	Bow Thruster	15.00	57.0	15.0	57.0	The marine joiner door should be replaced with a USCG approved fire door and frame. The overhead needs to be checked for the extent of structural damage from rust. The rust spots appear to continue up on the vehicle deck indicating the need for possible	Malaspina
2	CO2 Room	15.00	72.0	15.0	72.0		Malaspina
2	MSD Room					Renew coating systems on the tank top within the next 5 years [by 2011].	Tustumena

Dept.	Project Title	Project Cost (\$000)	Running Total (\$000)	GF Cost (\$000)	Running Total (\$000)	Project Description	Location (City)	Election District
Priority								
2	Standing Water & Deck Corrosion	20.00	108.0	20.0	108.0	The housing is to include a drain hole, a perimeter flange with bolt holes for attachment to the existing machinery spaces.	Taku	1-40
1	Wheel House fire boundaries	20.00	128.0	20.0	128.0	Make corrections to fire boundaries between the wheelhouse and main machinery spaces.	Fairweather	1-40
1	Observation Lounge door replacement	20.00	148.0	20.0	148.0	Replace fire door leading to lounge.	Malaspina	1-40
2	Main Engine Room	20.00	168.0	20.0	168.0	Modify ventilation system as required to meet existing noise requirements. (If the ship is repowered, the ventilation system should be replaced. New automatic fire dampers should be installed, controllable from the EOS.)	Malaspina	1-40
2	Chain Locker, Port	20.00	188.0	20.0	188.0	Remove chain and conduct a full survey.	Matanuska	1-40
2	Capstans	25.00	213.0	25.0	213.0	Replace the motor controllers for the capstans.	Tustumena	1-40
2	Steam Condensate Piping	25.00	238.0	25.0	238.0	The steam duct heaters and connectors should be replaced. The valves for the steam connectors should be replaced. Replacement should occur in conjunction with the refurbishment of the surrounding compartments.	Malaspina	1-40
2	Steering Gear Room	26.00	264.0	26.0	264.0	Install a steering repeater in the steering gear room adjacent to the manual steering control station.	Malaspina	1-40
1	Wheel House navigation improvements	30.00	294.0	30.0	294.0	Instal a Comm. Nav. 2001 Auto Pilot above the ECDIS that acts as a helm repeater.	Fairweather	1-40
1	L4 Panel wire corrections	30.00	324.0	30.0	324.0	Pull back approximately 50 feet of the oversize cable to a junction box in the Aux engine room and run a smaller size cable appropriate for a 50 amp circuit from the JB to the panel.	Columbia	1-40
1	Stability Software Program	30.00	354.0	30.0	354.0	Using the stability software report within the FCS, find a suitable software and incorporate this into the vessel.	Kennicott	1-40
1	Towing & Mooring Equipment	30.00	384.0	30.0	384.0	Unknown... TBD	Matanuska	1-40
2	Steam Duct Heaters And Connectors	35.00	419.0	35.0	419.0	Replace all sealed steam traps.	Malaspina	1-40
1	Salt Water Pipe repairs	45.00	464.0	45.0	464.0	Renew flanges, valves or isolation kits as described in the Fleet Condition Survey report.	Fairweather	1-40
1	Fire Station Modifications	45.00	509.0	45.0	509.0	Replace one 1-1/2" sweep elbow at FS60 and one 1-1/2" 6" nipple at FS63.	Columbia	1-40
1	Vehicle Elevator Limit repairs	45.00	554.0	45.0	554.0	Repair photobeams to provide safety protection for crew and passengers. Perform a detailed survey of the railings pay particular attention to the stanchion/deck interface. Repair or renew railing sections are required. Remount electrical cable mounts using compatible metals to prevent dissimilar metal corrosion.	Kennicott	1-40
2	Railings	50.00	604.0	50.0	604.0	Relocate or otherwise correct mag compass for proper operation	LeConte	1-40
1	Wheel House magnetic compass	50.00	654.0	50.0	654.0	A design change is required and the author of this item does not know what the extent of the changes would be. It is recommended that Eagle hydraulics be consulted for details.	Chenega	1-40
1	Life Boat Davits	65.00	719.0	65.0	719.0	Repair the corroded handrail structure to the deck immediately.	Kennicott	1-40
1	Open Deck hand rail repair	75.00	794.0	75.0	794.0	Replacement of wasted riser pipes on vehicle deck including water, ballast and fuel lines	Columbia	1-40
1	Vehicle Deck pipe replacement						Malaspina	

Dept.	Project Title	Project Cost (\$000)	Running Total (\$000)	GF Cost (\$000)	Running Total (\$000)	Project Description	Location (City)	Election District
1	Auto Fire Dampers in MVZ Bulkheads	75.00	869.0	75.0	869.0	NC... No visible indicators are provided on fire dampers. [1.4.2008...Mike Aholt, Beacon Professional Services] In order to comply with the applicable SOLAS regulations, a total of nine automatic fire dampers, mostly in the Vehicle Deck overhead need A-60 insu	Matanuska	1-40
1	Handicap Head/Toilet/Shower	75.00	944.0	75.0	944.0	Recommend conducting an assessment of this space to make sure it complies with the current ADA regulations. Determine method to prevent shower water from leaving the space under the door.	Tustumena	1-40
2	Cable Runs Too Close to Exhaust	75.00	1,019.0	75.0	1,019.0	Re-route or otherwise protect this existing cable run from the heat of the exhaust system.	Chenega	1-40
1	Fwd Observation Lounge window repairs	80.00	1,099.0	80.0	1,099.0	Replace seals in the windows that are leaking.	Kennicott	1-40
1	Water Maker rehab	80.00	1,179.0	80.0	1,179.0	This unit should be investigated and if found to be not acceptable for passenger use, it should be removed or upgraded.	Kennicott	1-40
1	CO2 Room steel repairs	80.00	1,259.0	80.0	1,259.0	Source and repair steel corrosion	Mataspina	1-40
1	Sliding Bridge Door Locks	80.00	1,339.0	80.0	1,339.0	Correct the problem with the door locks ASAP.	Tustumena	1-40
2	Main Breaker	80.00	1,419.0	80.0	1,419.0	Replace breakers or otherwise reconfigure existing. Expected cost \$80,000	Chenega	1-40
2	Power Distribution System	80.00	1,499.0	80.0	1,499.0	Replace breakers or otherwise reconfigure existing. Expected cost \$80,000	Fairweather	1-40
2	Power Distribution Systems	80.00	1,579.0	80.0	1,579.0	The condition of the cable should be monitored for insulation deterioration and be replaced as needed.	Fairweather	1-40
1	CO2 System improvements	90.00	1,669.0	90.0	1,669.0	Additional CO2 cylinders should be added into the system and the system configured to flood both spaces at the same time.	Malaspina	1-40
1	Anchor replacement	95.00	1,764.0	95.0	1,764.0	Replace the anchor. Anchor most likely will be a long lead time procurement item.	LeConte	1-40
1	Passenger Elevator Doors	100.00	1,864.0	100.0	1,864.0	PC... The passenger elevator doors are not tight at each deck level. The service elevator has fire doors at each level. [1.4.2008...Mike Aholt, Beacon Professional Services] The vessel passenger elevator is not currently compliant with 1974 SOLAS regulations	Matanuska	1-40
1	Bow Thruster maintenance	120.00	1,984.0	120.0	1,984.0	Remove deflector, rotor blades, steering shaft and replace all bearings and seals	Columbia	1-40
1	SSDG No. 2 Overhaul	120.00	2,104.0	120.0	2,104.0	Overhaul engine as required	Columbia	1-40
1	Underwater Body coatings	120.00	2,224.0	120.0	2,224.0	Perform total removal of the underwater hull system by abrasive blast grit. Apply new underwater hull system with Interspeed or Intersmooth system by International Paint.	Kennicott	1-40
1	Steel Renewal	125.00	2,349.0	125.0	2,349.0	Crop out and renew the areas of clad welding. One of these areas is over the #6 ballast tank, this could provide access into this tank for sandblasting and renewing the main deck tees if some are found to be wasted as shown in FCSI # 5595.	LeConte	1-40
1	Main Switchboard	150.00	2,499.0	150.0	2,499.0	Rectify Main Switchboard issues as covered on the FCSI	Aurora	1-40
2	Power Conditioning	150.00	2,649.0	150.0	2,649.0	Provide power conditioners to either all or part of the incoming shore power circuits Approx estimate cost \$150,000	Chenega	1-40
2	Potable Water Pumps	150.00	2,799.0	150.0	2,799.0	Provide power conditioners to either all or part of the incoming shore power circuits Approx cost estimate \$150,000	Columbia	1-40
2	Power Conditioning	150.00	2,949.0	150.0	2,949.0	Add additional 200 amp shore power connections near the forward starboard door and at the aft starboard mooring platform. If both connections are not possible the aft connection would be a higher priority than the forward.	Fairweather	1-40

