



# Symposium for Fatigue Management Approaches in Aviation

*Evolution from the Cockpit to the ATC Unit*  
 ICAO Headquarters, Montréal  
 5 – 6 April 2016

## DAY 1 – TUESDAY, 5 APRIL 2016

### SESSION 1 Welcome and Keynote Presentations

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| <p>09:00 – 09:30</p>   | <p><b>Master of Ceremonies</b><br/> <b>Miguel Marin</b>, <i>Acting Chief Operational Safety, ICAO</i></p> <p><b>Welcome Note</b><br/> <b>Steve Creamer</b>, <i>Director, Air Navigation Bureau, ICAO</i></p> <p><b>Panel Topic: Roles and responsibilities in FM</b></p> <ul style="list-style-type: none"> <li>• <b>Moderator: Catalin Radu</b>, <i>Deputy Director, Safety, ICAO</i></li> <li>• <b>Panel</b><br/> <b>Mike Comber</b>, <i>Director, Member and External Relations, IATA</i><br/> <b>Don Wykoff</b>, <i>Chair, IFALPA Flight Time Limitations Workgroup President Emeritus, IFALPA</i><br/> <b>Kurt Edwards</b>, <i>Director General, IBAC</i><br/> <b>Nico Voorbach</b>, <i>Director, ICAO and Industry Affairs, CANSO</i><br/> <b>Patrik Peters</b>, <i>President and CEO, IFATCA</i>,<br/> <b>Mark Millam</b>, <i>VP Technical, Flight Safety Foundation</i></li> </ul> |
| <p>09:30 – 10:30</p>   | <p><b>Keynotes</b><br/> <b>Prof. Philippa Gander</b>, <i>Director Sleep/Wake Research Centre, Massey University</i><br/>         What are the key FM scientific principles?</p> <p><b>Mr Ricardo Génova Galván</b>, <i>Flight Standards Director, EASA</i><br/>         Compliance with prescriptive regulations in a performance-based regulatory environment.</p> <p><b>Capt. Stephen Dickson</b>, <i>Senior VP Flight Operations, Delta Air Lines</i><br/>         FRMS: Is it worth it?</p>  |
| <p>10:30 – 11:00</p>   | <p style="text-align: center;"><i>Coffee Break</i></p>   |
| <p><b>SESSION 2</b> <i>What are the differences in implementing prescriptive vs FRMS regulations?: Insights from States that have already done so.</i></p> |  |
| <p>11:00 – 12:30</p>   | <p><b>Moderator</b><br/> <b>Elizabeth Gnehm</b>, <i>Secretary, Safety Management Panel, ICAO</i></p> <p><b>Panel</b><br/> <b>Nick Strange</b>, <i>Regulatory Specialist (Standards), CASA</i><br/> <b>Dale Roberts</b>, <i>Aviation Safety Inspector, Air Transportation Division, FAA</i><br/> <b>Jarnail Singh</b>, <i>Chairman of the Civil Aviation Medical Board, Singapore CAA</i><br/> <b>Daniel Coutelier</b>, <i>Rulemaking Officer, EASA</i><br/> <b>Roger Langman</b>, <i>Manager Flight Operations 135 Acting, South Africa CAA</i></p>  |
| <p>12:30 – 14:00</p>   | <p style="text-align: center;"><i>Lunch</i></p>  |



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### SESSION 3 *Fatigue Management or Labour Laws and Contracts?: Challenges for States in the middle of revising or developing FM regulations.*

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| 14:00 – 15:30 | <p><b>Moderator</b><br/> <b>Jim Mangie</b>, Program Director (Pilot Fatigue), Delta Air Lines</p> <p><b>Panel</b><br/> <b>Thomas Vezin</b>, Chief, Flight Standards, DGAC France<br/> <b>Izabela Tissot Antunes Sampaio</b>, Civil Aviation Specialist, ANAC, Brazil<br/> <b>Jörgen Weden</b>, Flight Inspector, Swedish Transport Agency<br/> <b>Oğuzhan Kabakci</b>, Head of Flight Operations Department, CAA Turkey</p> <p><b>Topics to be addressed</b></p> <ul style="list-style-type: none"> <li>Revising prescriptive limits – adopting another State’s regulations or establishing State-specific regulations?</li> <li>How have existing labour agreements/contracts/laws impacted on the way you manage fatigue?</li> <li>How was the decision to offer (or not offer) FRMS regulations made?</li> </ul> |
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| 15:30 – 16:00 | <i>Coffee Break</i> |
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### SESSION 4 *FM Developments and Tools*

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| 16:00 – 17:00 | <p><b>Moderator</b><br/> <b>Catalin Radu</b>, Deputy Director, Safety, ICAO</p> <p><b>Presentations and Speakers</b></p> <ul style="list-style-type: none"> <li><b>Nina McGrath</b>, IATA FRMS Task Force<br/>- Identifying common safety performance indicators</li> <li><b>Tom Nesthus</b>, Engineering Research Psychologist, FAA Civil Aerospace Medical Institute<br/>- Baselining an ALOS with regards to fatigue</li> <li><b>Kathryn Jones</b>, Human Factors Programme Manager, UK CAA<br/>- Developing safety cases</li> <li><b>Kris Tritschler</b>, Director, smartshiftwork.com<br/>- Fatigue Risk Assessment Methodologies</li> <li><b>Margo van den Berg</b>, Sleep/Wake Research Centre, Massey University<br/>- FM Developments for Cabin Crew</li> </ul> |
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| 17:00 – 19:00 | <i>Welcome Reception</i> | Sponsored by: |
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**END OF DAY 1**



