Flight Safety Enhancement – In Need of a Global Approach

Aviation safety, measured in terms of number of hull losses per departure, has reached a mature but stable level.

Any further enhancement of this achievement requires a systemic approach where the aircraft, the operations and the operating environment are considered globally.

Introducing the Flight Operations Briefing Notes Concept

The Flight Operations Briefing Notes have been designed to allow an eye-opening and self-correcting accident-prevention strategy.

The initial set of Approach-and-Landing Flight Operations Briefing Notes has been developed by Airbus in the frame of the Approach-and-Landing Accidents Reduction (ALAR) Task Force led by the Flight Safety Foundation (FSF).

The wide acceptance of the Approach-and-Landing Briefing Notes by the pilots’ community and the positive feedback received from customers have prompted Airbus to initiate the development of new sets of Briefing Notes, in order to cover the entire flight profile and address the main threats and hazards to flight operations safety.

Accident-prevention Strategy

To support this strategy, each Flight Operations Briefing Note:

- Presents the subject and its associated hazard to flight operations safety, using background information and statistical data;
- Emphasizes the applicable standards and best practices (e.g., standard operating procedures [SOPs], supplementary techniques, operational recommendations and training guidelines);
- Lists and discusses the operational and human factors that may cause flight crews to deviate from applicable standards;
- Provides or suggests company accident-prevention-strategies and/or personal lines-of-defense;

This section will assist the reader in identifying company or personal prevention strategies and/or corrective actions;
• Establishes a summary of operational key points and training key points;
• Refers to associated or related Flight Operations Briefing Notes; and,
• References related ICAO, U.S. FAR and European JAR regulatory documents.

How to Use and Implement the Flight Operations Briefing Notes?

The Briefing Notes should be used by airlines to enhance the awareness of various operational and human factors, threats and hazards among flight crews and cabin crews.

Management pilots should review, customize (as required) and implement the recommendations, guidelines and awareness information, in the following domains:

• Operational documentation:
  - Standard operating procedures; and,
  - Procedures and techniques / supplementary techniques.
• Training:
  - Simulator Training, to develop new scenarios for line oriented flight training (LOFT) or special purpose operational training (SPOT); and/or,
  - Crew resource management (CRM) training, to develop new topical subjects to support CRM discussions.
• Safety-awareness Information:
  - Flight crew bulletins;
  - Airline’s safety magazine articles;
  - Classroom lectures; and/or,
  - Stand-alone reading.

Line pilots should review and compare the recommendations, guidelines and awareness information with their current practices and enhance their techniques and awareness level, as required.

Other actors in the global aviation system, such as:
• Air traffic control services;
• Navigation state agencies;
• Operational authorities;
• Service providers; and,
• Flight academies / flying colleges;

...should use the provision of the Flight Operations Briefing Notes to evaluate their possible contribution to the enhancement of ground and flight safety.

What’s coming up?

The release of the Briefing Notes will span over the years 2004-2006 and will cover the following domains:

• Standard operating procedures
  (e.g.: Conducting effective briefings, ...),
• Human Performance
  (e.g.: Enhancing situational awareness, error management, ...),
• Operating environment
  (e.g.: Bird strike threat awareness, ...),
• Adverse weather operations
  (e.g.: Wind shear awareness, ...),
• Runway and surface operations
  (e.g.: Preventing runway incursions, ...),
• Supplementary techniques
  (e.g.: Preventing altitude deviations, ...),
• Establishes a summary of operational key points and training key points;
• Refers to associated or related Flight Operations Briefing Notes; and,
• References related ICAO, U.S. FAR and European JAR regulatory documents.
• Takeoff and departure operations (e.g.: Understanding takeoff speeds, Revisiting the stop or go decision, …),

• En-route climb and cruise management (e.g.: Managing buffet margin, overspeed prevention / recovery, …),

• Descent management (e.g.: Being prepared for go-around, …),

• Approach techniques (e.g.: Flying stabilized approaches, …),

• Landing techniques (e.g.: Preventing tail strike at landing, …),

• Ground handling (e.g.: Refueling with passenger on board, …),

• Cabin operations (e.g.: Managing smoke issues in cabin, emergency evacuation, …).

The Flight Operations Briefing Notes are progressively released on the Safety Library room of the Airbus Safety First website: http://www.airbus.com/about/safetylibrary.asp They should be also disseminated to customers once a year on CD-ROM and paper format.

Conclusion

Flight safety enhancement has been and will continue to be the result of technological developments.

However, 85 % of accidents today are operational events that involve human performance at every stage of the safety chain.

By developing the concept of Flight Operations Briefing Notes and by facilitating their wide dissemination to all actors of the aviation community, Airbus acknowledges that safety awareness information is a key element in further enhancing flight safety.
SAFETY FIRST

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For the enhancement of safe flight through increased knowledge and communications.

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