

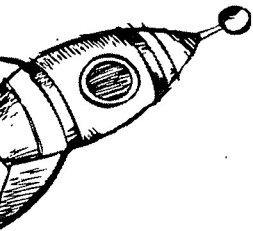
DR SHEIKH MUSZAPHAR SHUKOR

# HOW I BECAME AN ASTRONAUT

MALAYSIA'S  
FIRST ROCKETMAN

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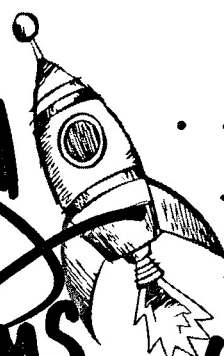
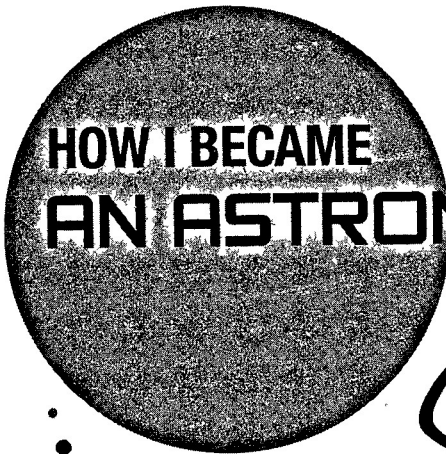


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HOW I BECAME  
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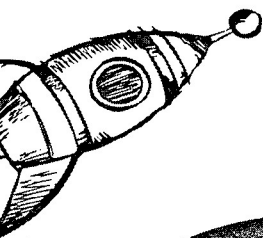
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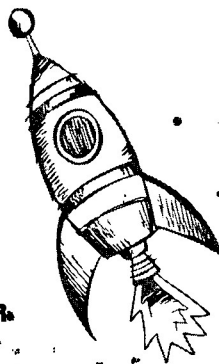
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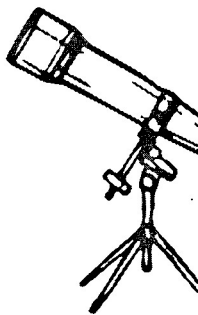
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## CHAPTER 1

# GENESIS



**T**he stars always fascinated me. When I was a child, I remember gazing up at the stickers of stars on my bedroom walls, which inspired me to dream of faraway lands and alien planets as I fell asleep. Then, like every other ten-year-old boy, I was eager to discover the mysteries that surrounded me. Why is the sky blue? How did the dinosaurs live? Where did we come from? How far were we from the stars above us? How big is space?

I read books, watched television, and asked my parents about these mysteries. And as I did, I realised that space was the ultimate mystery, its vastness exceeding every sense of scale my young mind could fathom. Part of my fascination and understanding of space was filled with watching episodes of *Star Trek* and endless repeats of *Star Wars* – just the original trilogy – which further fuelled my fascination of

## HOW I BECAME AN ASTRONAUT

boldly going where few have gone before, and made me wonder how it would feel to float in the emptiness of space.

Little did I know then that 24 years later, I would wear my very own spacesuit, enter a Soyuz capsule and rocket off into space as Malaysia's first *angkasawan*, shouting "*Malaysiaku Gemilang!*" as I flew above the blue beyond.

## WHERE IT ALL BEGAN

I was born on 27 July 1972 in Assunta Hospital, Petaling Jaya, the third child in a family of five brothers. Being a middle child, it was no surprise that I constantly sought attention from a very young age: of my two elder brothers, the eldest, Sheikh Ahmad, was doted by dad, and the second eldest, Sheikh Taufik, was adored by mom, leaving me to be the stubborn one who always wanted things his way. And I loved to argue, and still do. I'd still occasionally argue with dad, but it always came from a desire to understand and respect each other better.

