

## V. DISCUSSION GROUPS

### A. OVERVIEW AND PROCESS

#### ***Overall Goals of Discussion Groups***

*Discussion Groups* were assembled to encourage discussion among the symposium attendees, with a focus on fatigue-related challenges, barriers to change, and potential fatigue mitigation concepts.

The goals of the *Discussion Groups* were:

1. Develop an awareness of the fatigue-related challenges and drivers engendered by a range of aviation environments and the current (as well as historical) barriers to addressing these fatigue problems.
2. Share information and viewpoints on fatigue in the aviation workplace and discuss aviation fatigue mitigation concepts to address these problems.
3. Discuss practical applications of these concepts throughout the aviation industry, as well as in specific operations or activities.

*Discussion Groups* were asked to summarize and present their discussions on the morning of Day 3 to the symposium attendees and senior aviation community members. A PowerPoint template was provided to assist with the preparation of the report.

#### ***Structure of Discussion Groups***

Five *Discussion Groups* were formed to specifically represent different aspects of aviation operations.

- International Long Haul Operations: Passenger and Cargo
- Domestic Operations: Transcontinental Focus
- Domestic Operations: Multi-Leg/Short Haul Focus
- Air Traffic Control and Tech Operations
- Maintenance, Ramp Operations and Dispatch

Each *Discussion Group* consisted of a range of 50 to 100 participants, and were led by leaders and facilitators representing scientific, industry and employee groups. Example topics and discussion points were provided to guide *Discussion Group* discussions. However, the material was not all-inclusive and the groups were encouraged to extend the discussion to any areas not listed if the group felt they were relevant to the topic of fatigue in aviation.

Each discussion group was assigned several leaders, a facilitator, and a scribe, as follows:

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PARTNERSHIPS FOR SOLUTIONS**

<b>Discussion Group Topic</b>	<b>Facilitator Discussion Scribe</b>	<b>Panel Leaders</b>
International Long Haul Operations: Passenger and Cargo	Captain Mary McMillan (CSSI) Mr. Kevin West (FAA AFS-200)	Captain Jay Barnes (UPS) Captain Don Gunther (Continental) Captain Don Wykoff (DAL - ALPA)
Domestic Operations: Transcontinental Focus	Dr. Gregory Belenky, Washington State U. Ms. Nancy Claussen (FAA-AFS)	Captain Jim Bowman (FEDEX) Captain Doug Pinion (American - APA) Mr. Gary Thompson (Delta - ATA)
Domestic Operations: Short Haul/Multi-leg Focus	Dr. Kathy Abbott (FAA AIR-100) Ms. Alberta Brown (FAA AFS-200)	Captain Victor Cabot (American Eagle-ALPA) Mr. Lonny Glover (American - APFA) Captain Charlie Tutt, Sr VP (ASA)
Shift Work: Air Traffic Control & Tech Ops	Dr. Pam DellaRocco (FAA ATO) Ms. Ruth Ellen Schelhaus (FAA-NISC)	Ms. Kathy Carpenter (PASS) Mr. Tony Mello (FAA, Director, ATO Safety Service) Dr. David Schroeder (FAA CAMI Retired)
Shift Work: Maintenance, Ramp Ops & Dispatch	Mr. Jay Hiles FAA (AFS-300) Ms. Jennifer Ciaccio (AFS-300)	Mr. Roger Hughes (Jet Blue) Dr. Manoj Patankar, St Louis University. Mr. Dave Supplee, (US Airways, IAM)

***Purpose of Discussion Groups***

The groups were informed that the Aviation Fatigue Management Symposium was an event designed to present the most current scientific and industry-relevant fatigue information to a broad audience of aviation and fatigue/human factors science experts. Discussion Group Leaders and Facilitators were asked to encourage discussion on issues that broadly relate to the topical area. It was hoped that discussion of the formal presentation material would lead to improved understanding of fatigue in aviation and higher awareness of potential mitigation strategies and concepts that could be applied in the flight operations and shift work environments.

Group leaders and facilitators were aware that the information and viewpoints shared during Discussion Group discussions may entail proposals to continue the line of discussion or scrutiny in other venues and discussion/deliberative settings. If proposals arise in this regard, the Discussion Group leaders and facilitators were asked to lead the

discussion towards identifying potential fatigue mitigation or management strategic concepts that could be pursued independent of this symposium by individuals or organizations.

