

The Business Daily of the Global Aerospace and Defense Industry Since 1963

June 13, 2024

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## Flight Display

The U.S. Navy has awarded GE Aviation Systems LTD, Cheltenham, Gloucestershire UK, a \$28,550,890 contract for the production and delivery of up to a maximum quantity of 622 common electric stand-by indicators, the Pentagon announced on June 11. The weapons replaceable assembly serves as a backup flight display for the pilot or co-pilot on both fixed wing and rotary wing platforms in support of the Navy, Marine Corps, and Foreign Military Sales customers. Naval Air Warfare Center Aircraft Division, Patuxent River, Maryland, is the contracting activity.

## Daily Briefs

**RAYTHEON** has \$38.5m contract for technical refresh of DDG-1000 Class Total Ship Computing Environment Hardware in support of Zumwalt Test Facility Ship Mission Center, peripherals and spares hardware.

**XTENTI, LLC** has \$1.7m SpaceWERX Direct-to-Phase II contract focused on its FANTM-RiDE Long-duration Independent Operations Dispenser and SEMPER:PARATUS rapid integration, standardized smallsat bus and payload system.

**SATELLITE-BASED AUGMENTATION SYSTEMS** market reached \$559m globally in 2022, and should reach \$906m by 2032, growing at a CAGR of 5.1% from 2023 to 2032, according to **ALLIED MARKET RESEARCH**.

**KONGSBERG NANOAVIONICS** (smallsat mission integration, bus manufacture) appointed Atle Wøllo as its new CEO, taking over from interim CEO Žilvinas Kvedaravičius.

**SPACESUIT MARKET** was \$0.75b in 2021 and should grow to \$1.5b by 2031, for a CAGR of 7.3% from 2022 to 2031, according to **ALLIED MARKET RESEARCH**.

### OPERATIONS

## V-22 Will Not Be Fully Mission Capable Until Mid-2025, Navair Chief Says

BRIAN EVERSTINE, [brian.everstine@aviationweek.com](mailto:brian.everstine@aviationweek.com)

**The Bell Boeing V-22 fleet will not be fully mission capable until mid-2025 at the earliest as the aircraft return to flight with strict restrictions and tests of a new clutch are beginning, the commander of Naval Air Systems Command (Navair) says.**

Rear Adm. Carl Chebi told lawmakers during a June 12 House Oversight Committee hearing that full operations are still about a year away. That leaves a large hole in operational capability for all three services that fly the tiltrotor.

Aircraft in the entire V-22 fleet are currently not able to fly more than 30 min. from a divert field as part of a return-to-flight plan announced in early March. Each of the services is taking a different approach. U.S. Marine Corps MV-22s are deployed for exercises in Australia and Sweden. Meanwhile, a small number of U.S. Air Force CV-22s at one base are cleared to fly and doing so sparingly.

The Oversight Committee put the V-22 program under the microscope during the June 12 hearing, which was attended by family members of several Marines and airmen killed in recent crashes. Over the past 2 1/2 years, four V-22s have crashed, killing 20 service members. Privileged Safety Investigation Board inquiries into the two most recent accidents—the Aug. 27, 2023, crash of an MV-22 in Australia and the Nov. 29,

V-22, P. 2

## TECHNOLOGY

## EpiSci/PhysicsAI Named First Winner Of DARPA Air Autonomy Program

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**EpiSci and PhysicsAI are the first confirmed contractors selected for a DARPA program that as a team is expected to develop autonomous software to enable beyond-visual-range engagements involving multiple aircraft on both sides.**

The team will apply EpiSci's Tactical AI architecture to DARPA's AI Reinforcements (AIR) program, the third in a series of multiyear efforts to introduce artificial intelligence (AI) pilots to U.S. Air Force combat aircraft.

"The AIR program allows us to continue this proud history of excellence in air combat autonomy," said Dan Javorsek, EpiSci's chief technology officer.

The program continues a steady progression of DARPA-funded demonstrations focused on counter-air engagements. The AlphaDogFight Trials in 2020 included staged mock dogfights in a digital environment. The follow-on Air Combat Evolution (ACE) program transitioned the software to supporting mock dogfights with real aircraft, including the Air Force Test Pilot School's X-62 testbed.