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2	Open Deck	175.00	3,124.0	175.0	3,124.0	Repair corrosion in bulkheads, find and repair source of corrosion. Repair faulty doors and door seals.	Aurora	1-40
2	Lifeboat Davits	200.00	3,324.0	200.0	3,324.0	Next 5-year davit inspection should be scheduled for (Oct2012) the FV13 Overhaul.	Tustumena	1-40
1	CO2 System re-configure	225.00	3,549.0	225.0	3,549.0	Install additional CO2 bottles to adequately protect both spaces--MMR and AMR.	Columbia	1-40
1	A' Class Doors	260.00	4,059.0	260.0	4,059.0	PC...See SOLAS Insulation Upgrade Matrix and insulation markup plan where upgrades to doors are required. [1.4.2008...Mike Aholt, Beacon Professional Services] The vessel is not currently in compliance with the 1974 SOLAS regulations regarding "A" Class doors	Matanuska	1-40
1	Vehicle Space HVAC noise level	260.00	4,319.0	260.0	4,319.0	Recommend modifying system to comply with the regulations and installing silencers to reduce noise.	Columbia	1-40
1	#6 Ballast Tank pre & paint	280.00	4,599.0	280.0	4,599.0	The overhead should be blasted and painted along with about 400 square feet of other angles and frames in the tank. The majority of the tank has a good coating system and does not need a full blast and paint system. Fabricate and install two gooseneck vents with a total of 20 sq feet of area on top of the house. Formal plans may have to be presented for USCG approval.	LeConte	1-40
1	Fidley Natural Exhaust Vent	500.00	5,099.0	500.0	5,099.0	Inspect steel in areas of corrosion, repair steel as necessary. Clean, prime and recoat.	Columbia	1-40
2	Watertight Doors	500.00	5,599.0	500.0	5,599.0	Routine maintenance is required to prevent further deterioration.	Mataspina	1-40
2	Shaft Alley Power management System	500.00	6,099.0	500.0	6,099.0	The plate type access door from the space should be replaced with a USCG approved door and frame. Otherwise, with regular maintenance, this space should hold up satisfactorily until at least 2010.	Tustumena	1-40
1	Fire Detection System replacement	600.00	6,699.0	600.0	6,699.0	Install the Fuel Management System as outlined in the Fleet Condition Survey item	Columbia	1-40
1	Vehicle Space Ventilation System upgrades	650.00	7,349.0	650.0	7,349.0	A centralized, comprehensive fire detection and alarm system should be installed throughout the vessel. The system should serve all passenger, crew and work areas.	Mataspina	1-40
1	Engine re-power	25,000.00	32,349.0	25,000.0	32,349.0	The vehicle space ventilation system should be completely modified and replaced to meet the current regulatory requirements. New motorized, automatic fire dampers should be installed and tied into the fan controllers.	Mataspina	1-40
1	Life Boat & FRB Davits pipe mod	8.00	32,357.0	8.0	32,357.0	Replace both Main Engines and associated equipment	Columbia	1-40
1	Waste Heat Boilers modification	78.00	32,435.0	78.0	32,435.0	Modify the davit systems for the lifeboats and FRB to prevent the accidental discharge of oil from the accumulator through the vent.	Kennicott	1-40
1	Auto Fire Dampers in MVZ Bulkheads	68.00	32,503.0	68.0	32,503.0	Modify and reroute exhaust through the tunnel. Additionally, relocate the safety valves themselves to provide easier access to the valves by using stand pipes.	Mataspina	1-40
1	Auto Fire Dampers in MVZ Bulkheads	240.00	32,743.0	240.0	32,743.0	Modify system so that operating mechanisms are readily accessible (Refer to VNT 008), and mark in red light-reflecting color.	Matanuska	1-40
1	Auto Fire Dampers in MVZ Bulkheads					Where new fire dampers will be needed, such as for the vehicle space (Refer to VNT 015), and where dampers must be relocated to provided manual closing from each side of the boundary.	Matanuska	1-40

		Project	Running	GF	Running		Location	Election
Dept.		Cost	Total	Cost	Total		(City)	District
Priority	Project Title	(\$000)	(\$000)	(\$000)	(\$000)	Project Description		
1	B' Class Door Openings	150.00	32,893.0	150.0	32,893.0	Passenger cabin doors must be modified (to meet regulations) so that the gap under the door is no greater than 78 in2.	Matanuska	1-40
1	Blige And Ballast Valve replacement	68.00	32,961.0	68.0	32,961.0	The bilge/ballast system valves should be replaced with new valves.	Matanuska	1-40
1	Bow Thruster Compartment mods	350.00	33,311.0	350.0	33,311.0	Install an inclined ladder similar to those on the Taku and Malaspina.	Matanuska	1-40
		5,800.00	39,111.0	5,800.0	39,111.0	Replace CPP pumps #1 port and #1 starboard with new pumps. Overhaul piping, valves and controls as necessary. Open OD box, remove all components. Replace all wear parts with new, replace all O-rings, seals, gaskets, etc. with new. Test run, certify to n	Matanuska	1-40
1	Controllable Pitch Propeller System	252.00	39,363.0	252.0	39,363.0	Cabling with poor insulation should be replaced by 2010. A full insulation survey should be done to determine where higher risk cables are. This item for partial only.	Matanuska	1-40
1	Electrical Cabling replacement	26.00	39,389.0	26.0	39,389.0	New transponders procured and installed at next recertification	Matanuska	1-40
1	Life Raft Radar Transponders	15.00	39,404.0	15.0	39,404.0	Correct the port of registration on the lifeboats.	Matanuska	1-40
1	Lifeboat registration	180.00	39,584.0	180.0	39,584.0	Repair or renew the lifeboat fiberglass covers.	Matanuska	1-40
1	Lifeboat covers	130.00	39,714.0	130.0	39,714.0	Chlorinators or other marine growth inhibitors should be installed in each seachest to prevent engine overheating and down time.	Matanuska	1-40
1	Marine Growth Inhibitor install	18.00	39,732.0	18.0	39,732.0	Make repairs/ replace handrail in fwd passageway	Matanuska	1-40
1	Passageway (Fwd) hand rail repair	56.00	39,788.0	56.0	39,788.0	Replace refer drawers with new.	Matanuska	1-40
1	Reefer Drawers (Salad Station)	56.00	39,844.0	56.0	39,844.0	Replace refer drawers with new.	Matanuska	1-40
1	Reefer Drawers (Second Cook Station)	37.00	39,881.0	37.0	39,881.0	Replace the reference cell with new using a CAPAC tech rep and parts. The lead time on this material is unknown so this will need to be research prior to the upcoming overhaul period.	Matanuska	1-40
1	Reference Cell Replacement	220.00	40,101.0	220.0	40,101.0	Replace muff couplings with new to overcome internal defects.	Matanuska	1-40
1	Shafting Coupling repair	34.00	40,135.0	34.0	40,135.0	REPLACE STEAM TABLE SHELF WITH NEW STAINLESS STEEL WITH HEAT LAMPS UNDERNEATH. HOOK UP WATER FILL SYSTEM TO HOT WATER WITH FLOAT VALVE OR AUTO STOP SO THAT IT DOES NOT OVER FLOW.	Matanuska	1-40
1	Steam Table Water Filling System & Heating Accommodation Spaces HVAC cleaning	160.00	40,295.0	160.0	40,295.0	Clean Accom space HVAC system.	Matanuska	1-40
1	Engineer's Operating Station Steel Repairs	220.00	40,515.0	220.0	40,515.0	The deck plate is wasted and is in need of replacement to remain compliant.	Taku	1-40
1	Steering Gear Compartment coatings	80.00	40,595.0	80.0	40,595.0	Renew coatings within the space with areas of complete failure receiving priority.	Taku	1-40
1	Steward's Stores steel repair	80.00	40,675.0	80.0	40,675.0	Determine the source of the leak and repair. Crop out bulkhead and renew with new steel plate.	Taku	1-40
1	Vehicle Space insulation repair	80.00	40,755.0	80.0	40,755.0	Remove the insulation around Main Deck as allowed by the USCG to prevent further insulation damage. Prep and paint area around the interface between the deck and the bulkhead to protect the hull and deck from corrosion. Area aft of insulation on Main De	Taku	1-40
1	Vehicle Space steel tie downs	160.00	40,915.0	160.0	40,915.0	Repair the damaged car deck turtles which will require extensive hot work. Correct the vehicle space ventilation controls according to design specifications from 2000 upgrade.	Taku	1-40
1	Vehicle Space Ventilation controls	90.00	41,005.0	90.0	41,005.0	Repair the damaged ducting.	Taku	1-40
1	Vehicle Space Ventilation repairs	130.00	41,135.0	130.0	41,135.0	Replace for repair the dampers that must be tied open.	Tustumena	1-40
1	Accommodation Ventilation Systems	60.00	41,195.0	60.0	41,195.0	Execute repair in accordance with the approved dwgs to appropriately support platform.	Tustumena	1-40
1	Fin Stabilizer Room Platform	90.00	41,285.0	90.0	41,285.0	Crop and renew affected steel.	Tustumena	1-40
1	Laundry space steel deck repair	110.00	41,395.0	110.0	41,395.0	Replace failing oil tank	Tustumena	1-40
1	Oil/Water Separator tank repair	40.00	41,435.0	40.0	41,435.0		Tustumena	1-40

