

IATA's COSTG Activities

Catherine Chan

Group Safety Manager - Operational Safety (Cabin), Cathay Pacific



COSTG members are from...

Matt Whipp
Mary Gooding
Anne-Frédérique Houlbreque
Alexandra Wolf
Martin Ruedisueli
Rino Anastasio
Carlos Dias

 **AIR CANADA**
Christiane Raspa

 **BRITISH AIRWAYS**
 virgin atlantic
 **Lufthansa**

 **AIRFRANCE**  **SWISS**
 **AIRPORTUGAL**  **Alitalia**  **air astana**

 American Airlines
Lisa Mounce

Anabel Brough
Warren Elias
Artem Filippov
Berry Liman
Lerato Luti

 **Emirates**
 **QATAR**
AIRWAYS

 **Kenya Airways**
The Pride of Africa

 **SOUTH AFRICAN AIRWAYS**

Rosnina Abdullah
Johnny Chin
Catherine Chan
Sophie O'Ferrall

 **CATHAY PACIFIC**
 **SINGAPORE AIRLINES**
 **malaysia airlines**

 **australia**

Dangerous
goods



Cabin Crew



Procedures



and:

Evacuation



Accidents
and
incidents



Onboard
Service



Security



Unruly
Passengers



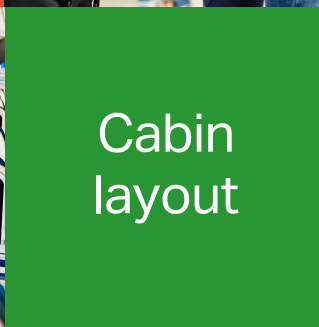
Communication



Risk
assessment



Cabin
layout



Emergency
Equipment



- Human trafficking
- Regulation
- Accessibility
- Fatigue
- Human factors
- Training
- Onboard product
- Lithium batteries
- Food safety
- Medical equipment
- ...
- ...

