



The FSF *Operator's Guide to Human Factors in Aviation* debuts on a Eurocontrol Web site.

A New Human Factors Tool on SKYbrary

BY TZVETOMIR BLAJEV

SKYbrary, an Internet-based initiative of Eurocontrol, the International Civil Aviation Organization (ICAO), the U.K. Flight Safety Committee and Flight Safety Foundation (FSF), is designed to be a comprehensive source of aviation safety information, freely available to users worldwide. The site, <www.skybrary.aero>, now contains nearly 2,500 articles and reference documents, with an average of 30 new articles being added every month.

This knowledge base already has proven to be a useful resource for safety managers at airlines and air traffic service providers, as well as training organization managers, who

typically link SKYbrary references into their course material. Recently, the U.S. Federal Aviation Administration Academy incorporated links to SKYbrary material for its International Runway Incursion Prevention Course.

The SKYbrary Human Factors category is fast becoming a key resource for aviation safety professionals, thanks to the work of the Foundation, its European Advisory Committee (EAC) and SKYbrary's team of editors. Central to this development has been the integration into SKYbrary of the FSF *Operator's Guide to Human Factors in Aviation* (OGHFA), more than 100 articles and supporting presentations developed

by the EAC. Direct access is via <www.skybrary.aero/index.php/Portal:OGHFA>.

OGHFA presents human factors issues in a manner tailored to the needs of the aviator — information and best practices based on established knowledge, supported by real-life examples. SKYbrary editors are integrating OGHFA within the wider human factors resource section of SKYbrary, linking articles to each other to allow easy access to this growing information pool for maximum professional benefit. Further contributions are sought to broaden and deepen this pool.

Focusing on the factors that influence people's behavior in work and personal life will help them identify the factors that are most relevant to avoiding errors.

OGHFA articles are organized into four categories:

Crew Actions and Behavior, which includes articles focused on the behavioral aspects of flying. This behavior is subject to a number of different influences.

Personal Influences involves the “internal state” of each individual flight crewmember (e.g., knowledge, fatigue, stress, emotion, mode awareness, spatial orientation, system awareness, time horizon, social interactions, complacency, boredom, distraction, fatigue, currency, knowledge, medical state, and morale). This section includes articles explaining how the human body works and human performance limitations.

Organizational and Environmental Influences are factors beyond the control of the crew but within the control of the airline (e.g., commercial pressure, company communications, ground handling, ground services, maintenance, technical support, training) and those factors affecting a flight that cannot be considered to be within the control of a pilot or an airline organization (e.g., airport facilities, air traffic control [ATC] communications, ATC services, weather conditions and other aircraft). This category includes articles which examine human performance as part of a team and organizational culture.

Informational Influences are the content and form of the operational information available

to a crew (e.g., paper and electronic checklists, manuals, navigational charts, standard operating procedures, and software). This section includes articles focused on training and threat management skills.

These 42 primary articles are supported by 32 situational examples, which detail accidents or incidents, analyzed in a way to help place the human factors issues, as well as defenses and best practices, into operational context. Checklists, self-study guides and training materials are included to further support the needs of individuals and instructors.

The main objective of OGHFA is to create a strong bridge between theory and practice that is context-sensitive, concrete, practical and easy to access.

The OGHFA material is contained in a distinct portal within SKYbrary but linked to the SKYbrary human factors category, allowing ongoing integration of new articles, documents and reference materials. This approach enables the inclusion of many articles related to human factors from a wide range of sources, opinions and cultures.

Building this knowledge is an ongoing process; although Eurocontrol has a comprehensive collection of material, human factors is a huge subject area. Further contributions from Flight Safety Foundation members would be welcome.

While work continues to complete the content in current operational categories, several new categories are under development, including cabin safety, emergency planning, human error and legal process, and safety culture.

Each week, Eurocontrol highlights a specific article in SKYbrary, often related to news events or a seasonal safety threat. Over 5,000 aviation professionals subscribe to a weekly e-mail service announcing the weekly highlight. SKYbrary is visited by more than 1,000 people each day, with visits exceeding 2,000 on days when aviation safety is in the news or following the weekly SKYbrary e-mail. ➔

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