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Book Review

Human Performance Workload and Situational Awareness Measures Handbook

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Review: The man has always been curious trying to unravel the unfathomable nature and its magnificence. It was because of this exploring attitude that he was able to uplift mankind in various ways: the best example being the innovation of machines. Then came the idea to make it more efficient, comfortable and safe for human use. Many experiments have been conducted from the day gadgets were invented, to assess its capability and to gauge the human interface that controls the machine. This book aims at selecting an appropriate measure for human performance, workload, and situational awareness for improved ergonomics.

This book has been divided into four chapters viz; Introduction, Human Performance, Human Workload, and Measures of Situational Awareness. The introduction lays down the plot for selecting the right measures before experiment to assess the effectiveness. The basics of measurement, definitions of human performance, workload and situational awareness has been discussed through extensive literature reviews and hundreds of actual projects. Attempts have been made to clear the concepts through exhaustive tables and illustrations.

Each type of measure has been subclassified into various categories: for example, performance measures have been classified into six categories viz: accuracy, time, task battery, human performance measures, & critical incident measures. Each category has been finely dissected to understand its strength and limitations. The authors have ensured that no stone was left unturned in this process making the book informative and comprehensive.

Opinion: Have you ever wondered what are the capabilities of a man in a machine and the toll the machine may take on its human counterpart? If so, the answer lies in this book. By flipping through the pages of this book, one will get the glimpse that it is not only important to devise a new contrivance but also to standardise it, to improve its safety, utility, and efficacy. This book gives an overview on measures on human performance, workload and situational awareness with strengths and limitations of various measures along with illustrations. This book is invaluable to the field of Human Engineering and Ergonomics with a far vision to develop, assess and select systems for optimum performance.

Recommendation: This book is an indispensable asset to all military and civil Aerospace Medicine practitioners especially in the field of Human Engineering. Residents in Aerospace Medicine may use this as a reference book for better understanding of the concepts of ergonomics and human factors.