Dept.	Project	Running	GF	Running	Project Description	Location	Election
Priority	Project Title	Cost (\$000)	Total (\$000)	Cost (\$000)	Total (\$000)	(City)	District
1	Port Main Engine overhaul	130.00	41,565.0	130.0	41,565.0	Engine is due for a 30,000 hour overhaul during next availability. At that time engine will have approx. 60,000 hours total.	Tustumena 1-40
1	Purser's Stateroom (S/R 108) PBX config	40.00	41,605.0	40.0	41,605.0	Reconfigure PBX to receive crew announcements in lieu of passenger stateroom announcements.	Tustumena 1-40
1	Side Port Door deck re-coat	30.00	41,635.0	30.0	41,635.0	The deck in way of the doors should be coated to reduce corrosion.	Tustumena 1-40
1	Std Main Engine overhaul	130.00	41,765.0	130.0	41,765.0	Engine is due for a 30,000 hour overhaul during next availability. At that time engine will have approx. 60,000 hours total.	Tustumena 1-40
1	Vehicle Space deck steel replacement	240.00	42,005.0	240.0	42,005.0	Make steel repairs to deck in way of vehicle doors.	Tustumena 1-40
2	Anchor Chain replacement	160.00	42,165.0	160.0	42,165.0	Replace shots 3-5.	Aurora 1-40
2	Blige And Ballast Pump replacement	20.00	42,185.0	20.0	42,185.0	The bilge/ballast pump is old and should be replaced.	Aurora 1-40
2	Bridge Catwalk Stanchions	18.00	42,203.0	18.0	42,203.0	Repair stanchions as required.	Aurora 1-40
2	Bridge Wings (P/S) steel repair	35.00	42,238.0	35.0	42,238.0	Renew steel under the port compass stand. Prep and paint to renew coatings on this area which is often neglected because it can not be accessed by the crew.	Aurora 1-40
2	Crew Shower/Head Aft	35.00	42,273.0	35.0	42,273.0	Replace the deck covering in the head and improve the lighting levels.	Aurora 1-40
2	Depth Sounder replacement	22.00	42,295.0	22.0	42,295.0	Replace the depth sounder.	Aurora 1-40
2	Docking Intercom System	65.00	42,360.0	65.0	42,360.0	Intercom system overhaul to include updated as-built conditions.	Aurora 1-40
2	Emergency Generator & Fan Room	25.00	42,385.0	25.0	42,385.0	Replace the door and frame with new	Aurora 1-40
2	Engine Room coatings	34.00	42,419.0	34.0	42,419.0	Clean bilge, monitor tank and recoat as needed.	Aurora 1-40
2	Engineers Head floor coverings	15.00	42,434.0	15.0	42,434.0	Replace deck covering. Prep and paint rust on door sill.	Aurora 1-40
2	Fast Rescue Boat (FRB) Davit coatings	38.00	42,472.0	38.0	42,472.0	Prep and paint FRB davit to protect steel structure.	Aurora 1-40
2	Forecastle Lookout Point	15.00	42,487.0	15.0	42,487.0	Prep and paint as required.	Aurora 1-40
2	Forepeak coatings	86.00	42,573.0	86.0	42,573.0	Localized blast and recoat the lower horizontal plating.	Aurora 1-40
2	Housestop coatings	96.00	42,669.0	96.0	42,669.0	Clean, renew, prime and repaint steel surfaces, as needed.	Aurora 1-40
2	MCC Room repair and coatings	60.00	42,729.0	60.0	42,729.0	Determine the cause of the visible corrosion and take corrective action.	Aurora 1-40
2	MSD tank repair/ replacement	80.00	42,809.0	80.0	42,809.0	Rebuild the V1 tank during the next availability with either Mild Steel or 316 Stainless Steel.	Aurora 1-40
2	Open Deck coatings	120.00	42,929.0	120.0	42,929.0	Structure should be sandblasted and painted, as needed in localized areas.	Aurora 1-40
2	Paint Locker coatings	40.00	42,969.0	40.0	42,969.0	The compartment needs to be thoroughly cleaned and the steel inspected for wastage. Renew steel where necessary. The space should be sand-blasted, primed and repainted.	Aurora 1-40
2	Purser's Information Desk HVAC	60.00	43,029.0	60.0	43,029.0	Improve ventilation to this space by modifying existing system	Aurora 1-40
2	Speed Log transducer	30.00	43,059.0	30.0	43,059.0	Repair/ replace existing transducer for speed log	Aurora 1-40
2	Steam And Condensate Piping replacement	140.00	43,199.0	140.0	43,199.0	The remaining sections of the existing steam piping should be replaced.	Aurora 1-40
2	Wheelhouse window leak repair	8.00	43,207.0	8.0	43,207.0	The remaining ACM insulation should be replaced with non-ACM.	Aurora 1-40
2	Additional Shorepower Connections	20.00	43,235.0	20.0	43,235.0	Replace window seal	Aurora 1-40
2	Black Water Tank level Indicator	15.00	43,255.0	15.0	43,255.0	Add additional 200 amp shore power connections near the forward starboard door and at the aft starboard mooring platform. If both connections are not possible the aft connection would be a higher priority than the forward.	Chenega 1-40
2	Bridge Console mods	6.00	43,270.0	6.0	43,270.0	Modify the Tank Level Indicator to provide more accurate results.	Chenega 1-40
2	Bridge Console mods	6.00	43,276.0	6.0	43,276.0	Modify the consoles to allow easy removal of the access panels to facilitate maintenance.	Chenega 1-40
2	Bridge Console mods	6.00	43,276.0	6.0	43,276.0	Increase ventilation inside the bridge consoles to cool the equipment.	Chenega 1-40

