

AVOIDABLE WAR WITHIN

All was not well on the Indian defence scene as questions were raised on the leadership and integrity of some individuals and their decisions, besides anomalies in recruitment and other scandals

By Dinesh Kumar

THE YEAR will be remembered for its negatives and controversies. This is unfortunate considering that the Indian armed forces, the world's fourth largest military, is an important instrument of state power and is viewed to be central to India's attempt to seek greater power accommodation of its rise as both a regional and an economic power.

This year's discourse was dominated by one major negative and controversy each, both linked to senior officers in the Army. For the first time in the armed forces' post-Independence history, a serving service chief revealed anomaly in his date of birth as recorded at the time of recruitment and took a stand on insisting that this be 'corrected'. In addition to the question of whether it is morally appropriate for the Army Chief, General V.K. Singh, to seek a change in his date of birth towards the end of his career and after having attained the top position, the issue, equally significantly, brought to fore anomalies in the functioning of the Army's Adjutant-General branch and the Military Secretary branch. How did these two departments, pivotal to personnel issues, end up recording varying dates of birth of an officer who eventually rose to become an Army Chief? This is a subject for investigation along with whether there are more such anomalies. A grave negative was the conviction of three Lt-Generals, one of whom was dismissed from service, a second cashiered and awarded three years' rigorous imprisonment, and a third awarded loss of seniority in a land scam in West Bengal. The conviction of the high-ranking three star generals, a Military Secretary, a Corps Commander and the Director-General (Supply and Transport)—all key positions—raises a serious question on leadership and integrity of some sections of the Army's leadership.



HIGH MORALE: The marching Indian Air Force personnel reflect the indefatigable spirit of the armed forces

ership. This cannot be cited as a one-off considering that the Army has and continues to be periodically rocked by scandals comprising moral, financial and professional corruption. It was not without reason that General V.K. Singh acknowledged on assuming the post of Army Chief last year that his service needs to accord attention to its 'internal health'.

Not much was achieved on acquisitions and induction of new weapon systems and platforms. Many of these are still in the pipeline as part of a much-needed and delayed major modernisation plan envisaged to involve an expenditure of about \$50 billion by the end of the current decade. The Ministry of Defence

finally narrowed down its selection for the medium range combat aircraft (MRCA) to the European Fighter Aircraft and the French Rafale, both from Europe. It involved the surprise rejection of the US F-16 and F-18 fighters and also the MiG-35 offered by India's traditional weapons supplier, Russia. A significant development was the US offer to involve India in the development of its most advanced fighter, the F-35, even as India signed agreements with Russia for the co-development of a fifth-generation fighter aircraft. The Indian Air Force finally got its C-130 Hercules transport aircraft bought explicitly, however, to transport the Army's Special Forces.

Big-ticket weapon systems and platforms such as the 44,500 tonne Russian Admiral Gorshkov (redesignated as INS Vikramaditya) and the French-made Scorpene submarines continue to await induction as does also the lease of a Russian nuclear-powered submarine, which has been delayed owing to a fire on board during sea trials.

The Army continues to grapple with insurgency in Kashmir and militant violence in the North-East. The debate over abrogation of the Armed Forces Special Power Act (AFSPA) has added to the concerns of the Army, which is deeply engaged in counter-insurgency operations in the trouble-torn state.

In addition to the much-delayed induction of weapon systems, especially in the Army, all three armed forces continue to be plagued by officer shortage. The issue is numerically acute in the Army, which continues to average a shortfall of about 11,500. The issue is qualitatively acute in the technology and capital-intensive Navy and Air Force, which operate sophisticated technology on board aircraft, ships, submarines, and on land. All this has a collective bearing on the efficiency of the services, especially in view of the increasing sophistication of weapon systems that require qualitatively superior and technology-savvy youth to lead, direct and operate such systems during war.

The world in your hand

Computing became more than mainstream, it became personal. Mobile internet access became an agent of change that connected people far beyond their geographic limitations

By Roopinder Singh

COMPUTERS are truly devices held in millions of hands worldwide. They connect the world like never before, and make it a global village. The world of technology lost its icon in 2011, but Steve Jobs left his mark for all to see. The computer came into our hands through smartphones and tablets this year. We had operating systems that competed with each other, hardware that out-specked its competition and even new applications that reinvented the old and gave it a twist. Such was the pace of new offerings that there was an embarrassment of riches that left consumers happy, though bemused.

With India finally being recognised as an important market, we saw product releases that were synchronised with international ones, and, at times, we got products that other markets, especially the US, did not have.

Everyone has a smart electronic gadget in their hands. Why, our honourable Members of Parliament, too, are getting assistance to get and use tablets so that Parliament can go significantly paperless. Not that much paper got used in the few sessions that the honourable MPs sat down for business, but that's another story.

