

# समाचार पत्रों से चयित अंश Newspapers Clippings

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## Talks uncertain as pak looks at leads

Pakistan is working on the "leads" provided by India on the terror attack on the IAF base in Pathankot, the Foreign Office said on Monday in a statement whose tone was conciliatory. Extending Pakistan's deepest condolences to the Government and people of India on the "unfortunate terrorist incident" in Pathankot, a statement by the spokesperson of the Ministry of Foreign Affairs said, "We understand the pain of many families who have lost their dear ones in this tragedy, as Pakistan itself is a major victim of terrorism." Noting that the terror attack that left seven security personnel dead has been categorically condemned by Pakistan, the spokesperson said, "In line with Pakistan's commitment to effectively counter and eradicate terrorism, the Government is in touch with the Indian government and is working on the leads provided by it." The statement, however, did not give details of the "leads" provided by India. It also said that India and Pakistan should remain "committed" to a sustained dialogue process. "Living in the same region and with a common history, the two countries should remain committed to a sustained dialogue process," it said, adding, "The challenge of terrorism calls for strengthening our resolve to a cooperative approach." An element of uncertainty crept in on Monday over next week's Foreign Secretary-level talks with Pakistan amid indications that these may be deferred in the wake of the Pathankot terror attack on Saturday. In New Delhi, there was no official comment on the Pakistani statement nor was there any official indication as to through which channel the "leads" have been provided to Pakistan. However, reports, not officially confirmed, said that National Security Adviser (NSA) Ajit Doval had provided to Pakistani authorities the details like the Pakistani numbers which the attackers had called and their intercepts. The attackers had made reportedly several calls to Pakistan, some of them brief and some long.

The Tribune

05 January 2016

## Ex-Defence Secy takes over as CIC

New Delhi, January 4 - Former Defence Secretary RK Mathur was today sworn in as the eighth Chief Information Commissioner by President Pranab Mukherjee at a ceremony at Rashtrapati Bhavan here. Mathur (62, a retired IAS officer of Tripura cadre, completed his two-year fixed tenure as Defence Secretary in May last year. As the CIC, he will have a tenure of about three years, till he attains the age of 65 years. The oath ceremony could not be held earlier as the President was on a southern sojourn for 14 days and returned on December 31. The Prime Minister Narendra Modi-led selection committee, which has Finance Minister Arun Jaitley and leader of Congress party in Lok Sabha, Mallikarjun Kharge, as its members, had last year on December 16 selected Mathur as the new CIC. The Central Information Commission has been headless twice since the BJP government came to power in 2014. Earlier, it was without a chief for nearly 10 months after the completion of the tenure of the then Chief Information Commissioner, Rajiv Mathur, in August, 2014. It again fell vacant a month back following the retirement of Vijai Sharma. At present, there are seven Information Commissioners - Basant Seth, Yashovardhan Azad, Sharat Sabharwal, Manjula Prasher, MA Khan Yusufi, Madabhushanam Sridhar Acharyulu and Sudhir Bhargava. The commission is made up of one chief and 10 Information Commissioners. The posts of three Information Commissioners are still vacant.



# Non-alignment to multi-alignment

BY M. K. Narayanan

December has been a significant month for India and Indian diplomacy. This was not limited merely to defence acquisitions, but also included new initiatives on the foreign policy front. If anything remained of the concept of non-alignment, India's outreach to both Cold War antagonists, in December, appeared to signal its final demise. Non-alignment served India well during the difficult years from the mid to the late 20th century, but had apparently outlived its utility. The time had possibly come to sound its requiem, and India did just that in December. Several reasons can be adduced for India's shift from non-alignment to multi-alignment. Undeniably, policies adopted by India since the beginning of this century had helped generate a climate of trust across the spectrum of warring nations and long-time antagonists. A spirit of accommodation and constructive solutions to major regional and international challenges had also made India more acceptable to most nations. The India-U.S. Civil Nuclear Agreement in the first decade of this century was in this respect truly the "game changer". India came to be seen as a positive, stabilising influence as far as the global and the regional environment was concerned. Non-alignment clearly had no place in this milieu. Deepening India-U.S. ties. It was, hence, not difficult for Defence Minister Manohar Parrikar, within the course of a few hours of discussion with his counterpart during his visit to the United States in December, to enhance the quality of their defence dialogue and strengthen the defence engagement between the two countries. Outcomes from this visit of the Defence Minister are certain to further enlarge the scope of the already booming defence relationship. Among the more significant takeaways are: the progress made regarding the joint working groups on both aircraft carrier technology and jet engine technology; the approvals given for additional numbers of Boeing P-8I maritime patrol aircraft, C-17 Globemaster-III strategic airlift aircraft, and M777 ultra-light howitzers; the progress achieved regarding long-deferred "foundational agreements" such as CISMOA (Com

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The Tribune

05 January 2016

## 25-hour siege of Indian Consulate in Afghanistan ends; 3 militants killed

Kabul/New Delhi, January 4 - An intense 25-hour gun-battle between security forces and terrorists outside the Indian Consulate in Mazar-i-Sharif came to end tonight with the killing of all attackers who attempted to storm the mission building. While three of the attackers were killed in the gunfight overnight, the remaining were neutralised by the night. "Afghan officials have confirmed that the operation has ended," said a Indian government source. "The clearance operation is over and all terrorists have all been killed," said provincial police chief Sayed Kamal Sadat. Some reports said one of the attackers was captured alive but there was no confirmation about it. A group of terrorists had attacked the Consulate at around 9.15 pm yesterday with an aim of storming the building but their plan was thwarted by the security forces. Earlier, official sources said special combat units of the Afghan National Police had recovered three bodies outside the Indian consulate. Subsequently, some more terrorists were holed up in a five-storey building about 100 metres across the road from the Indian Consulate and security forces had launched a daunting onslaught to neutralise them. "Our search operation is still going on inside the building," AFP quoted government spokesman Shir Jan Durrani as saying. According to him, one policeman was killed and 11 others injured in the encounter. Officials said the Consulate came under attack at around 9.15 pm last night with at least two militants trying to "storm". ITBP guards deployed on the sentry post foiled their attempt by raining heavy fire on them. They said at least seven Rocket-propelled grenade (RPG) rounds were fired in the direction of the Consulate but all missed it. Officials added that while there has been no damage to the five-storeyed and pink-coloured Consulate building A strong contingent of over four-dozen ITBP commandos has been securing this facility from 2008 apart from three other missions in the country and the main Embassy in the capital, Kabul.