Despite the sibling rivalry, I grew up in a supportive family. My dad always believed you could do anything you wanted if you set your mind to it, and he pushed us to the limit. He believed in me even when I doubted myself. He brought me up to be very positive, teaching me the maxim that "what the mind believes, we can achieve". Even before the announcement of the final ten candidates to go into space was made, he had predicted I would be one of the final two. He always believed I could go very far in life and often told me this bluntly.

My mom, on the other hand, is a gentle and patient soul who would never hit us, despite our mischievousness – rather than seeking to punish when we would stray, she would be the gentle hand that would guide us back to the right path.

## GENESIS

As for my brothers, they are the rocks I rely on, and set the yardstick of success for me. We were competitive with each other from a very young age, but not once did I envy them for being older and stronger than I was. I remember when I was 12 years old, my two elder brothers and I went to Jakarta to swim at the Southeast Asia Peninsular Games. I didn't win then but it definitely taught me to be very competitive, and it spurred me to do better. Each time I lost to my elder brothers, I would challenge them the next day to beat them. I was younger and physically smaller, but that didn't deter me. I always got immense satisfaction when I won, although sometimes I wonder whether my brothers let me win just to make me feel better. I was never one who hung his head down when I lost: Instead of being bitter, I just got better, faster, stronger and smarter.

Competitiveness and the will to win, however, can only take you so far. It is important to be surrounded by people who believe in you and want to see you succeed. You need them to encourage you and, most importantly, to believe in your dreams. This is essential because if you do fall – and life will always trip you up – your loved ones will be the ones who will console you, pick you up again, and heal your wounds.

## STANDING TALL

Dad's decision to send me to boarding school wasn't completely welcomed; it was hard to abandon family and the comforts of home. My dad, however, always felt that going away from home would help boys become men. So all my siblings and I were sent to boarding school.

Looking back, I wouldn't be the man I am today if it wasn't for my years at the MRSM Muar boarding school during my secondary education. There, I learned to be independent and decisive – two

## HOW I BECAME AN ASTRONAUT

vital prerequisites for an astronaut. I grew in my role as a leader and a student. I was in the student council for three years, represented Muar in tennis and was also a school volleyball player. In Form Five, teachers named me the student with the highest honours. My Sijil Pelajaran Malaysia (SPM) results were excellent.

But to become an astronaut, you also need to be determined, and have a passionate and generous spirit. I understand now that my astronaut training didn't start when I applied to the Angkasawan project, but with the belief that you could achieve anything if you put your mind to it – which my dad nurtured in me since young. So, to all parents and parents-to-be: teach your children to be brave and strong, and let them lead the way when the time is right. These lessons may not always be welcome, but your child will thank you for it.

## ANSWERING THE CALL

As much as I wanted to become an astronaut, I was also a child with realistic ambitions. It would be great to fly off into space, but Malaysia wasn't exactly the country where "space explorer" was a viable career option. But the qualities and beliefs I grew up with – being strong-willed, decisive and passionate – happened to be suited for the medical profession as well.

After school, I knew I wanted to become a doctor (first) – an ambition that became true after I obtained a scholarship to study at Kasturba Medical College in Manipal, India. I did my pre-med, my MBBS degree and my housemanship for seven years in India.

I love my profession as a doctor; I felt that no other job in the world allowed me to make real, tangible differences in people's lives. I went to Afghanistan in 2002 to volunteer as part of a humanitarian mission,



## GENESIS

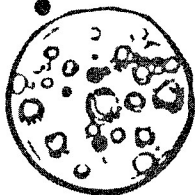
where I helped to build a hospital and treat Afghans, especially the women and children. In 2003, I went to Cambodia as a volunteer doctor for the same reasons: to do my bit in making our world a better place and find out my reason for being in this world.

I was happy, but something was still missing. My friends told me to get married – strive for “the ultimate goal in life,” they said, and by then I would feel complete. Being a husband and father is noble, but it was not what I was aiming for at that time. I still felt the pull of a greater calling: to dream, to explore the unknown, to see what few others have seen, and to understand the mysteries of nature and science.

