INTRODUCTION
Air Cmde Jasjit Singh AVSM VrC VM (retd) was amongst India’s most versatile strategic thinkers whose understanding and writings traverse a wide expanse of subjects like aerospace and air power, challenges posed by Pakistan and China, higher defence organisation, India’s foreign policy, defence economics and modern forms of warfare, as well as social issues impacting national security, counter-insurgency and many more. However, particularly close to his heart was the subject of India’s nuclear future—from the perspective of utilising the technology for peaceful applications as well as optimally putting its military dimension in the service of national security.

The role that nuclear energy could play in India’s energy mix and the role that nuclear weapons should play in national security strategy were both issues on which Jasjit Singh spent a lot of his thought and writing. On the former issue, he framed the need for nuclear energy in the context of India’s energy security and argued in favour of the country’s accommodation into the international nuclear regime so that outside help could be available to

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Jasjit Singh framed the need for nuclear energy in the context of India’s energy security and argued in favour of the country’s accommodation into the international nuclear regime so that outside help could be available to the indigenous nuclear power programme for its rapid expansion. The indigenous nuclear power programme for its rapid expansion. On the latter issue of nuclear weapons, he was clear that it was a necessary evil given the security compulsions of the neighbourhood. But he never gave up the idea that India must continue to press for universal elimination of nuclear weapons. In fact, he had plans to write his next book called Counterstrike, to further the understanding of no first use (NFU), a much misunderstood concept, in India’s nuclear strategy. Global acceptance of NFU, he firmly believed, could also serve as a stepping stone towards universal nuclear disarmament. Unfortunately, his book was not to see the light of day. He passed away on August 4, 2013 after having lived and breathed national security for over six decades of his active service—almost half of which was spent in think tanks.

EARLY YEARS
Born on July 8, 1934, in his ancestral home in Chandpur Rurki, a small village close to Nawanshahr in Shaheed Bhagat Singh Nagar district of Punjab, Jasjit Singh was one of eight siblings. Born into a landed family, his father felt that Jasjit’s first responsibility lay in helping run the farm, even though he got his graduation in English (Hons) from a college in Shimla. Jasjit Singh was always very proud of his proficiency in English language which he learnt first at a missionary school that he attended in Lahore, and then honed during graduation. One is often reminded of his insistence on the distinction between certain words such as will and shall—vocabulary that is pretty much used interchangeably today. But he would always remember his school grammar that had ingrained in him the difference in usage of the terms. He brought this to bear in the drafting of the nuclear
doctrine where he was sure of why he was writing “India shall pursue a doctrine of credible minimum nuclear deterrence” or that “any nuclear attack on India and its forces shall result in punitive retaliation with nuclear weapons to inflict damage unacceptable to the aggressor.” For him, shall spelt a definitiveness that brooked no hesitation, whereas will could indicate the exercise of an option.\(^1\)

After finishing his graduation, Jasjit wanted to join the Indian Air Force (IAF), but surprisingly enough, his father, who had himself retired as Chief Minister of Nabha State and returned to farming, disapproved of the decision. As stated earlier, he wanted Jasjit to join him in farming, and the son complied. But a period of drought during 1951-53 convinced him that he could not make a career out of farming. Finally, his father agreed to let him join the IAF and Jasjit joined the service in 1954, earning his commission in 1956.

Soon after, Jasjit Singh graduated with top honours and was awarded the much coveted Jodhpur Sword of Honour. He served the institution of IAF for thirty-one years with great distinction. As an ace fighter pilot, not only was he a flying instructor but he also tenanted several operational, command and instructional appointments. His participation in the Indo-Pak war of 1971, where he carried out air attacks that destroyed Pakistani tanks, won him a Vir Chakra for his gallantry in the face of enemy action. Subsequently, in 1974 he was awarded the Vayu Sena Medal by the IAF for his significant work in the personnel branch on manpower and career planning. The Ati Vishisht Seva Medal came his way in 1984 for his distinguished service.

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1. Modern English usage of the two terms can be found in the sentence, “will can imply volition or intention, while shall can imply necessity”, as cited in Maeve Maddox, “the difference between ‘will’ and ‘shall’”, https://www.dailywritingtips.com/the-difference-between-will-and-shall/
work in the personnel branch on manpower and career planning. The Ati Vishisht Seva Medal came his way in 1984 for his distinguished service.

During his time as a fighter pilot, Jasjit underwent two ejections from aircraft that he was flying. The first such incident took place on October 18, 1973 (which was also his wedding anniversary) when a bird hit caused engine failure and led to loss of control over the aircraft. The mishap happened while he was posted at Hindon. The second incident took place in 1977 when he was commanding 17 Squadron at Halwara. This time the aircraft had an engine malfunction and he was compelled to eject. Both times, during the ejections, he suffered multiple spinal injuries, but his destiny brought him back for bigger things in life. Many a time, and especially when he held on to contrarian positions, he would joke that since he had broken his spine twice, it went to show that he had a spine!