But the AIR program will be the first in the DARPA series to stage long-range missile attacks between opposing sets of multiple aircraft.

DARPA has not confirmed any other participants in the AIR program yet, but EpiSci believes its team includes the only

contractors that have been involved in all three of the agency's counter-air autonomy programs.

During the AIR program, the EpiSci/PhysicsAI team will first integrate the Tactical AI software on crewed F-16s modified to be piloted by autonomy software. The Air Force's Project Venom is modifying several F-16 Block 42s for this purpose.

The software will then be transitioned to an uncrewed combat air vehicle. The vehicle has not been identified, but testbed options include the Kratos XQ-58 Valkyrie, Boeing MQ-28 Ghost Bat and General Atomics Aeronautical Systems Inc. MQ-20 Avenger and recently-flown XQ-67.

DARPA has not identified a direct link between AIR and the Air Force's Collaborative Combat Aircraft (CCA) program. But the five-year-old series is maturing the same kind of autonomy software technology that will be essential to introducing CCAs. Although the agency's demonstrations are focused on counter-air missions, the CCAs also likely will be involved in air-to-ground missions.

EpiSci teamed up with PhysicsAI because of the latter's expertise in deep machine-learning techniques, says Matthew Niemiec, EpiSci's director of autonomy data and integration.

The AIR contract announcement follows a series of additional awards for EpiSci's Tactical AI software. The Poway, California-based company also recently received a follow-on award from the U.S. Navy to continue using Tactical AI on airborne and surface vehicles as part of Project Overmatch. And the company has partnered with Northrop Grumman to apply the same software on advanced uncrewed systems.

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### V-22, from P. 1

2023, crash of a CV-22 off Japan—have been completed, but the public reports have not been released.

Chebi, whose Navair oversees the V-22 program office and is airworthiness director for the fleet, said that since the lifting of the grounding bulletin, Ospreys have flown more than 7,000 hr. as of June 2. The command, along with other V-22 operators, has looked at issues with the Osprey's parts along with training, maintenance and operational changes to address fleet safety.

Navair is redesigning the Osprey's clutch in an attempt to fix a long-standing problem of hard engagements that have plagued the fleet since 2010. The issue was linked to a June 2022 MV-22 crash that killed five Marines. Following that accident, the clutch's input quill assembly on the entire V-22 fleet has been replaced every 800 hr.

Gary Kurtz, Navair's program executive for air, antisubmarine-warfare and special-mission programs, says the command is progressing on the new design, with testing expected in the

next couple of months. Fielding is planned in mid-2025. The Navy's fiscal 2025 budget request calls for replacements in fiscal 2026, with the goal of finally purging the aircraft of problematic thin-dense chrome. This issue has caused metal to chip into the Osprey's oil system and been linked to mishaps.

The budget calls for 45 kits to be procured in 2026, with the full program costing \$138 million for 328 kits.

Despite the planned changes, lawmakers and family members expressed concern about the fleet's safety and its needs going forward. Rep. Stephen Lynch (D-Mass.) called on the Pentagon to keep the fleet grounded until the clutch replacement is cleared and installed, adding that if another V-22 crashes in the meantime "your whole program is done."

Rep. Scott Perry (R-Pa.), a former U.S. Army brigadier general and aviator, raised the unlikely idea of replacing the V-22 fleet with other helicopters, such as the Sikorsky CH-53K and Boeing CH-47.

## FUNDING &amp; POLICY

## Biden Administration Outlines Concerns With House's Defense Bill

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**The White House on June 11 outlined a series of concerns about the House of Representatives' version of the fiscal 2025 defense policy bill but stopped short of veto threats as the House Rules Committee considered scores of amendments.**

The Biden administration, in a statement of policy, objected to several additions to the proposed National Defense Authorization Act (NDAA). They include adding a new missile defense site on the East Coast, a reduction in funding for shipbuilding and a lack of authorization funds for connecting the Integrated Battle Command System to the Terminal High-Altitude Aerial Defense system (THAAD).

"Multiple analyses show this integration is critical to improved performance of THAAD against more sophisticated threats and substantially benefits training and organization," the administration argues.

