CBRN EQUIPMENT

BRN (Chemical, Biological, Radiological, and Nuclear) defence equipment is crucial for military, emergency responders, and specialized security teams to effectively mitigate threats arising from hazardous materials and potential CBRN attacks. The deployment of such equipment is essential for protection, detection, decontamination, and containment of hazardous agents to ensure operational effectiveness and safeguard personnel and civilians.

Detection is the first line of defence in CBRN situations. Specialized detection tools enable responders to identify threats and assess risks. Chemical agent detectors, such as ion mobility spectrometers (IMS) and gas chromatography-mass spectrometry (GC-MS), are used to detect airborne chemical threats. Biological agent detectors, including systems like the Hand-Held Assay (HHA) and polymerase chain reaction (PCR) analyzers, help detect biological threats like anthrax, botulinum toxin, and viruses. Radiation detectors, such as Geiger counters, dosimeters, and scintillation detectors, are vital for identifying radioactive contamination. Additionally, nuclear threat detection devices, like radiation portal monitors and neutron detection tools, are used to detect nuclear threats.

Protective equipment ensures personnel safety against exposure to harmful CBRN agents. Personal protective equipment (PPE) includes gas masks, respirators, and full-body protective suits to shield individuals from toxic exposure. Self-contained breathing apparatus (SCBA) provides a clean air supply for responders working in contaminated environments. Specialized CBRN-resistant gloves and boots prevent contamination through skin contact, offering an additional layer of protection.

Decontamination is crucial to minimize the spread of contaminants and restore operational effectiveness. Portable decontamination showers are used for personnel and equipment cleansing. Decontamination solutions, including reactive skin decontamination lotion (RSDL) and sodium hypochlorite solutions, are used to cleanse surfaces and equipment. Vehicle and equipment decontamination units, such as sprayers and containment systems, help cleanse large equipment and vehicles exposed to contaminants.

Medical preparedness is essential for treating CBRN exposure victims. Antidotes and vaccines, such as atropine autoinjectors for nerve agents, botulinum antitoxin, and vaccines for biological threats like anthrax and smallpox, are vital. Medical kits, including field hospitals and trauma kits equipped with emergency response medications and treatments, provide critical medical support. Portable isolation units, such as bio-secure transport systems, ensure affected individuals are safely transported while preventing further contamination. Hazardous material containers provide secure containment units for safe transport and disposal of hazardous substances. Sealing and encapsulation equipment, including protective barriers and foams, help contain chemical and biological threats.

Balakot Air Strikes: A Paradigm Shift in India's Strategic Doctrine and the Misleading Narrative of Western Media



ix years ago, on February 26, 2019, India's external strategic paradigm underwent a historic transformation with the Balakot Air Strike. India's armed forces had long demon-

strated strategic restraint, refraining from military actions beyond its borders in line with the country's ethos. The operation targeted terrorist infrastructure deep within Pakistan's Balakot region, located in the Mansehra district of Khyber Pakhtunkhwa.

When the news of the Balakot airstrike broke the following day, hashtags such as #SurgicalStrike, #IndiaStrikeBack and #Josh trended on social media, especially on X (formerly Twitter) and Facebook. Meanwhile, Western media presented a misleading narrative regarding the situation in India. The New York Times published an article stating, "With India claiming to have avenged the Kashmir attack and Pakistan claiming that India had done no real damage, it seemed possible that the situation could yet be defused." The article also incorrectly suggested that India's airstrike was simply "political symbolism" ahead of the upcoming elections. Similarly, outlets like China Daily and Al Jazeera covered the incident but focused on statements from Pakistani officials. At the same time, Pakistan's government faced a crisis, taking 43 days to show the media Balakot was intact, misleading them to the wrong loca-

The Balakot Air Strike marked the first instance in India's history where the country grounded in an unwavering commitment to non-aggression and sovereign inviolability since independence chose a decisive military action. At the time, Defence Minister Shri Rajnath Singh referred to the strikes as a singular event of military precision and

impact and urging the leadership to think strategically rather than tactically. He stated, "Our approach to terrorism has been and will remain a judicious combination of clinical military action and mature, responsible diplomatic outreach." He also reassured the nation that the government would respond appropriately to any threat to India's national security in the future. However, this principled foreign policy often left India vulnerable to exploitation by revisionist states and non-state militant proxies with Pakistan and its extensive network of Islamist militants being the most prominent

From the Pakistani army's unilateral and duplication duplication duplication territorial advances in Kargil (1999) to its long-standing sponsorship of insurgency in Jammu and Kashmir, this expectation remained unrealized as Pakistan's military-dominated establishment continued to harbor and instrumentalize these militant elements as tools of statecraft against India. This continued asymmetric aggression seemed to embolden Pakistan, potentially misreading India's patience as inertia or at worst, reticence.

