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GE Aerospace Strike May End After Company and Union Reach Tentative Agreement

A strike of over 600 employees represented by the United Auto Workers at two GE Aerospace facilities in suburban Cincinnati appears poised to come to an end.

After two weeks of picketing, workers from GE Aerospace's Evendale plant and its Erlanger distribution facility reached a tentative agreement with the Fortune 500 company on Sept. 12, according to a social media post by union President Brian Strunk.

The union said picketing would continue until members were able to vote on the new terms on Sept. 19. However, Strunk said GE Aerospace is demanding employees from other union chapters who refused to cross the picket line return to the plant or be fired ahead of the vote.

"We know this is a difficult position, and we want you to know that our members will never forget the strength you showed us," Strunk said in the post. "We understand you (other union chapters, J Dyer UA 392 and IBEW Local 212) must return to work."
GE Aerospace officials noted the company has demanded non-UAW employees must return to work, but not workers affected by the current contract negotiations.

"We are in no way demanding that UAW workers go back to work - the strike continues until they ratify," said Perry Bradley, a spokesman for GE Aerospace.

In a prepared statement, the company said it was "pleased to have reached a tentative agreement with the UAW" and looking forward again to "work side-by-side to serve our customers and build our future together."

Among the terms bargained for, Strunk said, was better job security, a five-year agreement, better healthcare plans and more time off.

"This has been a long and difficult road, but I am proud of the solidarity our members have shown. Like David standing against Goliath, we stood firm under pressure and refused to back down," Strunk said in a statement to Enquirer media partner Fox19. "It may not be perfect, but through this fight we started to change hearts. We proved that when workers stand together, we can move mountains – and we will build on this momentum into the future."

The strike began early Aug. 28 just before the Labor Day weekend. It was organized by UAW Local 647, part of the United Automobile, Aerospace and Agricultural Implement Workers of America (UAW), which has more than 400,000 active members in North America.

GE Aerospace is a Fortune 500 company based in Evendale, making and servicing engines for both commercial and military aircraft. It has more than 130 manufacturing and service facilities around the world, half in 22 U.S. states and the rest in 24 countries. To continue reading, please click here.

GE Aerospace and BETA Technologies Collaborate on Hybrid Electric Aviation

GE Aerospace and US-based aircraft manufacturer BETA Technologies (BETA) have entered into a strategic partnership aimed at advancing hybrid electric aviation. Additionally, GE Aerospace plans to make an equity investment of $300m in BETA, subject to regulatory approval. US-based GE Aerospace will also have the right to appoint a director to BETA's board as part of this partnership.

The primary focus of this partnership is the creation of a hybrid electric turbogenerator intended for advanced air mobility (AAM) applications, which includes long-range vertical takeoff and landing (VTOL) aircraft and future models from BETA.

GE Aerospace chairman and CEO Lawrence Culp Jr. said: "Partnering with BETA will expand and accelerate hybrid electric technology development, meeting our customers' needs for differentiated capabilities that provide more range, payload, and optimised engine and aircraft performance."

The partnership will combine BETA's capabilities in high-performance, permanent magnet electric generators with GE Aerospace's expertise in turbine technology, certification, safety, and large-scale manufacturing of electrical power systems. The hybrid solution is designed to utilise existing infrastructure, including GE Aerospace's CT7 and T700 engines, and aims to enhance range, payload, and speed performance compared to similar aircraft.

BETA Technologies founder and CEO Kyle Clark said: "This partnership brings together two teams deeply committed to and guided by aerospace engineering excellence and building the future of flight. "We believe the industry is on the precipice of a real step change, and we're humbled that GE Aerospace has the confidence in our team, technology, and iterative approach to innovation to partner with us."

GE Aerospace has been developing a range of technologies for future flight, including integrated hybrid electric propulsion systems and new engine architectures. Its achievements include a ground test of an electric motor-driven propeller in 2016 and the successful test of a megawatt-class hybrid electric propulsion system in 2022, which was conducted at altitudes simulating single-aisle commercial flight.

