# Wildland Fire-Fighting Aircraft Maintenance FY2013 Request: \$500,000 Reference No: 54937

AP/AL: Appropriation Project Type: Life / Health / Safety

Category: Natural Resources

**Location:** Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40) Contact: Jean Davis

**Estimated Project Dates:** 07/01/2012 - 06/30/2017 **Contact Phone:** (907)465-2422

### **Brief Summary and Statement of Need:**

This is a new FY2013 capital project due to cost estimates that were finalized after the December 15 release of the Governor's budget. This request promotes the continued use of state-operated aircraft to provide Wildland Fire Suppression on state, private, and local lands. This proposal will allow for the authority to keep revenues collected from flying to be used for periodically scheduled and unscheduled aircraft maintenance. These maintenance costs exceed the capability of the annual operating budget and may occur once in several budget cycles. Many of these revenues are reimbursable from the federal government.

reimbursable from the federal government.								
Funding:	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	Total	
GF/Prgm	\$500,000		_		_		\$500,000	
Total:	\$500,000	\$0	\$0	\$0	\$0	\$0	\$500,000	
☐ State Match Required ☑ One-Time Project ☐ Phased - new				l - new	Phased - underv	vay 🗌 On-	-Going	
0% = Minimun	☐ Amend	ment	☐ Mental Health E	Bill				
Operating & Maintenance Costs:					Amour	nt	Staff	
Project Development:						0	0	
Ongoing Operating:				erating:		0	0	
One-Time Startup:				Startup:		0		
				Totals:		0	0	

# Additional Information / Prior Funding History:

#### **Project Description/Justification:**

This request will allow for the collection and expenditure of aviation recovery revenues based on the hours flown, receipts collected, and time at which the maintenance is necessary. The Division of Forestry operates 5 aircraft (i.e. 2 Pilatus PC-7's, 1 Shrike Aerocommander, 1 DeHavilland Beaver, and 1 Turbine Aerocommander) used in the suppression of wildland fires. These aircraft have numerous roles that include: detecting and monitoring fires, directing airtankers to targets, transporting personnel and cargo, and providing a safe environment (air traffic control) for all aircraft and fire-fighters responding to an incident. The state has an ownership obligation to repair and maintain its assets in airworthy condition.

These aircraft are maintained in accordance with FAA flight regulations and are subject to periodic scheduled maintenance. Typical inspections are scheduled at the following intervals: every 100-hours ("100-hour inspection.") and once a year "(annual inspection"). Engines are overhauled at specific time intervals established by the manufacturer, but the dates on which the services are necessary are variable depending on the seasonal utilization of the aircraft.

## Wildland Fire-Fighting Aircraft Maintenance

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Aircraft part inspections are also based a number of hours (i.e. 50-hours) or a specific amount of time (i.e. every two years) that a specific part has been in place. Non-scheduled maintenance occurs when an aircraft needs repair to maintain its airworthiness. Certain major maintenance items may occur over the span of several fire seasons and will not be within the capability of the normal annual operating budget.

As aircraft are dispatched and mobilized to specific wildland fires, the fire is charged an hourly rate. This rate is currently being established by Maximus, Inc. a third party contractor with the Department of Administration, Division of Finance, who has experience in developing aircraft rates that are in compliance with OMB Circular A-87 (this circular establishes allowable costs that are chargeable to the federal government).

Examples of periodic maintenance needs and estimated costs are shown below:

<u>Pilatus PC-7 Maintenance (901AK/902AK)</u> aircraft averages 200 hours of flying per year 100-hour maintenance (every 100 hours)

o Estimated \$7.0 to \$8.0

Annual maintenance (once per year, est. \$7.0 to \$8.0)

Intermediate Inspection (every 1500 hours)

- o i.e. Hot section inspection of turbine engine
- o Estimated cost \$50.0

High Time Inspection (every 3,000 hours,)

- o i.e. Non-destructive landing gear inspection
- Estimated cost \$20.0

Engine Overhaul (every 3,000 hours)

- Minimum cost approximately \$250.0 to \$350.0
- Normal cost approximately \$400.0
- Max cost approximately \$800.0

Some of the inspections are at various time-limited intervals based on its "military heritage."

- o every 13 years the seat belts need to be replaced at a cost of \$18.0 per belt
- o oxygen knob replacements every 2 years, est. \$10.0 per aircraft
- o Propeller maintenance every 5 years. Estimated cost \$4.5

#### A/C-500 Shrike Maintenance (909AK) aircraft averages 200 hours of flying per year

100-hour maintenance (est. \$8.0 to \$10.0)

Annual maintenance (est. \$8.0 to \$10.0)

Airworthiness Directive (AD) Maintenance

Wing Spar AD's

Engine overhauls (every 2,000 hours, est. every 10 years) - Estimated cost is \$100.0 (\$50/engine)

#### DHC-2 Beaver Maintenance (904AK) aircraft averages 100 hours of flying per year

100-hour maintenance (Estimated Cost \$3.5)

Annual maintenance (Estimated Cost \$3.5)

Engine overhauls (every 1400 hours, est. every 14 years) - Estimated cost \$20.0