

# AVIATION WEEK'S 66TH ANNUAL LAUREATE AWARDS



*Continuing a long tradition of honoring innovation, extraordinary achievements and exemplary leadership in aerospace and defense and aviation, Aviation Week's editors announce the winners of this year's Laureate Awards. We honor 29 individuals, companies and programs across five industry sectors—commercial aviation; defense; space; business aviation; and maintenance, repair and overhaul—as well as announce Lifetime Achievement awards and a new Pathfinder Award for exceptional industry leaders.*

*We also honor 20 rising stars in aerospace and aviation studies, the 2024 20 Twenties.*

*The awards will be presented at a black-tie gala at the National Building Museum in Washington on March 14. That evening, editors also will reveal five Grand Laureates selected from the winners in each of the industry categories.*

*For more information on attending this year's Laureate Awards Gala, and to view a list of past winners dating back to 1957, go to [Laureates.AviationWeek.com](http://Laureates.AviationWeek.com)*

CHRIS ZIMMER



## Commercial Aviation

### BEA (Bureau d'Enquetes et d'Analyses pour la securite de l'aviation civile)

French air accident investigation office BEA has identified trends confirming aircraft in the approach and landing phase remain vulnerable despite equipment sophistication. The bureau is improving its investigation methods with new sources of data such as smartphones. BEA is also investing in 3D analysis of large mechanical parts, a lesson learned from uncontained engine failures.



BEA

### Rolls-Royce UltraFan

The engine-maker conducted the first run of its UltraFan geared turbofan demonstrator in April 2023 in the Testbed 80 facility in Derby, England. With a fan diameter of 140 in., the UltraFan is by physical size the largest jet engine ever run. The test also marked the first run of a new-centerline large-fan engine at Rolls since the Trent XWB-84 in 2010.



ROLLS-ROYCE

### Universal Hydrogen

The company's De Havilland Canada Dash 8-300 propulsion testbed became the largest hydrogen-electric-powered aircraft yet to fly in March 2023, taking off with one of its two turboprop engines replaced with a 1-megawatt-class fuel cell powertrain in a key milestone for the startup's efforts to introduce zero-emission hydrogen propulsion, beginning with regional aviation.



MATT HARTMAN



AMERICAN AIRLINES

### American Airlines HEAT

The carrier's Hub Efficiency Analytics Tool (HEAT) is targeted at improving operational performance during severe weather or other events affecting flights. The tool weighs data from various sources and shifts departures and arrivals at hubs to minimize disruptions. The tool has prevented about 1,000 cancellations since its introduction in 2022.

### Guliz Ozturk, Pegasus Airlines, for Leadership

Ozturk has led the remarkable comeback of Pegasus Airlines as CEO since 2022. Pegasus is one of the most profitable airlines globally, following a highly successful low-cost carrier model mainly from its biggest base at Istanbul Sabiha Gokcen International Airport. Ozturk has not only delivered strong financial results but is also a keen supporter of gender equality and diversity.



PEGASUS AIRLINES

## Defense

### Saab Gripen E

The aircraft entered service with the Brazilian Air Force in December 2022, marking a milestone in development of the next-generation version of the Swedish fighter. With Brazil's selection of the Gripen E/F in December 2013, the program became a joint development effort, with Brazilian industry joining Saab's supplier partners. The first series production Gripen E for Sweden was handed over in October 2023.



SAAB



U.S. AIR FORCE

### Northrop Grumman B-21 Raider

The U.S. Air Force's B-21 Raider bomber flew for the first time on Nov. 10, 2023—eight years after contract award and less than a year after its public rollout at Northrop Grumman's Plant 42 facility in Palmdale, California. The milestone opens the door for the company to begin low-rate initial production of the first new U.S. bomber in three decades.



UKRAINIAN AIR FORCE

### Western Missile Integration for Ukraine

A challenge for the Ukrainian forces has been to erode the advantage of Russian's much larger air force and air defense systems. A team from the UK rapidly figured out how to launch MBDA Storm Shadow long-range cruise missiles from Ukrainian Sukhoi Su-24 aircraft, allowing Ukraine to hit military targets and supply lines deep inside Russian-held territory.



NAMMO

### Nammo THOR-ER

In August 2023, the THOR-ER team from Norway and the U.S. twice test-fired a solid-fuel ramjet missile, demonstrating significant increases in effective range. The tests demonstrated new high-energy fuels, advanced air injection and throttling methods needed for future solid-fuel ramjet systems. The tests also highlighted international collaboration, involving the U.S. Naval Air Warfare Center, Norwegian Defense Research Establishment and Nammo.



LOCKHEED MARTIN

### X-62A VISTA

The U.S. Air Force Test Pilot School, Calspan and Lockheed Martin collaborated to transform the U.S. Air Force's F-16D Variable In-flight Simulation Test Aircraft (VISTA) into the X-62 and enabled the first testing of synthetic artificial-intelligence pilots in a supersonic aircraft. This has provided the template for work on developing autonomy for the Air Force's planned Collaborative Combat Aircraft family.