## India abroad in 2016

Nepal, Afghanistan and Pakistan will demand special handling. Mr Modi's drop-in at Lahore suggests that he may have a plan, devised after internalising lessons from previous mistakes. All those involved in the country's foreign policy - as its makers, implementers and analysts - have reason to be happy: the subject received special salience in the national discourse during 2015. This is unlikely to change in 2016. Anticipating intelligently what awaits India in the next 12 months can hardly be divorced from what happened in the past one and a half years. In other words, an evaluation of foreign policy and national security strategy pursued by Prime Minister Narendra Modi's India since May 2014 is relevant to what might happen in the future. This task needs to be addressed dispassionately, eschewing a binary approach. In admiring aspects of foreign policy or criticising them, one should not be pro-Bharatiya Janata Party or pro-Opposition. Adhering to this broad framework, I would argue that the fundamental elements of the foreign policy remained unchanged, but the prioritisation of goals, the methodology to attain them, i.e. diplomacy, the personal engagement of Mr Modi, and the broad worldview, spanning from Fortaleza to Fiji, are relatively new. The BJP-led government has followed a foreign policy anchored in "change with continuity". More of this may be in store this year. While the importance of neighbours was projected, as reflected in the "neighbourhood first" mantra, the reality is that New Delhi invested heavily in cultivating closer ties with the major powers and a few middle powers. Mr Modi enjoys a seat at "the high table". Supporters hold that this is essential to ensure a massive inflow of capital and technology, much needed for India's economic transformation. Critics see in this a touch of overreach and personal ambition. Nonetheless, this will be continued as South Block executes the strategy of elevating India from a "balancing power" to a "leading power". The desired change will not happen overnight. Many long years of sustained work, steady economic progress and a calm and consensual political environment are the prerequisites for India to reach its destination. Meanwhile, we may expect many more journeys by Mr Modi to foreign lands. Several summits - G20, Shanghai Cooperation Organisation, East Asia Summit, and South Asian Association for Regional Cooperation, India- Association of Southeast Asian Nations, India-Russia, India-EU and UN General Assembly session - will take him abroad in 2016. An indicator of his popularity is the flood of invitations from foreign governments. He is awaited in such diverse lands as Mexico and Myanmar, Egypt and Israel, Indonesia and several African capitals. He will honour many of these invitations. In dealing with India's neighbours, the Modi government has demonstrated a mix of imagination, strength and resilience. Ties with Bangladesh are in a sweet spot today, but more work is required for resolution of the Teesta River and other issues. Bilateral relations with Sri Lanka are stable, but little progress on the fishermen's problems has occurred. Maldives has continued to be a big challenge, more so now with the rise of Islamic fundamentalism and evidence of new Chinese designs. This neighbour requires priority attention. So does Myanmar, now undergoing transition to a dyarchy composed of Aung San Suu Kyi and the Army that may co-rule the county. Nepal, Afghanistan and Pakistan will demand special handling. Mr Modi's drop-in at Lahore suggests that he may have a plan, devised after internalising lessons from previous mistakes. It could succeed, provided national consensus is re-built within India and the plan to normalise relations is sold to the Pakistan Army. As regards China, both a neighbour and a companion at "the high table", the policy of cooperation and competition will continue, along with the resolve to maintain peace and tranquility on the border. Among various regions, East Asia will probably receive the highest attention. Strategic competition is getting sharpened. Nations opposed to China's assertiveness are getting their act together, albeit slowly. Given its internal challenges and the adverse external environment, China may find it prudent not to rock the South China Sea boat. If so, the region will remain stable though tensions and the arms race will not disappear. For India, a more immediate priority is to make connectivity projects with Asean a reality as fast as possible. The past year indicates that Central Asia, the new theatre of "the Great Game" involving several major powers, may gain greater prominence. On West Asia, India will be watchful but also a little wary. There is far too much turbulence there, and India has only a few cards to play. New Delhi is in a position to raise India's profile in the African continent. It did well by

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## India abroad in 2016

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holding successfully the third India-Africa summit which was remarkable in scale, scope and initial impact. To achieve stated goals, the government needs to strengthen its implementation mechanisms and ensure that our top leaders increase their visibility in Africa. Latin American ambassadors in Delhi often express frustration while following their mandate to attract India's attention. They have a point. India-Latin America ties in business and culture are on the rise. With some political push, they can bloom further. Mr Modi might fulfil his promise to visit the region, perhaps in 2016. On major global issues of our time - climate change, terrorism, trade and UN Security Council reform India's perspectives are better known today. Their projection has improved. Some credit should be given to Mr Modi's communication skills, attention devoted to the diaspora and flair for use of social media as well as to his speechwriters who are doing a splendid job. The assessment that results of the recent conferences in Paris and Nairobi were mixed and thus not to India's complete satisfaction, should hardly surprise us. Welcome to the world of diplomacy where "you gain some and you lose some!" The world in 2016 - and India's foreign policy approach towards it - promises to be dynamic but largely predictable. Yet, we should also be ready to expect the unexpected.

