

# Nuclear, Missile & Space Digest

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A Fortnightly Newsletter from the MP-IDSA

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## A. India

- India eyes new missile testing range in Andhra Pradesh post CCS approval: All you need to know
- 2 satellites part of space docking experiment handed over to Isro
- India launches 4th nuclear-missile submarine
- India to target moon's south pole with sample return mission

## B. Pakistan

- Pakistan's weapons programs face scrutiny after US curbs

## C. China

- With jets and ships, China is honing its ability to choke Taiwan
- China's openness about its latest nuclear missile test shows growing confidence vis-à-vis the United States
- China launches new Earth observation satellite
- How China used a 'paper tiger' to emerge as a nuclear weapon superpower
- Chinese Foreign Ministry on its no-first-use nuclear policy
- China's ballistic missile launch site discovered by researchers
- China's Chang'e-6 lunar samples make global debut at IAC in Italy
- Chinese researchers develop "lunar bricks" for future lunar base construction
- China declares success as its youngest astronauts reach space

## D. Russia

- U.S. warns of growing nuclear and missile threats by North Korean military in support of Russia
- Russia flaunts its many doomsday weapons to keep the West from ramping up support for Ukraine
- Drone Attacks Russian Special Forces University in Chechnya
- Russia Simulates 'Massive' Nuclear Response to Enemy Attack
- U.S. Says North Korean Troops Ready for Ukraine Combat as Missile Raises Tensions

## **E. Europe**

- France mulls U.A.E partnership for Rafale F5 fighter jet development
- Further delays and hurdles for EU Space Law
- European agency offers support for struggling space sector
- Europe agency says it is in talks with SpaceX on tackling space junk
- Italy, Qatar to Jointly Develop Short-Range Anti-Drone Radar
- Europe's bold 'Explore 2040' campaign aims to get astronauts to the moon and Mars

## **F. The United States of America**

- Fearing China's hypersonic weapons, US Navy seeks to arm ships with Patriot missiles
- US approves possible sale of TOW missiles to Saudi Arabia

## **West Asia**

### **G. Bahrain**

- HH Shaikh Nasser bin Hamad meets national cyber security centre members
- Barzan Holdings driving growth of Qatar's defence sector

### **H. Iran**

- What are Iran's missile capabilities?
- Iran's nuclear doctrine should be revised
- Are Iran's oil, nuclear sites safe from Israel attack?
- Supplying Israel with 30,000-pound bombs could deter Iran's nuclear threat - opinion

### **I. Israel**

- IDF reveals 70% of Hezbollah drones have been destroyed
- Iranian leader Khamenei said to order reprisal attack on Israeli military sites

### **J. Lebanon**

- Hezbollah appoints Sheikh Naim Qassem as new chief
- Hezbollah launches barrage of rockets at Israeli settlements
- Hezbollah launches massive drone attack on Israel

### **K. Oman**

- Oman's first rocket to take off in December, confirms Etlag

### **L. Turkiye**

- France mulls U.A.E partnership for Rafale F5 fighter jet development

**M. East Asia**

- North Korea confirms launch of ICBM in longest-ever ballistic missile test
- North Korea's long-range missile test signals its improved, potential capability to attack US

**N. Southeast Asia**

- US militarizing region with mid-range missile system deployment in Philippines: experts
- PLA Navy tests South China Sea defences as Vietnam and Philippines expand footprint

## A. India

### India eyes new missile testing range in Andhra Pradesh post CCS approval: All you need to know

*CNBC TV 18, October 16, 2024*

The Cabinet Committee on Security (CCS), led by Prime Minister Narendra Modi, recently gave its approval for the establishment of a new missile testing range in the Nagayalanka area of Andhra Pradesh's Krishna district. This will allow the defence researchers in the country to test a large number of tactical missile systems.

"I thank the Hon'ble Prime Minister Shri @narendramodi Ji and the Cabinet Committee on Security (CCS) for approving the establishment of a new missile testing range in Nagayalanka in Andhra Pradesh. Proud that Krishna Dist. will play a significant role in boosting our nation's defence infrastructure," Andhra Pradesh Chief Minister N Chandrababu Naidu wrote on X. Andhra Pradesh minister and BJP leader Satya Kumar Yadav said the upcoming facility will significantly boost India's defence capabilities and would enable testing of "surface-to-air and anti-tank missiles, ensuring enhanced national security."

<https://www.cnbctv18.com/india/india-eyes-new-missile-testing-range-in-andhra-pradesh-post-ccs-approval-details-19493830.htm>

### 2 satellites part of space docking experiment handed over to Isro

*Business Standard, October 18, 2024*

Hyderabad-based Ananth Technologies on Friday handed over two 400 kg class satellites to ISRO, which will be part of the Space Docking Experiment planned by the space agency later this year.

The satellites will be launched onboard the PSLV-C60 mission slated for a December launch and considered a stepping stone for future missions such as the Indian space

station and Chandrayaan-4 mission that aims to bring lunar rock and soil samples back to earth.

The Polar Satellite Launch Vehicle (PSLV) rocket for the mission is also being built at a facility of Ananth Technologies Private Limited (ATL) in Thiruvananthapuram.

[https://www.business-standard.com/india-news/2-satellites-part-of-space-docking-experiment-handed-over-to-isro-124101801018\\_1.html](https://www.business-standard.com/india-news/2-satellites-part-of-space-docking-experiment-handed-over-to-isro-124101801018_1.html)

### India launches 4th nuclear-missile submarine

*Hindustan Times, October 22, 2024*

In the midst of a diplomatic spat with Canada, India quietly launched its fourth nuclear powered ballistic missile (SSBN) submarine at Ship Building Center (SBC) in Visakhapatnam this week to strength its nuclear deterrence against its adversaries.

While India's second SSBN INS Arighaat was commissioned by Defence Minister Rajnath Singh on August 29, 2024, the third SSBN INS Aridhaman will be commissioned next year. On October 9, the Cabinet Committee on Security (CCS) cleared the Indian Navy's plans for construction of two nuclear powered attack submarines to deter any adversaries in the Indo-Pacific.