Aviation
Starts with **People**
Ends with **People**

#PreventProtectProgress



COSTG & Our Progress

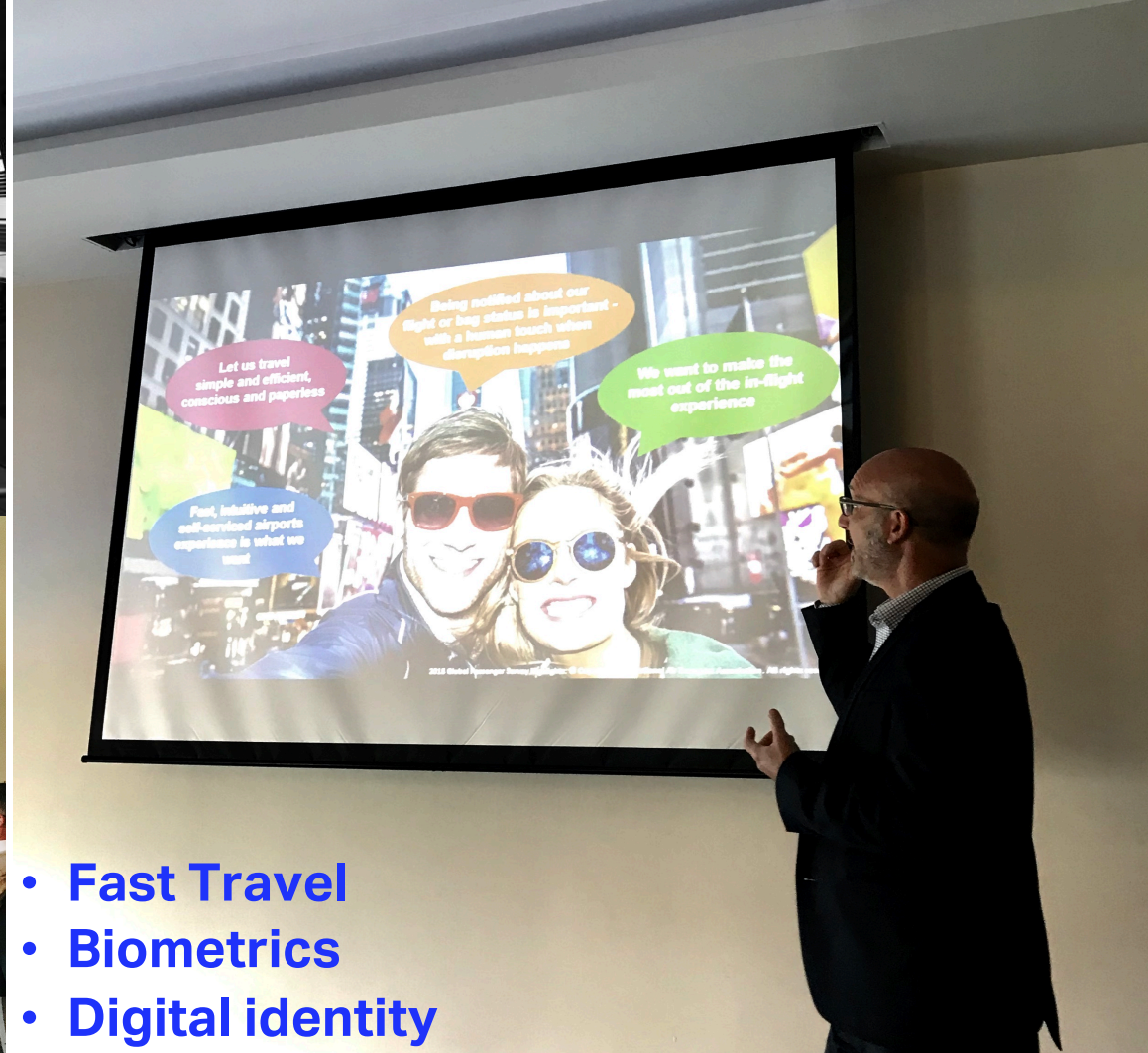


- Big Data : Performance Indicator
- Effective Change Management
- The Challenges of Regulation Policies and Procedures

Empowering the COSTG...
add value to your organization



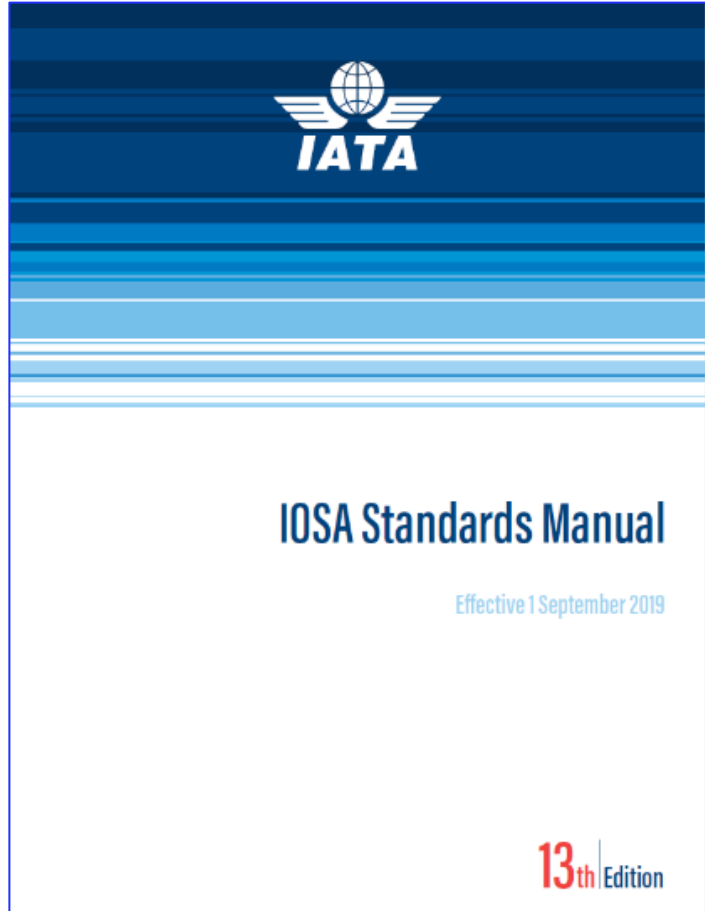
IATA Passenger Experience & Facilitation



- **Fast Travel**
- **Biometrics**
- **Digital identity**

How do we prepare ourselves for the future?