BETA's aircraft are designed for all-weather performance and have been tested in various environmental conditions across the US and Europe. In May this year, Ethiopian Airlines chose GE Aerospace's GEnx engine to power 11 new Boeing 787 aircraft, increasing its GEnx fleet from 19 to 30. The airline also confirmed its order for GE9X engines for eight Boeing 777-9 aircraft, with options for six additional aircraft. To continue reading, please click here.

Uzbekistan Airways Places Largest Order In Its History For Up To 22 Boeing 787s

Uzbekistan Airways has placed an order for up to 22 examples of the mid-sized Boeing 787-9 from the US planemaker's Dreamliner family of widebody twinjets. Consisting of both firm orders and options for more down the line, the carrier plans to use the type to modernize its fleet of twin-aisle aircraft.

Having already made history by being the first Dreamliner operator in Central Asia by putting the Boeing 787-8 into service, Uzbekistan Airways is now looking to upgauge this side of its operations by putting the 787-9's additional range and capacity into action. These factors will allow it to expand its international network, with routes to the United States of America among those being considered for the type.

According to a corresponding statement released yesterday by Boeing in order to announce the deal, this transaction represents the single largest order in the history of Uzbekistan Airways. The 22 examples of the 787-9 that the carrier has put its name down for are split between 14 firm orders and eight options.

The deal marks part of a wider initiative between Boeing and the Uzbekistan Ministry of Transport, with the US manufacturer also noting that it has "signed a Memorandum of Cooperation to explore opportunities to further expand the country's aviation ecosystem." Shukhrat Khudaikulov, the airline's Chair, said: "With this new contract, we are further strengthening both our airline's and our nation's position as a leading aviation hub in Central Asia, while providing our passengers with greater global connectivity. This step reaffirms our ambitions and strategic commitment to sustainable growth."

Uzbekistan Airways' order for as many as 22 units of the Boeing 787-9 Dreamliner was commemorated at a ceremony at the United Nations General Assembly. Here, representatives from the airline and the manufacturer were joined by Uzbek President Shavkat Mirziyoyev, underlining the deal's importance. According to Uzbekistan Airways, the 787-9 will help it position Tashkent as an Asian transit hub.

As previously noted, Uzbekistan Airways already flies the smaller Boeing 787-8, but the mid-sized 787-9 Dreamliner trumps this model in terms of both range and capacity. Indeed, Boeing's data shows that the former can fly 7,305 NM (13,530 km) with 248 passengers in a two-class configuration, compared to 7,565 NM (14,010 km) with 296 passengers. For this reason, the 787-9 has far outsold the 787-8.

With these improved metrics in mind, Uzbekistan Airways is eyeing an international expansion with its larger and longer-range Boeing 787-9 Dreamliner aircraft, which ch-aviation says will begin to be delivered in 2031. To continue reading, please click here.

Embraer Says Production is Unaffected After Metalworkers Announce Strike

Metalworkers at Embraer's São José dos Campos plant in Brazil initiated an indefinite strike on September 17, 2025, demanding wage increases and a formal collective labor agreement. As per a Reuters report, management is stating that operations are continuing as normal, despite the strike occurring after the union rejected the company's offer for a new contract last week.

Embraer is targeting between 77 and 85 commercial aircraft deliveries for 2025, and management insists that the strike will not derail its year-end goals. The dispute, however, underscores wider labor tensions across the aviation sector at a time of high global demand for aircraft. Embraer is also insisting that its executive aircraft division will not be impacted either.

At the center of the walkout is a wage dispute. Workers argue that Embraer's proposal, which tied raises to inflation with minimal additional increases, fails to recognize their contribution to the company's global success. The union has also raised alarms about cuts to protections for employees who suffer work-related injuries, saying those safeguards are a critical part of any fair labor agreement.

Embraer, however, is reluctant to commit to higher raises while balancing production costs and competitive pressures. The company insists it has offered a fair deal, pointing out that it must control labor expenses to remain competitive against Airbus and Boeing, as well as competing business jet manufacturers. Executives say they are committed to dialogue, but they have publicly stressed the need to maintain output levels.

