Indian Armed Forces: In Service of the Country
Liberation of East Bengal (East Pakistan)

In December 1970, Pakistan held its first ever general election based on adult franchise. General Yahya Khan, the President of Pakistan had expected that Zulfiquar Ali Bhutto's Pakistan People's Party would come to power. The expectation went awry. Instead Sheikh Mujibur Rehman's National Awami League swept the polls in the National Assembly. Sheikh Mujib staked his claim to form the government which was thwarted by the President of Pakistan. There were several meetings between Sheikh Mujib, Bhutto and General Yahya Khan on the issue of power sharing but no agreement could be arrived at. In frustration and perhaps egged on by Bhutto, Yahya Khan arrested Sheikh Mujib on March 23, 1971, whisked him away to a secret place in West Pakistan and imposed martial law in East Pakistan.

There was widespread resentment in East Pakistan resulting in a general strike which brought normal life to a halt. Yahya Khan unleashed Pakistan army on the Bengali population of East Pakistan. The atrocities committed by Pakistan army were nothing short of mass murder.

The influx of millions of refugees was a matter of great concern. There was also nationwide outcry against the outrageous acts of Pakistan army. Smt. Indira Gandhi, the Prime Minister thought of military intervention in East Pakistan in the summer of 1971. The military opinion, however, was not in favour of it. Arjun Subramaniam in his book says, “Indian Army Chief, General Manekshaw, was not comfortable with sustaining a two-front operation during the summer and monsoon months, rightly preferring a campaign in the winter months.” A winter campaign would also rule out any kind of Chinese intervention. General’s reasoning was sound and the Prime Minister accepted it. The decision to delay
Loyalty is not produced to order or by fear. It comes as a natural growth from circumstances which make loyalty not only a sentiment which appeals to one but also profitable in the long run. We have to produce conditions which lead to this sentiment being produced. In any event, criticism and cavilling at minorities does not help.

The only real long-term policy we can have is to consolidate India by making all the minorities in the country feel completely at home in the State, and indeed by removing all sense of difference from the political point of view between the so-called majorities and minorities. That will, no doubt, take some time. But that is the only goal to aim at and every step taken must keep that in view.

From letters to Chief Ministers dated 1st March 1950
The Vainu Bappu Observatory of the Indian Institute of Astrophysics traces its origin back to 1786 when William Petrie set up his private observatory at his garden house at Egmore, Madras, which eventually came to be known as the Madras Observatory. Later it was moved to Kodaikanal and functioned there as the Kodaikanal Observatory since 1899. However, Kodaikanal had very few nights available for observation and hence astronomers searched for a new site after India’s independence. M.K. Vainu Bappu who took over as the Director of the Kodaikanal Observatory in 1960, found a sleepy little hamlet called Kavalur in the Javadi Hills as a suitable site for establishing optical telescopes for observing celestial objects. This came to be known as Kavalur Observatory, later renamed as the Vainu Bappu Observatory after the untimely demise of its founder director.

From a distance, the Vainu Bappu observatory looks like an array of thimbles against the tapestry of the sky, the largest being the almost entirely indigenously built Vainu Bappu Telescope (VBT). Inside the glistening aluminium dome is the telescope, whose primary optics is a concave mirror of 123 centimeter (93 inch) diameter. This mirror and other optical and electronic devices are supported by 120 tonnes of finely-crafted steel suspended on a horseshoe and steel yoke which resembles a medieval sling-shot.

Built by the Indian Institute of Astrophysics (IIA) at a cost of Rs 6.5 crore, the telescope is the largest in Asia and the 18th most powerful optical telescope in the world. Prof. J.C. Bhattacharya, former director described it thus, “It’s an Indian eye to the universe and would enable us to work in the frontiers of astronomical research.”

The giant “Indian eye” is a triumph of indigenous ingenuity and a pleasure to watch in operation. The technicians manning the control panel below depress a button on the computer console and the shutters of the dome slide noiselessly open - leaving a slice of the night sky visible. The telescope moves with a gentle, floating motion as it tracks a heavenly body and the giant dome rotates with a low hum. The giant telescope brings millions of stars in the Milky Way, apart from those in other galaxies more clearly into focus for Indian astronomers to study. They can just turn the telescope towards the direction of any object visible in the sky by simply typing appropriate coordinates of that object.

Building the VBT itself was a mammoth task that took ten years to complete. It’s most essential components - the giant reflecting mirror, the yoke and the horseshoe on which it rests, and the mechanisms that control the movement of the telescope - created initial problems because of their sheer size.

