

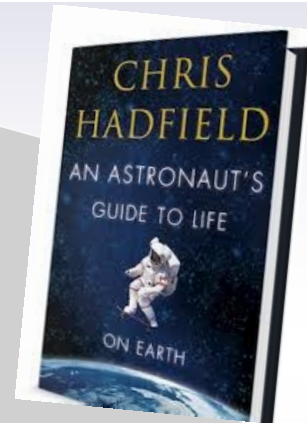
Executive Book Summary by Daniela Greco-Giancola

Chris Hadfield

## AN ASTRONAUT'S GUIDE TO LIFE ON EARTH

**The author shares advice and experiences from his own life. He teaches the reader**

- \* How to stay focused and achieve goals
- \* How to overcome fear
- \* How to anticipate problems and better solve them
- \* How to respond quickly and effectively in critical situations
- \* How to give credit to others
- \* How to lead with humility and a sense of humour
- \* How to build ever lasting relationships
- \* How to be resilient and learn from tragedies and mistakes
- \* How to become a leader without a big ego
- \* How to sweat and enjoy the small stuff



*"I wasn't destined to be an astronaut. I had to turn myself into one." (p. 2)*

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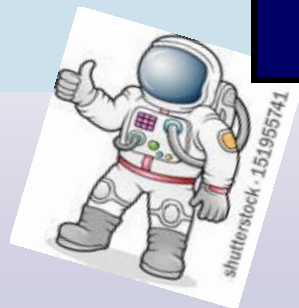
*“Ultimately, leadership is not about glorious crowning acts. It’s about keeping your team focused on a goal and motivated to do their best to achieve it, especially when the stakes are high and the consequences really matter. It is about laying the groundwork for other’s success, and then standing back and letting them shine.” (p. 234)*

