

International Federation of Airworthiness





Flight Safety Foundation

International Air Transport Association

Joint meeting of the FSF-58th annual International Air Safety Seminar IASS, IFA 35th International Conference, and IATA



HOSTED BY



# NOVEMBER 7-10, 2005 MOSCOW, RUSSIA







**Flight Safety Foundation** 

International Air Transport Association

Joint meeting of the FSF 58th annual International Air Safety Seminar (IASS), IFA 35th International Conference, and IATA

## Safety Is Everybody's Business

November 7–10, 2005 Moscow, Russia

## **IASS** Proceedings

ISSN 1528-4425

Copyright © 2005 by Flight Safety Foundation Inc. All rights reserved.

Flight Safety Foundation 601 Madison Street, Suite 300, Alexandria, Virginia 22314-1756 U.S.A. Telephone: +1 (703) 739-6700 Fax: +1 (703) 739-6708

www.flightsafety.org

#### FLIGHT SAFETY FOUNDATION

For Everyone Concerned With the Safety of Flight

#### **Officers and Staff**

Amb. Edward W. Stimpson Chairman, Board of Governors

> Stuart Matthews President and CEO

Robert H. Vandel Executive Vice President Kenneth P. Quinn, Esq. General Counsel and Secretary

David J. Barger Treasurer

ADMINISTRATIVE Linda Crowley Horger Manager, Support Services

FINANCIAL Juan G. Gonzalez Director of Finance and Administration Millicent Wheeler Accountant

MEMBERSHIP Ann Hill Director, Membership and Development

Ahlam Wahdan Membership Services Coordinator

Namratha Apparao Membership Services Coordinator

> PUBLICATIONS Mark Lacagnina Senior Editor

Wayne Rosenkrans Senior Editor

Linda Werfelman Senior Editor

**Rick Darby** Associate Editor

**Karen K. Ehrlich** Web and Print Production Coordinator

> Ann L. Mullikin Production Designer Susan D. Reed

Production Specialist

Patricia Setze Librarian, Jerry Lederer Aviation Safety Library

> TECHNICAL James M. Burin Director of Technical Programs

Joanne Anderson Technical Programs Specialist

Louis A. Sorrentino III Managing Director of Air Transport Safety Services

> **Robert Feeler** *Q-Star Program Administrator*

Robert Dodd, Ph.D. Manager, Data Systems and Analysis

**Darol V. Holsman** Manager of Aviation Safety Audits

Jerome "Jerry" Lederer, 1902–2004 Founder

#### Notice

The proceedings of the Flight Safety Foundation 58th annual International Air Safety Seminar (IASS), part of the joint meeting with the International Federation of Airworthiness 35th International Conference and the International Air Transport Association in Moscow, Russia, feature presentations on safety issues of interest to the aviation community. All the papers presented here have been reformatted for publication in the proceedings and have undergone minor editing for style. This information is not intended to supersede operators' or manufacturers' policies, practices or requirements, or to supersede government regulations. The Foundation, publisher of the proceedings, is not responsible for errors or omissions.

Information in this publication, in the interest of aviation safety, may be reprinted, in whole or in part, but may not be offered for sale, used commercially or distributed electronically on the Internet or on any other electronic media without the express written permission of the FSF director of publications. All uses must credit Flight Safety Foundation, *Safety Is Everybody's Business*, the appropriate presentation title and the author(s). Please send two copies of the reprinted material to the director of publications. These reprint restrictions apply to all FSF publications.

Cover photo: © Copyright 2005 Getty Images Inc.

#### Preface

These proceedings of the Flight Safety Foundation (FSF) 58th International Air Safety Seminar (IASS), part of the joint meeting with the International Federation of Airworthiness (IFA) 35th International Conference and the International Air Transport Association (IATA), reflect this year's theme, "Safety Is Everybody's Business."

Some presentations discuss aviation safety topics from a global aspect. Others survey the scene from a regional perspective. Some apply to operations, while others are concerned with maintenance. Still others relate to various specialties. The message is clear: There are many ways to look at safety and many levels on which the work of enhancing an already safe worldwide aviation system can go forward.

The venue for this year's meeting — Moscow, Russia — is significant. Several of the presentations illustrate the progress that continues to be made in Russia and the Commonwealth of Independent States.

Collectively, these presentations show that, whatever your role in aviation, your contribution is vital in maintaining an admirably low accident rate and lowering it further.

As always, we are grateful to the presenters, agenda development committee, sponsors, exhibitors and FSF members for their support of the seminar.

Strow S Jakuense.

Stuart Matthews President and CEO Flight Safety Foundation

November 2005

### We Thank You for Your Support!

**Host Committee** 



#### We Thank You for Your Support!



\*Sponsors and Exhibitors as of 9/30/05

## **Table of Contents**

Session I — Global Overview Session Chairman: David Mawdsley, director, safety, International Air Transport Association
Aviation Safety 2005: The Year in Review
<b>Regional Safety Team Efforts Overview</b>
Flight Safety Comparative Analysis of USSR/CIS-built and Western-built Jet and Turboprop Aircraft
Session II — Management of Safety Session Chairman: John Saull, executive director, International Federation of Airworthiness
Volga-Dnepr Airlines Flight Safety Assurance and Aviation Accident Prevention System
Survey on Cultural Factors Affecting Safety Management System Implementation in Latin America
Maintenance Error Management — The Next Step at Continental Airlines
Passenger Safety Information, Past and Future.125Professor Helen Muir and Lauren Thomas, Cranfield University
Session III — Operational Issues Session Chairman: Robert MacIntosh, chief advisor for international safety affairs, U.S. National Transportation Safety Board
Rejected Takeoffs Won't Go Away 133   Capt. William de Groh, Air Line Pilots Association, International
Running Out of Runway: Analysis of 35 Years of Landing-overrun Accidents
<b>Innovative Training With Promising Results — Runway Incursion Update</b>

Helicopter Controlled Flight Into Terrain (CFIT) Accidents: When and Where
Session IV — Continuing Airworthiness Session Chairman: Andrew McClymont, vice president, Europe, International Federation of Airworthiness
Outsourcing Component Support: The Component Solution Provider's Input to Improving Flight Safety
<b>Fatigue Management in Canadian Aviation Maintenance Operations</b>
Managing Procedural Error in Maintenance
<b>The Role of Human Factors Training and Error Management in the</b> <b>Aviation Maintenance Safety System</b>
Session V — Infrastructure and Technology Development Session Chairmain: James Terpstra, former senior corporate vice president, Jeppesen
New Capabilities for Weather Accident Prevention
Session VI — Proactive Use of Information Session Chairman: Paul Mingler, commercial flight safety director, GE Aircraft Engines
Sharing Safety Data — An Example of Cooperative Industry-Regulatory Data Analysis: Including a Review of the Prevalence and Severity of Propulsion-Related Events
<b>Changing National Safety Culture Through Data Sharing</b>
Structural Integrity Challenges

#### **Additional Papers**

We Need to Know What We Don't Know Capt. Scott C. Schleiffer, Air Line Pilots Association, International	
Safe Operation During Airport Construction Gerhard Gruber, Vienna International Airport	
International Federation of Airworthiness	
Officers and Vice Presidents Trustees	

#### **International Air Transport Association**

Officers
----------

#### **Flight Safety Foundation**

IASS Agenda Development Committee	402
International Advisory Committee	403
European Advisory Committee	404
Corporate Advisory Committee	406
Icarus Committee	407
Board of Governors	408
Honorary Advisory Board	409
Members	411