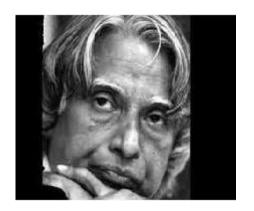




# A.P.J. ABDUL KALAM





Avul Pakir Jainulabdeen "A. P. J." Abdul Kalam (15 October 1931 – 27 July 2015) was the 11th President of India from 2002 to 2007. A career scientist turned reluctant politician, Kalam was born and raised in Rameswaram, Tamil Nadu, and studied physics and aerospace engineering. He spent the next four decades as a scientist and science administrator, mainly at the Defence Research and Development Organisation (DRDO) and Indian Space Research Organisation (ISRO) and was intimately involved in India's civilian space program and military missile development efforts. He thus came to be known as the Missile Man of India for his work on the development of ballistic missile and launch vehicle technology. He also played a pivotal organizational, technical, and political role in India's Pokhran-II nuclear tests in 1998, the first since the original nuclear test by India in 1974. Widely referred to as the "People's President", he returned to his civilian life of education, writing and public service after a single term. He was a recipient of several prestigious awards, including the Bharat Ratna, India's highest civilian honour. While delivering a lecture at the Indian Institute of Management Shillong, Kalam collapsed and died from an apparent cardiac arrest on 27 July 2015, aged 83.



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#### Where & when born

Avul Pakir Jainulabdeen Abdul Kalam was born on 15 October 1931 to a Tamil Muslim family in the pilgrimage centre of Rameswaram on Pamban Island, then in the Madras Presidency and now in the State of Tamil Nadu. His father Jainulabudeen was a boat owner and imam of a local mosque; his mother Ashiamma was a housewife.

#### **Brief life history of the Abdul Kalam**

His father owned a ferry that took Hindu pilgrims back and forth between Rameswaram and the now uninhabited Dhanushkodi. Kalam was the youngest of four brothers and one sister in his family. His ancestors had been wealthy traders and landowners, with numerous properties and large tracts of land. Their business had involved trading groceries between the mainland and the island and to and from Sri Lanka, as well as ferrying pilgrims between the mainland and Pamban. As a result, the family acquired the title of "Mara Kalam iyakkivar" (wooden boat steerers), which over the years became shortened to "Marakier." With the opening of the Pamban Bridge to the mainland in 1914, however, the businesses failed and the family fortune and properties were lost over time, apart from the ancestral home. [20] By his early childhood, Kalam's family had become poor; at an early age, he sold newspapers to supplement his family's income.

In his school years, Kalam had average grades but was described as a bright and hardworking student who had a strong desire to learn. He spent hours on his studies, especially mathematics. After completing his education at the Schwartz Higher Secondary School, Ramanathapuram, Kalam went on to attend Saint Joseph's College, Tiruchirappalli, then affiliated with the University of Madras, from where he graduated in physics in 1954. He moved to Madras in 1955 to study aerospace engineering in Madras Institute of Technology.

While Kalam was working on a senior class project, the Dean was dissatisfied with his lack of progress and threatened to revoke his scholarship unless the project was finished within the next three days. Kalam met the deadline, impressing the Dean, who later said to him, "I was putting you under stress and asking you to meet a difficult deadline". He narrowly missed achieving his dream of becoming a fighter pilot, as he placed ninth in qualifiers, and only eight positions were available in the IAF



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After graduating from the Madras Institute of Technology in 1960, Kalam joined the Aeronautical Development Establishment of the Defence Research and Development Organisation (DRDO) as a scientist. He started his career by designing a small hovercraft, but remained unconvinced by his choice of a job at DRDO. Kalam was also part of the INCOSPAR committee working under Vikram Sarabhai, the renowned space scientist. In 1969, Kalam was transferred to the Indian Space Research Organisation (ISRO) where he was the project director of India's first Satellite Launch Vehicle (SLV-III) which successfully deployed the *Rohini* satellite in near-earth orbit in July 1980; Kalam had first started work on an expandable rocket project independently at DRDO in 1965. In 1969, Kalam received the government's approval and expanded the programme to include more engineers.

In 1963–64, he visited NASA's Langley Research Center in Hampton, Virginia; Goddard Space Flight Center in Greenbelt, Maryland; and Wallops Flight Facility. Between the 1970s and 1990s, Kalam made an effort to develop the Polar Satellite Launch Vehicle (PSLV) and SLV-III projects, both of which proved to be successful.

Kalam was invited by Raja Ramanna to witness the country's first nuclear test Smiling Buddha as the representative of TBRL, even though he had not participated in its development.

His research and educational leadership brought him great laurels and prestige in the 1980s, which prompted the government to initiate an advanced missile programme under his directorship. Kalam and Dr V S Arunachalam, metallurgist and scientific adviser to the Defence Minister, worked on the suggestion by the then Defence Minister, R. Venkataraman on a proposal for simultaneous development of a quiver of missiles instead of taking planned missiles one after another. R Venkatraman was instrumental in getting the cabinet approval for allocating ₹388 crores for the mission, named Integrated Guided Missile Development Programme (IGMDP) and appointed Kalam as the chief executive.