The NDAA version calls for establishing a drone corps as a "basic branch" of the U.S. Army, a measure service officials oppose. The White House, in its statement, says it would create an "unwarranted degree of specialization and limit flexibility to

employ evolving capabilities."

Under the bill, the Pentagon would be blocked from providing Russia with notifications, data exchanges, inspection activities or telemetric activities as required by the New START treaty. The White House argues that even though the U.S. is not providing information because Russia is violating the treaty, the provision would "unduly constrain the ability" to adapt or loosen countermeasures as appropriate.

In its policy statement, the administration calls on Congress to pass a new expansion of counter-drone authority, as outlined in separate measures that would give the Homeland Security and Justice departments improved ability to protect certain locations from uncrewed aircraft systems (UAS).

"Enacting this legislation is vital to protecting the Homeland of the U.S. from myriad drone threats and to addressing major gaps in authorities," the administration argues.

Additional concerns from the White House focus on pay increases for enlisted service members, diversity initiatives, and other personnel- and political-related provisions.

The House Rules Committee on June 11 considered more than 1,300 amendments to the defense policy bill and is expected to bring many to the floor for votes.

## PROGRAMS

## Stoke Space Fires Up Initial First Stage Rocket Engine

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**Stoke Space completed a critical first hot-fire test of its full flow staged combustion (FFSC) engine on June 5 at the start-up's test site in Moses Lake, Washington.**

The engine, which is designed to produce more than 100,000 lb. of thrust, will power the first stage of Stoke's reusable Nova medium-lift launch vehicle. Similar to the Raptor engine developed by SpaceX for the Super Heavy booster and Starship vehicles, the Stoke FFSC is powered by liquid oxygen (LOx) and liquefied natural gas, in this case a commercially available form of methane.

Seven of the FFSC rocket engines will enable Stoke's reusable vehicle to perform missions "to and from a wide variety of orbital destinations, while still operating with the conservative margins needed for a long service life," the company says.

Stoke Space co-founder and CEO Andy Lapsa says the initial rocket engine test was run to its planned start condition

at around 50% power, and—because of the thrust transients—represents the biggest technical hurdle to overcome on the road to full-scale development and flight test. "The initial transition is the scariest part of the whole process—it's a very violent event where a lot of things can go wrong," Lapsa says.

The design and manufacture of the first stage engine was accomplished in 18 months. It follows the developmental flight test of its reusable second stage prototype called Hopper2 at Moses Lake last September. The second stage vehicle is designed to return to Earth and land vertically for rapid reuse with minimal refurbishment between flights.

Over the remainder of 2024, Stoke plans to mature its engine and vehicle design in parallel while scaling operations for orbital launch—the first test of which is planned for 2025. The target date for launch sometime next year is "still within the possible," Lapsa says.

The company's "next big thing" is to start building the Nova launch complex at Cape Canaveral's LC-14 site in Florida, he adds. Stoke is also close to completing a larger vertical test stand designed for longer endurance rocket runs at its Moses Lake site.

## TECHNOLOGY

## Kepler Validates SDA-Compatible Inter-Satellite Links In LEO

VIVIENNE MACHI, [vivienne.machi@aviationweek.com](mailto:vivienne.machi@aviationweek.com)

**Kepler Communications says it has used optical inter-satellite links to transfer data between two systems in low Earth orbit (LEO).**

The validation, announced on June 11, involved two Pathfinder satellites that were launched in November 2023 as technology demonstrators for Kepler's space data-relay constellation, the Kepler Network. During the tests, which took place in "recent weeks," the company says it transferred diagnostic data and imagery between the two spacecraft using TESAT-provided SCOT80 optical terminals.

The full link performance was demonstrated according to standards set by the Space Development Agency (SDA), Kepler says in a statement. The SDA is leading the development of a mesh network of hundreds of satellites operating in LEO under the Proliferated Warfighter Space Architecture (PWSA) program. The constellation is expected to support military missions including missile warning and missile tracking, as well as multi-band global communications access and persistent encrypted connectivity for military operators.