Dept.	Project	Running	GF	Running	Project Description	Location	Election
Priority	Project Title	Cost (\$000)	Cost (\$000)	Total (\$000)		(City)	District
2	Capstan area talk back speaker	18.00	18.0	43,294.0	Look at adding a talkback speaker in the Forepeak or modifying the controls to allow operation from the Forecastle Deck.	Chenega	1-40
2	Firemain valve replacement	26.00	26.0	43,320.0	Replace the check valves with a different material. Replace the iron ball valves with monel or stainless steel valves that will last longer in the marine environment.	Chenega	1-40
2	Water Jet hyd repair	10.00	10.0	43,330.0	Make repairs to hyd system to correct high temp.	Chenega	1-40
2	10-Inch Sewage Vent Line Replacement	80.00	80.0	43,410.0	Replace approximately 120-feet of vent piping.	Columbia	1-40
2	Air Compressor replacement	48.00	48.0	43,458.0	The two ships service/start air compressors should be replaced.	Columbia	1-40
2	Air Piping replacement	18.00	18.0	43,476.0	The compressed air piping should be replaced when new compressors are installed.	Columbia	1-40
2	Auxiliary Engine Room coatings	75.00	75.0	43,551.0	The bilge needs to be cleaned and painted.	Columbia	1-40
2	Battery Room coatings	16.00	16.0	43,567.0	Prep and paint the deck.	Columbia	1-40
2	Bilge And Ballast System mods	65.00	65.0	43,632.0	Modify the system to include independent piping for pumping out the ballast tanks. See specs developed during federal project 73780.	Columbia	1-40
2	Boiler re-tube	340.00	340.0	43,972.0	Replace the old tubing with new.	Columbia	1-40
2	Bow Thruster Compartment coatings	230.00	230.0	44,202.0	The compartment needs to be cleaned and the steel inspected for deterioration. Renew steel as necessary. Space should be blasted (SSPC-SP10) and coated.	Columbia	1-40
2	Bridge Toilet deck covering	15.00	15.0	44,217.0	New deck covering should be installed	Columbia	1-40
2	CCTV System modifications	180.00	180.0	44,397.0	Replace all cameras less the stack camera with a camera similar to the type installed at the AMHS terminals for security. Along with other components needed to control the cameras and record their images.	Columbia	1-40
2	Chain Locker coatings	160.00	160.0	44,557.0	Prep and coat P/S Chain lockers as needed.	Columbia	1-40
2	Crew Stairway deck coating/ covering	48.00	48.0	44,605.0	The stairways should be painted and deck covering replaced.	Columbia	1-40
2	Emergency Switchboard Batt Replacement	16.00	16.0	44,621.0	Replace emergency 120 volt batteries.	Columbia	1-40
2	Fan Room (100-104 Port) coatings	25.00	25.0	44,646.0	The deck should be cleaned and painted in the fan room.	Columbia	1-40
2	Fan Room (50-57 Port) coatings	25.00	25.0	44,671.0	The deck should be repaired to prevent further deterioration and possible structural problems.	Columbia	1-40
2	Fathometer replacement	26.00	26.0	44,697.0	Replace the fathometers with new equipment	Columbia	1-40
2	Fire Screen Door hold back install	90.00	90.0	44,787.0	Install a magnetic hold back for each door by extending the current magnetic hold back run from the nearest unit to each door. Hold backs should only be energized in port.	Columbia	1-40
2	Flushing Pumps replacement	36.00	36.0	44,823.0	The flushing pumps should be replaced.	Columbia	1-40
2	Fwd Observation Lounge window leaks	60.00	60.0	44,883.0	The window leaks should be repaired immediately. The torn upholstery should be repaired to prevent further deterioration.	Columbia	1-40
2	Main Deck to Second Deck Crew Quarters	60.00	60.0	44,943.0	Remove doors and door jams entirely, replace with new modern doors of same fire rating.	Columbia	1-40
2	Main Engine Pneumatic Control & Shutdown System	90.00	90.0	45,033.0	Remove pneumatic switches and associated tubing from Main Engines, Reduction Gears, and Turbo low oil pressure shutdowns and replace with modern electrical switches. Remove pneumatic Main Bearing high temp trips and replace with modern electronic sensors.	Columbia	1-40
2	Main Engine Room coatings	60.00	60.0	45,093.0	The bilge needs to be cleaned and painted.	Columbia	1-40
2	Mooring Compartment (Port) cable replace	13.00	13.0	45,106.0	The electrical cabling should be replaced.	Columbia	1-40
2	Mooring Compartment (Std) cable replace	13.00	13.0	45,119.0	The electrical cabling should be replaced.	Columbia	1-40
2	MSD Room coatings	48.00	48.0	45,167.0	The bilge needs to be cleaned and painted.	Columbia	1-40
2	No 5 DB FO Tank (C) Open and inspect	5.00	5.0	45,172.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40

Dept.	Project Title	Project Cost (\$000)	Running Total (\$000)	GF Cost (\$000)	Running Total (\$000)	Project Description	Location (City)	Election District
2	No 6 DB FO Tank (CI) Open and inspect	5.00	45,177.0	5.0	45,177.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40
2	No 7 DB FO Tank (CI) Open and inspect	5.00	45,182.0	5.0	45,182.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40
2	No 7 DB FO Tank (Port) Open and inspect	5.00	45,187.0	5.0	45,187.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40
2	No 7 DB FO Tank (Stbd) Open and inspect	5.00	45,192.0	5.0	45,192.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40
2	Observation Lounge window leaks & E lighting	75.00	45,267.0	75.0	45,267.0	This tank has not been surveyed in several years. Open and inspect tank	Columbia	1-40
2		18.00	45,285.0	18.0	45,285.0	The window leaks should be repaired immediately. The existing emergency lights should be replaced with new fixtures.	Columbia	1-40
2	OWS piping mods	15.00	45,300.0	15.0	45,300.0	The suction piping for the OWS should be relocated about 12 inches higher than the present location.	Columbia	1-40
2	Paint Locker door replacement	25.00	45,325.0	25.0	45,325.0	A stripping suction should be added from the oily water processing tank directly to the waste oil pump.	Columbia	1-40
2	Shaft Alley coatings	60.00	45,385.0	60.0	45,385.0	The steel plate door to this space should be replaced with a USCG approved fire door and frame. The bulkheads, deck and overhead should be cleaned and painted.	Columbia	1-40
2	Steam Piping replacement	25.00	45,410.0	25.0	45,410.0	Repair space coatings	Columbia	1-40
2	Steering Gear Room coatings	230.00	45,640.0	230.0	45,640.0	The steam piping and associated valves, traps and controls should be replaced. This may involve removal and disposal of ACM.	Columbia	1-40
2	Vehicle Doors modifications	12.00	45,652.0	12.0	45,652.0	Repair coatings	Columbia	1-40
2	Backup Power for Cell Phone Amplifier	230.00	45,882.0	230.0	45,882.0	The vehicle elevator cables and sheaves should be completely inspected for safety.	Columbia	1-40
2	Bottom Paint	68.00	45,950.0	68.0	45,950.0	Investigate adding vehicle elevator PLC/controls to UPS.	Columbia	1-40
2	Bow Thruster Tunnel Marine Growth Reduction	80.00	46,030.0	80.0	46,030.0	Emergency power is available from the spare circuit at Inverter #2	Columbia	1-40
2	Purser's Office and Stateroom improvements	15.00	46,045.0	15.0	46,045.0	Distribution Panel, located approximately six feet below the cell phone amplifier in the Bridge Electrical Room (BER).	Columbia	1-40
2	Radar Mast	8.00	46,053.0	8.0	46,053.0	Rewire the cell phone amplifier feeder cable.	Columbia	1-40
2	Railings	7.00	46,060.0	7.0	46,060.0	Each drydock the vessels underwater body paint shall be inspected. Due to the availability and cost of this paint, the underwater coatings should be planned one year in advance.	Columbia	1-40
2	Railings	82.00	46,142.0	82.0	46,142.0	Install two (2) Rolen-Star audio transducers on each of the bow thruster tunnels. These transducers shall be wired into the existing Hydrosonic Hull Tender oscillator unit on the forward side of bulkhead 31. Regulatory body approved transits shall be fi	Columbia	1-40
2	Searchlights	45.00	46,187.0	45.0	46,187.0	Remove the weatherlight door and rearrange the stateroom and office to provide a better office and living quarters	Columbia	1-40
2	Shaft Alley,	30.00	46,217.0	30.0	46,217.0	Prep and paint radar mast as required to eliminate active corrosion.	Columbia	1-40
2	Solarium					Perform a detailed survey of the railings pay particular attention to the stanchion/deck interface. Repair or renew railing sections are required on Sun Deck.	Columbia	1-40
2						Perform a detailed survey of the railings pay particular attention to the stanchion/deck interface. Repair or renew railing sections are required on Upper Deck.	Columbia	1-40
2						Install 2 new Carlisle Finch Model X9398-HRF Xenon Arc Searchlights	Columbia	1-40
2						Shaft alley is due to be prepped and painted.	Columbia	1-40
2						Solarium heaters need to be replaced. Solarium windows need to be replaced. Solarium should be painted.	Columbia	1-40