By the early 1980s, once it was clear that the injuries would not let him be fit enough to fly fighter jets again, his academic interests came to the fore. He completed his Masters in history from the University of Mysore during this time. He also started writing a series of articles on air power for Strategic Analysis, the flagship journal of the then only national security think-tank in India, the Institute for Defence Studies and Analyses (IDSA) at New Delhi. This is how he and IDSA got introduced to each other and their destinies were to remain intimately intertwined for sixteen years thereafter.

THE JOURNEY AS A STRATEGIC THINKER
In 1985, Jasjit Singh became the first serving military officer to be appointed Deputy Director at IDSA. This was an unprecedented move both for the IDSA and for the military. He himself used to say that few in the IAF understood his decision at the time. They considered it crazy for him to give up a promising service career to ‘move to the sidelines’ to do research on air power and national security. At IDSA, the Director then was Mr. K. Subrahmanya, the individual who India remembers as the doyen of national strategic thinking, particularly on nuclear strategy. The two came to form a formidable team as they wrote and spoke on matters of national security.
Two years later, in 1987, K. Subrahmanyan or K Sub, as he was called by all, decided to retire from his active position as Director. He reposed his faith in Air Cmde Jasjit Singh to step into his shoes. Many years later Jasjit described this moment as having arrived too quickly for him. He found the shoes of Mr. Subrahmanyan too large for him and he felt that he had only been shuffling along in them! However, for fourteen years after the change of guard at IDSA, Jasjit remained in the position of Director until 2001. He made a huge contribution in earning a stature for the organisation that made it count across the world as one of the leading policy think tanks. The crop of scholars that he groomed and mentored by showing direction as Director, today constitute the vibrant strategic community that populates nearly every think tank in India.

The dawn of the decade of the 1990s came with the end of the Cold War. As the US-USSR/Russia relations transformed, it spelt a tectonic shift not just for the world in general but also for India. The collapse of the USSR, with whom India had forged a deep strategic relationship, and the brief unipolar moment with the US as the sole superpower, with whom India had not enjoyed great relations during the Cold War, put New Delhi in a difficult diplomatic situation. At this juncture, Jasjit Singh stepped up his efforts to secure the country’s interests in a changing geopolitical landscape. While he engaged with his counterparts across the world, of particular relevance were his interactions with the USA, Russia and China. In fact, during the decade of the 1990s, he led eight rounds of Track II Indo-US strategic dialogues. He also annually addressed military academies in Moscow and Beijing. These engagements had a major impact on shaping perceptions about India and in imparting an understanding of India’s security challenges. Further, this served as a period of laying down the groundwork that had a huge role to play in the quick turnaround in American perceptions and position on India after the conduct of nuclear tests in 1998. He and Mr. Subrahmanyan (who remained a frequent participant at IDSA events) made a significant contribution to shaping the country’s nuclear discourse at a time when it was ostracised and under severe international sanctions.
An anecdote comes to mind about the man who inspired many scholars and was instrumental in harnessing the young minds. In 1997, I had already submitted my doctoral thesis at the Jawaharlal Nehru University, New Delhi, and was eager to start a career as an international affairs research analyst. Air Cmde Jasjit Singh, then Director of IDSA interviewed me. He did not check my academic credentials and declined to see my certificates. Rather, I remember being asked by him to spell out my dreams for myself and my country. After a few minutes of conversation on the state of nuclear non-proliferation, he asked me, “So when do you want to join? Tomorrow?” This was typical of the man—ever welcoming of young scholars and always willing to give them a chance. He never dithered in appointing new scholars. He used to joke that people called him a ‘tin pot dictator’ for making these decisions without calling for an appointment committee and following elaborate procedures. But, he took these decisions based on his gut instincts and it is clear that they worked well, since there are many in the strategic community today who can attribute their careers to the platform he gave them. I was lucky to be one of them.

It was also my good fortune to join the IDSA in 1997, one year before India tested its nuclear weapons. The momentousness of the event and its implications revealed themselves to me through my observations of Jasjit Singh’s myriad interlocutions with others of the Indian and international strategic community on the subject, as well as through my many interactions with him over the years. As it may be recalled, when India conducted its nuclear tests on May 11 and 13, 1998, the international community led by the USA and its allies erupted in anger and strongly criticised the action. Sanctions and technology denials followed as the then American President Bill Clinton led the demand that India ‘cap, roll back and eliminate’ its nuclear weapons programme.