Optical communication terminals, like those validated in Kepler's demonstration, are critical to allowing the PWSA's data

transport layer satellites to speak both to each other and to satellites in commercial networks via inter-satellite links. The SDA worked with cross-link providers to develop an interoperability standard for both the links and the terminals that is designed to ensure the satellites built under the PWSA can communicate with major commercial constellations like Amazon's Project Kuiper.

Kepler operates 21 satellites providing S- and K<sub>v</sub>-band point-to-point communications worldwide. The company is preparing to deploy the first tranche of its new space-based data-relay constellation, consisting of nine satellites and one hot spare operating alongside Kepler's current fleet. Initial optical services for the new constellation should begin in 2025. While the Kepler Network will service LEO initially, the company has plans to offer connectivity services to missions in other orbits as well.

Kepler is not currently involved in the SDA's proliferated LEO constellation initiative, but its optical data relay satellites are "well-suited" to support the agency's Transport Layer needs, a spokesperson tells Aviation Week. The company says it will evaluate solicitations as they are released.

In April, Kepler joined with Airbus Defense and Space and TESAT-Spacecom to develop a high-bandwidth optical communications network in LEO that could address opportunities like the European Space Agency's High Throughput Optical Network program.

## TECHNOLOGY

## Aegis Forges Ahead With Flight-Test Technology Development

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**HOUSTON—Selected as one of three winners of NASA's latest TechLeap Challenge, Aegis Aerospace Inc. anticipates its new Easy-to-Use Payload Interoperable Integration Carrier (EPIIC) will be available for purchase and flight by late 2025.**

Announced in October 2023, the Universal Payload Interface Challenge was open to the commercial sector, academia and investors to propose small payload interfaces for rapid testing of a variety of technology innovations. They would be aboard commercial suborbital rockets, orbital platforms, planetary landers, high-altitude balloons and parabolic aircraft flight.

The other winners, announced June 5, are: Ecoatoms of Reno, Nevada; and the student UCLA SPACE Institute. Initially awarded \$200,000 to develop flight-ready systems, each is eligible for up

to \$650,000 over three additional development phases.

"Using our Space Testing as a Service (STaaS) business model as a baseline, we developed a modular, flight-ready universal payload interface," said Matt Carter, Aegis' vice president for Systems Development Services. His comment was part of the company's June 10 selection announcement of its plan to simplify and lower the cost of increasing access to space for technology development.

Established in 2021 through the merger of Alpha Space and MEI Technologies, Aegis counts 20 payloads and experiments in Earth orbit.

Though its STaaS initiative, Aegis is the commercial provider for the Multi-purpose ISS Experiment (MISSE) platform on the exterior of the International Space Station. It provides exposure to the space environment, including power and data links for a wide range of test articles, including photovoltaics, sensors, cameras, electronics components and pharmaceuticals, as well as sample materials.

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PROGRAMS

**Airbus Secures Latest Yahsat Satellite Deal**

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**Airbus is deepening its ties with Al Yah Satellite Communications Co., securing an order for two more geostationary telecommunications satellites and a commitment to work on a new low-Earth-orbit (LEO) system for the United Arab Emirates (UAE)-based company.**

Yahsat says Airbus will build the Al Yah 4 and Al Yah 5 satcoms due for launch into geostationary Earth orbit (GEO) 2027 and 2028. The spacecraft, being designed for 15-year service life, are due to replace the Al Yah 1 and Al Yah 2 satellites launched in 2011 and 2012 that were also Airbus built.

Airbus will design and build the satellites using its Eurostar Neo platform and provide the ground control element of the system, Yahsat said on June 10.

The deal follows an agreement last year to work on the two spacecraft that comes at a time when demand for geostationary telecommunications satellites has retreated amid industry consolidation and questions over how rapidly growing LEO constellations will impact appetite for GEO services.

The program to provide secure government communications to the UAE across the Middle East, Africa, Europe and Asia is expected to cost around \$1.1 billion, including for launch and insurance. The company will finance the program at the early stage, it says, before a \$1 billion UAE advanced payment kicks in.

Airbus is currently building the Thuraya 4 satellite for Yahsat, which is scheduled to launch this year and enter service in 2025.