**Business Standard**

**05 January 2016**

### India to build its heaviest rocket to carry 10-tonne satellites

Indian Space Research Organisation (Isro) plans to build its heaviest rocket, which can carry satellites weighing 10 tonnes into space. Currently, the space agency's geosynchronous satellite launch vehicle (GSLV MK-2) can carry satellites weighing only two tonnes. The proposed rocket would be powered by a semi-cryogenic engine - that runs on kerosene and liquid oxygen, which the space agency is currently developing. Semi-cryogenic engines are environment-friendly and bring down the cost of launches significantly. The design process for the semi-cryogenic engine has been completed and it is being built by Godrej Aerospace, which also makes the Vikas engines for Isro's rockets. "Once we have this engine, we will have different levels of launch vehicles possible. Currently, the GSLV MK-3 uses the CE20 engine and once we put the semi cryogenic engine in such a combination, we will have a much bigger rating, which will have a payload capability of 10 tonnes," said S Somanath, project director of the GSLV MK-3 at Isro. He, however, did not set a time-frame for the rocket development. Last year, Isro tested a demonstrator of its heavier class of rocket, the GSLV MK-3, designed to carry four-tonne class communication satellites into space. The CE20, which the rocket uses, is an indigenously developed cryogenic engine. A full-fledged rocket with a communication satellite will be launched in 2017. "One of the launch vehicles will look like the GSLV MK-3, but it will be much taller, almost 65 metres, weighing 732.6 tonnes at lift-off and it is capable of putting a 10-tonne space plant in the communication orbit," said Somanath. Isro currently sends its four-tonne communication satellites, used for satellite broadcasting, on Arianespace rockets of the European Space Agency. Somanath said Isro would work on a modular vehicle approach, using the same platform to extend the power of its rockets than build separate rockets. "We thought we will go in a modular way. It will be possible for nearly 6-tonne payload capability and, if required, we will be able to change to our full 10-tonne launch vehicle with a little bit of addition," he said. Meanwhile, Isro will launch its fifth of the seventh regional navigation satellite on January 20. The satellite will be part of India's constellation of geo-positioning satellites that would help in disaster management, mapping and navigation, said M Annadurai, director, Isro.



## Decommissioning of Viraat being worked out

MUMBAI: The decommissioning schedule of Indian Navy's aircraft carrier, INS Viraat, is being worked out and the process would commence after the floating airfield returns from the International Fleet Review to be hosted at Visakhapatnam in February. The grand warship, according to officials of the Western Naval Command, is expected to be decommissioned during June-July 2016 depending on various factors including weather and availability of berth. INS Viraat, the oldest aircraft carrier afloat in the world, would be the star attraction at the IFR - and she would be accorded a grand farewell there. "Decommissioning is a complex process and lot of preparation is required," officials of the WNC said, adding that once she is back from the IFR, the schedule would be put in place. Her keel was laid in 1944 and she was launched on February 16, 1953. She was commissioned into the Royal Navy on November 18, 1959 as HMS Hermes. On May 12, 1987, she was commissioned under the White Ensign of the Indian Navy - and since then she had been serving the Indian interests. As HMS Hermes, she was the flagship of the South Atlantic Task Force during the beginning of Falklands War in 1982 - and during the conflict, her aircraft operated round the clocks and units from the ship destroyed a large number of enemy aircraft in the air and on the ground. After the Falklands War, the ship was placed as a reserve and it was in April 1986 that India, in the quest of second aircraft carrier, signed an agreement with the United Kingdom to acquire it. INS Viraat displaces nearly 28,500 tonnes and is capable of operating Sea Harrier jump jets, a Short Take off and Vertical Landing (STOVL) fighter aircraft and virtually all types of naval helicopters. The 12-degree ramp on the bows is the most striking visual feature of the ship and it helps to improve the safety factor as well as the radius of operation/payload carrying capacity of Sea Harrier. The ship is equipped with Close in Weapon System for self defence. The Computer Aided Action Information System (CAAIS) gives the command a complete picture of the tactical scenario based on information fed to the computer from all onboard sensors.

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Deccan Chronicle

05 January 2016

## Wearable memory device to monitor heart rate

Seoul, PTI: Scientists have created an ultra-thin, stretchable electronic device using gold nano-particles that easily laminates onto human skin like an adhesive sticker and could be used for continuous heart rate monitoring. In the past few years, several types of watches and bands designed to monitor heart rate and other health functions have popped up, yet the components of these devices can not be used in situations that require extreme stretchability, researchers said. In addition, there are often problems with the stability or efficiency of data storage in the watches and bands, and they typically do not get sufficiently close to the skin to detect heart rate with a high accuracy. To address some of these issues, Dae-Hyeong Kim of Seoul National University and colleagues have designed a heart rate monitor that, unlike most wearable memory devices that are merely flexible, can sustain complicated mechanical deformations (or stretching) associated with movements a human wearer might perform. "The technology in this work provides a new wearable platform for the flash memory and signal amplification devices that are important for continuous monitoring and data storage of a patient's healthcare information," said Kim. The device also gets a memory performance boost, thanks to a touch of gold. The ultra-thin circuit demonstrated in this study is made of a stretchable silicon membrane containing closely-packed gold nanoparticles, instead of more conventional conducting films. The gold nanoparticles have many advantages over the conventional films, including superb chemical stability and long-term memory storage. The device consists of electrocardiogram (ECG) sensors and amplifiers that monitor heart rate while conforming to the skin, and contains heart rate and elapsed time data encoded in binary numbers, which can be subsequently converted to decimal numbers for readability. The researchers show that their device can reliably store heart rate data obtained after exercise stress tests, as extracted from sample ECG signals. The heart rate data was retrieved and read again six hours later. The results hint at the possibility of using the stretchable circuit to design improved mobile and personalised health-monitoring devices.

## Biggest database for cancer drug discovery now in 3-D

London: The world's largest database for cancer drug discovery has been updated by adding three-dimensional structures of faulty proteins and maps of cancer's communication networks, reports a study. The updated database, developed at The Institute of Cancer Research, London, will allow scientists across the globe to design new cancer treatments more effectively, the study said. "Our database is constantly growing with information and is the largest of its kind - with more than 140,000 users from over 175 countries," said team leader Bissan Al-Lazikani from The Institute of Cancer Research, London. "And we regularly develop new artificial intelligence technologies that help scientists make predictions and design experiments. Our aim is that cancer scientists will be armed with the data they need to carry out life-saving research into the most exciting drugs of the future," Al-Lazikani noted. The "canSAR" database was launched in 2011 by researchers in the Cancer Research UK Cancer Therapeutics Unit at The Institute of Cancer Research (ICR) - with the ambitious goal of using Big Data approaches to build a detailed picture of how the majority of known human molecules behave. The database has already collated billions of experimental measurements mapping the actions of one million drugs and chemicals on human proteins, and has combined these data with genetic information and results from clinical trials. The new version of canSAR uses artificial intelligence to identify nooks and crannies on the surface of faulty cancer-causing molecules, as a key step in designing new drugs to block them. It also allows scientists to identify communication lines that can be intercepted within tumour cells, opening up potential new approaches for cancer treatment. The study was published in the journal Nucleic Acid Research.