Although the Modi government is tight-lipped on nuclear deterrence, the fourth SSBN, codenamed S4\*, was launched on October 16, a day after Defence Minister Rajnath Singh inaugurated Very Low Frequency Naval Station in Damagundam forest area of Vikarabad district in Telangana for command, control and communications with strategic assets of the Indian Navy.

<https://www.hindustantimes.com/india-news/india-launches-4th-nuclear-missile-submarine-101729560730642.html>

## India to target moon's south pole with sample return mission

*Space News, October 23, 2024*

India's Chandrayaan-4 lunar sample return mission will target a landing between 85 and 90 degrees latitude in the southern hemisphere of the moon, and follow up with a joint lander and rover mission with Japan.

The Chandrayaan-4 mission will consist of two stacks launched on two separate rockets and will target the vicinity of the lunar south pole, according to P. Veeramuthuvel of the Indian Space Research Organization (ISRO), speaking at the International Astronautical Congress (IAC) in Milan, Oct. 17.

The mission will aim to collect around three kilograms of samples from near the south pole, around which water-ice is thought to be available. ISRO will require several new technologies, including the ability to scoop from the surface and drill to a depth of around two meters to sample the subsurface.

### B. Pakistan

## Pakistan's weapons programs face scrutiny after US curbs

*Voice of America, October 23, 2024*

The latest U.S.-imposed restrictions on entities supporting Pakistan's defense programs may hinder Islamabad's future efforts to acquire sensitive defense technologies and its collaboration with China but are unlikely to affect Pakistan's weapons development for now, experts say.

Sixteen Pakistani firms were among 26 international companies added this week to a U.S. "entities list," making them ineligible to acquire U.S. items and technology without government authorization.

Companies or individuals can be placed on the list if they are "involved or pose a significant risk of being or becoming involved in activities contrary to the national

security or foreign policy interests of the United States," according to a U.S. Commerce Department statement.

Nine of the 16 Pakistani companies added to the blacklist this week were accused of being front companies for a previously sanctioned company, Advanced Engineering Research Organization, deemed responsible for the country's cruise missile and strategic drone programs.

The remaining seven entities were added for contributions to Pakistan's ballistic missile program, the Commerce Department statement said. Other companies added to the list this week were accused of procuring U.S.-made items with military applications for China, Iran, Egypt and the United Arab Emirates.

<https://www.voanews.com/a/pakistan-weapons-programs-face-scrutiny-after-us-curbs/7836490.html>

### C. China

## With jets and ships, China is honing its ability to choke Taiwan

The New York Times, October 16, 2024  
The Chinese warplanes, deployed in record numbers, crossed an informal boundary between China and Taiwan. Chinese Coast Guard boats joined naval ships in encircling Taiwan. Fighter jets took off from an aircraft carrier parked off the island's east coast. The large-scale military drills China held this week were aimed at demonstrating its potential to choke Taiwan's access to food and fuel and block the skies and waters from which the United States and its allies would presumably approach in coming to the island's defence. China's tightening military squeeze on Taiwan is imposing a new normal — creating daily pressure that exhausts the island's defense forces and increases the incentive for Taiwan to capitulate without a fight.

<https://www.nytimes.com/2024/10/16/world/asia/china-taiwan-blockade-drills.html>



## China's openness about its latest nuclear missile test shows growing confidence vis-à-vis the United States

*Bulletin of the Atomic Scientists, October 16, 2024*

China's Ministry of National Defense announced last month that the People's Liberation Army Rocket Force (PLARF) had successfully launched an intercontinental ballistic missile (ICBM) carrying a simulated warhead into the Pacific Ocean and that the missile accurately fell into the designated area. This was the first time since 1980 that China had test-fired an ICBM into international waters. But the test launch was part of routine annual training, the ministry added, in line with international law and international practice, and not directed against any country or target. Just as observers were vigorously speculating about the type of missile used in the test, China Junhao (China's military media wing) cut short the discussions, releasing pictures of the launch site—a very rare step given that the Chinese army has not made public a photo of the launch of a new ICBM for decades.

<https://thebulletin.org/2024/10/chinas-openness-about-its-latest-nuclear-missile-test-showsgrowing-confidence-vis-a-vis-the-united-states/>

## China launches new Earth observation satellite

*China Daily, October 16, 2024*

China sent a new Earth observation satellite into space from the Jiuquan Satellite Launch Center in Northwest China. It will be used in a variety of fields including land surveys, urban planning, road network design, crop yield estimation and disaster relief. The launch marked the 540th flight mission of the Long March carrier rocket series.

<https://www.chinadailyhk.com/hk/article/595401>

## How China used a 'paper tiger' to emerge as a nuclear weapon superpower

*South China Morning Post, October 16, 2024*

Sixty years ago, in the remote Lop Nur desert in the Xinjiang Uygur autonomous region, China successfully detonated its first atomic bomb, code-named "Miss Qiu". The test, on October 16, 1964, and the fission chain reaction it triggered, melted the top half of a 120-metre (394 feet) high iron tower. It was a pivotal moment in China's pursuit of nuclear weapons. On Aug 6, 1946, one year after the Hiroshima bombing, Mao Zedong was interviewed by American journalist Anna Louise Strong. "The atomic bomb is a paper tiger used by the American reactionaries to scare people," said Mao, who described the new killer weapon as scary looking, but in fact toothless. "Of course, the atomic bomb is a weapon of mass slaughter, but it is the people, not one or two new weapons, that decide the outcome of a war," he explained.

<https://www.scmp.com/news/china/military/article/3282498/how-china-used-paper-tigeremerge-nuclear-weapon-superpower>

## Chinese Foreign Ministry on its no-first-use nuclear policy

*Ministry of Foreign Affairs, the People's Republic of China, October 16, 2024*

On October 16, 1964, the Chinese government made a solemn declaration to the world that it undertakes not to be the first to use nuclear weapons at any time and under any circumstances. History and reality have proved that no-first-use of nuclear weapons is conducive to enhancing strategic mutual trust, advancing the nuclear disarmament process, effectively reducing strategic risks, and promoting global strategic balance and stability. Over the past six decades, the no-

first-use policy has been increasingly becoming an important consensus and priority in the field of international arms control. This year, China submitted a working paper on mutual no-first-use of nuclear weapons at the Second Session of the Preparatory Committee for the 11th NPT Review Conference.