At a delicate time like this, India’s diplomatic cadres went into overdrive across all major capitals of the world to explain the nation’s nuclear compulsions. As the Director of IDSA, India’s premier national security think tank that was beginning to be recognised and respected around the world, it
also fell upon Jasjit Singh to put his weight behind this effort. He contributed
wholesomely to the making of informed opinion on India’s nuclear policy. He
travelled across the length and breadth of the world to explain Indian threat
perceptions to policymakers and opinion shapers and thus subtly influenced
their view of India. It is hardly surprising that so many in the strategic world
remember him as the man with the red turban who passionately, but politely,
argued the case for India’s nuclear status.

The period 1998-2001, the four years before he retired from IDSA, could
perhaps be counted amongst the busiest ones of his career as a strategic
analyst. He spent nearly all his time addressing conferences across the world,
participating in TV discussions, writing short and long articles, hosting
delusions from many countries, organising conferences. Every action was
a brick in the making of the understanding of what a nuclear India meant.

Meanwhile, just before the nuclear tests in 1998, the National Democratic
Alliance (NDA) Government, in fulfilment of one of the agenda points from
its election manifesto, had set up a three-member Task Force under Shri
K. C. Pant to review policy challenges and recommend structural reforms to
India’s higher defence organisation. Mr. Jaswant Singh was a member of the
Task Force, while Jasjit Singh was made its Convener. In this capacity, he
laboured for months and temporarily also relocated himself to an office on
Parliament Street as he immersed himself in the exercise. The group managed
to produce a comprehensive document that recommended measures that
could be taken to remedy the situation. These steps eventually led to the
creation of the National Security Council (NSC), Strategic Policy Group
(SPG) and the National Security Advisory Board (NSAB), even though the
NSC model that was adopted was not truly in concurrence with the one
recommended by the KC Pant Committee.

Even as Jasjit Singh was busy with the task mandated to the Committee,
he was conscious that the conduct of nuclear tests by India necessitated
a publication that explained the country’s position on the subject. One
afternoon, soon after the nuclear tests, he summoned some of us, the IDSA
researchers, to his new den to share his idea of bringing out a book, the
Jasjit Singh wrote, rather presciently in 1998: China is, and is likely to remain, the primary competitor and challenge to India in strategic terms, ranging from competition for investments, markets, political influence, especially in the developing world and possible military terms. The name of which he had already thought of—Nuclear India. He wanted to document the new and significant development in India’s nuclear journey. Each one of us was tasked to write a chapter for the book and we were given a stiff deadline. Consequently, in only two months of India going nuclear, the book was published to explain this new reality to the world and to the people at home. The volume explained the need for India to conduct the nuclear tests at that juncture, the complexities that the new status would bring for the country and the doctrine and strategy it must follow as a path towards an affordable credible deterrence. To this day, the book remains essential reading for anyone wanting to understand nuclear India.

A PEEP INTO JASJIT SINGH’S NUCLEAR THINKING

Jasjit Singh was clear that the reason for India’s acquisition of nuclear weapons was not prestige or status, but security. The former, he firmly believed would only come from “how we solve our problems and how we conduct ourselves in the face of evolving geo-strategic and geo-economic realities.” Nuclear weapons, on the other hand, were meant to provide an “assured environment of peace and stability in which our primary goal of human development can be pursued unhindered.” Therefore, in his reckoning, the weapons were an “insurance against challenges to peace, stability and our independence of decision making.”2 And, the environment so created was to be exploited by the country to grow and develop. Prestige, he believed, would naturally follow.

In his assessment, the biggest threat to India’s rise was the uncertainty posed by China’s ascendance to economic and military power and the future direction of its policies. The India-China bilateral agreement of 1993 (on

Maintenance of Peace and Tranquillity along the Line of Actual Control) was based on the principle of ‘mutual and equal security’, and in Jasjit’s reckoning, the acquisition of nuclear weapons strengthened India’s ‘equal security’, which in a case of nuclear asymmetry would have been a mirage. He wrote, rather presciently in 1998:

> China is, and is likely to remain, the primary competitor and challenge to India in strategic terms, ranging from competition for investments, markets, political influence, especially in the developing world and possible military terms.³

While explaining the centrality of China as a security threat as the reason for India to acquire nuclear weapons, Jasjit Singh, nevertheless, also took pains to explain that before taking the difficult decision of conducting nuclear tests, India had long pursued a policy of keeping its nuclear options open.

This sentence written two decades ago is today a reality as China flexes its military muscles in South China Sea and reaches out to developing nations across the world with its Belt and Road Initiative (BRI).