**Want to know more?**

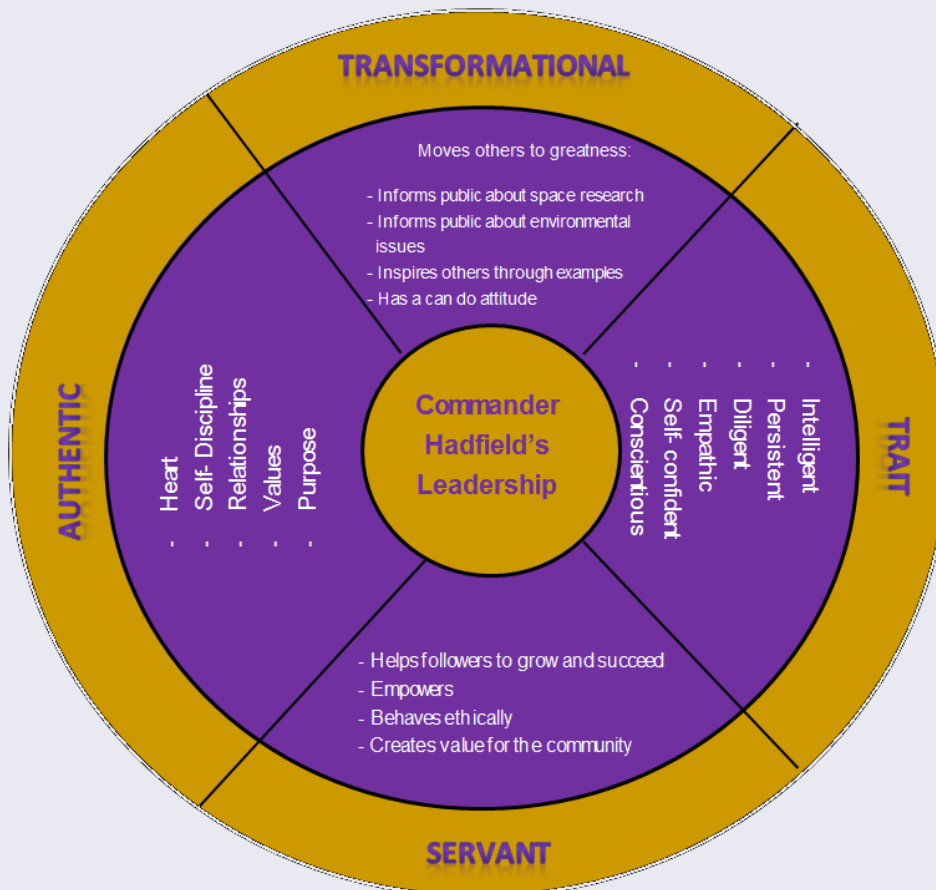
<http://chrishadfield.ca/>

<http://www.asc-csa.gc.ca/eng/>

<https://www.nasa.gov/>



**“... as commander of Expedition 35, I deliberately discouraged whining whenever I noticed it creeping into conversation. However, I couldn’t simply impose my will on the rest of the crew. Only the crew’s own appreciation of the value of expeditionary behavior made it possible for us to become a complaint-free group.”** (p. 109)



## In Brief...

In this autobiography, commander Hadfield shares his life and advice with the readers. From a farm in Ontario, where he spent his childhood, to the International Space Station (ISS), Chris Hadfield takes us on an unforgettable journey. Fascinated with the moon landing, he decided to achieve an ambitious goal: to be an astronaut. The book illustrates how he became an astronaut: the training, the preparation, and the experiences on and off Earth. He narrates eventful years of his life without forgetting to mention and praise the people who are most important to him: his own family. Chris Hadfield shares a series of counterintuitive lessons to be a great leader and a successful person in any line of work and life in general. He thinks the most important lesson is to work hard, be prepared, enjoy life events (big and small) and always remember to give some credit to others. The last two parts of the book are dedicated to his experience as commander of the ISS. Hadfield describes his trip from pre-launch and preparation to his return back to Earth. The book ends with a reflection of what the author has learned from his trip. Throughout the book, Hadfield maintains humility and good humour.

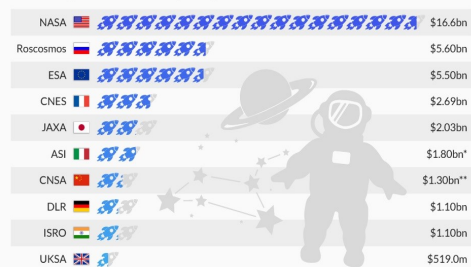
## The Book

### Introduction: Mission Impossible

A 9-year-old boy living on a farm with parents and siblings, Chris Hadfield became fascinated with the moon landing the night of July the 20<sup>th</sup>, 1969. Hadfield decided he was going to be an astronaut and made choices that would have led him to space: he began to rise early in the morning, eat healthy, read books, and study hard. Hadfield thought he could learn how to fly and have a military career as a pilot had he not been able to become an astronaut. At age 15, he got his pilot license.

In 1981, Chris Hadfield married high school sweetheart Helen, who became his biggest supporter. Finally, in 1983, the Canadian government hired the first 6 Canadian astronauts; Hadfield saw his dream draw closer and worked diligently towards it.

**The World Trails NASA in Space Exploration Expenditure**  
Annual budgets of international space agencies in 2013



\*2014  
\*\*estimate  
@StatistaCharts Sources: Respective space agencies

statista

In 1991, Hadfield was named U.S. Navy Test Pilot of the year. He then discovered an ad in the newspaper from the Canadian Space Agency (CSA) that asked for astronauts. He applied and patiently waited. Then, a Saturday in May, he received a phone call: he had been chosen to be an astronaut.

In 1987, he was selected to go to the U.S. Air Force Test Pilot School in California where he graduated top of his class. This opened more doors for him: he covered many roles that gave him technical and leading skills.