[https://www.fmprc.gov.cn/eng/xw/fjrbt/lxjzh/202410/t20241016\\_11508459.html](https://www.fmprc.gov.cn/eng/xw/fjrbt/lxjzh/202410/t20241016_11508459.html)

### **China's ballistic missile launch site discovered by researchers**

*Newsweek, October 17, 2024*

Researchers claimed that they have geolocated the launch site of a rare, publicized test of a nuclear-capable intercontinental ballistic missile (ICBM) in China. On September 25, the Chinese military launched a DF-31AG ICBM carrying a dummy warhead to the high seas in the Pacific Ocean. The missile has a reported range of 6,959 miles, capable of striking most of the continental United States with a nuclear warhead. China did not disclose the precise location of the launch site and the warhead's splash zone. Civil aviation notifications suggested that the missile was fired from the southern island of Hainan in China, while the warhead landed north of Tahiti in French Polynesia.

<https://www.newsweek.com/china-news-ballistic-missile-launch-site-discovered-researchersnuclear-weapons-1970400>

### **China's Chang'e-6 lunar samples make global debut at IAC in Italy**

*Global Times, October 19 2024*

China's Chang'e-6 lunar samples retrieved from the far side of the moon made their global debut at the 75th International Astronautical Congress (IAC) held in Milan, Italy from October 14 to 18. The display of such precious lunar samples not only highlights China's advancements in space technology but also provides new research prospects for global space scientists, China National Space Administration (CNSA) said. Themed "Responsible Space for

Sustainability," this year's IAC in Italy brought together leaders of space agencies, international organizations, researchers, entrepreneurs and astronauts representing more than 100 countries and regions. The IAC showcased the latest space technologies and achievements, delving into topics such as sustainable exploration of the moon and Mars, space observation of Earth's climate change, the role of private enterprises in space, and the applications of artificial intelligence, the CNSA said in a statement it provided to the Global Times.

<https://www.globaltimes.cn/page/202410/1321483.shtml>

### **Chinese researchers develop "lunar bricks" for future lunar base construction**

*Xinhua, October 20, 2024*

Chinese researchers have developed bricks from a material that has a similar composition to lunar soil, with the hope that they can be used to build a lunar base in the future. According to a recent video clip provided to Xinhua by the Huazhong University of Science and Technology, a team of researchers led by Ding Lieyun used a lunar soil simulant to make "lunar bricks" that are more than three times stronger than standard red bricks or concrete bricks. The team also developed another construction option using additive manufacturing technology. The researchers invented a 3D-printing robot to print houses using lunar soil. According to China Central Television, the lunar bricks will be sent to China's space station aboard the Tianzhou-8 cargo spacecraft to verify their mechanical and thermal performance, as well as their ability to withstand cosmic radiation. The first lunar brick is expected to return to Earth by the end of 2025.

<https://english.news.cn/20241020/3819f1f71984442da7a5c22687d260b8/c.html#:~:text=According%20to%20China%20Central%20Television,by%20the%20end%20of%202025>

## China declares success as its youngest astronauts reach space

*BBC, October 30, 2024*

A Chinese spacecraft with a three-person crew, including the country's first female space engineer, has docked after a journey of more than six hours.

The crew will use the homegrown space station as a base for six months to conduct experiments and carry out spacewalks as Beijing gathers experience and intelligence for its eventual mission to put someone on the Moon by 2030.

Beijing declared the launch of Shenzhou 19 a "complete success" - it is one of 100 launches China has planned in a record year of space exploration as it tries to outdo its rival, the United States.

The BBC was given rare access to the Jiuquan Satellite launch centre in Gansu and we were just over a kilometre away when the spacecraft blasted off.

<https://www.bbc.com/news/articles/c5yp47prg7jo>

### D. Russia

## U.S. warns of growing nuclear and missile threats by North Korean military in support of Russia

*PBS News, October 16, 2024*

The U.S. and its allies are "alarmed" by North Korea's nuclear and missile threats as well as its increasing military support for Russia's war in Ukraine, a senior U.S. official said Wednesday, but couldn't confirm Ukrainian claims that North Korean soldiers were sent to fight for Moscow.

U.S. Deputy Secretary of State Kurt Campbell spoke with reporters following discussions with South Korean and Japanese counterparts on reinvigorating an international pressure campaign against North Korea, which faltered in recent years amid a deepening divide at the U.N. Security Council.

Earlier on Wednesday, Washington, Seoul and Tokyo announced plans with eight

Western governments to launch a new multinational team to monitor the enforcement of sanctions against North Korea.

Russia in March vetoed a U.N. resolution in a move that effectively abolished monitoring by U.N. experts of Security Council sanctions against North Korea. It prompted Western accusations that Moscow was acting to shield its arms purchases from Pyongyang to fuel its war in Ukraine.

<https://www.pbs.org/newshour/world/u-s-warns-of-growing-nuclear-and-missile-threats-by-north-korean-military-in-support-of-russia>

## Russia flaunts its many doomsday weapons to keep the West from ramping up support for Ukraine

*AP, October 18, 2024*

This year has seen President Vladimir Putin repeatedly brandish the nuclear sword, reminding everyone that Russia has the world's largest atomic arsenal to try to deter the West from ramping up support for Ukraine.

He ordered his military to hold drills involving battlefield nuclear weapons with ally Belarus.

He announced Russia will start producing ground-based intermediate range missiles that were outlawed by a now-defunct U.S.-Soviet treaty in 1987.

And last month, he lowered the threshold for unleashing his arsenal by revising the country's nuclear doctrine.

