Vertical Flight Society Announces 2020 Group Recipients of Its Prestigious Awards

Nine groups exemplify excellence in vertical flight advancements

Fairfax, VA, April 1, 2020 — The Vertical Flight Society today announced the 2020 group recipients of its prestigious awards program. Since its establishment in 1944, VFS Awards have paid tribute to the outstanding leaders of vertical flight and served as a catalyst for stimulating technological advances. This year’s winners will be recognized at the Grand Awards Banquet on Oct. 7, during the VFS 76th Annual Forum and Technology Display in Virginia Beach, Virginia (www.vtol.org/forum).

“For more than 75 years, VFS has been recognizing the most significant accomplishments in vertical flight,” said VFS Executive Director Mike Hirschberg. “This year’s group award winners highlight the incredible capabilities of vertical flight aircraft and those who develop and operated them.”

The Society’s Captain William J. Kossler, USCG Award is given for the greatest achievement in the practical application or operation of vertical flight aircraft, the value of which has been demonstrated by actual service during the preceding 18 months. This year, the Kossler Award is being presented to the UK Royal Air Force Joint Helicopter Command (JHC) Chinook Force and the Joint Helicopter Support Squadron (JHSS), which saved the town of Whaley Bridge, Derbyshire, England. After a month’s worth of rain fell in just 24 hours in August 2019, the reservoir spillway above the small town started to collapse. Eight crew members flew three Chinooks for 58 flying hours and delivered 620 one-ton bags of aggregate to shore up the spillway, saving the town.

The Grover E. Bell Award is given for an outstanding research and experimentation contribution to the field of vertical flight development. This year’s recipient is the Sikorsky-Boeing/Army Joint Multi-Role Test Team. Over the past two years, the JMR Test Team completed powered wind tunnel testing of a one-fifth scale SB>1 Defiant in the National Full-scale Aerodynamics Complex (NFAC) wind tunnel, Propulsion System Test Bed (PSTB) endurance testing of key SB>1 drivetrain components, and flight testing of the Defiant aircraft. The data collected provide a comprehensive database for the SB>1 aircraft that has been instrumental in informing the US Army’s decisions for Future Vertical Lift (FVL).

Eagle Aviation Technologies is this year’s recipient of the VFS Supplier Excellence Award. This award is given to a supplier who, through the quality, innovativeness and cost-effective technology of its products, has made a notable contribution to improving the state of the art of vertical flight aircraft. Virginia-based Eagle Aviation Technologies is an industry leader in the design, analysis and manufacture of rotorcraft systems and components. Over the last 15 years, Eagle has made enormous contributions to the vertical flight industry, including developing the rotor blades for the Sikorsky X2 and S-97 Raider demonstrators.

The Leonardo International Fellowship Award recognizes significant contributions to international vertical flight cooperation. This year’s winner is the Subaru-Bell 412EPX Co-Development Team, representing the culmination of several years of close international fellowship and cooperation between design, certification and production teams in Japan, Canada and the United States.
The Robert L. Pinckney Award is given in recognition of notable achievement in manufacturing research and development for vertical flight aircraft or components brought to fruition in recent years. This year’s recipient is the Assembly and Flight Operations (AFO) Laser Ablation Team at Sikorsky, a Lockheed Martin Company. The team led the first successful implementation of a Class 4 Laser system for use in a production facility on military aircraft. Over the last four years, has proven a 95% reduction in labor when compared to traditional paint removal methods.

The Harry T. Jensen Award is given for an outstanding contribution to the improvement of reliability, maintainability, safety or logistics support through improved design or technical achievement. This year’s award is given to the Leonardo TH-119 Certification Team, the first single-engine helicopter approved for instrument flight rules (IFR) in the US since the 1990s. IFR flight is discernibly safer than visual flight rules (VFR) flight in marginal weather; considering that a majority of helicopters in the US are single engine, it’s hoped that the TH-119 has ushered in a sea change in helicopter safety.

This year’s recipient of the Howard Hughes Award, given in recognition of an outstanding improvement in fundamental helicopter technology brought to fruition in the previous 18 months, is the CH-53K EGR Team, including team members from Sikorsky, a Lockheed Martin Company; the US Naval Air Systems Command (NAVAIR); and General Electric. Exhaust gas reingestion (EGR) in low altitude hover operations for a three engine heavy lift helicopter is driven by complex aero-propulsion system interactions and their impact on EGR is not very well understood. EGR degrades engine performance, increases life-cycle costs and results in engine stalls. The extraordinary collaborative efforts by cross-functional experts in external aerodynamics, propulsion systems, computational fluid dynamics (CFD) modeling, design and test across Sikorsky, NAVAIR and General Electric resulted in unique insights into EGR root-cause, mitigation concept development and problem resolution proven through flight testing.

The Frederick L. Feinberg Award is presented to the pilot or crew of a vertical flight aircraft who demonstrated outstanding skills or achievement during the preceding 18 months. This year’s award is given to US Air Force Special Operations Command (AFSOC) 8th Special Operations Squadron CV-22 crew. The four-man CV-22 crew performed conspicuous acts of valor while deployed in support of combat operations against the Islamic State of Iraq and Syria on Jan. 16, 2019. The crew showed significant self-sacrifice and courageous conduct by planning and executing a no-notice rescue mission for three American military personnel catastrophically injured behind enemy lines. Leveraging the speed and range of the tiltrotor, the crew deftly penetrated rain and instrument meteorological conditions while avoiding enemy fire. If not for the CV-22 and crew, the injured personnel would not be alive today.

The Vertical Flight Heritage Sites Program is intended to recognize and help preserve locations with the most noteworthy and significant contributions made in both the theory and practice of helicopter and other VTOL aircraft technology. This year, the former McDonnell Aircraft Corporation (MAC), was selected for its historic significance. In 1943, MAC established a helicopter division to embark on new rotorcraft designs that advanced the state of the art. At this site, now Boeing St Louis, MAC designed, developed and flew record-setting twin rotors, tipjet rotor, and compound tipjet powered helicopters.

The Vertical Flight Society was founded as the American Helicopter Society in 1943 by the pioneers of the helicopter industry, who believed that technological cooperation and collaboration was essential to advance vertical flight. VFS is the global non-profit society for engineers, scientists and others working on vertical flight technology. For more than 75 years, the Society has led technology, safety, advocacy, and other important initiatives, and has been the primary forum for interchange of information on vertical flight technology. Descriptions of the awards and past recipients are available at www.vtol.org/awards.