For instance, a ceramic circular reddish-brown blank having a diameter of 93 inches was imported from West Germany and then had to be ground and polished to precision to make the primary concave mirror of the telescope. It took four years for scientists to reach that perfection - after they set up special facilities in Bangalore to grind the mirror first with diamond bits, then with glass and finally coating it with less than a millimeter-thick aluminium foil to give it the reflecting surface. Such accuracy was necessary because even the slightest variation would distort the image.
The giant yoke and the horseshoe which holds up the telescope and enables it to swivel in any direction, had to be floated on two pads which had oil pumped in under high pressure to allow completely frictionless movement - making the telescope so sensitive that even the push of a little finger could move it. Control mechanisms had to be developed to ensure that the telescope moved with an accuracy of less than a micron. All this makes the telescope so powerful that it is able to define a 25 paise coin placed 40 km away. In space, it is able to pick up light from some of the faintest stars, both in the Milky Way and in other galaxies.

The telescope was ready to search the depth of the sky four years after Prof. Bappu's death. It was dedicated to the nation by the then Prime Minister, Shri Rajiv Gandhi in 1986.

The most crucial aspect in development terms is image recording. The last decade of the last century saw replacement of photographic plates, most commonly used for taking images of astronomical objects, by newly discovered electronic devices called charged couple devices or CCDs. These are sensitive microchips capable of recording more than 80% of the light falling on them. In comparison, photographic plates are only about 1% efficient in doing the same work. The Vainu Bappu Observatory has a host of different types of CCD devices used for astronomical observations with its other telescopes.

Although there has been tremendous progress in the field of what is called the "invisible bands" of the spectrum - ultra violet, infra-red and radio waves – observations in visible optical bands still hold their ground.

One of the first discovery from Kavalur Observatory was the discovery of the rings of Uranus in March 1977. Using the 1 metre (40-inch) telescope, Indian scientists were among the first to discover atmosphere on Ganymede, Jupiter’s satellite.

Today scientists at IIA have made Bappu proud by setting up the Indian Astronomical Observatory at an altitude of 4500 metres above mean sea level. The site is a dry, cold desert with sparse human population. The ancient Hanle monastery is its nearest neighbour. The cloudless skies and low atmospheric water vapour make it one of the best sites in the world for optical, infrared, sub-millimetre, and millimetre wavelengths.

A 2 m optical infrared telescope is installed at the observatory. This telescope is remotely operated from CREST, Hosakote, using dedicated satellite links. A 0.70 m wide field robotic telescope is under installation for monitoring transients, under the GROWTH project.
The vibrant, colourful and energetic Gujarati folk dances truly reflect the essence of Gujarati culture and tradition. The best known among these is the Garba and Dandiya. Folk drama in Gujarat is known as Bhavai dance. Most of the art traditions trace back their origin to the ancient period.

Some popular folk dances of Gujarat are:

**Garba:** This is one of the ceremonial dances of Gujarat. Traditionally performed on the occasion of Navratra, in the lunar month of Kartik, corresponding to October/November, this dance form has attained immense popularity. A lamp is put inside an earthen pitcher called the *garbi* which has holes all around it symbolizing the seed of creation. Women usually perform Garba and sing songs. Music is provided by a drum called dholak. Garba songs are tuneful and the dancing is fascinatingly lyrical.

**Dandiya:** The Dandiya dance of Gujarat is performed as an essential part of festivals. Dandiya dance is thus called, because in it, the dancers hold two wooden sticks in their hands. While dancing, they rhythmically strike not only the two sticks but also strike the sticks held by other dancers who are either in front or at the sides. The male dancers wear a typical costume which consists of a white frock coat called *kediyu*, white churidar or pyjama and turbans on their heads. Women wear the traditional ghaghra and choli with beautiful ornaments.

**Tippani:** Performed only by women, Tippani is a popular folk dance in Gujarat which originated from the Chorwad district. It is common among the Koli and Kharva people of the coastal region and is performed while beating the floor in two opposite rows accompanied by folk songs. With simple musical instruments like a *thali* and a *turi*, dancers produce the music. The dance originated among labourers but is also performed on festivals and wedding.

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**L. H. KAZI**
(1954-2021)

Latafat Husain Kazi (Director, Culture) passed away on July 20, 2021, leaving a void in an important unit of the Nehru Centre. Very few know that Shri Kazi began his career at the Centre as an Assistant Manager at the Nehru Planetarium. In fact, his love for astronomy led him to the Coast Navigation School, California, U.S.A to study the subject. But he truly found his calling during his stint at the Cultural Wing of the Nehru Centre.

As Director (Culture), Shri Kazi wrote, directed and produced several dance ballets, musical dramas, ghazal and classical music concerts and mushairas. His contribution to the flourishing of Marathi Natya Sangeet was, indeed, immeasurable. Countless budding artists in classical music will vouch for his active encouragement of their talent during the much awaited annual Megh Malhar festival. Bharat Natya Sanshodhan Mandir, Pune felicitated him for keeping alive the dying art of Marathi Sangeet Natak.

Every programme organized by the Cultural Wing of the Centre, whether it be the National Theatre festival or the annual mushaira, the Marathi Natya Sangeet festival or the numerous dance ballets, would see Shri Kazi welcoming guests at the entrance of the Auditorium.

