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Review Of Research



LIFE SKETCH OF APJ ABDUL KALAM: AN OVERVIEW



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ABSTRACT :

n this research paper I tried to show the brief life sketch of Dr APJ Kalam. He was a great scientist, engineer etc. He also called as a missile man of India. He born in poor family but his achievements became very rich. He successfully launched number of missiles in India. Therefore, the Indian government recognized his talent and honored with number of awards.

KEYWORDS: Science and Technology, Missile, Rocket, Literature, Defence etc.

INTRODUCTION:

Dr.APJ Abdul Kalam is a greatest personality in the India. He is full of generosity and has rendered selfless service to humanity. He is dutiful, self-reliant and generous. Dr. Abdul Kalam was very much impressed by Indian spirituality and philosophy despite his scientific capability to make India one off the most powerful country of the world.

EARLY LIFE:

APJ Abdul Kalam was born October 15, 1931 at Dhanuskodi, an island in Tamil Nadu where his father rented a boat to fisherman who worked on the narrow strait between India and what was then Ceylon, now Sri Lanka. His full name is Avul Pakir Jainulabdeen Abdul Kalam. In Kalam's own words, "I was born into a middle class family in the island of Rameshwaram in the erstwhile Madras State. My father, Jainulabdeen, had neither much formal education nor much wealth, despite these disadvantages possessed a great innate wisdom and a true generosity of spirit. He had an ideal helpmate in my mother, Ashiamma. I do not recall the exact number of people she fed every day, but I am quite certain that far more outsiders ate with us than all the members of our own family put together." Speaking about his parents for whom he had the highest regard Kalam is on record to say, "My parents were widely, regarded as an ideal couple. My mother's lineage was more distinguished, one of her forebears was bestowed the title of 'Bahadur' by the British. Without mentioning the number of brothers and sisters he had, Dr. Kalam said, "I was one of many children – a short boy with rather undistinguished looks, born to tall and handsome parents". we lived in our ancestral house, which was built in the middle of the 19th century. It was fairly a large pucca house, made of lime stone and brick, on the mosque street in Rameshwaram. My austere father used to avoid all inessential comforts and luxuries. However, all necessities were provided for in terms of food or clothes. In fact, I would say mine was a very secure childhood, both materially and emotionally.

I normally ate with my mother, sitting on the floor of the kitchen. She would place a banana leaf before me on which she then handled rice and aromatic S mbhar a variety of sharp, homemade pickles and a dollop of

fresh coconut chutney."

HISEDUCATION

Dr APJ Kalam had his early education at the Rameshwaram Elementary School. Later on, APJ Abdul Kalam, left Rameshwaram for Ramanathapuram, the district head quarters, for further studies. His brothers also accompanied with him to Ramanathapuram to enroll him in Schwartz High School and to arrange for his stay at the hostel. In a short span of time, Kalam developed very close relationship with his teacher – lyadural Solomon – who proved to be his ideal guide. . He used to say, "To succeed in life and achieve results, you must understand and master three mighty forces = desire, belief and expectation." "In the year 1950, after having completed education at the School, at Schwartz, Kalam went to Trichnopolly, (as it was Known then) to study for the intermediate examination at St. Joseph College. he read the great classics – Tolstoy, Scott and Hardy – and later on he moved on to some works in philosophy. And it was around this time that APJ Kalam developed a great interest in physics. Ultimately, he took keen interest in science and science for him became the path to spiritual enrichment and self realization later in his life.Though he was selected for admission and completed with the help of his sister Zohara.

CONTRIBUTIONS OF APJ KALAM:

APJ Kalam made number of contributions in India. He appointed and served in various departments as a scientific assistant, Rocket Engineer etc.

As a Senior Scientific Assistant

Immediately after having met Swami Sivananda at Rishikesh, which certainly gave him lot of consolation, the young Kalam went to Delhi to find out his fate of the other interview which he had given at the DTD&P (Air). It was a pleasant surprise for him when he was handed over his appointment letter to join as Senior Scientific Assistant on a basic salary of Rs. 250/- p.m. He was thus destined to start his career as such in the year 1958. During his first year in the Directorate, he carried out a design assignment on supersonic target aircraft with the help of the office-in-charge R. Vardhararajan. He had been taken in the team. As a member of the team, he undertook a preliminary design study on a Human Centrifuge, and later on carried out the design and development of a Vertical-Takeoff and Landing-Platform. He was also associated with the development and construction of the Hot-Cockpit. Three years thereafter the Aeronautical Development Establishment came into existence at Bangalore and Kalam was pasted in that very new establishment. The work load at ADE, during the first years of its inception was of course very light, but earnest efforts were made to generate the work

V.K. Krishna Menon was the Defence Minister at that point of time and he was keenly interested in the progress of this small project. Whenever the Defence Minister was in Bangalore, he would enquire about the progress of the project. This deep interest in the project by the Defence Minister was always a source of encouragement to all those who had been working on the project.