Putin is relying on those thousands of warheads and hundreds of missiles as an enormous doomsday machine to offset NATO's massive edge in conventional weapons to discourage what he sees as threats to Russia's sovereignty and territorial integrity.

<https://apnews.com/article/russia-putin-nuclear-weapon-doctrine-missiles-bf50d3155369cc0a5f12ef7805bf2340#>



## Drone Attacks Russian Special Forces University in Chechnya

*The Moscow Times, October 29, 2024*

An early morning drone strike damaged a special forces university in the North Caucasus republic of Chechnya, regional leader Ramzan Kadyrov said Tuesday, marking the first such attack on the region since the full-scale invasion of Ukraine.

"At 6:30 this morning, the roof of an empty building on the territory of the Russian Special Forces University caught fire in Gudermes as a result of an unmanned aerial attack," Kadyrov said, referring to a town around 36 kilometers (22 miles) east of the capital Grozny.

Images shared on social media showed fire and black smoke rising from what appeared to be the university's main campus roof.

"No one was killed or injured. The fire has been extinguished," Kadyrov wrote on Telegram, adding that the attack did not lead to disruptions at the university.

He did not say whether he believed the drone had been launched from Ukraine, noting only that police were investigating the incident. Chechnya is located around 600 kilometers (373 miles) southeast of the border with Ukraine.

<https://www.themoscowtimes.com/2024/10/29/drone-attacks-russian-special-forces-university-in-chechnya-a86838>

## Russia Simulates 'Massive' Nuclear Response to Enemy Attack

*The Moscow Times, October 29, 2024*

Russia's military test-fired ballistic missiles across the country Tuesday to simulate a "massive" nuclear response to an attack on the country.

The exercises came a month after President Vladimir Putin revealed plans to broaden Russia's rules on the use of its nuclear weapons. The Kremlin said the changes served as a warning to Western countries considering whether to allow Ukraine to fire long-range missiles deep inside Russian territory.

"Russia affirms its firm stance that the use of nuclear weapons is a last-resort measure for ensuring state security," Putin said at the start of Tuesday's exercise.

"In light of rising geopolitical tensions and emerging external threats, it is essential to have modern and combat-ready strategic forces," the Kremlin leader added, saying that Russia does want to engage in a "new arms race."

<https://www.themoscowtimes.com/2024/10/29/russia-simulates-massive-nuclear-response-to-enemy-attack-a86850>

## U.S. Says North Korean Troops Ready for Ukraine Combat as Missile Raises Tensions

*The Moscow Times, October 31, 2024*

The United States said Thursday that up to 8,000 North Korean troops have reached Russia's border region with Ukraine ready for combat, after Pyongyang's firing of a long-range missile ramped up tensions days before the U.S. election.

Seeking advantage in his grinding invasion of Ukraine, President Vladimir Putin has brought in troops from North Korea, the first time Russia has invited foreign forces on its soil in more than a century.

Citing U.S. intelligence, Secretary of State Antony Blinken said that some 8,000 of the 10,000 North Korean troops believed to be in Russia have made their way to the Kursk border region.

"We've not yet seen these troops deploy into combat against Ukrainian forces, but we would expect that to happen in the coming days," Blinken told a news conference after four-way talks with the South Korean foreign and defense ministers.

Russia has been training North Korean troops in artillery, drones, basic artillery operations and trench clearing, "indicating that they fully intend to use these forces in frontline operations," Blinken said.

Defense Secretary Lloyd Austin said that North Korean troops were being supplied with Russian uniforms.

<https://www.themoscowtimes.com/2024/10/31/us-says-north-korean-troops-ready-for-ukraine-combat-as-missile-raises-tensions-a86873>

### *E. Europe*

#### **France mulls U.A.E partnership for Rafale F5 fighter jet development**

*The Defense post, October 18, 2024*

France is considering collaboration with the United Arab Emirates (UAE) to develop the Rafale F5 next-generation fighter aircraft. The countries are currently in talks about co-financing the initiative, with Abu Dhabi potentially covering the non-sovereign components of the fighter jet.

Paris will maintain exclusive control over the jet's critical components, even if the other party agrees to the deal, according to French newspaper La Tribune. If the UAE accepts the proposed co-financing, it will be allowed to expand its fleet of 80 Rafale aircraft to 100 and participate directly in future F5 innovations. In 2023, French Minister of the Armed Forces Sébastien Lecornu announced plans to form a "Rafale Club" for current and future operators of the French-made aircraft the goal is to contribute to F5 development costs while ensuring sovereignty over critical components. The club would also strengthen France's relations with global Rafale clients. In addition to the UAE, existing and future Rafale clients such as Egypt, Qatar, India, Greece, Indonesia, and Croatia may opt to join the club.

<https://thedefensepost.com/2024/10/18/france-uae-rafale-jet/>

#### **Further delays and hurdles for EU Space Law**

*Defense News, October 18, 2024*

The widely anticipated proposal could include regulations or directives, or it could be "just a set of policy principles that would

apply to space activities in the EU internal market," Maria Elena De Maestri, University of Genova international law professor, said Oct. 18 at the International Astronautical Congress here.

Another question is timing. The EU Space Law, previously expected in early 2024, is not likely to be published until at least 2025, according to legal experts at IAC.

"If you are an EU lawyer, you often have to show an extraordinary amount of patience," said Frans Von der Dunk, University of Nebraska space law professor and a member of the International Law Association's Committee on Space Law representing the Netherlands. "I'm afraid this EU Space Law is also going to be a long and winding road." European Commission President Ursula von der Leyen announced in 2023 that an EU Space Law, focused on safety, resilience and sustainability, would be a priority for 2024. The goal was to reduce market barriers caused by differing national laws and to increase the competitiveness of the European space sector.

<https://spacenews.com/further-delays-and-hurdles-for-eu-space-law/>

#### **European agency offers support for struggling space sector**

*Reuters, October 24, 2024*

The European Space Agency unveiled plans on Thursday to speed up payments to the space industry in the face of mounting job cuts, while imposing more scrutiny following cost overruns and delays.

