

# WSDOT Aviation Division & Office of Emergency Management:

## Report to the Joint Transportation Committee

*“Aviation Search and Rescue Study”*

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**September 11, 2013**





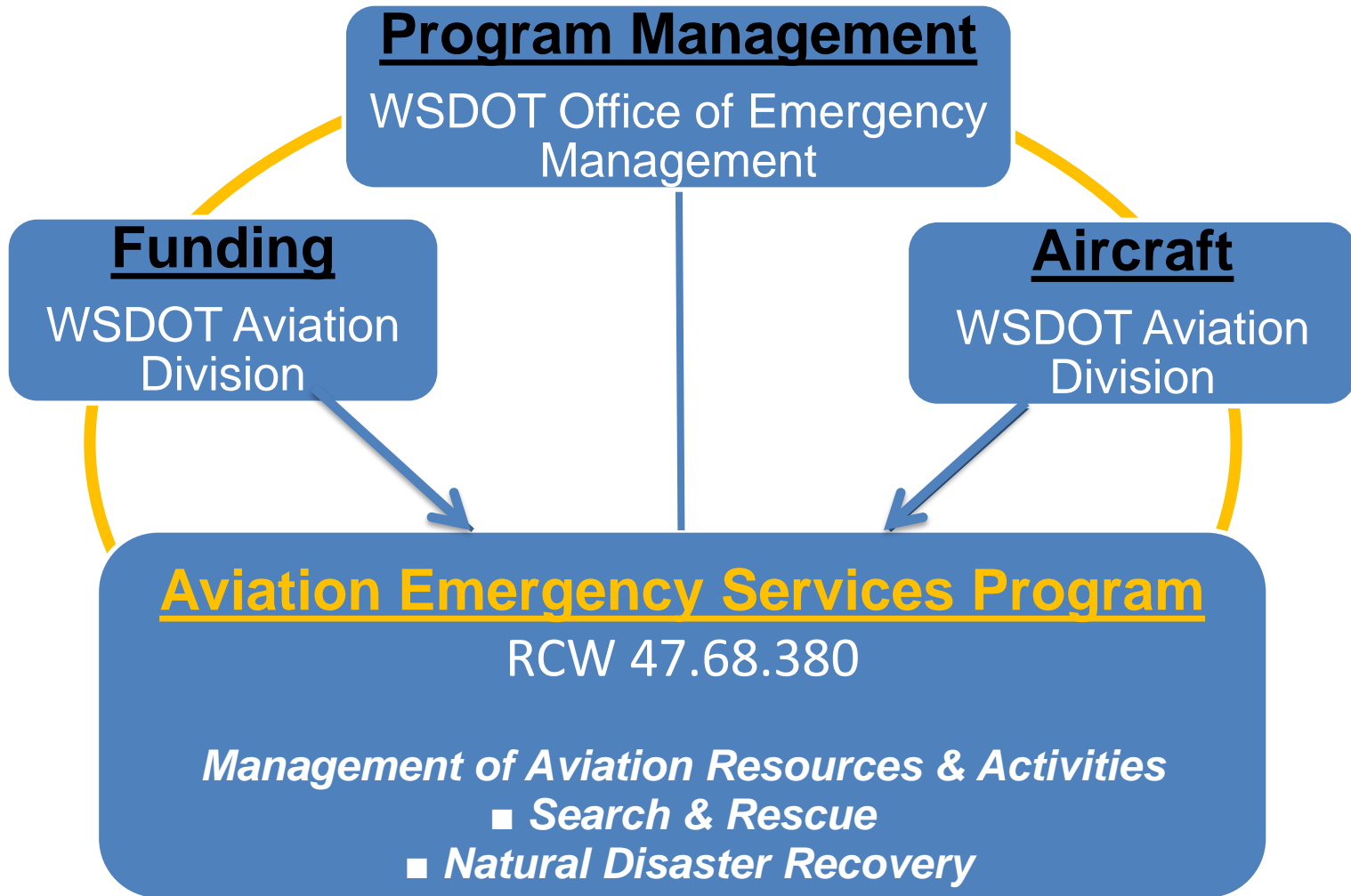
# Presentation Agenda

- Aviation Emergency Services Program Structure
- JTC Aviation Search and Rescue (ASAR) Study Overview
- Purpose of today's presentation
- Aviation Search and Rescue (ASAR) Recommendations
- Conclusion
- Questions



