COSTG members are from...

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Dangerous goods
Evacuation
Accidents and incidents
Cabin Crew
Procedures
Security
Unruly Passengers
Communication
Onboard Service
Risk assessment
Cabin layout
Emergency Equipment

and:

• 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
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

March 2019 meeting hosted by COMAC, Shanghai
Stakeholders: Industry, Operators, Government, Research
ICAO Observer Role

Global Stakeholders: Matching the Industry

- Asia 12%
- Europe 32%
- South America 4%
- North America 52%

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

Stakeholders:

- Industry
- Operators
- Government
- Research
The Public-Private Partnership: Civil Aviation

1st Tasking Request
List of Intl. Orgs

150 SAE standards in EASA Material
400+ SAE standards in FAA material
22 Tasking Requests
Regional Office Support: DC, Europe, China
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,
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)
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*
- AS8049/1B, *Performance Standard for Side-Facing Seats in Civil Rotorcraft, Transport Aircraft, and General Aviation Aircraft*
S

A

E

S

S

A

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
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