

**Aircraft and Vessel Repair and Maintenance****FY2005 Request: \$749,600****Reference No: AMD 6121****AP/AL:** Appropriation**Project Type:** Renewal and Replacement**Category:** Public Protection**Location:** Statewide**Contact:** Dan Spencer, Director, DAS**House District:** Statewide (HD 1-40)**Contact Phone:** (907)465-5488**Estimated Project Dates:** 07/01/2004 - 06/30/2005**Brief Summary and Statement of Need:**

The Department of Public Safety annually requests repair and maintenance funds for the DPS aircraft and vessels. These funds are for the repair, replacement and maintenance requirements of this department's aircraft and vessel fleet. For example, the funds will be used to rebuild vessel and aircraft engines and components when they reach the limits of safe useful life. Large marine diesel engines and aircraft engines require expert vendors to rebuild them. Many other components of vessels and aircraft must be maintained or replaced routinely to ensure safe operating conditions and comply with various safety regulations.

<b>Funding:</b>	<u>FY2005</u>	<u>FY2006</u>	<u>FY2007</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>Total</u>
Gen Fund	\$749,600	\$1,795,885	\$1,830,007	\$1,864,778	\$1,900,209	\$1,936,313	\$10,076,792
<b>Total:</b>	<b>\$749,600</b>	<b>\$1,795,885</b>	<b>\$1,830,007</b>	<b>\$1,864,778</b>	<b>\$1,900,209</b>	<b>\$1,936,313</b>	<b>\$10,076,792</b>

<input type="checkbox"/> State Match Required	<input type="checkbox"/> One-Time Project	<input type="checkbox"/> Phased - new	<input type="checkbox"/> Phased - underway	<input checked="" type="checkbox"/> On-Going
0% = Minimum State Match % Required		<input checked="" type="checkbox"/> Amendment	<input type="checkbox"/> Mental Health Bill	

**Operating & Maintenance Costs:**

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
<b>Totals:</b>	<b>0</b>	<b>0</b>

**Additional Information / Prior Funding History:**

Sec 1, Ch 82, SLA 2003, \$1,652,400

Sec 1, Ch 1, SLA 2002, \$1,200,000

Sec 1, Ch 61, SLA 2001, \$900,000; Sec 74(c), Ch 61, SLA 2001, \$300,000

Sec 1, Ch 135, SLA 2000, \$1,063,780

Sec 100, Ch 2, SLA 1999, \$975,000. Sec 131, Ch 139, SLA 1998, \$1,221,500.

Sec 82, Ch 100, SLA 1997, \$600,000 Sec 100, Ch 123, SLA 1996, \$750,000

Sec 135, Ch 103, SLA 1995, \$750,000 Sec 10, Ch 4, SLA 1994, \$800,000

**Project Description/Justification:**AIRCRAFT REPAIRS

This project allows for some of the yearly purchase of equipment needed to replace worn-out or obsolete equipment such as radios, landing gear, etc. It will purchase overhauls and repairs to department aircraft airframes, landing gear, and engines on an annual schedule. This is necessary to ensure the aircraft are airworthy, safe, and dependable.

For the department to carry out its public safety, law enforcement, and search and rescue responsibilities, it is essential that its aircraft are maintained in an airworthy, safe, and dependable condition. A minimum level of flying hours must be maintained to meet the department's enforcement objectives. Without adequate aircraft support, many aspects of the Alaska State Troopers' public safety and wildlife law enforcement efforts would be seriously impaired.

The Division of Alaska State Troopers Aircraft Section has complete maintenance responsibility for all DPS aircraft, including maintenance and replacement of engines, propellers, airframes, and electronics. FAA requirements, frequent maintenance, parts replacement, and re-fabrication are required. Adequate funding is essential to maintain a regularly scheduled overhaul and repair cycle for department aircraft. Aircraft maintenance cannot be sporadic and haphazard. Routine aircraft maintenance is especially critical as the time between airframe overhauls increase. Cessna aircraft and Piper Cubs should receive an overhaul of the airframe every 7 years, especially when operating in a corrosive saltwater environment. In fresh water and inland areas, these airplanes should be overhauled every 14 years, or 5,000 hours, whichever comes first. Any corrosion renders the aircraft no longer airworthy by manufacturer's standards and FAA regulations. Overhauling the airframes and landing gear will extend the life of the equipment and ensure a safe structural condition of the aircraft.

**VESSEL REPAIRS**

This project allows for some of the needed repairs, conversions, servicing, and maintenance for the Patrol Vessel (P/V) Stimson and the smaller vessels to ensure their safe and dependable operations during FY2005 and beyond. Routine preventative and annually scheduled maintenance for vessels of all sizes is necessary and cost efficient. As the operational life of some of the vessels is extended, maintenance becomes critical to the safety of the vessels and the crew. This project also allows for the purchase of equipment needed to replace worn out or obsolete equipment such as marine radios, global positioning systems, outboard engines, etc., as well as establish replacement dollars for vessels determined to be beyond economic repair. This is necessary to ensure that DPS vessels are seaworthy, safe, and dependable, meeting the needs of the public safety mission.

