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Perspective; Introduction; HRO: Some Origins; PART III: PILOT AND CREW PERFORMANCE ISSUES

Chapter 6. The Human in Flight: From Kinesthetic Sense to Cognitive SensibilityIntroduction; 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 AwarenessFuture 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 GeneratorsGrowth;

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?;

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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