# Aviation Emergency Services Program

## Structure





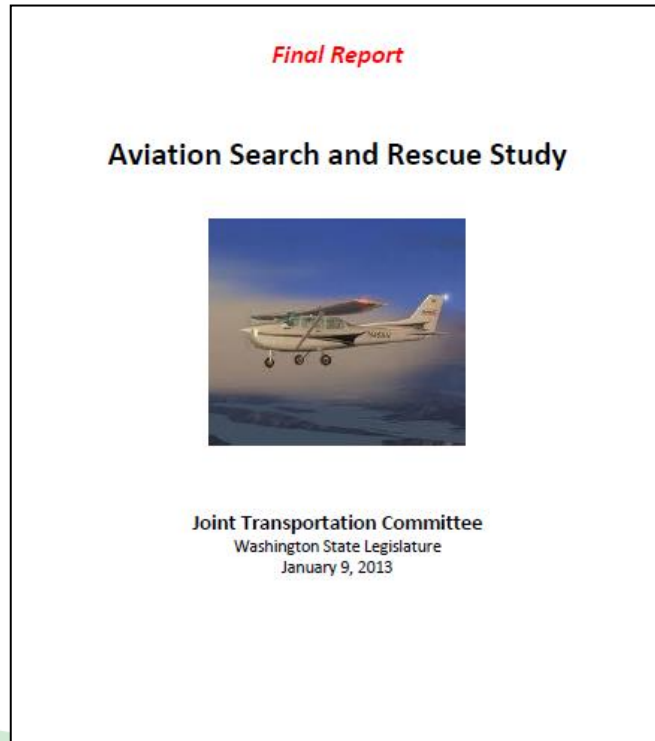
# Aviation Search and Rescue (ASAR) Study

- On March 23, 2012, the Legislature directed the Joint Transportation Committee to evaluate the most appropriate organization for the aviation search and rescue (ASAR) program.
- As directed in ESHB 2190, Sec. 204(5), the study was to address the following issues:
  1. Where the aviation search and rescue operations should be located to provide the maximum benefit for these searches;
  2. How the duplication of services and training should be addressed;
  3. Whether the current structure is the best use of state and federal funding; and
  4. If aviation search and rescue is relocated, what should be the source of funding?



# Purpose of today's presentation

**The purpose of this presentation** is to outline the steps that the Washington State Department of Transportation (WSDOT) has taken to implement the 13 recommendations of the January 2013 Joint Transportation Committee (JTC) report regarding Aviation Search and Rescue.





# ASAR Report Recommendations

The ASAR report, accepted by the Joint Transportation Committee in January 2013, identified 13 recommendations in addressing the study issues.

Those recommendations were broken into three broad categories:

- **WSDOT administration of Air Search and Rescue**
- **Air Search and Rescue Training**
- **Enhancements to General Aviation Safety**

**Recommendation 1**- The Washington ASAR program should remain in WSDOT.

**WSDOT input:** Concur

**Actions taken:** Not /Applicable

**Next steps:** Not /Applicable

**Recommendation 2- WSDOT should assess whether the ASAR program should remain in the WSDOT Office of Emergency Management, or be moved to the Aviation Division.**

**WSDOT input:** WSDOT conducted an assessment in 2011 and determined that the Office of Emergency Management (OEM) was the best location for the ASAR program. WSDOT re-evaluated its decision following the release of the report early 2013, and determined the program was located in the appropriate office.

**Actions taken:** Not/Applicable

**Next steps:** Not/Applicable



**Recommendation 3- WSDOT should cross-train existing WSDOT staff to lead air searches, in order to provide back-up to the aviation emergency coordinator. (Some cross-training is occurring, and it should continue.)**

**WSDOT input:** Concur

**Actions taken:** OEM has and continues to conduct a cross-training program for staff.

**Next steps:**

- 1) Continue to cross-train personnel and develop resource documentation.
- 2) Conduct training and certification.
- 3) Submit a budget decision package that includes an additional FTE for the Aviation Emergency Services program.

**Recommendation 4- WSDOT should take steps to make the ASAR program more transparent to its cooperating agencies and volunteers. This includes transparency in policies and process, agreements with stakeholder groups, methods for making search assignments, and criteria for assignment to ASAR volunteer rosters.**

**WSDOT input:** Concur.

**Actions taken:** This has been an ongoing effort by the WSDOT OEM and has included the following completed actions:

- 1) The MOU with Civil Air Patrol is ready to renew and will be completed by Sept 30, 2013.
- 2) The MOU with Washington Air Search and Rescue is in the final stages of being ready to sign and will be completed by 30 Sept 2013.