Director General Josef Aschbacher announced the measure after a council meeting of the 22-nation agency, a week after Airbus (AIR.PA), opens new tab announced 2,500 job cuts mainly in its loss-making satellites business.

"Profitability has been raised as a major issue," Aschbacher said, citing recent announcements at Airbus Defence and

Space and Franco-Italian rival Thales Alenia Space.

The proposed support will include increasing the level of downpayments on new contracts and releasing progress payments more quickly without waiting for all development milestones to be completed, "which of course takes much longer," he added.

But the package of help also comes with greater scrutiny.

Aschbacher said a newly formed Independent Project Management Authority would be tasked with examining new programmes to ensure they are "realistically prepared".

<https://www.reuters.com/technology/space/european-agency-offers-support-struggling-space-sector-2024-10-24/>

### **Europe agency says it is in talks with SpaceX on tackling space junk**

*Deccan Herald, October 24, 2024*

The European Space Agency is in talks with SpaceX about the possibility of Elon Musk's space venture joining an international charter designed to reduce a growing swarm of debris in space, Director General Josef Aschbacher told Reuters.

The 22-nation agency is spearheading one of several efforts to roll back the mass of space junk swirling round the planet from past missions that poses a risk to active satellites. Aschbacher said 110 countries or entities have joined ESA's Zero Debris charter, which aims to stop any new orbital garbage being generated by 2030. Asked whether SpaceX, whose satellites now make up some two thirds of spacecraft active in low Earth orbit, had signed up, Aschbacher said: "Not yet, but we are in discussion with them... This is a charter that keeps evolving and... we will keep raising the topics because they are so fundamental." SpaceX did not immediately respond to a request for comment.

<https://www.deccanherald.com/science/space/europe-agency-says-it-is-in-talks-with-spacex-on-tackling-space-junk-3246791>

### **Italy, Qatar to Jointly Develop Short-Range Anti-Drone Radar**

*The Defense Post, October 24, 2024*

Italian firm Fincantieri has signed a memorandum of understanding with Qatari Barzan Holdings to jointly develop a short-range anti-drone radar. Dubbed "Omega360," the program is part of broader strategic cooperation between the two countries. The deal is valued at 100 million euros (\$108 million), with the first units expected to be produced by the end of 2026. This follows a meeting in Rome between Italian Prime Minister Giorgia Meloni and the Emir of Qatar, Tamim bin Hamad Al-Thani, where they discussed security and defence partnerships. In a joint statement, the two leaders said they are "continuing the discussion on the establishment of an Italian military logistics hub in Qatar and promoting the coordination of exports in the region."

<https://thedefensepost.com/2024/10/24/italy-qatar-radar-deal/>

### **Europe's bold 'Explore 2040' campaign aims to get astronauts to the moon and Mars**

*Space.com, October 28, 2024*

The European Space Agency (ESA) is charting a bold course for the future, aiming to solidify Europe's position in space exploration through the "Explore 2040" initiative.

Josef Aschbacher, director-general of ESA, emphasized the need for Europe to increase its space activities during an Oct. 16 talk at the International Astronautical Congress (IAC) 2024 in Milan. The agency is now building a strategy to define its future. One key pillar of this is exploration.

"We have a process with our Member States called Explore 2040, which is a perspective at the horizon of 2040 and where Europe can go," Daniel Neuenschwander, director of human and robotic exploration at ESA, said in Milan.

<https://www.space.com/europe-astronauts-moon-mars-explore-2040>



## *F. The United States of America*

### **Fearing China's hypersonic weapons, US Navy seeks to arm ships with Patriot missiles**

*Reuters, October 25, 2024*

Fearing China will deploy hypersonic weapons to sink ships in the Pacific, the U.S. Navy is moving forward with a plan to arm some of its vessels with Patriot interceptor missiles, two senior defense officials said.

One industry official said putting the highly agile Patriot Advanced Capability-3 Missile Segment Enhancement (PAC-3 MSE) interceptors, used primarily in the U.S. by the Army, aboard Navy ships anticipates advances in Chinese missile technology, including the use of highly maneuverable hypersonic weapons.

Integrating the Lockheed Martin-made (LMT.N), opens new tab missiles with ships' air defenses comes amid simmering tension in the Indo-Pacific region as China rapidly modernizes its military, and in the wake of successful missile defense efforts in Ukraine and the Middle East.

<https://www.reuters.com/world/fearing-chinas-hypersonic-weapons-us-navy-seeks-arm-ships-with-patriot-missiles-2024-10-25/>

### **US approves possible sale of TOW missiles to Saudi Arabia**

*Anadolu Agency, October 24, 2024*

The US State Department approved the possible sale of TOW missiles to Saudi Arabia at an estimated cost of \$440 million, the Pentagon said October 24. "The proposed sale will improve the Kingdom of Saudi Arabia's capability to meet current and future threats by enhancing the strength of its homeland defense," it said in a statement. The principal contractor will be RTX Corporation in Tucson, Arizona. The Defence Security Cooperation Agency delivered the required certification notifying Congress of the possible sale on Thursday.

<https://www.aa.com.tr/en/americas/us-approves-possible-sale-of-tow-missiles-to-saudi-arabia/3373641>

## *West Asia*

### *G. Bahrain*

### **HH Shaikh Nasser bin Hamad meets national cyber security centre members**

*Bahrain News Agency, October 22, 2024*

Lieutenant General His Highness Shaikh Nasser bin Hamad Al Khalifa, the National Security Advisor, Royal Guard Commander, and Secretary General of the Supreme Defence Council, met with members of the National Cyber Security Centre. The meeting was attended by Shaikh Khalid bin Ali Al Khalifa, Deputy National Security Advisor, and Shaikh Salman bin Mohammed Al Khalifa, Chief Executive of the National Cyber Security Centre. HH Shaikh Nasser bin Hamad commended the efforts and achievements that have strengthened Bahrain's position in cybersecurity and contributed to the Kingdom's advancement in this domain. His Highness underscored that Bahrain has prioritised cybersecurity, recognising its role in maintaining security and fostering prosperity, both of which are key pillars established by His Majesty King Hamad bin Isa Al Khalifa, the Supreme Commander of the Armed Forces.

