

Aerial Survey Working Group Report
January 23-24, 2008 **Las Vegas, Nevada**

The annual Aerial Survey Working Group (ASWG) meeting was hosted by Kathy Matthews in Las Vegas, Nevada on the above dates. The group thanks Kathy for her work to provide an excellent facility for the meeting. This report is the responsibility of Jeff Mai, Forest Health Protection National Aviation Safety Manager.

In attendance were:

1. Kevin Buxton Ministry of Forests and Range, British Columbia
2. Walter Clevenger FHP, Pacific Southwest Region
3. Rob Cruz FHM, Northern and Intermountain Region
4. Doug Daoust FHP, Pacific Northwest Region
5. Gail Durham Nevada Division of Forestry
6. Alan Dymerski FHP, Rocky Mountain Region
7. Bobbe Fitzgibbon FHP, Southwestern Region
8. Bill Frament FHP, Northeastern Area
9. Zachary Heath FHP, Pacific Southwest Region
10. Brian Howell FHP, Rocky Mountain Region
11. Loren Iverson FHP, FHTET, WO
12. Jeff Mai FHP, FHTET, WO
13. Kathy Matthews FHP, Northern and Intermountain Region
14. Scott McDonnell New York State Department of Environmental Conservation
15. Dennis McDougall FHP, Northeastern Area
16. Michael McWilliams Oregon Department of Forestry
17. Jim Morrison Fire and Aviation Management, Intermountain Region
18. Florence Peterson FHP, Northeastern Area
19. Ivan Pupilidy Fire and Aviation Management, Rocky Mountain Region
20. Rusty Rhea FHP, Southern Region
21. Marc Roberts FHP, Northeastern Area
22. Jennifer Ross Rocky Mountain Region
23. Daniel Ryerson FHP, Southwestern Region
24. Bill Schaupp FHP, Rocky Mountain Region
25. Carolyn Scott FHP, Southern Region
26. Ben Smith FHP, Pacific Northwest Region
27. Scott Sontag FHP, Northern Region
28. Keith Sprengel FHP, Pacific Northwest Region
29. Dick Stefanski Fire and Aviation Management, Rocky Mountain Region
30. Rod Whiteman FHP, Northeastern Area
31. Larry Yarger FHP, WO

Note: FHP Alaska Region was unable to attend but communicated relevant information prior to ASWG 2008. The ASWG would like to thank the following three individuals:

Jim Morrison – Regional Aviation Safety Manager, Intermountain Region for providing National Aviation Accident Review.

Ivan Pupulidy – Regional Aviation Safety Manager, Rocky Mountain Region for presenting and leading discussion on Human Factors in aviation accidents.

Kevin Buxton – Forest Health Specialist with the Ministry of Forests and Range, Kamloops, British Columbia for his presentation of Aerial Survey in BC, Program Overview and Update.

The ASWG Four Key Issues for 2008

1. Risk Management and System Safety

Subject is keystone to any successful aviation program that reduces probability of accidents. FHP and cooperators have experienced an accident-free 2007 flight season. However, similar special use-type operations beyond our operational control and unrelated to FHP activities have met with disaster. Continued effort to manage risk throughout our system is critical to preventing accidents. Filling key positions, providing training, examining cooperative relationships, optimizing safe and efficient operations by balancing safety with production goals needs to remain at the forefront of program management and daily operations. We will be increasingly challenged as demands for aviation services and products continue or increase while, simultaneously, budgets decline.

Support has been greatly appreciated and progress has been made in 2007. A few of the more significant examples of support benefiting FHP, cooperators and customers are mentioned and related within the remaining key issues and additional information.

2. Aviation Safety Training

On February 4, 2005, Forest Service Manual (FSM) 5700 – Aviation Management was updated in the Directives System. All Forest Service employees must now meet Interagency Aviation Training Guide. Reference: FSM 5716 – FLIGHT OPERATIONS, 5716.03 – Policy *Only qualified personnel shall supervise Forest Service aviation operations and projects. All personnel involved in aviation operations must receive the appropriate training and meet the experience requirements specified in the fire and aviation management qualifications in FSH 5709.16, FSH 5709.17, and the Interagency Aviation Training Guide prior to participating in aviation missions, operations, or projects (see FSM 5703.4 and FSM 5703.5 for additional guidance and FSM 5706 for other interagency guides that are applicable.)*

There has been success in providing necessary training to FHP supervisors, agency and cooperating aviation users. Continued diligence is both prudent and required.

- A. Aviation Safety for FHP Supervisors was provided in October of 2007, 21 FHP supervisors attended. Of those attending, 15 completed the required prerequisites and were credited for the classroom training (a great start!). The remaining 6 supervisors attending classroom need to complete the online prerequisites. There are 15 supervisors that did not attend the October training for a variety of reasons; options are being considered to help them get the required training they need in 2008.
- B. Two Aerial Survey Aviation Safety and Management (AS2M) sessions were provided during March of 2008. One session was held in State College, PA. The other in Denver, CO. There were a total of 71 attendees from all FS Regions (except R-10), seven states (PA, WV, NY, CO, AK, NV, OR), two retired state and federal employees, and aerial

photographer with FHTET. It is expected that AS2M will be provided once annually to meet the demands of new surveyors needing survey and safety training and maintain the three-year required currency for others.