## Recommendation 4 (continued)—

### **Actions taken:**

- 3) WSDOT has a current MOU with the Emergency Management Division and the U.S. Air Force.
- 4) Aviation Emergency Services (AES) Web pages are being reviewed to better provide updated and useful information to customers. This process will be completed by September 30, 2013.
- 5) Search assignment criteria is already listed in WAC 468-200.

### **Next steps:**

- 1) Continue website improvements to provide useful, updated information for our stakeholders and partners.

**Recommendation 5- WSDOT should work more closely with CAP, WASAR and other aviation stakeholders to improve relationships with those organizations, including holding regular meetings to maintain good working relationships and improve the flow of information.**

**WSDOT input:** Concur.

**Actions taken:** This has been an ongoing effort by the WSDOT OEM and includes the following completed actions:

- 1) Created a Flight Line Support Team in collaboration with CAP. This includes furnishing a CAP-owned trailer with WSDOT-supplied equipment to support fixed-wing-aircraft operations at emergency and training operations. This team greatly improves overall safety of the operation as well as highly increases the readiness of aircraft to return-to-flight assignments.

## Recommendation 5 (continued)—

### **Actions taken:**

- 2) Coordinated with other aviation organizations and agencies to create and strengthen partnerships. WSDOT meets with the NW Regional Aviation Group at their bi-monthly meetings and special training activities.

### **Next steps:**

- 1) Continue to collaborate with volunteer groups to enhance and maintain response capabilities.
- 2) Develop a budget decision package that includes an additional FTE that will conduct more frequent meetings and training with our ASAR volunteer organizations.

**Recommendation 6- WSDOT should report to the Joint Transportation Committee by September 1, 2013, on steps taken to implement recommendations contained in this report.**

**WSDOT input:** Concur.

**Actions taken:** Report completed.

**Next steps:** Manage the timely completion of the “next steps” identified in this report and ensure follow up to sustain “actions taken”.



# Air Search and Rescue Training

**Recommendation 7- WSDOT and CAP, in cooperation with WASAR and others, should coordinate ASAR training courses to maximize the effectiveness of limited resources.**

- *To the extent possible, courses offered by WSDOT and CAP should be uniform to provide transferability at course completion.*
- *Course materials should, to the extent practical, be developed jointly and shared among organizations conducting training.*
- *WSDOT should explore opportunities to utilize qualified instructors, including CAP and WASAR instructors for training using WSDOT approved media in order to reduce workload on paid staff.*

**WSDOT input:** Concur.



# Air Search and Rescue Training

## Recommendation 7 (continued)—

**Actions taken:** This has been an ongoing effort by the WSDOT OEM and includes the following completed actions:

- 1) Conducted training over the past 12 months: 14 courses over 25 days, totaling 4,800 personnel hours. Training continues to be an ongoing and collaborative effort using CAP and WASAR instructors training volunteer personnel.
  - a. The courses are directed by WAC using current best practices, ensuring that quality and safe training is conducted.
  - b. The amount of training conducted is limited by availability of qualified volunteer staff, number of weekends open, and aircraft available.
  - c. Course material is not released for public dissemination to ensure the integrity of content and security for testing. It is also being constantly updated to add new information and improve delivery methods.





# Air Search and Rescue Training

## Recommendation 7 (continued)—

### **Actions taken:**

- 2) Conducted Volunteer Instructors meetings regularly during the training cycle to review upcoming events and to discuss training-related issues. In the past 12 months, 8 meetings have been conducted.

### **Next steps:**

- 1) Continue to provide training to ensure there is no degradation of current levels of service with volunteer groups and to maintain response capabilities.
- 2) Develop a budget decision package that includes an additional FTE to assist OEM with the development, coordination, and delivery of training with our ASAR volunteer organizations.



