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Sept. 9, 2026

**The Vertical Flight Society Announces the Winners of the  
43<sup>rd</sup> (2026) Annual Student Design Competition & Releases 44<sup>th</sup> (2027) RFP**

Fairfax, Virginia, USA — **The Vertical Flight Society (VFS)** is proud to announce the winners of its **43<sup>rd</sup> (2026) Annual Student Design Competition**, recognizing outstanding achievement in vertical flight innovation by university students from around the world.

Each year, the **VFS Student Design Competition** challenges university teams to develop conceptual designs for vertical takeoff and landing (VTOL) aircraft, offering students a hands-on opportunity to apply their engineering knowledge to real-world aerospace challenges and fostering interest in vertical flight technology. The competition sponsorship rotates between Airbus, Bell, The Boeing Co., Leonardo Helicopters, Sikorsky, a Lockheed Martin Co., and the DEVCOM Army Research Lab.

Sponsored by [Leonardo Helicopters](#) this year's competition awarded more than \$12,000 in prize money to recognize excellence in engineering design and innovation. The Leonardo Request for Proposal titled "**Hybrid Electric VTOL**" challenged university teams to consider architectural options of a new hybrid propulsion strategy, using the XV-15 as a baseline and reconfigure a hybrid electric propulsion alternative. For the 2025–2026 competition cycle, a total of **17 proposals** were submitted—from **universities** across **4 countries**.

**Georgia Institute of Technology** earned top honors in the graduate category and **Delft University of Technology** took first in the undergraduate category. Additionally, **Carleton University** received the **Best New Undergraduate Entrant** award. Team members from the first-place winners are invited to present their designs at the 83<sup>rd</sup> Annual Forum & Technology Display ([www.vtol.org/forum](http://www.vtol.org/forum)) — scheduled for May 11–13, 2027 in Phoenix, Arizona.

Executive summaries of the first place entries of this year's competition can be found at [VFS SDC](#). Archives of past competitions and entries are available at [SDC Archives](#).

The winning teams for the graduate category are as follows:

| <u>Place</u>    | <u>University (Graduate)</u>    | <u>City, Country</u>        | <u>Design Team</u> |
|-----------------|---------------------------------|-----------------------------|--------------------|
| 1 <sup>st</sup> | Georgia Institute of Technology | Atlanta, Georgia, USA       | Ibrido             |
| 2 <sup>nd</sup> | University of Maryland          | College Park, Maryland, USA | Hermes-Mercury     |

The Georgia Tech graduate design team developed a hybrid-electric propulsion architecture for the XV-15 in Phase I and an improved hybrid-electric tilt-rotor in Phase II. Phase I retrofitted the legacy XV-15 with a parallel hybrid-electric architecture, downsizing the T53 engines and integrating twin EMRAX motors to

deliver 10.2% electrically distributed mission power. Phase II expanded the design beyond retrofit, incorporating aerodynamic refinements, structural weight reduction, rotor and wing optimization, and fly-by-wire controls. Named **Ibrido** (“hybrid” in Italian), the designs combine innovative concepts to optimize performance and reflect Leonardo’s Italian heritage.

The winning teams for the undergraduate category are as follows:

| <u>Place</u>     | <u>University</u><br><u>(Undergraduate)</u> | <u>City, Country</u>             | <u>Design Team</u> |
|------------------|---------------------------------------------|----------------------------------|--------------------|
| 1 <sup>st</sup>  | Delft University of Technology              | Delft , Netherlands              | HEXV-15 Kestrel    |
| 2 <sup>nd</sup>  | Georgia Institute of Technology             | Atlanta, Georgia, USA            | Erodius            |
| 3 <sup>rd</sup>  | Pennsylvania State University               | State College, Pennsylvania, USA | Cygnus             |
| Best New Entrant | Carleton University                         | Ottawa, Ontario, Canada          | Ravens             |

**TU Delft’s** undergraduate **HEXV-15 Kestrel** hybrid-electric tiltrotor concept retains the XV-15 tiltrotor architecture, cross-shafted drivetrain philosophy, and three-bladed proprotors, while introducing nacelle-mounted wing extensions, optimized proprotor geometry, modular battery storage, and a high-voltage hybrid-electric torque-assist system. The **HEXV-15** is an evolution of the Bell XV-15, with a much smaller development budget than any clean-sheet configuration.

**The newest RFP for the 44<sup>th</sup> (2027) Annual Student Design Competition**, sponsored by [Bell](#), is now available at [VFS SDC](#). The new RFP, entitled “**VTOL Aircraft Supporting South America Offshore Oil & Gas Production**,” challenges the engineering academic community to design a vertical takeoff and landing (VTOL) aircraft to support oil and gas production off the South American coast.

**The Vertical Flight Society (VFS)** is the world’s leading technical society dedicated to advancing vertical flight. Established in 1943 as the American Helicopter Society, VFS has been at the forefront of rotorcraft and vertical flight innovation for more than 80 years. Today, the Society serves as the global resource for knowledge, collaboration, and advocacy in vertical flight technology. Through scientific, technical, educational, and legislative initiatives, VFS provides leadership that continues to shape the future of helicopters, tiltrotors, eVTOL aircraft, and other transformative vertical flight systems.

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**The Vertical Flight Society**

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