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👙 juggernaut

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To Myself

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## Chapter 1

## Science to the Rescue

'KALAM!' called out Shankar Mama, the town sarpanch. 'Come see the – what did you call it – the ... the ... spider web on this boat.'

'No, Kalam, check the spider web on my boat first!' screamed Murugan Uncle of the Murugan Military Mess.'I cannot have delays in my spice orders.'

'How can you care about some silly spices right now, Murugan? We're preparing for a cyclone here!' shouted Father Joseph de Mello.

'Yes, Murugan, quit being so selfish!' agreed Pandit Shivaprakash.

The island of Rameswaram was in a tizzy this grey morning in June 1942.

The town had fought many a cyclone over the years, but it had been warned about a

particularly nasty one this season and were gearing up for it. 'The kind that was last seen in 1939,' the warning had read.

Ten-year-old Abdul Kalam remembered the terrible time like it had happened yesterday. After all, it was his quick thinking and clever inventions that had saved so many from the angry cyclone and the town tyrant, Punnakai, who had put everyone in danger. But what the boy cherished most was the victory of science and the appointment of his hero, the physicist-cum-mathematician Professor Ramachandran, as vice principal at Vivekananda Vidyalaya and official town scientist.

Three years later, the town was now a big believer of science. There were bits of it everywhere, and Young Kalam was always at the centre of it. Even today, on the day our story begins, he was busy using his latest learning in marine engineering to protect the boats from the cyclone.

'It's called a dock line, Mama, and making a web or criss-cross with it will keep the boat in place,' said Kalam. He examined the boat that Shankar Mama had pointed to before jumping on to Murugan Uncle's boat, his dull shorts, loose, worn-out vest and sandals allowing him a big leap.



'No, no. We have to double the dock lines, Murugan Uncle. Can't be miserly with this. Single lines can break in the cyclone. And let's add spring lines at the front and back,' he continued. 'Yes, that would be best. A thirty-feet spring line should allow a slack of five inches to five feet of tidal movement. A ten-foot range. And raise the lines; we're expecting a higher tide! That should do it.'



Of course, Murugan Uncle understood nothing of what Kalam said. In fact, hardly anyone in the town ever understood Kalam. I wouldn't expect you to either. I can barely ever understand what the boy said! But everyone trusted him blindly.

Kalam, too, was used to the puzzled looks he got. So he picked up the dock lines at once and hopped on to the boat, his pointy nose and wispy hair hopping with him as he tied the line tightly along the length and breadth of the boat.

For an island, boats are an important lifeline. Safeguarding them was half the cyclone battle won. And Murugan Uncle's boat now looked like it could survive the worst.

'We must do the same for all the boats,' Kalam thought out loud. 'But I have to go now. I shall be back soon . . . in an hour?'

'Don't worry, Avul. I'll oversee the work



here. You work on your invention. It's an important one, son,' said Jainulabdeen Marakayar, Kalam's father and biggest supporter. Kalam's father was an imam and a simple man with a business of ferrying people to and from Madras of which the island was a part. He was certain his son would do big things, and he made sure to help the boy in every way possible.

'Thank you, Abbu,' Kalam said, giving his father a squishy hug before dashing off to Professor Ramachandran's laboratory.

Tucked away in a corner of Professor Ramachandran's gigantic lab was Kalam's own workshop. It was only a tiny storeroom, but it opened up to a shed. And it was here that Kalam's latest invention stood.

Abbu was right – this was by far the most important invention of his life. It was for a place in a national science competition. Thirty students from around the country would take part in a special two-week camp led by a team of the country's best scientists and engineers.

At the end of it, two of them would get a chance to tour *and* witness the first flight of the Mohawk IVz fighter aircraft, which was being built for the Royal Indian Air Force.

Kalam remembered the first time he had seen the Miles Merlin aircraft in the sky and told his father about his dream of flying. Of course the boy wanted any chance to be as close to an aircraft as possible!

He had been working on his invention day and night. 'A mix of all the sciences,' he called it and revealed nothing more. He even set up a ferocious bark alarm for nosey townspeople. But whatever he was making was growing in size and becoming difficult to keep a secret.

'This should channel all the water into the tank,' Kalam said to himself, sitting down on the step of a ladder to fasten a bamboo pipe on to his invention. 'It must have enough water for seventy-two hours. I wonder if one tank will do,' he thought out loud.

Kalam jumped off the ladder and scrawled something in his diary. 'Hmm, yes, perhaps two tanks, like this, on opposite angles, would be best. Balances the weight too,'he mumbled.



Finally, after minutes of muttering and scribbling, he got up.

'That should do it. Time for biology next. Time to call upon Ram.'