# Air Search and Rescue Training

**Recommendation 8- WSDOT should work to expand ASAR training course offerings in Central and Eastern Washington, to make it easier for Central and Eastern Washington pilots to participate in ASAR.**

**WSDOT input:** Concur; however, effective implementation of this recommendation may require additional staffing.

**Actions taken:** This has been an ongoing effort by the WSDOT OEM and has included the following completed actions:

- 1) Courses have been conducted in Central and Eastern Washington to reach volunteers in those areas. The following courses have been conducted or are scheduled to occur in Spokane:
  - a. New volunteer-orientation class held on December 15, 2012 (13 students)
  - b. Mission Scanner ground school session held on March 23-24, 2013 (10 students)



# Air Search and Rescue Training

## Recommendation 8 (continued)—

- c. Aircrew Survival classroom session is scheduled for September 21-22, 2013.
- 2) In May at the Washington State Search and Rescue Conference held in Ellensburg, a class was presented on Air Operations for SAR and Air Resources II (29 students).

### **Next steps:**

- 1) Continue to leverage existing resources and seek opportunities to conduct training across the state or to bring students from Eastern Washington to courses being conducted in Western Washington.
- 2) Develop a budget decision package that includes an additional FTE and an increase in the training budget that will allow an increase in training for Eastern Washington.



# Air Search and Rescue Training

**Recommendation 9- WSDOT should more clearly designate training required to participate in ASAR missions.**

**WSDOT input:** Concur

**Actions taken:** The OEM has completed the following actions:

- 1) All new volunteers are required to attend an orientation course which includes information on the RCW/WAC requirements to participate in the program. Additionally examples of past missions are presented to enable the new volunteer to assess the time requirements, work conditions, and operations flow of aviation emergency services missions. This requirement has been in place since 1996. WAC 468-200-120

**Next steps:**

- 1) In conjunction with recommendation 4, review Aviation Emergency Services (AES) website to ensure adequate information is available to explain the process.



# Enhancements to General Aviation Safety

**Recommendation 10**- Organizations involved in general aviation should strongly encourage pilots to file flight plans or leave itineraries for every flight.

**WSDOT input:** Concur

**Actions taken:** The WSDOT Aviation division has led this educational effort with the following actions:

- 1) Incorporated this message into presentations and discussions with pilot groups such as the Washington Pilots Association .
- 2) Posted an article on the WSDOT Blog, “Preflight checks: Can we find you?” that included information on filing a flight plan.  
<http://wsdotblog.blogspot.com/2012/08/pre-flight-check-can-we-find-you.html>
- 3) Media release on the Aviation email notification system (ListServe) - Pilots: check for temporary flight restrictions due to Washington wildfires  
<http://www.wsdot.wa.gov/News/2012/09/WildfireTFRs.htm>



# Enhancements to General Aviation Safety

## Recommendation 10 (continued)—

### **Actions taken:**

- 4) Developed a webpage on the WSDOT Aviation website called, “Pilots Page” that includes educational sections on filing flight plans.

### **Next steps:**

- 1) Complete an annual media release on the Aviation ListServe that encourages pilots to file flight plans.
- 2) Work with the WPA and other pilot organizations to leverage the annual media release into a minimum of two stakeholder newsletter articles.
- 3) Develop a flyer insert to distribute with WSDOT’s annual notification of aircraft registration.
- 4) Improve the WSDOT “Pilots Page” webpage.



# Enhancements to General Aviation Safety

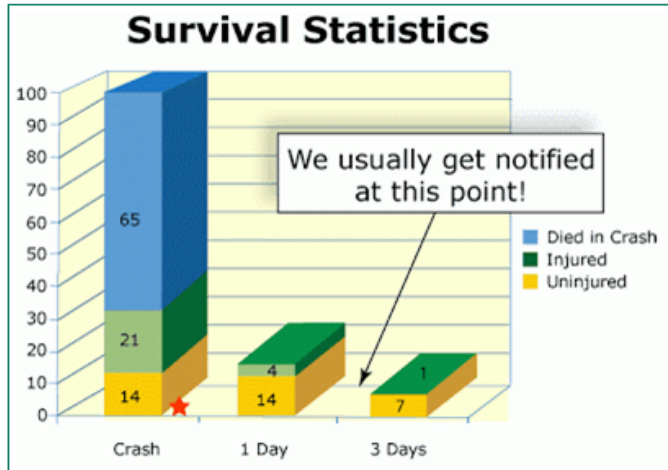
## Pre-flight check: Can we find you?

Thursday, August 9, 2012

Posted by WSDOT

0 Comments

On July 23, we got that dreaded call: someone wasn't where they were supposed to be. A pilot, flying his home-built airplane, didn't show up. Family members notified authorities and WSDOT Aviation launched an air search.



