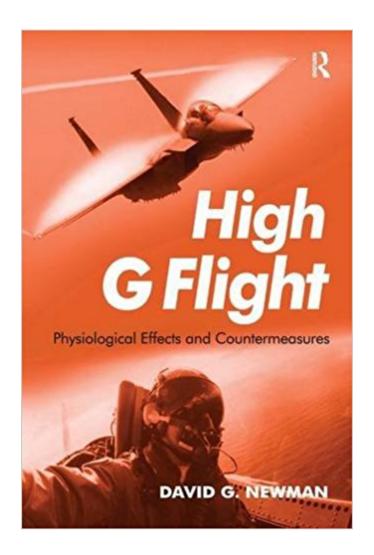


The book was found

High G Flight: Physiological Effects And Countermeasures





Synopsis

This book provides a unique, authoritative and detailed examination of the physiological and clinical consequences of human exposure to high G forces. Pilots of military fast jets, civilian aerobatic pilots and astronauts during the launch and re-entry phases of spaceflight are frequently and repetitively exposed to high G forces, for which the human body is not fundamentally designed. The book examines not only the nature of the high G environment, but the physiological effects of exposure to high G on the various systems of the human body. In particular, the susceptibility of the human cardiovascular system to high G is considered in detail, since G-Induced Loss of Consciousness (G-LOC) is a serious hazard for high G pilots. Additionally, the factors that influence tolerance to G and the emerging scientific evidence of physiological adaptation to high G are examined, as are the various countermeasures and techniques that have been developed over the years to protect pilots from the potentially adverse consequences of high G flight, such as the G-suit and positive pressure breathing. The accumulated knowledge of human exposure to high G is drawn together within High G Flight, resulting in a definitive volume on the physiological effects of high G and their countermeasures.

Book Information

Hardcover: 268 pages

Publisher: Routledge; 1 edition (May 6, 2015)

Language: English

ISBN-10: 1472414578

ISBN-13: 978-1472414571

Product Dimensions: 0.8 x 6.2 x 9.2 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #4,216,577 in Books (See Top 100 in Books) #34 in Books > Textbooks >

Medicine & Health Sciences > Medicine > Special Topics > Transportation #71 in Books >

Medical Books > Medicine > Transportation #435 in Books > Engineering & Transportation >

Engineering > Industrial, Manufacturing & Operational Systems > Ergonomics

Customer Reviews

'This is the book we have all been waiting for. Dr Newman has skilfully provided a unified understanding of the current state of knowledge on human exposure to high G forces. Clearly written, the reader is taken from basic physics, through the mechanics of flight exposure, to current

methods of G protection. Highly recommended.' -- Michael Bagshaw, King's College London and Cranfield University, UK

Associate Professor David G. Newman is a consultant in aviation medicine and Head of the Aviation Medicine Unit in the School of Public Health and Preventive Medicine at Monash University in Melbourne, Australia. His 13 years as an aviation medicine specialist in the Royal Australian Air Force, in both Australia and on exchange in the UK, include three years in support of tactical fighter operations and two years as Chief Instructor at the RAAF Institute of Aviation Medicine, where he was responsible for the training of all Australian Defence Force aircrew and medical officers. He holds a medical degree from Monash University, a Diploma in Aviation Medicine from the Royal College of Physicians of London, an MBA from Deakin University and a PhD from the University of Newcastle. He is also a pilot, with flying experience in several military fast jets including the F/A-18 Hornet and the Harrier. He has won numerous awards for his research into aerospace biomechanics and high G physiology, including the Aerospace Medical Associationâ TMS Arnold D. Tuttle award in 2000, the Buchanon-Barbour Award from the Royal Aeronautical Society in 2000, and the John Paul Stapp Award from the Aerospace Medical Association in 2014.

Download to continue reading...

High G Flight: Physiological Effects and Countermeasures High Fiber Recipes: 101 Quick and Easy High Fiber Recipes for Breakfast, Snacks, Side Dishes, Dinner and Dessert (high fiber cookbook, high fiber diet, high fiber recipes, high fiber cooking) The Student Pilot's Flight Manual: From First Flight to Private Certificate (The Flight Manuals Series) Roadway Safety: Identifying Needs and Implementing Countermeasures Treaties on Transit of Energy via Pipelines and Countermeasures (Oxford Monographs in International Law) Guide to Network Defense and Countermeasures From Bats to Rangers: A Pictorial History of Electronic Countermeasures Squadron Two (ECMRON-2) Fleet Air Reconnaissance Squadron Two (VQ-2) Stress Effects: A fascinating look at the effects of stress on breathing patterns, gut microbiome, adrenals and addiction. The Sound Effects Bible: How to Create and Record Hollywood Style Sound Effects Introduction to Guitar Tone & Effects: A Manual for Getting the Best Sounds from Electric Guitars, Amplifiers, Effects Pedals & Processors The After Effects Illusionist: All the Effects in One Complete Guide Compositing Visual Effects in After Effects: Essential Techniques High Blood Pressure Cure: How To Lower Blood Pressure Naturally in 30 Days (Alternative Medicine, Natural Cures, Natural Remedies, High Blood Pressure ... Cures for High Blood Pressure, High BI) Airplane Flight Dynamics and Automatic Flight Controls Pt. 1 Electronics in the Evolution of Flight (Centennial of Flight Series) Understanding Voice

Problems: A Physiological Perspective for Diagnosis and Treatment (Understanding Voice Problems: Phys Persp/ Diag & Treatment) Pilbeam's Mechanical Ventilation: Physiological and Clinical Applications, 6e Workbook for Pilbeam's Mechanical Ventilation: Physiological and Clinical Applications, 6e Pilbeam's Mechanical Ventilation: Physiological and Clinical Applications, 5e Biochemical, Physiological, and Molecular Aspects of Human Nutrition, 3e

Contact Us

DMCA

Privacy

FAQ & Help