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The Asian Age

05 January 2016

## Kabul blast near airport injures 30

A powerful car bomb struck near Kabul's international airport on Monday evening, just hours after a suicide bomber blew himself up in the war-scarred Afghan capital. At least 30 Afghan civilians, including nine children, were wounded in the attack on Camp Baron, a heavily protected residential compound for civilian technical contractors close to the city's main airport, a health ministry official said. The Taliban claimed responsibility for the blast. A police official said a truck packed with explosives drove up to the armoured gates of the complex before being detonated, smashing windows and sending glass flying and badly damaging nearby houses. Medical aid group Emergency, which runs a hospital in Kabul, said it was receiving wounded at its surgical centre. It said on Twitter: "#Afghanistan two attacks today in #Kabul, we're currently receiving victims of the #masscasualty at our Surgical Centre". The violence comes as Afghan forces battle to end a protracted siege near the Indian consulate in the northern city of Mazar-e-Sharif which began on Sunday night. Earlier Monday, a suicide bomber struck a street leading to the city's international airport, near where the second blast took place, but no casualties were reported. The bombings mark the latest assaults on the war-scarred Afghan capital. A Taliban suicide car-bomber struck a French restaurant popular with foreigners in Kabul on Friday, killing two people in a New Year's Day attack. Fifteen others were wounded in the attack on Le Jardin, an Afghan-owned eatery, which caused a piercingly loud explosion and left a building engulfed in flames. The spike in violence coincides with a renewed international push to revive peace talks with the resurgent Taliban.

## Pakistan arrests 42 IS supporters

Though the country has been denying the existence of the dreaded group, it is secretly neutralising members of the outfit. At least 42 militants allegedly linked to the Islamic State (IS) group have been arrested in Pakistan's Punjab province as part of a campaign to "wipe the threat of IS" from the country, officials said on Monday. The arrests were made during a series of raids by counter-terrorism officials to nab the alleged supporters and activists of the dreaded terrorist group in Pakistan. Punjab Law Minister Rana Sanaullah told reporters that the weekend swoop targeted four districts of the province. Seniors among those held. Mr. Sanaullah said senior IS operatives were among those arrested, including Islamabad chief Amir Mansoor, his deputy Abdullah Mansoori and chief for Sindh province Umer Kathio. A senior police official from Lahore confirmed the arrests. "The arrests are part of campaign to wipe the threat of IS from Pakistan," he said. Hate literature confiscated. The authorities confiscated hate literature, propaganda material and weapons during the raids at a hideout of the militants. Police began their raids after they busted a group of IS supporters in Daska and Sialkot districts of Punjab province last week, which provided vital clues about the activities of the group in Pakistan. Pakistan has officially denied the presence of the IS in the country, but secretly it has been neutralising militants who have either shifted their allegiance from the Taliban to the IS or have shown inclination to support the group. Though the country has been denying the existence of the dreaded group, it is secretly neutralising members of the outfit. At least 42 militants allegedly linked to the Islamic State (IS) group have been arrested in Pakistan's Punjab province as part of a campaign to "wipe the threat of IS" from the country, officials said on Monday. The arrests were made during a series of raids by counter-terrorism officials to nab the alleged supporters and activists of the dreaded terrorist group in Pakistan. Punjab Law Minister Rana Sanaullah told reporters that the weekend swoop targeted four districts of the province. Seniors among those held. Mr. Sanaullah said senior IS operatives were among those arrested, including Islamabad chief Amir Mansoor, his deputy Abdullah Mansoori and chief for Sindh province Umer Kathio. A senior police official from Lahore confirmed the arrests. **05 January 2016.** "The arrests are part of campaign to wipe the threat of IS from Pakistan," he said. Hate literature confiscated. The authorities confiscated hate literature, propaganda material and weapons during the raids at a hideout of the militants. Police began their raids after they busted a group of IS supporters in Daska and Sialkot districts of Punjab province last week, which provided vital clues about the activities of the group in Pakistan. Pakistan has officially denied the presence of the IS in the country, but secretly it has been neutralising militants who have either shifted their allegiance from the Taliban to the IS or have shown inclination to support the group.

# Russia: Ready to mediate between Saudis, Iran

Germany, France call for dialogue; British PM hugely concerned; Pak won't pick sides. Russia is ready to serve as an intermediary to resolve the dispute between Saudi Arabia and Iran that saw the kingdom break off diplomatic relations with Tehran, the foreign ministry said Monday. "We ask Tehran, Riyadh and other Gulf countries to show restraint," the ministry said in a statement, as it called on Saudi Arabia and Iran to take "the path of dialogue". "Russia is ready to support such efforts," the statement said, adding that "Moscow is deeply concerned by the latest escalation of the situation in the Middle East caused by the major regional powers, Saudi Arabia and Iran." Earlier, a foreign ministry source had told AFP that "Russia is ready to serve as an intermediary between Riyadh and Tehran". "If our partners Saudi Arabia and Iran show they are ready and willing (to meet), our initiative will remain on the table," the source said. Germany urged Riyadh and Tehran on Monday to restore diplomatic relations and warned it would take into account developments in Saudi Arabia when it decides on arms exports there. In Berlin, Chancellor Angela Merkel's spokesman Steffen Seibert said: "We call on both countries to resume dialogue. We appeal to both countries... To use all means at their disposal to improve their diplomatic relations." A spokesman for the economy ministry meanwhile said it was "following developments" in Saudi Arabia, and that they would "come into play" when it decides on approval for future defence exports to the country. Germany's vice chancellor Sigmar Gabriel warned Saudi Arabia on Monday Berlin could review military exports in light of Riyadh's mass executions of prisoners two days earlier. "It turns out we were right not to deliver battle tanks or G36 assault rifles to Saudi Arabia," he said. France urged Saudi Arabia and Iran on Monday to reduce tensions. "We need to be vigilant about what is happening between Saudi Arabia and Iran," government spokesman Stephane Le Foll said. British PM David Cameron said tensions between Iran and Saudi Arabia were "hugely concerning" Monday and condemned the death penalty following Riyadh's controversial execution of a Shia cleric. Pakistan will not support Saudi Arabia or Iran as they head for clash amid worsening ties, officials here said, reports our correspondent. Senior officials said Pakistan could play a role for reconciliation between the two countries, if they are requested. The Arab League will hold emergency talks at the request of Saudi Arabia on Sunday to discuss attacks in Iran on the kingdom's embassy and consulate, its deputy head said.