Dept.	Project	Running	GF	Running	Location	Election
Priority	Project Title	Cost (\$000)	Total (\$000)	Cost (\$000)	Total (\$000)	(City) District
2	Steam	10.00	46,227.0	10.0	46,227.0	1-40
2	Unixex Head	1.50	46,228.5	1.5	46,228.5	LeConte
2		22.00	46,250.5	22.0	46,250.5	LeConte
2	V1 & V2 Sewage Tanks	75.00	46,325.5	75.0	46,325.5	LeConte
2	Vehicle Space	42.00	46,367.5	42.0	46,367.5	LeConte
2	Weatheright Door	20.00	46,387.5	20.0	46,387.5	LeConte
2	CCTV System	13.00	46,400.5	13.0	46,400.5	Lituya
2	Re-Route Waste Oil Piping	12.00	46,412.5	12.0	46,412.5	Lituya
2	A/C Compressors Officers Qtrs	10.00	46,422.5	10.0	46,422.5	Malaspina
2	Accommodation	35.00	46,457.5	35.0	46,457.5	Malaspina
2	Accommodation Space Ventilation System	5.00	46,462.5	5.0	46,462.5	Malaspina
2	Accommodation Space Ventilation System	14.00	46,476.5	14.0	46,476.5	Malaspina
2	Aft Mens T/S	15.00	46,491.5	15.0	46,491.5	Malaspina
2	Auxiliary Machinery Room	400.00	46,891.5	400.0	46,891.5	Malaspina
2	Bow Thruster	10.00	46,901.5	10.0	46,901.5	Malaspina
2	Camera System	4.00	46,905.5	4.0	46,905.5	Malaspina
2	Chill Room	5.00	46,910.5	5.0	46,910.5	Malaspina
2	Chill Room	8.00	46,918.5	8.0	46,918.5	Malaspina
2	Circuit Breaker Panels	3.00	46,921.5	3.0	46,921.5	Malaspina
2	CO2 Room	12.00	46,933.5	12.0	46,933.5	Malaspina
2	Crews Head	6.00	46,939.5	6.0	46,939.5	Malaspina
2	Cross Passage	35.00	46,974.5	35.0	46,974.5	Malaspina
2	Deck Coatings	110.00	47,084.5	110.0	47,084.5	Malaspina
2	Electrical Cabling	25.00	47,109.5	25.0	47,109.5	Malaspina
2	Fan Room	20.00	47,129.5	20.0	47,129.5	Malaspina
2	Fan Rooms	15.00	47,144.5	15.0	47,144.5	Malaspina
2	Fantail					1-40

The steam and condensate piping is in fair condition. Traps, control valves, pipe insulation and other system components should be overhauled to keep the system operating at high efficiencies.

Replace rusted tiles. Fix deck drain & repair steel.

Sewage tanks should be sand blasted and painted in place of the annual patch repair work that has been done over the past few years.

Blast and paint the car deck to avoid corrosion of the steel deck.

Many of the weather tight doors are deteriorating. There are 7 on the vessel that are showing rust. Renew the door and jams with new SS weld in type doors

Install new camera and weather proof heated housing on front of Foc'sle house to view fore deck.

Install larger drain pans with larger diameter piping with a proper slope with correct slope for drainage.

The air conditioning system should be converted over to an EPA approved refrigerant other than R-134a.

Clean ducting which has been deferred for the past 7 years.

The ventilation systems serving the accommodation spaces should be inspected and ducting restrictions repaired. New humidifiers should be installed that inject potable quality steam into the air.

Add additional access covers in the overhead for rebalancing and cleaning of the system.

Repair leaking fixtures and renew decking.

Clean the bilge area and repair failed coating systems.

Capt. Sundt would like to see an omni-directional bow thruster such as those on the Columbia and Kennicott.

Install the previously purchased cameras to improve security aboard the vessel. System is capable of 16 views, currently only 6 are installed.

The door gasket should be replaced. The indicator light in the light switch should be replaced.

Inspect areas of corrosion, repair and recoat as necessary.

Check ID markings for all circuits.

Install an automatic hold back door, instead of the manual latch that is currently installed.

Repair leaks and recoat steel as necessary. Replace floor tiles and coving.

Apply non-skid that could be used to build up the low points on deck to eliminate potential areas of standing water. Renew coatings.

Remove existing and renew external deck coatings on Sun Deck

All electric cable should be meggered and replaced as required. Due to the age, it is suspected that the majority of the exposed wire will require replacing.

Repair and recoat steel as necessary. Descale and paint rusty pipes.

Renew filter housings to provide more effective air filtration. Improve access to filters if possible.

Prep and paint the fantail to prevent corrosion.

Dept.	Project Title	Project Cost (\$000)	Running Total (\$000)	GF Cost (\$000)	Running Total (\$000)	Project Description	Location (City)	Election District
2	Fwd Observation Lounge	30.00	47,174.5	30.0	47,174.5	The overhead paneling should be replaced when possible. Window leaks should be repaired.	Malaspina	1-40
2	Fwd Womens Head	20.00	47,194.5	20.0	47,194.5	Repair leaks and steel deck and recoat steel as necessary.	Malaspina	1-40
2	Liferaft Racks	3.00	47,197.5	3.0	47,197.5	Prep and paint the liferaft racks.	Malaspina	1-40
2	Main Engine Room	15.00	47,212.5	15.0	47,212.5	Clean, prep and paint foundations to extend life of equipment.	Malaspina	1-40
2	Marine Growth Inhibitors	12.00	47,224.5	12.0	47,224.5	Chlorinators or other marine growth inhibitors should be installed in each seachest.	Malaspina	1-40
2	Mens Head - Aft	5.00	47,229.5	5.0	47,229.5	Replace caulking and paint the space.	Malaspina	1-40
2	Mens Head Stbd	14.00	47,243.5	14.0	47,243.5	The toilets should be replaced and the space cleaned up and painted. As motor controllers are replaced, the control voltages should be changed to low voltage.	Malaspina	1-40
2	Motor Control Circuitry	32.00	47,275.5	32.0	47,275.5	Recommend building a coaming underneath the MSD system to catch the corrosive runoff that is causing multiple material failures under the equipment. MSD bilge needs spot scaling and coating.	Malaspina	1-40
2	MSD Room	40.00	47,315.5	40.0	47,315.5	Update the tank & void names on the vessel to create a standard for all future reference to the tanks & voids. This would include the Sounding Procedures, Fueling Manual, Stability Manual, Capacity Plan and General Arrangements. Update signage at tanks.	Malaspina	1-40
2	Naming Convention Officer/Crew Passage	4.00	47,341.5	4.0	47,341.5	Replace the deck covering.	Malaspina	1-40
2	Oil Fired Boiler	350.00	47,691.5	350.0	47,691.5	Replace boiler it has reached the end of it's effective service life	Malaspina	1-40
2	Public Address System	25.00	47,716.5	25.0	47,716.5	Balance the entire system.	Malaspina	1-40
2	Recreation Rooms	8.00	47,724.5	8.0	47,724.5	Replace worn carpet in the fwd and aft rec room	Malaspina	1-40
2	Satellite Antenna Foundation Pedestal	3.00	47,727.5	3.0	47,727.5	The old Sat Phones are no longer used due to the new system that was installed.	Malaspina	1-40
2	Shaft Alley insulation	10.00	47,737.5	10.0	47,737.5	Repair damaged insulation. (Insulation may be ACM)	Malaspina	1-40
2	Shaft Alley piping	5.00	47,742.5	5.0	47,742.5	Remove unused sewage pipes.	Malaspina	1-40
2	Shaft Alley sewage piping	10.00	47,752.5	10.0	47,752.5	Renew coatings on sewage and drain piping	Malaspina	1-40
2	Shaft Alley	17.00	47,769.5	17.0	47,769.5	Recommend spot scale and coat of the shaft alley bilge.	Malaspina	1-40
2	Shaft Alley Escape Trunk	6.00	47,775.5	6.0	47,775.5	The shaft alley should be cleaned and painted.	Malaspina	1-40
2	Ships Stores	5.00	47,780.5	5.0	47,780.5	Replace the deck covering.	Malaspina	1-40
2		500.00	48,280.5	500.0	48,280.5			1-40
2	Side Port Doors					These weather tight car doors are original and require maintenance, this is an old system, doors should be renewed with hydraulic type doors.	Malaspina	1-40
2	Steering Gear Compartment	12.00	48,292.5	12.0	48,292.5	Areas with coating failures should be repaired.	Malaspina	1-40
2		100.00	48,392.5	100.0	48,392.5	Doors are operated with pneumatic cylinders. Pins and bushings need to be renewed and change to hydraulic cylinders.	Malaspina	1-40
2	Stern Loading Doors					The steel plate door to this space should be replaced with a USCG approved fire door and frame.	Malaspina	1-40
2	Stewards Staterooms (Fwd)	7.00	48,399.5	7.0	48,399.5		Malaspina	1-40
2	Stewards Stores	7.00	48,406.5	7.0	48,406.5	The steel plate door should be replaced with a USCG approved fire door and frame.	Malaspina	1-40
2	Store Room	6.00	48,412.5	6.0	48,412.5	Replace shelves with better grade sheking and new floor grating.	Malaspina	1-40
2	Stores Locker	5.00	48,417.5	5.0	48,417.5	Replace the deck covering.	Malaspina	1-40
2	Transformers	12.00	48,429.5	12.0	48,429.5	Conduct a transformer survey. The transformers should be replaced with transformers designed for the new voltage ranges.	Malaspina	1-40
2	Underwater Body	325.00	48,754.5	325.0	48,754.5	Underwater hull coatings are nearly 10 years old and get annual patch work as needed. Blast and renew coatings.	Malaspina	1-40
2	Vehicle Deck	25.00	48,779.5	25.0	48,779.5	Improve lighting.	Malaspina	1-40

