1. **IIMC** or Inadvertent Instrument Meteorological Conditions continues to be the leading cause of fatalities in our profession.
2. This occurs when a pilot flies into conditions where they can no longer use outside references to fly (i.e. clouds, fog, extreme darkness)
3. Training and equipment required for planned IFR flight is a good start, but does not adequately protect your crews from the hazards of IIMC.
4. Seek out and conduct **IIMC specific training** several times a year. Consider using simulators.

### Human Factors

1. **Fatigue** is a leading causal factor in aviation accidents. Even minor levels of fatigue affect a pilot’s ability to stay safe in a *far more significant manner than an officer driving a car*.
2. It is an industry standard to allow pilots short naps when fatigued in order to avert disaster.
3. When tired, humans are unable to gauge their own level of fatigue any more accurately than an intoxicated person can judge how impaired they are. Set a policy and stick to it. Do not rely on personal evaluation to stay safe.
4. Have daily maximum duty hour limits, max flight hours and a minimum rest period policy for all unit members. *This includes mechanics.*
5. Your policy should have a means of responding to cases where employees are fatigued. i.e. shift coverage contingency plans or authorized safety stand down until crews are safe to fly.

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**What is SMS?**

A Safety Management System will give you things a traditional safety program cannot:

- Prioritized Risk Management based on real threats to your operation instead of educated guesses
- The opportunity to stop hazards before they cause an incident
- Safety Initiative Performance Tracking
- Ability to identify and correct failing safety policies or procedures
- A clear view of your Return on Investment and impact on safety

Aviation Safety Officers (ASO) need from their leadership:

- Support and authorization in writing
- To work directly with the Training Officer
- Your commitment to a Just Culture
- Training – this is not something that one can just ‘pick up’ in their spare time

ALEA offers ASO and SMS training at our regional safety seminars and annual conference.

**Free SMS tools** and Unit Manager Safety training can be found on the website:

http://www.alea.org/safety
**Critical Tips**

1. Establish a Safety Management System.
2. Designate an Aviation Safety Officer and get them the training needed to perform their job properly.
3. Have a fatigue management program.
4. Ensure your flight training program has at least one annual outside audit of pilot proficiency.
5. Write and rehearse a comprehensive Emergency Response Plan.
6. Ensure your Safety Officer and Training Officer (or Chief Pilot) are working together to address safety issues.
7. Attend ALEA’s Unit Manager Course.
8. Have a Flight Risk Assessment Tool (FRAT) for your crews to use every day.
9. Follow PSAAC Standards and consider accreditation. Do a gap analysis to see how your unit measures up to industry standards.
10. Give your flight crew the right to decline flights for safety reasons in your agency policy manual.

**Recent data**

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<tr>
<th>Year</th>
<th>Accidents</th>
<th>Fatalities</th>
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<td>2008–2013</td>
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<table>
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<tr>
<th>Top Accident Types</th>
<th>Total (Fatalities)</th>
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<tr>
<td>Inadvertent IMC*</td>
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</tr>
<tr>
<td></td>
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<td>Training</td>
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<td>LTE*</td>
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</table>

*flight into poor weather/fog

**Aviation Safety Management**

**Critical Concepts**

For Leadership in Public Safety Aviation Operations