### Eren Ozmen, Sierra Nevada Corp., for Leadership

Ozmen and her husband, Fateh, purchased Sierra Nevada Corp. (SNC) in 1994 and have turned it into a multibillion-dollar force to be reckoned with in the defense industry. In 2023, SNC notched a win to provide the U.S. Army with airborne intelligence, reconnaissance and surveillance services, putting itself in a strong position to win follow-on business.



SIERRA NEVADA CORP.





## Firefly Aerospace and Millennium Space Systems Victus Nox

In a three-part relay race, Firefly and Millennium coordinated to launch a satellite for the U.S. Space Force in an unprecedented demonstration of rapid response. Millennium had 60 hr. to transport the satellite to Vandenberg SFB, California, fuel it and install a payload adaptor for launch by Firefly's Alpha rocket 27 hr. later. A day and a half after that, the satellite was ready to begin a space domain awareness mission.



FIREFLY AEROSPACE



ISRO

## Indian Space Research Organization Chandrayaan-3

Indian Space Research Organization (ISRO) Chairman Sreedhara Somanath brought India's space program back from the loss of its Chandrayaan-2 lunar lander in 2019 to become the fourth nation to land a rover on the Moon, landing the farthest south of any mission yet. The mission confirmed the presence of water in that region of the Moon as well as the presence of sulfur near the lunar South Pole—all at a cost of \$75 million.

## Lockheed Martin Osiris Rex

NASA's \$1 billion Origins, Spectral Interpretation, Resource Identification, Security-Regolith Explorer (Osiris-Rex) fulfilled its primary mission, collecting and delivering pristine samples from the primordial asteroid Bennu. Lockheed developed sample collection hardware that acted as a "reverse vacuum," blowing compressed nitrogen gas to stir up dust and dirt from the asteroid and collect it in a canister for return to Earth in September 2023.



LOCKHEED MARTIN



SPACEX

## SpaceX Starlink

In 2020, Elon Musk mused that his Starlink constellation of low-Earth-orbit communication satellites might bankrupt his otherwise successful launch company SpaceX. Three years later and with more than 5,000 satellites orbited, Starlink is providing commercial high-speed internet access globally. Though controversial, Starlink has been used by Ukraine in its war against Russia, and the U.S. has contracted to use its military Starshield service.

## Mike Moses, Virgin Galactic, for Leadership

Parlaying hard lessons from the space shuttle program, Moses joined Virgin Galactic from NASA in 2011 to help the startup backed by Richard Branson create and operate a safe, reliable, commercially viable space transportation service suitable for nonprofessional astronauts. It took years longer than expected, but the company began commercial operations in June 2023. Moses has served as Virgin Galactic's president since 2016.



PURDUE UNIVERSITY



# Business Aviation

## Dassault Aviation FalconWays

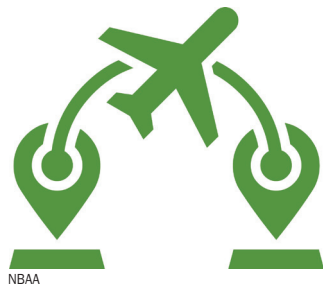
A small team of Dassault engineers and pilots, led by engineering manager Cyrille Grimald, developed a flight planning tool called FalconWays that allows pilots to optimize fuel consumption by selecting the most fuel-efficient route based on real-time weather data and performance data for each specific model of Falcon business jet. The team proposed the program through an in-house entrepreneurial initiative.



DASSAULT AVIATION

## NBAA Sustainable Flight Department Accreditation

The National Business Aviation Association launched the Sustainable Flight Department Accreditation Program to help organizations reduce their carbon footprints. The program has four accreditations—flight, ground support, operations and infrastructure. To date, it has awarded 44 accreditations to 25 businesses that have identified a net reduction of 125,266 metric tons of CO<sub>2</sub> emissions. Beyond this, it nurtures a sustainable culture that has become the industry standard.



NBAA

## SmartSky Networks

SmartSky's 5G/LTE air-to-ground connectivity network for business aviation became operational across the U.S. in 2022. In 2023, the company announced SmartSky LITE, the first streaming-level system available for smaller business aircraft such as the Pilatus PC-12. The 5G/LTE LITE system is flying on five different types of light jet and turboprop.



SMARTSKY NETWORKS

## GAMA Electric Propulsion and Innovation Committee (EPIC)

Established in 2015 by the General Aviation Manufacturers Association (GAMA), EPIC has successfully brought industry together to provide coordinated input to aviation regulators and standards developers on issues raised by new technologies including electric aircraft propulsion and simplified vehicle operation. In August 2023, GAMA submitted a robust industrywide response to the FAA's proposed operating rules for vertical-takeoff-and-landing vehicles.



MAGNIX

## Barrington Irving, for Leadership

Having previously been the youngest person to pilot an airplane around the world solo, Jamaican American pilot Irving created the Flying Classroom to bring STEM learning to K-12 students. Now that classroom, part of the Barrington Irving Technical Training School, will also serve adults. The aviation technical training delivers job-ready skills that can help expand the workforce to a wider range of people.