TECHNOLOGY

**Apple Unveils Text Via Satellite As Rivalry With SpaceX Heats Up**

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**Users of iPhone 14 and newer models will be able to send and receive text messages via a satellite connection, Apple announced at its developer conference.**

Newer iPhones could previously send text messages to emergency services via a partnership that Apple struck with satellite communications company Globalstar in 2022.

An Apple executive announced June 10 at the 2024 Apple Worldwide Developers Conference in Cupertino, California, that iPhone users can soon send iMessages and text messages via a satellite connection when out of range of Wi-Fi or cellular service.

To use the satellite texting feature, iPhone users will be prompted to point their phones toward a satellite. It was not disclosed how long it would take to send or receive messages. The satellite-based messaging service will also transmit emojis and be encrypted end to end, Apple says.

Apple's announcement comes as SpaceX has said its Starlink cellular constellation is poised to go live with service for T-Mobile customers before year's end. Specialized Starlink satellites will initially provide text-messaging services to T-Mobile customers

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## PROGRAMS

## Boeing Reveals New Air Dominance Engineering Site

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**Boeing plans to hire 400 engineers to work on air dominance programs at a facility under construction by Embry-Riddle Aeronautical University in Daytona Beach, Florida, the company said on June 11.**

The announcement comes as Boeing's Air Dominance unit competes for the U.S. Air Force's Next Generation Air Dominance contract, plus building F-15EXs, T-7As, MQ-25s and MQ-28s.

"Increasing both our footprint in Florida and partnership with Embry-Riddle will accelerate innovation across combat aircraft programs," said Steve Nordlund, Boeing Air Dominance vice president and general manager.

Boeing will lease the university's Cici and Hyatt Brown Center for Aerospace Technology for the facility. The building has been under construction for two years and is scheduled to open in October.

Boeing plans to hire 200 engineers by the year's end, then a total of another 200 employees in 2025 and 2026.

"We expect this location to be attractive to not only Embry-Riddle graduates but also established aerospace engineers from across Florida and around the nation," Nordlund said.

## PROGRAMS

## Merlin Autonomy System Aims To Reduce SOCOM C-130J Crews

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**Autonomous flight system startup Merlin Labs has won a contract potentially worth \$105 million to demonstrate a reduced aircrew capability for U.S. Air Force Special Operations Command (SOCOM) Lockheed Martin C-130Js.**

Under the five-year indefinite-delivery, indefinite-quantity (ID/IQ) contract from SOCOM, Boston-based Merlin is expected to design, integrate and test an operationally relevant autonomous flight system that could be fitted to multiple aircraft types.

Work under the small business innovation research contract is planned to be completed by June 2029, with \$7.5 million in fiscal 2023 funding having been allocated for the initial task

order under the ID/IQ.

The startup is developing the Merlin Pilot autonomous flight system and working toward FAA supplemental type certification on the Cessna Caravan as the initial application.

In July 2022, coincident with a \$105 million Series B fundraising round, Merlin announced a partnership with the Air Force to bring autonomy to its C-130Js to reduce the flight-deck crew from two pilots to one by using the Merlin Pilot as the second required crewmember. Work has since expanded to include the Boeing KC-135 aerial refueling tanker.

The SOCOM contract covers multiple phases, including design for installation onto the C-130J, integration and ground testing, a test readiness review and flight testing, a full takeoff-to-landing demonstration and integration efforts for other special operations aircraft types.

## PROGRAMS

## Taiwan To Upgrade Avionics On 20 C-130H Aircraft

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**The Taiwan Air Force plans to upgrade the avionics on its Lockheed Martin C-130H Hercules aircraft.**

The air force told the local Central News Agency that the program will span between 2025-2030 and cost around \$10 billion (\$310 million).

The package is expected to include an integrated digital cockpit interface, maritime search-and-rescue capabilities, improved GPS systems, a ground collision-avoidance system and a global air traffic management compliant system like automatic dependent surveillance-broadcast (ADS-B) for the aircraft to operate in

civil airspace. Training simulators will also be acquired.

The Aviation Week Discovery Database shows the air force has 20 C-130Hs, one of which is the C-130HE electronic warfare platform. The service has operated the C-130H since 1984; one was written off in a 1997 accident.