Dept.	Project	Running	GF	Running	Project Description	Location	Election
Priority	Project Title	Cost (\$000)	Total (\$000)	Cost (\$000)	Total (\$000)	(City)	District
2	Vehicle Deck	15.00	48,794.5	15.0	48,794.5	Malaspina	1-40
					Modernize the refrigeration van receptacles with supportable equipment.		
2	Vehicle Deck	20.00	48,814.5	20.0	48,814.5	Malaspina	1-40
					The valve seals need to be replaced or new valves installed at scuppers		
2	Vehicle Deck	25.00	48,839.5	25.0	48,839.5	Malaspina	1-40
					Modify hand rail on the sun deck to allow wheelchair access to the solarium.		
2	Wheelchair Access	25.00	48,864.5	25.0	48,864.5	Malaspina	1-40
					Deck has soft spot, suspect wasted steel under deck coatings. Remove coatings, repair steel, and renew coatings on the deck.		
2	Womens Head	12.00	48,876.5	12.0	48,876.5	Malaspina	1-40
					Poured flooring should be installed in this space to replace tile.		
2	Womens Head - Aft	15.00	48,891.5	15.0	48,891.5	Malaspina	1-40
					Pull new cable between Wheelhouse to B/T Compartment. Install cabling and headset for better communication to the B/T flat.		
2	1JV Circuit Between Wheelhouse & BT Compartment	5.00	48,896.5	5.0	48,896.5	Matanuska	1-40
					A new compressor oil needs to be found that properly lubricates the machines.		
2	AC Compressors	170.00	49,066.5	170.0	49,066.5	Matanuska	1-40
					The crew and passenger spaces accommodation systems should be completely replaced. Individual terminal reheat systems should be installed for the cabins. Potable quality steam humidifiers should be added to the system.		
2	Accommodation Space Ventilation Systems	3.00	49,069.5	3.0	49,069.5	Matanuska	1-40
					Replace foundation bolts.		
2	Aft Capstan	22.00	49,091.5	22.0	49,091.5	Matanuska	1-40
					Range, gauge, sandblast and paint. Include spot marks.		
2	Anchor Chain	3.00	49,094.5	3.0	49,094.5	Matanuska	1-40
					Repair drain pipe that has been patched.		
2	Bridge Wing Controls	2.00	49,096.5	2.0	49,096.5	Matanuska	1-40
					Replace plexiglass control covers and equipment consoles.		
2	Carpet	15.00	49,111.5	15.0	49,111.5	Matanuska	1-40
					Install new carpet in the bridge, officers quarters and passageway.		
2	Clean Stack, Crankcase Exhaust Fan & Motor	20.00	49,131.5	20.0	49,131.5	Matanuska	1-40
					Remove screens, fan and motor. Clean the entire area and motor. Meg motor, reinstall and test.		
2	Compressed Air Receivers	100.00	49,231.5	100.0	49,231.5	Matanuska	1-40
					Replace the compressed air receivers by 2010.		
2	Condensate Piping	75.00	49,396.5	75.0	49,396.5	Matanuska	1-40
					The boiler condensate piping should be replaced. The existing piping insulation is suspected to be ACM and should be removed and replaced.		
2	Cooling Piping	4.00	49,400.5	4.0	49,400.5	Matanuska	1-40
					The seawater cooling system for the propulsion system auxiliaries should be replaced with Cu-Ni and the pipe size increased.		
2	Fan Room No. 2	8.00	49,408.5	8.0	49,408.5	Matanuska	1-40
					Fix the forward bulkhead penetration and replace insulation.		
2	Forecast Deck	45.00	49,453.5	45.0	49,453.5	Matanuska	1-40
					Strip, prime and repaint approximately 1,700 square feet.		
2	Forward Observation Lounge	4.00	49,457.5	4.0	49,457.5	Matanuska	1-40
					Leaks in the overhead and window should be repaired immediately. An additional means of escape should be added to the space.		
2	Hanging Lifelocket Storage Boxes	10.00	49,467.5	10.0	49,467.5	Matanuska	1-40
					Install lower vents of the aft section of the boxes to reduce condensation and damage to the lifejackets.		
2	Lifboat Davits	20.00	49,487.5	20.0	49,487.5	Matanuska	1-40
					Prep and paint the areas of corrosion on the lifboat davits and associated equipment.		
2	Main Engine Cooling Pumps	30.00	49,517.5	30.0	49,517.5	Matanuska	1-40
					The seawater cooling pumps should be rebuilt/overhauled by 2010.		
2	Main Engine Room Supply System	10.00	49,527.5	10.0	49,527.5	Matanuska	1-40
					The MMR air supply system should be increased in capacity by 2010.		
2	Men's Head (Fwd)	44.00	49,571.5	44.0	49,571.5	Matanuska	1-40
					A new poured floor should be installed in this head.		
2	Men's Toilet/Shower in the Solarium	6.00	49,577.5	6.0	49,577.5	Matanuska	1-40
					This space should be refurbished in the next few years.		
2	Move E-Gen Voltage Regulator	20.00	49,597.5	20.0	49,597.5	Matanuska	1-40
					Remount regulator in the Switchboard, add multiple connector wire from E-Gen to switchboard and connect to regulator.		
2	No. 10 Port Wing Void	15.00	49,612.5	15.0	49,612.5	Matanuska	1-40
					Blast and recoat the lower sections and the aft bulkhead of this tank.		
2	No. 10 Stbd Wing Void	15.00	49,627.5	15.0	49,627.5	Matanuska	1-40
					Blast and recoat the lower sections of this tank.		
2	No. 10 Void (Centerline)	15.00	49,627.5	15.0	49,627.5	Matanuska	1-40