Rest in peace, Kazi Sahab. When the curtains go up again in the Auditorium, we shall all miss your presence there.
Programme for September 2021

Open from 11.00 a.m. to 7.00 p.m. (On exhibition days only)

MADHURI DEVLALIKAR . AJIT CHAVAN

Madhuri is a self taught artist. Her paintings are created out of paper.

Ajit secured G.D.A. from Sir J. J. Institute of Applied Art. He has his advertising studio. His paintings are digital and abstract on canvas.

Tuesday 31st August to Monday 6th September 2021 (Circular Gallery)

ANITA HASURKAR . KALAIVANI . NIRMALA DUTTA . MEENAL GOEL . RICHA BANSOD

This group exhibition will display works in mixed media, water and oil colours and acrylic on canvas.

Tuesday 21st September to Monday 27th September 2021 (AC Gallery)

AYUSHI JAIN . AMBEREEN DHARAMSEY . MEENAKSHI WADHWA . RASHMIE TYAGI

This group of self-taught artists will exhibit works in various mediums.

Tuesday 28th September to Monday 4th October 2021 (Circular Gallery)

PROF. MANGAL GOGTE

Prof. Gogte is a self-taught artist who has taught in many universities in India and abroad. Her water colours and oils are mainly on nature.

Tuesday 14th September to Monday 20th September 2021 (AC Gallery)

PRAKASH JADHAV . RANJEET VARMA . SWATI DRAVID . MANISH RAO . MONA RATHOD . SUNITA NAIK . BHANU GOVANI . GOPAL GADHAVE . SHILPA RATHOD

This group exhibition will showcase figurative and abstract works in oil, acrylic and water colours.

Tuesday 21st September to Monday 27th September 2021 (Circular Gallery)

RADHIKA POWAR

Radhika is a self-taught artist. Being a Bharatnatyam dancer, her paintings are based on movements of dance in acrylic on canvas.

Tuesday 28th September to Monday 4th October 2021 (Circular Gallery)

ANITA HASURKAR . KALAIVANI . NIRMALA DUTTA . MEENAL GOEL . RICHA BANSOD

This group exhibition will display works in mixed media, water and oil colours and acrylic on canvas.

Tuesday 21st September to Monday 27th September 2021 (AC Gallery)

AYUSHI JAIN . AMBEREEN DHARAMSEY . MEENAKSHI WADHWA . RASHMIE TYAGI

This group of self-taught artists will exhibit works in various mediums.

Tuesday 28th September to Monday 4th October 2021 (Circular Gallery)
24. **Jaipur City**

The walled city of Jaipur was founded in 1727 by Sawai Jai Singh II with the help of a Bengali architect Vidyadhar Bhattacharya. It was meticulously planned, and each community or guild had its own quarters - the jewellers had Johari Bazaar, the dyers lived in Neelgaron ka Mohalla, and the sculptors had Shilparon ka Rasta. All administrative offices were located at Brahma Pol as Sawai Jai Singh II believed in the wisdom of keeping his nobility and intelligentsia away from the craftsmen and labourers. Palaces, temples, gardens, offices, residential quarters, workshops, stables and workhouses were all laid out according to Sawai Jai Singh II’s master plan.

The City Palace was a city within a city; here thousands were employed to serve the royal family. Huge pink Bengal-arch gateways covered with white floral motifs led to the City Palace. Until 1970, the Naubat Khana over the Dhundhubi Pol resounded with music every time the Maharaja entered or left the City Palace. Spacious courtyards surrounded each palace and today turbaned retainers guide the flow of tourists.

The Jantar Mantar in Jaipur built in 1728-34, located across from the City Palace, is one of the five observatories built by Jai Singh II. It is the best preserved and was used until quite recently. The Jaipur government used solar time for its official purposes, and this was read on a sundial in the Jantar Mantar called the Samrat Yantra. A gun used to be fired from Nahargarh fort above the city as a time signal. Jai Singh II claimed to have invented all the masonry instruments in the observatory.

Sawai Pratap Singh built the Hawa Mahal in 1799 as a vantage point for the womenfolk to watch processions from behind the purdah. A five-storeyed pink stucco facade, painted with white flowering vines and geometric trees, the Hawa Mahal is an inseparable part of the memories of royal Jaipur. The pierced stucco jharokha windows are as delicate and fragile as the women they once screened from the public gaze. On entering Hawa Mahal, one finds a large paved courtyard surrounded by verandahs and rooms, where royal ladies rested while watching lengthy processions and religious festivals. Another courtyard has a square marble pool where Holi was celebrated by the women.

In 2019, UNESCO World Heritage Committee inscribed Jaipur the “Pink City of India” among its World Heritage Sites.

**Further reading at Nehru Centre Library:**

- Jaipur City Palace by Vibhuti Sachdev & Giles Tillotson; Roli Books, New Delhi, 2008. Call No. 915.44/Sac/Til. Barcode- 15688
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