



ALERTNESS
SOLUTIONS

www.alertness-solutions.com



www.flightsafety.org

Alertness Management Safety Evaluation

Fatigue is acknowledged as a prominent safety issue in corporate flight operations. In a NASA study conducted in collaboration with the Flight Safety Foundation and the National Business Aviation Association, 9 out of 10 corporate pilots identified fatigue as a moderate or serious safety issue, with a significant 75% admitting to nodding off during a flight.

Ongoing evaluations of a flight department's practices, policies, and procedures can help to maintain the highest standards of safety. Like crew resource management, pilot proficiency, or maintenance, alertness management activities contribute to the safety of operations, and therefore should be included in periodic safety evaluations. This Alertness Management Safety Evaluation was created to provide corporate aviation with a tool to meet this need.

This evaluation addresses five main areas of alertness management and can serve several purposes, including:

- Corporate flight departments can use it to evaluate their current alertness management efforts and identify areas for improvement.
- Flight departments can use it as a guide for developing an alertness management program.
- Safety auditors can use it to evaluate alertness management activities in flight departments.

	YES	NO
A. Education		
1) Are flight crewmembers provided training about fatigue, including the physiological causes and effects, and safety-related risks?	<input type="checkbox"/>	<input type="checkbox"/>
2) Are others who affect flight safety (e.g., schedulers, management, maintenance crews, cabin crews, dispatchers) provided training on these issues?	<input type="checkbox"/>	<input type="checkbox"/>
3) Is there a method to assess the effectiveness of training activities (e.g., pre/post-training quizzes)?	<input type="checkbox"/>	<input type="checkbox"/>
4) Is there a mechanism to determine whether the training information used is scientifically valid and current?	<input type="checkbox"/>	<input type="checkbox"/>
<i>Education Totals</i>		_____
B. Alertness Strategies		
5) Are flight crews and other personnel provided training on alertness strategies?	<input type="checkbox"/>	<input type="checkbox"/>
6) Are there clear written policies regarding the use of alertness strategies?	<input type="checkbox"/>	<input type="checkbox"/>
7) Are there explicit written policies regarding on-duty rest opportunities (e.g., on-board crew rest facilities, planned cockpit rest, ground rest facilities)?	<input type="checkbox"/>	<input type="checkbox"/>
8) Is there a process for evaluating the scientific validity, effectiveness, and safety of alertness strategies <i>before implementing them</i> ?	<input type="checkbox"/>	<input type="checkbox"/>
9) <i>Once in use</i> , is there a process for evaluating the scientific validity, effectiveness, and safety of alertness strategies?	<input type="checkbox"/>	<input type="checkbox"/>
<i>Alertness Strategies Totals</i>		_____

- | | YES | NO |
|--|--------------------------|--------------------------|
| C. Scheduling | | |
| 10) Do scheduling practices <i>for all personnel</i> explicitly address fatigue issues based on information from scientifically valid resources? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11) Do scheduling practices for flight crews adhere to the “Principles and Guidelines for Duty and Rest Scheduling in Corporate and Business Aviation” published by the Flight Safety Foundation? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12) Are there written policies regarding basic duty/rest parameters <i>for all personnel</i> , which include minimum off-duty/rest opportunity, maximum duty time, consecutive duty periods, and recovery time between trips or work cycles? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13) Is there an explicit written procedure that is used for exceptions to these policies? | <input type="checkbox"/> | <input type="checkbox"/> |

Scheduling Totals _____

D. Healthy Sleep

- | | | |
|---|--------------------------|--------------------------|
| 14) Is information offered to flight crews and other personnel about sleep disorders, how to recognize sleep disorders, and how to get help if they suspect they have a sleep disorder? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15) Is there a written policy that addresses diagnosis, treatment, and continued flight status of personnel with possible sleep disorders? | <input type="checkbox"/> | <input type="checkbox"/> |

Healthy Sleep Totals _____

E. Organizational

- | | | |
|--|--------------------------|--------------------------|
| 16) Does the flight department have an integrated alertness management program that includes education, alertness strategies, scheduling, and healthy sleep? | <input type="checkbox"/> | <input type="checkbox"/> |
| 17) Is there an individual identified to coordinate alertness management activities? | <input type="checkbox"/> | <input type="checkbox"/> |
| 18) Are alertness management activities ongoing (as opposed to, for example, a one-time training)? | <input type="checkbox"/> | <input type="checkbox"/> |
| 19) Is corporate management involved in alertness management activities and policy development? | <input type="checkbox"/> | <input type="checkbox"/> |
| 20) Are alertness management activities integrated into the regular operational practices of the flight department, such as CRM or MRM programs? | <input type="checkbox"/> | <input type="checkbox"/> |

Organizational Totals _____

Scoring the Evaluation

To evaluate the flight department's alertness management activities, consider the totals from two perspectives:

1. How many sections *do not have* at least one item checked? This will identify entire areas that need to be addressed that are not currently part of alertness management activities. (Lower number is better.) _____
2. For each section, how many items are checked “YES”? How does that compare to the total number of items for that section? This will identify the extent to which the flight department is addressing each main area. _____
(Higher number is better.)