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Nota di contenuto	Front Cover; Human Factors in Aviation; Copyright Page; Table of Contents; Foreword; Contributors; PART I: INTRODUCTION; Chapter 1. Human Factors in Aviation: An Overview; Progress Since the First Edition; A Look Ahead...; Human Factors in Aviation: This Edition; A Final Comment; PART II: ORGANIZATIONAL PERSPECTIVES; Chapter 2. The System Perspective on Human Factors in Aviation; Introduction; Aircraft Systems of Relevance and the Human Component; Systems Engineering Methods and Application to Aviation Human Factors; Summary, the Future, and Some Key Issues Chapter 3. The System Safety PerspectiveIntroduction and Some Definitions; Defining a System Boundary; Evaluating For Safety; Supporting the Human Contribution to Safety; Design Via a ""System Safety Perspective""; Chapter 4. The Safety Culture Perspective; Introduction; Definition of Safety Culture; Assessment of Safety Culture; Safety Culture Transformation; Conclusion: Synthesis of Safety Culture Methods and Outcomes; Chapter 5. The High Reliability Organization Perspective; Introduction; HRO: Some Origins; PART III: PILOT AND

CREW PERFORMANCE ISSUES

Chapter 6. The Human in Flight: From Kinesthetic Sense to Cognitive Sensibility Introduction; The Evolution of The Aircraft Cockpit and of the Pilot's Task; Correspondence and the Naturalistic World; Coherence and the Electronic World; Managing the Hybrid Ecology; Challenges for NextGen Aircraft; Summary and Implications for Design; Conclusions;

Chapter 7. Information Processing in Aviation; Introduction; Information Processing in Early Aviation; Higher-Level Processing in Aviation Systems; Resources for Meeting the Information Processing Challenges in Aviation

Emergent Processes-Mental Workload and Situation Awareness Future Directions;

Chapter 8. Managing Workload, Performance, and Situation Awareness in Aviation Systems; A Management Framework; Practical Issues: Combining WL, SA, and Performance;

Chapter 9. Team Dynamics at 35,000 Feet; Introduction; Why does Aviation Crew Performance Matter?; Advances in Team Performance Research; Advances in Aviation Crew Performance; What Factors Impact Crew Performance?; How can Aviation Crew Performance be Improved?; Where do we go from here?; Concluding Remarks; Acknowledgment

Chapter 10. Flight Training and Simulation as Safety Generators Growth; Industry Safety; Safety Generators in Crew Training; Training Enhancement Strategies; Summary;

Chapter 11. Understanding and Analyzing Human Error in Real-World Operations; A Philosophical Perspective on Errors and Accidents; Sources of Error Data; Examples of Error Studies; Concluding Thoughts; Acknowledgments;

Chapter 12. Cognitive Architectures for Human Factors in Aviation; Introduction, Motivation, and Organization; What are Cognitive Architectures?; Relevant Recent Publications

Improving Human Performance and Learning Models for Warfighter Readiness

Sommario/riassunto

This edited textbook will be a fully updated and expanded version of the highly successful first edition of Human Factors in Aviation. Written for the widespread aviation community - students, engineers, scientists, pilots, managers, government personnel, etc. ? HFA offers a comprehensive overview of the topic, taking readers from the general to the specific, first covering broad issues, then the more specific topics of pilot performance, human factors in aircraft design, and vehicles and systems. The new editors offer essential breath of experience on aviation human factors from multi