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The Tribune

05 January 2016

## Clear info came 8 hrs before shots fired

Ruchika M Khanna

Eight hours before the six fidayeen struck the Pathankot Air Force station on the intervening night of January 1 and 2, security agencies, while intercepting mobile phone signals, had zeroed in on their exact location - inside a forest surrounding the station. With the agencies having no doubt on what the target of the fidayeen was, the security forces had tried to cordon off the forest from 7 pm onwards on January 1, in a bid to contain them inside till sunrise. But eight hours later, the "suicide squad" managed to breach the security cordon, mainly comprising Punjab Police and Army personnel and finally struck their target. With the security agencies drawing flak for the prolonged operation and number of casualties, intelligence sources said the operation was not an 'operational failure'. It was only because they had prior and specific inputs of the fidayeen's target that the terrorists were contained in the non-technical area of the station, they said. "They were not allowed to reach the vital installations. And even the casualties are not as high as could be," they said, adding that barracks of the Defence Services Corps and other areas, along the periphery of the air force station, had been vacated to thwart heavy loss of lives. The terrorists gave a missed call to their handlers in Pakistan using a cellphone of a taxi driver, Ikagar Singh, who was killed by the terrorists on the night of December 31 and January 1. The handlers then called back on the number. The signals received from the phone helped the agencies to "know about" the location of the terrorists in the forest. The first intelligence alert was sounded off on December 29, specifying that 16 terrorists would be infiltrating into the Indian territory. The alert clearly mentioned that the incursion would take place from Bamiyal. It also mentioned that the most likely target was the Air Force station due to "less-intense" patrolling there. Sources told The Tribune that on January 1 afternoon, after SP Salwinder Singh had been thoroughly questioned by top officers of the Punjab Police and other security agencies, they were convinced that some terrorists had infiltrated into the Indian territory. Later, the SP informed about the incident to his seniors in the Pathankot police, who reportedly disapproved of his version. The Punjab Police were put on alert only after Rajesh was found with a silted throat and the SP and Rajesh's versions were corroborated.

## Oregon standoff: Why did armed militia members take over a wildlife refuge?

Armed protesters continue to occupy a building at a national wildlife refuge in a remote part of Oregon as they argue that a father and son who are headed back to prison for arson on federal lands are being sent there unfairly. Why are they doing it and what do they hope to gain? Here are a few things to know about the standoff. What was the spark? A father and son in Burns, Oregon, were convicted three years ago of burning federal land in Oregon. Dwight Hammond, 73, served three months in prison on the conviction, and his son, Steven, 46, served one year. In October, however, a federal judge ruled the pair had served too little time under a federal anti-terrorism law that requires a mandatory minimum sentence of 5 years for fires that damage public property but cause no injury or death. The two were ordered back to prison to serve four years each. They are to report Monday morning. Why did they burn the land? The Hammonds claimed they burned the land to reduce the growth of invasive plants and to protect their land, which borders federal property, from wildfires. Prosecutors say the fire set in 2001 which burned 139 acres of Bureau of Land Management lands, was set to cover-up illegal deer hunting. Who is protesting? Around 300 people rallied in Burns, Oregon, Saturday in protest of the adjusted sentences for the Hammonds whose property is nearby. Saturday afternoon, a group from the protests took over the wildlife refuge. The leader of the standoff is Ammon Bundy. Bundy is the son of Cliven Bundy who had his own run-in with federal authorities over grazing rights on federal lands. Ammon Bundy, along with a group of men described as militiamen from several other states, were the ones who occupied the Malheur National Wildlife Refuge nearly 300 miles southeast of Portland on Saturday. They are armed. Bundy claims there are 100 men there. That number has not been confirmed. Do the Hammonds want the help? "Neither Ammon Bundy nor anyone within his group/organization speak for the Hammond Family," the Hammonds' lawyer W. Alan Schroeder wrote to local law enforcement authorities this weekend. According to The Associated Press, Dwight Hammond has said he and his son plan to peacefully report to prison Monday as ordered by the judge. "We gave our word that's what we would do, and we intend to act on it," he told The AP last week. What is the Malheur National Wildlife Refuge? The refuge, according to a National Parks website, is a federal wildlife preserve where, "People and wildlife have been drawn to the resources of this oasis of wetlands in the high desert of Oregon for thousands of years. With over 320 bird species, Malheur is a mecca for birdwatchers." The refuge is located half an hour south from Burns near Malheur Lake. The refuge is closed "until further notice," and has posted this explanation on its website: "The Fish and Wildlife Service is aware that an unknown number of armed individuals have broken into and occupied the Malheur National Wildlife Refuge facility near Burns, Oregon. While the situation is ongoing, the main concern is employee safety and we can confirm that no federal staff were in the building at the time of the initial incident. We will continue to monitor the situation for additional developments."