<https://www.bna.bh/en/news?cms=q8FmFJgiscL2fwIzON1%2BDgzxgjFHaf%2FOrWBicwPrUls%3D>

### **Barzan Holdings driving growth of Qatar's defence sector**

*Zawya, October 31, 2024*

Barzan Holdings is driving the growth of Qatar's defence sector as it is committed to growing defence capability companies and becoming a knowledge-hub, advising on key technologies and facilitating next generation development. Speaking to The Peninsula on the sidelines of 15<sup>th</sup> Milipol Qatar 2024, Sultan Ibrahim Al Kuwari, Program Development Director at Barzan Holdings highlighted the importance of the event. "This is our fourth year of participation in Milipol Qatar and we are focusing mainly on artificial intelligence

and autonomous capabilities. Since the inception of the company we have been committed to participate in this exhibition which is one of the main platforms to showcase our capabilities and reach international and national clients," Al Kuwari said. This year "we are showcasing two new technologies related to autonomous capabilities as well as AI capabilities. In addition to that, we are having a theme to showcase all the small weapons and ammunition. The weapons are manufactured locally here in Qatar."

<https://www.zawya.com/en/business/energy/barzan-holdings-driving-growth-of-qatars-defence-sector-cvefm0lu>

### **H. Iran**

#### **What are Iran's missile capabilities?**

*The Economic Times, October 26, 2024*

Ballistic missiles form an important part of Iran's arsenal and were used in its Oct. 1 strike on Israel, an attack that Israel responded to on Saturday with raids on Iranian military sites. Israel warned Iran not to retaliate for October 26, strikes the latest salvo in their escalating conflict, while a semi-official Iranian news agency vowed "proportional reaction". The U.S. Office of the Director of National Intelligence says Iran is armed with the largest number of ballistic missiles in the Middle East. The semi-official Iranian news outlet ISNA published a graphic in April showing nine Iranian missiles it said could reach Israel. These included the "Sejil", capable of flying at more than 17,000 km (10,500 miles) per hour and with a range of 2,500 km (1,550 miles); the "Kheibar" with a range of 2,000 km (1,240 miles), and the "Haj Qasem", which has a range of 1,400 km (870 miles), according to ISNA. The Arms Control Association, a Washington-based non-governmental organization, says Iran's ballistic missiles include the "Shahab-1", with an estimated range of 300 km (190 miles); the "Zolfaghar", range of 700 km (435 miles); "Shahab-3", range of 800-1,000 km (500 to 620 miles); "Emad-1", a missile under

development, range of up to 2,000 km (1,240 miles) and "Sejil", under development, with 1,500-2,500 km (930 to 1,550 miles) range.

<https://economictimes.indiatimes.com/news/defence/what-are-irans-missile-capabilities/articleshow/114615885.cms?from=mdr>

#### **Iran's nuclear doctrine should be revised**

*Mehr News Agency, October 27, 2024*

Following the Israeli aggression on Iran, an Iranian lawmaker called for a revision in the country's defence and nuclear doctrine. Speaking at a parliament open session on October 27 morning, Mohammad Reza Sabbaghian said, "I condemn the Zionist regime's cowardly aggression against Iran, which was carried out with the direct and indirect support of the US and Europe"; "In response to the aggressor Zionist regime and the United States, we must consider [achieving] the defence weapons that these aggressors and bullies have, and the defence and nuclear doctrine of our country should be revised," he stressed. Despite the previous warnings of the officials of the Islamic Republic to the illegal Zionist regime to avoid any adventurous actions, the Tel Aviv regime attacked several military sites in the provinces of Tehran, Khuzestan, and Ilam on Saturday morning in a tension-causing action, Iran Air Defence Force said.

<https://en.mehrnews.com/news/223611/Iran-s-nuclear-doctrine-should-be-revised>

#### **Are Iran's oil, nuclear sites safe from Israel attack?**

*The Economic Times, October 27, 2024*

Israel attacked military targets in Iran with pre-dawn airstrikes October 27, in retaliation for the barrage of ballistic missiles the Islamic Republic fired on Israel earlier this month. It was the first time Israel's military has openly attacked Iran. The Israeli military said its aircraft targeted facilities that Iran used to make the missiles



fired at Israel as well as surface-to-air missile sites. Crucially, there was no indication that Iran's oil or nuclear sites were struck. Iran insisted the strikes caused only "limited damage", and Iranian state-run media downplayed them. Taken together, the moves suggested at least for now that both countries are trying to avoid a more serious escalation. Still, the strikes risk pushing the archenemies closer to all-out war at a time of spiraling violence across the Middle East, where militant groups backed by Iran — including Hamas in Gaza and Hezbollah in Lebanon — are already at war with Israel.

<https://economictimes.indiatimes.com/news/international/us/are-irans-oil-nuclear-sites-safe-from-israel-attack/articleshow/114634799.cms?from=mdr>

### **Supplying Israel with 30,000-pound bombs could deter Iran's nuclear threat - opinion**

*The Jerusalem Post, October 29, 2024*

A Wall Street Journal headline after Israel's retaliatory strike on Iranian military facilities said, "Israel's Strikes on Iran, While Measured, Push Region Deeper into a Dangerous Era... Direct conflict between the foes has reset rules of engagement." After two massive Iranian ballistic missile attacks and a restrained Israeli response, America is seeking to de-escalate the conflict and prevent a regional war. Secretary of Defence Lloyd Austin warned Iran not to "make the mistake of responding to Israel's strikes." So, how could providing Israel with massive ordnance bombs (GBU-43/B or GBU-57) and the planes to deliver them lessen the risk of another Iranian ballistic missile attack and "reset the rules of engagement" for the better? It seems counter-intuitive, but if the United States provides Israel with the ability to penetrate Iran's deeply buried nuclear facilities, Iran may be much more hesitant to respond to the Israeli attack on Iranian soil or move towards weaponization and complete a functioning atomic bomb.