Kalam served as the Chief Scientific Adviser to the Prime Minister and the Secretary of the Defence Research and Development Organisation from July 1992 to December 1999. The *Pokhran-II* nuclear tests were conducted during this period in which he played an intensive political and technological role. Kalam served as the Chief Project Coordinator, along with Rajagopala Chidambaram, during the testing phase. Media coverage of Kalam during this period made him the country's best known nuclear scientist.

In 1998, along with cardiologist Soma Raju, Kalam developed a low cost coronary stent, named the "Kalam-Raju Stent". In 2012, the duo designed a rugged tablet computer for health care in rural areas, which was named the "Kalam-Raju Tablet"

Kalam became 11<sup>th</sup> President of India on 25-Jul-2002 serving the nation with pride. After he decided not to contest the second term, he started giving lectures in many universities, colleges and schools.

While delivering a lecture at the Indian Institute of Management Shillong, Kalam collapsed and died from an apparent cardiac arrest on 27 July 2015, aged 83. His death was mourned across the nation with thousands including national-level dignitaries attending the funeral ceremony held in his hometown of Rameshwaram,



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where he was buried with full state honours.

#### **Career in political**

Kalam served as the 11th President of India, succeeding K. R. Narayanan. He won the 2002 presidential election with an electoral vote of 922,884, surpassing the 107,366 votes won by Lakshmi Sahgal. His term lasted from 25 July 2002 to 25 July 2007.

Kalam became the 11th president of the Republic of India in an easy victory, and moved into the Rashtrapati Bhavan after he was sworn in on 25 July. Kalam was the third President of India to have been honoured with a Bharat Ratna, India's highest civilian honour, before becoming the President.

During his term as president, he was affectionately known as the *People's President*, saying that signing the Office of Profit Bill was the toughest decision he had taken during his tenure.

He also took the controversial decision to impose President's Rule in Bihar in 2005

In September 2003, in an interactive session in PGI Chandigarh, Kalam supported the need of Uniform Civil Code in India, keeping in view the population of the country

He decided not to contest the Presidential election again stating that he wanted to avoid involving Rashtrapati Bhavan from any political processes

After leaving office, Kalam became a visiting professor at the Indian Institute of Management Shillong, the Indian Institute of Management Ahmedabad, and the Indian Institute of Management Indore; an honorary fellow of Indian Institute of Science, Bangalore; chancellor of the Indian Institute of Space Science and Technology Thiruvananthapuram; professor of Aerospace Engineering at Anna University; and an adjunct at many other academic and research institutions across India. He taught information technology at the International Institute of Information Technology, Hyderabad, and technology at Banaras Hindu University and Anna University.

In May 2012, Kalam launched a programme for the youth of India called the *What Can I Give Movement*, with a central theme of defeating corruption.

In 2011, Kalam was criticised by civil groups over his stand on the Koodankulam Nuclear Power Plant; he supported the establishment of the nuclear power plant and was accused of not speaking with the local people. The protesters were hostile to his visit as they perceived to him to be a pro-nuclear scientist and were unimpressed by the assurances provided by him regarding the safety features of the plant

On 27 July 2015, Kalam travelled to Shillong to deliver a lecture on "Creating a Livable Planet Earth" at the Indian Institute of Management Shillong. At around 6:35 p.m. IST, only five minutes into his lecture, he collapsed.



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#### Leadership qualities to mention a few here below

#### 1. Everything is Possible.

Dr.Abdul Kalam, Former President of India...a son of a small boat owner, from far end of the Country reaching... what was possibly, the supreme most position, a Citizen of India can ever reach...that too, only one out of a billion people, can ever reach once in 5 years...through sheer hard work, dedication and, sincerity, backed by destiny. Probably Dr.Kalam may even rise taller as a human being, in stature in the Modern World History.

#### 2. Leaders Ignite the minds of Others

Dr Kalam was a destiny's child. A man with nothing except curiosity and passion for flying, with wings of fire, flew as high as he could in the sky. And, like a special satellite that orbits the Universe, he went about his mission, igniting millions of young minds and many nations.

#### 3. Leaders care, share and maintain transparency

Dr. Kalam boasted nothing but learnt as much as he can till his last breath. He kept nothing to himself but shared with transparency and sincerity to each and every one, everything he learnt, who crossed his life till his last breath at IIM, Shillong.

# 4. Leaders Inspire others and make them dream rather than making them believe in their own dreams

Dr. Kalam inspired millions of young hearts to dream; And made them to believe in their dreams. He wanted people to dream, to transform their dreams into thoughts that can result into actions. Dr. Kalam envisioned a developed India that is very much a reality through strong vision.

#### 5. Leaders are truly Visionary

Dr. Kalam strongly believed that future India's success rest over PURA (Providing Urban Amenities in Rural Areas). And, that is the way forward, to create a developed India. He is truly a visionary.