ISM Ed 13



Safety Best Practices Guide Ed 5



CAB ISARPS

- Top 10 findings
- Other issues

Risk Assessment

- Now and in future

Civil Aviation University of China, Tianjin



Collaboration between SAE – IATA, EMG & COSTG

SEAT Committee
S-9 Committee



Collaboration between SAE – IATA EMG & COSTG

1. Aircraft SEAT Committee
Brace Position, Head Impact Criteria

2. S-9 Committee
Evacuation slide design

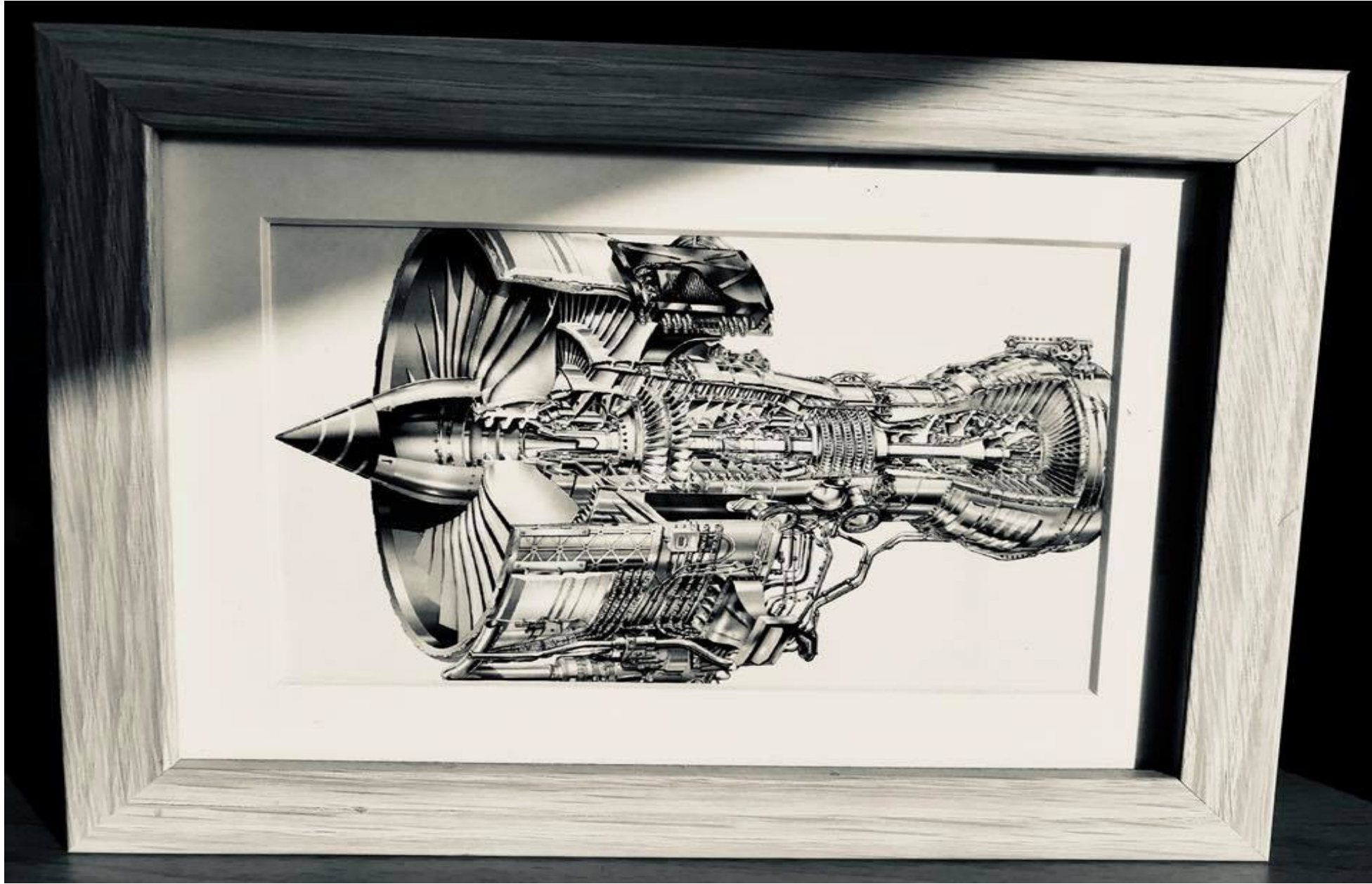
Project Completed

IATA BPG :

Cabin interior retrofits and
entry into service program



SAE International and you...



