Lessons Learned from Cross-Industry Benchmarking

June 7th & 8th, 2001
Sheraton Inner Harbor Hotel
Baltimore, MD
PROLOGUE

The theme of this year's annual workshop of the Center for Human Performance and Risk Analysis (CHPRA) is "Lessons Learned from Cross-Industry Benchmarking." Therefore, the workshop features presentations by academic researchers and industry practitioners on the aviation, aerospace, oil, rail, and nuclear industries.

We specifically chose to focus on the aviation and aerospace industries. Keynote speaker Ron Westrum is a frequent speaker on safety topics at aviation safety conferences, and John Lemke is the Manager of System Safety Engineering in the Office of Safety and Mission Assurance at NASA Headquarters. In addition, Michal Tamuz will discuss lessons learned from near miss reporting in the aviation industry, and Mary Waller will discuss crew communication in NASA mission control center operations.

A second focus of the workshop concerns the topic of safety culture, which is of significant interest today across a wide variety of industries. Several speakers, including cultural anthropologist Constance Perin and consultants Nicholas Bahr and Rob Fisher, will discuss the topic of safety culture in general. Other speakers will address issues of safety culture in the context of specific contexts and challenges. For example, Jan Erik Vinnem will discuss the use of performance indicators in offshore oil operations, and Center Director Vicki Bier will discuss how deregulation can create challenges to maintaining an effective safety culture. Finally, Najmedin Meshkati and John Brøns will both discuss safety culture at nuclear facilities in the wake of the Tokaimura accident.

The workshop is structured with a leisurely pace, to provide the opportunity to discuss particular issues in detail in an interactive manner. We hope that participants in this year's workshop will find the opportunity to explore a number of new ideas that they can apply at their own organizations.
# TABLE OF CONTENTS

**AGENDA**

**LIST OF WORKSHOP ATTENDEES**

**SPEAKERS Thursday June 7th, 2001**

**ORGANIZATION TYPES AND ACCIDENT TYPES**  
*RON WESTRUM*

**THE TOKAIMURA ACCIDENT: CAUSES, EFFECTS AND LESSON**  
*NAJMEDIN MESHKATI*

**RE-MODELING THE HIGH CONSEQUENCE INDUSTRIAL ORGANIZATION IN OPERATION**  
*CONSTANCE PERIN*

**USE OF RISK INDICATORS IN THE NORTH SEA OFFSHORE OPERATIONS**  
*JAN ERIC VINNEM*

**SPEAKERS Friday June 8th, 2001**

**MISSION SUCCESS STARTS WITH SAFETY**  
*JOHN LEMKE*

**LEARNING FROM NEAR ACCIDENTS IN THE AIR TRANSPORTATION INDUSTRY: POSSIBILITIES AND PITFALLS**  
*MICHAL TAMUZ*

**EFFECTS OF ADAPTIVE BEHAVIOR AND SHARED MENTAL MODEL CREATION OF CONTROL CREW PERFORMANCE**  
*MARY WALLER*

**ORGANIZATIONAL CULTURE – SIMPLISTIC APPROACHES TO COMPLEX ISSUES**  
*ROBERT FISHER*

**A PRACTICAL APPROACH TO ASSESSING SAFETY CULTURE OF RAILROAD COMPANIES**  
*NICHOLAS BAHR*

**THE TOKAIMURA ACCIDENT: A REVIEW OF U.S. FUEL CYCLE FACILITIES**  
*JOHN C. BRONS*

**IMPLICATIONS OF DEREGULATION FOR SAFETY MANAGEMENT**  
*VICKI BIER*
7th Annual CHPRA Workshop Agenda

*Lessons Learned from Cross-Industry Benchmarking*  
*June 7th & 8th, 2001*

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**Thursday, June 7th**

12:00pm  **CHPR A Luncheon** (*Harborview Room*)  
Keynote Address—“Organization Types and Accident Types”  
Ron Westrum  
(Eastern Michigan University)

1:45pm  Break (*meeting moves to Loch Raven Room*)

2:00pm  “The Tokaimura Accident: Causes, Effects, and Lessons”  
Najmedin Meshkati  
(University of Southern California)

2:45pm  Break

3:00pm  “Re-Modeling the High Consequence Industrial Organization in Operation”  
Constance Perin  
(Massachusetts Institute of Technology)

4:00pm  “Use of Risk Indicators in the North Sea Offshore Operations”  
Jan Erik Vinnem  
(Preventor AS)

**Friday, June 8th** (*Loch Raven Room*)

7:00am  Continental Breakfast

8:00am  “Mission Success Starts with Safety”  
John Lemke  
(NASA—Safety & Risk Management Division)

9:00am  “Learning from Near Accidents in the Air Transportation Industry: Possibilities and Pitfalls”  
Michal Tamuz  
(University of Texas-Houston)

10:00am  “Effects of Adaptive Behavior and Shared Mental Model Creation of Control Crew Performance”  
Mary Waller  
(University of Illinois-Urbana/Campaign)

11:00am  “Organizational Culture – Simplistic Approaches to Complex Issues”  
Robert Fisher  
(Performance Improvement International)

12:00pm  Lunch Break (*on your own*)

1:00pm  “A Practical Approach to Assessing Safety Culture of Railroad Companies”  
Nicholas Bahr  
(Booz-Allen and Hamilton)

2:00pm  “The Tokaimura Accident: A Review of U.S. Fuel Cycle Facilities”  
John C. Brons  
(Nuclear Energy Institute)

3:00pm  “Implications of Deregulation for Safety Management”  
Vicki Bier  
(University of Wisconsin-Madison)