

Reachout No. 56 in Muscat, Oman

From 1 January to 9 February 2023

Hosted by Oman Transport Safety Bureau and Oman Aircraft Control College

1. Introduction

1.1 The Oman Transport Safety Bureau and Oman Aircraft Control College hosted a series of aviation safety courses as the 56th ISASI Reachout in Muscat, Oman from 1 January to 9 February 2023. The content of the courses was coordinated with the Oman Transport Bureau (OTSB) (Captain Majid Saif AL Barhi, Director of Oman Transport Safety Bureau and Ms. Zayana Ali Saud Al Said, Head of Air Accident Investigation, Transport Safety Bureau). The course facility and travel arrangements were handled by the Oman Aircraft Control College (OACC) (Mr. Said Alkiyumi, General Manager).

1.2 The courses comprised a two-week Accident and Incident Investigation course from 1 to 12 January and a rerun of this course from 15 to 26 January; and a one-week Safety Management Systems course from 29 January to 2 February and a rerun of this course from 5 to 9 February. The dedicated involvement and support by Oman TSB and OACC was evident at all times throughout the course and was appreciated by the instructors and the participants.

1.3 The ISASI instructors were Mr. Mike Doiron, representing ISASI and Cirrus Aviation (Halifax, Nova Scotia, Canada) (all four courses) and the ISASI International Councillor Mr. Caj Frostell (the two two-week accident investigation courses). Each course was attended by about 35 participants (OTSB investigators, and OTSB part-time investigators from all facets of the Oman aviation industry (airlines, maintenance facilities, air force, board guard agency, police, royal flight services etc.)

1.4 The instructors prepared master copies of their training material. OACC arranged for reproduction of the presentations in the form of a hardcopy participant handout, and the OTSB distributed soft copies to the participants.

2. The Accident Investigation course

2.1 The presentations by Caj Frostell on the two-week accident investigation course comprised: the international requirements for accident investigation (ICAO Annex 13); planning for major investigations; independence of the investigation agency and regional agencies; accident site investigation; photography; the technical investigation; wreckage recovery from the sea; witness interviewing; flight operations investigation; investigation of ATS and airport factors; crashworthiness and survivability; ICAO requirements for SSP, SMS and airline safety programs; crisis management (news media and family assistance); tests and research; occurrence reporting and event classification; incident investigations; writing the final report; accident investigation management; and accident site hazards and personal protective equipment. The case studies included the COPA B737 video; group assignments; non-pressurization incident – Avro RJ100; and determination of findings, causes and safety recommendations based on a helicopter flight operations video.

2.2 The presentations by Mike Doiron consisted of: Human factors (SHELL model, Reason's model, HFACS); CRM; automation; slips lapses and mistakes; pilot monitoring investigations; weather investigation; human information processing; investigation of runway

incursions; investigation of falsified qualifications and documents; and investigating fatigue. The case studies included flight AA1420 in Little Rock, Arkansas (weather); AirTransat A330 landing in the Azores; ASA529 (human performance threats); an ATR 42 accident; and the F28 accident in Dryden, Canada.

3. The SMS course

3.1 The presentations by Mike Doiron consisted of two one-week sessions on Safety Management Systems (SMS) based on ICAO, EASA, FAA and Transport Canada guidance material. In addition to the SMS guidance material, there were discussion and explanations of the SMS Gap Analysis and SMS Implementation strategies. The SMS training was further enhanced through relevant SMS case studies, Human Factors awareness training, development of Just Safety Culture concepts, and Internal Investigation/Evaluations of SMS type incidents. The participants demonstrated a good understanding of the SMS requirements and a willingness to incorporate these concepts into their operations. The participants for each SMS course were provided with copies of SMS training material, case studies, videos, SMS checklists and links to on line SMS reference material. The exchange of information with the participants continued after completion of the SMS training with further assistance relating to specific SMS requirements in Air Traffic Control, Flight Operations, Airport Operations, Airworthiness, Civil Authority and Transportation Safety Board. Very strong professional relationships were formed that will contribute to an SMS program based on continuous improvement.

4. Conclusions

4.1 A number of seminar participants mentioned with appreciation that it was a unique opportunity arranged by ISASI, in which the Oman aviation industry representatives came together with the OTSB investigators to discuss accident investigation and aviation safety issues.

4.2 From an ISASI instructor perspective, the multitude of ISASI Reachout activities was a unique opportunity to exchange experiences, different ways of investigating occurrences and implementing safety strategies, handling of emergency situations, implementing safety actions and exchanging ideas for the future.

4.3 The instructors truly appreciated the excellent facilities and arrangements, the interactions with management and course participants, as well as the exceptional hospitality. The outstanding arrangements and assistance rendered to the instructors were invaluable in all aspects.

Graduation ceremony for the Air Accident & Incident investigation course, which have been organized by Oman Transport Safety Bureau in cooperation with Oman aircraft control college & International Society of Air Safety Investigators (ISASI)