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## DAY 2 – WEDNESDAY, 6 APRIL 2016

### SESSION 5 *What are the implications of the new ATC FM provisions?*

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| 09:00 – 10:30 | <p><b>Moderator</b><br/>         Chris Dalton, <i>Chief, Airspace Management and Optimization, ICAO</i></p> <p><b>Panel</b><br/>         Claire Marrison, <i>CANSO</i><br/>         Daniel Coutelier, <i>Rulemaking Officer, EASA</i><br/>         Jason Demagalski, <i>Human Factors and Fatigue Risk Manager, Air Traffic Organization, FAA</i><br/>         Jeff Richards, <i>IFATCA</i><br/>         Mohammad Al Dossari, <i>Director, Air Navigation &amp; Aerodromes Department, UAE General Civil Aviation Authority</i><br/>         Yasumasa Takahashi, <i>Assistant to the Director, Air Navigation Services Office, Japan Civil Aviation Bureau</i><br/>         Ashley Nunes, <i>Independent policy analyst and commentator, Visiting researcher (Université Paris Descartes)</i></p> <p><b>Topics to be addressed</b></p> <ul style="list-style-type: none"> <li>• What are the benefits for ANSPs and for ATCs?</li> <li>• How do different regulators plan to address these?</li> <li>• With a lack of distinction between regulator and service provider roles, can fatigue be adequately managed using either prescriptive or FRMS approaches?</li> </ul> |
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10:30 – 11:00

*Coffee Break*

### SESSION 6 *Getting Started: Implementing FM Approaches for ATCs*

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| 11:00 – 12:30 | <p><b>Moderator</b><br/>         Ruth Stilwell, <i>Executive Director, Aerospace Policy Solutions, LLC</i></p> <p><b>Panel</b><br/>         Ann Lindeis, <i>Director, Safety Management and Human Factors, NavCanada (TBC)</i><br/>         Jaco van der Westhuizen, <i>Human Factors/ Development and Learning Specialist, ATNS South Africa</i><br/>         Paul Fallow, <i>Head of Service Delivery, Airways New Zealand</i><br/>         Moussa Soura, <i>CELICA-ATC Executive from Direction of Operations, ASECNA</i><br/>         Neil May, <i>Head of Human Factors, NATSS</i><br/>         Sinead McCloskey, <i>Director of Assurance, Dubai Air Navigation Services</i></p> <p><b>Topics to be addressed</b></p> <ul style="list-style-type: none"> <li>• How are ANSPs managing ATC fatigue now and what changes are necessary to address future requirements?</li> <li>• How will contractual obligations that might constrain the prescriptive and FRMS approaches be dealt with?</li> <li>• Are SMSs already well-established in all ANSPs?</li> <li>• Do ANSPs need FRMS?</li> <li>• What tools do the ANSPs need to help them implement?</li> </ul> |
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12:30 – 14:00

*Lunch*



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### SESSION 7 *Addressing fatigue management needs in other industry sectors*

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|----------------------|---|
| <b>14:00 – 15:30</b> | <p><b>Moderator</b><br/> <b>Michelle Millar</b>, <i>Technical Officer (Human Performance), ICAO</i></p> <p><b>Panel</b><br/> <b>Alex Holmes</b>, <i>Research Director, Clockwork Research</i><br/> <b>Claudia Cabaco</b>, <i>Flight Safety Assistant Manager, Netjets Europe</i><br/> <b>Nick Strange</b>, <i>Regulatory Specialist, CASA</i><br/> <b>Craig Hanlon</b>, <i>Chief Pilot, DuPont Aviation, representing IBAC</i><br/> <b>Kathryn Jones</b>, <i>Human Factors Programme Manager, UK CAA</i><br/> <b>Kevin Morgan</b>, <i>Manager, AFS-350, General Aviation Branch, FAA</i><br/> <b>Leigh Signal</b>, <i>Associate Director and Senior Research Fellow, Sleep/Wake Research Centre, Massey University</i></p> <p><b>Topics to be addressed</b></p> <ul style="list-style-type: none"> <li>It is not a matter of copy and pasting FM SARPs and regulations from one industry sector to another. How do acceptable levels of risk differ between different types of operations and how should this be reflected in fatigue management requirements?</li> <li>What are the FM needs of helicopter operators, business jet operators, emergency medical services sectors and aviation maintenance engineers and how can we best address them?</li> </ul> |
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**15:30 – 16:00**

*Coffee Break*

### SESSION 8 *Are cultural differences affecting the implementation of FM approaches?*

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| <b>16:00 – 17:00</b> | <p><b>Moderator</b><br/> <b>Curt Graeber</b>, <i>President, The Graeber Group</i></p> <p><b>Presentations and Speakers</b><br/>         Are the FM processes and “best practices” identified in ICAO guidance generic or do we need to develop implementation alternatives that may be more suited in different cultural contexts? What might these be?</p> <ul style="list-style-type: none"> <li><b>SeungYoung Lee</b>, <i>Executive Director, Air Line Pilots Association of Korea</i> <ul style="list-style-type: none"> <li>Implementation in Korea</li> </ul> </li> <li><b>Zhang Yu</b>, <i>Deputy Division Director, Flight Standards Department, CAAC</i> <ul style="list-style-type: none"> <li>Implementation in China</li> </ul> </li> <li><b>Mike Boyd</b>, <i>Technical Officer, ICAO</i> <ul style="list-style-type: none"> <li>Elastic waist trousers</li> </ul> </li> </ul> <p><b>Close</b><br/> <b>Steve Creamer</b>, <i>Director, Air Navigation Bureau, ICAO</i></p> |
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**END OF DAY 2**