The program is not yet reflected in any U.S. Foreign Military Sales (FMS) documents.

Days earlier, the U.S.-Taiwan Business Council called on Washington to supply Taipei with more diverse platforms that could better counter China's blockade and gray-zone threats, beyond just munitions and sustainment.

The appeal comes on the heels of U.S. State Department approval of two FMS to Taiwan for F-16 spares and support services in a deal totaling \$300 million.

## BUSINESS

## Lilium CEO Expresses Confidence About German, French Support

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**Lilium CEO Klaus Roewe expects \$100 million in loan guarantees from the German and Bavarian governments, while talks with France toward a further \$200 million are ongoing, raising the likelihood that the startup can finance its path to type certification and entry-into-service in 2026.**

Despite its continued progress in developing the all-electric Lilium Jet, the Munich-based startup faces a narrow cash runway, with just \$110 million in total liquidity as of the end of the first quarter (Q1), barely enough to keep it funded through midsummer. But having raised an additional \$114 million earlier this month, mostly from existing shareholders, the company received a badly needed financial lifeline that should allow it to operate its first manned flight later this year.

Still, that will not be enough money to carry Lilium far into 2025, even considering its ability to access customer predelivery payments (PDP) following its first manned flight. As such, Lilium is seeking the loan guarantees from the German federal and Bavarian state governments, which have commissioned state development bank KfW to conduct due diligence on the startup—a process Roewe says should conclude “six to eight weeks” from now.

Roewe also says Lilium is in “advanced discussions” with the French government for its loan guarantees, with disbursements to be paid in tranches “over the next several years.”

The French subsidies would be used to fund construction of high-volume production facilities there, including a final assembly line, battery pack assembly line and maintenance facilities,

Roewe explains, adding Lilium is discussing potential locations with French regional governments.

At the same time, Lilium continues to “engage in active dialogue with sovereign entities, strategic partners, prospective customers and stakeholders for further funding initiatives,” the company notes in a shareholder letter issued alongside its Q1 financial results.

“Given the visibility on potential government-backed capital sources, along with our recent capital raise, we believe we have a liquidity road map for our first piloted flight later this year,” Roewe told analysts on the startup’s latest earnings call.

Despite Lilium’s optimism about its latest fundraising progress, SMG Consulting analyst Sergio Cecutta cautions it still may not be enough to finance the complete path to entry-into-service (EIS).

Even with a total of \$414 million—the recent \$114 million capital raise and \$300 million in expected German and French subsidies—as well as PDP, Cecutta estimates the company will still be short \$150 million, assuming an estimated EIS in Q4 2026. A major caveat, however, is the timing of disbursement of government funds, which he notes could have a “major impact” on Lilium’s financial outlook.

At expected rates of cash burn, Cecutta predicts Lilium will run out of cash “one or two quarters” prior to EIS. Critically, he also notes his analysis does not take into account the cash needs for a production ramp-up, which he said “could make the situation a bit more complex.” He does note additional customer PDPs could mitigate those concerns.

The funding update comes as Lilium works through final assembly of its first Lilium Jet, MSN-1, while MSN-2 continues to progress with the fuselage, wings and canard now assembled.

## OPERATIONS

## Ukraine Claims Successful Strike On Russian Su-57

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**The Ukrainian government says it hit a Russian Su-57 fighter in a long-range strike on an air base, potentially adding to the growing list of high-profile combat aircraft losses Moscow has suffered in the past year.**

The strike on Akhtubinsk AB, a Russian research and test facility, could mark the first combat loss of Russia’s most advanced low-observable combat aircraft, depending on damage levels. The Ukrainian government posted satellite images it says were taken on June 7 and June 8, showing first the Su-57 intact,

and then the Su-57 with impact points and fire damage.

The Russian government did not immediately respond to a request for comment.

The Russian Aerospace Forces and Navy have suffered significant losses since launching an unprovoked, full-scale invasion of Ukraine in February 2022. The losses include A-50 airborne early warning aircraft, an Il-22M Coot B command-and-control aircraft, a Tu-22 bomber, Su-34 strike fighters and Su-35 fighters.