SAE International and you...

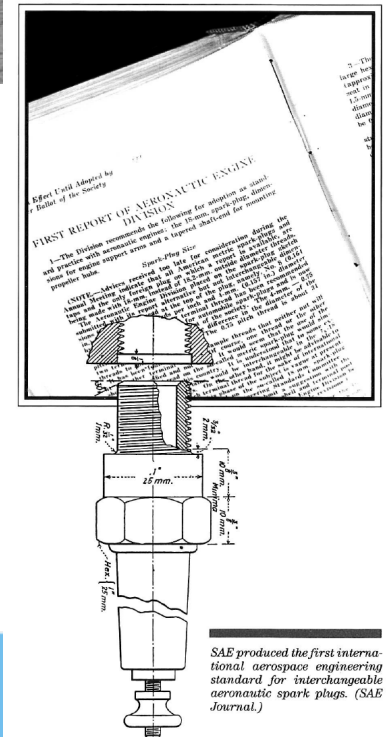
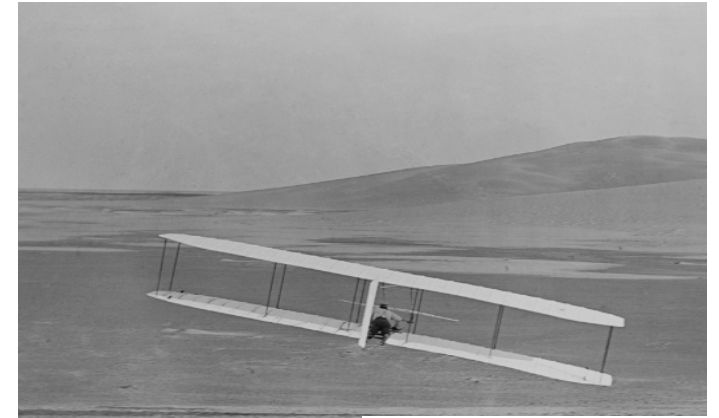
SAE Aerospace Standards

Phuong Ta, SAE Seat Committee Vice Chair

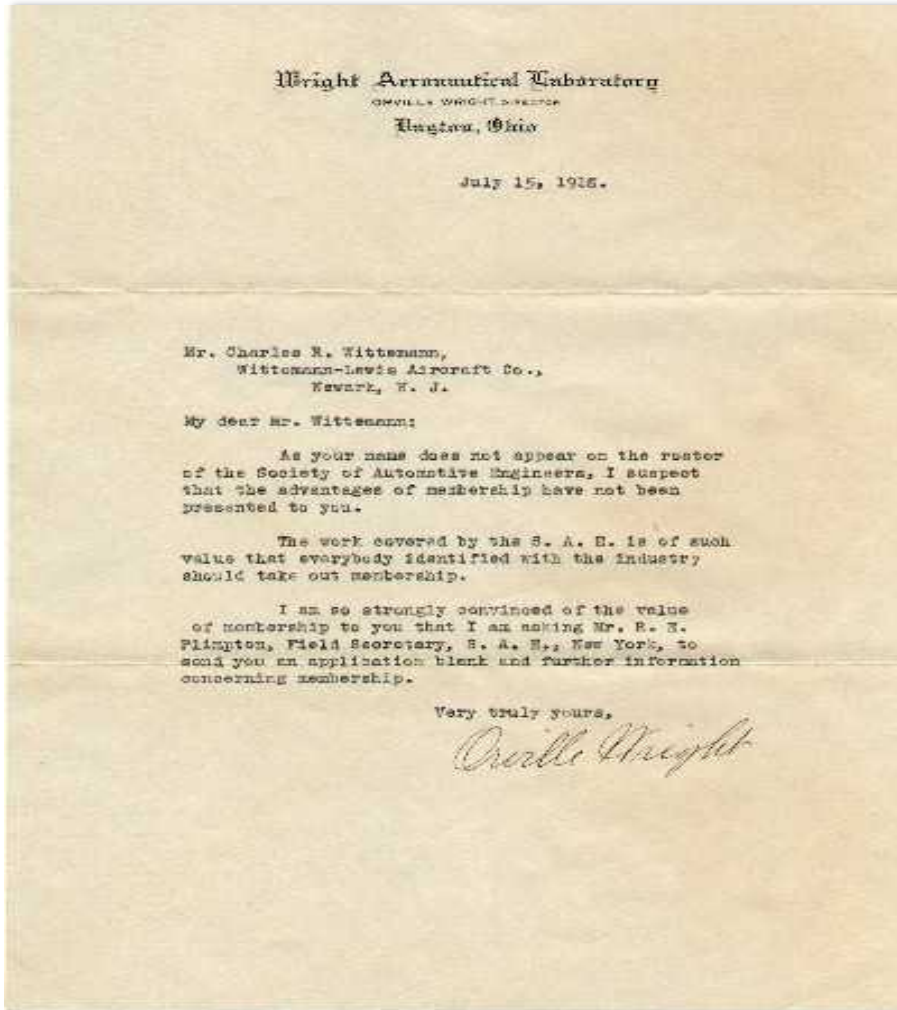
IATA Cabin Operations Safety Conference
Istanbul, Turkey
11th June 2019