## Part I: Pre- Launch

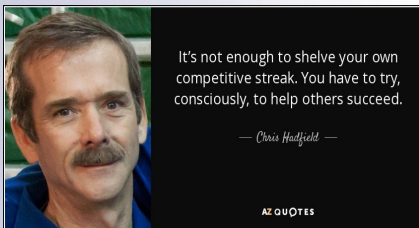
### The Trip Takes a Lifetime

November 12<sup>th</sup>, 1995 was the day of Hadfield's first Launch in the Space Shuttle Atlantis. He describes this experience as esoteric and oneiric. Hadfield also recalls the less glamorous parts of the situation: wearing a diaper in the space capsule, feeling the sweat and itchiness from the space suit and feeling uncomfortable sitting in a tight space. Once back on Earth, Chris started training for his next mission in 1998.

In 1998, Hadfield performed two space walks and led one of them. In the following 11 years, Chris covered many more leadership roles such as NASA Director of Operations in Russia, Chief of Robotics and then Chief of International Space Station Operations in the NASA Astronaut Office in Houston.

### Have an Attitude

Chris Hadfield relates and compares an astronaut's personal attitude with "attitude" in a space flight which refers to the vehicle orientation. From time to time, the "attitude" needs to be adjusted literally and metaphorically. He has always enjoyed his work independently from going to space or not. His attitude has always been to work hard and give a 100% each time while enjoying his job.



### **The Power of Negative Thinking**

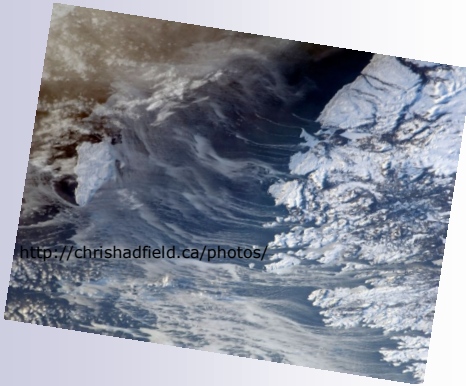
Hadfield analyzes, in this chapter, the power of transforming something negative into something productive and helpful. He answers the question that many ask him, "How do you deal with your fear?" He deals with it by being ready and willing to face negative and perilous situations; Chris advocates that, as an astronaut, negative thinking can actually save one's life along with crewmates. For this reason, astronauts rehearse numerous problematic, dangerous, and even devastating situations.

In the second part of the chapter, Hadfield recalls the devastating loss of the Columbia crewmembers in 2003. He was at that point, Chief of Robotics and he decided to be proactive and work even harder and more diligently to solve possible malfunctions. He mourned his lost friends and colleagues and he did acknowledge that sometimes, there is nothing a person could do to avoid a tragedy; nevertheless, he became even more focussed and dedicated to his work demonstrating great fortitude. Hadfield closes the chapter by saying that he is a very upbeat person not because he visualizes victory and success all the time, but because he relentlessly trains and prepares to react to the worst.

"Anticipating problems and figuring out how to solve them is actually the opposite of worrying: it's productive." (p. 72)

### **Sweat the Small Stuff**

To turn oneself into a great leader, one must sweat the small stuff. Hadfield recalls an event that really opened his eyes about the danger of being overconfident. During his training as a jet pilot, Chris became complacent thinking he was a rather good pilot. One day, however, he had to fly with a new instructor on a new route. He did not prepare enough and nearly had a re-ride; re-rides were scheduled for pilots who did poorly and even one could be detrimental to their future as pilots. The instructor looked at Hadfield's impressive file and decided not to penalize him that time. Chris appreciated the opportunity and started to better himself immediately. He spent countless hours envisioning the possible route. He travelled them on foot and by car; he also studied a couple hours per night in the hanger, inside the plane: he mentally took off, used the controls, and landed. He learned how to sweat the small stuff and make corrections to avoid the same mistakes twice. He also learned, both as a pilot and an astronaut at NASA, to own up and confess his mistakes. This practice could save someone else from making the same error.



