

## Indian Journal of Aerospace Medicine

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Book Review

## Pulling G: Human Responses to High and Low Gravity

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Review: The book begins with historical facts and a chapter on John Paul Stapp with his experiments on biodynamics. It is interesting to know that John Paul Stapp was a military doctor, who became the fastest man on earth and contributed immensely in making the aviation as well as automobile industry much safer as we see today. The book describes the effects of high G on our vision and also, the phenomenon of G-induced Loss of Consciousness (G-LOC). The evolution of centrifugation as a countermeasure to negate the effects of high G especially in military aviation is described extensively. The book also has a chapter on 'Formula 1 Race', where, the author describes how the forces of high G affects human performance and becomes a major safety concern. In another chapter, the book describes various G forces experienced by the astronauts during launch and recovery in the space flights. The long-term effects of microgravity and various countermeasures have been covered in great details. The chapter on 'Artificial Gravity', which is an interesting phenomenon, has been explained in detail with present understanding and future concepts. Erik Seedhouse, Canada's only High-risk Acceleration Training Officer and a trained Suborbital Astronaut, has simplified the complex subject of gravity and its effects on human body in less than 200 pages. Colourful rare pictures and figures have been used judiciously to drive home the points and keep the interest alive on the topic.

**Opinion about the Book:** 'Pulling G' is a book written for people who want to know how gravity is felt by a fighter pilot or formula one racer who frequently experience high G. It also gives an insight into how an astronaut endures both high G as well as the microgravity condition during various phases of space flights. The book has been written in such a simple manner that anyone, even without a science background, can easily understand the concept of gravity and its effects on human body.

**Recommendation:** This book has great learning objectives for novices and professionals as well. It is recommended for Aerospace Medicine Practitioners to read this book.