

Preface

I had the privilege of returning, to the International Space Station (ISS) for the third time from 16 May to 1 June 2011 after the “Marco Polo” mission in 2002 and the “Eneide” mission in 2005. This time I did not go with the Russian Soyuz spacecraft, but I flew on board the Space Shuttle Endeavour, which took off from the hot, sunny Cape Canaveral launch base in Florida.

I spent 16 incredible days on board the Endeavour and the ISS, experiencing events and surroundings I had known years before, which were always new, fascinating, and captivating.

Sixteen work days that were the result of years and years of work, training, and testing; in other words planning and preparation.

This is why reading and writing a preface for a book which concerns space programs, after experiencing them first-hand, evokes a strange feeling in me.

After having experienced a certain kind of training for many years, made up of methodically planned intense activity and having spent many days on board the ISS, I am now reading behind-the-scenes activities and methods with a mixture of curiosity, interest, and reflection.

Space, as a sector, is continuously evolving and becoming a work environment open to everyone. It provides an opportunity for growth and development; however, the absolute methodological and management rigor that has always characterized it has remained a constant.

During incredible days of intense activity inside the ISS in orbit at a speed of 28,000 km/h around our planet, you are not aware of all the work that has gone into those times. However, you only have to reflect for an instant to understand how much of what only a few people have the privilege of experiencing is the result of the work of thousands of men and women who for years have planned, realized, and managed a network of programs and projects to make the largest house in space.

The subject of space program management, especially where the human factor figures, is therefore so complex and varied that even an astronaut (the very person who incarnates the essence of the reason men and women design spacecraft or orbiting stations) is unaware of the whole picture.

This is why reading a book which examines several of the vital mechanisms of the three sides of “technological-management-financial development” helps us to better understand how this fascinating and complex world works, a world where a few hundred space objects in orbit around the Earth help us every day to understand the climate, to communicate with each other, to locate, and help us to live in space to explore and experiment new ways of propelling human life beyond the frontiers of the Earth itself.

We now have the “experience” of how to live in space, thanks to planning and management logic that was completely unknown until a few decades ago. The inductive principle has become essential for extrapolating general rules from the individual cases of prior experiences in order to create standards of reference for new and innovative programs that drive man ever further into the universe.

In this sense, I consider it a duty to thank the author of this book. He is a personal friend of mine whose clarity of thought and ability to analyze and synthesize have translated into the passion evident in this book.

A passion, which is for us all and for the future generation of scientists, engineers, astronauts, and human beings in general, the source of curiosity and knowledge.

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