<https://www.jpost.com/opinion/article-826521>

## **I. Israel**

### **IDF reveals 70% of Hezbollah drones have been destroyed**

*The Jerusalem Post, October 31, 2024*

The IDF said on October 31, that it had destroyed around 70% of Hezbollah's drones from its Unit 127; mostly since it escalated its attacks in mid-September, besides that general number, the IDF said it had killed a full 10% of Hezbollah's drone operators as well as the commander of the entire unit. Next, the IDF said it had killed the Hezbollah drone commander of the North Litani region and destroyed 54 positions that had held drones. Further, the IDF stated it had destroyed 24 detection or operations installations related to Hezbollah's drone units. Moreover, the military said that it had eliminated eight centers for assembling drones, six underground drone-related bases, and seven drone storage centers. Despite all of these significant numbers, the IDF has shot down drones at lower percentages than rockets, and drones have killed and wounded a large number of Israeli soldiers and civilians over the course of the war, with around 231 out of 1,300 not being shot down. Although that shoot down rate is around 80%, the rocket shoot down rate has been closer to 90%.

<https://www.jpost.com/israel-news/article-827047>

### **Iranian leader Khamenei said to order reprisal attack on Israeli military sites**

*Times of Israel, October 31, 2024*

Iran's supreme leader has ordered his military officials to prepare a reprisal attack against Israel, a report said Thursday, as senior Iranian officials warned of "harsh" and "unimaginable" responses to Israel's strikes on Iranian military sites earlier this month. The report in The New York Times, citing Iranian officials, said Tehran's response would not

come until after US voters go to the polls on November 5, though other news outlets have quoted sources saying Iran's response could come ahead of the vote. Iranian leaders have been threatening to carry out a reprisal action after the Israeli Air Force attacked anti-aircraft batteries and radar sites across Iran on October 26 in retaliation for a massive Iranian ballistic missile attack on Israel on October 1. But Iran has so far been seen as seeking to minimize the chances for escalation or a repeat engagement.

<https://www.timesofisrael.com/iranian-leader-khamenei-said-to-order-reprisal-attack-on-israeli-military-sites/>

### **J. Lebanon**

#### **Hezbollah appoints Sheikh Naim Qassem as new chief**

*Islamic Republic News Agency, October 29, 2024*

Lebanon's Hezbollah resistance movement announced on Tuesday it has chosen Sheikh Naim Qassem to succeed Martyr Hassan Nasrallah as the new secretary general of the group. Hezbollah's Shura Council announced on Tuesday that it had elected Sheikh Naim Qassem as secretary-general to succeed Martyr Sayyed Hassan Nasrallah, according to the Beirut-based Al Mayadeen news network. This decision "grounded in the principles of true Islam and the steadfast ideals of Hezbollah, follows the party's established procedures for selecting the Secretary-General", it noted. In a statement, Hezbollah expressed its commitment to upholding the legacy of Sheikh Qassem's predecessor, describing the election as part of a sacred mission. We pledge to God Almighty, to the soul of our beloved martyr Sayyed Hassan Nasrallah, to the martyrs, to the Islamic resistance fighters, and to our resilient and loyal people, to work together to fulfill Hezbollah's principles and goals, added the source. Hezbollah called for the organization's dedication to carrying forward the cause of resistance. The Shura Council wished Sheikh Qassem success in leading Hezbollah,

entrusting him with the responsibility of preserving the movement's resistance and raising its flag until victory.

<https://en.irna.ir/news/85643136/Hezbollah-appoints-Sheikh-Naim-Qassem-as-new-chief>

#### **Hezbollah launches barrage of rockets at Israeli settlements**

*Islamic Republic News Agency, October 29, 2024*

Hezbollah has launched a heavy barrage of rockets into northern Israeli occupied territories, resulting in casualties among Zionist settlers. The strikes came shortly after the Lebanese resistance movement announced the appointment of Sheikh Naim Qassem as its new secretary-general. According to Al Jazeera, sirens sounded in nearly 30 areas across the Galilee region in northern occupied territories following the missile strikes. Israeli emergency services reported that one Israeli was killed and 13 others injured as a result of the rocket fire targeting the settlement of Ma'alot Tarshiha. Israeli media also reported that multiple buildings in the settlement were struck by missiles launched from Lebanon. In a series of statements, Hezbollah also said that its fighters had struck the settlement of Kfar Vradim and Dalton with rockets. The Israeli military began a ground invasion of southern Lebanon in late September, prompting Hezbollah to retaliate with intensified rocket barrages. The two sides have been trading cross-border fire since October last year when the Israeli regime launched the genocidal war in Gaza.

<https://en.irna.ir/news/85643472/Hezbollah-launches-barrage-of-rockets-at-Israeli-settlements>

#### **Hezbollah launches massive drone attack on Israel**

*Mehr News Agency, October 30, 2024*

Local media in the occupied Palestinian lands said October 30, afternoon that

Hezbollah launched massive drone attacks on Nahariya and northern Tel Aviv in central occupied lands. Sirens warning of a drone infiltration sound along occupied lands (Israel) northern coastal plain, with the Israeli military saying it identified several targets that crossed into occupied land's airspace from Lebanon, Times of Israel reported. The alerts began in the Nahariya area, before spreading southward, reaching Acre and Haifa, the Times added.

<https://en.mehrnews.com/news/223812/Hezbollah-launches-massive-drone-attack-on-Israel>

### **K. Oman**

#### **Oman's first rocket to take off in December, confirms Etlaq**

*Times of Oman, October 17, 2024*

Etlaq has issued a statement regarding the announcement of the launch of the Sultanate of Oman's first space rocket in December 2024; however the launch will not be a public event. The company said: "In reference to the news articles published on October 2nd which mentions the plan for a space launch from the premises of Etlaq Spaceport in December 2024, Etlaq would like to confirm that, in accordance with local regulations and international safety standards, we are supporting the launch of an experimental launch vehicle before the end of 2024." The launch is being organised in cooperation with the Ministry of Transport, Communications and IT, the National Space Program, the Civil Aviation Authority, NASCOM, and institutional stakeholders.