#### 6. Leaders look for solutions to problems with Innovative mindset

What can a missile scientist do with his learnings to alleviate India's problems? He cross-pollinated the idea of using the high-grade steel used in missiles that can kill people and



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designed and developed, what is famously known as Kalam-Raju Stent-that now saves people...at fraction of the cost compared to those expensive ones, making it more affordable.

#### Critical moments in his life

In the 1970s, Kalam also directed two projects, Project Devil and Project Valiant, which sought to develop ballistic missiles from the technology of the successful SLV programme. Despite the disapproval of the Union Cabinet, Prime Minister Indira Gandhi allotted secret funds for these aerospace projects through her discretionary powers under Kalam's directorship. Kalam played an integral role convincing the Union Cabinet to conceal the true nature of these classified aerospace projects.

Kalam played a major part in developing many missiles under the mission including Agni, an intermediate range ballistic missile and Prithvi, the tactical surface-to-surface missile, although the projects have been criticised for mismanagement and cost and time overruns.

During the period of Kalam served as the Chief Project Coordinator, along with Rajagopala Chidambaram, during the *Pokhran-II* nuclear testing phase, Media coverage made him the country's best known nuclear scientist. However, the director of the site test, K Santhanam, said that the thermonuclear bomb had been a "fizzle" and criticisied Kalam for issuing an incorrect report. Both Kalam and Chidambaram dismissed the claims.

In the 147-page book, Mr. Kalam writes about his experience of watching his father build a boat, his early working life as a newspaper boy at the age of eight and even his first-hand experience of the way in their religious elders settled a religious matter in his school.

He recounts "staring into the pit of despair" when he failed to make it as an IAF pilot and how he pulled himself up and rose to become the man who headed India's missile programme and occupy highest office in the country.

During his term as president, Kalam acted on only one mercy plea in his five-year tenure as president, rejecting the plea of rapist Dhananjoy Chatterjee, who was later hanged. Perhaps the most notable plea was from Afzal Guru, a Kashmiri terrorist who was convicted of conspiracy in the December 2001 attack on the Indian Parliament and was sentenced to death by the Supreme Court of India in 2004. While the sentence was scheduled to be carried out on 20 October 2006, the pending action on his mercy plea resulted in him remaining on death row. He also took the controversial decision to impose President's Rule in Bihar in 2005.



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#### Teachings

- 1. You have to dream before your dreams can come true
- 2. Excellence is a continuous process and not an accident.
- 3. Life is a difficult game. You can win it only by retaining your birthright to be a person.
- 4. Man needs his difficulties because they are necessary to enjoy success.
- 5. We will be remembered only if we give to our younger generation a prosperous and safe India, resulting out of economic prosperity coupled with civilizational heritage.
- 6. Those who cannot work with their hearts achieve but a hollow, half-hearted success that breeds bitterness all around.
- 7. Educationists should build the capacities of the spirit of inquiry, creativity, entrepreneurial and moral leadership among students and become their role model.
- 8. Look at the sky. We are not alone. The whole universe is friendly to us and conspires only to give the best to those who dream and work.
- 9. If a country is to be corruption free and become a nation of beautiful minds, I strongly feel there are three key societal members who can make a difference. They are the father, the mother and the teacher.
- 10. My message, especially to young people is to have courage to think differently, courage to invent, to travel the unexplored path, courage to discover the impossible and to conquer the problems and succeed. These are great qualities that they must work towards. This is my message to the young people.

#### **Traits**

- 11. He was extremely close to his elder siblings and their extended families throughout his life, and would regularly send small sums of money to his older relations, himself remaining a life-long bachelor.
- 12. Kalam was noted for his integrity and his simple lifestyle.
- 13. He never owned a television, and was in the habit of rising at 6:30 or 7 a.m and sleeping by 2 a.m.
- 14. His few personal possessions included his books, his veena, some articles of clothing, a CD



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player and a laptop;

- 15. Religion and spirituality were very important to Kalam throughout his life. In fact, he made his own spiritual journey the subject of his final book, Transcendence: My Spiritual Experiences with Pramukh Swamiji
- 16. His father had also impressed upon the young Kalam the value of interfaith respect and dialogue.
- 17. He was fond of saying: For great men, religion is a way of making friends; small people make religion a fighting tool.
- 18. One component of Kalam's widespread popularity among diverse groups in India, and an enduring aspect of his legacy, is the syncretism he embodied in appreciating various elements of the many spiritual and cultural traditions of India
- 19. In addition to his faith in the Koran and Islamic practice, Kalam was well-versed in Hindu traditions; he learnt Sanskrit, read the Bhagavad Gita and he was a vegetarian. Kalam also enjoyed writing Tamil poetry, playing the veena (a South Indian string instrument), and listening to Carnatic devotional music every day

#### **Awards and achievements**

- He was awarded Padma Bhushan in 1981 and Padma Vibhushan in 1990
- Kalam was the third President of India to have been honoured with a Bharat Ratna, India's highest civilian honour, before becoming the President.
- He was also the first scientist and the first bachelor to occupy <u>Rashtrapati Bhawan</u>.
- Apart from these he got many accolades both from national and international organization.

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