The state fisheries are changing and patrol emphasis for the region's smaller vessels are taking on new roles, including increased patrols relating to federal marine enforcement and Homeland Security concerns. All vessels are used for commercial fisheries enforcement and other trooper duties including search and rescue missions. Many of the larger vessels patrol the high seas all year, from Southeast Alaska to the Gulf of Alaska to the Bering Sea, in all weather and sea conditions. To patrol these fisheries in safe and dependable vessels, the division needs to provide a planned and scheduled maintenance program. The increasing demand in operations will also impact small vessel maintenance needs.

The department has also expanded its role with the inclusion of the Federal Joint Enforcement Agreement, Homeland Security, and boating safety enforcement concerns. This responsibility covers the largest coastline in the country.

While this Capital Project Request is for FY2005 only, maintaining the fleet is an ongoing process requiring the division to forecast needs based on prudent mariner practices, equipment manufacturer recommendations, and normal wear and tear. Deferred projects are weighed against newer concerns to determine the final priority listing for needed maintenance.

The majority of the smaller vessels, 23 ft and larger, operated and maintained by the department are quite old. Of the 18 operable vessels, 8 have seen less than 9 years of service. Nine vessels are 10 years or older with two being over 17 years in age. As the age of a vessel increases, so do maintenance and repair costs and the frequency of breakdowns. Sufficient funding must be available to maintain the vessels on a regular schedule.

The 156' Dutch Harbor based P/V Stimson is the largest vessel in the fleet and the only enforcement vessel in its class. It requires substantial maintenance to maintain its systems. The Kodiak based P/V Camai, the Cordova based P/V Churchill, and the Ketchikan based P/V Enforcer are the newest large members of the fleet and are expected to require only the standard annual inspections and safety equipment updates. Vessels need to be scheduled into shipyards four months or more in advance due to demands for service and the time needed to advertise and select successful bidders.

The department has implemented a program to upgrade the hull systems on the larger vessels, such as paint, zinc's, and valves to allow the dry-docking of the larger vessels to be extended from 2 years out to 3 possibly even 4 years. The P/V Woldstad completed this process in FY2004 and the Stimson is scheduled to complete the process in FY2005.

**DOCUMENTATION OF ESTIMATED CAPITAL COSTS**

The information below is based on projected maintenance needs at the time this document was written. Changing circumstances, equipment failure, etc., may result in reallocation of funds to within the aircraft and vessel fleet as needed.

**AIRCRAFT REPAIRS**

- 1. Detachment "A" Aircraft repair / overhaul  
(2 each PA-18's, C-185)

\$30,900

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2. Detachment "B" Aircraft repair / overhaul (6 each PA-18's, C-185, R-44)	47,300
3. Detachment "C" Aircraft repair / overhaul (10 each PA-18's, 2 each C-185's, C-206 amphibian, R-44)	138,300
4. Detachment "D" Aircraft repair / overhaul (6 each PA-18's, 2 each C-185's)	84,600
5. Emergency/contingency	<u>32,100</u>

**AIRCRAFT REPAIR / OVERHAUL TOTAL \$333,200****VESSEL REPAIRS**

1. P/V Stimson shipyard repairs	\$200,000
2. Southeast Region vessels maintenance and repairs	31,300
3. Kenai Region vessels maintenance and repairs	22,000
4. Western Region vessels maintenance and repairs	116,600
5. Statewide vessels maintenance and repairs	6,500
6. Emergency/contingency	<u>40,000</u>

**VESSEL OVERHAUL/REPAIRS TOTAL \$416,400****TOTAL CIP COSTS \$749,600**

In past years, the Aircraft and Vessel Repairs CIP were separate appropriations:

Aircraft CIP History - Budgeted - FY94 \$459,800, FY95 \$400,000, FY96 \$375,000; Combined in FY97 (Aircraft Share) \$398,600, Combined in FY98 (AC Share) \$383,000, Combined in FY99 (Aircraft Share) \$475,200, Combined in FY00 (Aircraft Share) \$478,000, Combined in FY01 (Aircraft Share) \$696,980, Combined in FY02 (Aircraft Share) \$613,250, Combined in FY03 (Aircraft Share) \$600,000, Combined in FY04 (Aircraft Share) \$795,910.

Vessel CIP History - Budgeted - FY94 \$570,400, FY95 \$400,000, FY96 \$375,000; Combined in FY97 (Vessel Share) \$351,400, Combined in FY98 (Vessel Share) \$217,000, Combined in FY99 (Vessel Share) \$746,300, Combined in FY00 (Vessel Share) \$497,000, Combined in FY01 (Vessel Share) \$402,800, Combined in FY02 (Vessel Share) \$586,750, Combined in FY03 (Vessel Share) \$600,000, Combined in FY04 (Vessel Share) \$856,490.

Combined CIP History - Budgeted - FY94 \$1,030,200, FY95 \$800,000, FY96 \$750,000, FY97 \$750,000, FY98 \$600,000, FY99 \$1,221,500, FY00 \$975,000, FY01 \$1,063,780, FY02 \$1,200,000, FY03 \$1,200,000 and FY04 \$1,652,400.