SAE International

- Established in 1905
- Global technical membership association and standards developing organization comprised of nearly 200,000 engineering professionals
- Transport industries such as automotive, aerospace, and commercial vehicles
- 100th Anniversary of SAE Aerospace Standards in 2017
- First international aerospace standard published in 1917 for interchangeable aeronautic spark plugs



SAE Aerospace Standards History – From 1916



The Wright Brothers

“The work covered by the SAE is of such value that everybody identified with the industry should take out membership.”

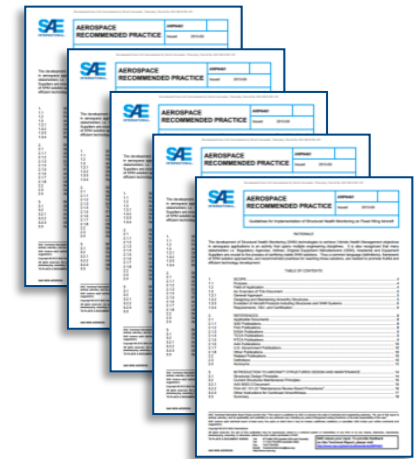
Orville Wright, 1918

Premise

- ICAO and aviation authorities are looking to industry standards to provide the (technical) basis for regulatory and certification material
- The national aviation authorities are working towards common certifications and airworthiness requirements, based on common standards
- SAE International brings all stakeholders together around one table to develop aerospace industry voluntary consensus standards necessary for aircraft design, production, operation, maintenance, and repair

SAE Aerospace Standards by the Numbers

Systems Groups	10
Steering Groups	3
Technical Committees	180+
Standards	8,500+
Document Types	4
AS, AMS, ARP, AIR	
Unique Participants	8,300+
Total Participation	17,600+



SAE Aerospace Council, Global Custodians: Oversight and Governance

Airbus	Gulfstream Aerospace
A4A	Honeywell Aerospace
AVIC	Lockheed Martin
BAE Systems	Lufthansa Technik
Boeing	Meggitt
Bombardier Aerospace	Northrop Grumman
CAPE	Pratt & Whitney / UTC
CIRA	Rolls-Royce (Chair)
COMAC	Safran
EASA	Sikorsky
Embraer	Southwest Airlines
FAA	U.S. Department of Defense
Leonardo	Wichita State University
GE Aviation	