### **The Last People in the World**

In a very competitive environment such as NASA, Hadfield underlines the importance of relying on his colleagues and empowering them. He recalls how he had to be trained to be a great team asset. For example, he took part in many survival camps where he had to alternate between the role of leader and follower. In one occasion, his group became stuck on a hill and Chris, along with his co-leader, found a path that the team could follow; not being sure if it would work out, he went down the path first and then went back to lead the

rest of the team to safety. Colleagues are the only people in the world and off the Earth an astronaut can rely on when on a mission in outer space.

### **What's the Next Thing That Could Kill Me?**

A bee in the visor of a fighter jet pilot flying in formation could be deadly. One of the first times he flew in formation, Hadfield discovered the insect in his visor. He had to keep in mind one of his counter intuitive lessons: What's the next thing that could kill him? It was not going to the bee, but it could have been an unsafe attempt to break formation to kill him. Thus, he resigned himself to flying in the bee's company.

***“At NASA, we're not just expected to respond positively to criticism, but to go one step further and draw attention to our own missteps and miscalculations.” (p. 79)***

**“Sweat the small stuff. Without letting anyone see you sweat.” (p.169)**



### Critical Analysis of Part I

In the first part of the book, Hadfield gives compelling instructions to become a great leader and follower. He is not at all arrogant or blinded by his success. He remains humble, knowing that it is key to being not just an effective leader and astronaut, but a great person with sound values. He describes how mistakes in his job became valuable lessons. In this chapter, the reader understands the basic traits Hadfield had to become a leader, but also the hard work to prepare for the role. He learned an important leadership lesson: never force your own views and orders upon others, but first observe the surroundings, listen to people and get used to the new culture. This is a very good example of emotional intelligence and effective leadership skills.

The chapters are well seasoned with humour and incredibly detailed. A brilliant lesson to help the reader fight off disappointment and regret and be glad just to have the opportunity to get ready for the journey to come!

**Critical Thinking for the Reader:** Hadfield ended up fulfilling his dream of becoming an astronaut and going to space: Would it have been possible for him to convey the same messages on life and career if he had not succeeded? Do you think his outlook on life would have been the same if he had never had the opportunity to go to space?



**"This situation was perfect for developing leadership- and followership- skills, and it was a great test of physical endurance and mental stamina, too." (p. 106)**



## **Part II: Liftoff**

### **Tranquility Base: Kazakhstan**

Chapter 7 focuses more on the mental preparedness of an astronaut. Hadfield describes his staying in Kazakhstan where he spent the quarantine preceding his flight as Commander of the ISS. He felt glad he was given the opportunity to reflect and mentally prepare for his role. He contemplated the magnitude of the journey that was about to take place. Hadfield also expresses the importance of having a somewhat balanced life between family and work.

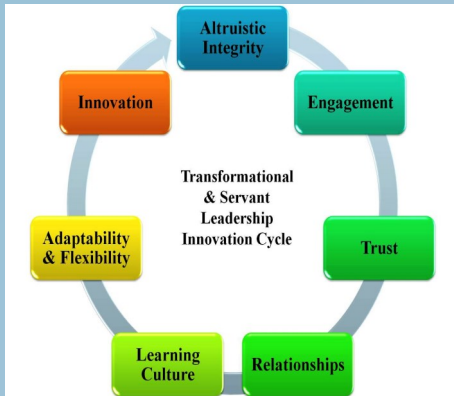
### **How to Get Blasted (and Feel Good the Next Day)**

Good leaders are opened to new experiences. Hadfield had to learn how to operate both the Shuttle and the Soyuz in order to be a competitive candidate to fly to space. In this chapter, Chris moves the focus more inwards and explains how he felt last time he went to space. He did not lead the Soyuz capsule, but acted like a follower; being a cooperative person, he constantly thought of ways of making his colleague's experience as the Soyuz Commander a positive one. Once on the ISS, Hadfield became Commander and his followers showed him the same courtesy.