The hovercraft was christened NANDI, the mount of Lord Shiva. The Defence Minister flew in the NANDI in spite of warnings given by a Group Captain in his troupe. To his happiness joy and comfort, the Minister agreed to permit Kalam to fly the machine in which he himself sat. The minister was very happy on the success of the flight. "You have demonstrated that the basic problems of hover craft development are solved The said project was completed ahead of the time.

AS A ROCKET ENGINEER

Dr APJ Kalam had tremendous faith in the sacred books of all religions. Those were his source of strength, which made him work towards his mission tirelessly. To his good luck, a visitor, Prof. MGK Menon, came to the hovercraft and asked for a ride. "Can you give me a ride in the machine?" he enquired. His request filled me with joy. Finally, here was someone who was interested in my work," said Kalam.

"We took a ten minute ride in the hovercraft, a few centimeters above the ground... The visitor asked me

a few questions about myself, thanked me for the ride and departed ... After a week, I received a call from the Indian Committee for Space Research (INCOSPAR) to attend an interview for the post of Rocket Engineer.

In the maiden Nike-Apache Launch, Kalam was in charge of rocket integration and safety. The launch was smooth and problem free. Dr. Kalam was very much impressed by the all round leadership of Dr. Sarabhai. He was always looking for more novel approaches and would be inclined to involve the young and dynamic people in the challenging projects. According to Dr. Kalam, Dr. Sarabhai was an ideal experimenter and innovator.

With the death of Tippu Sultan Indian Rocketry also met its demise – at least for the next 150 years. Fortunately, Rocketry was reborn in India under the leadership of Jawaharlal Nehru.

Under the Prime Ministership of Jawaharlal Nehru, Prof. Vikram Sarabhai took a series of decisions to make indigenous Rockets, Satellite launch Vehicles (SLVs) and the satellites. Prof. Vikram Sarabhai had an eye on Dr. Kalam, who had been shaping very well in the field of science and technology and assigned him the task of providing interface support to payload scientists. Prof. Vikram Sarabhai had a plan of developing a Rocket Assisted take-off system (RATO) for military aircraft. After having coffee at the Asoka Hotel at 1:00 am he unfolded this plan to both the Group Captain and Dr. Kalam and took them with him to Tilpat Range situated at the outskirts of Delhi. After dropping us back at the Hotel Asoka, Prof. Sarabhai went to the Prime Minister's House for a breakfast meeting.

AS MEMBER ON THE MISSILE PANEL

The Ministry of Defence wanted to make missiles in the country itself. And to his good luck Dr. Kalam was inducted as member of the Missile Panel along with Group Captain V.S. Narayanan. Both of them worked with full vigour and dedication.

SUCCESSFUL LAUNCHING OF THE SLV-3

And ultimately, under the leadership of Dr. APJ Abdul Kalam, India's first Satellite Launch Vehicle, SLV-3 was successfully launched in the early hours of the 18th July, 1980. At this most extra-ordinary success Kalam was thrilled and excited. In his own words, "I spoke in the midst of screeching decibels the most important words I have ever uttered in my life, "Mission Director calling all stations. Stand by an important announcement. All stages performed to mission requirements. The fourth stage apogee motor has given the velocity to put Rohini Satellite into orbit." There were happy cries everywhere. When Kalam came out of the Block house, he was physically lifted and was carried in the procession.

The whole country was overjoyed on this rarest of rare achievement. This achievement brought the country among the small group of countries who possessed Satellite Launch capability. The Indian Parliament greeted this occasion with thumping of desks. "I experienced mixed feelings. I was happy to achieve the success which had been evading me for the past two decades, but I was sad because the people who inspired me were no longer there to share my joy – my father, my brother-in-law Jallaludin and Prof. Sarabhai." Said Dr. Kalam".

AS A DIRECTOR OF DRDL:

After having achieved Great success in SLV-3, Dr Kalam was destined for a new challenging assignment. With the approval of the then Defence Minister R. Venkataraman, Prof. Dhawan was able to get him the appointment as Director, DRDO in February, 1982. In April 1982, Kalam visited DRDO to acquaint himself with potential worksite. The then Director, S L Bansal took him around and introduced him to senior scientists in the Laboratory.

LAUNCH OF AGNI

The successful launch of Agni gave immense pleasure and satisfaction to Dr. Kalam. The launch was scheduled for the 22nd May 1989. K.C. Pant, the then Defence Minister had come there to witness the launch of Agni. Predicting the success of the launch, K.C. Pant asked "Dr. Kalam! What would you like me to do to celebrate

the Agni success tomorrow?" The next day Agni took off at 7:10 hours. It was a perfect launch. The missile followed a text book trajectory. It was certainly a great occasion in the life of Dr. Kalam.

TEST FIRING OF AKASH

India's 44th Independence Day was celebrated with the test firing of Akash. With this the country had moved forward in ground based air defence of vulnerable areas. Slow by slow by slow Dr. Kalam had been adding feather after feather in his cap.