Working out of the Wenatchee airport, searchers flew grid patterns (based on the route he most likely took), scoured mountainous terrain and chased leads. Sadly - after six and a half days of searching, dried-up leads and exhausted resources – we had to suspend the search.

When a plane goes missing, it's a race against the clock to try to get as much information as possible. When hours turn into days, the chances of a favorable outcome decrease drastically.

So now we have a sobering reminder to pilots and anyone who cares about someone who flies. No one wants to think they might one day be the subject of a search. However, the old adage –“expect the best and prepare for the worst” might just be the key to saving a pilot's (and any passengers') life.

Our goal is no plane ever goes missing. But if the worst happens, here are some things that will make it easier for emergency crews to find the plane faster:

**File a flight plan** – A flight plan will tell searchers where you were heading and your intended route. This information can be critical during a search.

**Use flight following** – Talking to air traffic control (ATC) during your flight can pay dividends if you go missing. ATC would have radar information and details about when they last spoke to you, where you were heading, and if you had reported any in-flight troubles.

**Make sure you have an operational emergency locator transmitter** – The key word here is “operational.” Check it out every so often to make sure it's working. ELTs transmit distress signals in emergencies and help search crews find your location. ELTs are required in most U.S. registered civil aircraft.

**Consider investing in a new 406 ELT** – Several years ago, a more advanced model of the ELT (406 mhz) was developed. This version will cost around \$550 per unit, but has an 80 percent chance of activating upon impact. And it will tell searchers your tail number and exact location. This could mean the difference between hours and minutes when it comes to searches.



# Enhancements to General Aviation Safety

**Recommendation 11- Organizations involved in general aviation should conduct on-going pilot safety education about the importance of using emergency beacons and following other flight safety policies.**

**WSDOT input:** Concur

**Actions taken:** The WSDOT Aviation division has led this educational effort with the following actions:

- 1) Incorporated this message into presentations and discussions with pilot groups such as the WPA
- 2) Posted an article on the WSDOT Blog, “Preflight checks: Can we find you?” that included information on the importance of an operational ELT.  
<http://wsdotblog.blogspot.com/2012/08/pre-flight-check-can-we-find-you.html>
- 3) Developed a webpage on the WSDOT Aviation website called, “Pilots Page” that includes the importance of maintaining and utilizing emergency beacons.





# Enhancements to General Aviation Safety

## Recommendation 11 (continued)—

### Next steps:

- 1) Complete an annual media release on the Aviation ListServe that encourages pilots to maintain and check their ELTs.
- 2) Work with the WPA and other pilot organizations to leverage the annual media release into a minimum of two stakeholder newsletter articles.
- 3) Develop a flyer insert to distribute with WSDOT's annual notification of aircraft registration.
- 4) Improve the WSDOT "Pilots Page" webpage



# Enhancements to General Aviation Safety

**Recommendation 12**- The Aircraft Owners and Pilots Association, in conjunction with WSDOT and others, should encourage aircraft owners to equip their aircraft with 406 emergency beacons.

**WSDOT input:** Concur

**Actions taken:** The WSDOT Aviation division has led this educational effort with the following actions:

- 1) Incorporated this message into presentations and discussions with pilot groups such as the WPA.
- 2) Posted an article on the WSDOT Blog, “Preflight checks: Can we find you?” that included information on 406 MHz ELTs.  
<http://wsdotblog.blogspot.com/2012/08/pre-flight-check-can-we-find-you.html>
- 3) Developed a webpage on the WSDOT Aviation website called, “Pilots Page” that includes educational sections on the benefits utilizing a 406 MHz ELT.

## Recommendation 12 (continued)—

### Next steps:

- 1) Complete an annual media release on the Aviation ListServe that encourages pilots to equip their aircraft with a 406 MHz ELTs.
- 2) Work with the WPA and other pilot organizations to leverage the annual media release into a minimum of two stakeholder newsletter articles.
- 3) Develop a flyer insert to distribute with WSDOT's annual notification of aircraft registration.
- 4) Improve the WSDOT "Pilots Page" webpage



# Air Search and Rescue Training

**Recommendation 13**- Aircraft registration renewals, aviation newsletters and magazines, and community colleges aviation courses should all be employed to enhance general aviation safety awareness.