While explaining the centrality of China as a security threat as the reason for India to acquire nuclear weapons, Jasjit Singh, nevertheless, also took pains to explain that before taking the difficult decision of conducting nuclear tests, India had long pursued a policy of keeping its nuclear options open. “This was an approach in keeping with Indian civilisational value of taking the veritable middle path,” said Jasjit Singh. India kept to this path in the hope that the world would move towards disarmament at some stage and that would address India’s security concerns from China. But the move of the world at the end of the Cold War from disarmament towards a renewed focus on discriminatory non-proliferation (with the indefinite and unconditional extension of the Non-Proliferation Treaty in 1995 and the conclusion of the Comprehensive Test Ban Treaty in 1996 as well as strengthening of ad hoc

³ Ibid., p. 19.
export control instruments) put pressure on India’s ability to stay on the middle path. As he pithily put it: “The situation that India faced by early 1998 was that if the stranglehold of the non-proliferation order continued to tighten around the open option, and India did not take steps to break out of it, very soon it would be no option left.” So, it was hardly surprising that India decided in favour of testing, willing to bear the costs the decision might entail, over living in a state of permanent nuclear adverse asymmetry.

Despite having taken the step of possessing nuclear weapons, Jasjit Singh was clear about India’s ethical stand. He wrote:

India’s strategic and security interests are served better if there are no nuclear weapons that can impinge on India’s security calculus. Nuclear disarmament, therefore, is not only a moral/ethical principle for us, and a necessity for international peace and security, but also an imperative for national security.4

According to him, this factor had not altered even after India went nuclear and in fact, could even be leveraged to “strengthen our negotiating position to seek disarmament”.

As a vocal member of the international Pugwash movement that brings together scholars and public figures to work towards peace and security, Jasjit argued passionately in favour of universal, multilaterally negotiated, verifiable disarmament. In 1988, he was pivotal in the drafting of the Action Plan that was presented by then Prime Minister Rajiv Gandhi at the Third Special Session on Disarmament. Twenty years later in June 2008, he planned and executed (despite having fallen seriously unwell in February that year) an international conference—“Towards a Nuclear Weapons Free World”—which was addressed by the Prime Minister and the Vice President of India and was attended by as many as two hundred members of India’s strategic community, including fifteen international experts. He had conceived the idea of the conference towards the end of 2007 and had it vetted by then

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National Security Advisor (NSA) who agreed readily, including providing funding from the Ministry of External Affairs for the event. The Indian Council of World Affairs (ICWA) also agreed to co-sponsor the conference and share the myriad tasks.

Jasjit Singh wanted it to be an international conference and he quickly set in motion the process of contacting his vast network of strategic friends spread across the world. However, before the implementation of his ambitious plans could commence, he suffered a severe brain haemorrhage in February 2008 and remained in hospital for several weeks. Through March and April, the state of his health caused much concern, even as the Additional Director, AVM Kapil Kak valiantly held fort. Soon after his discharge though, while not allowed to come to office, he made sure that the office came to him! So, from his study he directed the execution of the humongous task of crafting the programme, sending out invitations, overseeing flight and hotel arrangements and ensuring the smooth conduct of the conference. The prospects and challenges of universal nuclear disarmament were well examined in the two-day deliberations that were inaugurated by the then Prime Minister. As explained by Jasjit himself in his introductory remarks:

We plan to explore the nuclear environment of the future in its diverse dimensions and discuss the ways and means of dealing with them ... As we know consciousness of the danger is a prerequisite to our ability to deal with it successfully. It is the consciousness slipping back in our minds that led to lowered attention to abolition of nuclear weapons after the end of the Cold War.5

He also made a persuasive case for “a paradigm shift from competitive security to cooperative security” as a way of managing future challenges especially to manage international peace and security in a non-nuclear world. The papers presented by scholars of high stature made for a worthy volume

and it was the big-heartedness of the man that he asked me to be the editor of the book that was published in 2009.\textsuperscript{6}

Despite being a supporter of universal nuclear disarmament, Jasjit had no illusions that such a world was going to come about either quickly or easily. So, while he exhorted India and other countries to make efforts to achieve this goal some day, for the present, he was realist enough to understand that India would need to possess nuclear weapons to protect its national interests. He recognised that this also meant drafting a clear and unambiguous doctrine having an appropriate role for nuclear weapons. This task too was ably performed by the Air Cmde in his capacity as a member of the first National Security Advisory Board constituted by the Government of India under the chairmanship of Mr. K. Subrahmanyam. Along with other astute minds well versed in understanding of nuclear deterrence as part of the group, the duo worked hard to put together a draft doctrine. This was produced in record time and presented to the government around the middle of 1999. The draft, in a rather uncharacteristic move for India, was made public by then National Security Advisor, Mr. Brajesh Mishra, in August 1999.