For the union, the strike is as much about visibility as it is about wages. By staging an indefinite walkout, workers are pushing Embraer into a position where it must weigh potential reputational damage and customer concerns against its resistance to labor demands. From here, we will see how long the company can sustain planned production rates and how long the strike can last.

Embraer's year-end delivery targets add urgency to the dispute. By September 16, the manufacturer had delivered 35 commercial aircraft, leaving nearly 50 jets to be completed before December. The company is even more reliant on its business jet division, which it hopes can deliver roughly 145 to 155 units before the end of the year, having delivered 61 units so far. To continue reading, please click here.

Beehive Industries Hits Rapid Milestones With Frenzy™ Engine Testing Under U.S. Air Force Contract

Beehive Industries, an American manufacturer of advanced propulsion systems for uncrewed aerial defense applications, announced today significant strides in the development and testing of its 200 lbf Frenzy™ engine. Building on a $12.46 million contract awarded in October 2024 by the U.S. Air Force in collaboration with the University of Dayton Research Institute (UDRI) and following the formal introduction of the Frenzy engine in December 2024, Beehive has achieved extraordinary milestones.

The company has accelerated the development process, moving from the finalization of production requirements to First Engine to Test (FETT) in an impressive five months. Since then, Beehive has tested a new engine every six weeks, demonstrating the power of its additively-enabled manufacturing approach.

This rapid pace has resulted in the successful testing of four individual Frenzy engines in just six months. This unprecedented speed highlights Beehive's ability to compress traditional development timelines from years to months, a feat made possible by its innovative design and production techniques. The testing program, conducted across Beehive's Denver, Cincinnati, and Knoxville facilities, has adhered strictly to the original program plan with all four engines beginning their tests on schedule. This consistency underscores the company's reliable say/do culture and its commitment to delivering results.

The Frenzy engines, ranging from five to eight inches in diameter and delivering 100 to 300 lbf, have successfully completed a comprehensive testing regimen, including performance and operability validation, durability validation, and environmental stress testing. Far from being mere demonstrations, these engines have already met or exceeded all product requirements. Each engine individually surpassed better-than-target power, better-than-target Specific Fuel Consumption (SFC), and more than a full mission of operational durability, while collectively accumulating more than 20 hours of runtime.

These results not only validate Beehive's bold performance claims but also position the Frenzy engine as a game-changer for UAV applications, where cost, efficiency, and reliability are critical.

"Beehive's rapid advancement with the Frenzy engine family is a testament to our team's expertise and the transformative potential of additive manufacturing," said Gordie Follin, Chief Product Officer. "These test results exceed our expectations and reinforce our mission to provide the U.S. military with affordable, high-performance propulsion systems that can be deployed at scale. We're proud to collaborate with UDRI and the U.S. Air Force to push the boundaries of aerospace innovation." To contiue reading, please click here.

Innovative Materials for the Medical Industry

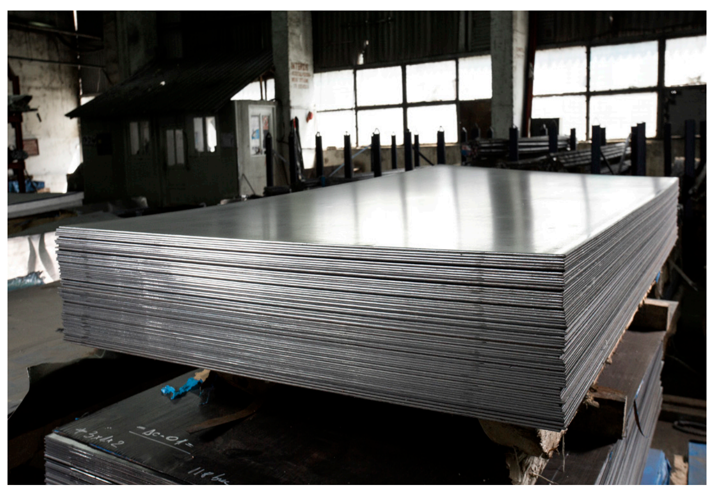
Cutting edge technology shapes the future in the medical industry, from 3D printing custom prosthetics and devices to wearable devices with embedded sensors that monitor vitals and provide real-time data. United Performance Metals and UPM Advanced Solutions are here to provide innovative materials and high-quality solutions for the medical industry, with biocompatible alloys including titanium, stainless steel, cobalt, and cobalt chrome moly.

