



Book Review

Diary of an apprentice astronaut

Polash Sannigrahi¹

¹Department of High Altitude Physiology and Hyperbaric Medicine, Institute of Aerospace Medicine, Bengaluru, Karnataka, India.



Author : Samantha Cristoforetti
Publishers : Penguin Books Limited
Pages : 400
Year of Publication : 2018 (first publication)
Genre : Space travel, Memoir
ISBN : 978-0-241-37139-8

Corresponding author:

Polash Sannigrahi,
Department of High Altitude
Physiology and Hyperbaric
Medicine, Institute of
Aerospace Medicine,
Bengaluru, Karnataka, India.

drpolash_mrmc@yahoo.co.in

Received: 26 August 2022

Accepted: 13 March 2023

Published: 02 August 2024

DOI

10.25259/IJASM_25_2022

Quick Response Code:



Introduction to the Author: Samantha Cristoforetti is a European Space Agency (ESA) astronaut, engineer, and former Air Force pilot. Born on April 26, 1977, in Milan, Italy, she pursued her degree in Mechanical Engineering from the Technical University of Munich and graduated in Aeronautics Sciences at Accademia Aeronautica in Puzzuoli. She became one of the first women to be a lieutenant and fighter pilot in the Italian Air Force. She had flown over 500 h in different types of military aircraft before being selected as an astronaut in 2009 by the ESA. As part of Expedition 42/43, she spent 200 days on the International Space Station (ISS) in 2014. She completed her second stint onboard ISS in 2022 as the Mission Commander for Expedition 68.

Brief of the Book: Diary of an Apprentice Astronaut is the story of Samantha Cristoforetti's incredible journey of becoming the first female ESA astronaut from the Italian Air Force to serve a mission on board ISS. The book was originally written in Italian and was translated into English by Jill Foulston.

The book comprises of 42 chapters, each written in the form of diary entries. The initial chapters deal with her recollections of experiences during astronaut selection and training. This primarily involved training on Soyuz and its operation, centrifuge training, snow, and sea survival training, training on the life support system which includes Sokol space suit training, as well as training on food, water, and toilet system on board Soyuz and ISS. She also underwent extravehicular activity (EVA) training in NASA's neutral buoyancy laboratory in Houston. She recounts in great detail the friendships, bonding, and camaraderie made in Star City and Houston as well the role of her Flight Surgeon in various stages of her mission.

The later chapters of the book are based on her experiences on board ISS, gradually adjusting to life in microgravity and working with her crewmates from America and Russia. The challenges faced by an astronaut in microgravity such as spatial disorientation, and challenges in performing routine daily life activities such as sleeping, eating food, using the toilet, and performing exercises have been brought out in these chapters. The book also portrays her disappointment of not being able to perform a spacewalk on her mission as the vehicle carrying her EVA suit suffered a launch failure. The book concludes with the re-entry of the crew on-board Soyuz crew module on June 11, 2015. She also mentions the sensation of dizziness and heaviness experienced while walking, due to exposure to gravity on landing back on earth.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, transform, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2023 Published by Scientific Scholar on behalf of Indian Journal of Aerospace Medicine

Opinion about the Book: The book encompasses the journey of Samantha Cristoforetti from her days as an astronaut trainee, culminating with the ISS Expedition 42/43. The author takes the reader along with her on a journey from earth to the ISS which is orbiting at an altitude of 400 km with a speed of 28,000 km/h. The language of the book is simple and keeps the reader engrossed. The depiction of chapters in the form of diary entries is a unique feature that keeps the readers spellbound. The author has avoided the use of technical jargons. The images and illustrations in the book help in the easy assimilation of the subject matter.

Recommendation: The book gives an overview of the various components involved in a space mission, namely, astronaut selection, training, periodic medical and psychological evaluation, mission preparation, launch, in-flight activities, and re-entry through the viewpoint of an astronaut. With recent ventures into space by private companies such as Space X, Blue Origin, and Virgin Galactic, space tourism has become a reality and not just limited to science fiction movies. In addition, Indian Space Research Organization is gearing up for India's maiden Human Spaceflight Mission-

Gaganyaan. Hence, studying this book is recommended for each and every person who has ever dreamt of space travel. The lessons learnt from various activities performed by the International Space Agencies during a Space Mission would also be helpful in incorporating into our Gaganyaan Mission.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

How to cite this article: Sannigrahi P. Diary of an apprentice astronaut. Indian J Aerosp Med 2023;67:75-6. doi: 10.25259/IJASM_25_2022