Contours of what came to constitute India’s nuclear doctrine can be discerned from Jasjit’s chapter on “A Nuclear Strategy for India”, in \textit{Nuclear India} that was published almost a year before the doctrine was drafted. He opined in the chapter that India’s nuclear doctrine must take its direction from the logic of the role that India wants to bestow upon its nuclear weapons. In his view, the role of India’s nuclear weapons was to dissuade and deter nuclear blackmail and coercion and to prevent the threat of use or use of nuclear weapons against Indian territory or people. With this in view, he found no role for nuclear weapons for war-fighting. Accordingly, he firmly ruled out the need for any pre-emptive use of the weapons. With NFU as the driving strategy, he rightly put emphasis on survivability of the nuclear arsenal as a crucial necessity. As he pointed out, “various ways will have to be found so that an adversary is not

tempted to believe that a first strike against us will seriously degrade our ability to retaliate.”

Writing on the issue of tactical nuclear weapons, a capability that Pakistan introduced into its nuclear deterrence posture with its first test of the very short-range ballistic missile, Nasr, in April 2011, Jasjit had already dismissed the concept of tactical nature of nuclear weapons in 1998, especially between physically contiguous neighbours. He wrote:

Any nuclear weapon of any quality, mode of delivery or yield, used against any type of target, will result in a strategic impact to which the logical response would be the use of nuclear weapons, more often than not, on an overwhelming scale ... Regardless of the yield or type of delivery system, we must ensure that we do not become the victim of believing in the fallacy of any nuclear weapon being tactical. The artificial division of nuclear weapons into tactical and strategic is not only irrelevant for us, but carries with it the danger that a belief system could grow in a way that might justify the use and utility of such weapons for actual war-fighting.\(^8\)

As is evident, the book Nuclear India sought to make public the altered context and content of India’s nuclear debate. His attempt was to highlight the issues that would need serious and detailed consideration and evaluation in the public domain so that a national perspective could emerge. He himself acknowledged that the book:

[S]et forth some ideas, not with the belief that they represent a finality of logic and necessity, or even to perceive them as some sort of prescription, but with the hope that they will trigger further discussion and debate to evolve our nuclear doctrine and strategy.\(^9\)


\(^8\) Ibid., p. 317.

\(^9\) Ibid., p. 323.
Signs of definite restraint by India to neither expand the scope of conflict by opening another front, nor allowing its aircraft engaged in the operation of dislodging the Pakistani soldiers from crossing the Line of Control (LoC), led the international community to tilt its opinion in favour of India. The ability to execute a limited conventional response when both sides had demonstrated nuclear capability was seen as responsible behaviour, and it stood out in stark contrast to the irresponsible and provocative actions taken by Pakistan.

Indeed, some of the principles and beliefs that he then articulated have stood India in good stead as its capabilities have improved in keeping with the guidelines provided by the doctrine.

In the closing pages of the book, Jasjit Singh made an assertion. He wrote:

War in the sub-continent, if it takes place will remain a “border war” limited in time, space and aims. The “N”-factor will continue to weigh heavily on the prospect, scope, and nature of a conventional war involving India ... in the past, the wars of the subcontinent were limited (in time, scope, goals, etc.) by choice. But nuclearisation has made wars limited as an imperative.10

This proved to be so uncannily correct when in less than one year of the publication of this book, Pakistani regular soldiers had infiltrated into Kargil dressed as mujahedeen. This was a bold step taken by Pakistan under the assumption that its nuclear weapons gave it the freedom to undertake offensive actions with no risks since the international community was expected to step in quickly to disentangle the situation. As Jasjit often explained, the central logic of Pakistan’s acquisition of nuclear weapons was to “neutralise Indian conventional superiority to the degree that any punishing military operation by India in retaliation to its actions is forestalled by the risk of escalation.

10. Ibid., p. 311.
to a nuclear weapon exchange.”\textsuperscript{11} However, while conceding that the presence of nuclear weapons may have made full-scale wars difficult, Singh was a votary of the concept of limited war. In fact, he believed that the country that could manage the dynamics of limited war would be able to run a successful national strategy.

In Kargil, as India fought back to regain its territory it was able to “demonstrate the politico-military acumen to conduct a limited war”.\textsuperscript{12} This negated the Pakistani assumption of an early involvement of the international community that would insist on a ceasefire, thus enabling salami slicing of territory. But, signs of definite restraint by India to neither expand the scope of conflict by opening another front, nor allowing its aircraft engaged in the operation of dislodging the Pakistani soldiers from crossing the Line of Control (LoC), led the international community to tilt its opinion in favour of India. The ability to execute a limited conventional response when both sides had demonstrated nuclear capability was seen as responsible behaviour, and it stood out in stark contrast to the irresponsible and provocative actions taken by Pakistan.

Pakistan’s defeat at Kargil created considerable misgivings between the civilian administration and the military institutions. After a number of developments that heightened the tensions, Prime Minister Nawaz Sharif decided to remove then Chief of Army Staff (COAS), General Musharraf, from the position. This act was done when the COAS was not even in the country and he is reported to have received the news as he was playing golf in Sri Lanka on the 50th anniversary of the Sri Lankan Army. The Army, however, could not have been expected to take this move lightly. In fact, it was a matter of little surprise that on October 12, 1999, with the support


\textsuperscript{12} Ibid., p. 126.
of the Chief of General Staff, Gen Musharraf managed to stage a coup and ousted the Prime Minister. He even elevated himself to the position of Chief Executive of Pakistan.