3. Programmatic Risk Assessment (RA) for FHP

The first ever programmatic RA for FHP was initiated in January 2008. This RA examines hazards and identifies mitigations for all aspects the FHP aviation system within aerial application, photography and survey programs. Similar analyses were initiated (or completed in 2007 and revisited in 2008) by Fire and Aviation Management including Helicopter Operations, Aerial Supervision, Single Engine Airtankers, Infrared, and Rope Assisted Deployment programs. Examples are posted [//www.fs.fed.us/fire/av_safety/Systems_Safety/av_risk_mgt/](http://www.fs.fed.us/fire/av_safety/Systems_Safety/av_risk_mgt/). Progress continues on the FHP RA to be distributed prior to the 2008 flight season. As soon as practicable, specific recommendations will be derived and provided to FHP Unit Aviation Officers, cooperators and management.

4. Survey Hours and Use of Automated Flight Following (AFF)

Approximately 3,911 hours were flown by FHP and state cooperators conducting aerial survey in 2007. AFF was utilized 77% of the total survey flight time, a decrease from last year's estimate. AFF specifications continue to be written into new contracts for exclusive use and CWN aircraft. Increasingly, vendors and regions have been procuring AFF systems and paying subscriptions locally. A continuing need remains for a handful of portable systems procured by FHP in 2004 with subscriptions formerly paid nationally by F&AM. FHP has provided national funding to continue service for these portable systems during 2008, after which individual regions will be responsible for continuing subscription service if necessary. It is recommended that any surplus FHP AFF units be transferred to F&AM for use in FS airtankers.

Additional Information

A. All seven Key Issues from 2007 were addressed completely or in part since the 2007 Report. Those partially addressed and needing further attention are again included in this report.

B. The 2009 ASWG meeting will be January 21-22, 2009 in Baltimore, Maryland hosted by the Northeastern Area (Marc Roberts, Bill Frament, and Rod Whiteman).

C. Disturbance mapping development continues using MODIS and may be useful as a flight as a flight planning aid, helping to identify areas of disturbance and possibly prioritize survey areas. Pilot projects are planned for 2008 in the Lake States, SPB areas, and Region 6.

D. Mountain pine beetle in British Columbia – Kevin Buxton presented survey methodology and status. Acres with MPB-caused mortality during 2007 in BC were approximately four times more than acres with mortality from all damage agents combined in the US. Kevin described waves of MPB dispersal visible on Doppler, winds that carry beetles 60-80 miles, and photographs of lake shores where dead beetles had accumulated and were several inches deep. Higher numbers of beetles and fewer preferred host trees (lodgepole pine) is causing MPB to moving into non-preferred or non-host tree species. The beetles are attacking and killing spruce, broods are maturing in spruce. MPB is also attacking Jack pine. There is concern it may establish and move through Jack pine stands in Alberta and beyond.

E. Pre Season Survey Workshop(s) – Region 6 hosting “Calibration & Conformity” June 24-26 in Hood River, Oregon; Colorado State Forest Service hosting “Rocky Mountain Fly-In” tentatively planned for the week of June 9th in Fort Collins CO; Northeastern Area, Durham, NH hosting DASM training (possibly flying), no other workshops are identified at this time.

F. Ground Checks – The guidelines adopted last year are posted on line and were again discussed www.fs.fed.us/foresthealth/aviation/pdfs/ADS_grdchk_guide_formV2.pdf. Additional methods of ground checking ADS polygons were presented 1) walk thru, 2) view from lookouts or vistas, 3) windshield survey conducted from vehicle. Pros and cons exist with all methods, utilizing the best mix of these approaches is a viable option to get the most out ground checks.

G. Annually at the ASWG meeting there is an agenda item for those who are looking for help flying aerial survey for the current survey season. Nationally there continues to be a shortage of qualified sketchmappers due to inadequate staffing and turn over. Assisting other aerial survey programs helps sketchmappers develop their skills in new areas, while helping out other FHP programs. The ASWG supports this opportunity for additional training and experience. There were no specific requests for survey assistance; however, status reports indicate a variety of opportunities may exist:

Rocky Mountain Region

Aerial Survey Program Manager position outreached 12/17/07 - 2/16/08, primary contact Jeri Lyn Harris jharris@fs.fed.us

Southwestern Region

Aerial Surveyor position currently being outreached until 4/23/08, contact Debra Allen-Reid to respond to outreach dallenreid@fs.fed.us

Alaska Region

Hopes to fill two positions this year, contact Dustin Wittwer for more information dwittwer@fs.fed.us

Pacific Southwest Region

Planning to accomplish surveys with regional staff but may be opportunity for assistance, contact Walter Clevenger if interested wclevenger@fs.fed.us

Northeastern Area

State of PA expressed desire for some help, state personnel recently trained in safety (AS2M), contact Rod Whiteman for more information rwhiteman@fs.fed.us

Southern Region

Training needs indicated for states experiencing personnel turnover, contact Rusty Rhea for more information rrhea@fs.fed.us