SUCCESSFUL LAUNCHING OF NUCLEAR TEST AT POKHRAN

The main guiding spirit behind the successful nuclear tests at Pokhran, conducted on the 11th May 1998 and 13th May 1998, was no other person than Dr. APJ Abdul Kalam. Let us salute this rarest of the rare son of the soil. He will certainly go down in the history of the country – "the Father of the Indian Missile Programme".

And on November, 25, 1999 Dr. Kalam was promoted as the Principal Scientific Advisor to the Government of India in the rank of a Cabinet Minister. At the annual function of the Indian National Academy on December, 8, 2000 Dr. Kalam was conferred the "Life time contribution Award in Engineering 2000" by the deputy chairman of the Planning Commission, Shree. K.C. Pant. He laid down his office of the Principal Scientific Advisor on November 10, 2001 for some obvious reasons.

Before Dr. APJ Abdul Kalam was chosen as the Presidential candidate of almost all the political parties except the Left parties, he had to travel a long journey of hard work, dedication, perseverance and tireless efforts for the development of science and technology in the country.

AS THE PRESIDENT OF INDIA:

Dr. Avul Pakir Jainulabdeen Abdul Kalam a proud son of humble and saintly parents – Ashiamma and Jainulabdeen – took over as India's eleventh President (12th term) and was sworn in on the morning of Thursday the 25th July, 2002 in the Central Hall of Parliament. The Chief Justice of India, B.N Kirpal administered him the oath of the office of the President.

AWARDS AND HONOURS:

He received number of awards for his contributions. Soon after having recognized the extraordinary achievements made by Dr. Kalam for his country in the field of Science and Technology he was selected by the Government of India for the conferment of Padmabbhushan on the 26th January, 1981 another recipient of Padma Vibhushan was Prof. Dhawan, whom Kalam used to call him his guru. When Dr. Kalam rang up Dr. Brahma Prakash to thank him he chided for the formality and said, "I feel as if my son got the award." Dr. Kalam was deeply touched for the fatherly affection shown by Dr. Brahma Prakash.

AWARDED BHARAT RATNA

"In recognition of his extraordinary and invaluable contribution in the service of the motherland, Dr. APJ Abdul Kalam was decorated on 25th November 1997 with "Bharat Ratna", the Highest Civilian Honour that country can bestow on any citizen. Dr. Kalam has not risen to this position overnight. His hard work, sincerity, dedication and immense love for the country made him reach the high pedestal. When in 2002, he moved into the Rashtrapati Bhavan, he already had the Bharat Ratna around his neck."

"In October 1998, Dr. Kalam was honoured with the prestigious Indira Gandhi Award for national integration. Not only this, he took over as Scientific Advisor to the Minister for Defence in place of Dr. Arunachalam."

CONFERRED DOCTOR OF SCIENCE DEGREE'S

He conferred two doctor of science degrees from two universities those are Anna University of Madras and Jadavpur University. Meanwhile, Dr. Kalam was conferred with an honorary Degree of Doctor of Science by

the Anna University of Madras. The said function of conferring an honorary Degree of Science on Dr. Kalam was presided over by Dr. Raja Ramanna. This honour in the field of academics was certainly in recognitions of his extraordinary achievements in the field of rocketry.

"Towards the end of the year 1990, Dr. APJ Abdul Kalam was conferred honorary Degree of Doctor of Science by the Jadavpur University for his outstanding achievements. A special convocation was arranged for this purpose. Another recipient for this hounour was Dr. Nelson Mandela. It was indeed a great occasion for Dr. Kalam to be honoured with Dr. Nelson Mandela."

SOME OTHER HONOURS

| Edinburgh University (UK) |
|---------------------------------------|
| Simon Fraser University |
| Institute of Electrical & Electronics |
| Engineers. |
| University of Waterloo |
| Oakland University |
| ASME Foundation (USA) |
| California Institute of Technology |
| (USA) |
| Nanyang Technological University |
| (Singapore) |
| Carnegie Mellon University |
| |
| Royal Society (UK) |
| University of Wolverhamption (UK) |
| Alwars Research Centre (Chennai) |
| |

CONCLUSION:

To sum up, Dr APJ Kalam was a great personality of India. He contributed in number of fields like, science and technology, literature so on. He born in poor family but his self he made his life very bright with his hard work. Therefore, today his name became very famous. He served as a scientist, engineer, writer etc. for his great contribution government of India conferred many awards and honours.

REFERENCE:

1. Sharma & Others Pride of the Nation Dr. APJ abdul Khalam Diamond Pocket N k New Dehali 2013

2. Srinivas Laxman. Dreams to Rajendr A biography APJ Abdul Khalam Navaneet Publication

3. APJ Abdul Kalama Scintist, & Humans An Chatarvesest Rivp a Publhish New Dehi 2012

4. M.P. Bhatia- APJ Abdul Kalam. MI Publication



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