Ukraine has undertaken several long-range UAV strikes on Russian targets, including airfields. The latest attack struck a base located 589 km (366 mi.) from the front line, Ukraine says.

A pro-Russian Telegram channel claims three UAVs struck the base.

## PROGRAMS

## U.S. Army Posts New Solicitation For HADES Aircraft

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**The U.S. Army on June 7 issued a new solicitation for a fleet of aircraft that will fly its future high-altitude intelligence, surveillance and reconnaissance (ISR) mission, ahead of an expected award for the lead systems integrator for the project.**

The service plans to fly a fleet of 14 medium-large commercial jets carrying multi-intelligence payloads for its High Accuracy Detection and Exploitation System (HADES) program. The service has long expected to use Bombardier Global 6500s for the fleet, having already ordered one of the jets with an option for two more, for initial prototypes. While the new request for information is likely meeting the requirement to survey the market, it does indicate a willingness to look at other airframes.

The jets need to fly at a medium-high altitude at high airspeed, and be able to support wing hardpoints, belly canoe and radome. Only new aircraft will be considered.

The request for information (RFI) says the platform needs to operate between 41,000-51,000 ft. above mean sea level or above after an integration of 6,500 lb. of mission equipment. There needs to be a minimum of 14,000 lb. of payload while maintaining 12 hr. or more of unrefueled flight endurance. It must fly at sustained transit speeds equal to or greater than 450 kt. (517.8 mph) true airspeed.

The new aircraft must be in production through 2030.

A key requirement is that the aircraft must not use composite materials for the fuselage and empennage skin, though limited use of composite materials for nose cones, tail cones, pylons, fairings and radomes is permissible. The Global 6500 uses aluminum alloys for the fuselage.

The Army is expected to select the lead systems integrator for HADES this month, with Sierra Nevada Corp. (SNC) competing against a team of L3Harris, Leidos and MAG Aerospace. Both SNC and a team of MAG and L3 are building prototypes for a predecessor to HADES, called the Army Theater-Level High Altitude Expeditionary Next Aircraft (Athena). Both the teams are using Global 6500s for the prototypes.

## BUSINESS

## Hermeus Eyes Florida Site For Future Engine Test Center

STEVE TRIMBLE, [steve.trimble@aviationweek.com](mailto:steve.trimble@aviationweek.com)

**Atlanta-based startup Hermeus is considering whether to open a hypersonic engine test facility at Cecil Airport in Jacksonville, Florida, the company said on June 11.**

The location emerged in local news reports about a \$135 million economic development opportunity involving 100 jobs, which was endorsed on June 10 with a \$2 million tax incentive by the mayor's Budget Review Committee, the Jacksonville Daily Record reported.

The committee released a project summary that withheld the identity of the company involved, calling the proposal by its code name, Project Heat. Another report by the Jacksonville Business Journal identified the company linked to Project Heat is Hermeus.

A Hermeus spokesperson confirmed its involvement in Project Heat, but stopped short of committing to building the test facility at the Cecil Airport site.

"I can confirm that Hermeus is currently exploring Cecil Airport as a location for a new engine test facility. But as of right now, we cannot comment on any additional details," said Martin

Berman, Hermeus' director of content and marketing.

In 2021, Hermeus opened Site 27 as the company's first engine test facility, at Dekalb-Peachtree Airport in Chamblee, Georgia. The company opened another hypersonic test facility at the University of Notre Dame in Indiana in 2022.

Hermeus plans to introduce the Halcyon hypersonic airliner in the mid-2030s. In the meantime, the company is working on a series of subscale prototypes and high-speed production vehicles, starting with the Quarterhorse and the Darkhorse vehicles.

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### APPLE, from P. 5

using unmodified cellphones operating with standard LTE/4G protocols. Voice, data and internet-of-things connectivity coverage would follow in 2025, SpaceX says on its website.

In May, AST SpaceMobile signed strategic partnership agreements with Verizon and AT&T to provide direct-to-cellular service from its satellites to those two companies' users, particularly in areas beyond the broadcast range of cellular towers, such as wilderness areas, national parks and rural highways.