



# United States Department of Agriculture Forest Service

## Aviation Safety Alert

No. FS 2006-01

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**Subject:** Plastic Sphere Dispenser (PSD) flight profile “watch out” situations

**Area of Concern:** PSD Operations

**Distribution:** Aviation Operations, Fire and Aviation Personnel, Contract Pilots

**Discussion:** The Accident Review Board, in the case of the 2005 fatalities in Texas while conducting PSD operations, recommended the following:

Recommended to the Interagency committee to include a requirement in the Interagency Aerial Ignition Guide pre-mission briefing that addresses PSD flight profile “watch out” situations including but not limited to loss of tail rotor effectiveness (LTE), Settling with Power, etc.

The Interagency Aerial Ignition Guide will be reviewed in 2006 and republished in 2007. This Safety Alert is to provide guidance in the interim.

The Interagency Aerial Ignition Guide currently addresses PSD operations in this manner:  
PSD operations require helicopter flight below 500 ft AGL and less than 50 mph. Hovering out of ground effect (HOGE) is often requested. The Pilot must keep altitude, airspeed, wind direction and aircraft capabilities and limitations in mind during all phases of flight operations. Page III-9, XIII, B.

In addition to the guidance provided by the Interagency Aerial Ignition Guide address the following situations during the pre-mission briefing:

### PSD Flight profile “watch out” situations

- Utilizing helicopters loaded at or near maximum gross weight
  - *Double check manifest to ensure all items loaded on helicopter are listed with correct weights.*
- Loss of tail rotor effectiveness (LTE)

- **Hot, high and heavy**
- **Double check load calculations**
- **Settling with power**
  - *Hovering Out of Ground Effect (HOG E) should be discouraged.*
- **Downwind turns in order to stay in unit and maintain appropriate burn pattern**

**In all cases ensure correct performance charts are utilized & numbers are double-checked.**

*/s/ Ron Hanks*  
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