### **Aim to Be a Zero**

There are three ways an astronaut can be seen by his colleagues and superiors. A minus one is a person who is not at all prepared, or prepared, but very arrogant and with a negative disposition. A zero is a person just competent and useful enough not to be a hindrance for others. Finally, a plus one is a person who is regarded as an asset. Chris recounts episodes in which he acted as a zero, minus one, or plus one. In the second part of this chapter, he mentions how he learned from some of his colleagues such as astronaut Tom Marshburn. Marshburn is described as a capable outdoorsman. During the National Outdoor Leadership School survival course, Chris noticed that Tom never imposed his skills upon others; he simply helped them to develop their leadership skills by providing appropriate counselling and support. Hadfield closes the chapter by reminding future astronauts to aim to be a zero and slowly build up to a plus one.



### Life off Earth

Hadfield opens this chapter with a description of the ISS. He then contemplates the greatness of different nations coming together to achieve such an awe-inspiring project. He continues with very informative notions on how to perform daily tasks in zero gravity. He was so inspired by his mission that he decided to involve people on Earth. He began creating videos to show people how to perform everyday jobs in space. The Canadian Space Agency ran with it producing educational materials. Hadfield became the first to lead a very different approach to recruiting and educating people about life in space. He happily embraced his new role. He saw an opportunity

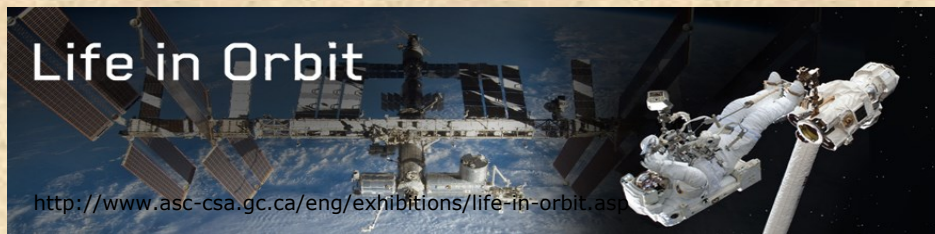
to use social media for a fresh and innovative outreach program. He thought it was important to educate people about space exploration. His new plan became a media sensation leading to more people wanting to invest in space research.

**“The lesson: good leadership means leading the way, not hectoring other people to do things your way.” (p.105)**

### Square Astronaut. Round Hole

Sparks flew out of the side of the ISS. Commander Hadfield had to notify Ground Control and shortly after discover that there was an ammonia leak. Overnight, NASA scheduled an unplanned space walk. Two of Hadfield’s crewmates were recruited for the Extra Vehicular Activity. Hadfield felt fairly disappointed to learn he was not going to be the hero who saved the ISS, but upon reflection, he decided to help his followers to have their glorious moment without complaining. Helping them succeed made him feel like he made the right decision: with the power of a committed leader and team, everything is possible!





### **Critical Analysis of Part II**

In part II, Hadfield makes a more emotional connection with the reader. He closely examines his feelings and relationships with people in his life and mostly on the ISS. Hadfield also takes time in this chapter to analyze and describe what his crewmates felt and did and how they dealt with the trip in their own unique ways. It is refreshing to see a Commander who can look inward and look to others: A commander who seeks to understand and learn from crewmembers. Fascinating is also the constant role switching between leaders and followers.

Commander Hadfield emerges as flexible and conscientious from these chapters, but it is not all. The reader is wowed by the humility and insightfulness with which he approaches each task, problem, situation, and opportunity. To be a good leader, one should have a great understanding of the environment, situations, people, and self (Northouse, 2015). Commander Hadfield certainly fits the profile.

Finally, the lessons taught in these chapters can be extrapolated and applied to other professions and even life itself.

**Critical Thinking for the Reader:** Do you think astronauts have to display specific traits?

Astronauts on the ISS have to spend months in a confined space with each other: How can they apply emotional intelligence to positively influence moral?

***“...astronauts get so much practice swapping between lead and supporting roles that it does get easier overtime.”*** (p. 269)

## Part III: Coming Down to Earth

### Soft Landings

In this chapter, Chris Hadfield describes and compares the Shuttle and Soyuz landings. The latter is extremely rough. He experienced a sense of pride and purpose.