Jobs' baby, iPhone 4S, came four months later than expected. It was not bigger than its predecessor, and was not the much-awaited iPhone 5, but it still became a bestseller, and had enough new features—the fast A5 processor, an improved camera and Siri, its voice-activated digital assistant—to make it stand out.

On the software front, the Android 4.0 Ice Cream Sandwich from Google strutted its stuff, including the capability to unlock a phone through facial recognition. Hardware from Samsung, Motorola and others improved to an extent where smart

phones became faster than computers, and came with dual core processors.

As for tablets, our very own Aakash became the game-changer by breaking a price barrier and delivering functional tablets for less. For those who have more, the iPad 2 is still the market leader by a large margin. Yet, like the iPhone version only gained incrementally as it is thinner, faster and has two cameras now. Everyone aspires to beat iPad2, and with Android tablets nipping at its heels, Apple launched a barrage of suits against its rivals, even as Amazon came out with the Kindle Fire, an e-book reader that is much more, and Nook brought out its own attractive product.

As consumption devices, tablets are now displacing laptops. Not that laptops are going extinct. Since people still have to work by typing on their keyboards, laptops are fast evolving into ultra books—the very thin versions with flash memory and the ability to start instantly. Apple's MacBook Air is one such device already available. Others in the Windows world are just on the horizon, with Intel backing them.

In a world dominated by slick and expensive gadgets, the small and inexpensive tablet Aakash made news simply by being there, the only tablet that is available on sale online for Rs 2,500. Datawind, the company that assembles it, created quite a stir, and got more than four lakh orders from individual and corporate customers.

Many months before Aakash made waves worldwide, people were already looking at the skies, looking for the 'super moon' which brought the moon closest to the earth in 19 years.

Mankind's quest for more information about planet Mars continued. NASA's



WHEN AAKASH IS THE LIMIT: The small and inexpensive Indian tablet Aakash made news for being the only tablet that is available for ₹2,500

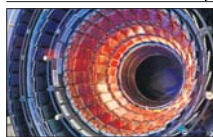
probes worked at finding traces of life on the planet as a new \$2.5 billion nuclear-powered rover was sent to the Red Planet in November. On the other hand, the Russian attempt to launch a probe failed, because of a mechanical problem with the rocket.

A quest of another kind continued as the search for evidence of Higgs Boson continued. It is also called 'The God Particle' and is critical in our effort to understand the structure of matter. Did you

know that the sub-atomic particles, Bosons are named after the physicist Satyendra Nath Bose?

Indian scientists continued to search the skies as they sent satellites skyward on Indian rockets. ISRO scored far more hits than misses in 2011 by adding first to the defence forces with successful testing of Prithvi missile, and to India's space mission by PSLV launches. Thus, we not only reached for *Aakash*, we also held our very own Aakash in our hands.

NEWSPICK



The God particle

European nuclear research scientists claimed that they are close to discovering the elusive Higgs Boson, the "God particle" that confers mass on matter. It is thought to be one of the building blocks to the universe. But they are still some way from confirming the existence of a sub-atomic particle that is one of the cornerstones of modern physics. The CERN laboratory in Geneva confirmed that measurements by its LHC Large Hadron Collider have come closer than previous searches to detecting the sub-atomic particle, whose existence was first hypothesised in the 1960s.



We may not be alone

Observations by the US space telescope Kepler pinpointed a planet orbiting another star. It is the closest thing to Earth that has been detected to date. Kepler 22-b is about 2.4 times the size of Earth and lies in the "Goldilocks zone" around its home star. Conditions on the new planet are neither too hot nor too cold.



Failed Red quest

In spite of half a century of sending probes to Mars, space engineers still have a shaky record of success. Out of the 38 Mars missions, 19 have suffered some kind of major flaw, a failure rate of 50 per cent. The latest victim of the Great Galactic Ghaul was the Russian Phobos-Grunt mission, which was supposed to fly on a 10-month mission to Mars after its recent launch. Instead, it found itself stuck in orbit about a few hundred miles above the Earth.

WONDER DRUG TO KILL CANCER



A major breakthrough was achieved when scientists created a wonder drug which kills cancer. In fact, the medicine is believed to wipe out some of the most deadly forms of the disease. The KGS drug is likely to be available in less than five years.

MIG CRASHES MOUNT



As many as seven air crashes involving IAF's fighter aircraft took place this year, the most recent one being in Srinagar in Jammu. It was the fifth belonging to the MIG-21 series warplane. The IAF has decided to phase the MIG-21 aircraft out by 2017.

BIG DEAL FOR THE FORCES



Medium-range combat aircraft have been shortlisted by the Ministry of Defence. Two European aircraft are in the final list. Also, India and Russia will collaborate for the fifth generation fighter aircraft.

OFFICER SHORTAGE



All three armed forces continue to grapple with the issue of officers' shortage. The issue is numerically acute in the Army, which continues to average a shortfall of about 11,500.