The Balakot Air Strike not only redefined the contours of Indo-Pakistani military engagement but also made a clear doctrinal statement: India would no longer remain constrained by self-imposed operational limitations and would neutralize security threats at their point of origin with decisive action. The immediate precursor to the Balakot airstrikes was the terrorist attack on February 14, 2019, when a suicide bomber targeted a convoy of the Central Reserve Police Force (CRPF) in Pulwama, Jammu and Kashmir. This horrific attack was one of the deadliest in recent Indian history, resulted in the loss of 40 personnel. The attack was carried out by a suicide bomber affiliated with Jaish-e-Mohammed (JeM), a Pakistan-based jihadist organization led by Maulana Masood Azhar. JeM has long sponsored cross-border terrorism against India with the support of Pakistan's

As Islamabad repeatedly resisted international calls to act against JeM. the Pulwama attack forced India to recalibrate its strategic response. It was culminated the Indian Air Force's (IAF) to dare airstrikes deep inside Pakistani territory aimed at dismantling the terrorist infrastructure of JeM. This operation changed the balance of power on the borders sending a clear signal that Indian forces would take every measure including cross-border actions to address any anti-India acts from Pakistan or its sponsored entities.

According to media reports, the Balakot airstrikes symbolized not just a shift in India's military doctrine but also showcased the effectiveness of inter-service operational synergy and precision-strike capabilities. After verifying indisputable intelligence that JeM had relocated its insurgent cadre and senior leadership to a hidden camp near the Islamic seminary of Muhammad Yusuf Azhar, an operation was conceived at the highest levels of India's defense command. The strike carried out in the early hours of February 26, 2019 involved the precise neutralization of the identified terrorist infrastructure located approximately 20 kilometers from Balakot town in Pakistan's Khyber Pakhtunkhwa province.

The operation, now regarded as a textbook example in modern aerial warfare and counter-terrorism strategy demonstrated India's capability and willingness to execute highrisk cross-border precision strikes with doctrinal clarity. Media reports said that the IAF conducted a multi-axis aerial maneuver, simultaneously launching dozens of fighter jets from various airbases under the Western and Central Air Commands. This tactic was designed to confuse Pakistan's air defense systems and obscure the intent and objectives of the Indian aircraft. By using this deception a small group of aircraft was able to break away from the main force and penetrate Pakistani airspace with minimal detection striking the identified terrorist camp with surgical precision.

The kinetic operation lasted about 20 minutes, demonstrating an unmatched level of tactical planning and precision. Post-strike assessments and corroborated intelligence suggested that the targeted facility housed between 500 to 700 insurgents undergoing terrorist training with reports estimating that over 300 were likely neutralized. The success of the Balakot operation went beyond the military realm providing India with a diplomatic triumph as the international community rallied behind India's right to defend itself against terrorism, primarily emanating from Pakistan.

In the aftermath, while Western media initially misrepresented India's actions, they later recognized the paradigm shift in India's diplomacy regarding terrorism in the South Asian region. The international community acknowledged India's right to selfdefense against terrorism originating from its western border and condemned Pakistan's enduring role in fostering extremist networks. This marked a significant shift in the international discourse. It underscored India's growing stature as a key actor in shaping global counter-terrorism norms and reinforced its position as a responsible stakeholder in international security.

Nevertheless, the Balakot operation has left a lasting impression on India's collective memory, representing the valor of its armed forces a recalibrated anti-terrorism doctrine and newfound confidence on the international stage. At the same time, it serves as a poignant reminder of the sacrifices made by the armed forces in their relentless efforts to secure the country's borders and uphold its sovereignty, while highlighting the flawed narrative of India's diplomacy presented by Western media.