The company added: "We regret to inform you that this launch will not be a public accessible event. We understand that there may be interest to know more about this national milestone: however, for now we plan to share more information after launch. We thank and appreciate your interest."

<https://timesofoman.com/article/151056-omans-first-rocket-to-take-off-in-december-confirms-etlaq>

### **L. Turkiye**

#### **France mulls U.A.E partnership for Rafale F5 fighter jet development**

*The Defense post, October 18, 2024*

France is considering collaboration with the United Arab Emirates (UAE) to develop the Rafale F5 next-generation fighter aircraft. The countries are currently in talks about co-financing the initiative, with Abu Dhabi potentially covering the non-sovereign components of the fighter jet.

Paris will maintain exclusive control over the jet's critical components, even if the other party agrees to the deal, according to French newspaper La Tribune. If the UAE accepts the proposed co-financing, it will be allowed to expand its fleet of 80 Rafale aircraft to 100 and participate directly in future F5 innovations. In 2023, French Minister of the Armed Forces Sébastien Lecornu announced plans to form a "Rafale Club" for current and future operators of the French-made aircraft the goal is to contribute to F5 development costs while ensuring sovereignty over critical components. The club would also strengthen France's relations with global Rafale clients. In addition to the UAE, existing and future Rafale clients such as Egypt, Qatar, India, Greece, Indonesia, and Croatia may opt to join the club.

<https://thedefensepost.com/2024/10/18/france-uae-rafale-jet/>

### **M. East Asia**

#### **North Korea confirms launch of ICBM in longest-ever ballistic missile test**

*Al Jazeera, October 30, 2024*

North Korea has confirmed it launched a new intercontinental ballistic missile (ICBM) towards waters off its eastern coast in what was the longest flight time

yet for a North Korean missile, authorities in South Korea and Japan said, raising fears of advanced weapons development by Pyongyang.

North Korean leader Kim Jong Un was present at the missile test launch on Thursday and issued a warning to his enemies, the official Korean Central News Agency (KCNA) said.

"The test-fire is an appropriate military action that fully meets the purpose of informing the rivals, who have intentionally escalated the regional situation and posed a threat to the security of our Republic recently, of our counteraction will," Kim was quoted as saying by KCNA.

South Korea's Joint Chiefs of Staff (JCS) said in a statement the missile launched towards the East Sea, which is also known as the Sea of Japan, was detected at about 7:10am (22:10 GMT) and was fired on a "lofted trajectory".

The JCS said later that initial analysis points to a possible use by North Korea of a newly developed solid-fuel booster for its long-range missiles.

<https://www.aljazeera.com/news/2024/10/30/north-korea-launches-ballistic-missile-towards-the-sea-south-korea-says>

### **North Korea's long-range missile test signals its improved, potential capability to attack US**

*AP, October 31, 2024*

North Korea test-fired an intercontinental ballistic missile for the first time in almost a year Thursday, demonstrating a potential advancement in its ability to launch long-range nuclear attacks on the mainland U.S.

The launch was likely meant to grab American attention days ahead of the U.S. election and respond to condemnation over the North's reported troop dispatch to Russia to support its war against Ukraine. Some experts speculated Russia might have provided technological assistance to North Korea over the launch.

North Korean leader Kim Jong Un observed the launch, calling it "an appropriate military action" to show North Korea's resolve to respond to its enemies' moves that have threatened the North's safety, according to the North's state media.

Kim said the enemies' "various adventuristic military maneuvers" highlighted the importance of North Korea's nuclear capability. He reaffirmed that North Korea will never abandon its policy of bolstering its nuclear forces.

<https://apnews.com/article/north-korea-missile-launch-377c07eac46ad41bda0d4445df6f51d5>

### **N. Southeast Asia**

### **US militarizing region with mid-range missile system deployment in Philippines: experts**

*Global Times, October 22, 2024*

The US Army's recent deployment of a mid-range missile system to the northern Philippines was "incredibly important and allowed American and Filipino forces to jointly train for the potential usage of such heavy weaponry in Asian archipelago conditions," US Major General Marcus Evans, Commanding General of the Hawaii-based 25th Infantry Division, said on Monday, the AP reported.

The US Army deployed the Typhon missile system to the northern Philippines as part of joint combat exercises in April with Philippine troops, the AP reported. It is a land-based weapon that can fire the Standard Missile-6 and the Tomahawk Land Attack Missile.

The Typhon missile system was supposed to be flown out of the Philippines last month, but the two countries agreed to keep the missile system in the northern Philippines indefinitely, according to the report.

The Typhon missile system would be considered a banned weapon had the US



not withdrawn from the Intermediate-Range Nuclear Forces (INF) Treaty, as the deployment of such mid-range missiles on other countries' doorsteps would inevitably compress the reaction time of air defense and pose significant threat, a Beijing-based military expert who requested anonymity told the Global Times on Tuesday.

<https://www.globaltimes.cn/page/202410/1321673.shtml>

### **PLA Navy tests South China Sea defences as Vietnam and Philippines expand footprint**

*South China Morning Post, October 27, 2024*

China's navy has conducted another round of drills in the South China Sea, a contested waterway where rival claimants the Philippines and Vietnam are ramping up land reclamation and construction.

The People's Liberation Army Navy did not specify where or when the training took place, saying only that the exercise was conducted "in late autumn".

"A frigate detachment of the Southern Theatre Command Navy conducted a full training and assessment on air defence and missile interception, anti-surface attack and vessel damage control," it said in a post on Chinese social media on Sunday.

The drills involved launching attacks on targets at sea and in the air while the Chinese vessel came under fire, followed by a search-and-attack exercise with another vessel acting as an adversary.

<https://www.scmp.com/news/china/diplomacy/article/3284072/pla-navy-tests-south-china-sea-defences-vietnam-and-philippines-expand-footprint>



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