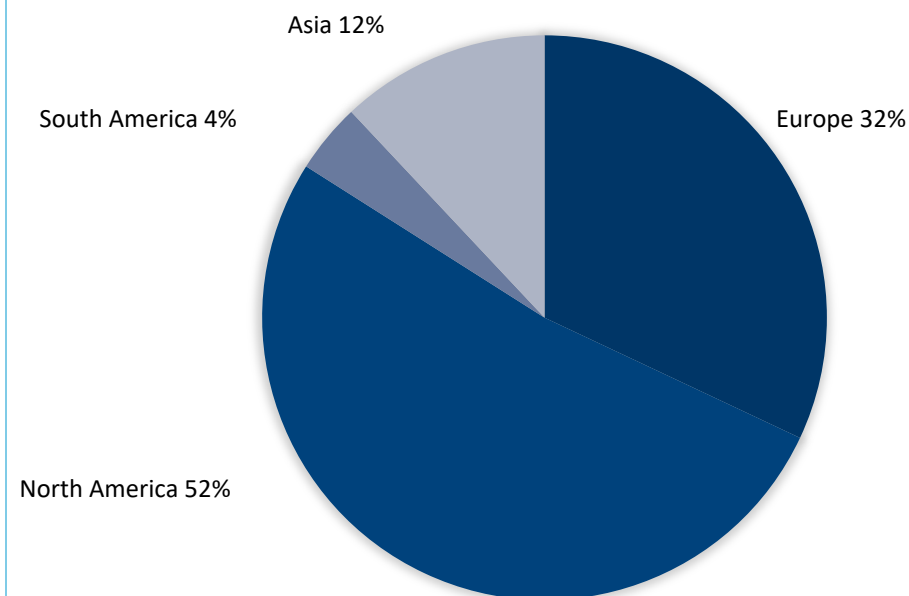
March 2019 meeting hosted by COMAC, Shanghai

Stakeholders:

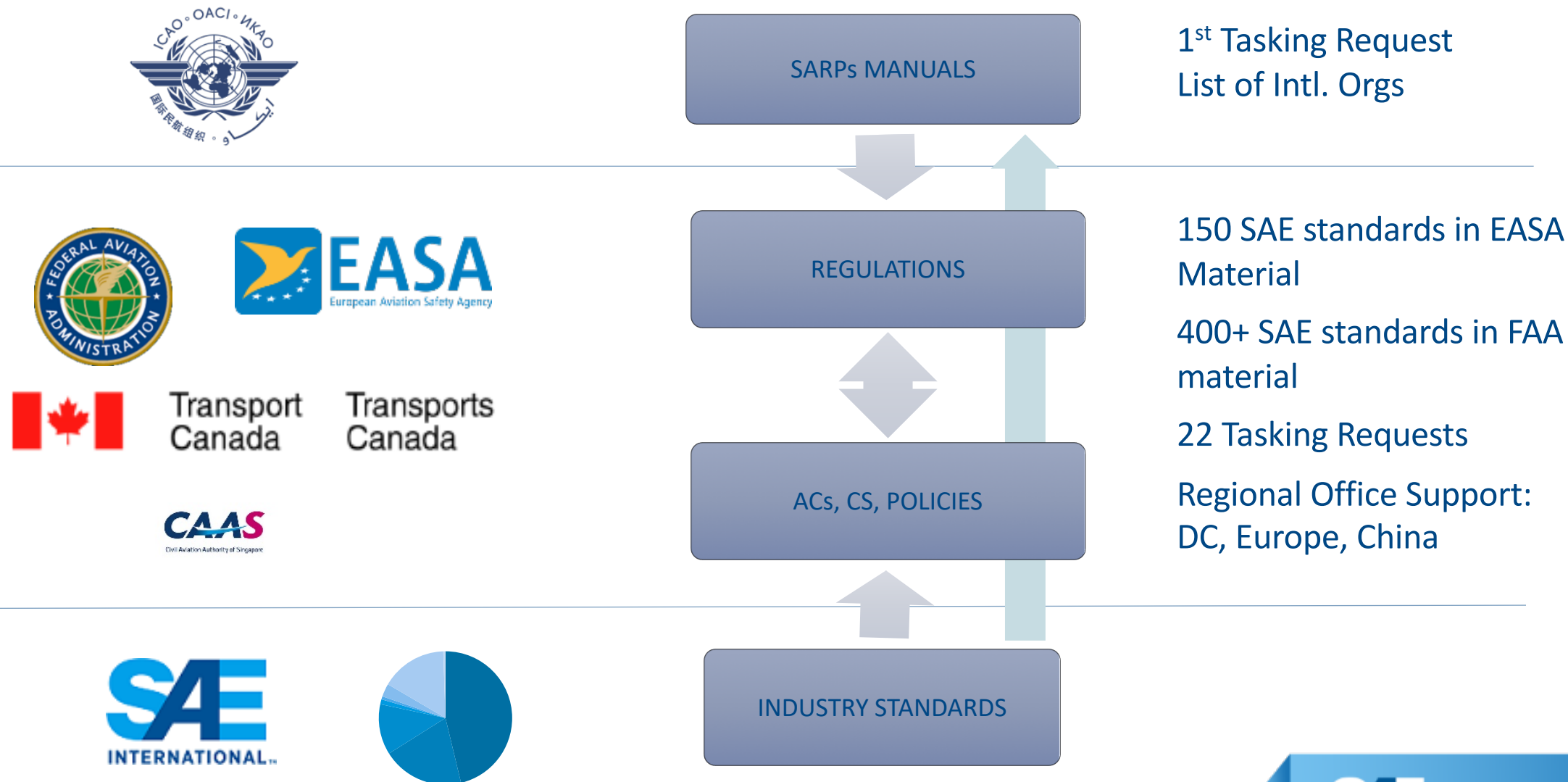
Industry, Operators, Government, Research

