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**FOREWORD/INTRODUCTION**

**GUIDE TO THE GUIDE**

**CHAPTER 1**

**Human Factors**..... *Describes the field of Human Factors and Ergonomics and defines important terminology and concepts*

**CHAPTER 2**

**Establishing a Human**

**Factors/Ergonomics Program**..... *Describes what an ergonomics program is and why aviation organizations should establish a program*

**CHAPTER 3**

**Workplace Safety**..... *Describes the major hazards associated with industrial workplaces and the steps maintenance supervisors and planners can take to mitigate the hazards*

**CHAPTER 4**

**Shiftwork & Scheduling**..... *Describes the major research findings related to various shift scheduling practices*

**CHAPTER 5**

**Facility Design**..... *Describes the major Human Factors concepts related to facility design, with emphasis on elements found in the aviation maintenance environment such as movable scaffolding*

**CHAPTER 6**

**Work Design**..... *Describes the most prominent Human Factors concepts related to designing both the workplace and the job to incorporate human capabilities and limitations*

## CHAPTER 7

**Training**..... *Describes the overall training requirements in the aviation maintenance environment and the training methods that are appropriate for teaching various types of knowledge and skills*

## CHAPTER 8

**Testing & Troubleshooting**..... *Describes the concepts and techniques related to testing and troubleshooting, such as fixation, tunnel vision, and uncertainty*

## CHAPTER 9

**Automation**..... *Describes the major concepts related to automation and how to decide which workplace functions are most amenable to automation. Discusses some of the myths and potential pitfalls of automation*

## CHAPTER 10

**Disabilities**..... *Describes the requirements of the **ADA** and provides a Human Factors perspective on adjusting to the capabilities and limitations of disabled individuals*

## CHAPTER 11

**Sexual Harassment**..... *Describes the underlying social and legal concepts related to sexual harassment. Describes the latest court decisions and regulatory requirements regarding this topic*

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**Personal & Job Related Factors**..... *Describes the most common personal and job-related factors that adversely affect workers' job performance, such as substance abuse, job-related stress, financial problems, and family problems*

*financial problems, and family problems.  
Discusses the use and misuse of Employee  
Assistance Programs*

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**Human Error** ..... *Defines human error as it relates to the aviation maintenance domain. Provides methods for identifying errors and error-causing circumstances, minimizing the risk of error, and dealing with the consequences of errors.*

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**Information Transfer** ..... *Describes the various types of information transfer that occur in the aviation maintenance workplace. Provides guidelines for evaluating the human-machine interfaces that allow information to be transferred among various elements of the maintenance system.*

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