Dept.	Project Title	Project Cost (\$000)	Running Total (\$000)	GF Cost (\$000)	Running Total (\$000)	Project Description	Location (City)	Election District
2	No. 11 Stbd Wing Void	12.00	49,639.5	12.0	49,639.5	Blast and recoat the lower section fwd of FR 162 of this tank.	Matanuska	1-40
2	No. 2 DB Ballast	28.00	49,667.5	28.0	49,667.5	Recoating of this tank is recommended.	Matanuska	1-40
2	No. 4 DB FW Ballast (Port)	30.00	49,697.5	30.0	49,697.5	Recoating of this tank is recommended.	Matanuska	1-40
2	No. 4 DB FW Ballast (Stbd)	30.00	49,727.5	30.0	49,727.5	Recoating of this tank is recommended.	Matanuska	1-40
2	No. 11 Port Wing Void	18.00	49,745.5	18.0	49,745.5	Recoating of this tank is recommended.	Matanuska	1-40
2	Officers Mess & Crew Mess	6.00	49,751.5	6.0	49,751.5	Replace the officers quarters (water cooled) A/C unit with a new air cooled model.	Matanuska	1-40
2	Passageway (Aft-Steward Ctrs)	15.00	49,766.5	15.0	49,766.5	The space should be refurbished. Decking, bulkheads and overheads are old.	Matanuska	1-40
2	Passageway (Fwd Steward Ctrs)	15.00	49,781.5	15.0	49,781.5	The space should be refurbished. Decking, bulkheads and overheads are old.	Matanuska	1-40
2	Placards	3.00	49,784.5	3.0	49,784.5	The lifesaving placards are faded and stained, these should be renewed.	Matanuska	1-40
2	Purser's Office	18.00	49,802.5	18.0	49,802.5	Replace carpet. Install bulkhead cabinet at fwd bulkhead. Install undercounter shelves and cabinet. Add additional electrical outlets under counter.	Matanuska	1-40
2	Recliner Lounge	35.00	49,837.5	35.0	49,837.5	The deck covering and furniture should be replaced. The window leaks should be repaired as soon as possible to prevent deterioration of the deck.	Matanuska	1-40
2	Recreation Room	12.00	49,849.5	12.0	49,849.5	The deck covering should be replaced. The bulkheads should be painted.	Matanuska	1-40
2	Sanitary Pumps	14.00	49,863.5	14.0	49,863.5	Existing pumps were rebuilt 3 years ago, should be replaced with bronze double seal pumps.	Matanuska	1-40
2	Speed Log Transducer	18.00	49,881.5	18.0	49,881.5	Speed Log is very old and hard to have serviced, renew with a more modern unit.	Matanuska	1-40
2	Stairwell	5.00	49,886.5	5.0	49,886.5	Paint stairwell, and renew signage.	Matanuska	1-40
2	Steam Piping	60.00	49,946.5	60.0	49,946.5	There are remaining sections of the original steam piping that should be replaced. The ACM insulation should be removed and replaced.	Matanuska	1-40
Th	Transfer Pump	26.00	49,972.5	26.0	49,972.5	The fuel oil pump is rebuilt on a regular bases and is to small causing long fuel transfer times. Larger pumps and piping should be installed.	Matanuska	1-40
2	Wheelhouse Window	4.00	49,976.5	4.0	49,976.5	The portside window has popped out of the frame and is secured in place till it can be replaced.	Matanuska	1-40
2	Wheelhouse Heated Windows	21.00	49,997.5	21.0	49,997.5	Replace the three heated windows, controls and power supplies since only the center one works marginal.	Matanuska	1-40
2	Women's CG Locker	4.00	50,001.5	4.0	50,001.5	Prep and paint this space.	Matanuska	1-40
2	Women's Shower	18.00	50,019.5	18.0	50,019.5	Shower surrounds showing signs of rust, renew surrounds and repair deck coatings.	Matanuska	1-40
2	Women's Head (Aft)	12.00	50,031.5	12.0	50,031.5	The deck covering should be replaced before more deterioration leads to possible failure of the deck plate, and the sinks should be replaced.	Matanuska	1-40
2	Accommodation Spaces	30.00	50,061.5	30.0	50,061.5	Install new electric humidifiers throughout the ships ventilation system.	Taku	1-40
2	After Lounge	40.00	50,101.5	40.0	50,101.5	The deck covering and furniture is dated and worn out.	Taku	1-40
2	Battery Locker	4.00	50,105.5	4.0	50,105.5	The deck should be cleaned and repaired.	Taku	1-40
2	Boiler Condensate Tank	16.00	50,121.5	16.0	50,121.5	Replace with new tank which would have an epoxy coating on the inside to prevent corrosion.	Taku	1-40
2	Bow Thruster Machinery Space	8.00	50,129.5	8.0	50,129.5	Repair burn marks in the overhead. Renew deck coating.	Taku	1-40

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2	Elevator Controls	28.00	50,157.5	28.0	50,157.5	The 1980 elevator motor controller and elevator controls are obsolete, and should be updated.	Taku	1-40
2	Electrical Power Distribution	150.00	50,307.5	150.0	50,307.5	The eleven NA1B power panels should be replaced. The circuit breakers are no longer available and it will be necessary to replace the entire panel.	Taku	1-40
2	Engine Room Bilges	20.00	50,327.5	20.0	50,327.5	Clean bilges and recoat as required.	Taku	1-40
2	Exterior Deck, Upper Deck	65.00	50,392.5	65.0	50,392.5	Correct areas with coating failure.	Taku	1-40
2	Exterior Deck, Cabin Deck	30.00	50,422.5	30.0	50,422.5	Renew coatings as required to protect the exterior of the Cabin Deck.	Taku	1-40
2	Exterior Deck	18.00	50,440.5	18.0	50,440.5	Add deck drains in areas of standing water.	Taku	1-40
2	Fan Room	4.00	50,444.5	4.0	50,444.5	Recoat the deck.	Taku	1-40
2	Fire Alarm Label Plates	3.00	50,447.5	3.0	50,447.5	Update signage to match current alarm type.	Taku	1-40
2	Firemain Piping	200.00	50,647.5	200.0	50,647.5	Current piping is steel and carries salt water, many areas have been patched. Recommend replacement with 90:10 CuNi piping.	Taku	1-40
2	Forecastle	30.00	50,677.5	30.0	50,677.5	Renew coatings.	Taku	1-40
2	Foredeck / Ladderway	14.00	50,691.5	14.0	50,691.5	Remove doubler plate, crop out wasted steel and renew steel plate as required.	Taku	1-40
2	Forward Observation Lounge	40.00	50,731.5	40.0	50,731.5	Reseal the windows. Remove joiner panel to determine the extent of corrosion that has occurred to the bulkhead, repair and paint.	Taku	1-40
2	FRB Davit	35.00	50,766.5	35.0	50,766.5	Renew coatings and davit components as required.	Taku	1-40
2	Fuel Oil Purifier	225.00	50,991.5	225.0	50,991.5	The fuel oil purifier is used continuously whenever the vessel is in service. The average economic life of a purifier is 15-20 years, which it has reached.	Taku	1-40
2	Main Machinery Room Ventilation	22.00	51,013.5	22.0	51,013.5	The ventilation supply and exhaust ductwork should be fitted with silencers.	Taku	1-40
2	Mens Head (Fwd)	10.00	51,023.5	10.0	51,023.5	Repair leaks in piping behind joinery work and recoat the deck.	Taku	1-40
2	Mens T/S Shower & Dressing Room Area	14.00	51,037.5	14.0	51,037.5	Remove existing tile and check integrity of the steel underneath. Renew with a deck coating rather than tile.	Taku	1-40
2	Mens Toilet/Shower	12.00	51,049.5	12.0	51,049.5	The Cabin Deck Men's Toilet/Shower should be refurbished as it is very old and in poor condition.	Taku	1-40
2	Mens Toilet/Shower	9.00	51,058.5	9.0	51,058.5	The failed deck covering should be replaced.	Taku	1-40
2	Mens Toilet/Shower CG Locker	15.00	51,073.5	15.0	51,073.5	Repair bulkhead and replace deck covering. Replace label plate of the space. Renew the sink.	Taku	1-40
2	Mooring Compartment (Port & Stbd)	52.00	51,125.5	52.0	51,125.5	Renew coatings as required to protect the exterior of the space. Replace all ordinary steel foundation bolts with stainless-steel.	Taku	1-40
2	No 4 Double Bottom Ballast Tank-Port	28.00	51,153.5	28.0	51,153.5	Prep and paint as required.	Taku	1-40
2	No 4 Double Bottom Ballast Tank-Starboard	28.00	51,181.5	28.0	51,181.5	Prep and paint as required.	Taku	1-40
2	No 4 Fresh Water Tank-Port	36.00	51,217.5	36.0	51,217.5	Prep and paint as required.	Taku	1-40
2	No 4 Fresh Water Tank-Starboard	36.00	51,253.5	36.0	51,253.5	Prep and paint as required.	Taku	1-40
2	No. 3 Void (Ft. 47-61)	18.00	51,271.5	18.0	51,271.5	Prep and paint as required.	Taku	1-40
2	No. 4 Wing Void (Ft. 131-145)	18.00	51,289.5	18.0	51,289.5	Prep and paint as required.	Taku	1-40
2	Passenger Staterooms	4.00	51,293.5	4.0	51,293.5	Renew lifesaving placards.	Taku	1-40
2	Recreation Room	10.00	51,303.5	10.0	51,303.5	The forward and aft recreation rooms should be completely refurbished; carpet and appropriate underlayment and padding should be installed.	Taku	1-40
2	Scullyery	7.00	51,310.5	7.0	51,310.5	Replace broken window frame in scullery, water is leaking in this space.	Taku	1-40
2	Shaft Alley	6.00	51,316.5	6.0	51,316.5	Areas with coating failures should be repaired.	Taku	1-40