ICAO Observer Role

Global Stakeholders: Matching the Industry



The Public-Private Partnership: Civil Aviation



IATA – SAE Standardization Collaboration Topics

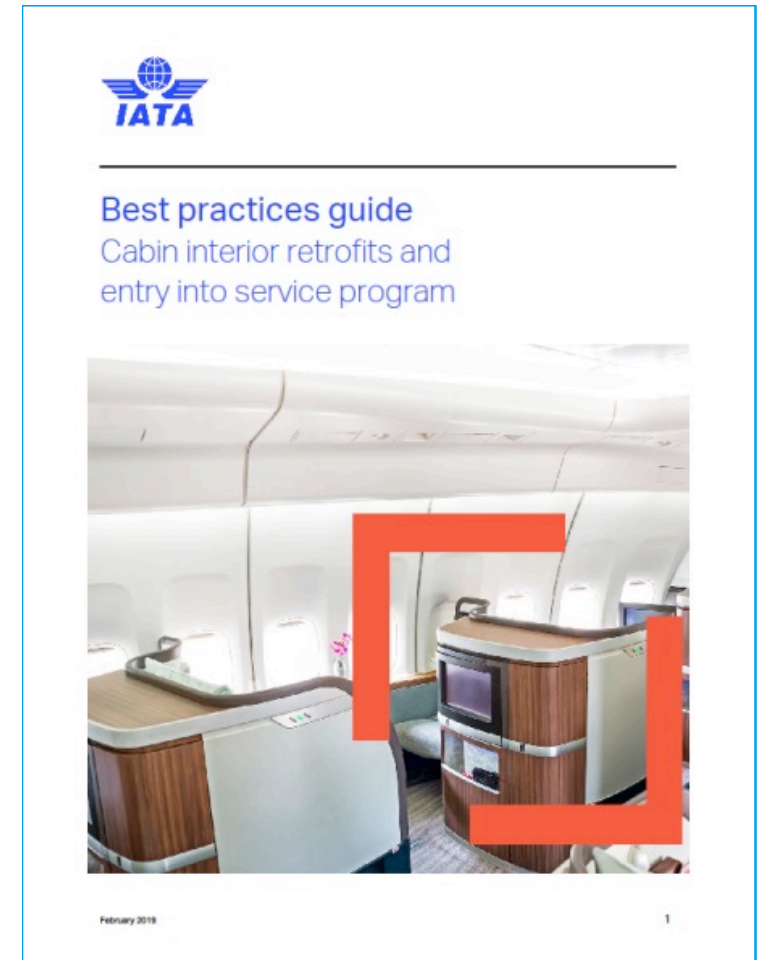
- Additive Manufacturing (Metals, Polymers & Repair)
- Aircraft Ground De-icing
- Aircraft Health Monitoring
- Cabin Air Measurement
- Cabin Safety
- Cargo Containers
- Commercial Aircraft Composite Repair
- Ground Support Equipment
- RFID

