Asia Pacific Aviation

Regional Safety and Outreach

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Association of Asia Pacific Airlines
Overview

• AAPA
• Asia Pacific aviation
• Safety performance
• Challenges
• Priorities
• Outreach
AAPA member airlines

- ANA
- ASIANA AIRLINES
- air astana
- Bangkok Airways
- Cathay Pacific
- CHINA AIRLINES
- DRAGONAIR
- EVA AIR
- Garuda Indonesia
- JAPAN AIRLINES
- KOREAN AIR
- malaysia Airlines
- Philippine Airlines
- Royal Brunei Airlines
- SINGAPORE AIRLINES
- THAI
Asia Pacific Aviation
We came a long way
Aviation: connecting the world

- Air travel delivers global mobility
- 3.6 billion passengers
  - 10 million per day
- Carries 35% by value of global trade
  - Goods worth US$6 trillion
- Wider social and economic benefits
- Outstanding safety record
- Committed to sustainable growth

Source: IATA, ATAG
Asia Pacific

• Diverse geographic region
• Home to 4 billion people
  ➢ 56% of the world’s population
• Dynamic economies generate 34% of global GDP
• Wide range of income levels, rapidly growing middle class
• Aviation widely recognised as a key contributor to economic and social development
• Political diversity remains challenging: need for multilateral cooperation

Source: IMF
Growing middle class consumers

Middle Class* (millions of people)

<table>
<thead>
<tr>
<th></th>
<th>1995e**</th>
<th>2005</th>
<th>2015</th>
<th>2025</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emerging</td>
<td>455</td>
<td>911</td>
<td>2,792</td>
<td>3,776</td>
<td>4,830</td>
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<tr>
<td>Mature</td>
<td>66</td>
<td>130</td>
<td>206</td>
<td>310</td>
<td>441</td>
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<td>Developing</td>
<td>776</td>
<td>826</td>
<td>848</td>
<td>864</td>
<td>861</td>
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</tbody>
</table>

* Households with yearly income between $20,000 and $150,000 at PPP in constant 2015 prices
** Estimate for 1995 split region

Driving consumption, including air travel demand

Source: Airbus GMF 2016-2035
Asia Pacific Aviation

US$203 billion revenue
US$7 billion net profit
1,297 million passengers
927 million domestic
370 million international
21 million tonnes of cargo
7,058 aircraft

Asia Pacific carriers overall market share:
33% of global passenger traffic
38% of global cargo traffic

Source: Combined AAPA + non-AAPA airlines GMT+5 to GMT+12
Most of the world’s busiest international routes are in the Asia Pacific region

<table>
<thead>
<tr>
<th>Rank</th>
<th>Route</th>
<th>PAX (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hong Kong - Taipei</td>
<td>5.1</td>
</tr>
<tr>
<td>2</td>
<td>Jakarta - Singapore</td>
<td>3.4</td>
</tr>
<tr>
<td>3</td>
<td>Bangkok - Hong Kong</td>
<td>3.0</td>
</tr>
<tr>
<td>4</td>
<td>Kuala Lumpur - Singapore</td>
<td>2.7</td>
</tr>
<tr>
<td>5</td>
<td>London - New York</td>
<td>2.7</td>
</tr>
<tr>
<td>6</td>
<td>Hong Kong - Singapore</td>
<td>2.7</td>
</tr>
<tr>
<td>7</td>
<td>Hong Kong - Shanghai</td>
<td>2.5</td>
</tr>
<tr>
<td>8</td>
<td>Hong Kong - Seoul</td>
<td>2.5</td>
</tr>
<tr>
<td>9</td>
<td>Bangkok - Singapore</td>
<td>2.4</td>
</tr>
<tr>
<td>10</td>
<td>Dublin - London</td>
<td>2.2</td>
</tr>
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</table>

Source: IATA WATS 2016, 2015 data
Safety & Security
Aviation Safety & Security

Diminishing losses despite strong traffic growth

Sources: World Bank; Aviation Safety Network; The Economist

*Passengers and crew on aircraft of ≥14 passengers, excluding military and corporate
†To November 8th. Includes air crash of October 31st in Egypt as a bombing

Economist.com

AAPA
ASSOCIATION OF ASIA PACIFIC AIRLINES
Safety Performance Trends

Western-built Jet Aircraft Major Accident Rates
by Operator Region 2006 - 2016
3-year moving averages