When the call for Malaysia's first *angkasawan* came, it struck a chord deep within me. My dream would soon come true! Of course, it was a long and daunting journey with slim hopes of success, but I wouldn't have wanted it any other way. I had to find out if I wanted this so badly that I would sacrifice everything to make this dream a reality.

And I am thankful, through God's grace, that this dream came true, and that I lived through the experience to tell you that you can achieve your dreams too, no matter how crazy they sound.





## CHAPTER 2

# THE CALL



**O**ppportunity knocks when you least expect it.

It was 11 a.m. and I was attending to patients in the clinic at HUKM. After I'd just finished examining a patient, my phone rang. It was my little brother, Sheikh Arwiz, and he told me of an online call for candidates for Malaysia's first astronaut.

This was the now-or-never, one-in-a-million chance I had to take. The chances were slim, but that never deterred me. From where I stood, everyone who applied was in alien territory, which is where I often thrived. I'd been there many times before: as a competitive swimmer, in a student council, or volunteering in Afghanistan and Cambodia.

## HOW I BECAME AN ASTRONAUT

This would be the challenge I was waiting for.

And so, on that day, I sent in my application and prayed that my name would get chosen. I later found out there were over 11,000 other applicants; I had better chances of being struck by lightning than becoming Malaysia's first astronaut. But I was never one to quit before I even started.

While waiting for the results, I knew I was nowhere near fit enough for space. Of course, I had no idea then of the physical demands required of an astronaut, but I knew that working as a doctor didn't mean I was healthy. Most doctors who are starting out rarely get enough time for sleep, let alone exercise. I weighed 98kg at the time – a little stout and slightly chubby. If I wanted to have any chance of qualifying, I had to trim down and tone up. I joined a gym the next day.

I started changing my whole lifestyle. I went to the gym daily, ran four kilometres a day on the treadmill, swam in the evening and alternately included weight training into my routine. I watched what I ate, didn't have too much rice and had bread instead, but the hardest thing was trying to avoid my favourite *nasi lemak* and *roti canai*. I did cheat, on and off, or when I couldn't stop myself. There were many occasions where I had to jog at one in the morning.

Eventually, I shed close to 20 kilos within eight months, despite being busy with my orthopaedic work. For the first time in my life, I felt like I was really in shape, and I also felt good about myself. But I also needed to buff up my mental strength as well. So I tried yoga and meditation to free myself from negative thoughts and kept my mind focused on the prize.

Time passed and it was almost a year before there was any news about the astronaut programme. I continued my Master's degree



## THE CALL

course in Orthopedics while preparing myself physically and psychologically. At the time, I was in my final year, and my thesis submission and exams were around the corner. My anxiety about the results made me wonder if there was an astronaut programme. Were we really sending a Malaysian to space? Why was the selection process taking so long?

## WHY SPACE?

I hated the idea of growing up, getting married, having kids and growing old like everyone else. It was not because I was irresponsible, but I knew I was meant for something more than an ordinary life. All my life I wanted to make a difference in other peoples' lives and have my voice heard. I wanted to give back to society, but I did not know how.

Being the first astronaut of Malaysia would serve that purpose. I know there are those who think I did it for personal glory. I wouldn't deny there was a part of me that thought: "How cool would it be to say 'I went into space!' " – but I knew there was more to it than that. It was, ultimately, my quest to represent my country as a forward-thinking nation, a country that dared to dream big and was bold enough to reach beyond the skies.

It was true that Malaysia as a developing nation had no tradition in the space sciences – but that didn't stop the National Planetarium Division in the Prime Minister's Department from being set up in 1989. Fourteen years later, the department announced an audacious bid to send a man to the International Space Station (ISS) in cooperation with the Russian Space Agency.

Some questioned such an ambition, thinking it a foolish and wasteful programme. But one doesn't have to look back far to see that space

## HOW I BECAME AN ASTRONAUT

travel played a pivotal role in determining the future of nations like America, where it rallied its people together towards becoming a nation of dreamers and doers. Where others questioned why, we wanted to ask “why not?”

