General Aviation Joint Steering Committee

Loss of Control Working Group 1

Spatial Disorientation

**Outreach Guidance Document**

**2015/12/21-080 (I) PP**

This outreach guidance is provided to all FAA and aviation industry groups that are participating in outreach efforts sponsored by the General Aviation Joint Steering Committee (GAJSC). It is important that all outreach on a given topic is coordinated and is free of conflicts. Therefore, all outreach products should be in alignment with the outline and concepts listed below for this topic.

**Outreach Month: April 2016**

**Topic: Spatial Disorientation (SE 34 Output 3-2)**

The FAA and industry will conduct a public education campaign emphasizing the dangers of spatial disorientation and optical illusions.

**Background:**

NTSB accident data suggest that spatial disorientation may be a precursor to many general aviation accidents – particularly in night or limited visibility weather conditions.

Instrument and VFR pilots are subject to spatial disorientation and optical illusions that may cause loss of aircraft control.

**Teaching Points:**

* Discuss the physiology and limitations of human sight and balance mechanisms
* Offer responses to typical disorientation and illusion events.
* Discuss best practices for preventing Spatial Disorientation.
* Discuss local disorientation accidents and/or incidents.
* Practical demonstrations of vertigo can be included in the program if a Barany Chair or other vertigo-inducing device is available.

**Note:** This outreach consists of a PowerPoint Show with 2 embedded videos produced by the Civil Aeromedical Institute. The first video deals with human physiology & spatial orientation. The second addresses common visual illusions. Both presentations offer suggestions for managing disorientation. Each video runs for approximately 15 minutes. You may screen one or both videos depending on your program requirements. Links to the videos appear below. From those locations you can either run the video on line or download it for use in a seminar.

**References:**

* **Spatial Disorientation PowerPoint with embedded videos**
* ***Spatial Disorientation Part 1– Why Not to Fly by the Seat of your Pants***
  + [www.faa.gov/tv/?mediaid=462](http://www.faa.gov/tv/?mediaid=462)
* ***Spatial Disorientation Part 2 – Visual Illusions***
  + [www.faa.gov/tv/?mediaid=463](http://www.faa.gov/tv/?mediaid=463)

**IMPORTANT** – Once you have completed outreach on this topic, please help us track the outreach you have done by entering a PTRS record.

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| PTRS Activity Code | National Use | Primary Area | Key word | Description | Performance Target | Due  Date | LDR  **12XXFAAST** |
| 2685 | NPP14 | K | 032 | Promote “Topic of the Month” within the FSDO area | 1 per FSDO per month | 09/15/16 | OR0100 |