

## Catch up: Putin apologises for plane strike; Trump wants more time for TikTok



**Vladimir Putin** apologised for the shooting down of an **Azerbaijani passenger plane** on Wednesday—his first public comment on the incident. In a call with his Azerbaijani counterpart, Russia’s president admitted that his forces were deploying anti-aircraft fire against a Ukrainian drone attack at the time, but did not go as far as accepting responsibility for the strike. At least 38 passengers were killed.

**Donald Trump** asked America’s Supreme Court to pause the enforcement of [a law](#) requiring that **TikTok** be sold to an American firm or be shut down. The deadline for compliance is January 19th. Joe Biden, who signed the law, cited privacy concerns over TikTok’s Chinese owner, ByteDance. The incoming president called for time to pursue a “political resolution”.

**Russia’s security service**, the FSB, claimed to have thwarted a Ukrainian plot to kill a senior Russian officer and a pro-war blogger. [The FSB](#) said a Russian citizen, allegedly acting on Ukrainian orders, retrieved a bomb disguised in a portable speaker.

Last week Ukraine assassinated the head of Russia's nuclear-protection forces.

**Taliban forces** launched strikes on the Durand Line, Afghanistan's disputed border with **Pakistan**, sparking heavy clashes. The fighting killed 19 Pakistani soldiers and three Afghan civilians, according to local media. Afghanistan's defence ministry suggested the attack was in retaliation for Pakistani air strikes earlier this week. Relations between the neighbours remain fraught, with [Pakistan](#) accusing Afghanistan of sheltering militants.

Authorities in **Finland** said they would relocate a seized tanker to a port near Kilpilahti, in the south of the country, for investigation. The vessel, which was boarded on Thursday, is suspected of damaging undersea cables while transporting Russian oil. It is believed to be part of a "shadow fleet" evading [sanctions on Russian oil](#) sales.

**China's government** said it would lower import tariffs on ethane and certain recycled copper and aluminium raw materials from January 2025. China is adjusting hundreds of import categories in an effort to [promote green industries](#). Tariffs on other items, including molasses, will rise.

America's national-security spokesman, John Kirby, said that **North Korean** troops fighting for **Russia** against **Ukraine** were being treated as expendable, with waves being sent to their deaths. The claim was mirrored by Volodymyr Zelensky, Ukraine's president. Reports on Friday suggested that the first North Korean prisoner captured by Ukraine had died. Ukraine reckons [North Korea](#) has sent around 12,000 troops.

**Word of the week:** Bossman. A name (originating in London slang) for those who run a small shop in Britain. [Read the full story.](#)

# Streaming slows to a trickle



*Until January 2nd we are looking ahead to next year's big stories. Today, what will shape culture and science?*

Film and television projects delayed by the [Hollywood strikes](#) of 2023 will finally hit screens over the next 12 months. Cinema-goers can look forward to instalments of “Avatar”, “Mission: Impossible” and “Captain America”. Television viewers will get new series of [“The White Lotus”](#) and “Stranger Things”. But they should enjoy these glossy productions while they can, as studios are tightening their belts.

Making money from streaming services is proving to be harder than expected. Netflix and Disney are managing it, but most of Hollywood's older studios are struggling to turn a profit on their digital ventures. An industry-wide economy drive is therefore under way. Disney's spending on content, excluding sport, was 30% lower in 2024 than in 2022. Even Apple, which jostles for the position of the world's most valuable company, is said to be curbing its TV-commissioning enthusiasm. Viewers should [prepare to pay more](#) for less impressive shows and films.

# American football's global ambitions



In 2023, 93 of the 100 most-watched television broadcasts in America were National Football League games. Abroad, the [Super Bowl](#) is popular, helped by its star-studded half-time show (and, in 2024, by a romance between [Taylor Swift](#), a singer, and Travis Kelce, a player for the perennially outstanding Kansas City Chiefs). But American football remains a niche sport in much of the world.

The NFL is [trying hard to change that](#). In 2025 the league will play eight games abroad—more than in any previous season. Teams are focusing on building fan bases overseas; in recent years they have been able to keep revenue earned abroad as they do for home games, rather than having to give it back to the league. And the NFL has invested heavily overseas in flag football, a non-contact version that will be an Olympic sport in 2028. American football may never be more popular than the beautiful game, but more languages may soon need translations for “touchdown” and “linebacker”.

# The AI revolution comes to drugs



Developing a drug is an arduous process that often fails. It begins by identifying a target, such as a protein or gene, associated with a disease. Researchers then search for a molecule that can either block or enhance the target's activity safely. This can involve screening as many as 1m compounds before selecting just one or two promising candidates. Software can help to identify such molecules. But [generative artificial intelligence](#) can dream up entirely new ones to test.

BCG, a consultancy, estimates that about 65 AI-inspired molecules are currently being tested on humans. During 2025 results from second-phase clinical trials, which test for effectiveness and side-effects, will be reported for more than half a dozen such drugs. Previous trials of some AI-designed drugs, including treatments for eczema and cancer, were disappointing. But scientists remain optimistic. AI-developed treatments, when they arrive, will [profoundly change drug development](#).



# Fusion power gets closer—no, really



The quest to generate cheap and abundant power from nuclear fusion is undergoing a shift from the public to the private sector. Towards the end of 2025 Commonwealth Fusion, a company spun-out from the Massachusetts Institute of Technology, will open the [first fusion reactor](#) designed to operate at near-commercial scale. Known as a tokamak, the machine has a doughnut-shaped reaction vessel surrounded by powerful electromagnets which confine and heat a plasma of deuterium and tritium. The resulting reaction liberates helium, neutrons—and a lot of energy.

Commonwealth Fusion hopes to reach “ $q > 1$ ”, the point where a reactor releases more energy than is put into it, in early 2026. But even if it doesn’t succeed, the firm is not the only one pursuing fusion with private funding. Some startups are testing more exotic approaches than tokamaks, until now the tried-and-trusted fusion design. If Commonwealth Fusion fails to deliver, many others are lining up behind it.

## The winners of this week's quiz



*The Economist*

Thank you to everyone who took part in this week's quiz. The winners, chosen at random, were:

**Patricia Poels**, Heverlee, Belgium

**Katie Cho**, Palo Alto, United States

**Andy Matterson**, Ennetbaden, Switzerland

They all gave the correct answers of: Bleak House, Herald, Holly Golightly, Old Faithful and Silent Spring. The theme is Christmas carols: In the Bleak Midwinter, Hark The Herald Angels Sing, The Holly and the Ivy, O Come, All Ye Faithful and Silent Night.

The questions were:

**Monday:** Which Charles Dickens novel features the long-running court case Jarndyce v Jarndyce?

**Tuesday:** Which newspaper title is shared by publications in Miami and Scotland?

**Wednesday:** Who was the central female character in the book and film "Breakfast at Tiffany's"?

**Thursday:** What erupts roughly every 90 minutes in Yellowstone

National Park?

**Friday:** Which 1962 book by Rachel Carson described the harm to nature caused by the pesticide DDT?





**If people do not believe that mathematics is simple, it is only because they do not realise how complicated life is.**

*John von Neumann*