

DAILY TRACKER

NUCLEAR ISSUES

1. India feels confident in its strategic deterrent capabilities, which would be bolstered by the continuing induction of Agni-V missiles and the commissioning of nuclear submarines, despite being behind China and Pakistan in terms of nuclear weapons. According to a recent analysis in the US-based Bulletin of The Atomic Scientists, Pakistan continues to develop its nuclear arsenal with more warheads, delivery systems, and an expanding fissile materials production business.

Source: <https://www.wionews.com/india-news/india-has-less-nukes-than-pakistan-china-new-analysis-of-capabilities-426600>

2. China is sharply increasing its nuclear arsenal and could have up to 700 deliverable warheads by 2027 and at least 1,000 by 2030, as the Communist giant aims to surpass U.S. global power by the middle of the 21st century, the Pentagon has warned in a new report. China is investing in, and expanding, the number of its land-, sea-, and air-based nuclear delivery platforms and constructing the infrastructure necessary to support this major expansion of its nuclear forces, it said on November 4 in a congressionally mandated report, amidst tense relations between Washington and Beijing over a range of issues, including Taiwan.

Source: <https://www.thehindu.com/news/international/china-may-have-at-least-1000-nuclear-warheads-by-2030-pentagon/article37335548.ece>

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Source: <https://www.cbsnews.com/news/iran-news-us-nuclear-talks-uranium-enrichment/>

NUCLEAR PROLIFERATION

1. Nuclear weapons are no longer enough to sustain U.S. strategic deterrence. Senior military leaders and pioneering scholars believe a new technological revolution is now unfolding, and they are right.

If we are not attentive now, the United States may lose the ability to deter major attacks in coming years. The old model of strategic nuclear deterrence is increasingly threatened by a new suite of military technologies, from hypersonic missiles and advanced missile defenses to non-kinetic cyberattacks. Individually, these technologies are potent. But together, they will revolutionize the way that great powers deter and conduct war. To avoid falling behind, the United States must hedge against disruptive capabilities by modernizing its existing nuclear arsenal and undertaking a systematic review of strategic capabilities for the 2030s. This vision for the future balance of strategic forces should then enable defense and diplomatic officials to determine investment priorities accordingly and decide when and how to engage Russia and China to avoid strategic instability in this new era.

Source: <https://www.wionews.com/india-news/india-has-less-nukes-than-pakistan-china-new-analysis-of-capabilities-426600>

2. Sensationalizing the threat of China is an old trick of Washington, especially when it seeks excuses to justify its hawkish policies. The US Department of Defense on Wednesday released a 2021 Report on Military and Security Developments Involving China. The report speculates that, "The accelerating pace of the PRC's nuclear expansion may enable the PRC to have up to 700 deliverable nuclear warheads by 2027. The PRC likely intends to have at least 1,000 warheads by 2030."
3. Sixty-nine years ago, a new type of cloud was the focus of scientific research: the mushroom cloud produced by cold war atomic tests. Ivy Mike, which took place on 1 November 1952, was the first full-scale test of a hydrogen bomb. Equivalent to more than 10m tons of TNT, it obliterated the small island of Elugelab. The rising fireball was accompanied by a spectacular display of lightning. This unusual "nuclear lightning" was a side-effect of the transient electromagnetic pulse from the nuclear blast.

Source: <https://www.theguardian.com/world/2021/nov/04/what-the-mushroom-cloud-from-1952-hydrogen-bomb-test-ivy-mike-revealed>

MISSILES/BIO WEAPONS

1. Israel is deploying a new aerostat for the first time this week, as it moves closer to having a new missile sensor capability. Developed jointly by Israel's Missile Defense Organization (IMDO) and the American Missile Defense Agency (MDA), the aerostat is known formally as the High Availability Aerostat System (HAAS) and is, essentially, a blimp tethered to the ground with a long-range radar developed almost entirely from annual Foreign Military Financing funds provided to Israel from the US.

Source: <https://breakingdefense.com/2021/11/israel-launches-new-inflatable-missile-tracking-system/>

2. The UK RN is still weighing up options for a future surface-to-surface missile requirement to replace [Harpoon](#), with the First Sea Lord Adm Sir Tony Radakin ([soon to become Chief of the Defence Staff](#)) telling MPs on 2 November that there was a debate around whether to procure an interim solution or leave a gap until a more advanced weapon can be brought into service.

Source: <https://www.shephardmedia.com/news/naval-warfare/uk-still-weighing-up-future-surface-to-surface-missiles/>

3. Recently, Dmitry Shughaev, the director of the Russian Federal Service for Military-Technical (FSMTC) indicated that Russia is likely to supply even the S-500s to both India and its arch-rival China and even discussed the Su-30s as the Indian Air Force operates the MKI variant. India is an old strategic partner, we have signed a contract for the S-400, and they will receive the first division of this system by the end of the year. Therefore, it is absolutely logical that they would be interested in requesting the S-500 from us in the foreseeable future.

Source: <https://eurasianimes.com/s-500-missile-checkmate-jets-india-russia/>

4. Russian President Vladimir Putin urged the country's arms manufacturers Wednesday to develop even more advanced hypersonic missiles and high-energy lasers to maintain the country's edge in military technologies. Speaking during a meeting with officials, Putin hailed the new weapons, such

as the Avangard and Kinzhal hypersonic weapons and the Peresvet laser system as a “breakthrough” that “ensured Russia's military security for many years and even decades.”

Source: <https://www.military.com/daily-news/2021/11/04/putin-urges-development-of-new-hypersonic-missiles-lasers.html>

UN REFORMS

1. The UN Security Council called for an end to the intensifying and expanding conflict in Ethiopia on Friday, and for unhindered access for humanitarian aid to tackle the world’s worst hunger crisis in a decade in the war-torn Tigray region. The U.N.’s most powerful body expressed serious concern about the impact of the conflict on “the stability of the country and the wider region,” and called on all parties to refrain “from inflammatory hate speech and incitement to violence and divisiveness.”

Source: <https://apnews.com/article/africa-united-nations-ethiopia-hunger-856afd1d97f95f296176779a3601f6c3>

2. The U.N. special envoy for Sudan said talks had yielded the outline of a potential deal on a return to power-sharing, including restoration of the ousted premier, but it had to be agreed in "days not weeks" before both sides' positions hardened. The United Nations has been coordinating efforts to find a way out of the country's crisis following a coup by the military on Oct. 25 in which top civilian politicians were detained and Prime Minister Abdalla Hamdok was placed under house arrest.

Source: <https://www.reuters.com/world/africa/exclusive-un-official-says-sudan-deal-under-discussion-needed-days-not-weeks-2021-11-04/>

3. Extreme weather driven by climate breakdown is hitting the world “with a new ferocity”, the UN has said, but countries have so far failed to prepare for the widespread damage that is now inevitable even if greenhouse gas emissions are reduced. Developing countries are particularly at risk, but they are unable to muster the cash needed to defend people and resources from flooding, droughts and sea level rises. They are likely to need between \$140bn and \$300bn a year by the end of this decade to cope with the impacts, but in 2019 received only \$80bn in climate finance, which included cash to cut greenhouse gas emissions.

Source: <https://www.theguardian.com/environment/2021/nov/04/countries-have-failed-to-adapt-for-unavoidable-climate-damage-un-says>