**WSDOT input:** Concur

**Actions taken:** See actions reported in Recommendations #10-12 above.

**Next steps:** See planned steps reported in Recommendations #10-12 above.



# Conclusion

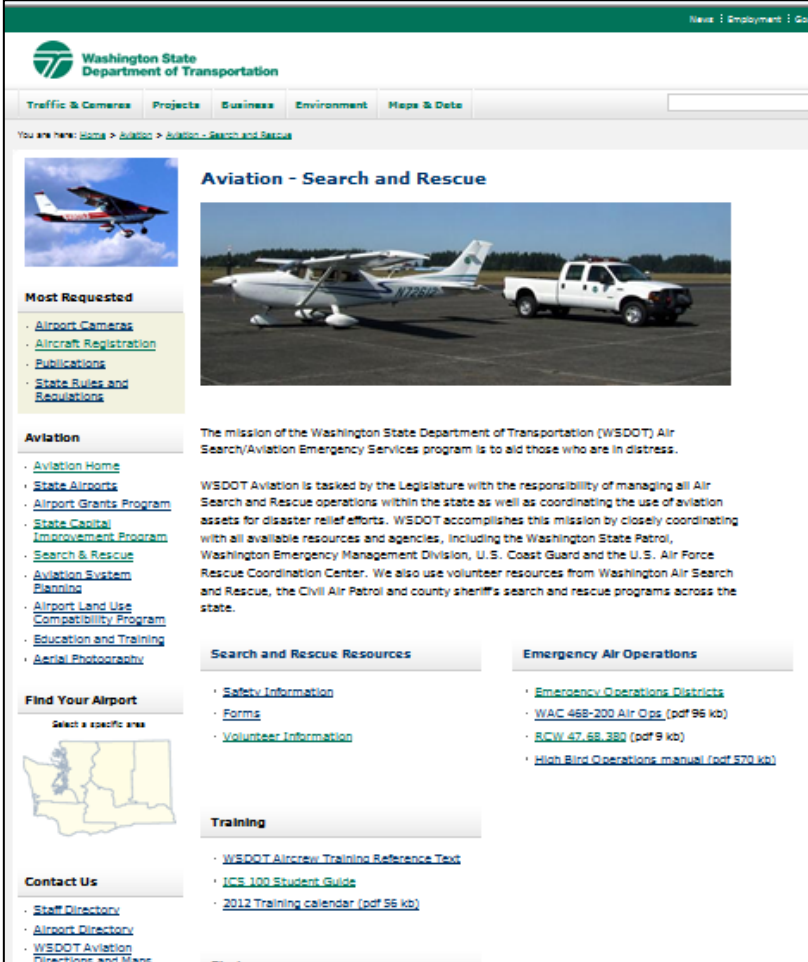
- ✓ WSDOT found the JTC Aviation Search and Rescue study extremely useful in developing our strategy to improve this important program.
- ✓ WSDOT is committed to implementing the next steps identified in this report.
- ✓ The implementation will be jointly managed by the Maintenance Operations Division/Office of Emergency Management and the Aviation Division.



# More Information

## WSDOT Aviation- Search and Rescue Website:

<http://www.wsdot.wa.gov/aviation/SAR/>



The screenshot shows the WSDOT Department of Transportation website for the Aviation Search and Rescue program. The page features a navigation menu with links for Traffic & Cameras, Projects, Business, Environment, and Maps & Data. The main content area is titled "Aviation - Search and Rescue" and includes a large image of a small aircraft on a runway next to a white pickup truck. Below the image, there are several sections: "Most Requested" with links to Airport Cameras, Aircraft Registration, Publications, State Rules and Regulations, and Aviation; "Aviation" with a mission statement and a list of links including Aviation Home, State Airports, Airport Grants Program, State Capital Improvement Program, Search & Rescue, Aviation System Planning, Airport Land Use Compatibility Program, Education and Training, and Aerial Photography; "Find Your Airport" with a map of Washington state and a "Select a specific area" prompt; "Contact Us" with links to Staff Directory, Airport Directory, and WSDOT Aviation Directions and Maps; "Search and Rescue Resources" with links to Safety Information, Forms, and Volunteer Information; "Emergency Air Operations" with links to Emergency Operations Districts, WAC 468-200 Air Ops (pdf 96 kb), RCW 47.68.380 (pdf 9 kb), and High Bird Operations manual (pdf 570 kb); "Training" with links to WSDOT Aircrew Training Reference Text, ICS 100 Student Guide, and 2012 Training calendar (pdf 56 kb); and a "Photos" section.



# Questions & Contacts

Questions regarding this report should be addressed to:

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