Precision Rerolled Strip: United Performance Metals' precision rerolled strip is an ultra-light strip that can be customized to your desired thickness - as low as 0.0008". UPM offers several medical precision strip grades, including 301, 302, 304, 304L, 305, and 316/316L stainless steel, as well as 201 nickel and L605 cobalt. These materials are used for implants, medical instruments, matrix strips, needles, x-rays, and contacts for electrodes used in electrocardiogram (EKG) tests. To learn more about UPM's precision rerolled strip offerings, please click here.

Powder: UPM Advanced Solutions offers a comprehensive range of high-quality powders that are used for a variety of medical applications, including surgical instruments, blades, and wound-closure devices. These powders are engineered to deliver excellent mechanical properties such as corrosion resistance, high strength, and durability and undergo rigorous quality control to meet the highest industry standards. Grade 23 titanium powder, 316L stainless steel powder, and CCM powder are best suited for the medical industry due to their biocompatibility and high purity. To learn more about UPM Advanced Solutions' powder grades, please click here.

Build Plates: When stability and compatibility are needed, UPM Advanced Solutions has custom build plate solutions that can be tailored to the size, shape, and finish that our customers need. Build plates serve as the foundation for 3D printing and feature treated surfaces that optimize adhesion and prevent warping. UPM Advanced Solutions offers Ti-6AL-4V, CP Grade 2, and 6242 titanium, and 304/304L stainless steel which are often used in the medical industry to produce orthopedic and spinal implants, such as cages, rods, screws, and joint replacements. Other common medical applications that utilize build plates include dental implants and patient-specific cranial and facial implants. To learn more about UPM Advanced Solutions' build plate products, please click here.

From Mineral to Metal: How Titanium is Made



Lightweight, strong, and corrosion resistant, titanium is a prized metal that plays a critical role in everything from aviation to medical implants. The journey of titanium starts deep within the Earth, not as a shining metal, but instead as a dull ore that must be extracted and processed to yield high-quality titanium that is free of impurities.

Titanium was first discovered in 1791 by William Gregor, an English clergyman and amateur mineralogist, who identified a new metal in black magnetic sand from Cornwall, England. He named it manaccanite. In 1795, German chemist Martin Heinrich Klaproth independently discovered the same element in rutile ore and named it titanium, after the Titans of Greek mythology. Klaproth later confirmed Gregor's earlier discovery, and the name "titanium" was adopted. However, isolating pure titanium proved difficult. It wasn't until 1910 that Matthew A. Hunter produced 99.9% pure titanium using sodium reduction in a pressure cylinder. This was followed by the Kroll process in the 1930s–40s, developed by William Justin Kroll, which used magnesium to reduce titanium tetrachloride.

To begin the titanium process, this element must first be extracted from mineral deposits. Since titanium is not found in its pure form in nature, it is primarily gathered from ilmenite and rutile minerals. Ilmenite is a titanium-iron oxide ($FeTiO_3$), which is the primary ore used for titanium due to its abundance in nature. Rutile is an oxide mineral composed of titanium dioxide (TiO_2) that can also be used to form titanium. Once mined, the ore is crushed, washed, and processed using techniques like gravity and magnetic separation to concentrate the titanium oxide.

The Kroll Process is the primary industrial method for producing titanium. This process occurs at temperatures around 1650-1830°F (900–1000°C) and combines titanium dioxide ore with chlorine to form titanium tetrachloride ($TiCl_4$). Once the liquid tetrachloride forms, it is reduced by molten magnesium in a batch process. This reaction yields magnesium chloride and a porous, brittle material known as titanium sponge.

With the titanium sponge now formed, it is cleaned to remove any magnesium chloride using vacuum distillation or leaching. The titanium is then crushed into smaller granules, breaking it down from its sponge form. From here, large quantities of granules are compressed using extreme pressure to form compact blocks of titanium. These blocks are welded together and then melted in a furnace to create solid ingots. To continue reading, please click here.