## Snowflake coral, a serious threat to biodiversity

Colonies of snowflake coral ( *Carijoa riisei* ), an invasive species recently documented off the coast of Thiruvananthapuram and Kanyakumari, could pose a serious threat to the marine ecology of the region, according to scientists. Scuba divers working for Friends of Marine Life (FML), a local NGO, have recorded the presence of several colonies of the fast-growing alien species amid barnacle clusters on the rocky reef off the coast of Kovalam in Thiruvananthapuram and Enayam, Kanyakumari. The documentation was done as part of a research project harnessing the traditional knowledge of the fishermen community to assess the marine biodiversity of the region. The snowflake coral is known to inhabit reefs and underwater structures such as shipwrecks and piers, attaching itself to metal, concrete and even plastic. It is considered an invasive species because of its capacity to dominate space and crowd out other marine organisms. Researcher Robert Panipilla, who coordinated the project, said the colonies of the soft coral were documented at 10 m depth off Kovalam and 18 m depth off Enayam. "Last month, we deployed scuba divers after receiving information from local fishermen that the species had colonised parts of the reef," he said. A native of the tropical Western Atlantic and the Caribbean, *C.riisei* was first reported as an invasive species from Hawaii in 1972. Since then, it has spread to Australia, Thailand, Indonesia and the Philippines. In India, it has been reported from the Gulf of Mannar, the Andaman and Nicobar Islands, Gulf of Kutch and Goa. With its capacity to thickly settle and occupy a variety of surfaces, *C.riisei* can destabilise the marine ecosystem, says K. Padmakumar, Pro Vice Chancellor, Kerala University of Fisheries and Ocean Studies (KUFOS). He fears it will crowd out other species like corals, sponges, algae, ascidians that contribute to the rich marine biodiversity of the region. Because of the lack of baseline data, *C.riisei* is not recognised as an invasive species in India. Prof. Padmakumar, who had published the presence of *C.riisei* in the Gulf of Mannar in 2011, said the presence of the soft coral colonies off the southern coast could also lead to livelihood issues. "The mussel beds off the Vizhinjam coast are vulnerable to *C.riisei* invasion since the coral preys on the mussel larvae," he says. Mr. Robert said the FML would share the findings of the survey with the scientific community to evolve a management strategy for the invasive species.

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## Disruptive innovations, gender diversity to dominate HR space

The year 2016 will see more companies allocating increased funds for HR analytics. Disruptive innovations are creating new business models, while new technologies, data analytics and social networks are having a huge impact on how people communicate, collaborate and work. As we step into 2016, it would be interesting to see how organisations prepare to attract and retain the best talent while ensuring business continuity and efficiency. It will be an imperative HR function to emerge as a strategic business partner that prepares the organisation for a digital future. Gender diversity will take centre stage: 2015 saw organisations appoint women in leadership roles. This is going to take centre stage in 2016 in order to promote gender diversity. This is indicated by McKinsey Global Institute's report on The Power of Parity, which establishes that advancing women's equality can add \$12 trillion to global growth. As per the report, India has a larger relative economic value at stake from advancing gender equality than any of the ten regions analysed. It also states that India could add \$700 billion of additional GDP in 2025, upping the country's annual GDP growth by 1.4%. Focused talent management: As leaders steadily realise the worth of their human capital, every aspect of talent management will change. The ideal talent life cycle will now be goal-centric at every phase. From recruiting to off-boarding, every life cycle change that talent goes through will have a focus on organisational value-based goals. Continued use of HR analytics: A recent Deloitte study revealed 57% of human resource departments increased spends on analytics. HR will facilitate this move towards data-based, objective workforce decisions by being the procurers and analysts of the data that organisations have been housing for years. Adoption of innovative employee engagement practices: The year 2015 saw relaxing of maternity and paternity leave policies and dress code at work places. The year 2016 will see organisations introduce more such flexible and innovative initiatives. Re-engineering performance management processes: Traditional performance management is being replaced with innovative performance solutions to value and retain top talent while also helping medium performers do better. The author is chief human resource

## Earthlings and aliens, the changing perspectives as we push the envelope

BY Vasanthi Suresh

Humans will be the ETs when they set foot on other planets through space expeditions

"The surest sign that intelligent life exists elsewhere in the universe is the fact that it has never tried to contact us." I recently came across this statement in a forwarded post and could not help smiling. And it brought to mind stories and movies about aliens, portrayed in many instances as hostile, with humans teaming up to save the earth from these extraterrestrial invaders. A passing thought that may pop up at this moment is why any aliens would bother to destroy our planet, when we are doing such a great job ourselves - they just need to stand back and watch us pay the price for our irresponsible decisions and actions over hundreds of years. We probably had an alien spy or two participating in the Paris climate summit and gleefully transmitting information to their counterparts in outer space. Stephen Hawking, the theoretical physicist and cosmologist, wrote: "We are in danger of destroying ourselves by our greed and stupidity. We cannot remain looking inwards at ourselves on a small and increasingly polluted and overcrowded planet. I don't think the human race will survive the next thousand years, unless we spread into space." On this point, you cannot help hoping it is not too late to undo the damage done, maybe by totally banning non-biodegradable material and taking strong measures to control activities that cause pollution. On a different note, he said: "I believe alien life is quite common in the universe, although intelligent life is less so. Some say it has yet to appear on Planet Earth." Good one, that! Talking about aliens, it is funny to think that the boot is on the other foot now - with several programmes on the theme of "Destination Mars" being rolled out by different groups or agencies, humans will be the aliens setting foot on other planets. The millionaire Dennis Tito, the world's first space tourist, is the source behind "Inspiration Mars", which proposes to launch a manned mission, not to actually land on the red planet but zoom within a hundred miles of its surface and return to earth. The Netherlands-based non-profit organisation Mars One hopes to land astronauts on Mars by 2026, but this is supposedly a one-way trip, with no return plan addressed. Still, more than two lakh people applied for the honour of being among the first few aliens to visit Mars. Billionaire entrepreneur Elon Musk envisions a colony in Mars, with a population of 80,000 human beings. The key to this plan lies in developing the right space launch vehicle and this is the immediate focus of his organisation, SpaceX. NASA's human spaceflight programme too has the long-term goal of getting astronauts to the vicinity of the red planet by the mid-2030s. Of course, the Mars Orbiter Mission marks India's first venture into the interplanetary space and will explore the possibility of life on the planet. If life does exist on Mars, I wonder how Martians would regard these proposed expeditions into their space. Would they perceive these experiments as a business continuity plan for Planet Earth? That in order to sustain human life if (or when) Earth becomes uninhabitable (from the effects of catastrophic global warming, new virulent strains of pathogenic bacteria, or some such development), alternative worlds need to be explored, and with Destination Mars being rolled out, humans are daring to cross the frontier lines of Planet Earth, with an intent to check if life exists and if human colonies can be set up? Would the word "colonies" send a chill down their spine, bringing images of earth's colonial era to the forefront, where the hosts were dominated and trampled upon by the visitors from other continents? Or would they be glad to be regarded as a favourite space tourism spot for future generations, eager to exchange tall tales of hazardous journeys in the Milky Way and debate on the dangers of earthquakes over 'mars shakes'? Not really digressing from the topic on hand, but may be jumping the gun the slightest bit - on the lines of etiquette and netiquette, do we need to start brainstorming on the dos and don'ts around interplanetary etiquette?