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Mahashivratri-A Divine Night of Prayer, Awakening & Bliss

BAIRAJ CHAWALGAMI

here is an unknown and mysterious energy that is driving all of us. Scientists have not been able to give it a name, yet. However, saints of yore have called this unknown energy Shiva which is the energy believed to make every living being alive. We are able to breathe, eat, walk and carry out our day to day activities because of Shiva. Not only does this energy drive living beings, but it also resides in non living things - as their energy. Shiva, thus drives existence. Shiva literally means nothingness but it is nothing which creates everything and thus it is Shiva which is behind creating everything. So Shiva implies nothing out of which everything is created and thus Shiva is manifest in each and everything. Shive in fact thus represents cosmic energy which makes all the people to work and perform all the activities and drives all of us. Mahashivratri is the night of awakening and bliss. In our hustle and bustle of life, we forget our source of energy-that which is running all of us. In a year there are 12 Shivratri's but the Mahashivratri is the darkest night in month of Faguna. This night should not become just an ordinary night and a night of wakefulness but a night of awakening. India is the land of festivals and fairs and we celebrate many festivals but the festival of Mahashivratri is an important festival and it is celebrated across the length and breadth of the country. But the festival of Mahashivratri has special importance for the kashmiri pandit community and they celebrate this festival in a unique, special and different

way. Mahashivratri is the festival to remember and to take our awareness to the basis of our existence. The pertinent question is as to why is the Shivratri celebrated. There is more than one Mahashivratri story behind the celebrating of this festival.

▶ One is that Lord Shiva married Parvati on this day. So it is the day of the celebration of this sacred union.

▶ Another story is that when Gods and demons churned the ocean together to obtain ambrosia that lay in its deft, a pot of poison emerged. Lord Shiva consumed this poison, saving both the Gods and the mankind. The poison lodged in the Lords throat turning him blue. Thus to honor the savior of the world, Shivratri is celebrated.

▶ One more legend is that as Goddess Ganga descended from heaven in full force, Lord Shiva caught her in his matted locks, and released her on to Earth as several streams. This prevented destruction on Earth. As a tribute to Him, the Shivalinga is bathed on this

▶ One more legend is that as Goddess Ganga descended from heaven in full force, Lord Shiva caught her in his matted locks, and released her on to Earth as several streams. This prevented destruction on Earth. As a tribute to Him, the Shivalinga is bathed on this auspicious night.

Also, it is believed that the formless God Sadashiv appeared in the form of a Lingodhbhav Moorthi at midnight. Hence, people stay awake all night, offering prayers to the God. These are some of the stories that can possibly answer why we celebrate Shivratri. But,

what do we do during Shivratri? Mahashivratri is very significant for people who are on the spiritual path. It is also very significant for people who are in family situations, and also for the ambitious in the world. People who live family situations observe Mahashivratri as Shiva's wedding anniversary. Those with worldly ambitions see that day as the day Shiva conquered all his enemies. But for the ascetics, it is the day he became one with Mount Kalilash. He became like a mountain- absolutely still. In the yogic tradition, Shiva is worshipped as a God, but considered as Adi Guru, the first Guru from whom the science of Yoga originated. That day is Mahashivratri. All movement in him stopped and he became utterly still, so ascetics see Mahashivratri as the night of stillness. Mahashivratri is an opportunity and a possibility to bring you to that experience of the vast emptiness within every human being which is the source of all creation. On the one hand, Shiva is known as the destroyer. On the other, he is known as the most compassionate. He is also known to be the greatest of the givers. The yogic lore is rife with many stories about Shiva's compassion. The ways of expression of his compassion have been incredible and astonishing at the same time. So Mahashivratri is a special night for receiving too. It is our wish and blessing that you must not pass this night without knowing at least a moment of the vastness of this emptiness that we call as Shiva. Let this night not just be a night of wakefulness,

let this night be a night of awakening

for us all. Maha Shivratri is one of the

most auspicious festivals of Hindus and is dedicated to Lord Shiva. It is being celebrated this year on 26 February [Wednesday] all over country. However Kashmiri Pandits celebrate it as Hearat a day earlier that is on 25th February -Tuesday. It holds a great significance for Hindus all across the globe and is one of the most celebrated festivals across the country. This day marks Lord Shiva's marital union with Goddess Parvati. Devotees visit Shiv-Parvati temples to seek blessings and also observe fast on this day. Maha Shivratri this year falls on Tryodashi Tithi during Krishna Paksha in the month of Magha in the South Indian calendar or the Amavasyant Hindu lunar calendar. However, according to North Indian calendar or the Poornimant lunar calendar, Maha Shivaratri is the Masik(monthly) Shivaratri in the month of Phalguna. The day is celebrated as Goddess Parvati and Shiva's marriage. This is the most popular legend associated with Maha Shivratri. The day marks the marital union of the Lord with his consort. After his wife Sati's death, Shiva lived like a hermit. He was immersed in meditation and undertook severe penance. Sati took rebirth as Parvati in order to win Shiva's heart once again and become his consort. She did rigorous penance for years and did all that she could to win his attention. On seeing her dedication, devotion and immeasurable love. Shive accepted her as his wife. They married on the 14th day of the dark fortnight in the month of Phalguna. It is related with Samunder Mamthan episode. In a con-