The day this event took place happened to be one on which IDSA was hosting a delegation from abroad. At the evening dinner organised for them on the India International Centre (IIC) rooftop, the talk was all about the latest development in Pakistan and its future as a nuclear state with the army in the saddle. Little did I, then a fledgling in these circles, realise the importance of what was being discussed by the stalwarts at the gathering. But, this was a unique way of mentoring by the Air Cmde. He gave ample opportunity to young scholars to rub shoulders with seniors and encouraged them to ask questions, sit at the main table and engage in conversation. It was a sheer delight to see him in action at such events—a gracious host and a firm speaker upholding India’s national security interests.

AN INSTITUTION BUILDER—FROM IDSA TO CAPS

After retiring from IDSA at the age of 67, Jasjit Singh briefly took on the role of editorial advisor for defence and strategic affairs at The Indian Express. Enjoying a great rapport with the young workforce at the newspaper office, he was equally at ease in the small cubicle. He had a kettle and a couple of cups tucked away in a corner and had no qualms about making the coffee himself and offering it to every visitor with lots of food for thought on the evolving global security scenario. His columns reflected on these matters and he was also happy to answer questions from laymen on issues related to national security.

However, his stint at the newspaper did not last very long as he soon immersed himself in the task of setting up the Centre for Air Power Studies (CAPS) under a private, non-profit trust registered in New Delhi called the Forum for National Security Studies. This was mandated to undertake studies in national defence and security, military affairs and strategy in general and on air power dimensions in particular. It was meant to provide professional military education to the IAF and to help it understand the global trends in
air power transformation. The first office of CAPS was a room and a half in a DDA flat, the other half being occupied by the Indian Pugwash Society. The drawing room of the flat had been converted into a small conference hall with a large round table in the centre. This also doubled as office space once a couple of air force officers were deputed by the IAF to the Centre to initiate studies on air power and space. Most of the money for furnishing the office and hosting the few early seminars followed by lunch came out of the Air Cmde’s own pocket. But, such was his passion and drive that he kept the endeavour going till more funds were provided by the Ministry of Defence to set up a corpus to sustain the Centre.

The other initial source of income for the Centre was a project that Jasjit obtained from the Department of Atomic Energy (DAE) to study the case of nuclear energy for India. Back in 2003, one day Air Cmde called me in Jamnagar to say that CAPS had obtained the project and that it was time for some hard work. His objective was to come up with a study that would suggest solutions on how to get India out of the stranglehold of the non-proliferation regime. The task was to produce a series of papers on the Nuclear Suppliers Group—its functioning, limitations and possibilities of engagement with India. As part of this effort, a national seminar was organised in the first half of 2004 in which presentations with the idea of seeking India’s exceptionalisation from the NSG were made.

As one of the deliverables of the DAE project, a newsletter called Nuclear Power was started. It began as a short 8-page, fortnightly compilation of news and views. Despite all constraints of resources and manpower, Jasjit Singh was committed to bringing out the newsletter without interruption and to sending it gratis to policymakers and members of the strategic community. Sitting in Jamnagar, with often unreliable access to the internet that is typical of a cantonment, I would compile nuclear news and views of every fortnight and send it to Air Cmde Singh at Delhi, where he had someone format it into the newsletter, make photocopies and have them dispatched. Further, during the time when the Indo-US nuclear deal was being negotiated, special issues of the newsletter were also sent to Indian missions abroad and to many
members of Parliament. These endeavours would have made a difference, however small, in shaping opinions on the matter at a time when India faced a fractious debate on the subject. There were several Indian voices that objected to India accepting any safeguards on its nuclear programme as a condition of engagement into international nuclear commerce. There were also many who questioned the very need for arriving at an agreement with the USA! Amid these extreme positions, Jasjit Singh endeavoured to inject the voice of reason based on research and analyses of India’s situation and global developments. He surely played a role in shaping India’s nuclear narrative, but to him personally it mattered little whether his actions were having an impact or not. He just believed in doing his karma—actions that arose from a strong power of conviction that he derived from a compass that always pointed to national security. Unconcerned about whether his writings were being read or not, his motto was “lagey raho Munna bhai!”

In 2007, the scope of the DAE project granted to CAPS was expanded. In keeping with this, the newsletter Nuclear Power grew into Nuclear Security. It now covered the entire range of nuclear issues from nuclear power to nuclear strategy, non-proliferation and arms control and even missile defence. The newsletter has since been printed without missing a single issue. Jasjit Singh used to call the process of compilation of the newsletter as akhand paath—a continuous, unending task. It is distributed to over four hundred people today.