The days preceding the return were just as busy as the ones prior to the departure.

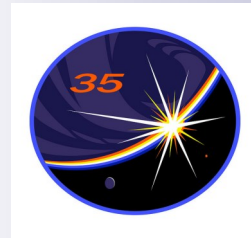
Chris handed over his Commander title to his Russian colleague Pavel Vinogradov. Before leaving, Hadfield spent time contemplating the universe and the magnitude of the place where he was; he felt respect and awe, but not sadness.

Boarding the Soyuz, Hadfield resumed his role as follower. Roman was to be commander of the capsule and Hadfield expressed trust for his leader. Once back on the ground, Hadfield felt elated to have completed Expedition 35 successfully and to have reached so many by using social media. He thought that, "...in that sense, at least, it was a soft landing". (p. 263)

### Climbing Down the Ladder

In the last chapter, Hadfield explains the importance of moving up and down the career ladder. Astronauts do not undergo the classical pattern of climbing up, but rather they move constantly. This ensures better teamwork. He also underlines the importance of enjoying the big, shiny moments as well as the little ones.

Once back to Earth, commander Hadfield had to undergo several medical tests, rehabilitation programs (to counter the effects of zero gravity), and endless events and interviews. He remembers his last visit to Star City in Russia; after a formal ceremony, he said goodbye to friends and colleagues. He did not deny feeling nostalgic: a chapter of his life was over. He was to retire a few months afterwards. Life, however, was still full of surprises. He felt ready to embrace the next chapters of his life.



*"Truly being ready means understanding what could go wrong- and having a plan to deal with it."* (p. 54)

### Critical Analysis of Part III

The journey is now reversed: Commander Hadfield comes back to Earth rejoiced and fulfilled. As the recount of the trip back home goes on, the reader is catapulted back to every journey he/she has experienced with emotions rushing back. Not every expedition is physical and commander Hadfield does an egregious job at compelling the reader to think about both the physical and emotional sphere of a journey. The astronauts and cosmonauts heavily land on Earth in the Soyuz capsule, but their spirits still soar high.

Metaphorically speaking, bearing down to Earth is never the beginning of the end, but rather a testament of something magnificent that has taken place in our lives. What we do next can and should be inspired by renewed purposes and newfound perspective.

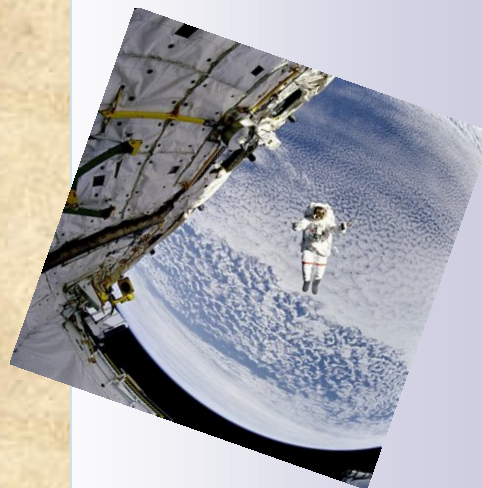
**Critical Thinking for the Reader:** Read the last chapter, and then explain the following quotes; finally, express your personal view and provide some examples from your experience.

“Life is just a lot better if you feel you’re having 10 wins a day rather than a win every 10 years.” (p. 280)

“Endings don’t have to be emotionally wrenching if you believe you did a good job and you’re prepared to let go.” (p. 281)

<https://www.flickr.com/photos/nasacommons/9452139338/>

“I was a Canadian pilot without much leadership experience. Square astronauts, round hole. But somehow, I’d manage to push myself through it, and here was the truly amazing part: along the way, I’d become a good fit. It had only taken 21 years.” (p. 239)







**"But if you are confident in your abilities and sense of self, it's not nearly as important to you whether you're steering the ship or pulling on an oar. Your ego isn't threatened because you've been asked to clean out the closet or unpack someone else's socks." (p. 194)**

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