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2	Ship Service Switchboard	85.00	51,401.5	85.0	51,401.5	The old type ML breakers are no longer supported by the manufacturer and should be replaced as required with the FA or KA type. Some bus work may have to be done.	Taku	1-40
2	Signage	10.00	51,411.5	10.0	51,411.5	Update signage throughout the ships passenger area to be uniform and correct.	Taku	1-40
2	Steering Repeater	20.00	51,431.5	20.0	51,431.5	Install a steering repeater in the steering room which would be used during emergencies.	Taku	1-40
2	Tonnage Opening (Ft. 127-130 Stbd)	9.00	51,440.5	9.0	51,440.5	Renew coatings as required. Repair insulation.	Taku	1-40
2	Tonnage Opening (Ft. 127-130 Stbd)	16.00	51,456.5	16.0	51,456.5	Renew coatings as required. Repair insulation.	Taku	1-40
2	Top of Mooring Compartments (Port & Stbd)	5.00	51,461.5	5.0	51,461.5	Renew coatings as required. Repair insulation.	Taku	1-40
2	Upper Void (Ft. 47-61)	86.00	51,547.5	86.0	51,547.5	Mechanical spot paint repair needed. Remove old coatings by track blast and apply zinc which is less maintenance and protects the steel deck.	Taku	1-40
2	Vehicle Space	14.00	51,561.5	14.0	51,561.5	Some of the vehicle space drain do not function properly due to their location. Install new drains near the car doors.	Taku	1-40
2	Vehicle Space	35.00	51,596.5	35.0	51,596.5	The system should be thoroughly inspected and corroded sections renewed.	Taku	1-40
2	Vehicle Space Ventilation	1.00	51,597.5	1.0	51,597.5	Open tank and inspect during next available drydock period.	Taku	1-40
2	Void (1-35-0)	5.00	51,602.5	5.0	51,602.5	Fix plumbing issues and install new stall door handles.	Taku	1-40
2	Womens Head (Fwd)	12.00	51,614.5	12.0	51,614.5	Replace motor controllers on the anchor windlass	Tustumena	1-40
2	Anchor Windlass	11.00	51,625.5	11.0	51,625.5	Surfaces with loss of coating should be prepped and painted to help deter corrosion.	Tustumena	1-40
2	Bosun's Stores	5.00	51,630.5	5.0	51,630.5	Areas with coating failures should be repaired.	Tustumena	1-40
2	Bow Thruster Room	30.00	51,660.5	30.0	51,660.5	Prep & paint areas with active corrosion around the port & starboard bridge wings. Renew cable ties underneath railings.	Tustumena	1-40
2	Bridge Wings (P/S)	16.00	51,676.5	16.0	51,676.5	Repair or replace gate. Recover bar stools & benches.	Tustumena	1-40
2	Cocktail Lounge	14.00	51,690.5	14.0	51,690.5	Insert gunwale where dented, and paint effaced areas.	Tustumena	1-40
2	Collision Damage Repair	22.00	51,712.5	22.0	51,712.5	These pumps run continuously and have outlived their life span, they should be replaced.	Tustumena	1-40
2	Cooling Pumps	18.00	51,730.5	18.0	51,730.5	Install a Doppler Log to interact with the Stabilizer Fins.	Tustumena	1-40
2	Doppler Log	150.00	51,880.5	150.0	51,880.5	The original exterior cabling on the ship should be replaced with new cabling. All cable should be insulation-resistance checked.	Tustumena	1-40
2	Electrical Cabling	125.00	52,005.5	125.0	52,005.5	Replace all the exterior doors due to corrosion. Work will include steel deck replacement due to corrosion.	Tustumena	1-40
2	Exterior Doors	6.00	52,011.5	6.0	52,011.5	Repair insulation and repaint deck as required.	Tustumena	1-40
2	Fan Room	8.00	52,019.5	8.0	52,019.5	Areas with coating failures should be repaired.	Tustumena	1-40
2	Fin Stabilizer Compartment	20.00	52,039.5	20.0	52,039.5	The areas of corrosion prepped and painted.	Tustumena	1-40
2	Foosle Open Deck	20.00	52,059.5	20.0	52,059.5	Overhaul the lifeboat engines.	Tustumena	1-40
2	Life Boats	10.00	52,069.5	10.0	52,069.5	Repaint the deck in worn areas.	Tustumena	1-40
2	Machinery Casing	12.00	52,081.5	12.0	52,081.5	Repair deck drain, stalls & fix bulkhead.	Tustumena	1-40
2	Mens Forward Head	14.00	52,095.5	14.0	52,095.5	Areas with coating failures should be repaired. Additional lighting fixtures should be installed.	Tustumena	1-40
2	MSD Room	200.00	52,295.5	200.0	52,295.5	Perform upgrades on Tustumena similar to those being proposed for Step One of the AMHS Fleet MSD Upgrade project.	Tustumena	1-40
2	MSD System	15.00	52,310.5	15.0	52,310.5	Replace rusting antenna foundations on the House Top & paint all foundations.	Tustumena	1-40
2	Navigation Antenna Foundations	18.00	52,328.5	18.0	52,328.5	Reseal leaking windows as required.	Tustumena	1-40
2	Observation Lounge	9.00	52,337.5	9.0	52,337.5	Install new inset units with insulation sleeve around units. Install & attach new compressors making sure there is a good seal.	Tustumena	1-40
2	Officers Mess						Tustumena	

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2	Open Deck	80.00	52,417.5	80.0	52,417.5	Weather decks should be blasted and recoated.	Tustumena	1-40
2	Open Deck Aft of Solarium	15.00	52,432.5	15.0	52,432.5	Weather decks should be blasted and recoated.	Tustumena	1-40
		20.00	52,452.5	20.0	52,452.5	Replace brass drain covers as required to prevent foreign objects from entering the drain pipes. Add deck drains to eliminate standing water problems.	Tustumena	1-40
2	Open Deck, Exterior							
2	Open Deck, Exterior	12.00	52,464.5	12.0	52,464.5	Install a stop to prevent the gates & railings from striking each other and renew coatings. Coatings on railings need spot repair.	Tustumena	1-40
2	Open Deck, Exterior	2.00	52,466.5	2.0	52,466.5	Replace homemade vent protection with a softer type of protection.	Tustumena	1-40
2	Passenger Cabins	24.00	52,490.5	24.0	52,490.5	There are 4 passenger cabin bathrooms that have cracked bulkheads that should be renewed.	Tustumena	1-40
2	Public Shower (Port side)	4.00	52,494.5	4.0	52,494.5	Replace this interior door and frame	Tustumena	1-40
2	Purser's Office	22.00	52,516.5	22.0	52,516.5	The Chief Purser has some ideas on moving a joinery bulkhead to provide more space for both the office and the stateroom.	Tustumena	1-40
		15.00	52,531.5	15.0	52,531.5	Replace shelves with a better sea going pan type shell to prevent items from falling off.	Tustumena	1-40
2	Purser's Station							
2	Radar Mast	15.00	52,546.5	15.0	52,546.5	Prep and paint radar mast to stop corrosion.	Tustumena	1-40
2	Service Boat Crane	6.00	52,552.5	6.0	52,552.5	Install a new remove stop start switch by crane.	Tustumena	1-40
2	Shaft Alley	5.00	52,557.5	5.0	52,557.5	Spot paint repair needed.	Tustumena	1-40
		18.00	52,575.5	18.0	52,575.5			
2	Side Lounge & Vending Area					Rubber floor tile needs to be renewed, and benches recovered with vinyl.	Tustumena	1-40
		200.00	52,775.5	200.0	52,775.5	Solarium heaters need to be replaced. Solarium windows need to be replaced. Solarium should be painted.	Tustumena	1-40
2	Solarium							
2	Stairs, Exterior	6.00	52,781.5	6.0	52,781.5	Stairs are rusted and need coatings.	Tustumena	1-40
2	Steering Gear Compartment	6.00	52,787.5	6.0	52,787.5	The bilge needs to be cleaned and painted.	Tustumena	1-40
		20.00	52,807.5	20.0	52,807.5	Transformers are very old, new transformers should be installed with lower voltages.	Tustumena	1-40
2	Transformers							
		5.00	52,812.5	5.0	52,812.5	Overhead in wheelhouse is old and has several unused holes, renew ceiling panels.	Tustumena	1-40
2	Wheelhouse							
		10.00	52,822.5	10.0	52,822.5	Aft bulkhead has rust bleeding out of the walls, remove joinery panel, fix leak and reinstall joinery panels.	Tustumena	1-40
2	Women's Forward Head							