test of one-upmanship, the Devas and the Asuras - started churning the Samudra or ocean to obtain the divine nectar (Amrita) to gain immortality. While churning the ocean with Mount Mandara as the rod and Vasuki, the King of serpents as a rope, a number of beneficial things emerged from the ocean but with it also surfaced the Halahala or the poison. Halahala was so toxic that it could ruin the creation. In order to save life and the universe, Lord Vishnu asked the Devas to reach out to Lord Shiva, who alone could consume the poison. Lord Shiva readily agreed to consume Halahala. Fearing it could harm him, Goddess Parvati pressed his neck with her hands thereby preventing the Halahala from going down his throat. This made Halahala find refugee in his throat. Though it failed to cause harm to Shiva, it turned his neck blue. Hence Shiva is also known as Neelakantha. In order to ensure Halahala has no other impact on the Lord, the Devas and devotees of the Lord kept him awake all night singing praises and performing dances. Shivlinga came into being this way, Once, Lord Vishnu and Lord Brahma had an argument over their supremacy. This created much disturbance in the Devaloka and the Devas reached out to Lord Shiva for help. In order to make Brahma and Vishnu realize that there was a supreme power governing them, Shiva appeared as a fiery flame shaped like a lingam and challenged the two to trace the beginning and the end of the beaming light. Vishnu transformed into a boar and headed underground while Brahma took the form of a Swan

to fly upward. The search turned out to be so tiring that Brahma persuaded Ketaki flower to play witness to his "achievement" of tracing the origin of the beam and convey the same to Lord Vishnu. This is when Lord Shiva emerged in his full form from the beam. Realising that their argument was futile and their claim to supremacy meaningless, Brahma and Vishnu bowed to Lord Shiva and pleaded forgiveness. Since Shiva appeared in a Linga form on this day, people celebrate his supremacy by remaining awake and chanting mantras honoring him on Maha Shiyaratri.

As already mentioned Shivratri is celebrated in a unique ,different and special way by the kashmiri pandits and the festival has great importance for the kashmiri pandits .The kashmiri Hindus start the preparations for this yearly festival a fortnight before the day of Shivratri and on this day the head of the family observes fast. breaks it after the pooja at midnight They fill some pots with water and walnuts and perform pooia. These pots are symbolized as Lord Shiva, his consort Parvati and their son Ganesh and also the Bharavas. It is said that the four kernels of the walnut represent the four Vedas. After three days the walnuts are distribute to the relatives and neighbours. The kashmiri pandits cook many vegetarian and non vegetarian dishes and offer them to the Baravas on the auspicious night and after pooja they eat the specially prepared food and dishes.

May Lord Shiva bestow his blessings to the humanity.

imate Change Combat the

■ DR. BANARSI LAL

very country is being affected by the climate change. The economies of nations and lives of human beings are disrupted by the climate change. Weather patterns are changing and sea levels are rising. Although the green house gases emissions have dropped in $202\bar{0}$ due to COVID-19 but is expected to be temporally. As the global economy starts to recover from the pandemic, emissions will rise again. There is dire need to take urgent action to protect the lives and livelihood of the individuals. For this purpose some new interventions need to be introduced. There is need to deal with the impacts of climate change. Presently the whole world is affected by the COVID-19 pandemic. Even in this challenging time, our commitment to tackle the climate change should remain strong. We should make our efforts to protect the environment. We can organize seminars, trainings, digital media campaigns, webinars and virtual panels to accelerate the climate action. We all are facing lot of environmental challenges from loss of biodiversity to climate change to plastic pollution. There is need to work on climate change at all levels of government. A unified global

response is must to tackle the climate crisis. We need to develop new environmentalists who can engage millions of people on climate change. Of all the planets the Earth is considered as the luckiest planet in the universe because it is the only planet where life became possible. Beautiful life developed on this planet whether that is in the form of humans, animals, plants or marine life. But the human race lost its humanity and used the Earth's resources ruthless-