IATA Groups & SAE Committee Linkages

- IATA Engineering & Maintenance Group
 - AMS AM-NM, Additive Manufacturing Nonmetals
 - AMS CACRC, Commercial Aircraft Composite Repair Committee
 - AC-9M, Cabin Air Measurement
 - G-18, Radio Frequency Identification (RFID) Aerospace Applications
 - HM-1, Integrated Vehicle Health Management
- IATA Cabin Operations Safety Technical Group
 - SEAT Committee
 - S-9A, Safety Equipment & Survival Systems
 - S-9B, Cabin Interiors & Furnishings
- IATA Ground Operations Group
 - AGE-2, Air Cargo
 - AGE-3, Aircraft Ground Support Equipment

IATA Best Practices Guide

- SAE invited to participate in team hosted by IATA Engineering & Maintenance Group
- SEAT and S-9 Committees provided input to Appendix A which identifies SAE standards and recommended practices that could be utilized for certification of interior modifications
- Released February 2019,
https://www.iata.org/publications/Documents/Best_practices_guide_Cabin_retrofit_and_EIS_Ed1.pdf



SAE Committee Liaisons with IATA COSTG

- SEAT Committee
- S-9, Cabin Safety
 - S-9A, Safety Equipment & Survival Systems
 - S-9B, Cabin Interiors & Furnishings

SAE SEAT Committee

- Current Projects
 - ARP6337, *Composite Seats*
 - ARP5526F, *Aircraft Seat Design Guidance and Clarifications*
 - AS6960, *Performance Standard for Seat Surrounding Furniture in Transport Aircraft*
 - AS8043C, *Restraint Systems for Civil Aircraft*
 - AS8049E, *Performance Standard for Seats in Civil Rotorcraft, Transport Aircraft, and General Aviation Aircraft*
- Considering developing an Aerospace Information Report for Defining Minimum Seat Dimensions (related to safety & egress only)

SAE SEAT Committee

➤ Recently Published

- *ARP6330, Methods to Evaluate Impact Characteristics of Seat Back Mounted IFE Monitors*
- *ARP5526E, Aircraft Seat Design Guidance and Clarifications*
- *AS6316, Performance Standard for Oblique Facing Passenger Seats in Transport Aircraft*
- *ARP6199A, Method to Evaluate Aircraft Passenger Seats for the Test Requirements of 14 CFR Part 25 Appendix F, Parts IV and V*
- *AS8049/1B, Performance Standard for Side-Facing Seats in Civil Rotorcraft, Transport Aircraft, and General Aviation Aircraft*

SAE S-9A, Safety Equipment & Survival Systems Committee

Current Projects:

- *AS8994, Emergency Escape Slides, Ramp/Slides and Slide Rafts*
- *AS4299A, Survivor Locator Lights*
- *AS8993, Slip Resistance Requirements and Coefficient of Friction Test Methods*

Recently Published:

- *AS5134B, Aviation Visual Distress Signals (AVDS)*
- *AIR5690A, Rationale for Replacement of Pyrotechnic Signaling Devices in Survival Kits on Transport Category Aircraft Life Rafts and Slide-Rafts*
- *ARP6239, Demonstration Emergency Equipment*

SAE S-9B, Cabin Interiors & Furnishings Committee

Current Projects:

- *ARP1315F, Safety Considerations for Airplane Lavatories*
- *ARP1384E, Passenger Safety Briefing Materials*
- *ARP8996, Comprehensibility Testing for Pictogram-based Aircraft Markings and Placards*
- *AS6271, Halocarbon Clean Agent Hand-Held Fire Extinguisher*

Recently Published:

- *ARP6503, Cabin Crew Rest Facilities & ARP583J, Cabin Crew Stations*
- *ARP488F, Exits and Their Operation - Air Transport Cabin Emergency*
- *ARP577E, Emergency, Instruction and Information Placards – Internal and External*

Collaboration

Industry wins when it collaborates on common standards:

- A baseline to ensure products meet “form, fit and function” and can be interchangeable and interoperable
- Easier compliance with regulations
- Meeting contractual requirements
- Higher levels of quality
- Leveraging supply chain efficiencies
- Reduction in per unit costs
- Wider global availability
- Reduced operating costs due to lower stock levels