## 'Make in India' gets ambitious, flying cars, e-nose on wishlist

MYSORE: India's technology think tank under the ministry of science & technology has come out with 'Technology Vision 2035' here at the ongoing Indian Science Congress, identifying the challenges ahead and how they can be dealt with through technological interventions while realizing the dream of a developed India by the year 2035. The think-tank -- Technology Information, Forecasting and Assessment Council (TIFAC) -- in the Vision document lists a technology road-map for India, giving details of 12 sectors and technologies that in some cases exist but need to be deployed, some in the pilot stage that must be scaled up and technologies in R&D stage. It, in fact, talks about many future technologies, ranging from flying cars, real time translation software, personalized medicine, wearable devices, e-sensing (e-nose and e-tongue) to 100% recyclable materials among others which may be used in different areas to solve day-to-day problems. "The trajectories delineated as part of this 'Technology Vision 2035' along with its actualization would not only lead to the desired quality of life for citizens but also boost our comprehensive national power", said Prime Minister Narendra Modi in his foreword to the document, while emphasizing that the pressure on country's resources can only be solved through use of technology. The document was released by the PM after he inaugurated the 103rd Indian Science Congress on Sunday where he promised that his government would "make it easier to do science and research" in India and envisioned a future in which innovation makes lives of people better.. Interestingly, the document also talks about technology which still dwells in the imagination, saying these may become real as "a result of curiosity driven, paradigm shattering research (called blue sky research)". As part of those 'blue sky' research ideas, the government think tank imagined the concept of virtual courts and digital evidence; complex real-time dynamic disaster management response systems; sensing devices to be able to feel the product on internet before buying it; machines\robots to connect all personal and emotional needs; intelligence vehicles to detect emergency situations and take over the control and inter-planetary communications systems. "This is not a vision of technologies available in 2035 per se; rather, it is a vision where our country and compatriots should be in 2035 and how technology would bring this vision to fruition", said the document before elaborating on how the sector-wise 'future technologies' can bring change to the lives of people. This is the second time the ministry's think tank has come out with such a vision document. The first one - Technology Vision 2020 - had come under A P J Abdul Kalam in 1996 with a view to sketch the scenario as of the year 2020. "Decade and a half down the line, it is important to repeat such an exercise to review the actual state of play and take into account new possibilities and challenges that would take the country to the year 2035", said the preamble of the 2035 Vision. Besides the key sectors like health, education, transport, energy, food\agriculture and manufacturing, the Technology Vision 2035 also mentioned environment, information & communication technologies, infrastructure, materials, habitat and water as important areas where future technologies will be able to solve day-to-day problems of citizens by better utilization of available resources and skilled manpower.

# So, what could be wrong with free Internet?

By Parminder Singh

Facebook has been splurging money on a simple argument, what's wrong with giving free Internet to those who cannot afford it, even if it is somewhat limited? Isn't it better than having no Internet? The Free Basics package will especially include content most relevant to people in poverty. Everyone, meanwhile, retains the same right to access the full Internet as they had before. But why are so many against this apparent act of selfless service? If indeed the idea is to ensure an Internet for all, whether one can afford it or not, it is best done by declaring a basic access to the Internet as a right. And making it a licensing condition for telcos to provide every citizen a minimum monthly quota of free telephone time and data. Further, with increasing digitalisation of governance and other essential services, it can be mandated that access to all such basic services, as identified by the regulator and not a private company like Facebook, will remain free of any data/call charges, at all times. One cannot be denied access to basic public and other essential/emergency services for having run out of one's data package. If the Free Basics debate is really about the digital rights of the marginalised, then these are the directions to think in. Normally, the most forceful point against Net Neutrality has been that it will stifle investment by reducing telcos' profits. This more honest argument looks the opposite of the one expressing corporate zeal for serving the excluded, even at the expense of earning revenue. It is therefore worth inquiring how free services can enhance revenues and what can be wrong with it. The real problem with Free Basics, or zero rating, requires us to first understand the nature and role of the Internet in the emerging digital network society. The Internet is not only a telecommunication system, or just a new social media. In early years of the industrial revolution, the media first got called as the fourth estate. As recognition of its social role grew, the media attracted special regulatory approaches and was not treated as a normal commercial sector. Today, with an emerging digital network society, it is similarly important to understand the Internet as a new kind of horizontal, foundational and a social layer. It is causing and underpinning far-reaching digital transformations across all sectors of society, from governance, democracy, education and health, to transport and entertainment, to work, trade and business. The regulation of the Internet must focus on this unique social-structural role. Internet platforms is a useful emerging regulatory term, especially in Europe. The Internet being foundational to our digitally reprogrammed social systems, it is important to ensure its complete neutrality, providing a fully even-playing field to all actors and activities on it. True to the foundation/superstructure analogy, the smallest unevenness, or relative advantage/disadvantage, in the Internet layer, can get magnified manifold in its actual impact in every sector, and thus overall on society. This is why it is so important to protect ex-ante the basic design of the Internet, of which full Net Neutrality is a core principle. Any distortion in its basic design will get magnified and incorporated into the superstructure, affecting all areas of society. The decisions that we face today about Internet's regulation thus pertain to the very design of the emerging social paradigm, especially in terms of its egalitarian potential. The current early stages of the digital network society suggests a tendency towards increased monopolisation in every sector as it becomes digital. All digital social systems require the public Internet as the essential public layer to connect to the people. It thus becomes the all-important manoeuvring zone for people, enabling some degree of resistance to monopolisation, allowing interoperability and switch-overs across different options. But if this public connectivity layer is also allowed to be rigged, by selling privileged transit over it, the risk of monopolisation and lock-ins by a few corporates over key social sectors gets greatly enhanced. This is the real problem with zero or differential rating, where connectivity costs for consumers are fully or partly offset by content providers in exchange for subverting the egalitarian design of the Internet. This original design ensures that all content on the Internet is given exactly the same treatment. Cause for inequity. One can already predict monopoly in digital education and health service companies, for instance, becoming a societal challenge, within the next few years. If they are also able to have privileged access to people through zero rating, it would be as good, or bad, as handing over our education and health sectors to them.