Over the next five years CAPS grew in strength and stature. Several air force officers joined the Centre, undertook many projects and several books were published. Another of Jasjit’s forward-looking initiatives for disseminating education on nuclear issues was the idea of running week-long capsules where the officers were exposed to the best speakers on the subject. A nuclear strategy capsule was started for the senior echelons of the three services, including officers posted at the Strategic Forces Command (SFC) to explain the nuances of nuclear doctrine and strategy of India and others. From the time of the first capsule in 2007 to the twenty-seventh capsule held
in July 2019, more than fifteen hundred officers have been exposed to nuclear thinking.

Having the foresight to envision the role of India in reshaping the global security order of the future, Jasjit Singh exhorted the young and not so young officers at every forum where he interacted with them to read and write more and broaden their horizons beyond their immediate professional requirements. He strongly believed that only scholar warriors could be trusted with the future of the country, especially in times of strategic uncertainty. He was concerned about defence planning for India in conditions of rapid technological change, and placed emphasis on self-reliance, creation of operational capabilities and use of military power for political purposes without leading to war. His dedication, commitment and boundless energy are as well remembered as his professional experience, depth of knowledge, vision and sincerity of effort. CAPS, meanwhile, has grown into a well-respected national security think tank. Over eighteen years of its existence today, it has published ninety-two books, most of which have emerged from the research projects undertaken by the research faculty at the Centre. CAPS continues down the path that he set for the organisation, with the same sincerity of purpose.

RECOGNITION OF NATIONAL SECURITY
AS A DISCIPLINE OF STUDY

Jasjit Singh was ever ready to engage with the uniformed or the non-uniformed, the informed and the uninformed, the intelligentsia, the bureaucracy, the academia, and most of all with young students on all issues of national security. He found this imperative. In fact, his constant worry was that India was not investing enough in building ‘intellectual capacity’ to sustain its rise to power. Ever an optimist, he believed that India would inevitably rise to power by the sheer size of its economy and human resource potential. A greater concern for him was the need to sensitishe his compatriots to the concepts and challenges of national security that would confront the country as it grew in capability and stature. Therefore, he
After spending 31 years in active service in the IAF, Jasjit Singh served the nation for another about 30 years through the study of national security and defence. Whether from the cockpit of a fighter jet or as a strategic thinker, he was consistent in his endeavour to defend, propagate and promote India’s national interests in national and international military and civil circles.

encouraged new ideas from fresh, young minds and his room was open to all. He would often say that a think-tank must remain ahead of the security challenges in its thinking if it is not to become a ‘thought tank’.

He was quite unhappy about the fact that the subject of national security was not taught as a separate discipline in our education system—neither in the civilian universities, military training institutions or in mass communication institutes. He considered this a major handicap in making India a knowledge society that could transcend the parochial regional affinities. He rightly believed that a country with the kind of diversity that India enjoyed must make a conscious effort to instill a ‘national security consciousness’ among all sections of society.

Convinced by his arguments in this matter, Mr. Kapil Sibal, Minister of Human Resources Development in the late 2000s, appointed an Expert Committee to examine the issues. Jasjit Singh was chosen as the head of the Committee, with Chairman of University Grants Commission (UGC) and other senior professors as its members. The report of the Committee was produced in record time and its recommendations were accepted by the Government for phased implementation. Universities were mandated to open departments of National Security Studies and the Central University, Jammu took the lead by becoming the first university to do so.

Subsequently, as member of the Indian Council of Social Science Research (ICSSR), Jasjit Singh was also instrumental in the inclusion of the subject of National Security in the list of topics on which the institution was granting research fellowships and projects to scholars. I became the first recipient of this fellowship when my proposal on space security was accepted by the
ICSSR for a research grant. Needless to say, it was Jasjit Singh’s idea that I make this proposal in order to get the ICSSR endeavour started off. As is evident, he was making things happen at all ends to ensure the success of his multifarious efforts at suffusing a larger understanding of the many complex dimensions of national security.

Meanwhile, as his own contribution to this process, he wrote a book titled, *India’s Security in a Turbulent World*, which was published by National Book Trust of India in 2013. Written in an easy style for all to understand, the book was particularly meant for the younger generation to make sense of the developments occurring around the world that were likely to impact India’s security. In the last chapter of the book he outlined a security strategy for the twenty-first century. He foresaw the rivalry between the US and China and recommended that India “maintain friendly cooperative relations with both the current superpower and the aspirant superpower, the People’s Republic of China.”¹³ This had to be complemented with the build-up of military capability premised on self-reliance and with instruments to carry out effects based outcomes. The relevance of this advice in today’s times is immense.