***Discussion Group Sessions***

*Discussion Group* Sessions are scheduled to occur throughout the Fatigue Symposium.

*Session 1:* Day 1, 1.25 hrs of discussion

*Session 2:* Day 2, 3.5 hrs of discussion (*split into two sessions*)

*Session 3:* Day 3, 3.5 hrs for summary reports of Discussion Groups

Each *Discussion Group* was assigned to a specific room within the conference venue in which discussions occurred. The *Discussion Group* rooms were equipped with a computer, visual projector, whiteboard, flipcharts and notebooks to encourage interaction among discussion group members.

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***Discussion Group Objections***

For each Discussion Group Area, there were three discussion objectives

- Objective 1: Compile fatigue-related challenges and drivers
- Objective 2: Compile the major current (as well as historical) barriers to fatigue mitigation.
- Objective 3: Compile potential fatigue mitigation concepts and activities that may apply to particular discussion group area.

***Discussion Group Leaders***

The Leaders were instructed enforce ground rules of courtesy, fairness, and balance in the discussion. They were encouraged to avoid contentious discussion on the application of any particular mitigation concept and to encourage open discussion on fatigue-related topics, rather than proprietary or economic concerns.

- Roles:
  - to guide the discussion
  - to summarize the group's discussion
  - to present a summary of the discussions to the Symposium on Day 3.
- Responsibilities:
  - to ensure complete and accurate responses to the objectives for discussion
  - to ensure that all those present who have constructive input to the discussion are heard and considered

- to help guide discussion to both understand and apply fatigue mitigation concepts.

***Discussion Group Facilitator***

Each group had at least one designated facilitators. The role of the facilitator was:

- to initiate the discussion as outlined in the instructions
- to comment on the science relative to the fatigue drivers and barriers;
- to offer ideas for mitigation strategies to be considered by the group, and
- to prompt participation of other members in the Discussion Group who may have relevant scientific and operational experience.

The Facilitator attempted to:

- Make respectful suggestions to keep the discussion focused on one topic at a time and avoid tangents.
- Make note of points or ideas that may need to be addressed during later discussion if they are not part of the current topic.

The Discussion Group Facilitator & Leaders were instructed to involve everyone in the discussion and participants were told that they may submit a point anonymously to the group in written format.

***Discussion Group Scribe***

Each discussion group had a scribe with the following responsibilities:

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- Record the main points of discussion, capturing the names of contributors when possible.
- Help compile the lists of challenges/drivers and barriers.
- Help compile the list of mitigation strategies and opportunities.
- Help prepare the report to the symposium.
- The notes of the discussion will be confidential and will not be provided to the government. Notes will be used to prepare the Symposium Proceedings by IBR and names will be deleted.

***Discussion Panelists & Participants were expected to:***

- Suspend their personal or organizational agendas;
- Contribute their knowledge to the discussion and to raise questions that will further group understanding of the issues;
- Focus comments to promote the goals of the Discussion Group and the symposium;
- Show mutual respect for other's ideas;
- Allow equal opportunity for participation by all panel members; and
- Avoid detailed and contentious discussion on the application of any particular mitigation concept.

***Discussion Group Schedule***

**Day 1 Discussion**

- Establish a list of major fatigue challenges and drivers, as well as barriers to fatigue mitigation, in the identified Discussion Group topic area.

**Day 2, First Discussion Period**

- Complete discussion of major fatigue drivers and barriers to improvement – compile list for report out.
- Initiate discussion of promising strategies for fatigue mitigation.

**Day 2, Second Discussion Period**

- Compile list of fatigue challenges/drivers and barriers.
- Compile list of strategic mitigation concepts and application opportunities.
- If possible, prioritize mitigation concepts and opportunities
  - starting with near-term, immediate opportunities, progressing to
  - far-term, potential concepts.
- Populate the report template for next day presentation to symposium attendees. Select report presenter.

**Day 3, Reports of Discussion Groups**

- **Flight Operations**
  - International
  - Domestic transcontinental
  - Domestic short haul
- **Shift Work**
  - Air Traffic Controllers and Tech Ops
  - Maintenance, Ramp Ops and dispatchers
- **Panel Overview**

*AVIATION FATIGUE MANAGEMENT SYMPOSIUM:  
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- Fatigue drivers
- Barriers to change
- Promising strategies for mitigation,
  - flight ops
  - shift work