part-2

**So, what could be wrong with free Internet?**

Contd...

This extraordinary value of the Internet as the people connecting layer means that it is a small price for the monopoly-inclined corporates to pay the telcos for its privileged use, rather than the consumers paying for connectivity. Telcos also realise that, while the value transiting through their networks with increasing digitalisation of society is almost limitless, what they can charge consumers for connectivity has its limits. Instead, charging those who use a privileged transit over their networks to consolidate monopolies, and profiteer from it, is an ever expanding source of revenue. Facebook may, right now, not be paying anything to Reliance for Free Basics, but telcos' only long-term interest in allowing such free use of their network is to open up the possibility of Net Neutrality violations, leading to revenue streams from the content providers' side. The proverbial thin end of the wedge! Once such a defect in the Internet's basic design, meaning the zero or differential rating model, is allowed to take root, given the extremely high economic stakes involved, it will quickly propagate and consolidate as the default. At that stage, it may be impossible to reverse it. Strong regulatory intervention is, therefore, urgently required to expressly and fully disallow this model, which alone can keep the Internet open and egalitarian. Facebook is basically arguing that the poor cannot afford regulatory protections about what kind of media/ Internet they get. It is similar to a media organisation offering free or cheaper news to the poor in exchange for being released from regulatory constraints, like the ban on paid news, and keeping a minimum ratio of editorial to advertisement space. So we get two versions of a healthy Internet-like healthy media, healthy education system and well-regulated health sector-one for the rich and another for the poor. The politico-ideological basis of such reasoning is quite problematic and is made worse when unleashed in the name of "digital equality."

DESIDOC

# Gene editing to treat muscular dystrophy

By Nicholas Wade

After decades of disappointingly slow progress, researchers have taken a substantial step toward a possible treatment for Duchenne muscular dystrophy with the help of a powerful new gene-editing technique. Duchenne muscular dystrophy is a progressive muscle-wasting disease that affects boys, putting them in wheelchairs by age 10, followed by an early death from heart failure or breathing difficulties. The disease is caused by defects in a gene that encodes a protein called dystrophin, which is essential for proper muscle function. Because the disease is devastating and incurable, and common for a hereditary illness, it has long been a target for gene therapy, though without success. An alternative treatment, drugs based on chemicals known as antisense oligonucleotides, is now in clinical trials. But gene therapy - the idea of curing a genetic disease by inserting the correct gene into damaged cells - is making a comeback. A new technique, known as Crispr-Cas9, lets researchers cut the DNA of chromosomes at selected sites to remove segments or insert new ones. Three research groups, working independently of one another, reported in the journal *Science* that they had used the Crispr-Cas9 technique to treat mice with a defective dystrophin gene. Each group loaded the DNA-cutting system onto a virus that infected the mice's muscle cells and excised from the gene a defective stretch of DNA known as an exon. Without the defective exon, the muscle cells made a shortened dystrophin protein that was nonetheless functional, giving all of the mice more strength. The teams were led by Charles Gersbach of Duke University, Eric Olson of the University of Texas Southwestern Medical Centre and Amy Wagers of Harvard University. "The papers are pretty significant," said Louis Kunkel, a muscular dystrophy expert at Boston Children's Hospital who discovered the dystrophin gene in 1986. The dystrophin protein plays a structural role, anchoring each muscle fiber to the membrane that encloses the muscle-fibre bundle. The dystrophin gene, which guides the protein's production in the cell, sprawls across about 1 per cent of the X chromosome and is the largest in the human genome. That gene has 79 sections, or exons, but can evidently maintain reasonable function even if a few exons in the middle are lost. The protein works as long as its two ends are intact. This is what happens in a milder disease known as Becker muscular dystrophy, in which mutations cause instructions from a few exons to be skipped during protein-making process. In Duchenne muscular dystrophy, however, mutations cause muscle cells to make a truncated protein missing one end, and this protein does not work at all. This difference suggests a possible treatment strategy: removing damaged exons from Duchenne patients so that their muscle cells produce an intact, though shorter, dystrophin protein, much like that seen in Becker patients. Clinical trials. All three teams have filed for patents. But considerable work lies ahead before clinical trials can start. It is not clear how the human immune system would react to the components of the gene editing system or to modified dystrophin proteins to which it has not been habituated. If a gene therapy for muscular dystrophy can be developed, it will compete with the antisense oligonucleotide drugs that are already in clinical trials. These work on the same principle of avoiding damaged exons, but instead of cutting them out of the DNA, they force the exons to be skipped at a later stage of the protein manufacturing process. The drugs do not target the heart muscles very well, however, and they must be given weekly. A gene therapy treatment should last longer. "The advantage of the DNA approach is that the cell has no choice but to make the protein you want," Wagers said. Some fear that Duchenne patients may get only one shot at treatment before developing resistance to the virus used to edit the defective exons. But Gersbach played down this concern. "The hope for gene editing is that if we do this right, we will only need to do one treatment," he said. "This method, if proven safe, could be applied to patients in the foreseeable future." Olson also said that progress would be rapid. "To launch a clinical trial, we need to scale up, improve efficiency and assess safety," Olson said. "I think within a few years, those issues can be addressed."