**CONCLUSION**

After spending 31 years in active service in the IAF, Jasjit Singh served the nation for another about 30 years through the study of national security and defence. Whether from the cockpit of a fighter jet or as a strategic thinker, he was consistent in his endeavour to defend, propagate and promote India’s national interests in national and international military and civil circles. Indeed, he maintained national interest as the only prism through which to analyse every development in the region and beyond. And his rare ability to connect the dots to get the larger picture from tell-tale tactical details and facts helped him peer ahead to notice what was coming. The man never let the nation down, whether as an air warrior or a strategist. In fact, he was ever ready to voice his views irrespective of how the wind was blowing and always remained practical in his approach.

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Jasjit Singh had kept an eagle eye on the security of the nation. His deep insights borne out of his rich reading of history and sharp analytical acumen stood the country in good stead in several moments of crisis. There is little doubt that he stands out amongst many in the Indian strategic community as much for his balanced analysis, as for his ethics and integrity to the profession.

Jasjit Singh was quite prolific as a writer. He has been author and contributing editor of nearly three dozen books, including such pioneer works as, *Air Power in Modern Warfare* (1985), *Non-provocative Defence* (1989), *Nuclear India* (1998), *India’s Defence Spending* (2000), *Air Power and Joint Operations* (2003), *Iraq War* (2004), *Defence from the Skies: Indian Air Force through 75 Years* (2007) and *The Icon* (2009). Amongst his many affiliations, he has had some major roles in which he rendered great service to the nation. He was convener of the Task Force to set up the National Security Council (1998). He was a member of the National Security Advisory Board in 1990-91 and in 1999-2001 during which he was responsible for the preparation of India’s Draft Nuclear Doctrine. Further, he served many additional roles—Member of the International Commission for a New Asia, Member of the International Commission for Peace and Food, Consultant to the Standing Committee on Defence of the Indian Parliament, Advisor as well as Member of Advisory Committee (on Defence Matters) to the 11th Finance Commission of India, Chairman of Committee of Experts to review the functioning of Defence and Strategic Studies and related university system of Ministry of HRD (2011), Member of Governing Council ICWA as well as of ICSSR, Member of Planning Commission Advisory Committee on Vision 2020, Member of Advisory Committee on Civil Aviation of Punjab Government, Member of Executive Council of Central Jammu University.

On Jasjit Singh’s 75th birthday, K. Subrahmanyam, his mentor and friend, gifted him a watch. He explained the reason for this by saying since Jasjit Singh had kept a “constant watch over India’s security for the last many
decades”, he deserved just such a gift. And indeed, Jasjit Singh had kept an eagle eye on the security of the nation. His deep insights borne out of his rich reading of history and sharp analytical acumen stood the country in good stead in several moments of crisis. There is little doubt that he stands out amongst many in the Indian strategic community as much for his balanced analysis, as for his ethics and integrity to the profession.

Singh received the Padma Bhushan in 2006 for his outstanding service to the nation in the field of defence and strategic affairs. The Padma Bhushan citation recognised him as the country’s ‘leading thinker, defence expert and institution builder’. His experience, sense of responsibility, immense knowledge and ability to work hard, ignoring all personal ailments, was awe-inspiring and worthy of emulation. For the generations of India that follow, here is a man who breathed his country’s interests to the last breath and passed away with a number of ideas still bubbling inside him. On his 79th birthday on July 8, 2013, he had delivered an inspiring address at CAPS on the issue of national security—that was, of course, the only way he knew to celebrate any day! In fact, all days were equally special, or inconsequential to him. All that he looked forward to every single day was a good discussion on national security. Anyway, on his birthday in 2013, he laid down a ten-year plan for all that he wanted to achieve over the next decade. Willing to work himself to a punishing schedule, he travelled to Mhow for a seminar in the last week of July 2013 and despite taking an early morning return flight and suffering from a bad throat, he stayed on in office till late into the evening for some meetings. The bronchial infection only worsened over the weekend and he was admitted to the hospital for treatment. A week down the line, on August 4, 2013, he breathed his last. Then PM Manmohan Singh, in his condolence message, described him as a ‘brave soldier’, an ‘inspirational military leader’ who provided ‘intellectual vision for India’s defence and strategic planning’. Indeed, every word of that is true.

Air Cmde Jasjit Singh was a drummer who played to his own beat and marched as he thought fit. Obviously, not all appreciated this. But even his
worst critics have never grudged him his integrity, forthrightness and clarity of views. Let me conclude with a short verse that I wrote for him some years ago, capturing the many aspects that I, and many other scholars, have learnt from him.

Clarity of thought and
precision with word
depth of a worm and
breadth of a bird

  Common sense and logic
  over verbiage and pretence
  are what you need the most
  to wade from ‘fog’ into sense

Being open to all
the young and the old
encouraging all to think
beyond what was told

  These are only a few of the things,
  that the Thinker taught all
  keeping India ahead of the curve
  an eye on every ball.