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*“Why choose this as our goal? And they may well ask why climb the highest mountain? Why, 35 years ago, fly the Atlantic? Why does Rice play Texas? We choose to go to the moon. We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organise and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too.” – John F. Kennedy*

Kennedy’s 1962 speech at Rice University in Houston, Texas, signalled an audacious bid to commit America’s vast national resources and scientific might to land a man on the moon before that decade was out. Made in front of a massive crowd of 35,000 people gathered in the Rice Stadium in Houston, the speech was more than rhetoric; it was a promise to Americans that his administration would dream big, and do all it can in making that dream come true.

Decades later, Kennedy’s words still ring true for any nation striving for greatness. It is not enough that Malaysians be content with what we know and have achieved; to truly progress, we must be more willing to challenge long-held assumptions and conventional wisdom.

One of the most important challenges for Malaysians to realise our goal to become a truly developed nation is to transform our mindsets from those of underdogs to champions. Malaysians must be willing to



## THE CALL

aspire beyond the ordinary and never at any time allow our national spirit to linger without purpose, to be tainted with the pettiness or pessimism that hinders our children from dreaming and doing.

Indeed, we should provide ample space for the younger generation to grow and develop. Let them be more adventurous, inquisitive and critical so they can realise their potential and fulfil their destiny.

During my time as an *angkasawan*, I had the opportunity to demonstrate some interesting experiments to local schoolchildren and hoped to encourage them to be more involved in space science. I played the Twisting Orbital Platform (TOP) in space, carried out research relating to the characteristics and growth of liver cancer and leukaemia cells, studied the crystallisation of various proteins and microbes in the weightlessness of space, and demonstrated the behaviour of fluids and various liquids and spheres twisting in a microgravity environment.

I also wanted to become a Malaysian ambassador in space by introducing my Russian and American compatriots to items that symbolised the Malaysian way of life: I brought Malaysian *batik* to space to show them the intricacies and gentleness of Malaysian art. I also brought the *Jalur Gemilang* to the Space Station and proudly showed it off to my fellow astronauts and cosmonauts.

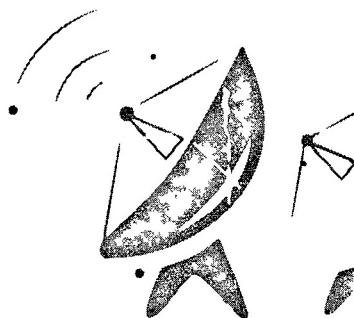
One of my finest moments was reading the Rukunegara loudly and proudly in the station. I carried my home in my heart, and showed it to the world.

Those are the reasons I answered the call.





# IT BEGINS



**A**fter being selected from the 11,425 online applicants, I was instructed to be at the Tentera Udara Diraja Malaysia (TUDM) airbase in Subang Jaya on the morning of 3 September 2005 for the run of my life. I still remember the trepidation and anticipation in taking my first few steps towards becoming an astronaut.

And they were going to be really fast steps. We were required to run 3.5km in under 20 minutes in the first nationwide elimination round, called "The Run to Orbit". Before the race, I had done 3.5km in 19 minutes on the treadmill in the gym but never tried running outdoors. With the weather and the wind, I imagined it would probably be a bit tougher.

In **HOW I BECAME AN ASTRONAUT**, Sheikh Muszaphar Shukor takes us along on his journey into space. The subtitle – “Malaysia’s First Rocketman” – says it all. Many dream of space, but few reach it. In the Malaysian context, he was the first – and to date, only one – to achieve his dream of being an astronaut.

But between him and the stars lay several monumental challenges, not least of which is proving himself to be the best among thousands of other Malaysians chasing the same dream. By the time he stepped into the Soyuz Spacecraft on 10 October 2007, he had undergone over two years of intense preparation that included gruelling physical and mental tests in Malaysia and Russia.

This book details what it takes to become an astronaut from Sheikh Muszaphar’s personal journals. More than that, this is a story of hope – one in which an ordinary Malaysian achieved extraordinary things through sheer determination and the will to make his dream come true. Read it and be inspired to reach for the stars!



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