Source: AAPA
Unprecedented tragedies

• Every loss brings human suffering

• Even though, flying is extraordinarily safe, and getting safer still

• Industry is delivering continuous improvements in aviation safety performance

• Despite heightened anxieties, public confidence about air travel remains positive
Challenges
Individual/Cultural challenges to SMS
ICAO State Safety Oversight System

- ICAO sets global safety standards and practices
  - Staged approach: Basics > Extended > Predictive

- ICAO oversight of effective implementation by States through Universal Safety Oversight Audit Programme & Continuous Monitoring Approach (USOAP-CMA)
Variable quality of regulatory oversight

Inconsistent implementation of ICAO standards

- Lack of quality assurance leads to unnecessary duplication
- Call for action to address evident weaknesses
- ICAO ‘No Country Left Behind’ campaign
Asia Pacific: Regulatory perspectives

• Diverse region: varying levels of capacity and capability
• Some States at risk of failing USOAP-CMA with findings of Significant Safety Concerns
• Punitive measures taken against operators for the deficiencies of its home regulator
• Several Asian countries have been subject to external sanctions including US Cat 2 designation or operating bans per EU safety list
• Many States introducing ramp inspections – inconsistent approach
• Keeping pace with industry growth brings further challenges

Multiple audits not the most effective way to enhance the quality of regulatory oversight and aviation safety
Asia Pacific: Regulatory challenge

- Industry high level of safety performance due to coordinated safety activities, sharing best practices and data, lessons learned
- States increasing level of foreign air operator surveillance resulting in punitive sanctions on airlines
  - Inconsistent/unharmonised approach
  - Lack of industry dialogue
- Keeping pace with industry growth
- State Safety Program (SSP)
- Just Culture

Need to strengthen regional collaboration and cooperation to further enhance aviation safety
US & EU: extra-territorial impact

- US aviation safety oversight led by FAA
  - Foreign operators must comply with FAR129
  - Categorize countries with operations to the US
  - Cat 2 rating restricts airline operations to the US
- EU safety oversight led by European Commission, EASA and Eurocontrol
  - Foreign operators must comply with TCO operations
  - Safety List: imposes operating bans on airlines from countries with inadequate safety oversight
- State responsibility but sanctions have punitive impact on airlines regardless of airline safety performance
Priorities
Safety Priorities

Identified Risk Factors:

• Controlled Flight into Terrain (CFIT Turboprop)
• Approach & Landing
• Loss of Control in Flight
• Runway Safety (excursions)
• Non-Adherence to Standard Operating Procedures
• Human Factors
• Ground Accidents

**Focusing on development and implementation of action plans to proactively manage such threats**
Latent Safety Conditions

Identifying underlying deficiencies in:

• Regulatory oversight
• Safety management
• Management systems
• Change management
• SOP and checking procedures
• Training systems
• Qualifications and experience levels
Safety Focus

- Airlines operate in a complex and challenging business environment
- Asian airlines are listed among some of the world's leading safe airlines
- Safety requires long term investment and commitment in resources by all stakeholders
- Greater focus on effective regulatory oversight aligned with agreed ICAO standards
- Enhanced safety performance relies on transparency, collaboration and cooperation between regulators and industry
Outreach
AAPA Outreach

- Open policy on safety – FOSWG, CaSWG, APTSF, APASS
- Efforts based on trust, transparency and partnership
- Forums, Workshops and Working Groups
- Support national safety forums
- Outreach to regional ANSPs
- Benchmarking and sharing of data with safety partners
- Develop guidance and training – Just Culture
- Outreach to Turbo-prop operators

➢ Turboprop operations require separate focus and attention to prioritise relevant safety initiatives
Working relationship with airlines in the region

Always open for dialogue on safety
Airport Focus

• Runway Safety
• Safety Management Systems (SMS)
  • Identification and mitigation of airport risks and hazards
• Wild life management
• Foreign object damage
• Ground operations
• Infrastructure
• Collaboration and cooperation
Regional Stakeholder Outreach
Closing Thoughts

- Flying is extraordinarily safe and secure
- Aviation drives economic and social development
- Airport and ANS infrastructure planning is a shared challenge
- Aviation requires effective regulatory oversight
- Close collaboration amongst all involved stakeholders
- Stakeholders committed to continuous safety improvement; must take ownership of safety priorities

Keeping air travel safe, secure and convenient
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