BARRINGTON IRVING

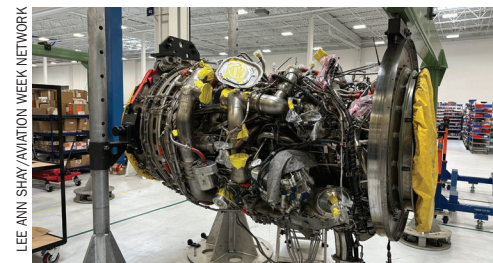
# MRO

## AAR

The company developed the Concourse digital platform internally to unify and streamline business operations across the company. Concourse provides a single place for employees and customers to interact and manage business, as well as centralizes future technology initiatives at AAR. In early 2023, it launched its Digital MRO application, digitizing the entire airframe MRO workflow, from task cards to inspections and final signoffs.



AAR



LEE ANN SHAY/AVIATION WEEK NETWORK

## Delta TechOps

The Delta Engine Maintenance team reimagined engine operations coming out of COVID-19 when the airline MRO faced significant increases in engine and part repair turnaround times and the addition of three engine variants. The result: The APEX program's predictive and simulation capabilities have resulted in predictive part-level material scrapping, optimized engine production control, substantial improvements in material availability and eight-digit cost savings.

## GE Aerospace

The company's investments in new engine inspection technology is improving the efficiency, accuracy and quality of inspections. For example, its artificial intelligence-powered Advanced Blade Inspection Tool for on-wing inspections can reduce inspection time from hours to minutes, and its Sensiworm uses untethered soft robotics technology to crawl through an engine to detect defects and corrosion.



GE AEROSPACE



LUFTHANSA TECHNIK

## Lufthansa Technik

To streamline workflows and enable data sharing across applications, Lufthansa Technik has created a technical operations ecosystem by bringing together Flydocs maintenance archives and the Aviator data platform with Swiss-AS' AMOS engineering and maintenance system. Benefits range from making application programming interfaces work seamlessly across systems to leveraging data across systems and creating additional predictive benefits.

## SR Technics, Atlas Air and Kuehne+Nagel

In April 2023, the MRO, air cargo and logistics giants joined forces to create the Sustainable Engine Alliance, a partnership to manage global engine supply chains more sustainably. This includes using digital services for emissions transparency, sustainable aviation fuel and engine-stand management solutions, while avoiding environmentally harmful materials.



SR TECHNICS



## Philip J. Klass Lifetime Achievement Award

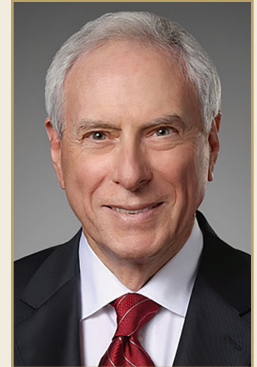


DYLAN PATRICK PHOTOGRAPHY

**Clay Lacy**, often called Mr. Learjet, was instrumental in launching the business jet era. He began flying at age 12 on his grandmother's farm and joined United Airlines in 1952 at age 19. In 1969, Lacy flew the first Learjet into Van Nuys Airport in California as a demonstrator for Pacific Learjet. Four years later, he founded

Clay Lacy Aviation as the first jet charter and executive jet management company on the West Coast. He has flown more than 300 aircraft types and logged more than 50,000 flight hours. Lacy also helped to pioneer the Astrovision camera system used to film more than 2,000 projects, including the original "Top Gun."

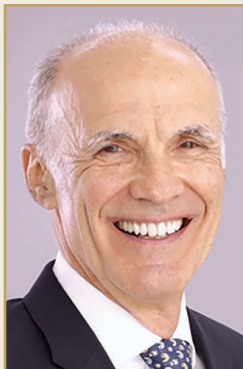
**Dan Goldin** is known as the longest-serving administrator of NASA, but his contributions to space go far beyond that. Launching his career in 1962 as a propulsion engineer at the NASA Lewis Research Center in Cleveland, he went on to spend 25 years leading cutting-edge national security space projects at TRW (now Northrop Grumman). Appointed NASA administrator in 1992, Goldin



STRATOLAUNCH

reenergized the agency with his "faster, better, cheaper" mantra, overseeing the repair of the Hubble Space Telescope, landing of U.S. rovers on Mars, redesign and construction of the International Space Station and the forging of an international partnership with Russia in the ashes of the Cold War. He also guided the initial design of the James Webb Space Telescope.

## Pathfinder Award



EMBRAER

**Luis Carlos Affonso** is the mastermind behind Embraer's success in commercial and business aviation. He joined the company more than 40 years ago in January 1983, as an aeronautical engineer. Since then, he has led the launch and development of multiple all-new commercial and business aviation aircraft, including the ERJ145, first-generation Embraer 170/190 family and E-Jet E2 family. He also led Embraer's diversification into executive jets. Later, as head of strategy, Affonso drove the creation of EmbraerX, a unit dedicated to disruptive technology, and advanced air mobility spinoff Eve.