The Earth is the most unique planet because it developed the most intelligent life called as the human race. Environmental and climate literacy is the engine not only for creating the environmental and climate laws and policies but also to promote green technologies. It is worthwhile to mention here that our Earth planet is losing the 15 billion trees every year i.e. around 56 acres of forest in every minute. Many species are going extinct rapidly. With our efforts we can protect hundreds of species. Lack of environment education has led man to be harsh to nature. There is dire need to empower everybody with the knowledge to inspire action in defense of environmental protec-

tion. It seems that we have forgotten

the most beautiful gift that we have got in the form of planet Earth. We also seem to have forgotten that this is our home and we need to take care of it in order to stay healthy and fit. We are mercilessly utilizing and depleting the Earth's limited resources. Our ignorance is causing severe problems like depletion of the Ozone layer, polluted rivers due to dumping of industrial waste, loss of soil health due to excessive use of agrochemicals, global warming etc. Deforestation is rapidly increasing due to increase in the industrialization. This has disturbed the Earth's environment. The increase in the Earth's temperature is melting the ice at the Poles. We already have dug quite a huge well for ourselves but still we can come out from it. We should protect the earth by planting trees; reduce pollution by limiting the use of vehicles, switching off lights when unnecessary, conserving petrol and diesel etc. These small steps but when billions of people will do so together, there can be definitely the positive results to protect the Earth. The step of CNG vehicles in New Delhi is really highly appreciable that have considerably reduced the amount of pollution in Delhi. The mighty river Yamuna has

also been polluted by the industrial waste. The increased evaporation and additional moisture to the atmosphere has led more intense

2019 year was recorded as the warmest year. Carbon dioxide and other green house gases also rose in 2019. The climate crisis is an existential threat. Many pandemics are related to the climate crisis, helping to nurture and host novel germs. Even in present era many people are not aware about some serious environmental issues-from air pollution to toxic dumps to pesticides to loss of biodiversity. There are enormous challenges but there are also vast opportunities on climate action. Climate change is considered as the biggest challenge for the mankind. It is expected that by the end of 2020, nations will increase their national commitments to 2015 Paris Agreement on climate change. There is dire need to tackle the climate crisis globally. Every country needs to step up with urgency and ambition for climate action to safeguard the present and future generations. People have started to protect the environment in small steps but there is dire need to take giant leaps to save the mankind on the Earth.

Stringent laws and rules need to be made, to make people realize the importance of protecting the mother Earth. Every nation needs to cut down on Carbon emissions to reduce the effects of global warming otherwise the global warming will make the ice-caps at the Poles to melt and raise sea levels. It can be so devastating that it will wipe out many countries on the Earth. There is need of collective efforts to protect the Earth from pollution. If we do nothing for the protection of environment and let things be as they are, then there can be the worst results. Earth may take revenge and the wrath of the planet may be even more furious. Many times we have seen it happen right in front of our eves and observe cyclones, flash floods, sudden fires in forests, tsunamis, earthquakes, diseases etc. Such types of calamities are revenge of the Earth and a small revenge by Earth takes a huge toll on mankind. A major natural calamity happens only when we play with our environ-

The size of earth is fixed while its resources are being depleted abruptly. It has been observed that some countries are causing more pollution affecting the other countries also.

Many species of flora and fauna are extinct. We should protect our environment for our development. Without adequate environmental protection, development is useless. Humankind is rapidly depleting the natural resources on the Earth. It is acceptable that we need petrol and diesel to run our vehicles and the Earth is not refusing us. It only wants us to use it judiciously. Similarly the other natural resources should be used judiciously by the mankind. We can recycle the papers and stop using plastic bags. We should make collective efforts to reduce Carbon emission in the atmosphere to protect the mankind. On this day each of us should take initiatives to plant more and more plants and return the balance to the beautiful planet Earth so that everybody on this planet can live in peace. In the fast changing life we are so busy in day-to-day life that we don't have time to stand and contemplate about the planet we live on. But now we should make strenuous efforts to protect the planet Earth. The Earth will find some ways to protect us if we love and respect it. There is need to work together to protect the planet Earth.

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